



**University  
of Victoria**

Facilities  
Management

# Exterior Wayfinding Signage

## Specifications and Details



Sheet List	
Sheet Number	Sheet Name
01	title sheet and drawing list
02	typography, colours and pictograms
03	sign design - overview
04	sign design - graphic design details
05	sign design - graphic design details - cont
06	sign construction - sections
07	sign construction - details
08	general notes

# Sign No. 1

## Vehicular - Main Gateway

project: Campus Wayfinding  
number: -  
issue date: April 1, 2019

sign: Sign No. 1 - Main Gateway  
sheet name: title sheet and drawing list  
scale: as noted

sheet number: 01

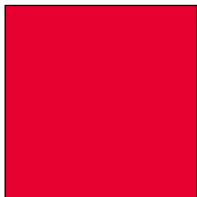




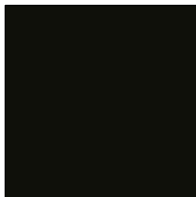
core colours



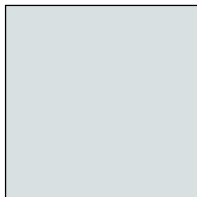
clear anodized coating  
application: sign structure



PANTONE 185 C  
application:  
pinstrip, arrows



PANTONE 426 C  
application: text,  
crest - monochromatic



PANTONE 7541 C  
application: background



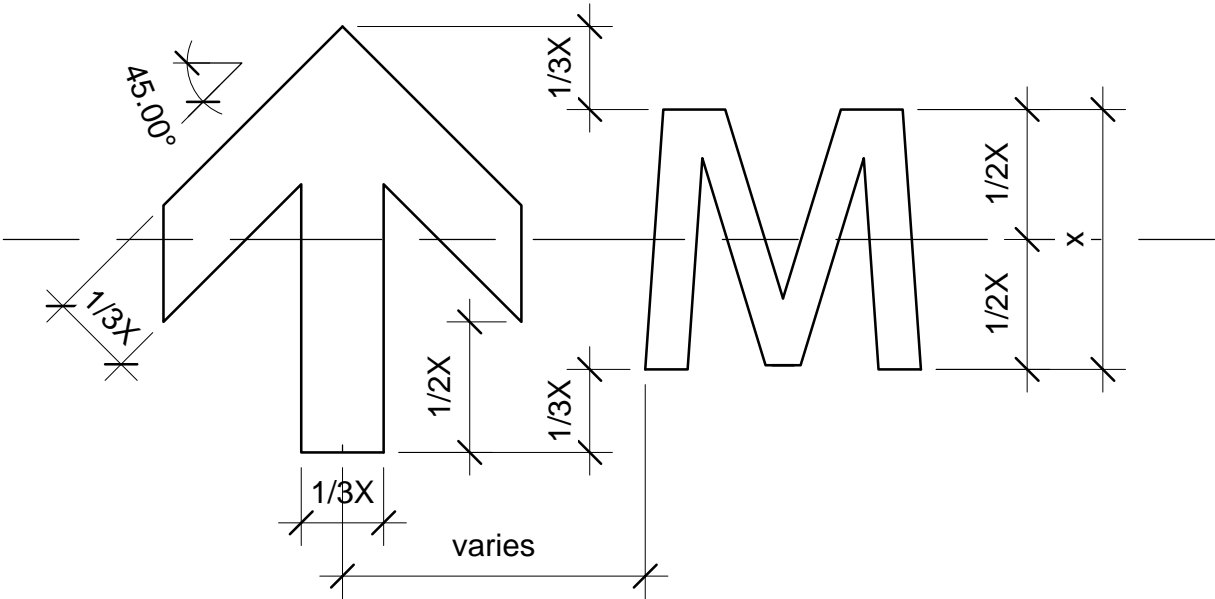
garry oak motif - digital file is to be delivered  
by University of Victoria

samples of typeface family

Myriad Pro Semi Bold

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
1234567890

arrow style and arrow size in relation to text height



University of Victoria Logo, horizontal standard

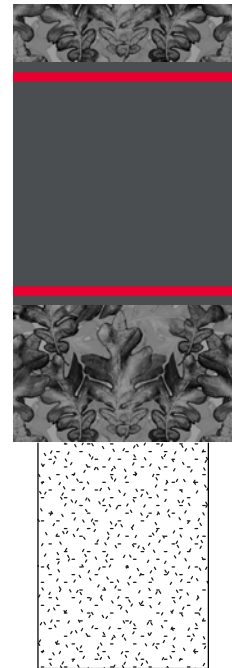


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full colour

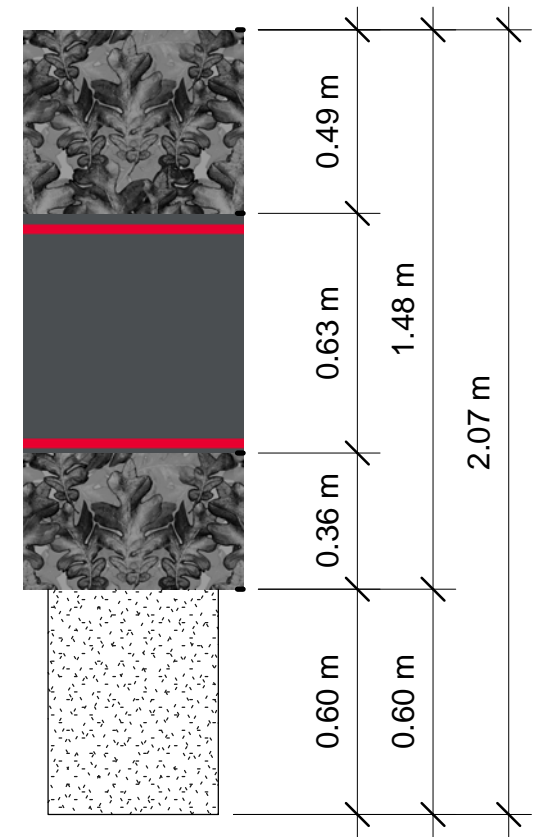
reverse monochromatic - shown against background for clarity



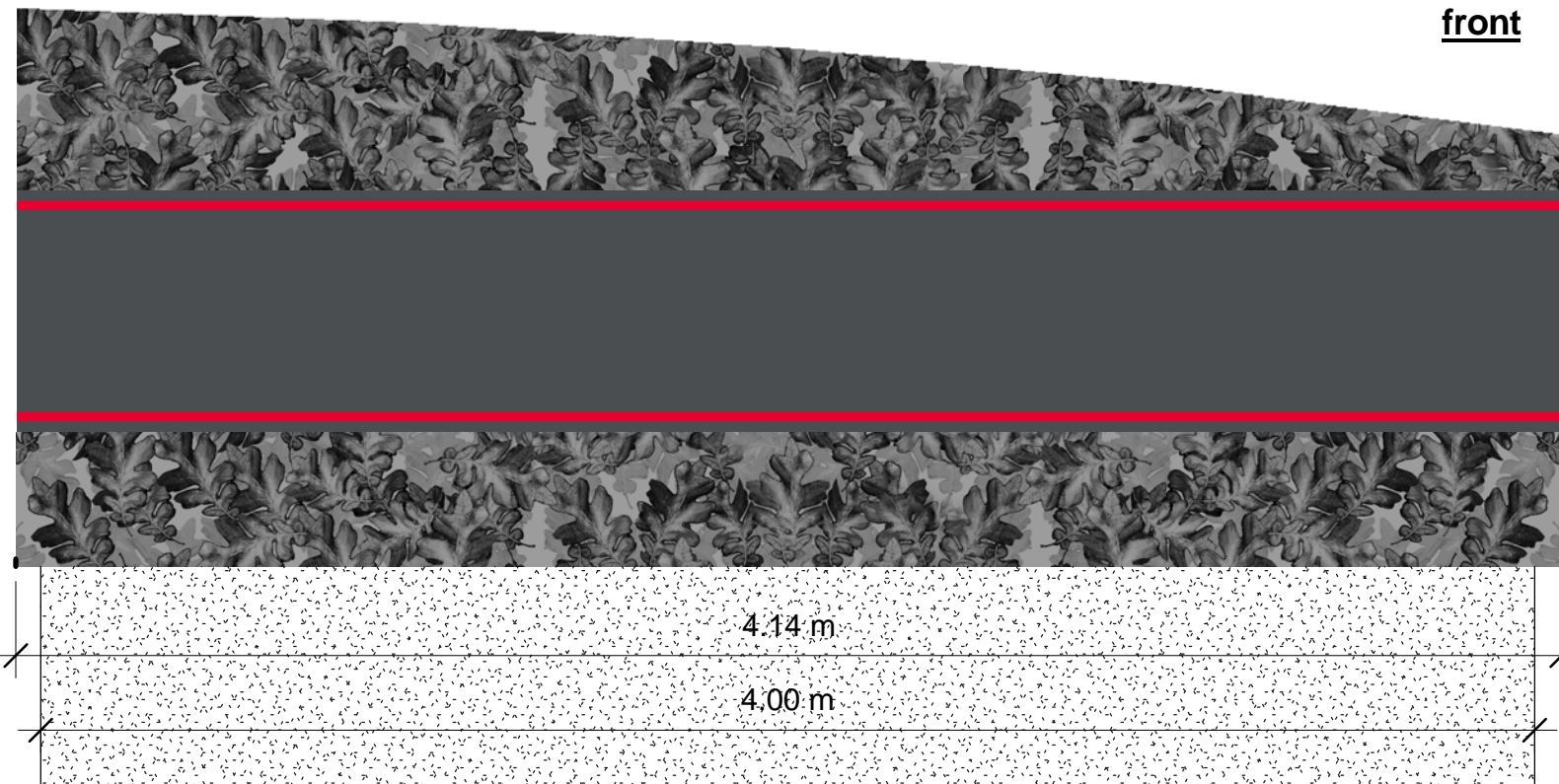
side



front



side



back

gateway sign scale 1:20

project: Campus Wayfinding  
number: -  
issue date: April 1, 2019

sign: Sign No. 1 - Main Gateway  
sheet name: sign design - overview  
scale: as noted

sheet  
number:

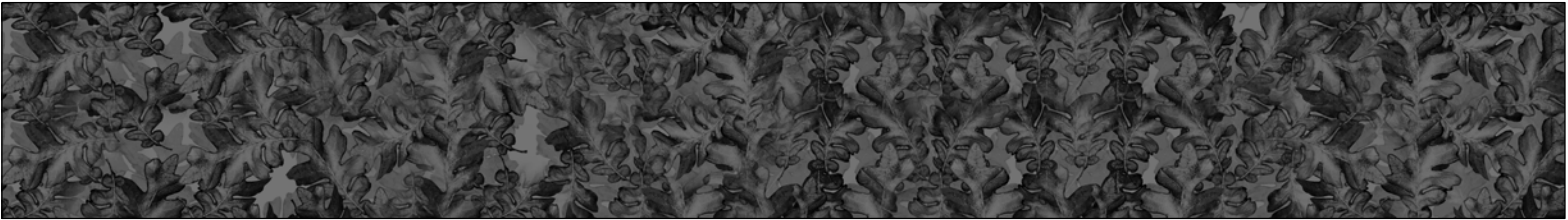
03



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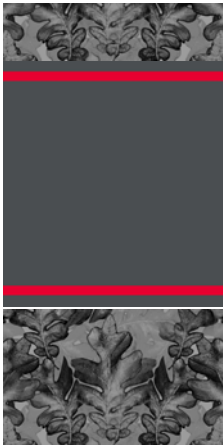
Back panel (not shown here) to be one piece, digitally printed vinyl protected with anti-graffiti, optically clear overlamine. Aluminum panel thickness to be 3.2mm



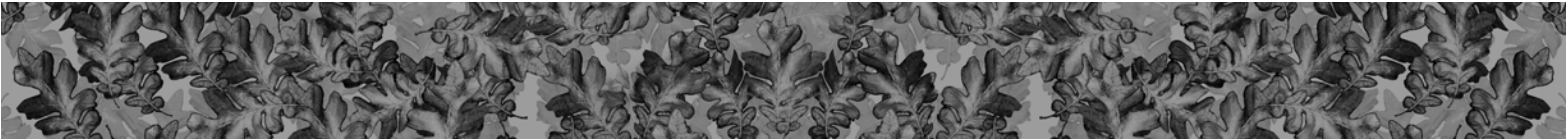
(top) Digitally printed vinyl protected with anti-graffiti, optically clear overlamine.  
Aluminum panel size: 4130mm x 485mm x 6.4mm



(front - top) Digitally printed vinyl protected with anti-graffiti, optically clear overlamine.  
Aluminum panel size: 4130mm x 485mm x 6.4mm



(front - main) Digitally printed vinyl protected with anti-graffiti, optically clear overlamine, with push-thru acrylic pictograms.  
Aluminum panel size: 4130mm x 650mm x 6.4mm



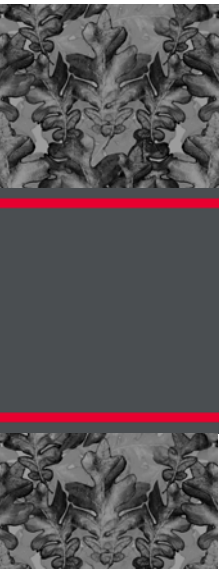
(front - bottom) Digitally printed vinyl protected with anti-graffiti, optically clear overlamine.  
Aluminum panel size: 4130mm x 360mm x 6.4mm

Clear acrylic (pictograms):  
Plaskolite OPTIX, Chemcast GP or equivalent

First surface prints:  
Vinyl: 3M IJ180, MPI 2005 or equivalent  
Overlamine: 3M 8914, Avery DOL 6060 or equivalent.

2nd surface prints:  
CAV-50 reverse print - i/w/i (2nd surface)  
Overlamine: 3M 8914, Avery DOL 6060 or equivalent (first surface)

- 1) Vinyl to be printed on, installed as per manufacturer's recommendations.
- 2) Use compatible UV inks and overlaminates as recommended by manufacturer
- 3) Where applicable wrap vinyl and overlamine over the edges of the alu. panel.
- 4) All panels to be mechanically fastened to substrate.
- 5) Manufacturer to confirm all dimensions prior to fabrication.
- 6) Manufacturer to ensure watertightness of panel connections.



Digitally printed vinyl protected with anti-graffiti, optically clear overlamine.  
Aluminum panel size:  
580 mm x 1495 mm x 3.2 mm

Digitally printed vinyl protected with anti-graffiti, optically clear overlamine.  
Aluminum panel size:  
580 mm x 1170 mm x 3.2 mm

**scale 1:20**

project: Campus Wayfinding  
number: -  
issue date: April 1, 2019

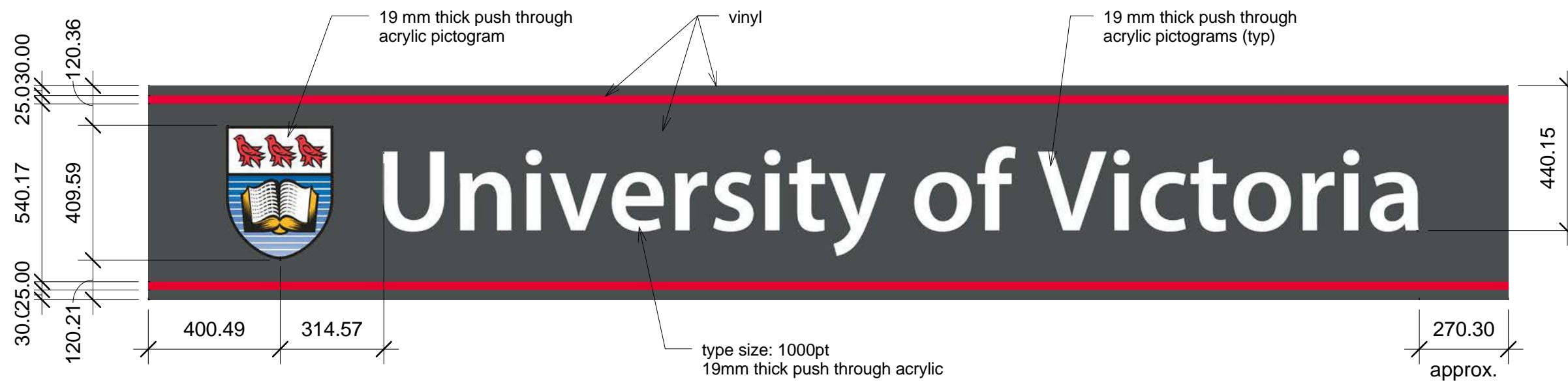
sign: Sign No. 1 - Main Gateway  
sheet name: sign design - graphic design details  
scale: as noted

sheet  
number:

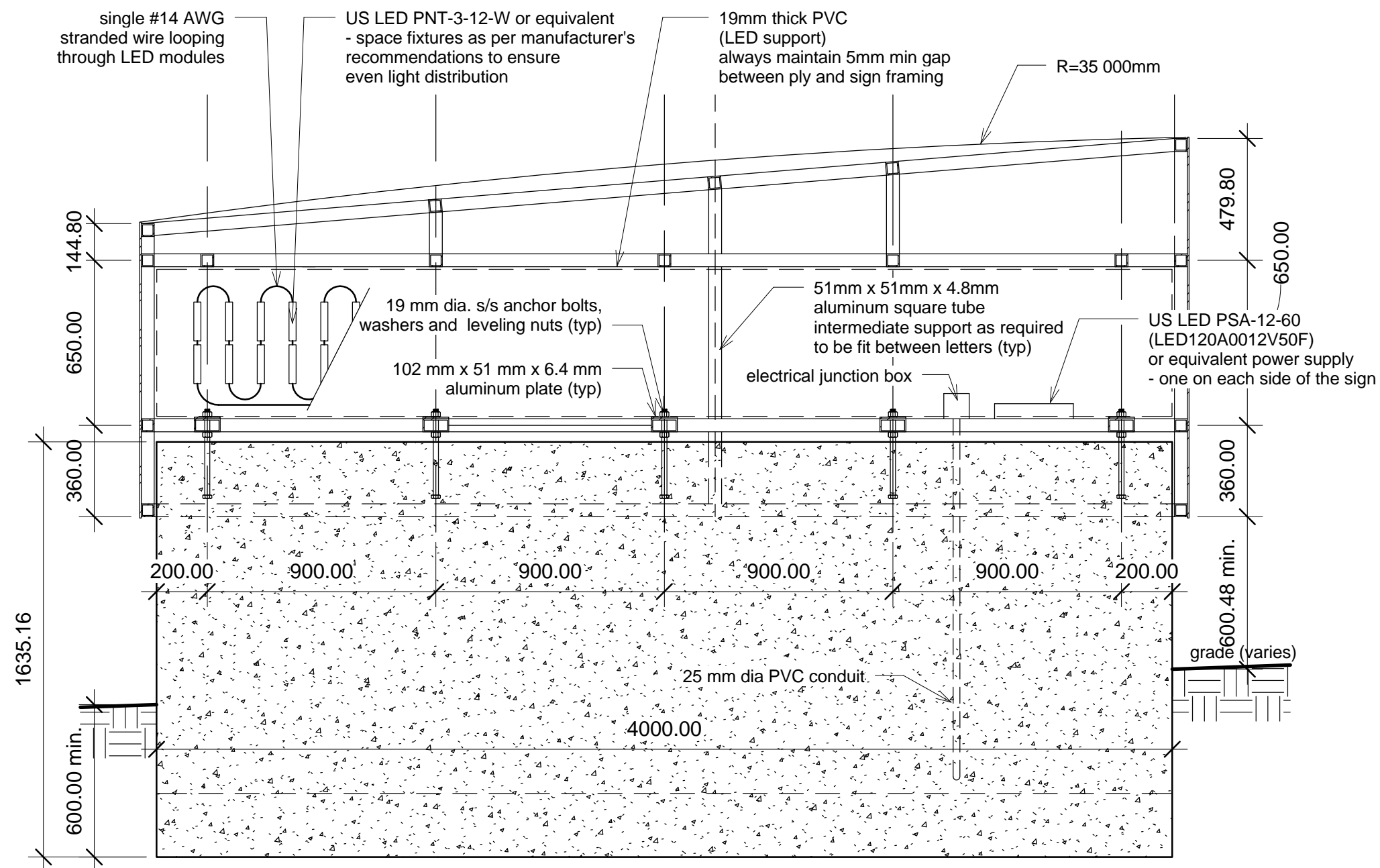
04



**University  
of Victoria**



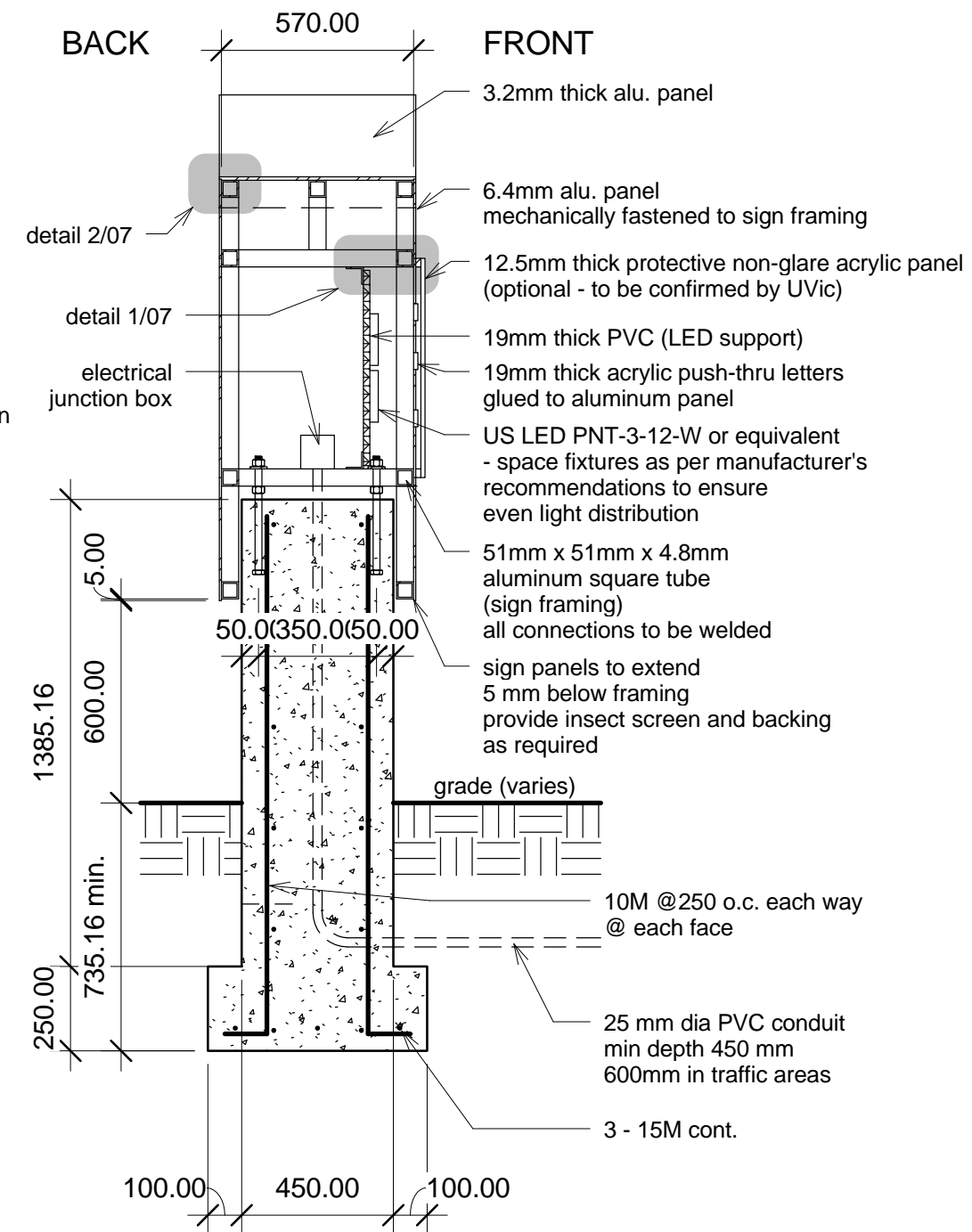
**front panel with push through pictograms**  
**scale 1:15**



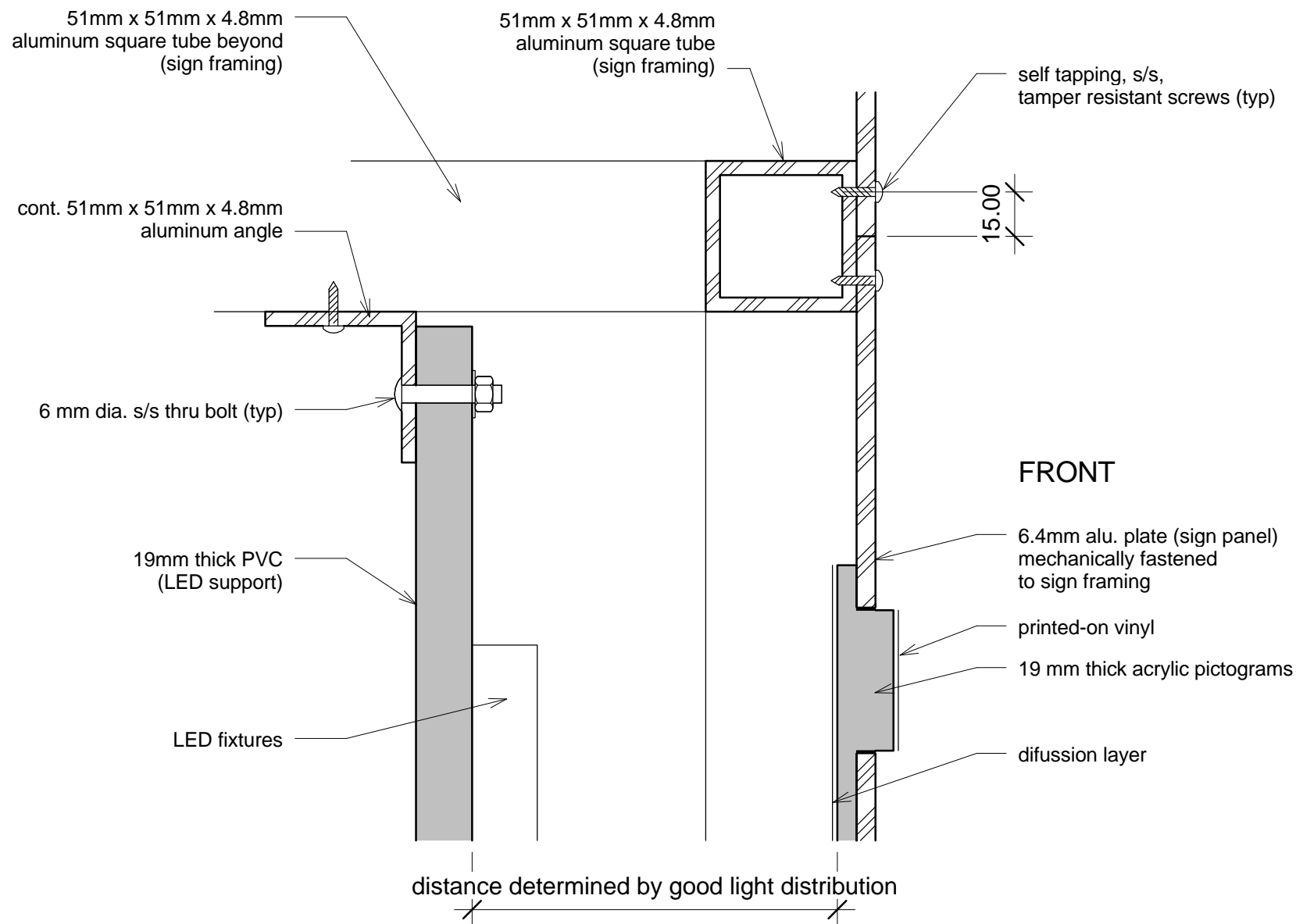
General Notes:

- 1) provide ventilation holes as required
- 2) US LED PSA-12-60 power supply to provide ource of power to a max. of 50 MegaBright 12 LED Modules
- 3) Sign must have a CSA label as an assembly
4. Manufacturer to verify all diemnsions prior to sign fabrication. All discrepancies should be reported to the Architect.

**long section scale 1:20**



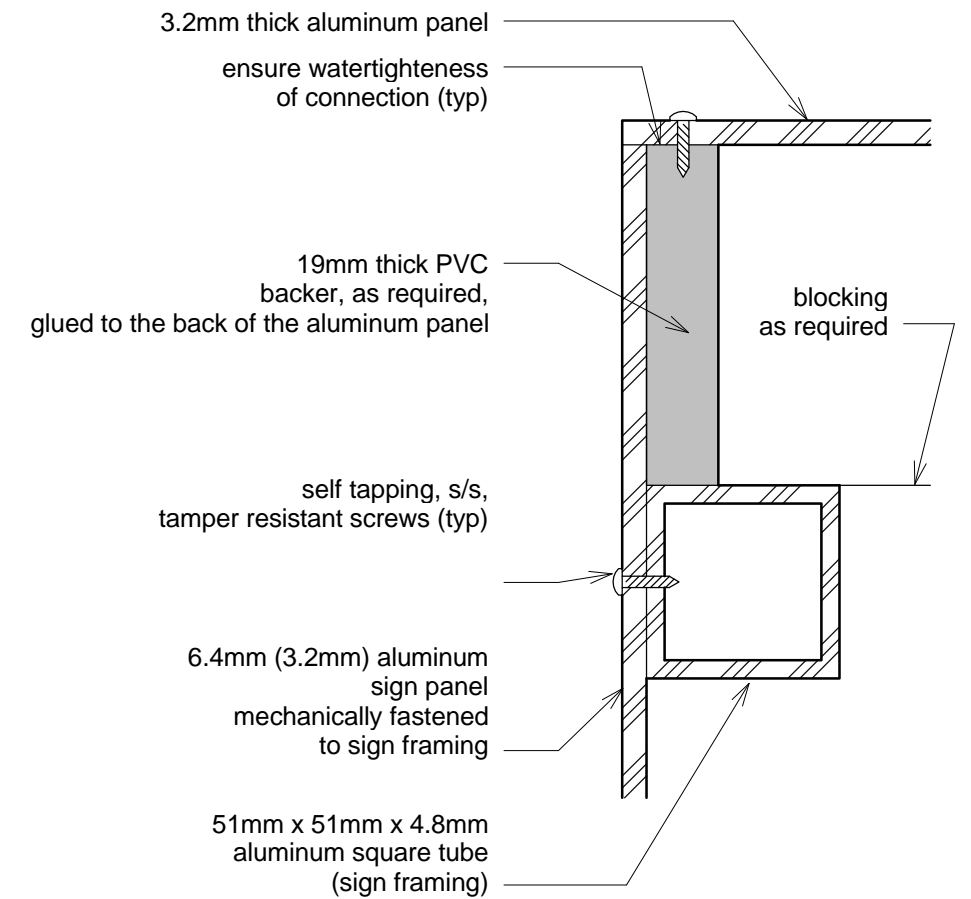
**cross section scale 1:20**



**detail 1 scale 1:2**

**General Notes:**

- 1) provide ventilation holes as required
- 2) US LED PSA-12-60 power supply to provide ource of power to a max. of 50 MegaBright 12 LED Modules
- 3) Sign must have a CSA label as an assembly
4. Manufacturer to verify all dimensions prior to sign fabrication. All discrepancies should be reported to the Architect.



**detail No. 2 scale 1:2**

project: Campus Wayfinding  
 number: -  
 issue date: April 1, 2019

sign: Sign No. 1 - Main Gateway  
 sheet name: sign construction - details  
 scale: as noted

sheet  
 number:

07



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 of Victoria**



GENERAL NOTES

- 1. Provide sign ID stickers as per proposed location plan.  
Form and placement of stickers on signs is to be coordinated with University of Victoria
- 2. Manufacturer to verify all dimensions prior to sign fabrication. All discrepancies should be reported to the Architect.

STRUCTURAL NOTES

**DRAWINGS**

- 1. These drawings show the completed project. The drawings do not show components that may be necessary for construction safety, which is the responsibility of the contractor.
- 2. The use of these drawings is limited to that indicated in the revisions column.
- 3. The information on these drawings shall not be used for any other project or works.

**DESIGN**

- 1. The structures shown have been designed in substantial accordance with the British Columbia Building Code 2006, which is based on the National Building Code of Canada 2005.
- 2. The following wind loads and factors were used: q50=0.63kPa, lw=1.0-ULS, 0.75-SLS.

**FIELD REVIEW BY STRUCTURAL ENGINEER**

- 1. Structural Engineer provides field review only for the work shown on these structural drawings, and it is conducted with such frequency as Structural Engineer deems appropriate to ascertain that the work is in general conformance with the documents prepared by Structural Engineer.  
Field review by Structural Engineer is not carried out for the Contractor's benefit, nor does it make Structural Engineer guarantors of the Contractor's work. It remains the Contractor's responsibility to build the work in conformance with the contract documents. Structural Engineer shall not be responsible for the acts or omissions of the Contractor, Sub-Contractor, or any other persons performing any of the work or for the failure of any of them to carry out the work in accordance with the contract documents.
- 2. Provide 24 hours advance notice of each required field review. Field reviews shall be scheduled to be carried out during normal business hours unless special arrangements are made with Structural Engineer.
- 3. The work to be reviewed shall be generally complete.

**CONCRETE AND REINFORCING STEEL**

- 1. Concrete work shall conform to CAN/CSA-A23.1, CAN/CSA -A23.2, CAN/CSA -A23.3 and referenced documents.
- 2. Reinforcing shall conform to CAN/CSA-G30.18R – Grade 400MPa.
- 3. Cover to reinforcing steel to be 50mm uno.
- 4. Portland cement shall be type gu unless noted otherwise.
- 5. Concrete shall have a unit weight of 23±1 kn/m3/ (145±5 pcf) unless noted otherwise.
- 6. Concrete shall have a compressive strength of 35MPa at 28 days, and conform to exposure class C-1 with a maximum water-cement ratio of 0.40 and air content of 5-8%. Maximum aggregate size to be 19mm.
- 7. No calcium chloride is permitted, in any form, in any concrete mix. Curing and protection of concrete for hot, cold or dry weather is to be as per clauses 7.4.1.8 and 7.4.2 of CAN/CSA.

STRUCTURAL NOTES (cont)

**STRUCTURAL ALUMINUM**

- 1. Aluminum sections shall be new.
- 2. Aluminum alloys shall conform to the Aluminum Association publication Aluminum Standards and Data ISO 6361-2 or ISO 6362-2.
- 3. Extruded shapes, Tubes, Bolts, and Plate to be 6061 alloy uno.
- 4. Aluminum in contact with concrete or grout shall be given a heavy coat of alkali-resistant bituminous paint or other equivalent coating before installation.
- 5. Welding operators and procedures shall be qualified according to CSA W47.2.
- 6. Submit shop drawings for review prior to start of steel fabrication.
- 7. Fabrication practices and tolerances shall be in accordance with CAN/CSA-S16, except bolt holed edge distance tolerance to be -0, +2mm.
- 8. Anchor and connection bolts to be ASTM A193 Stainless Steel. Anchors shall be embedded 300mm into concrete, complete with a nut and washer each end.
- 9. Unless noted otherwise, column base plates shall be 20 mm minimum thick. Anchor bolt holes shall be punched undersize and reamed to size.
- 10. Provide 6 mm cap plates for all tube members uno.
- 11. Aluminum shall be connected with fillet welds all-around uno. Weld size shall match the wall thickness of the thinnest part being connected uno. Welds to be ground smooth.

**TAMPER RESISTANCE AND CONNECTIONS**

- 1. Connection hardware to be stainless steel uno.
- 2. Aluminum panels to be connected to structure with 6.4mm diameter stainless steel self-tapping screws at 450mm maximum centre to centre spacing.
- 3. Non-removable panels may be welded or glued by the manufacturer, as approved by Structural Engineer.
- 4. Panel connection screws to be tamper resistant "Torx-Pin" screws as supplied by O.E.M. Hardware of Surrey BC, or equivalent as approved by Structural Engineer.
- 5. Visible connection bolts shall be "Pentagon" tamper resistant bolts, with "Pentagon" nuts as supplied by O.E.M. Hardware of Surrey BC, or equivalent as approved by Structural Engineer. Anchor bolts to be secured with "Pentagon" security nuts.

ELECTRICAL NOTES

- 1. Signs must be provided with CSA label
- 2. LED modules, power supplies, cable, wire and junction box must be integral with signs
- 3. All electrical installations to be done in accordance with the Canadian Electrical Code and as recommended by the LED lighting manufacturer.
- 4. Run 2#8 +GND conductors in 27mm PVC conduit from sign to existing campus exterior lighting pole standard. Intercept existing underground conduit, install an H20 rated flush junction box with bolt-on cover and splice into exterior lighting circuit.
- 4. The sign manufacturer shall provide an electrical shop drawings indicating input power requirements and a schematic wiring diagram for the sign.





