

**GLAZING SPECIFICATION - BLDG A** 

#### **GLAZING PERFORMANCE DATA**

PRODUCT DESCRIPTION: STARPHIRE® ULTRA-CLEAR GLASS IS A UNIQUE LOW-IRON GLASS, THE CLEAREST FLOAT GLASS AVAILABLE, DELIVERING HIGH LIGHT TRANSMITTANCE AND TRUE-COLOR FIDELITY.

#### PRODUCT LAYERS

- ¼" (6mm) STARPHIRE®
- ½" (12.7mm) SPACE AIR NO GAS ¼" (6mm) STARPHIRE®

#### PERFORMANCE DATA

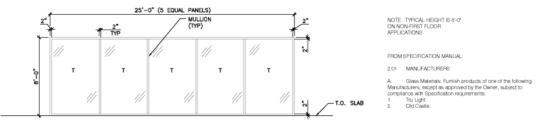
- TRANSMITTANCE NRFC U-VALUE WINTER: 0.47
- VISIBLE LIGHT: 84%
- SOLAR ENERGY: 80% UV: 77%
- REFLECTANCE
- VISIBLE LIGHT- EXT: 15% • VISIBLE LIGHT- INT: 15%
- SHGC: 0.82 SOLAR ENERGY: 14%
  - LSG: 1.02

SUMMER: 0.50

SHADING COEFFICIENT: 0.94

## STORAGE AREA WINDOWS (TYPICAL)

- ALUMINIUM STORE FRONT WINDOW WITH FIXED GLAZING - BOTTOM OF WINDOW AT FINISHED FLOOR, UNLESS OTHERWISE NOTED



-MUST BE CLEAR SINGLE PANE, .25" (1/4 INCH) TEMPERED GLASS WITH A VISIBLE LIGHT TRANSMITTANCE (VLT) OF 89%. DO NOT ORDER ANY GLASS WITH LOW E TREATMENT, TINTING OR OTHER COATING. -ALL FRAMES SHALL BE 4" DEEP OR MATCH EXISTING, CENTER-GLAZED, BLACK ANODIZED

-IF LOCAL BUILDING CODE REQUIRES A MORE ENERGY EFFICIENT WINDOW, USE DOUBLE PANED, INSULATED GLASS WITH A VISIBLE LIGHT TRANSMITTANCE DO NOT ORDER ANY GLASS WITH LOW E TREATMENT, TINTING

- DOUBLE-PANE GLASS WINDOWS ARE DESIGNED TO RESIST LOADS AS PER OBC AND WILL NOT REQUIRE RAILING

- MINIMUM DEFLECTION: L/100

## **OTTAWA BIRD-SAFE DESIGN GUIDELINE** SEPTEMBER 2020

- c) Where glazing is used, bird-safe glass or glass with integrated protection measures is preferred (as per specifications below). Treatments should be applied to a minimum of 90% of the glass within the first 16 metres of height as measured from the finished grade, or to the height of the adjacent mature tree canopy, whichever is
- d) Where green roofs, rooftop gardens or terraces are included in a design, any adjacent glazing should also be treated to a height of 4 m from the surface of the roof or terrace or the height of the adjacent mature vegetation, whichever is greater.

## Specifications for Bird-Safe Glass

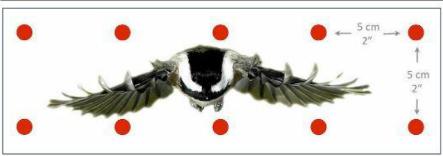
Several techniques can be used to make glass more visible to birds as a solid barrier. These include the use of closely spaced grilles or muntins (i.e., bars dividing individual panes of glass) and the application of commercial films and visual markers. Patterns and images can be applied directly to the glass during manufacture using ceramic fritting, acid etching, digital printing or silk-screening. Creative solutions such as painted murals may also be an option in some cases. Permanent or built-in treatments are preferred for their durability, but other solutions can be effective as long as they are properly maintained and replaced when necessary.

In cases where transparent glass is not required for visibility, low-reflectance opaque or frosted glass (including channel glass and glass blocks) are excellent options to reduce or eliminate collisions. Various finishes are available with differing levels of light transmission. This may include reflective or low-emissivity coatings that have an outside reflectance of 15% or less. Opaque or frosted glass with an outside reflectance of greater than 15% should only be used in combination with other strategies such as

Specifications for effective visual markers:

- High colour contrast to the glass surface.
- Must be applied to the exterior (first) surface of the glass. Any pattern of visual marker is acceptable (i.e. lines, dots, etc.) as long as a
- maximum spacing of 50 mm by 50 mm is used (see Figure 6 below).
- Individual marker elements should be a minimum of 4 mm diameter, or 2 mm wide by 8 mm long for linear elements.

Treatments applied to interior surfaces of the glass will not adequately address reflectivity issues. They will also be less effective at reducing transparency issues if reflectivity is not addressed.



spacing of markers s representative of the area occupied by a flying songbird, the most numerous victims of collisions (American Bird Conservancy / Safe Wings Ottawa).

U-Haul CO. (Canada) LTD

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conformance before proceeding with fabrication.

