1.0 INTRODUCTION

Robinson Land Development have prepared this fire flow memorandum in support of the proposed development located at 2167 McGee Side Road in the City of Ottawa. The Owner is proposing to construct a 1635 square metre office/warehouse building on the 0.76 hectare property. Detailed servicing and stormwater management designs for the site have been prepared by D.B. Gray Engineering Inc. and discussed in their *Site Servicing Study & Stormwater Management Report,* dated December 21, 2023. This memorandum is intended to provide additional details on the fire flow requirements for the site prepared in accordance with applicable guidelines as discussed in the sections below.

2.0 GUIDELINES

This memorandum has been prepared in accordance with the following documents:

- **Water Supply for Public Fire Protection**, Fire Underwriters Survey, 2020 (herein referred to as FUS Guidelines).
- **City of Ottawa Technical Bulletin ISTB-2021-03,** City of Ottawa, August 18, 2021.
- **National Fire Protection Association (NFPA)**
  - NFPA 1: Fire Code
  - NFPA 1142: Standard on Water Supplies for Suburban and Rural Firefighting (2022)
- **Site Servicing Study & Stormwater Management Report, 2167 McGee Side Road**, D.B. Gray Engineering Inc., December 21, 2023.

3.0 WATER SUPPLY

There are no municipal watermain systems in the vicinity of the subject site. Domestic water supply for the proposed building will be provided by an existing drilled well located on the property. For more details regarding the domestic water supply refer to the *Site Servicing Study* prepared by D.B. Gray Engineering Inc.

4.0 REQUIRED FIRE FLOW

4.1 City of Ottawa Guidelines

City of Ottawa Technical Bulletin ISTB-2021-03 states the following:

"The requirements for levels of fire protection on private property in urban areas are covered in Section 7.2.11 of the Ontario Building code. If this approach yields a fire flow greater than 9,000 L/min then the Fire Underwriters Survey method shall be used to determine these requirements instead. The requirements for levels of fire protection on private property in rural areas are based on the FUS method in all cases."

Since the subject site is located on private property and in a rural area of the City, the FUS Guidelines have been referenced.

4.2 FUS Guidelines

Part 1 – Required Fire Flow of the FUS Guidelines states:

"Water distribution system design should contemplate meeting the required fire flows existing or probable, with the possible exception of gross anomalies where there is no fire threat to the remainder of the community."

Given that the proposed building is in a rural setting with no fire threat to the community (i.e. no exposures within 30 metres) an exception should be considered in determining the required fire flow.

Part 2 – Risk Quantification with Required Fire Flows of the FUS Guidelines states:

"In areas where the authority having jurisdiction determines that adequate and reliable water supply systems for effective fire-fighting purposes do not otherwise exist, consideration should be given to planning for alternative water supplies for structural fire-fighting purposes. The recommended approach for alternative water supply design and delivery is described in NFPA 1142, Standard on Water Supplies for Suburban and Rural Fire Fighting."

Since adequate water supply systems for firefighting purposes do not exist (i.e. no municipal water distribution system available) the recommended approach for water supply design should be in accordance with NFPA 1142 as recommended in the FUS Guidelines.

4.3 NFPA Guidelines

NFPA 1142 - Standard on Water Supplies for Suburban and Rural Firefighting is a standard which identifies the method of determining the minimum requirements for alternative water supplies for structural firefighting purposes in areas where the authority having jurisdiction (AHJ) determines that adequate and reliable water supply systems for firefighting purposes to do not otherwise exist.

The minimum water supply for firefighting has been calculated in accordance with NFPA Guidelines as follows:

Exposures

For the purpose of calculating minimum water supply requirement, a structure shall be considered an exposure hazard under the following conditions *[reference: NFPA 1142 Chapter 4.1.5]:*

1. It is 9.3 m^2 or larger in area and is within 15.24 m of another structure.
2. The structure, regardless of size, is of occupancy hazard classification 3 or 4 as determined in Chapter 5 and is within 15.24 m of another structure.

Since no structures are located within 15.24 metres of the building being considered, there are no exposure hazards.

Minimum Water Supply Equation

For structures with no exposure hazards, the minimum water supply shall be determined as follows *[reference: NFPA 1142 Chapter 4.2.1]:*

$$WS_{min} = \frac{VS_{tot}}{OHC}(CC) \qquad [4.2.1]$$

Where:

WS_{min} = minimum water supply (gal)
VS_{tot} = total volume of structure (ft^3)
OHC = occupancy hazard classification number
CC = construction classification number

Total Volume of Structure

Building Length	= 48.768 m
Building Width	= 33.528 m
Ground Floor Area	= 1,635.094 m^2
Building Height	= 7.315 m
Roof Height	= 1.394 m

VS_{tot} = 1635.094 x (7.315 + (1.394/2)) = 13,100.4 m^3

VS_{tot} = 13,100.4 m^3 x 35.31 = 462,574 ft^3

The Developer intends to implement firewalls (refer to Firewall Plan provided under **Attachment A**) which will divide the proposed building into 10 separate units thus reducing the volume of the structure being considered. To be conservative, the largest unit by volume has been considered.

Unit Length	= 9.75 m
Unit Width	= 25.53 m
Unit Floor Area	= 248.92 m^2
Unit Height	= 7.315 m
Unit Roof End Area	= 20.73 m^2
Unit Roof Length	= 9.75 m

VS_{tot} = (248.92 m^2 x 7.315 m) + (20.73 m^2 x 9.75 m) = 2,022.9 m^3

VS_{tot} = 2,022.9 m^3 x 35.31 ≈ **71,430 ft^3**

For proposed building dimensions refer to the Proposed Site Plan and Proposed Elevations drawings (prepared by others) provided under **Attachment A**.

Occupancy Hazard Classification Number

The intended use of the building being considered is not yet known, however, based on the applicable zoning uses an occupancy hazard classification number of (4) has been assumed. A list of occupancies which qualify for an occupancy hazard classification number of (4) are provided under **Attachment A** *[reference: NFPA 1142 Chapter 5.2.2.2].* If the intended use of

the building becomes known, justification for a higher occupancy hazard classification number may be warranted.

OHC = **4**

Construction Classification Number

The building being considered is assumed to be of non-combustible (Type II) construction. In accordance with *NFPA 1142 Table 6.2.1,* Type II construction shall be assigned a classification number of (0.75).