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01	title sheet and drawing list
02	typography, colours and pictograms
03	sign design - overview
04	sign design - graphic design details
05	sign construction - sections
06	sign construction - details
07	general notes

project:

Campus Wayfinding

number:

-

issue date:

April 1, 2019

sign:

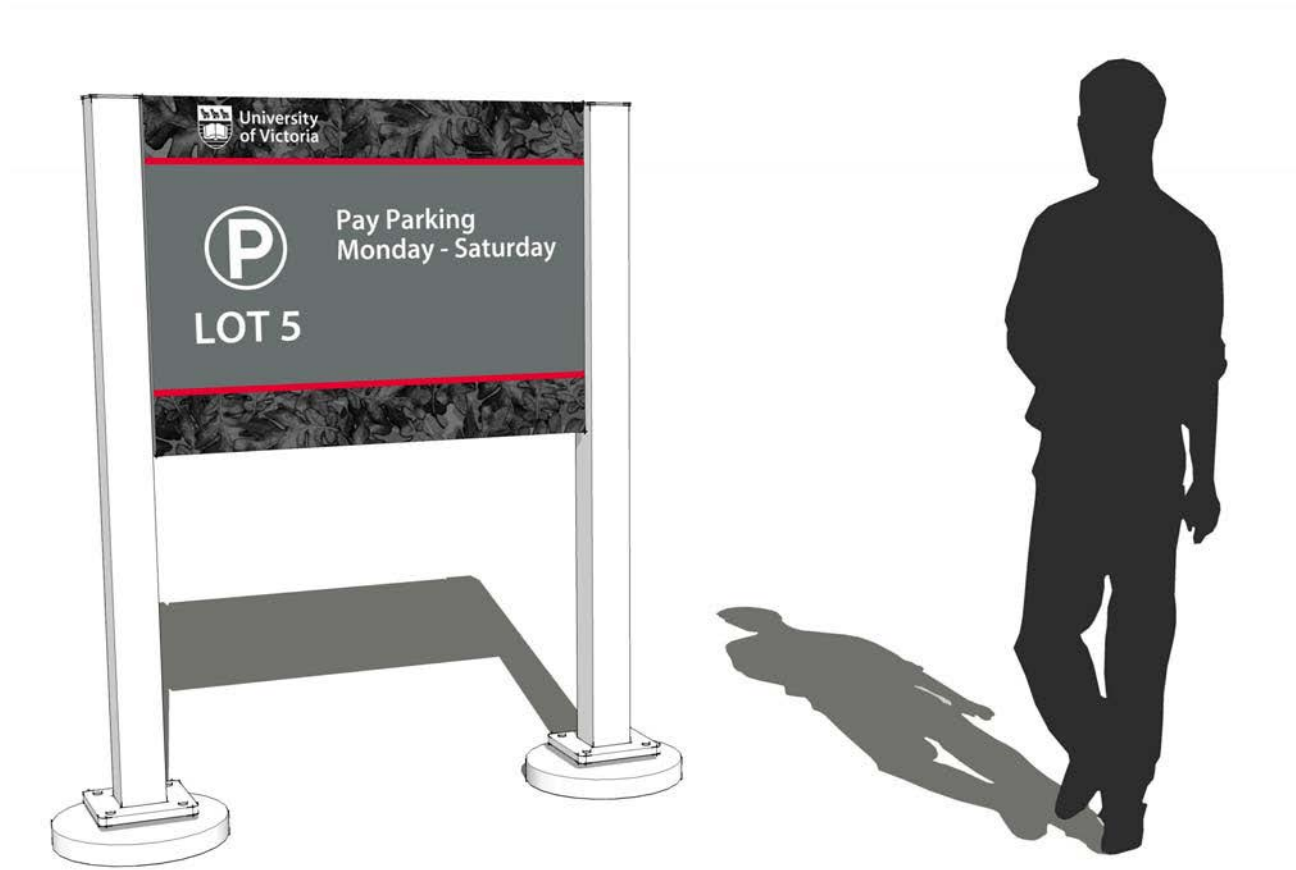
Sign No. 2A - Parking Lot

sheet name:

title sheet and drawing list

scale:

as noted



Sign No. 2A

Vehicular - Parking Lot

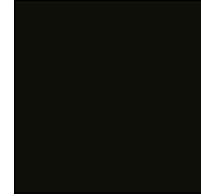
## core colours



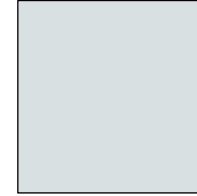
clear anodized coating  
application: sign structure



PANTONE 185 C  
application:  
pinstrip, arrows



PANTONE 426 C  
application: text,  
crest - monochromatic



PANTEONE 7541 C  
application: background,  
back panel (single sided sign)



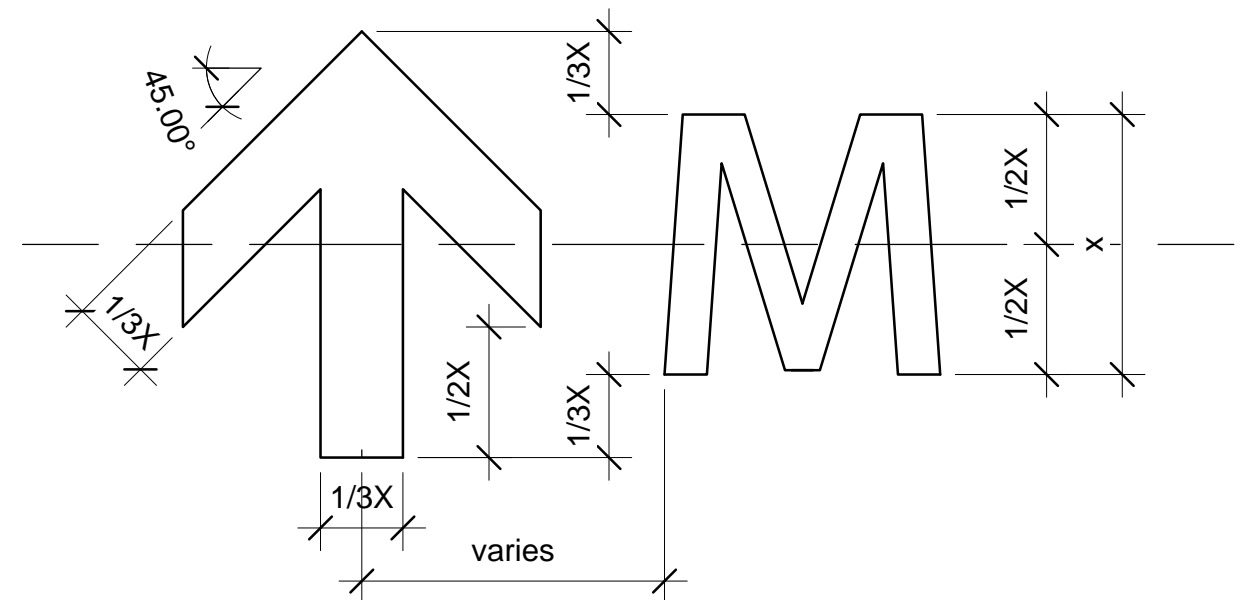
gary oak motif - digital file is to be delivered  
by University of Victoria

**samples of typeface family**

**Myriad Pro Semi Bold**

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
1234567890

### arrow style and arrow size in relation to text height



**University of Victoria Logo, horizontal standard**



# University of Victoria



**full colour**

**reverse monochromatic** - shown against bacground for clarity

project: Campus Wayfinding  
number: -  
issue date: April 1, 2019

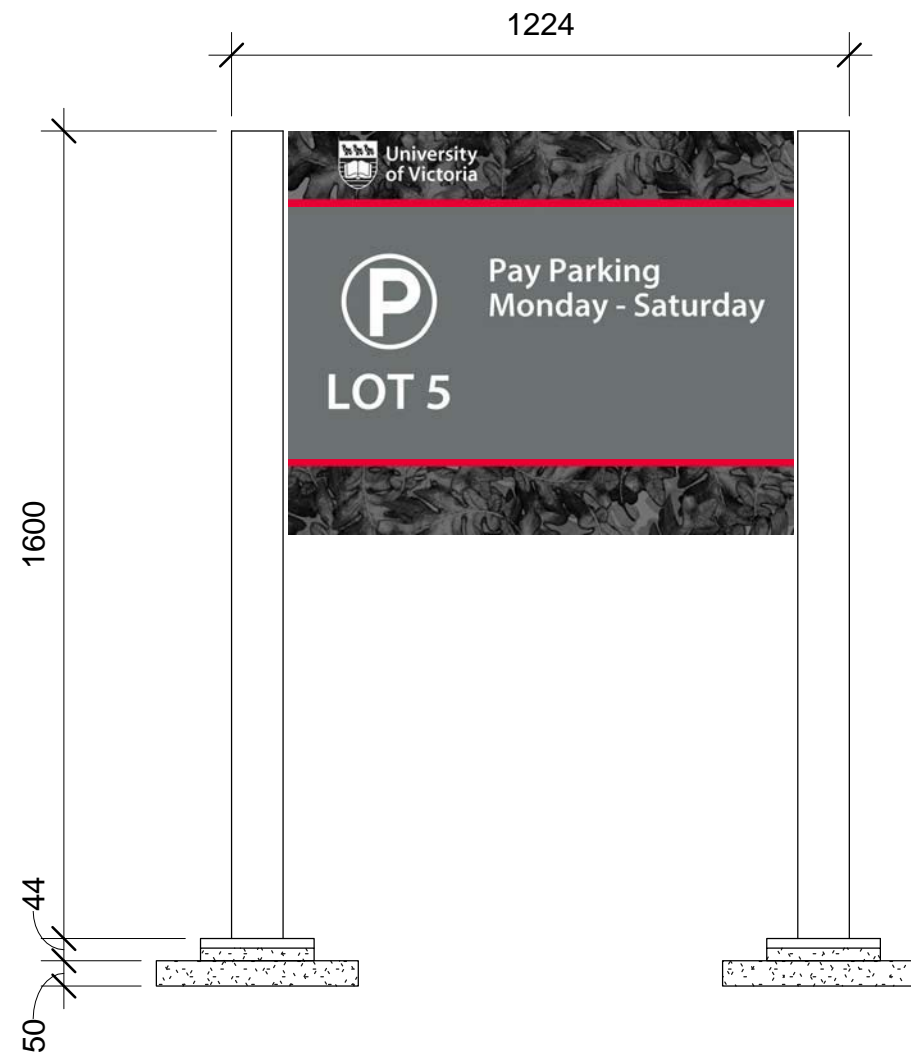
sign: Sign No. 2A - Parking Lot  
sheet name: typography, colours and pictograms  
scale: as noted

sheet  
number:

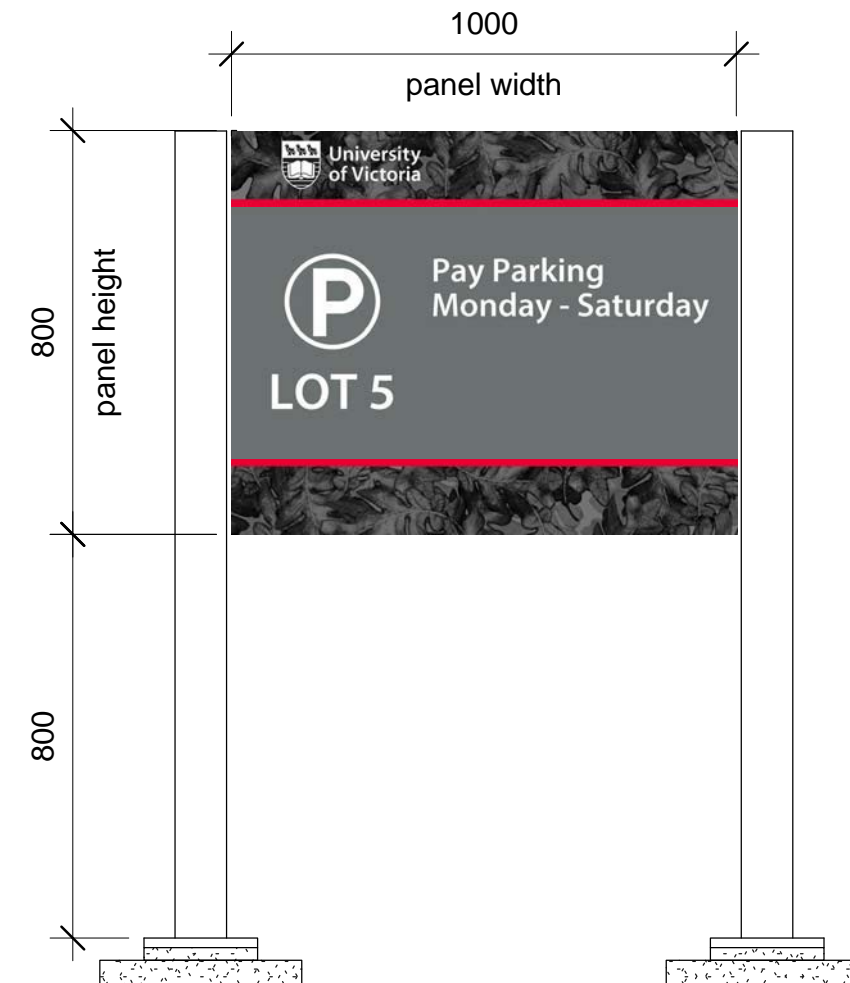
02



**University  
of Victoria**

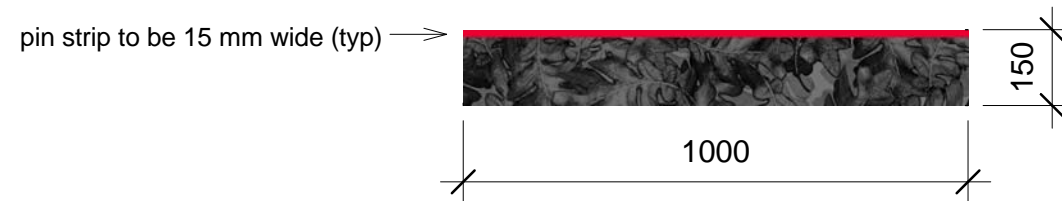
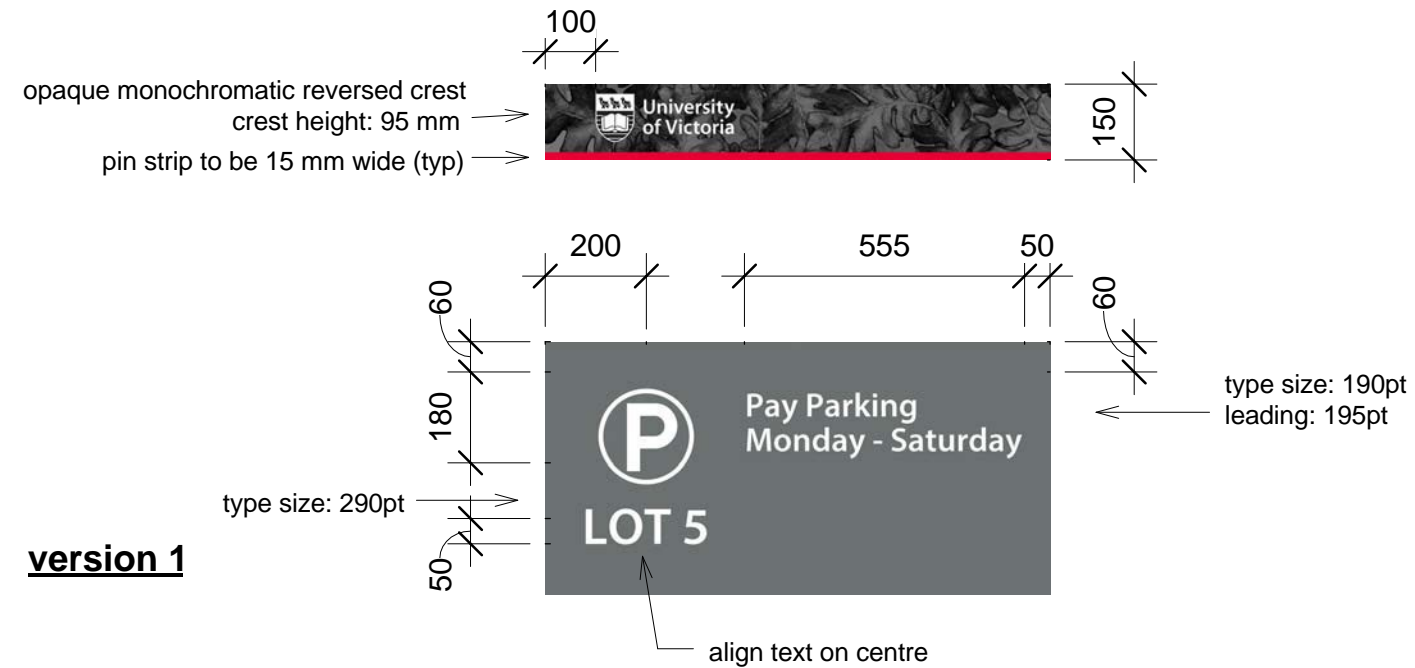


**Parking Lot A**  
**scale 1:15**



**Parking Lot A**  
**scale 1:15**





scale 1:15

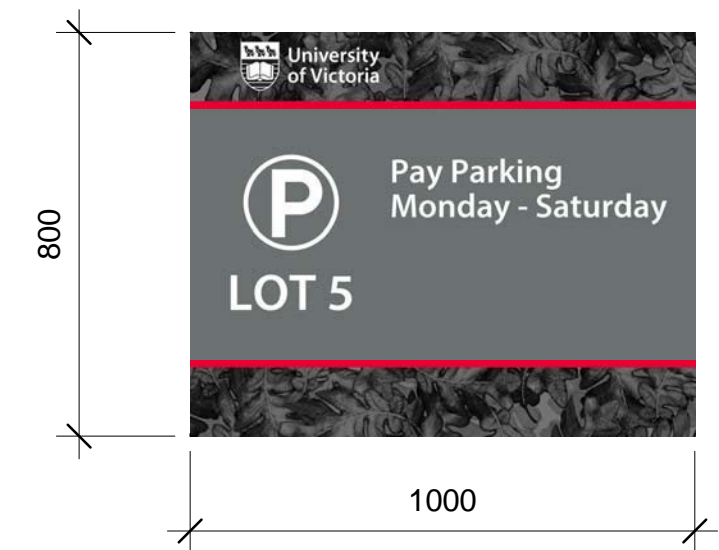
#### Description

Digitally printed vinyl protected with anti-graffiti, optically clear overlaminate  
Aluminum panel size (one piece): 1000 mm x 800 mm x 6.4 mm  
See sheet 05 for details.

Vinyl: 3M IJ180, MPI 2005 or equivalent  
Overlaminate: 3M 8914, Avery DOL 6060 or equivalent.