## IBI Group Architects (Canada) Inc. is a member of the IBI Group of companies

No.	DESCRIPTION	DATE
1	CONCEPT DESIGN	2022-04-29
2	DESIGN DEVELOPMENT	2022-06-03
3	ISSUED FOR PERMIT	2022-07-19
4	RESPONSE TO SPC COMMENTS	2022-08-26
5	RESPONSE TO PERMIT COMMENTS - BLDG A	2022-09-27
6	RESPONSE TO PERMIT COMMENTS - BLDG A - 2	2022-10-17
7	2ND RESUBMISSION - EIS / LANDSCAPE	2022-10-17
8	3RD RESUBMISSION - EIS / LANDSCAPE	2022-11-16

**KEYPLAN** 

ISSUES



**CONSULTANTS** 

ARCHITECTURE / PROJECT MANAGEMENT / TRANSPORTATION: **IBI GROUP - OTTAWA** 333 PRESTON STREET UNIT 400, OTTAWA, ON K1S 5N4

CIVIL / LANDSCAPE / PLANNING: NOVATECH 240 MICHAEL COWPLAND DRIVE SUITE 101, KANATA, ON

GOODKEY, WEEDMARK & ASSOCIATES LIMITED **CONSULTING ENGINEERS** 1188 WOODWARD DRIVE, OTTAWA, ON, K2C 3R8 CLELAND JARDINE ENGINEERING LTD

STATE OF THE ART ACOUSTICK INC. 43-1010 POLYTEK STREET, OTTAWA, ON K1J 9J3

200-580 TERRY FOX, KANATA, ON, K2L 4B9

J.D. BARNES LTD 103-62 STEACIE DRIVE, OTTAWA, ON K2K 2A9

SENEZ CONSULTING LTD., 208 EVANS AVE. UNIT 2019, TORONTO, ON, M8Z 1J7

PRIME CONSULTANT **IBI GROUP** 

400-333 Preston Street, Ottawa ON, K1S 5N4, Canada tel 613 225 1311 fax 613 225 9868

U-HAUL MOVING & STORAGE OF OTTAWA

30 FRANK NIGHBOR PLACE, OTTAWA, ON

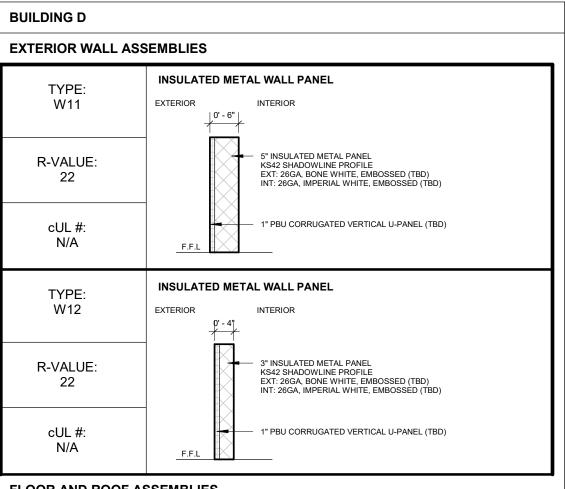
U-Haul Entity 942072

PROJECT NO: 138165

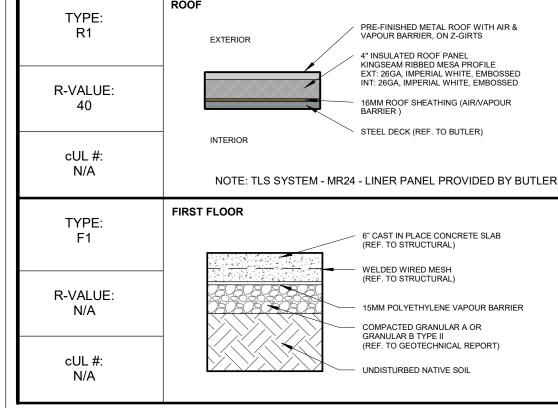
DRAWN BY: CHECKED BY: A. Chu Y. Bilbeisi PROJECT MGR: APPROVED BY: Y. Bilbeisi H. Semple SHEET TITLE

BLDG A - BUILDING ASSEMBLIES

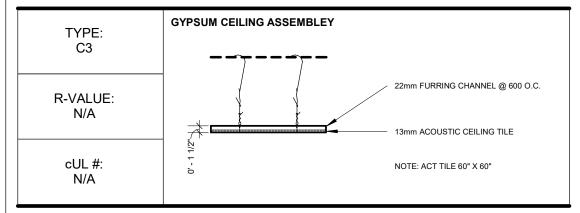
ISSUE



### FLOOR AND ROOF ASSEMBLIES



### **CEILING ASSEMBLIES**



#### GLAZING SPECIFICATION - BLDG D

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#### PERFORMANCE DATA

- TRANSMITTANCE VISIBLE LIGHT: 84%
- SOLAR ENERGY: 80%
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REFLECTANCE

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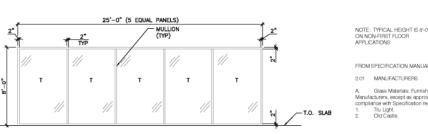
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## **OTTAWA BIRD-SAFE DESIGN GUIDELINE** SEPTEMBER 2020

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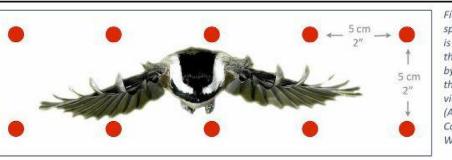


Figure 6: The spacing of markers is representative of the area occupied by a flying songbird, the most numerous victims of collisions (American Bird Conservancy / Safe Wings Ottawa).