CC = **0.75**

Minimum Water Supply

Using the parameters above, the minimum water supply has been calculated using *Equation 4.2.1* as follows:

$$WS_{min} = \frac{71{,}430}{4} (0.75)$$

$WS_{min} \approx$ 13,393 gal

WS_{min} = 13,393 gal x 3.785 ≈ **50,692 L**

Water Delivery Rate

In accordance with *NFPA 1142 Table 4.6.1,* the water delivery rate for a required water supply of 50,692 L is 950 L/min which equates to a duration of roughly 1.0 hour (53 minutes).

The AHJ shall be permitted to adjust the water delivery rate, giving consideration to local conditions and need. *[reference: NFPA 1142 Chapter 4.6.2].*

The minimum water delivery rate shall not be less than 250 gpm (950 L/min). *[reference: NFPA 1142 Chapter 4.6.3].*

Water Supply Tanks

"Fire flow requirements shall be permitted to be decreased by the AHJ for isolated buildings or a group of buildings in rural areas or suburban areas where the development of full fire flow requirements is impractical as determined by the AHJ". [reference: NFPA 1 Chapter 18.4.2.1.1]

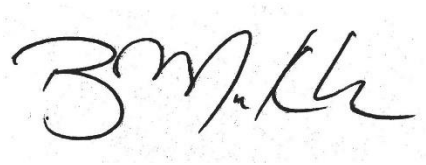
Fiberglass tanks (or approved equivalent) can be considered as a suitable option to provide the required water supply for fire protection. A tank with a rated capacity of 56,800 L has a diameter of 2.4 metres and a length of 13.6 metres (refer to sample tank specifications under **Attachment A**). The practicality of the required tank size should be considered in determining the fire flow requirements as suggested under *Chapter 18.4.2.1.1*.

5.0 CONCLUSIONS

This memorandum has demonstrated that minimum water supply requirements, prepared in accordance NFPA 1142 Guidelines, are warranted for the subject site given the lack of a

municipal water distribution system. The values provided herein should be considered in determining fire flow requirements.

Prepared By:



Brandon MacKechnie, P.Eng.
Project Engineer

Reviewed By:

Pat Leblanc, P.Eng.
Senior Project Manager

Appendix A

Firewall Plan

Proposed Site Plan
(DWG. A001)

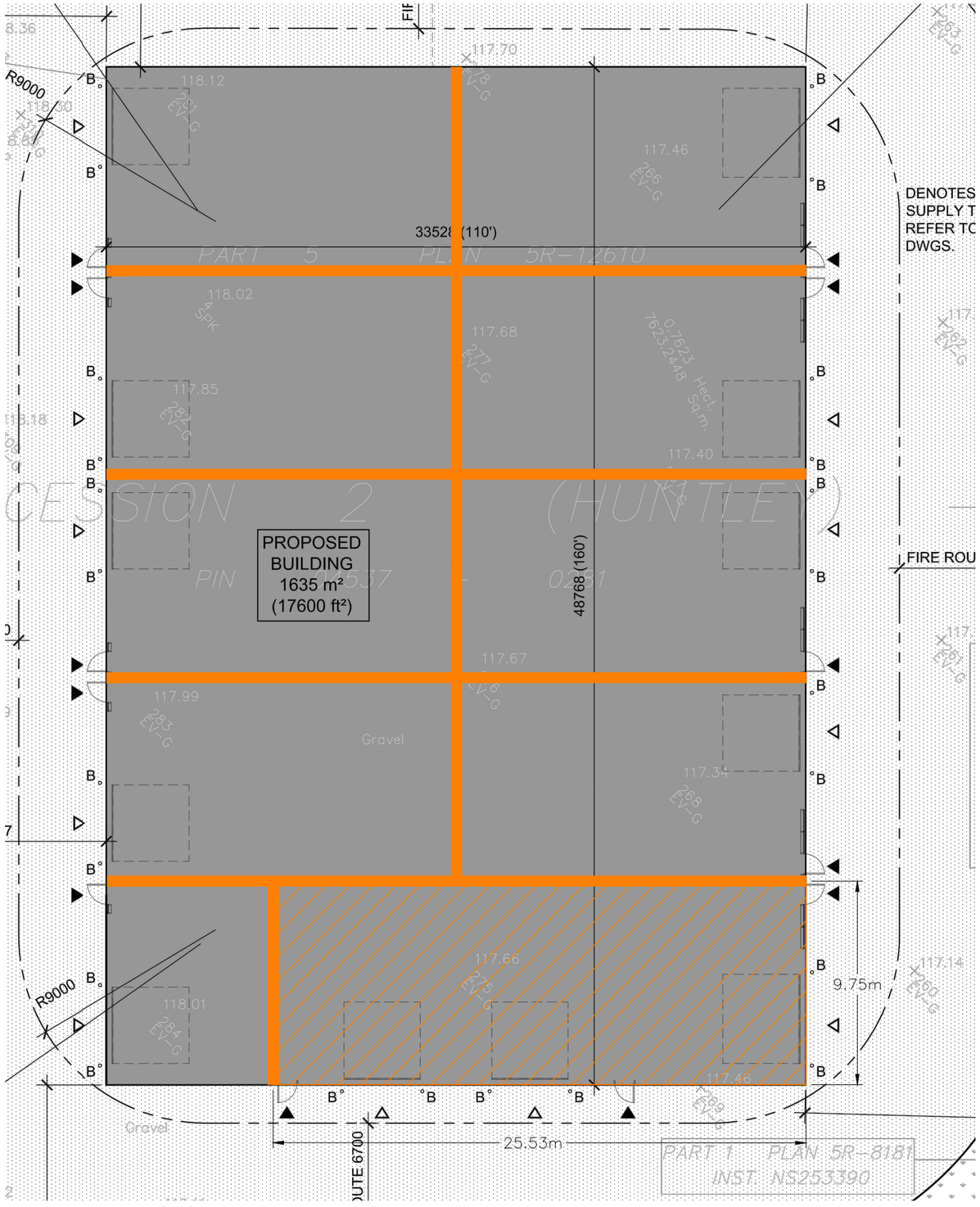
Proposed Elevations
(DWG. A300-A301)