- 1) One piece vinyl to be printed on, installed as per manufacturer's recommendations.
- 2) Use compatible UV inks and overlaminates as recommended by manufacturer
- 3) Wrap vinyl and overlaminate over the edges of the aluminum panel.
- 4) If single sided sign then back panel to receive vinyl printed with PANTEONE 7541 C

Refer to Adobe Photoshop files for detailed sample layout



scale 1:15

project: Campus Wayfinding  
number: -  
issue date: April 1, 2019

sign: Sign No. 2A - Parking Lot  
sheet name: sign design - graphic design details  
scale: as noted

sheet number:

04

mechanically fastened to stringer with tamper resistant  
ed. rain cap to have clear anodized finish

section a

1550  
length of tube

51mm x 51mm x 4.8mm  
aluminum square tube  
internal framing  
all connection to be welded (typ)

leave open at bottom (typ)

1125

base to extend min 50mm  
above ground

19  
25  
600 min.

slope of grade varies

600

grade

leave 10mm min. gap between post and rain cap (typ)

3.2mm thick aluminum rain cap, welded to post  
rain cap to have clear anodized finish (typ)

12 mm dia. tamper resistant s/s thru bolt (typ)

38 mm dia. hole for bolt installation

40mm x 10mm aluminum spacer  
w/ clear anodized finish.  
Spacer to terminate 50mm from top  
and bottom of framing (typ)

102mm x 102mm x 6.4mm  
aluminum square tube  
w/ clear anodized finish (typ)

225mm x 225mm x 19mm base plate  
w/ clear anodized finish welded to post

4-19mm s/s anchor bolts  
with washers and leveling nuts (typ)  
nuts to extend max 10mm above bolt

fill with 35 MPa  
non-shrink grout (typ)

two ties at top

400mm dia. concrete foundation  
reinforced with 5-15M  
vert. 10mm ties @ 300mm

400mm dia. concrete foundation

**front view / section scale 1:15**

400mm dia. concrete foundation

225mm x 225mm x 19mm base plate  
w/ clear anodized finish welded to post.

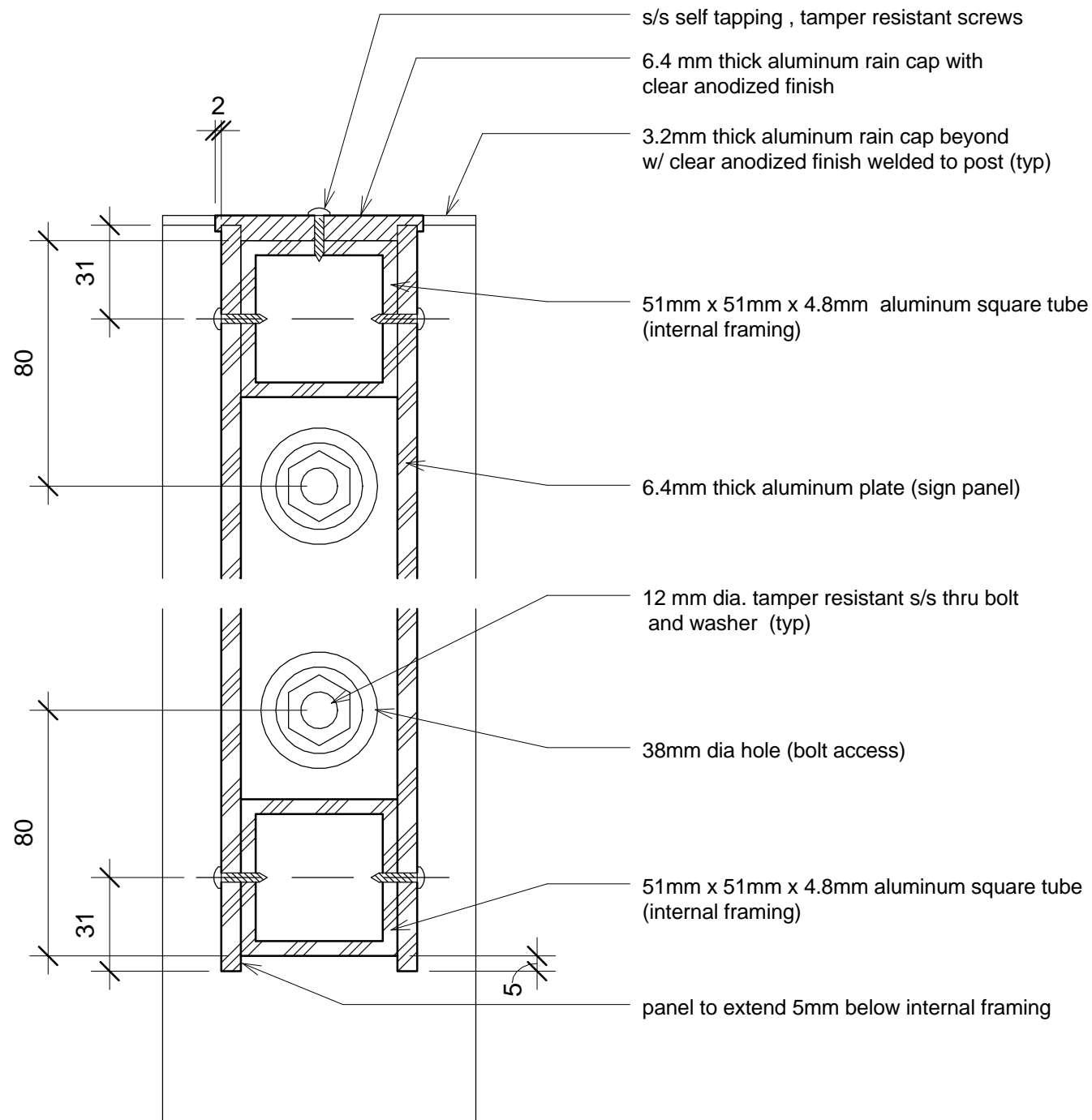
102mm x 102mm x 19mm aluminum square tube  
w/ clear anodized finish.

4-19mm s/s anchor bolts

**section a scale 1:15**

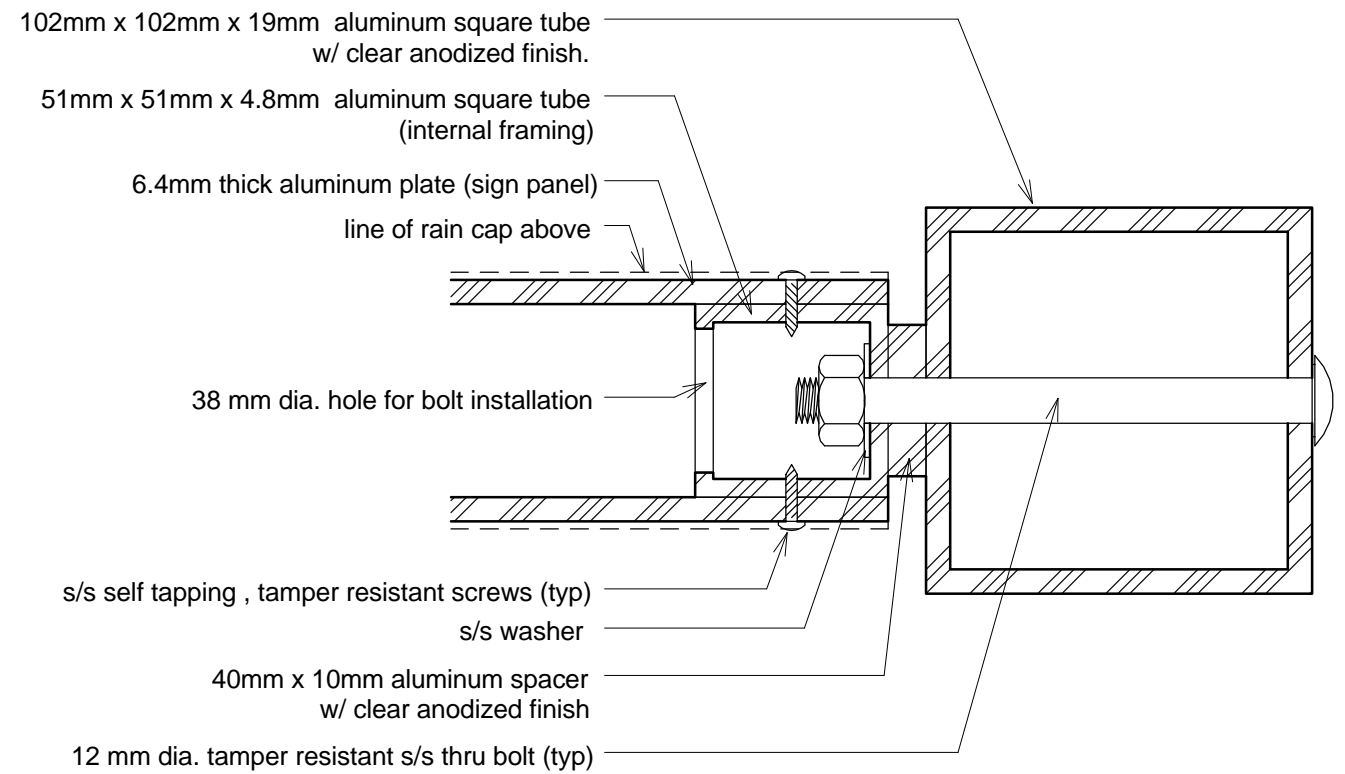
General Note:  
Manufacturer to verify all diemnsions  
prior to sign fabrication. All discrepancies  
should be reported to the Architect.



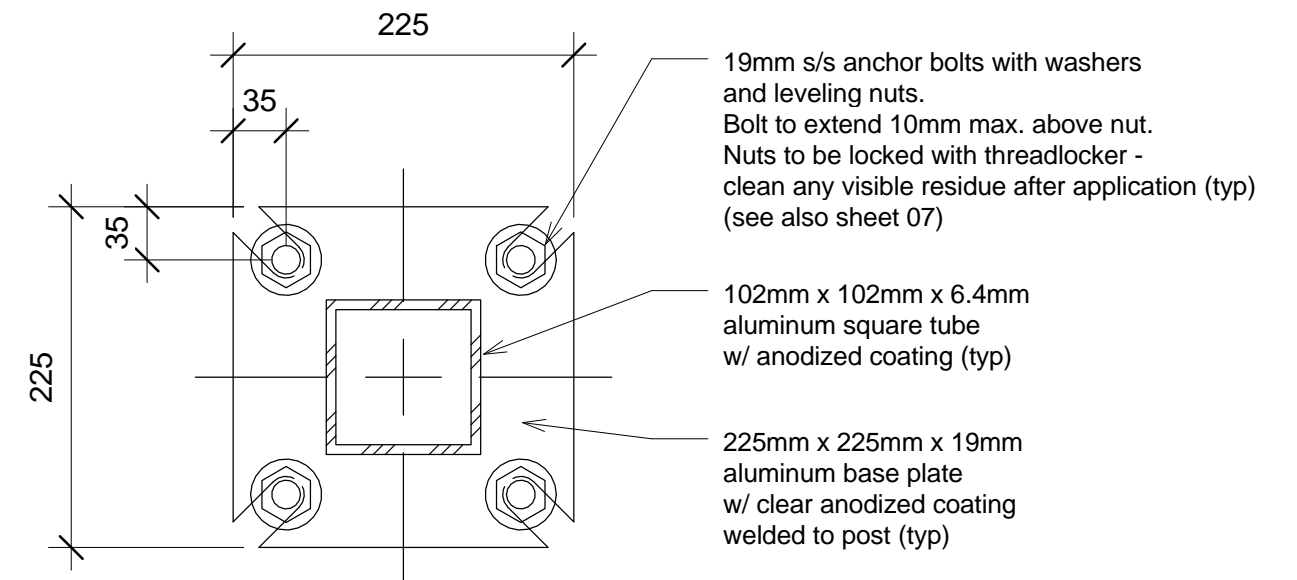


General Note:  
Manufacturer to verify all dimensions prior to sign fabrication. All discrepancies should be reported to the Architect.

**section detail 1 scale 1:2**



**section detail 2 scale 1:2**



**section b (slip base) scale 1:5**

project: Campus Wayfinding  
number: -  
issue date: April 1, 2019

sign: Sign No. 2A - Parking Lot  
sheet name: sign construction - details  
scale: as noted

sheet  
number:

06



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of Victoria**

GENERAL NOTES

- 1. Provide self adhesive sign ID stickers. ID's should correspond with ID's shown on location plan  
Form and placement of stickers on signs is to be coordinated with University of Victoria
- 2. Fasteners:
  - foundation (anchor bolts):
  - bolts: Fastenal part #47406 (1/2" s/s threaded rod)
  - washers: Fastenal part #71021 (1/2" s/s washers)
  - nuts: Fastenal part #70714 (1/2" s/s nuts)
  - posts:
  - thru bolts: Fastenal part #174786 (1/2" s/s x 5" button Socket Cap Screw)
  - thru bolt washers: Fastenal part #71021 (1/2" s/s washers)
  - thru bolt nuts: 70714 (1/2" s/s nuts)
  - panels:
  - security screws panel attachment: Fastenal part #BS0160024SSH200 (10-24 x 3/4" button head security screw )
  - rain cap attachment: Fastenal part #BS0160024SSH200 (10-24 x 3/4" button head security screw)
- 3. Threadlocker: Locktite 271 Red
- 4. Whenever anchor bolts are cut, contractor to ensure cut surfaces (terminated coating) are protected against rusting.
- 5. Manufacturer to verify all diemnsions prior to sign fabrication. All discrepancies should be reported to the Architect.

STRUCTURAL NOTES

**DRAWINGS**

- 1. These drawings show the completed project. The drawings do not show components that may be necessary for construction safety, which is the responsibility of the contractor.
- 2. The use of these drawings is limited to that indicated in the revisions column.
- 3. The information on these drawings shall not be used for any other project or works.

**DESIGN**

- 1. The structures shown have been designed in substantial accordance with the British Columbia Building Code 2006, which is based on the National Building Code of Canada 2005.
- 2. The following wind loads and factors were used: q50=0.63kPa, lw=1.0-ULS, 0.75-SLS.

**FIELD REVIEW BY STRUCTURAL ENGINEER**

- 1. Structural Engineer provides field review only for the work shown on these structural drawings, and it is conducted with such frequency as Structural Engineer deems appropriate to ascertain that the work is in general conformance with the documents prepared by Structural Engineer.  
Field review by Structural Engineer is not carried out for the Contractor's benefit, nor does it make Structural Engineer guarantors of the Contractor's work. It remains the Contractor's responsibility to build the work in conformance with the contract documents. Structural Engineer shall not be responsible for the acts or omissions of the Contractor, Sub-Contractor, or any other persons performing any of the work or for the failure of any of them to carry out the work in accordance with the contract documents.
- 2. Provide 24 hours advance notice of each required field review. Field reviews shall be scheduled to be carried out during normal business hours unless special arrangements are made with Structural Engineer.
- 3. The work to be reviewed shall be generally complete.

STRUCTURAL NOTES (cont)

**CONCRETE AND REINFORCING STEEL**

- 1. Concrete work shall conform to CAN/CSA-A23.1, CAN/CSA -A23.2, CAN/CSA -A23.3 and referenced documents.
- 2. Reinforcing shall conform to CAN/CSA-G30.18R – Grade 400MPa.
- 3. Cover to reinforcing steel to be 50mm uno.
- 4. Portland cement shall be type gu unless noted otherwise.
- 5. Concrete shall have a unit weight of 23±1 kn/m3/ (145±5 pcf) unless noted otherwise.
- 6. Concrete shall have a compressive strength of 35MPa at 28 days, and conform to exposure class C-1 with a maximum water-cement ratio of 0.40and air content of 5-8%. Maximum aggregate size to be 19mm.
- 7. No calcium chloride is permitted, in any form, in any concrete mix. Curing and protection of concrete for hot, cold or dry weather is tobe as per clauses 7.4.1.8 and 7.4.2 of CAN/CSA.

**STRUCTURAL ALUMINUM**

- 1. Aluminum sections shall be new.
- 2. Aluminum alloys shall conform to the Aluminum Association publication Aluminum Standards and Data ISO 6361-2 or ISO 6362-2.
- 3. Extruded shapes, Tubes, Bolts, and Plate to be 6061 alloy uno.
- 4. Aluminum in contact with concrete or grout shall be given a heavy coat of alkali-resistant bituminous paint or other equivalent coating before installation.
- 5. Welding operators and procedures shall be qualified according to CSA W47.2.
- 6. Submit shop drawings for review prior to start of steel fabrication.
- 7. Fabrication practices and tolerances shall be in accordance with CAN/CSA-S16, except bolt holed edge distance tolerance to be -0, +2mm.
- 8. Anchor and connection bolts to be ASTM A193 Stainless Steel. Anchors shall be embedded 300mm into concrete, complete with a nut and washer each end.
- 9. Unless noted otherwise, column base plates shall be 20 mm minimum thick. Anchor bolt holes shall be punched undersize and reamed to size.
- 10. Provide 6 mm cap plates for all tube members uno.
- 11. Aluminum shall be connected with fillet welds all-around uno. Weld size shall match the wall thickness of the thinnest part being connected uno. Welds to be ground smooth.

**TAMPER RESISTANCE AND CONNECTIONS**

- 1. Connection hardware to be stainless steel uno.
- 2. Aluminum panels to be connected to structure with 6.4mm diameter stainless steel self-tapping screws at 450mm maximum centre to centre spacing.
- 3. Non-removable panels may be welded or glued by the manufacturer, as approved by Structural Engineer.
- 4. Panel connection screws to be tamper resistant “Torx-Pin” screws as supplied by O.E.M.  
Hardware of Surrey BC, or equivalent as approved by Structural Engineer.
- 5. Visible connection bolts shall be “Pentagon” tamper resistant bolts, with “Pentagon” nuts as supplied by O.E.M. Hardware of Surrey BC, or equivalent as approved by Structural Engineer.  
Anchor bolts to be secured with “Pentagon” security nuts.