U-Haul CO. (Canada) LTD.

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KEYPLAN



CONSULTANTS

#### ARCHITECTURE / PROJECT MANAGEMENT / TRANSPORTATION: **IBI GROUP - OTTAWA**

333 PRESTON STREET UNIT 400, OTTAWA, ON K1S 5N4 CIVIL / LANDSCAPE / PLANNING: NOVATECH

240 MICHAEL COWPLAND DRIVE SUITE 101, KANATA, ON

#### GOODKEY, WEEDMARK & ASSOCIATES LIMITED CONSULTING ENGINEERS 1188 WOODWARD DRIVE, OTTAWA, ON, K2C 3R8

CLELAND JARDINE ENGINEERING LTD 200-580 TERRY FOX, KANATA, ON, K2L 4B9

STATE OF THE ART ACOUSTICK INC.

43-1010 POLYTEK STREET, OTTAWA, ON K1J 9J3 J.D. BARNES LTD 103-62 STEACIE DRIVE. OTTAWA. ON K2K 2A9

**SENEZ CONSULTING LTD.,** 208 EVANS AVE. UNIT 2019, TORONTO, ON, M8Z 1J7

IBI GROUP 400-333 Preston Street, Ottawa ON, K1S 5N4, Canada tel 613 225 1311 fax 613 225 9868 ibigroup.com

PRIME CONSULTANT

U-HAUL MOVING & STORAGE OF OTTAWA

30 FRANK NIGHBOR PLACE, OTTAWA, ON

U-Haul Entity 942072

PROJECT NO: 138165 DRAWN BY: CHECKED BY: A. Chu Y. Bilbeisi PROJECT MGR: APPROVED BY:

Y. Bilbeisi H. Semple SHEET TITLE BLDG D - BUILDING

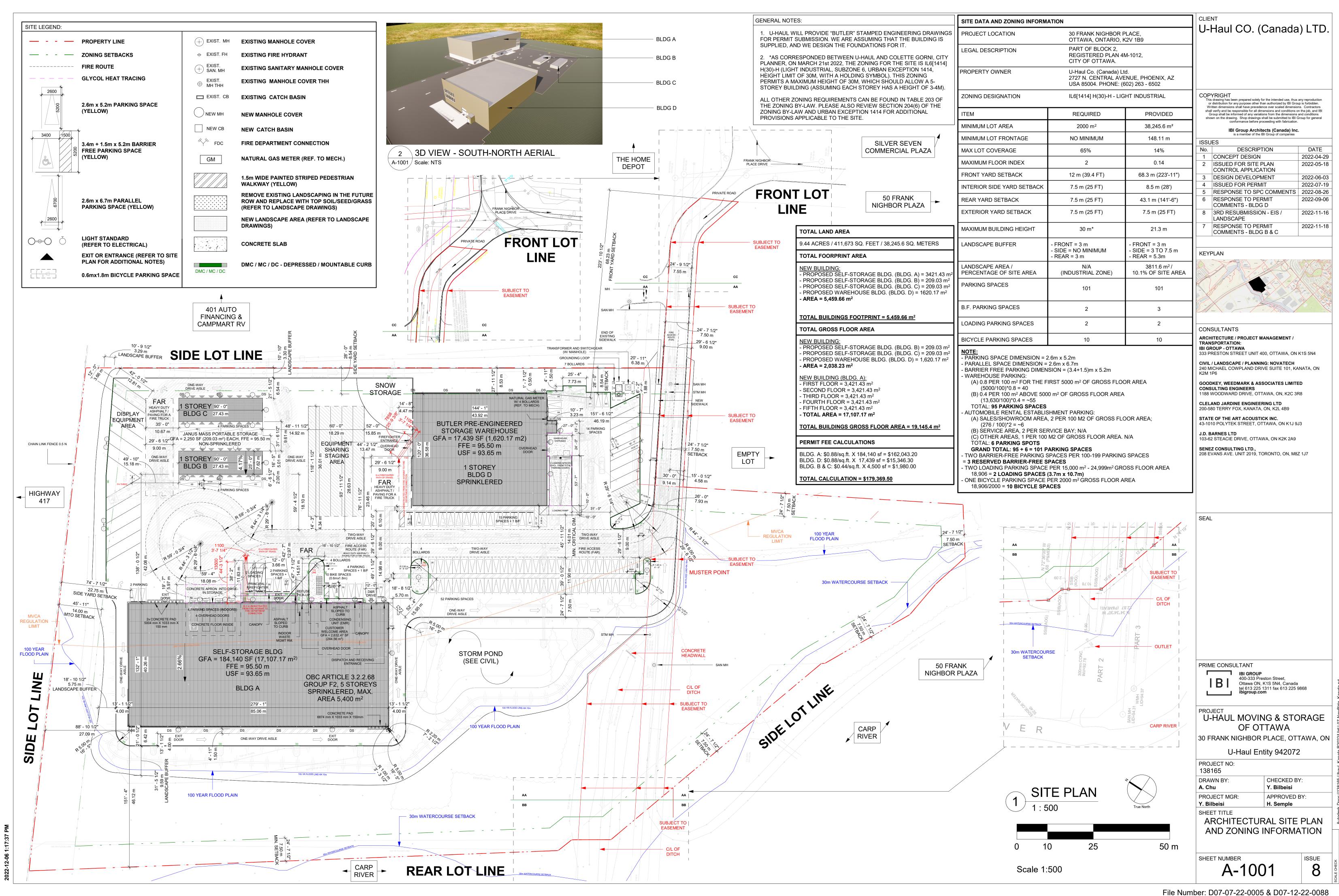
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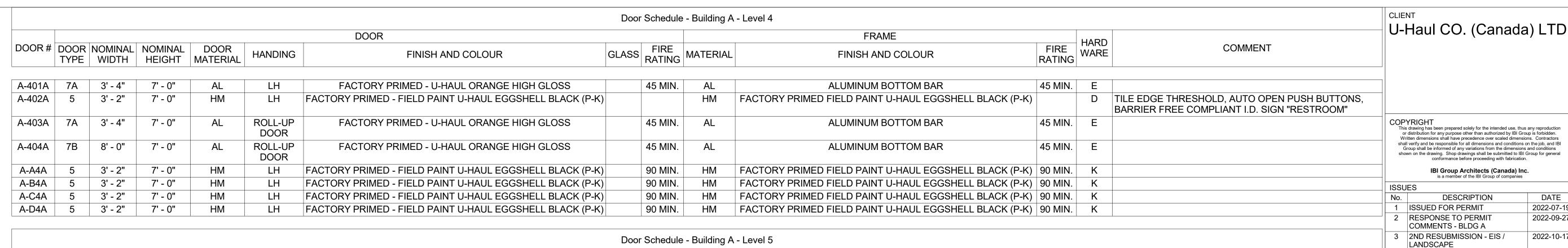
A-0009