Occupancy Hazard Classification

Construction Classification Number

Water Delivery Rate

Tank Specifications



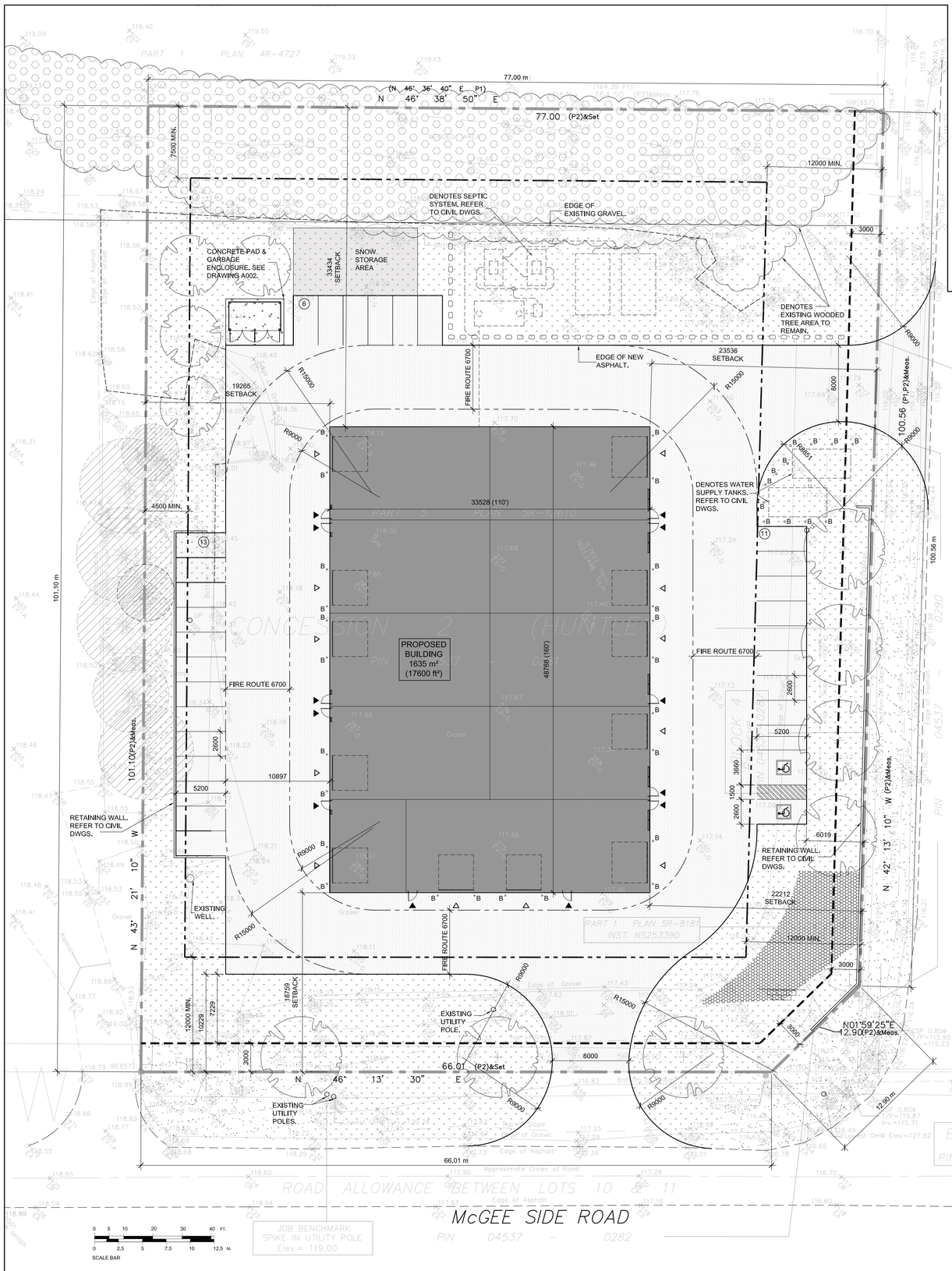
LEGEND

PROPOSED FIREWALL

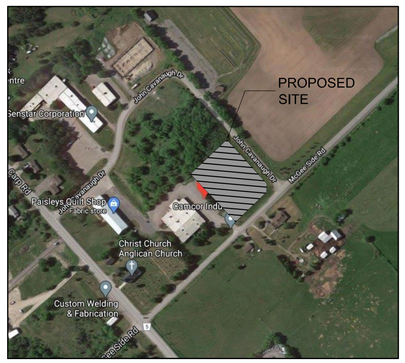
EFFECTIVE FIRE AREA

Robinson
Land Development

scale N.T.S.	2167 McGEE SIDE ROAD	project no. 24012
date 06/02/24	FIREWALL PLAN	FIREWALL
drawn by BLM		



1 / A001 PROPOSED SITE PLAN:
SCALE: 1 : 250



REFER TO LANDSCAPE DWGS FOR ALL TREES & GRASS & MULCH AREAS.

LEGEND

- PROPERTY BOUNDARY LINE.
- SET BACK LINE
- LANDSCAPE BUFFER
- FIRE ROUTE LANES
- PROPOSED BUILDING
- ASPHALT
- CONCRETE SURFACE. REFER TO CIVIL DWGS.
- SEEDED GRASS AREA. REFER TO LANDSCAPE DWGS.
- EXISTING LANDSCAPED AREA . REFER TO LANDSCAPE DWGS.
- EXISTING WOODED AREA. REFER TO LANDSCAPE DWGS.
- ▲ MAN DOOR LOCATIONS.
- △ O/H DOOR LOCATIONS
- °B DENOTES BOLLARDS. REFER TO CIVIL DWGS.

GENERAL NOTES:

1. REFER TO SURVEYOR'S REAL PROPERTY REPORT PART 1 PLAN OF PART OF LOT 11, CONCESSION 2, (GEOGRAPHIC TOWNSHIP OF HUNTLEY) CITY OF OTTAWA, SURVEYED BY ANNIS, O'SULLIVAN, VOLLEBEKK LTD, ONTARIO LAND SURVEYORS.

SITE DATA:

BUILDING AREA: 1635m²

GROSS FLOOR AREA: (City of Ottawa Zoning Bylaw): Gross floor area means the total area of each floor whether located above, at or below grade, measured from the interiors of outside walls and including floor area occupied by interior walls and floor area created by bay windows, but excluding;

(a) floor area occupied by shared mechanical, service and electrical equipment that serve the building; (By-law 2008-326)
(b) common hallways; corridors; stairwells, elevator shafts and other voids; steps and landings; (By-law 2008-326)
(c) bicycle parking; motor vehicle parking or loading facilities;
(d) common laundry, storage and washroom facilities that serve the building or tenants;
(e) common storage areas that are accessory to the principal use of the building; (By-law 2008-326)
(f) common amenity area and play areas accessory to a principle use on the lot; and (By-law 2008-326)
(g) living quarters for a caretaker of the building.