Sheet List	
Sheet Number	Sheet Name
01	title sheet and drawing list
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06	sign construction - details
07	general notes

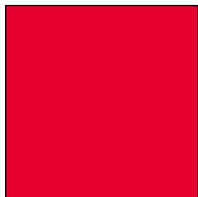


Sign No. 2C  
Vehicular - Parking Lot

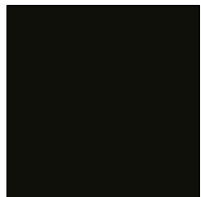
**core colours**



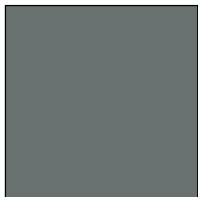
clear anodized coating  
application: sign structure



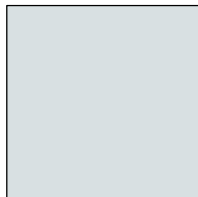
PANTONE 185 C  
application:  
pinstrip, arrows



PANTONE 426 C  
application: text,  
crest - monochromatic



PANTONE 424 C  
application: background



PANTONE 7541 C  
application: background,  
back panel (single sided sign)



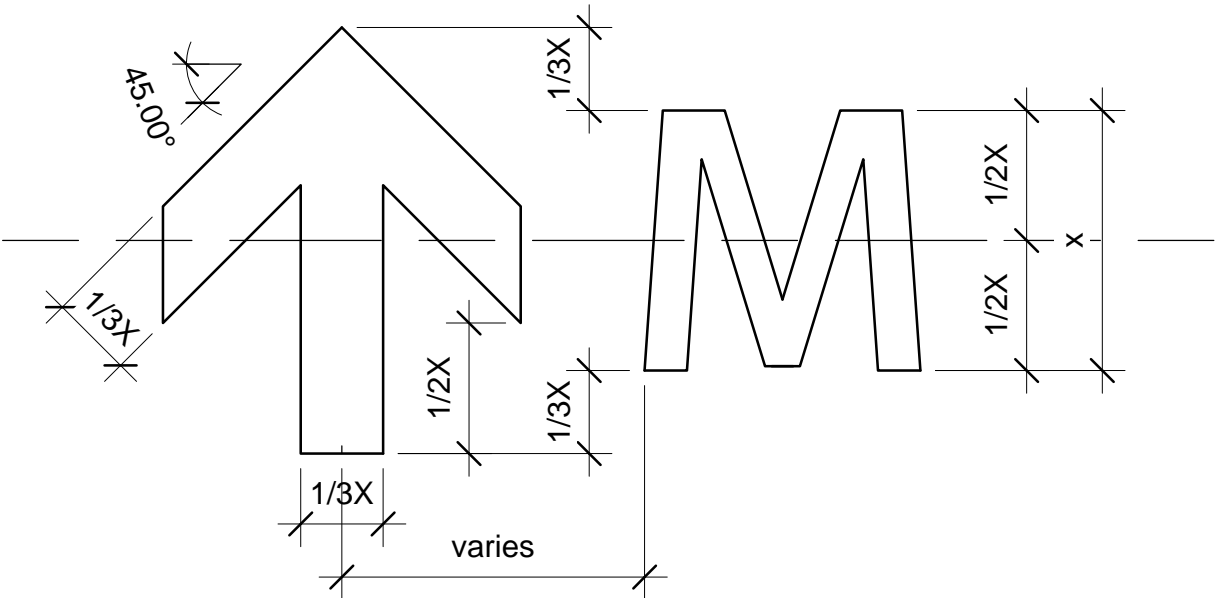
garry oak motif - digital file is to be delivered  
by University of Victoria

**samples of typeface family**

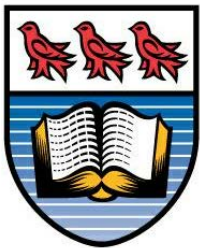
Myriad Pro Semi Bold

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
1234567890

**arrow style and arrow size in relation to text height**



**University of Victoria Logo, horizontal standard**

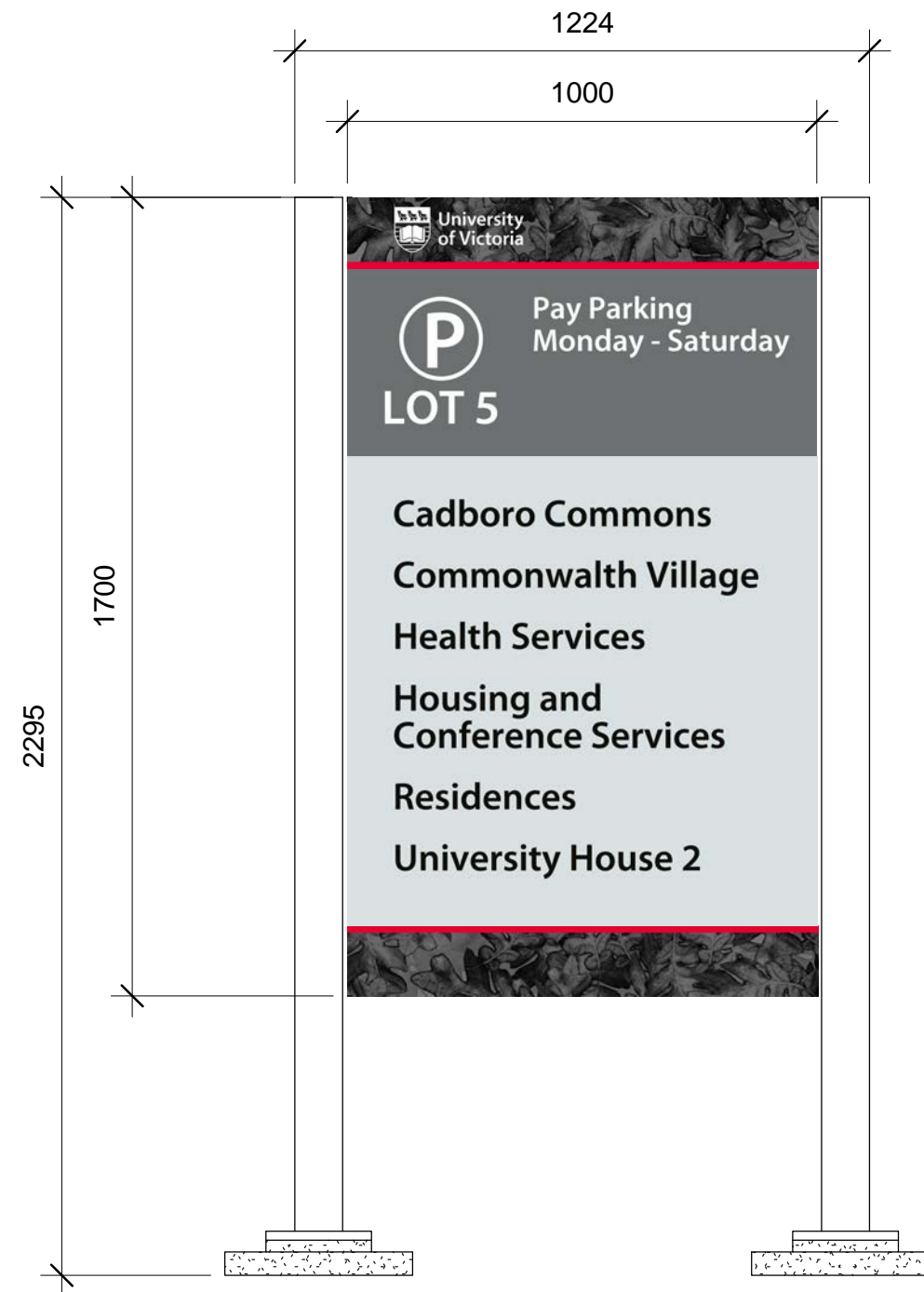


University  
of Victoria



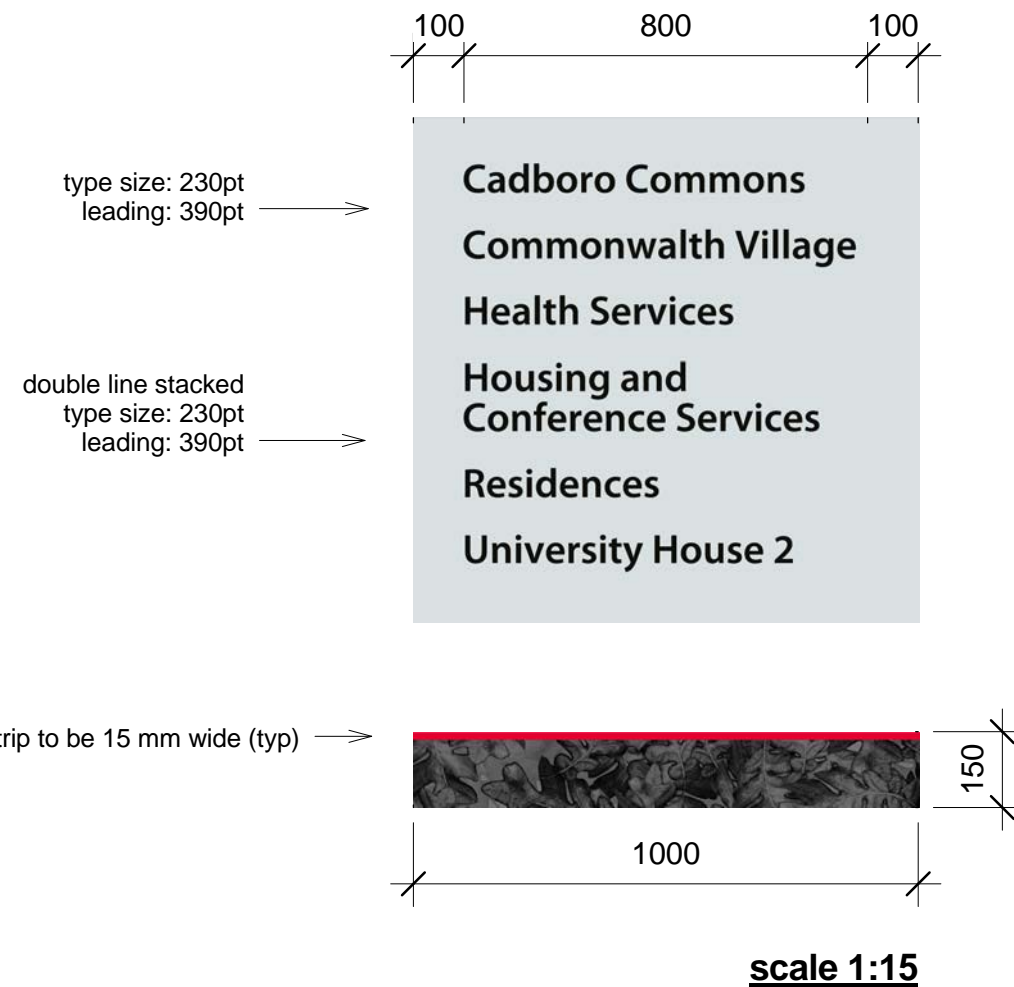
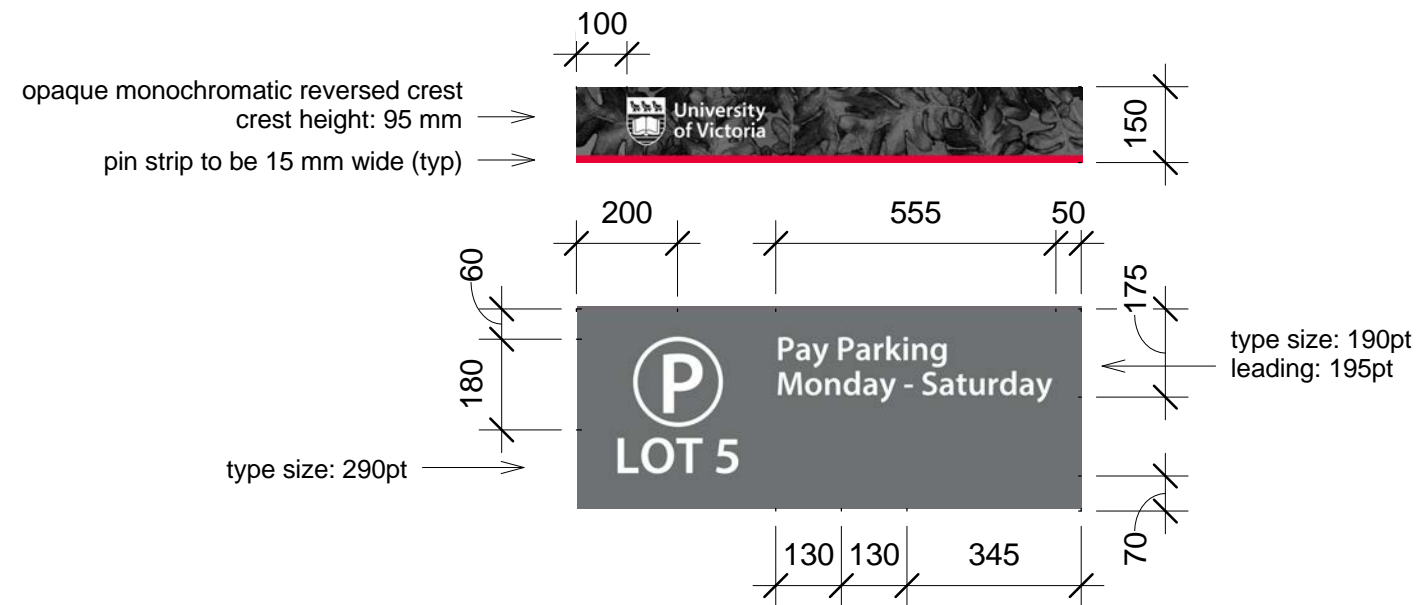
**full colour**

**reverse monochromatic - shown against bacgroud for clarity**



**Parking Lot C**  
**scale 1:15**



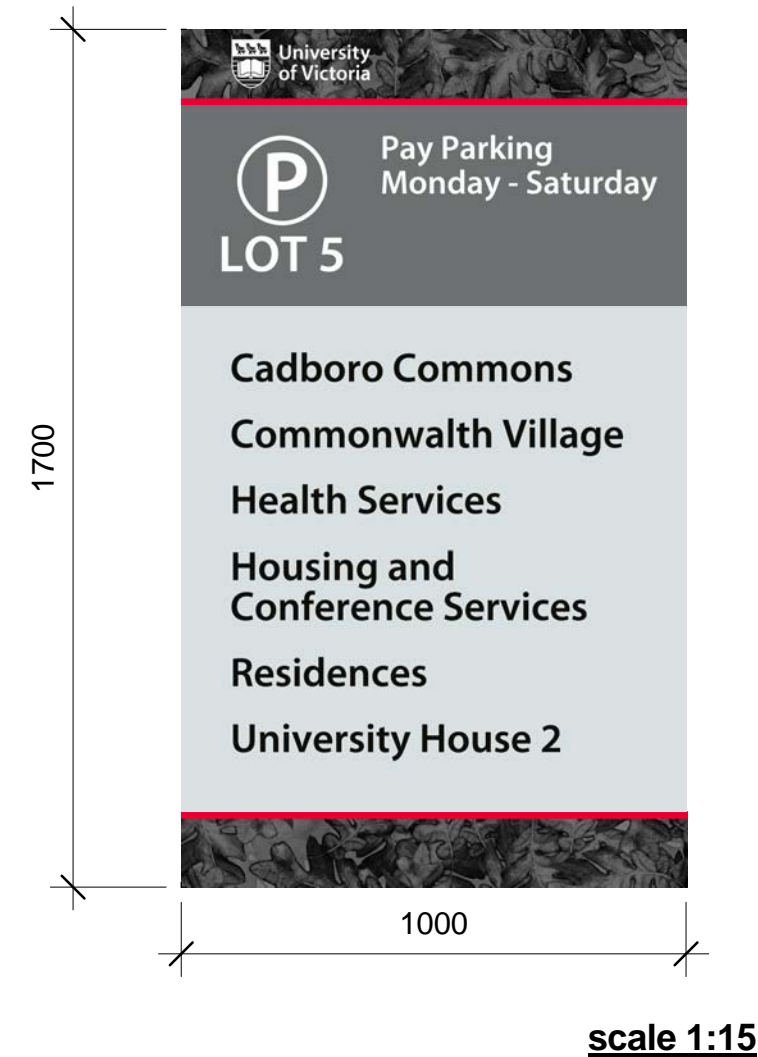


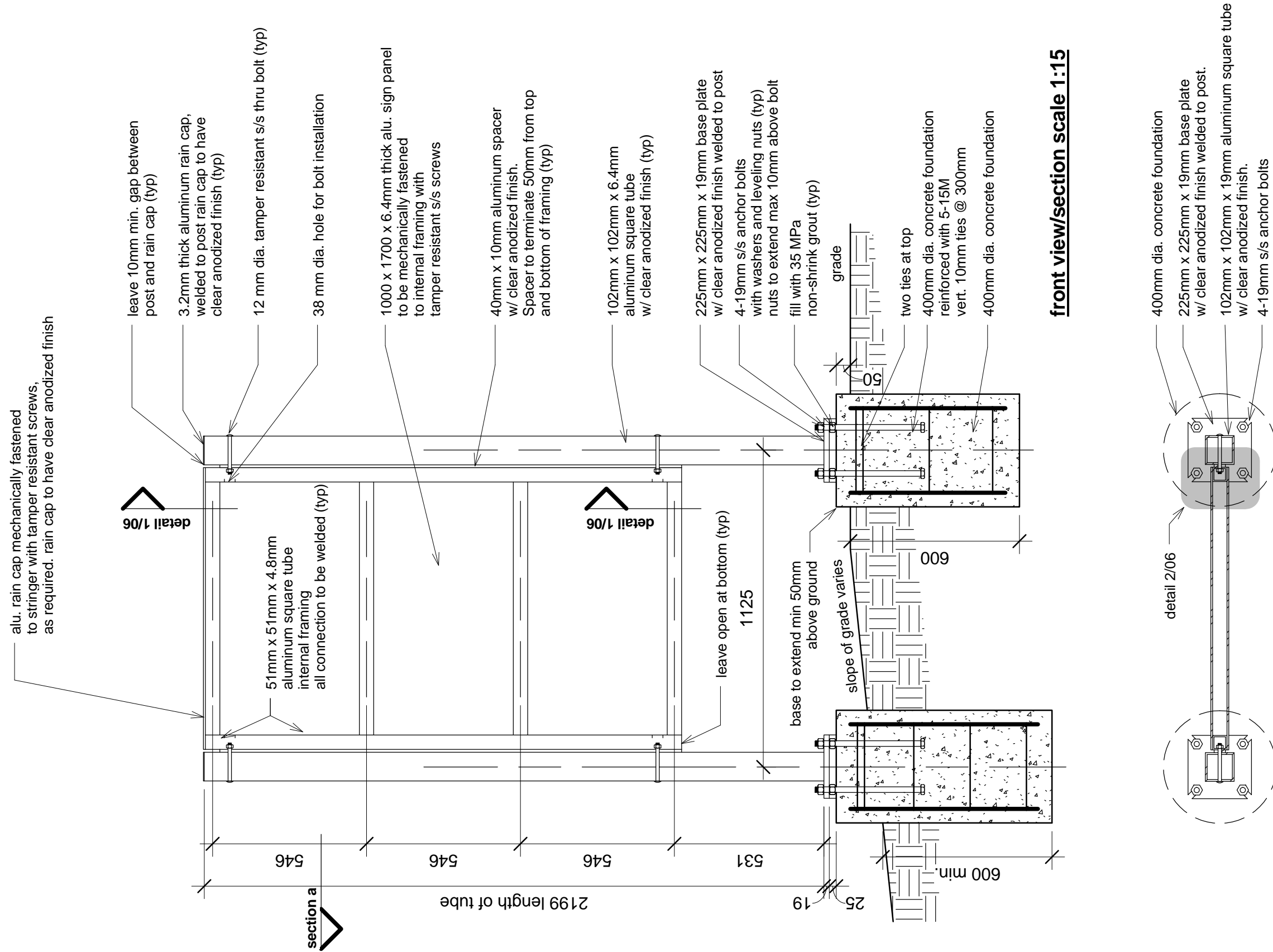
**Description**  
Digitally printed vinyl protected with anti-graffiti, optically clear overlamine  
Aluminum panel size (one piece): 1050 mm x 750 mm x 6.4 mm  
See sheet 05 for details.