**ASSEMBLIES** 

6

ISSUE





													2
Door Schedule - Building A - Level 5											3		
	DOOR HARD COMMENT									4			
		NOMINAL WIDTH	NOMINAL HEIGHT	DOOR MATERIAL	HANDING	FINISH AND COLOUR	GLASS FIRE RATING	MATERIAL	FINISH AND COLOUR	FIRE RATING	WARE		Т
A-501A	7A	3' - 4"	7' - 0"	AL	LH	FACTORY PRIMED - U-HAUL ORANGE HIGH GLOSS	45 MIN.	AL	ALUMINUM BOTTOM BAR	45 MIN.	E		
A-502A	7A	3' - 4"	7' - 0"	AL	ROLL-UP DOOR	FACTORY PRIMED - U-HAUL ORANGE HIGH GLOSS	45 MIN.	AL	ALUMINUM BOTTOM BAR	45 MIN.	E		
A-503A	7B	8' - 0"	7' - 0"	AL	ROLL-UP DOOR	FACTORY PRIMED - U-HAUL ORANGE HIGH GLOSS	45 MIN.	AL	ALUMINUM BOTTOM BAR	45 MIN.	E		
A-A5A	5	3' - 2"	7' - 0"	HM	LH	FACTORY PRIMED - FIELD PAINT U-HAUL EGGSHELL BLACK (P-K)	90 MIN.	HM	FACTORY PRIMED FIELD PAINT U-HAUL EGGSHELL BLACK (P-K	() 90 MIN.	K		
A-B5A	5	3' - 2"	7' - 0"	НМ	LH	FACTORY PRIMED - FIELD PAINT U-HAUL EGGSHELL BLACK (P-K)	90 MIN.	HM	FACTORY PRIMED FIELD PAINT U-HAUL EGGSHELL BLACK (P-K	() 90 MIN.	K		
A-C5A	5	3' - 2"	7' - 0"	НМ	LH	FACTORY PRIMED - FIELD PAINT U-HAUL EGGSHELL BLACK (P-K)	90 MIN.	HM	FACTORY PRIMED FIELD PAINT U-HAUL EGGSHELL BLACK (P-K	() 90 MIN.	K		
A-D5A	5	3' - 2"	7' - 0"	НМ	LH	FACTORY PRIMED - FIELD PAINT U-HAUL EGGSHELL BLACK (P-K)	90 MIN.	HM	FACTORY PRIMED FIELD PAINT U-HAUL EGGSHELL BLACK (P-K	() 90 MIN.	K		

0' - 2" 5' - 8 1/4"

0' - 2" 5' - 8 1/4"