GROUND FLOOR AREA (1635m²) + MEZZANINES (218m²)
NEW INDUSTRIAL BUILDING: 1853m²
TOTAL 1853m²

GROSS AREA: (Ontario Building Code definition); The total area of all floors above grade measured between the outside surfaces of exterior walls or between the outside surfaces of exterior walls and the centre line of firewalls, except that, in any occupancy other than a residential occupancy, where an access or a building service penetrates a firewall, measurements shall not be taken to the centre line of such firewall.

GROUND FLOOR AREA (1635m²) + MEZZANINES (218m²)
NEW INDUSTRIAL BUILDING: 1853m²
TOTAL 1853m²

ZONING:

1.0 ZONING DESIGNATIONS (Part 13):

RG - RURAL GENERAL INDUSTRIAL ZONE

2.0 ZONING PROVISIONS:

RG5 SUBZONES - CARP ROAD CORRIDOR :

	REQUIRED	PROVIDED
MINIMUM LOT WIDTH (m):	30	66,01
MINIMUM LOT AREA (m²):	4000	7,622
MINIMUM FRONT YARD SETBACK (m):	12	18,759
MINIMUM REAR YARD SETBACK (m):	7,5	33,434
MINIMUM INTERIOR SIDE YARD SETBACK (m):	4,5	19,265
MINIMUM CORNER SIDE YARD SETBACK (m):	12	22,212
MAXIMUM PRINCIPAL BUILDING HEIGHT (m):	15	8,012
MAXIMUM LOT COVERAGE (%):	50	21,45
LANDSCAPED AREA (%):	50	78,55
MINIMUM LANDSCAPING ABUTTING A STREET (m):	3	6,019
MINIMUM LANDSCAPING ALL OTHER CASES (m):	0	0

3.0 PARKING (Section 101) :

AREA D ON SCHEDULE 1A.

Minimum Required:
OFFICE 8 (2,4/100m² of GFA 332,5 m²)
WAREHOUSE: 13 (0,8/100m² of GFA 1520,5 m²)
TOTAL 21

Provided:
STANDARD SPACE : 28
BARRIER-FREE: 2
TOTAL 30

4.0 BICYCLE PARKING (Section 111):

Not Required as per section 111 (1): NOT PROVIDED

5.0 LOADING (Section 113):

Not required as per table 113A. NOT PROVIDED

6.0 ACCESSIBLE PARKING PROVISION REQUIREMENTS
(Parking Bylaw 2017-301, PART C Section 111):

Minimum Required: 1 TYPE A PARKING SPACE
1 TYPE B PARKING SPACE

Provided: 1 TYPE A PARKING SPACE
1 TYPE B PARKING SPACE

CLIENT

STOKED INDUSTRIES INC.
14 KNOLL TERRACE, NEPEAN, ON, K2J 2K6

ISSUE	DESCRIPTION	DATE
11	REVISED FOR FINAL SPC APPROVAL	12/21/2023
10	REVISED FOR CITY COMMENTS	26/09/2023
09	FOR SITE PLAN CONTROL REVIEW/RESPONSE	11/08/2023
08	FOR SITE PLAN CONTROL	30/06/2023
07	FOR CLIENT DISCUSSION	10/02/2023
06	REVISED AS PER CIVIL COMMENTS	22/03/2023
05	REVISED AS PER CLIENT COMMENTS	16/02/2023
04	FOR SITE PLAN CONTROL REVIEW/RESPONSE	27/07/2021
03	FOR SITE PLAN CONTROL REVIEW/RESPONSE	01/06/2021
02	FOR SITE PLAN CONTROL	26/02/2021
01	FOR SITE PLAN PRE-CONSULTATION	30/11/2020