Vinyl: 3M IJ180, MPI 2005 or equivalent  
Overlamine: 3M 8914, Avery DOL 6060 or equivalent.

- 1) One piece vinyl to be printed on, installed as per manufacturer's recommendations.
- 2) Use compatible UV inks and overlamines as recommended by manufacturer
- 3) Wrap vinyl and overlamine over the edges of the aluminum panel.
- 4) If single sided sign then back panel to receive vinyl printed with PANTEONE 7541 C

Refer to Adobe Photoshop files for detailed sample layout



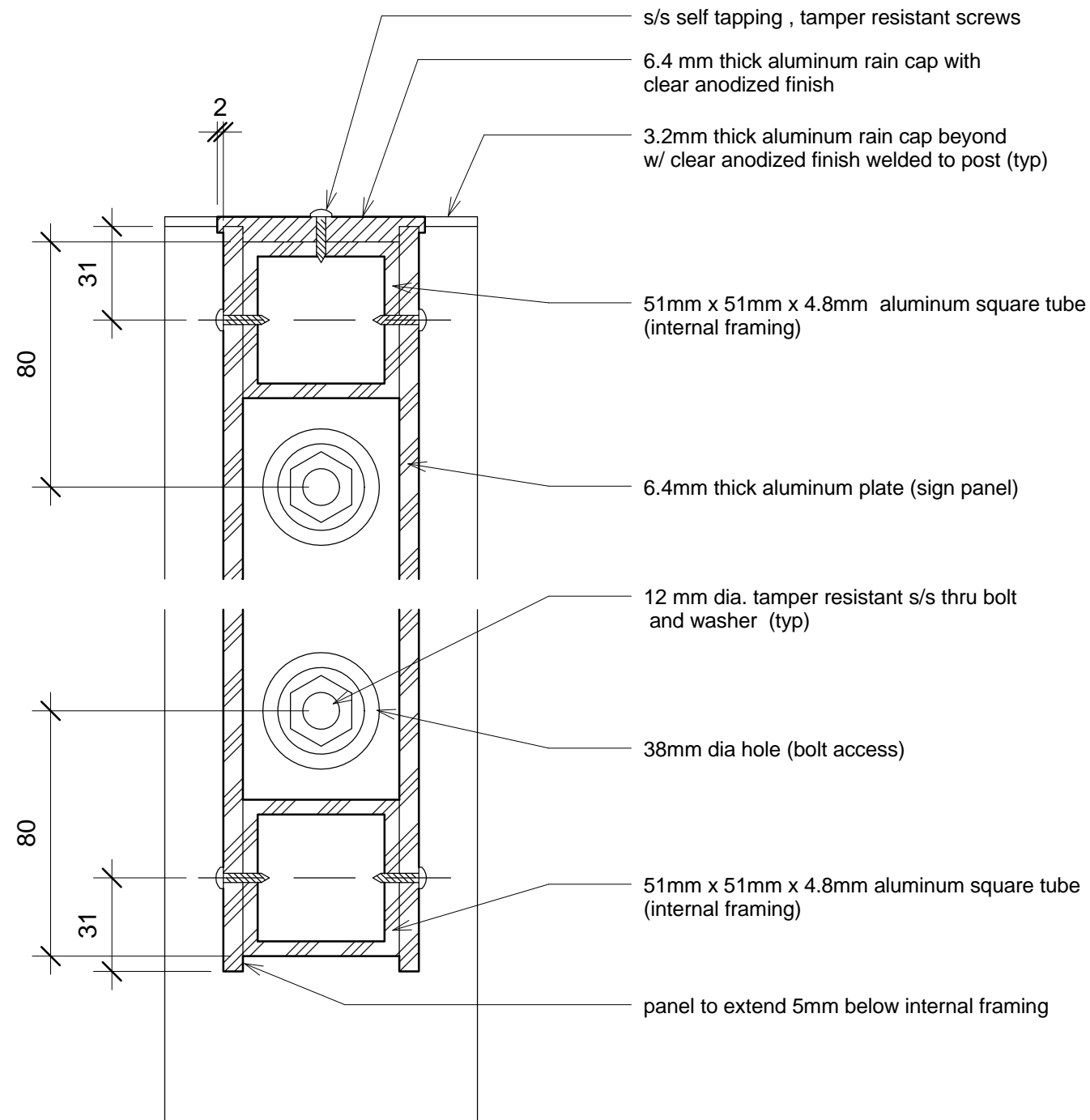


front view/section scale 1:15

section a scale 1:15

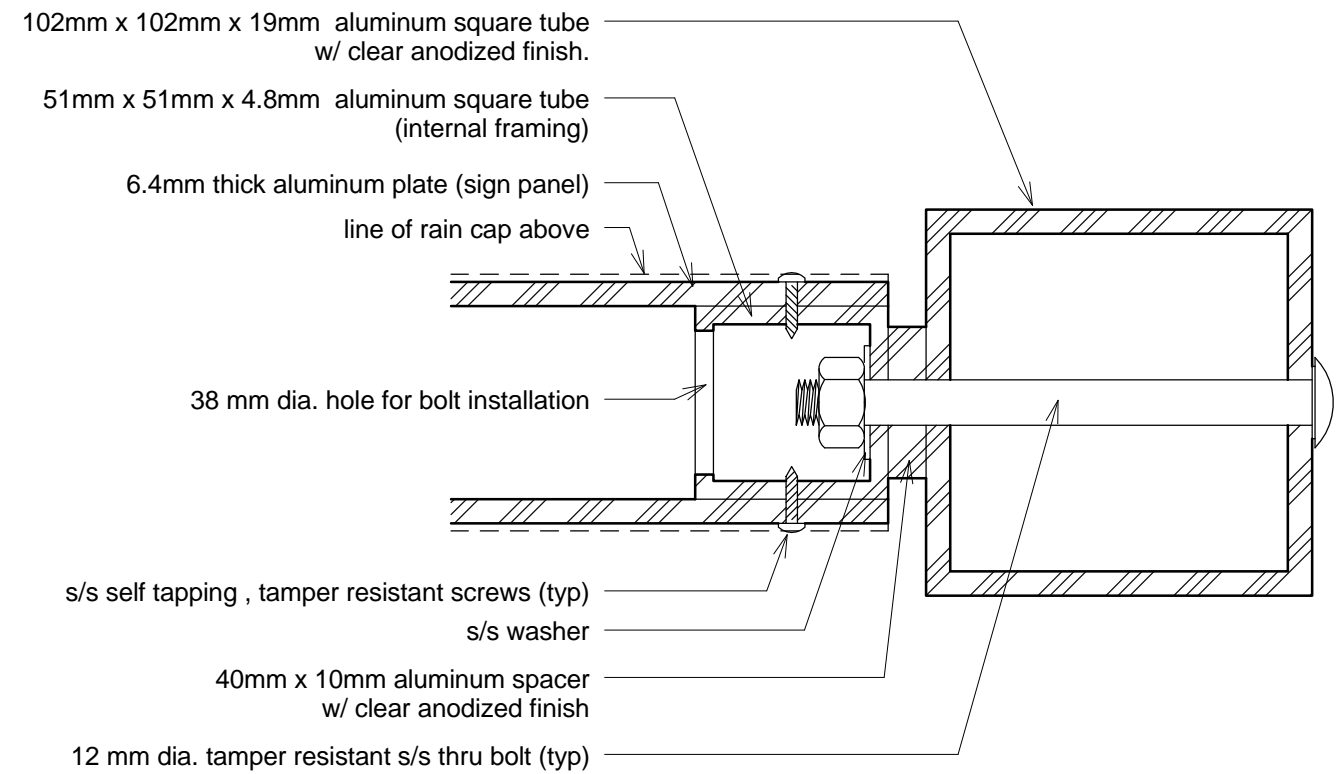
General Note:  
Manufacturer to verify all diemnsions prior to sign fabrication. All discrepancies should be reported to the Architect.



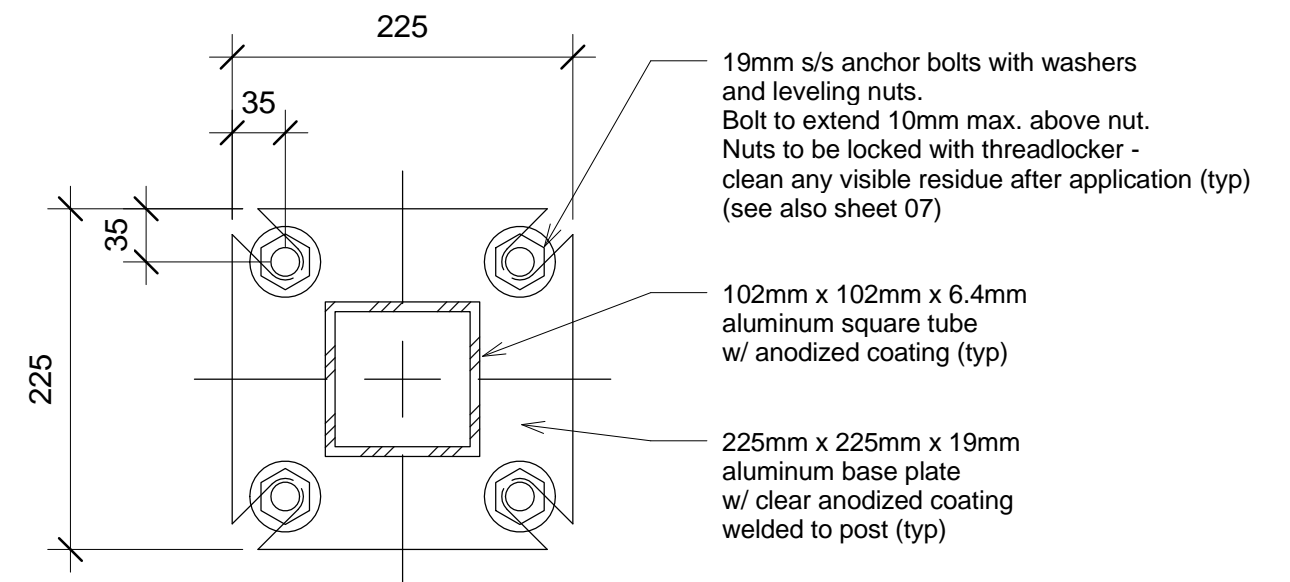


General Note:  
Manufacturer to verify all dimensions prior to sign fabrication. All discrepancies should be reported to the Architect.

**section detail 1 scale 1:2**



**section detail 2 scale 1:2**



**section b (slip base) scale 1:5**

project: Campus Wayfinding  
number: -  
issue date: April 1, 2019

sign: Sign No. 2C - Parking Lot  
sheet name: sign construction - details  
scale: as noted

sheet  
number:

06



**University  
of Victoria**

GENERAL NOTES

- 1. Provide self adhesive sign ID stickers. ID's should correspond with ID's shown on location plan
- Form and placement of stickers on signs is to be coordinated with University of Victoria
- 2. Fasteners:
  - foundation (anchor bolts):
  - bolts: Fastenal part #47406 (1/2" s/s threaded rod)
  - washers: Fastenal part #71021 (1/2" s/s washers)
  - nuts: Fastenal part #70714 (1/2" s/s nuts)
  - posts:
  - thru bolts: Fastenal part #174786 (1/2" s/s x 5" button Socket Cap Screw)
  - thru bolt washers: Fastenal part #71021 (1/2" s/s washers)
  - thru bolt nuts: 70714 (1/2" s/s nuts)
  - panels:
  - security screws panel attachment: Fastenal part #BS0160024SSH200 (10-24 x 3/4" button head security screw )
  - rain cap attachment: Fastenal part #BS0160024SSH200 (10-24 x 3/4" button head security screw)
- 3. Threadlocker: Locktite 271 Red
- 4. Whenever anchor bolts are cut, contractor to ensure cut surfaces (terminated coating) are protected against rusting.
- 5. Manufacturer to verify all diemnsions prior to sign fabrication. All discrepancies should be reported to the Architect.

STRUCTURAL NOTES

**DRAWINGS**

- 1. These drawings show the completed project. The drawings do not show components that may be necessary for construction safety, which is the responsibility of the contractor.
- 2. The use of these drawings is limited to that indicated in the revisions column.
- 3. The information on these drawings shall not be used for any other project or works.

**DESIGN**

- 1. The structures shown have been designed in substantial accordance with the British Columbia Building Code 2006, which is based on the National Building Code of Canada 2005.
- 2. The following wind loads and factors were used: q50=0.63kPa, lw=1.0-ULS, 0.75-SLS.

**FIELD REVIEW BY STRUCTURAL ENGINEER**

- 1. Structural Engineer provides field review only for the work shown on these structural drawings, and it is conducted with such frequency as Structural Engineer deems appropriate to ascertain that the work is in general conformance with the documents prepared by Structural Engineer.  
Field review by Structural Engineer is not carried out for the Contractor's benefit, nor does it make Structural Engineer guarantors of the Contractor's work. It remains the Contractor's responsibility to build the work in conformance with the contract documents. Structural Engineer shall not be responsible for the acts or omissions of the Contractor, Sub-Contractor, or any other persons performing any of the work or for the failure of any of them to carry out the work in accordance with the contract documents.
- 2. Provide 24 hours advance notice of each required field review. Field reviews shall be scheduled to be carried out during normal business hours unless special arrangements are made with Structural Engineer.
- 3. The work to be reviewed shall be generally complete.

STRUCTURAL NOTES (cont)

**CONCRETE AND REINFORCING STEEL**

- 1. Concrete work shall conform to CAN/CSA-A23.1, CAN/CSA -A23.2, CAN/CSA -A23.3 and referenced documents.
- 2. Reinforcing shall conform to CAN/CSA-G30.18R – Grade 400MPa.
- 3. Cover to reinforcing steel to be 50mm uno.
- 4. Portland cement shall be type gu unless noted otherwise.
- 5. Concrete shall have a unit weight of 23±1 kn/m3/ (145±5 pcf) unless noted otherwise.
- 6. Concrete shall have a compressive strength of 35MPa at 28 days, and conform to exposure class C-1 with a maximum water-cement ratio of 0.40 and air content of 5-8%. Maximum aggregate size to be 19mm.
- 7. No calcium chloride is permitted, in any form, in any concrete mix. Curing and protection of concrete for hot, cold or dry weather is to be as per clauses 7.4.1.8 and 7.4.2 of CAN/CSA.

**STRUCTURAL ALUMINUM**

- 1. Aluminum sections shall be new.
- 2. Aluminum alloys shall conform to the Aluminum Association publication Aluminum Standards and Data ISO 6361-2 or ISO 6362-2.
- 3. Extruded shapes, Tubes, Bolts, and Plate to be 6061 alloy uno.
- 4. Aluminum in contact with concrete or grout shall be given a heavy coat of alkali-resistant bituminous paint or other equivalent coating before installation.
- 5. Welding operators and procedures shall be qualified according to CSA W47.2.
- 6. Submit shop drawings for review prior to start of steel fabrication.
- 7. Fabrication practices and tolerances shall be in accordance with CAN/CSA-S16, except bolt holed edge distance tolerance to be -0, +2mm.
- 8. Anchor and connection bolts to be ASTM A193 Stainless Steel. Anchors shall be embedded 300mm into concrete, complete with a nut and washer each end.
- 9. Unless noted otherwise, column base plates shall be 20 mm minimum thick. Anchor bolt holes shall be punched undersize and reamed to size.
- 10. Provide 6 mm cap plates for all tube members uno.
- 11. Aluminum shall be connected with fillet welds all-around uno. Weld size shall match the wall thickness of the thinnest part being connected uno. Welds to be ground smooth.

**TAMPER RESISTANCE AND CONNECTIONS**

- 1. Connection hardware to be stainless steel uno.
- 2. Aluminum panels to be connected to structure with 6.4mm diameter stainless steel self-tapping screws at 450mm maximum centre to centre spacing.
- 3. Non-removable panels may be welded or glued by the manufacturer, as approved by Structural Engineer.
- 4. Panel connection screws to be tamper resistant “Torx-Pin” screws as supplied by O.E.M. Hardware of Surrey BC, or equivalent as approved by Structural Engineer.
- 5. Visible connection bolts shall be “Pentagon” tamper resistant bolts, with “Pentagon” nuts as supplied by O.E.M. Hardware of Surrey BC, or equivalent as approved by Structural Engineer. Anchor bolts to be secured with “Pentagon” security nuts.