FRIT PATTERN

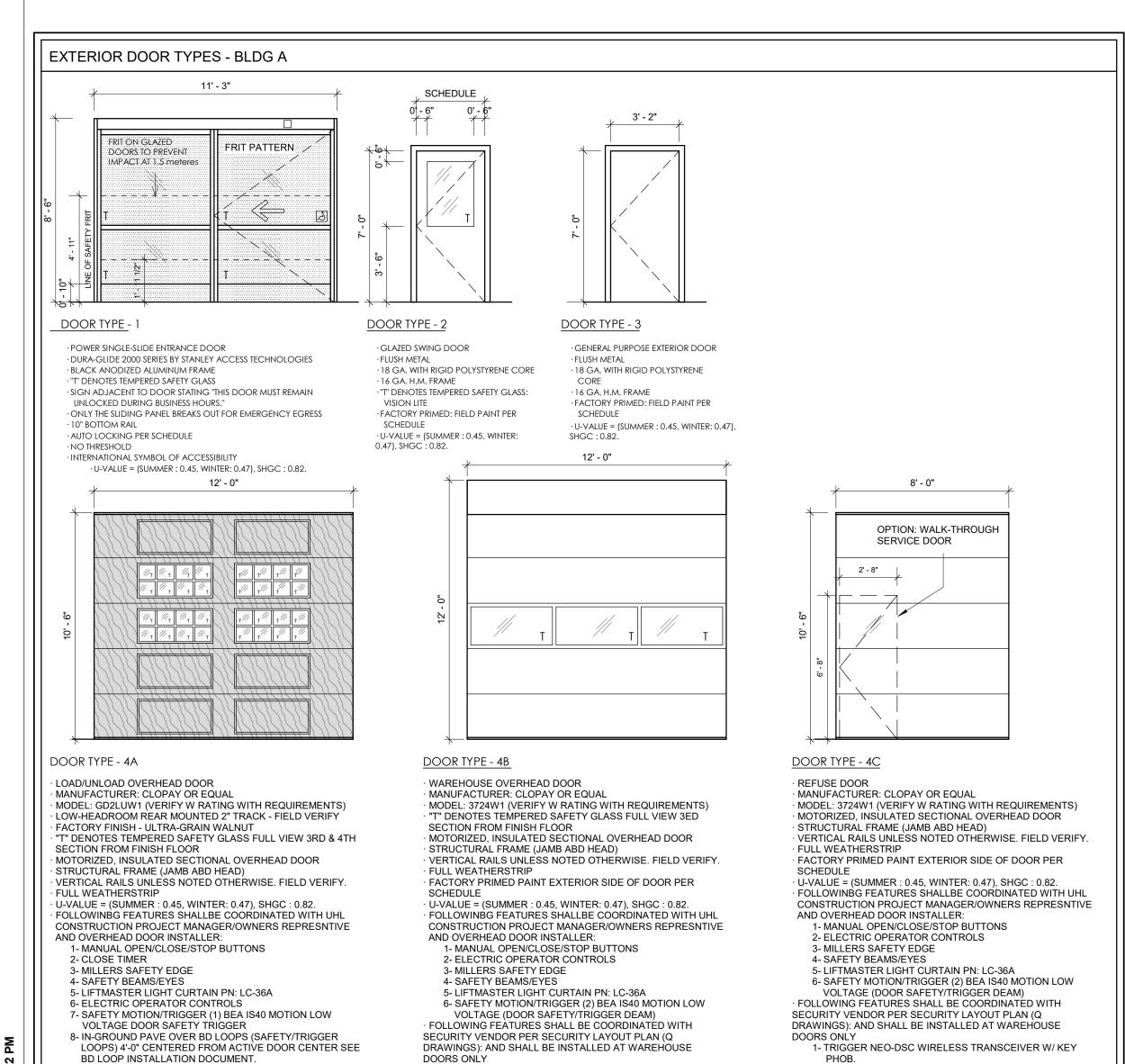
GROUND FLOOR SLIDING DOORS AND

**CURTAIN WALL TO HAVE FRITTED GLASS** 

(13)

(A-105B)

4' - 3 1/2" 0' - 2" 0' - 2" 5' - 8 1/4"