PROFESSIONAL STAMP

PROJECT NORTH

es ARCHITECT
11 Hogan Drive | Arnprior | ON | K1Y 0H8
613.203.3760

PROJECT

2167 MCGEE SIDE RD,
WAREHOUSE BUILDING

DRAWING

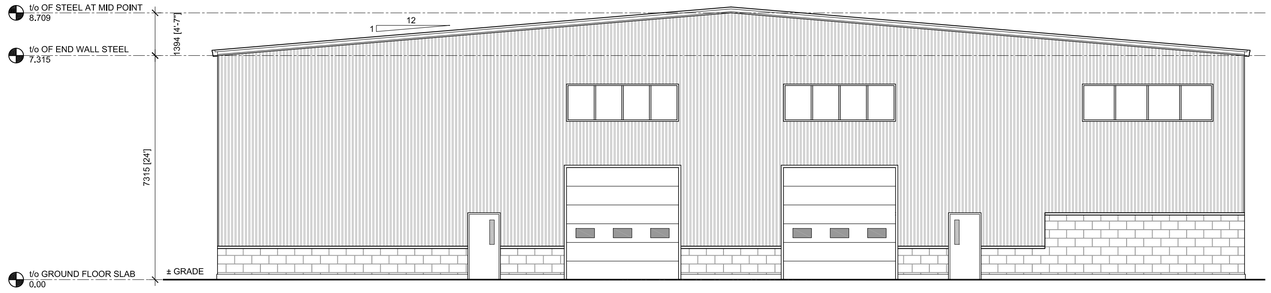
PROPOSED
SITE PLAN

PROJECT No: 060	REVISION: 10
DRAWN: SL	DATE: NOVEMBER 2020
APPROVED: ES	SCALE: AS SHOWN

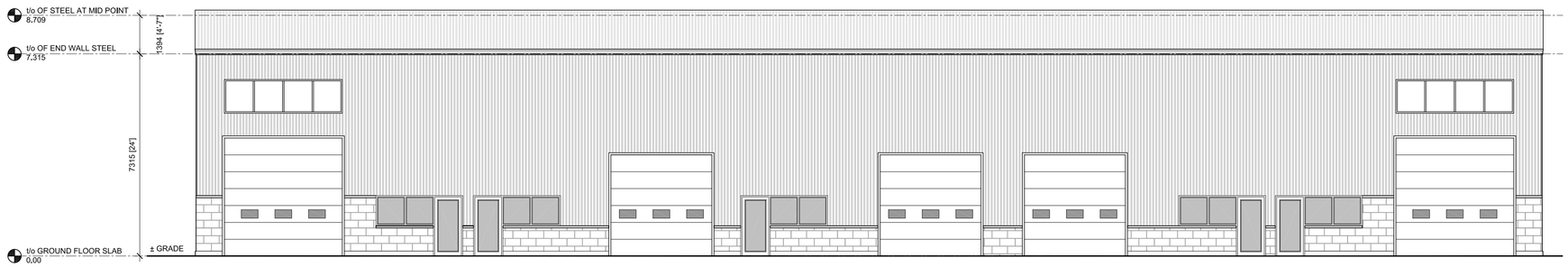
DRAWING No: A001

D07-12-21-0027

PLAN NO. 18432



1 / A300 PROPOSED SOUTH ELEVATION: OPTION A
SCALE: 1 : 100



1 / A300 PROPOSED EAST ELEVATION: OPTION A
SCALE: 1 : 100

LEGEND

- MASONRY CLADDING.
- VERTICAL INSULATED METAL PANEL SIDING, GREY

CLIENT

STOKED INDUSTRIES INC.
14 KNOLL TERRACE, NEPEAN,
ON, K2J 2K6

ISSUE	DESCRIPTION	DATE
04	REVISED FOR FINAL SPC APPROVAL	12/21/2023
03	FOR SITE PLAN CONTROL	30/06/2023
02	FOR CLIENT REVIEW	25/05/2023
01	FOR CLIENT DISCUSSION	17/05/2023

PROFESSIONAL STAMP

PROJECT NORTH

es ARCHITECT
11 Hogan Drive | Arnprior | ON | K1Y 0H8
613.203.3760

PROJECT

2167 MCGEE SIDE RD,
WAREHOUSE BUILDING

DRAWING

PROPOSED
ELEVATIONS

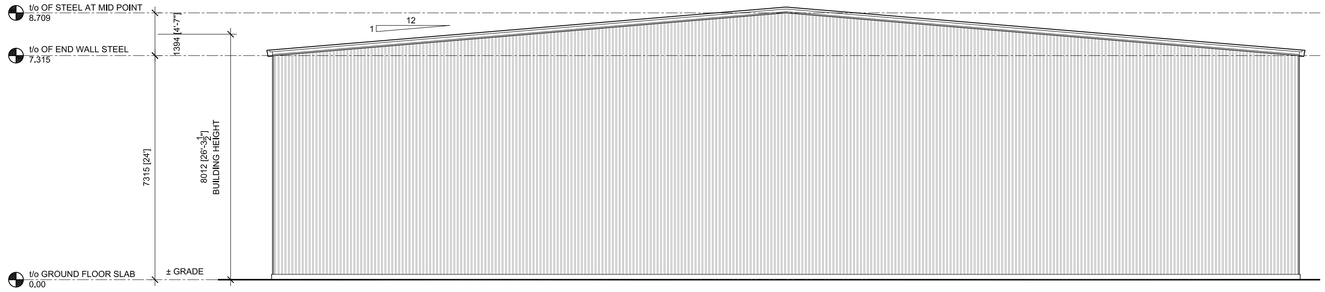
PROJECT No: 060	REVISION: 03
DRAWN: SL	DATE: MAY 2023
APPROVED: ES	SCALE: AS SHOWN

DRAWING No:

A300

D07-12-21-0027

PLAN NO. 18432



1 / A301 PROPOSED NORTH ELEVATION: OPTION A
SCALE: 1 : 100

1 / A301 PROPOSED WEST ELEVATION: OPTION A
SCALE: 1 : 100

LEGEND

- MASONRY CLADDING.
- VERTICAL INSULATED METAL PANEL SIDING, GREY

CLIENT

STOKED INDUSTRIES INC.
14 KNOLL TERRACE, NEPEAN,
ON, K2J 2K6

ISSUE	DESCRIPTION	DATE
04	REVISED FOR FINAL SPC APPROVAL	12/21/2023
03	FOR SITE PLAN CONTROL	30/06/2023
02	FOR CLIENT REVIEW	25/05/2023
01	FOR CLIENT DISCUSSION	17/05/2023

PROFESSIONAL STAMP

PROJECT NORTH

es ARCHITECT
11 Hogan Drive | Arnprior | ON | K1Y 0H8
613.203.3760

PROJECT

2167 MCGEE SIDE RD,
WAREHOUSE BUILDING

DRAWING

PROPOSED
ELEVATIONS

PROJECT No: 060	REVISION: 03
DRAWN: SL	DATE: MAY 2023
APPROVED: ES	SCALE: AS SHOWN

DRAWING No:

A301

D07-12-21-0027

PLAN NO. 18432

5.2.2.2

Occupancies having conditions similar to the following shall be assigned occupancy hazard classification number 4:

(1) Barns and stables (commercial)

(2) Building materials supply storage

(3) Department stores

(4) Exhibition halls, auditoriums, and theaters

(5) Feed stores (without processing)

(6) Freight terminals

(7) Mercantiles

(8) Paper and pulp mills

(9) Paper processing plants

(10) Piers and wharves

(11) Repair garages

(12) Rubber products manufacturing and storage

(13) Warehouses, such as those used for furniture, general storage, paint, paper, and woodworking industries

Pin Header

Table 6.2.1 Construction Classification Number

Construction Type	Classification Number
Type I (442 or 332)	0.5
Type II (222, 111, or 000)	0.75
Type III (211 or 200)	1.0
Type IV (2HH)	0.75
Type V (111 or 000)	1.5

Pin Header

Table 4.6.1 Water Delivery Rate

Total Water Supply Required		Water Delivery Rate	
gal	L	gpm	L/min
<15,000	<56,780	250	950
15,001–22,500	56,785–85,170	500	1,900
22,501–30,000	85,175–113,560	750	2,850
>30,000	>113,560	1,000	3,800

GRANBY
COMPOSITES

FIBERGLASS TANKS
FOR WATER AND WATER STORAGE MANAGEMENT INDUSTRY
Sustainable & Safe.