1- TRIGGER NEO-DSC WIRELESS TRANSCEIVER W/ KEY

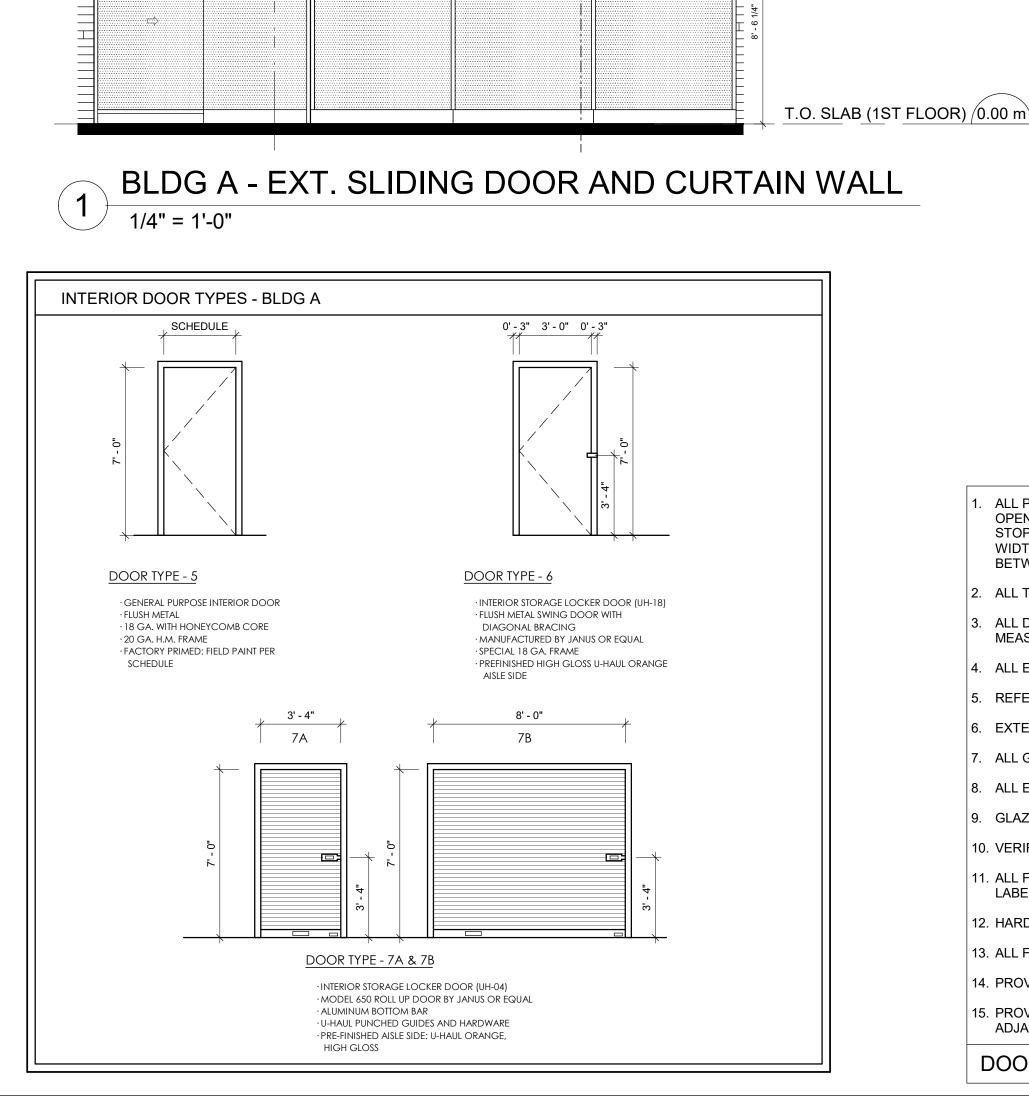
PHOB

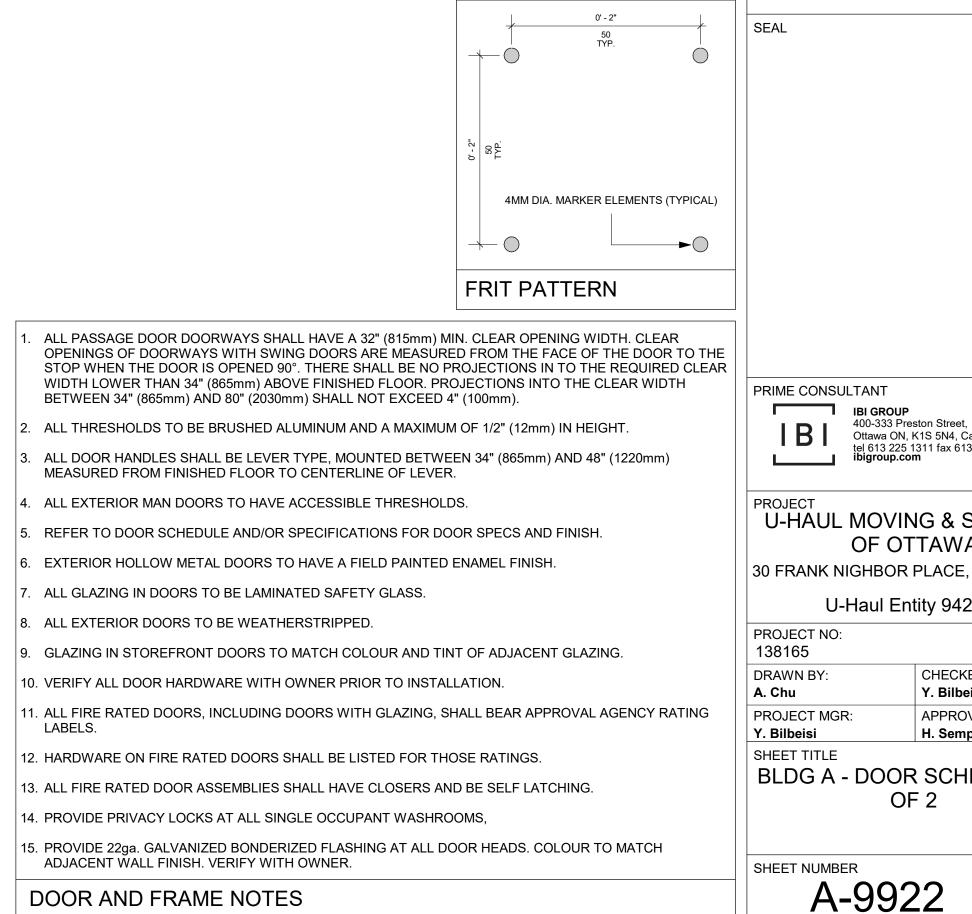
WALK-THROUGH SERVICE DOOR): 32 X 80 INCHES (813 X 2032

MM) WITH ALUMINUM FRAME, GEARED HINGE, AND PNÉUMATIC DOOR CLOSER; EXTERIOR MATCHING DOOR

LATCH SECURITY LOCK

FACE; INTEGRAL SHIPLAP WEATHER SEAL; KEYED DEAD





conformance before proceeding with fabrication.

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DESCRIPTION

3RD RESUBMISSION - EIS /

ARCHITECTURE / PROJECT MANAGEMENT /

CIVIL / LANDSCAPE / PLANNING: NOVATECH

GOODKEY, WEEDMARK & ASSOCIATES LIMITED

1188 WOODWARD DRIVE, OTTAWA, ON, K2C 3R8

43-1010 POLYTEK STREET, OTTAWA, ON K1J 9J3

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STATE OF THE ART ACOUSTICK INC.

333 PRESTON STREET UNIT 400, OTTAWA, ON K1S 5N4

240 MICHAEL COWPLAND DRIVE SUITE 101, KANATA, ON

LANDSCAPE

CONSULTANTS

K2M 1P6

TRANSPORTATION: **IBI GROUP - OTTAWA** 

**CONSULTING ENGINEERS** 

SENEZ CONSULTING LTD.,

J.D. BARNES LTD

DATE

2022-07-19

2022-09-27

2022-10-17

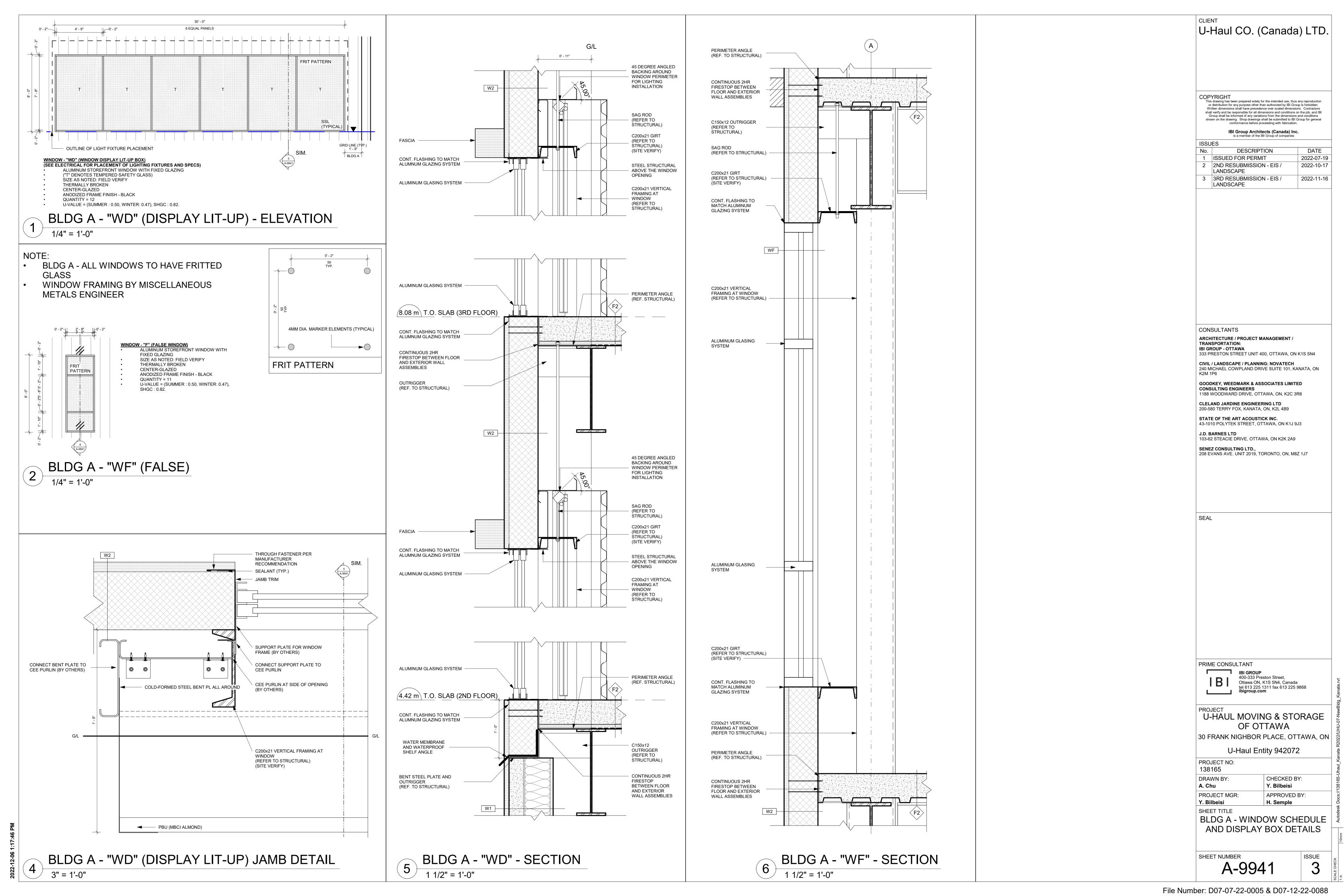