MOST POPULAR PRODUCTS

NN08240476
12,500 gal. (US) 10,500 gal. (UK) 47,600 L
Diameter: 2,438 mm (8')
Length: 11,365 mm (37' 3 1/2")
Weight: 1,630 kg (3,594 pounds)

NN08290573
15,000 gal. (US) 12,490 gal. (UK) 56,800 L
Diameter: 2,438 mm (8')
Length: 13,551 mm (44' 5 1/2")
Weight: 2,041 kg (4,500 pounds)

NN08350687
18,000 gal. (US) 14,990 gal. (UK) 68,100 L
Diameter: 2,438 mm (8')
Length: 16,573 mm (54' 4 1/2")
Weight: 2,654 kg (6,860 pounds)

NN08390760
20,000 gal. (US) 16,665 gal. (UK) 75,700 L
Diameter: 2,438 mm (8')
Length: 18,665 mm (61' 2 7/8")
Weight: 2,880 kg (6,360 pounds)

NN10100452
12,000 gal. (US) 9,990 gal. (UK) 45,400 L
Diameter: 3,048 mm (10')
Length: 7,112 mm (23'4")
Weight: 1,814 kg (4,000 pounds)

NN10200760
20,000 gal. (US) 16,650 gal. (UK) 75,700 L
Diameter: 3,048 mm (10')
Length: 11,391 mm (37' 4 1/2")
Weight: 2,767 kg (6,100 pounds)

NN10260950
25,000 gal. (US) 20,880 gal. (UK) 94,600 L
Diameter: 3,048 mm (10')
Length: 13,996 aim (45' 11")
Weight: 3,425 kg (7,550 pounds)

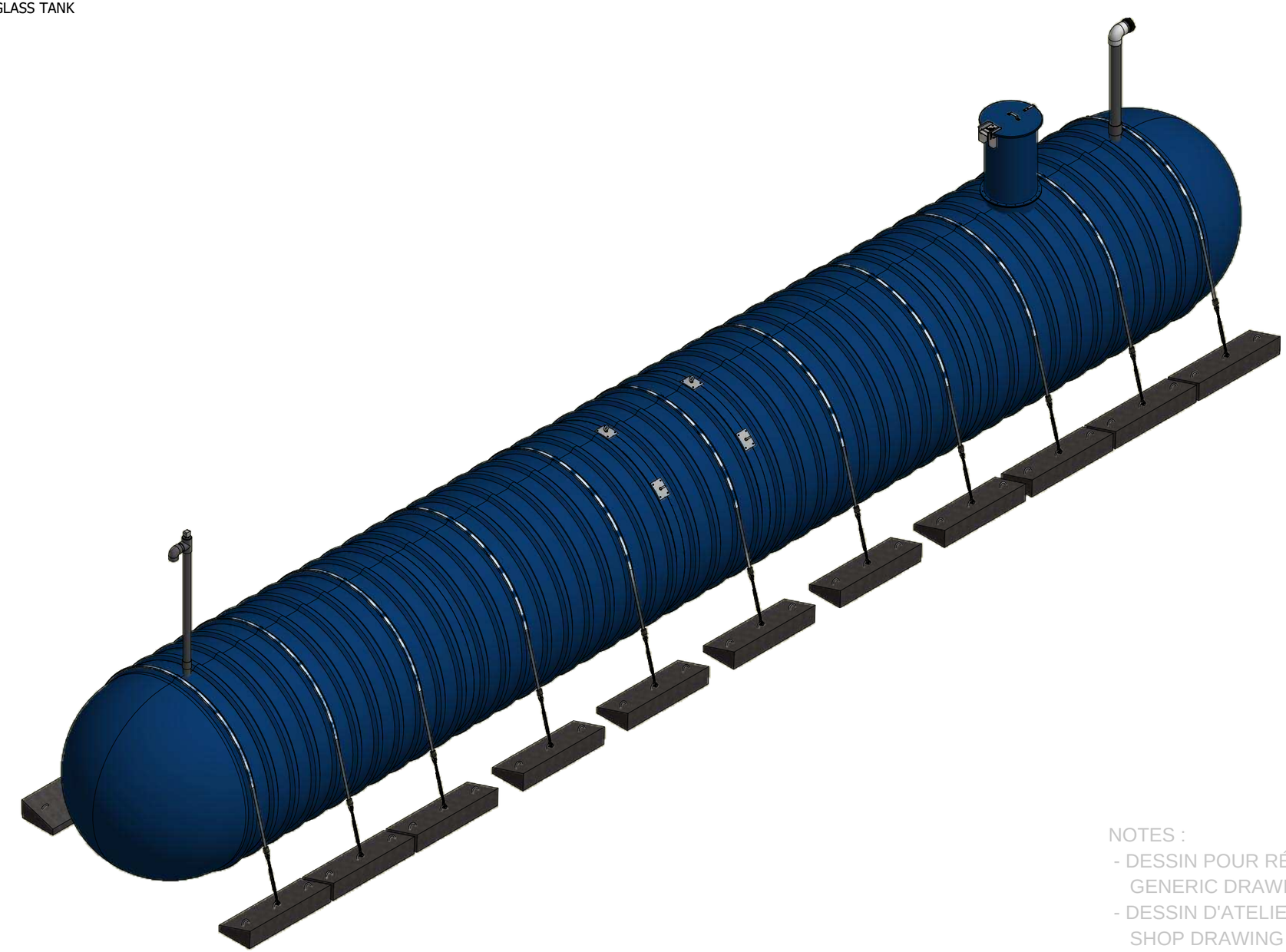
NN10321135
30,000 gal. (US) 24,980 gal. (UK) 113,600 L
Diameter: 3,048 mm (10')
Length: 16,610 mm (64' 2")
Weight: 3,969 kg (8,750 Pounds)

NN10381325
35,000 gal. (US) 29,140 gal. (UK) 132,600 L
Diameter: 3,048 mm (10')
Length: 19,113 mm (62' 8 1/2")
Weight: 4,559 kg (10,060 Pounds)

NN10441513
40,000 gal. (US) 33,310 gal. (UK) 151,400 L
Diameter: 3,048 mm (10')
Length: 21,716 mm (71' 3")
Weight: 5,262 kg (11,600 pounds)

NN10461577FP

RÉSERVOIR DE FIBRE DE VERRE / FIBERGLASS TANK



NOTES :

- DESSIN POUR RÉFÉRENCE SEULEMENT / GENERIC DRAWING FOR REFERENCE ONLY
- DESSIN D'ATELIER DISPONIBLE SUR DEMANDE / SHOP DRAWING AVAILABLE ON REQUEST

TOLERANCES (LINÉAIRES / LINEAR)
0 OR FRAC. (X/X) -> ± 1% 0.00 -> ± 0.25"
0.0 -> ± 0.5" 0.000 -> ± 0.125"

TOLERANCES (ANGULAIRES / ANGULAR)
0 -> ± 2 DEG.
0.0 -> ± 0.5 DEG. 0.00 -> ± 0.1 DEG.