2022-11-16

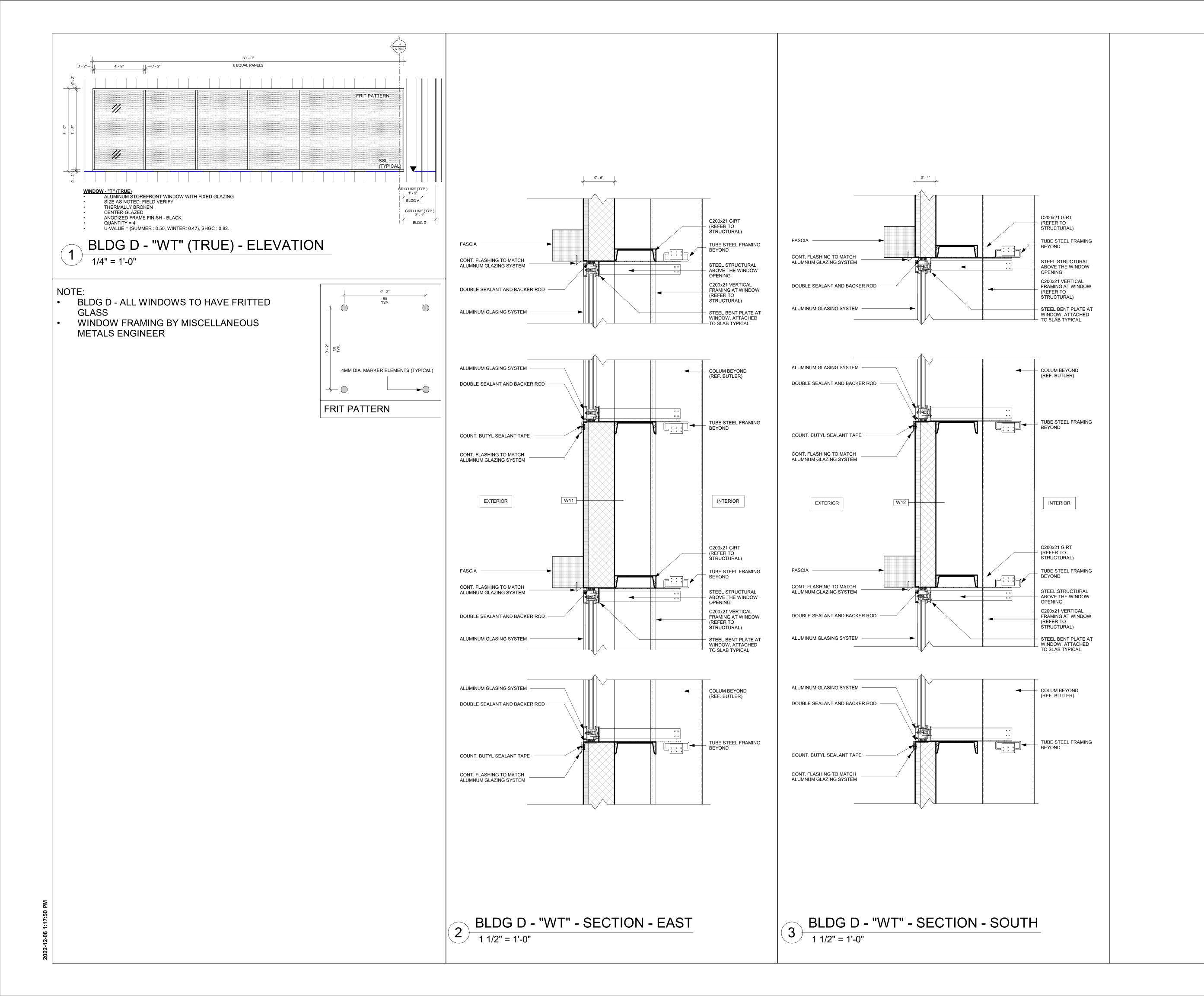
FOLLOWING FEATURES SHALL BE COORDINATED WITH

1- SECURITY ACCESS TRIGGER (WIEGAND/DOORKING) BY

SECURITY VENDOR PER SECURITY LAYOUT PLAN (Q

SECURITY VENDOR.





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400-333 Preston Street,
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tel 613 225 1311 fax 613 225 9868
ibigroup.com U-HAUL MOVING & STORAGE OF OTTAWA 30 FRANK NIGHBOR PLACE, OTTAWA, ON U-Haul Entity 942072 PROJECT NO: 138165 DRAWN BY: CHECKED BY: A. Chu Y. Bilbeisi PROJECT MGR: APPROVED BY: Y. Bilbeisi H. Semple SHEET TITLE BLDG D - WINDOW SCHEDULE AND DETAILS SHEET NUMBER ISSUE A-9942 4