Poids / Weight : 9662 Lb / 4382 Kg

Client

Description de la révision / Revision description

Dessiné par / Drawn by: S. Potvin 01/03/2018

Approuvé par / Approved by :

Unités / Units: INCHES

Feuille / Sheet: 1 / 4

Granby Composites Inc.

Format / Size	No de la pièce / Part no.	REV
B	NN10461577FP	01

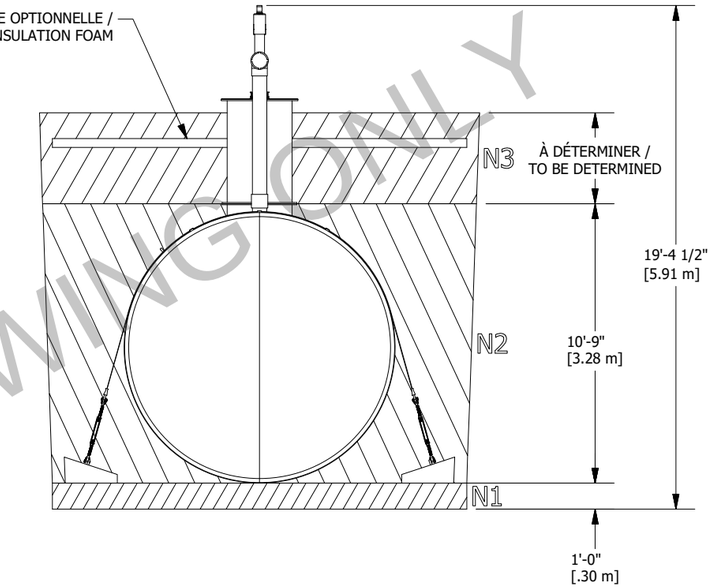
Description / Title: RÉSERVOIR 10' Dia. / 155944 L / 41196 gal US - TANK

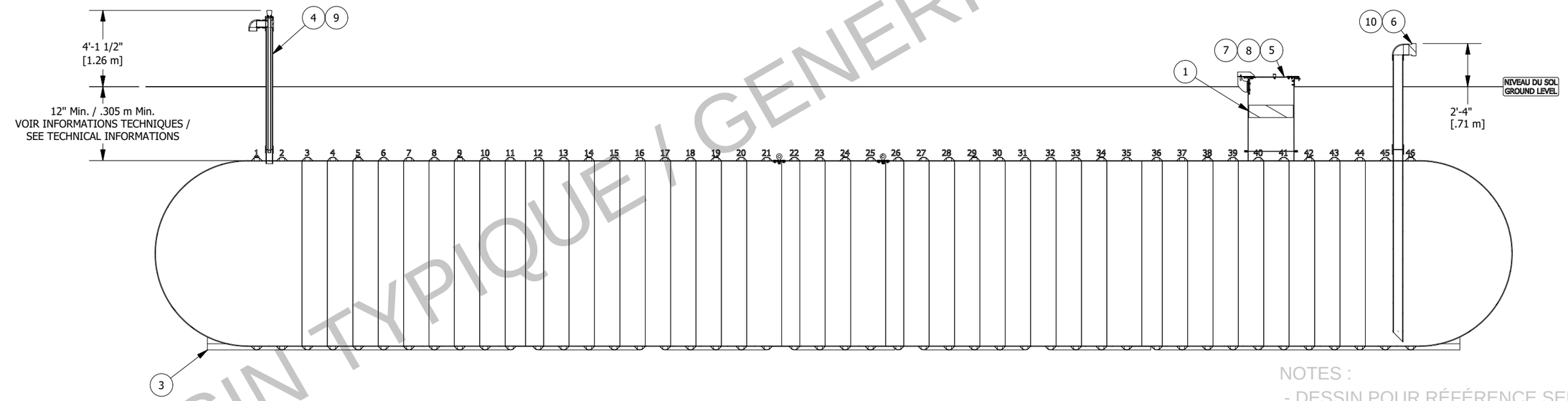
Projet: Project

Item	Numéro de pièce / Part Number	Qté / Qty	Description	Check List
1	ADF0000001	1	FOAM 28¾" DIA. x 8" ÉP. / FACTEUR R-35	
2	ADP0000001	4	PLAQUES DE LEVAGE (Granby #AS1108) - LIFTING LUG	
3	ENSCOUR10	11	JEUX DE COURROIES ET BLOCS DE BÉTON - ANCHORING KIT	
4	EV480J	1	ENSEMBLE ÉVENT AVEC JAUGE - 4" SCH. 80 - VENT KIT WITH GAUGE	
5	GMHE30-COVER01	1	COUVERCLE DE TROU HOMME CADENASSABLE AVEC PENTURE - 30" DIA. FRP. - LOCKABLE MAN HOLE COVER WITH HINGE	
6	KB-BNH0600090	1	ENSEMBLE BORNE FONTAINE - 6"NH 90° - FIRE HYDRANT KIT	
7	MH-30 (6"L.)	1	TROU D'HOMME - 30" DIA. x 6" L. - MANHOLE	
8	MHE-30 (48"L.)	1	EXTENSION DE TROU D'HOMME - 30" DIA. x 48" L. - MANHOLE EXTENSION	
9	TP80400G01 (9"L.)	1	TUYAU PVC GRIS - 4" SCH.80 - PVC PIPE GREY	
10	TP80600G01 (125"L.)	1	TUYAU PVC GRIS COUPÉ 45° - 6" SCH.80 - PVC PIPE GREY 45° CUT	

PROPRIÉTÉS DU REMBLAI / BACKFILL PROPERTIES

N1 - GRAVILLON 1/8" À 3/4" OU PIERRE NETTE 1/2"
1/8" TO 3/4" PEA GRAVEL OR 1/2" CRUSHED STONE
N2 - REMBLAI PRIMAIRE, GRAVILLON 1/8" À 3/4" OU PIERRE NETTE 1/2"
PRIMARY BACKFILL, 1/8" TO 3/4" PEA GRAVEL OR 1/2" CRUSHED STONE
N3 - REMBLAI SECONDAIRE, SABLE GROSSIER OU GRAVIER 1 1/2" OU MOINDRE
SECONDARY BACKFILL, COARSE SAND OR GRAVEL 1 1/2" OR LESS





VUE D'ÉLÉVATION COUPÉE
CUT ELEVATION VIEW

Ancrage optionel selon les conditions du terrain / Optional anchoring depending on the tank's environment

Informations techniques / Technical informations

- Profondeur d'enfouissement / Burrial depth: Selon les conditions géotechniques d'installation / According to the geotechnical installation conditions
- Diamètre intérieur / Inside Diameter : 120" / 3.048 m
- (Si requis) Quantité de courroies de fibre de verre avec attaches en acier galvanisé / (If required) Quantity of fiberglass anchoring straps : 11
- (Si requis) Quantité de blocs de béton armé / (If required) Quantity of reinforced concrete deadman anchors : 22
- Longueur minimale requise de la chaîne pour le levage à 60° / Minimum required length of the chain for the 60° lifting : 135"
- Évalué HS-20 à une profondeur d'enfouissement de 36 à 60 pouces , .9144 m à 1.524 m / HS-20 rated for burial depth from 36 to 60 inches , .9144 m to 1.524 m
- Fabriqué selon les exigences ANSI-AWWA D120 / Manufactured according to ANSI-AWWA D120 requirements

Le réservoir doit être installé selon les instructions du manufacturier. / The tank must be installed in accordance with the manufacturer's instructions.

NOTES :
- DESSIN POUR RÉFÉRENCE SEULEMENT / GENERIC DRAWING FOR REFERENCE ONLY
- DESSIN D'ATELIER DISPONIBLE SUR DEMANDE / SHOP DRAWING AVAILABLE ON REQUEST

TOLERANCES (LINÉAIRES / LINEAR)
0 OR FRAC. (X/X) -> ± 1% 0.00 -> ± 0.25"
0.0 -> ± 0.5" 0.000 -> ± 0.125"

TOLERANCES (ANGULAIRES / ANGULAR)
0 -> ± 2 DEG.
0.0 -> ± 0.5 DEG. 0.00 -> ± 0.1 DEG.

Poids / Weight : 9662 Lb / 4382 Kg

Client

Description de la révision / Revision description

Dessiné par / Drawn by: S. Potvin — 01/03/2018

Approuvé par / Approved by :

Unités / Units: INCHES — Feuille / Sheet 2 / 4

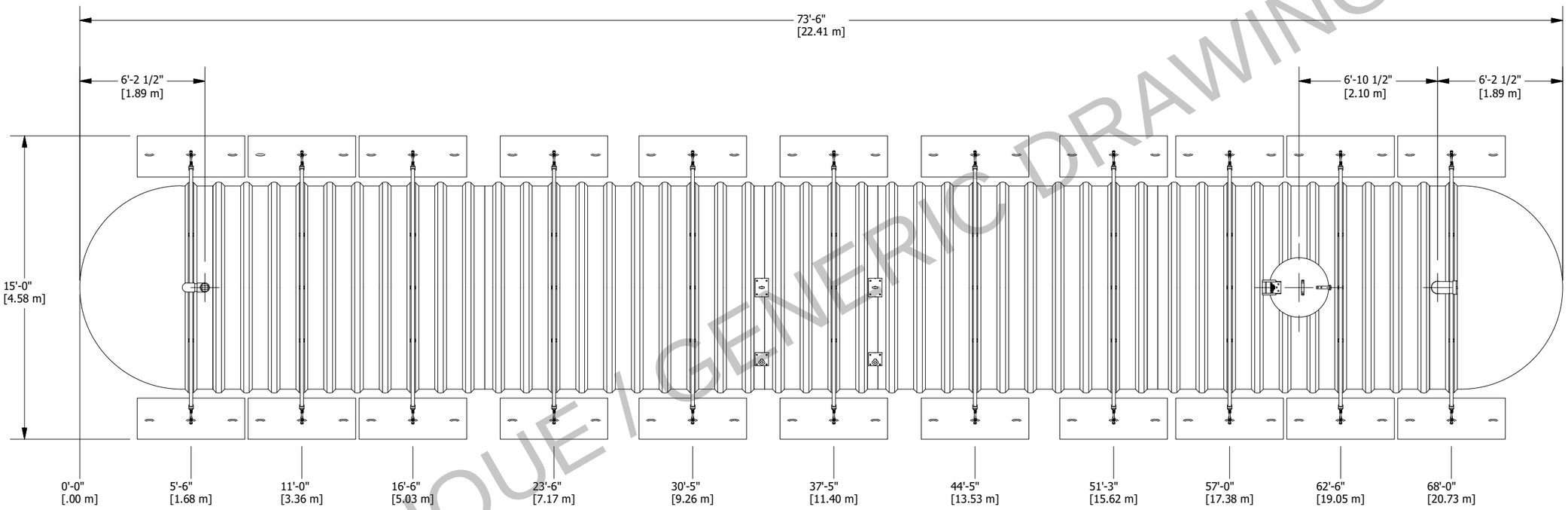
Granby Composites Inc.

Format / Size: B — No de la pièce / Part no.: NN10461577FP — REV: 01.

Description / Title: RÉSERVOIR 10' Dia. / 155944 L / 41196 gal US - TANK

Projet: Project

D-PRTS_TMPLT_G



VUE DE PLAN
PLAN VIEW

NOTES :
- DESSIN POUR RÉFÉRENCE SEULEMENT / GENERIC DRAWING FOR REFERENCE ONLY
- DESSIN D'ATELIER DISPONIBLE SUR DEMANDE / SHOP DRAWING AVAILABLE ON REQUEST

TOLERANCES (LINÉAIRES / LINEAR) 0 OR FRAC. (X/X) -> ± 1% 0.00 -> ± 0.25" 0.0 -> ± 0.5" 0.000 -> ± 0.125"	Description de la révision / Revision description	Granby Composites Inc.
TOLERANCES (ANGULAIRES / ANGULAR) 0 -> ± 2 DEG. 0.0 -> ± 0.5 DEG. 0.00 -> ± 0.1 DEG.	Dessiné par / Drawn by: S. Potvin — 01/03/2018	Format / Size: B — No de la pièce / Part no.: NN10461577FP — REV: 01.
Poids / Weight : 9662 Lb / 4382 Kg	Approuvé par / Approved by :	Description / Title: RÉSERVOIR 10' Dia. / 155944 L / 41196 gal US - TANK
Client	Unités / Units: INCHES — Feuille / Sheet: 3 / 4	# Projet: Project #

D-PRTS_TMPLT_G