Sheet List	
Sheet Number	Sheet Name
01	title sheet and drawing list
02	typography, colours and pictograms
03	sign design - overview
04	sign design - graphic design details
05	sign construction - sections
06	sign construction - details
07	general notes

# Sign No. 3A

## Vehicular - Building Identification

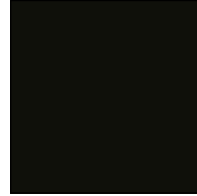
## core colours



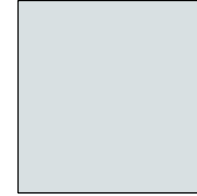
clear anodized coating  
application: sign structure



PANTONE 185 C  
application:  
pinstrip, arrows



PANTONE 426 C  
application: text,  
crest - monochromatic



PANTEONE 7541 C  
application: background,  
back panel (single sided sign)



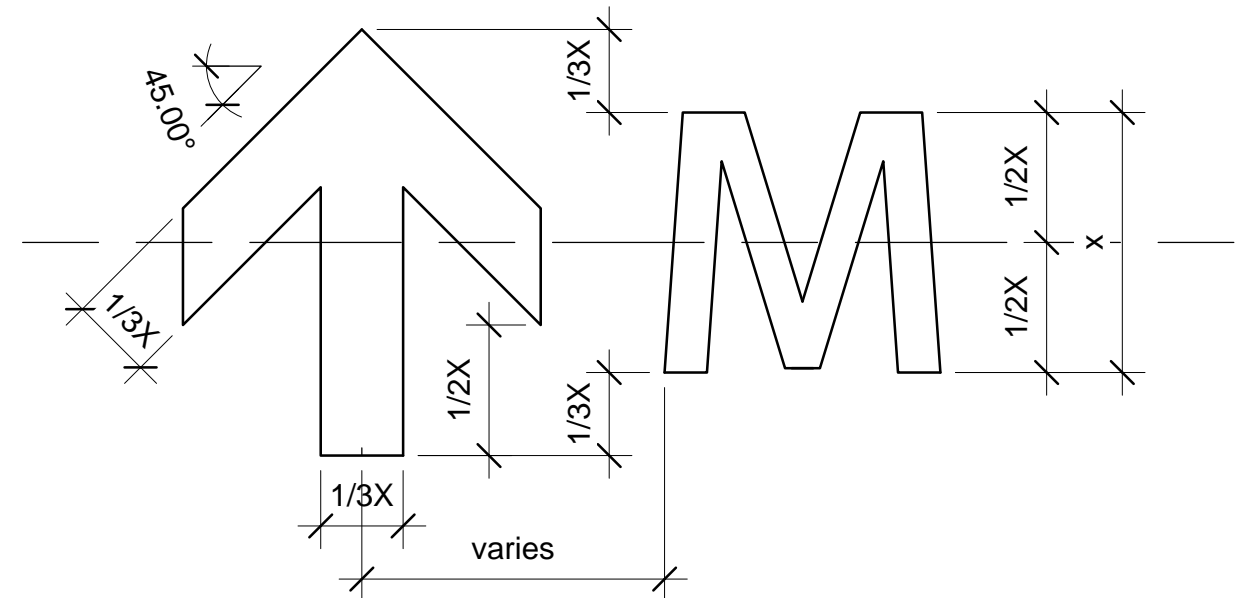
gary oak motif - digital file is to be delivered  
by University of Victoria

## samples of typeface family

# Myriad Pro Semi Bold

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
1234567890

### arrow style and arrow size in relation to text height



**University of Victoria Logo, horizontal standard**



# University of Victoria



**full colour**

**reverse monochromatic** - shown against background for clarity

project: Campus Wayfinding  
number: -  
issue date: April 1, 2019

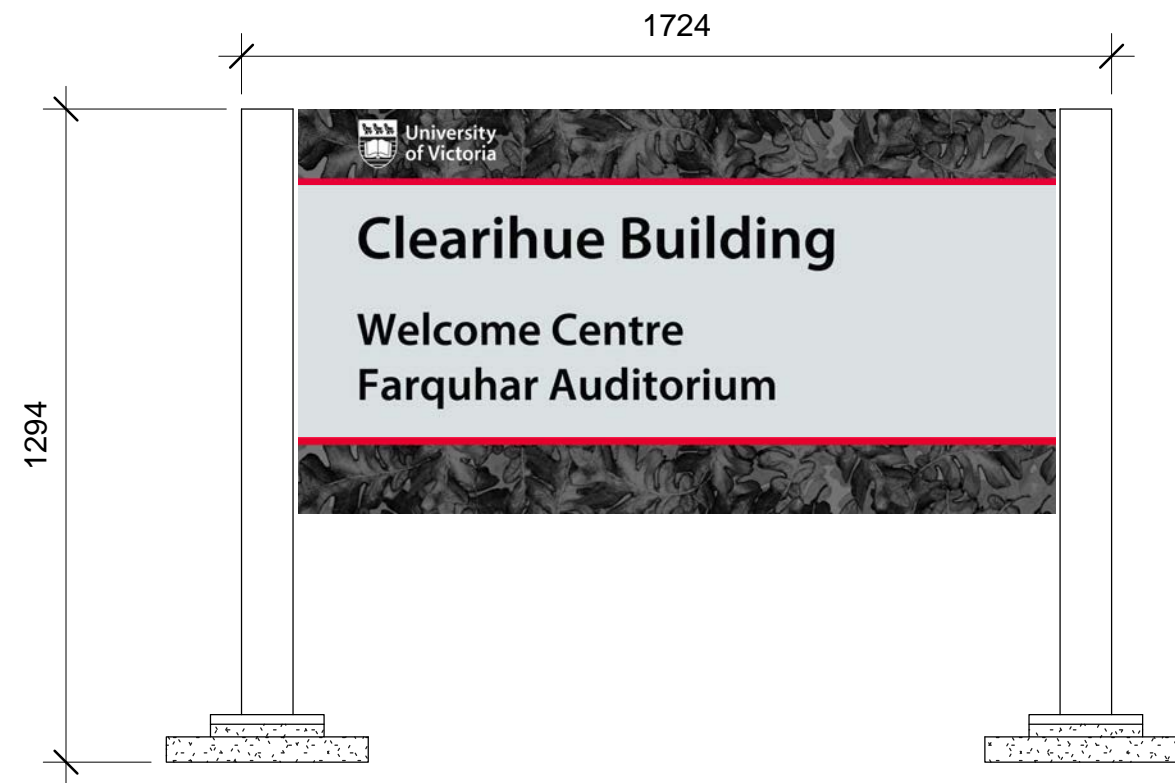
sign: Sign No. 3A - Building Identification  
sheet name: typography, colours and pictograms  
scale: as noted

sheet  
number:

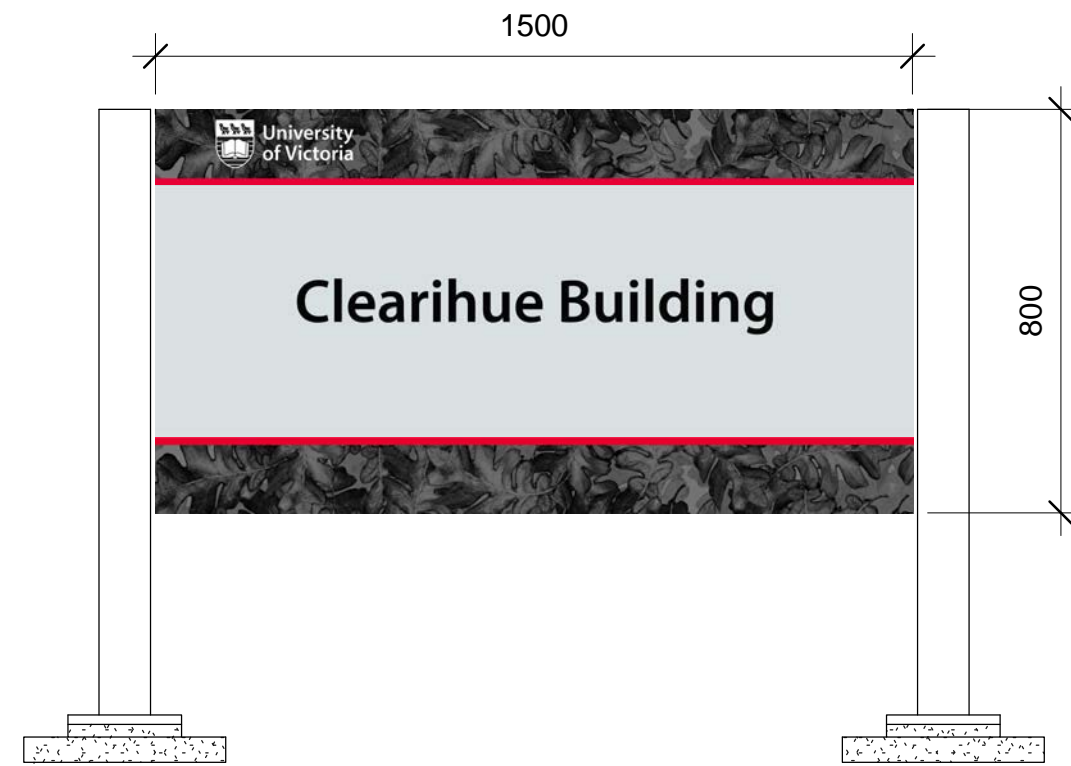
02



**University  
of Victoria**



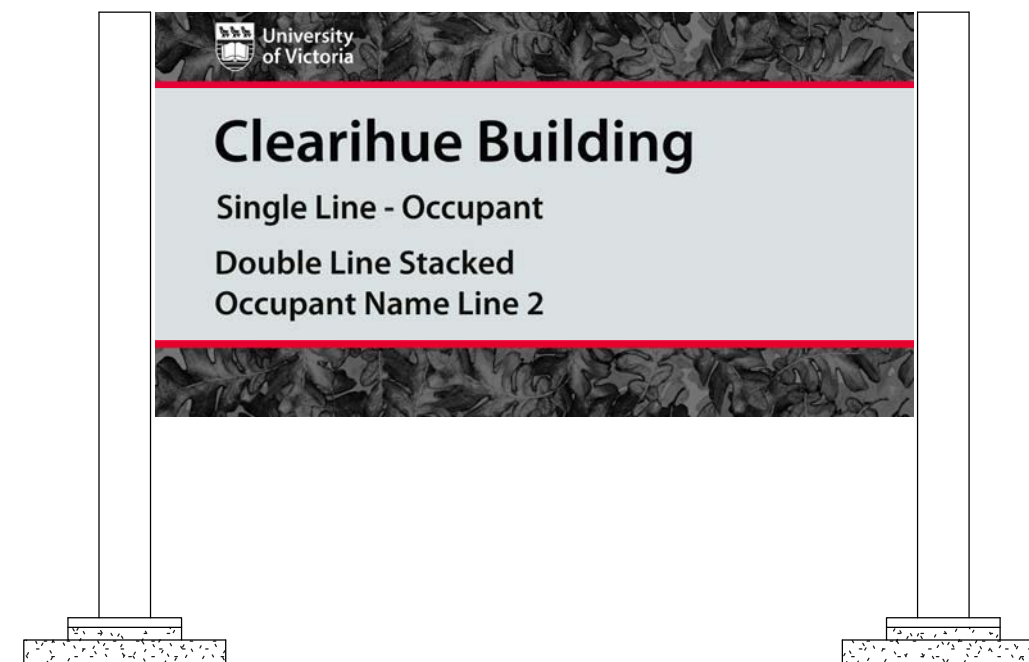
**building name with occupant names**  
**scale 1:15**



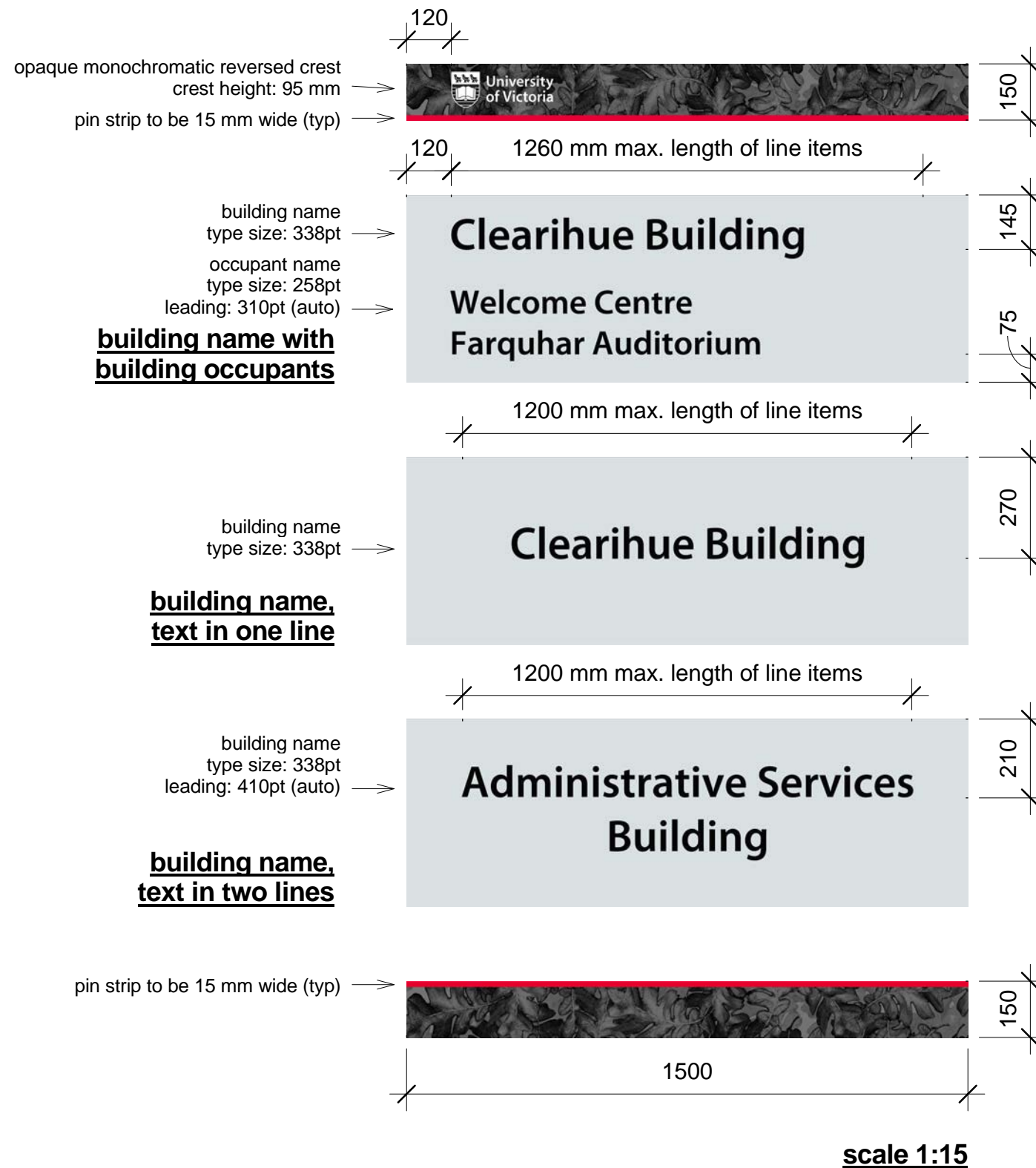
**building name, text in one line**  
**scale 1:15**



**building name, text in two lines**  
**scale 1:15**



**building name, text in two lines (double line stacked)**  
**scale 1:15**

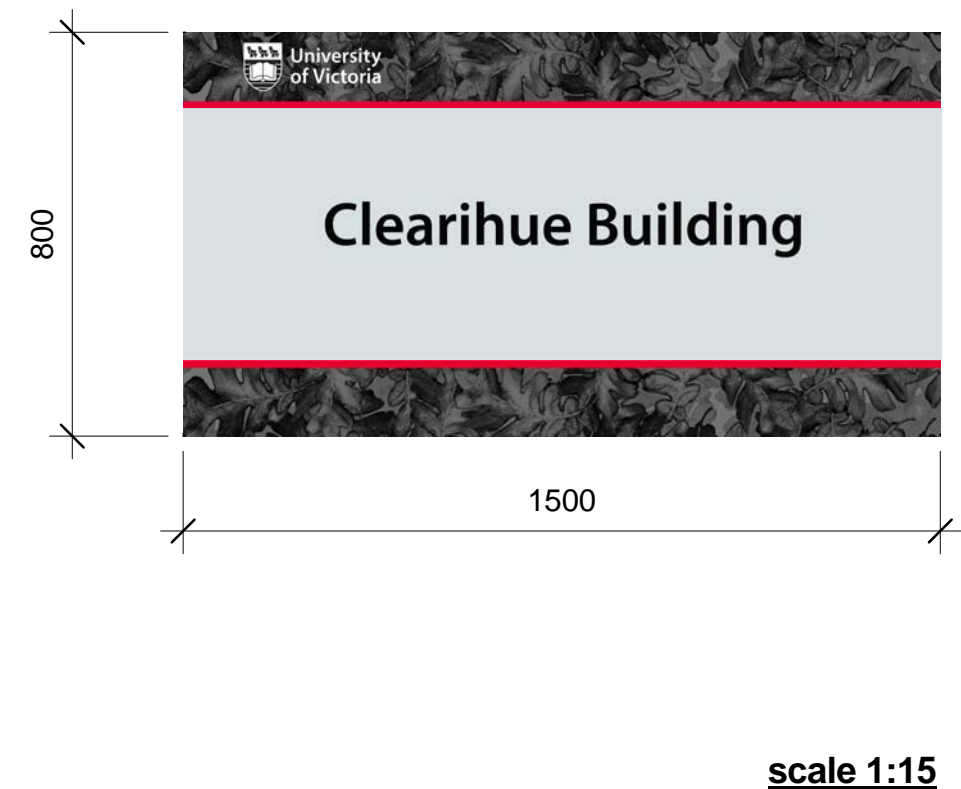


Description  
Digitally printed vinyl protected with  
anti-graffiti, optically clear overlaminate  
Aluminum panel size (one piece): 1500 mm x 800 mm x 6.4 mm  
See sheet 05 for details.

Vinyl: 3M IJ180, MPI 2005 or equivalent  
Overlaminate: 3M 8914, Avery DOL 6060 or equivalent.

- 1) One piece vinyl to be printed on, installed as per manufacturer's recommendations.
- 2) Use compatible UV inks and overlaminates as recommended by manufacturer
- 3) Wrap vinyl and overlaminate over the edges of the aluminum panel.
- 4) If single sided sign then back panel to receive vinyl printed with PANTEONE 7541 C

Refer to Adobe Photoshop files for detailed sample layout



project: Campus Wayfinding  
number: -  
issue date: April 1, 2019

sign: Sign No. 3A - Building Identification  
sheet name: sign design - graphic design details  
scale: as noted

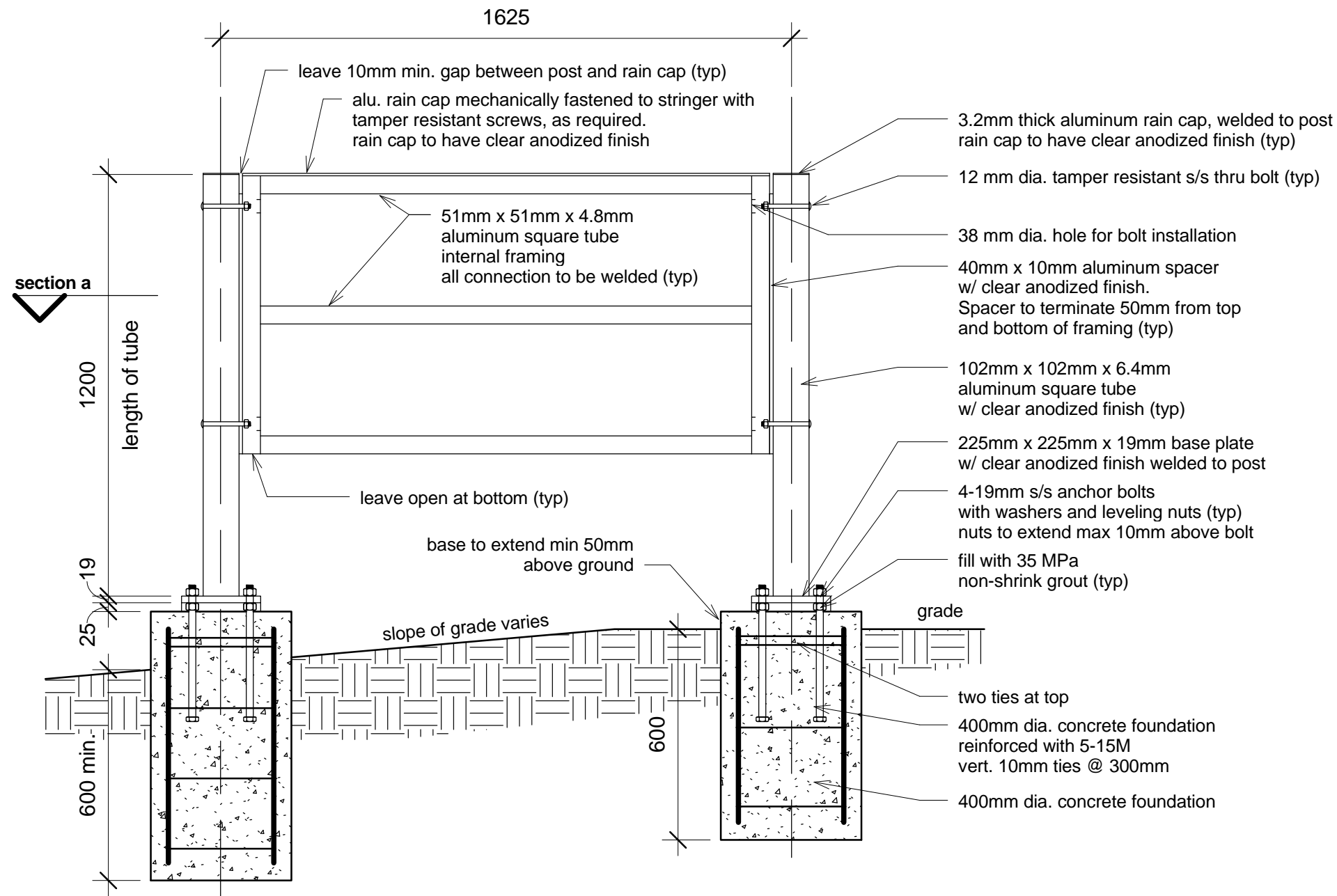
sheet  
number:

04

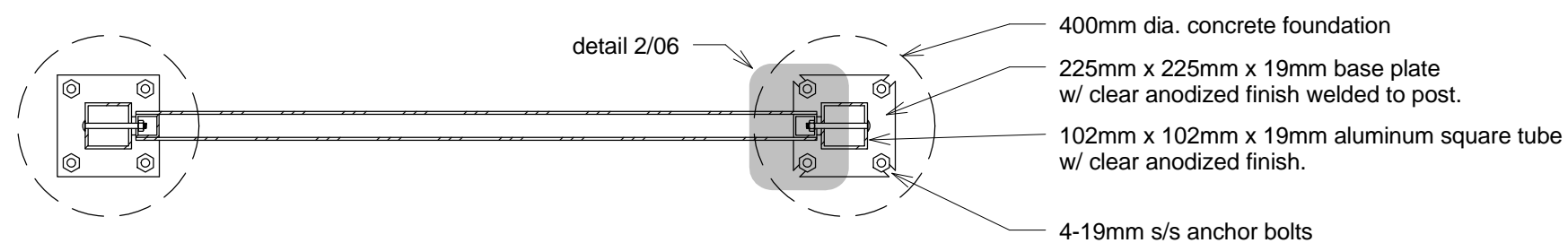


University  
of Victoria

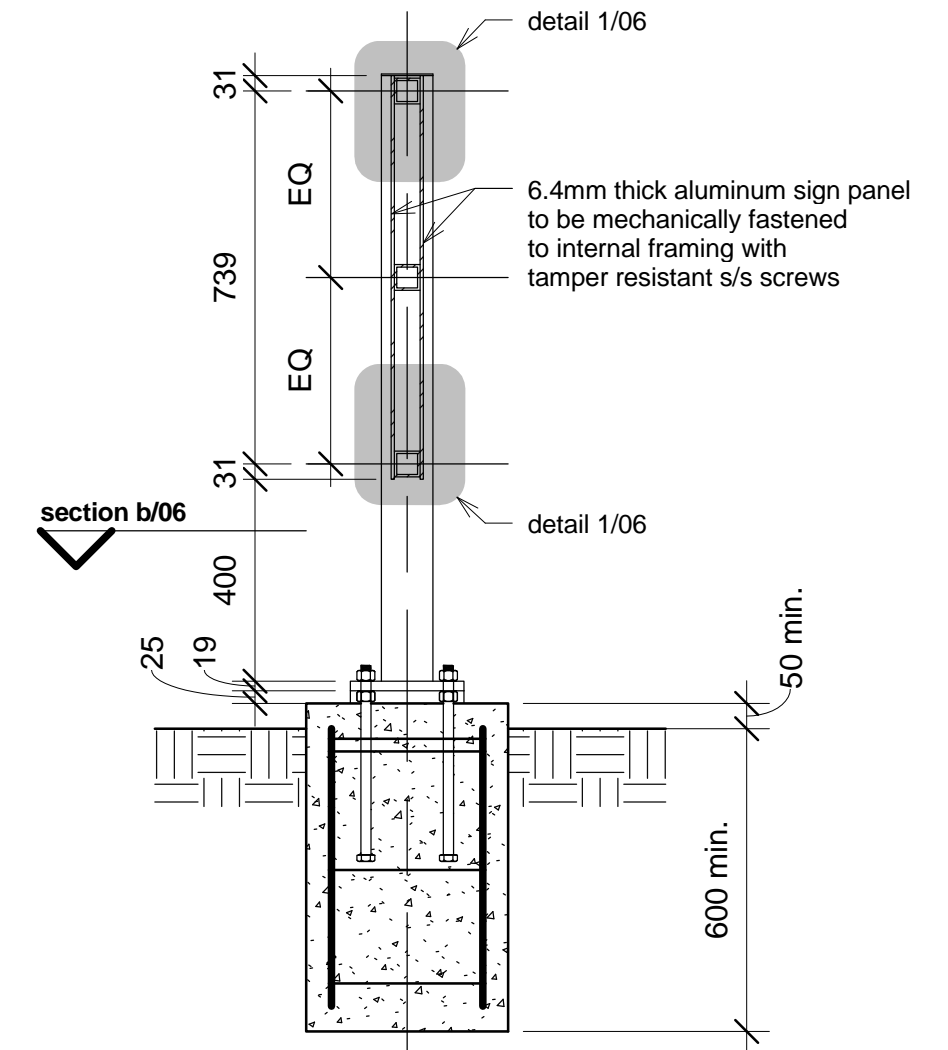




**front view/section scale 1:15**

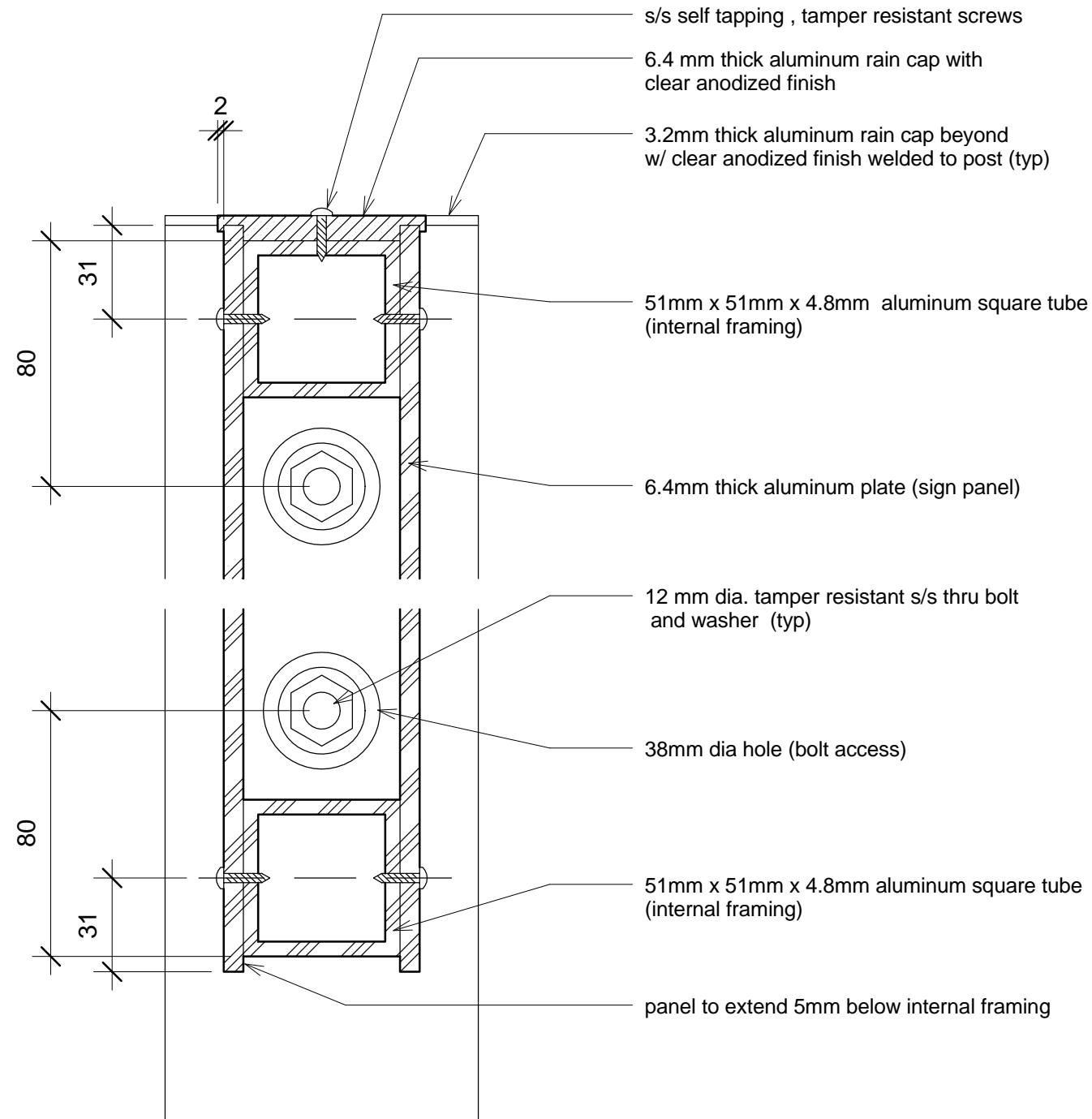


**section a scale 1:15**



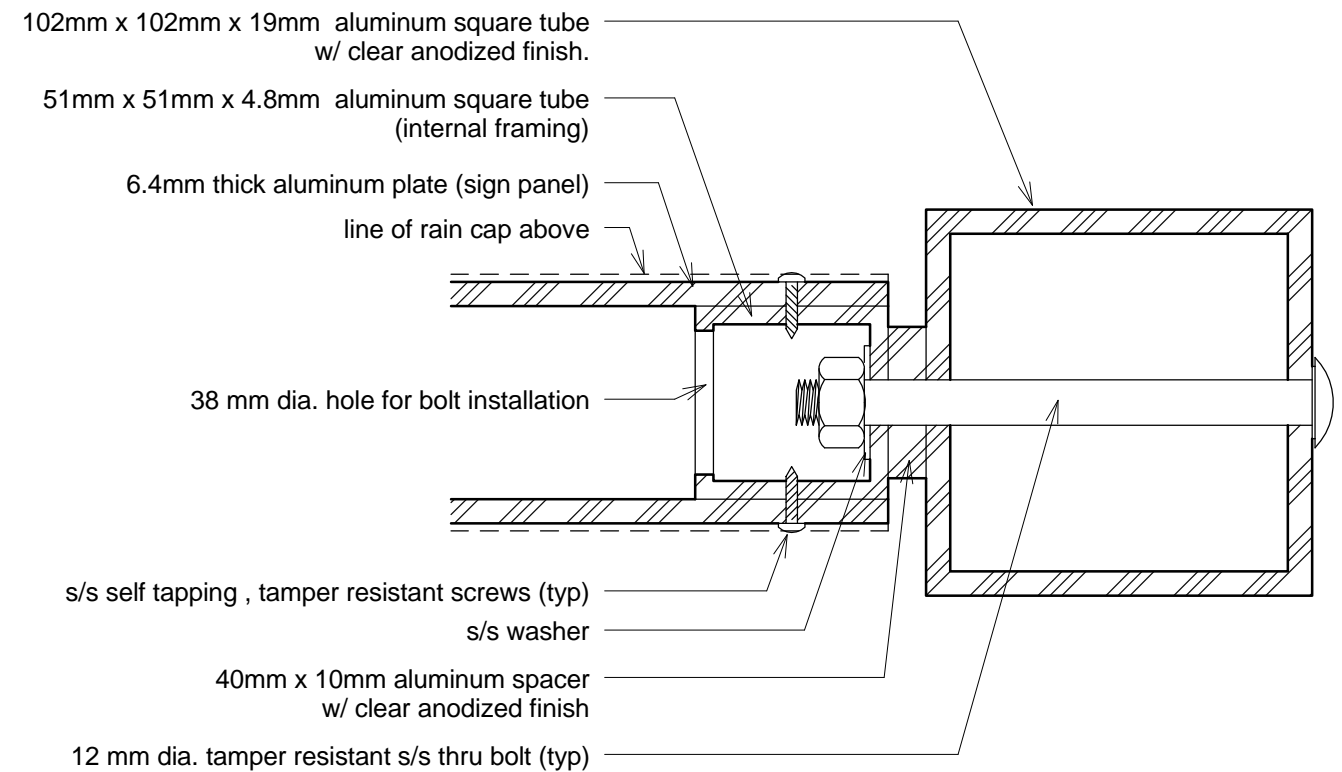
**side view/section scale 1:15**

General Note:  
Manufacturer to verify all dimensions prior to sign fabrication. All discrepancies should be reported to the Architect.

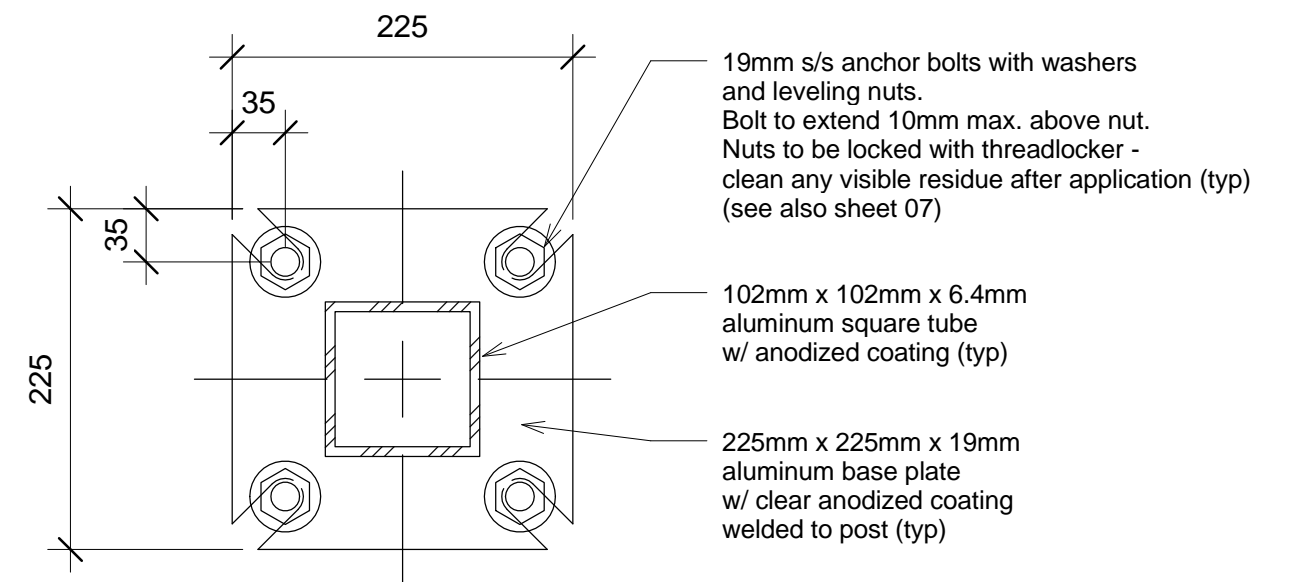


General Note:  
Manufacturer to verify all dimensions prior to sign fabrication. All discrepancies should be reported to the Architect.

**section detail 1 scale 1:2**



**section detail 2 scale 1:2**



**section b (slip base) scale 1:5**

project: Campus Wayfinding  
number: -  
issue date: April 1, 2019

sign: Sign No. 3A - Building Identification  
sheet name: sign construction - details  
scale: as noted

sheet  
number:

06



University  
of Victoria

GENERAL NOTES

- 1. Provide self adhesive sign ID stickers. ID's should correspond with ID's shown on location plan
- Form and placement of stickers on signs is to be coordinated with University of Victoria
- 2. Fasteners:
  - foundation (anchor bolts):
  - bolts: Fastenal part #47406 (1/2" s/s threaded rod)
  - washers: Fastenal part #71021 (1/2" s/s washers)
  - nuts: Fastenal part #70714 (1/2" s/s nuts)
  - posts:
  - thru bolts: Fastenal part #174786 (1/2" s/s x 5" button Socket Cap Screw)
  - thru bolt washers: Fastenal part #71021 (1/2" s/s washers)
  - thru bolt nuts: 70714 (1/2" s/s nuts)
  - panels:
  - security screws panel attachment: Fastenal part #BS0160024SSH200 (10-24 x 3/4" button head security screw )
  - rain cap attachment: Fastenal part #BS0160024SSH200 (10-24 x 3/4" button head security screw)
- 3. Threadlocker: Locktite 271 Red
- 4. Whenever anchor bolts are cut, contractor to ensure cut surfaces (terminated coating) are protected against rusting.
- 5. Manufacturer to verify all diemnsions prior to sign fabrication. All discrepancies should be reported to the Architect.

STRUCTURAL NOTES

DRAWINGS

- 1. These drawings show the completed project. The drawings do not show components that may be necessary for construction safety, which is the responsibility of the contractor.
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DESIGN

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- 2. The following wind loads and factors were used: q50=0.63kPa, lw=1.0-ULS, 0.75-SLS.

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- 1. Structural Engineer provides field review only for the work shown on these structural drawings, and it is conducted with such frequency as Structural Engineer deems appropriate to ascertain that the work is in general conformance with the documents prepared by Structural Engineer.  
Field review by Structural Engineer is not carried out for the Contractor's benefit, nor does it make Structural Engineer guarantors of the Contractor's work. It remains the Contractor's responsibility to build the work in conformance with the contract documents. Structural Engineer shall not be responsible for the acts or omissions of the Contractor, Sub-Contractor, or any other persons performing any of the work or for the failure of any of them to carry out the work in accordance with the contract documents.
- 2. Provide 24 hours advance notice of each required field review. Field reviews shall be scheduled to be carried out during normal business hours unless special arrangements are made with Structural Engineer.
- 3. The work to be reviewed shall be generally complete.

STRUCTURAL NOTES (cont)

CONCRETE AND REINFORCING STEEL

- 1. Concrete work shall conform to CAN/CSA-A23.1, CAN/CSA -A23.2, CAN/CSA -A23.3 and referenced documents.
- 2. Reinforcing shall conform to CAN/CSA-G30.18R – Grade 400MPa.
- 3. Cover to reinforcing steel to be 50mm uno.
- 4. Portland cement shall be type gu unless noted otherwise.
- 5. Concrete shall have a unit weight of 23±1 kn/m3/ (145±5 pcf) unless noted otherwise.
- 6. Concrete shall have a compressive strength of 35MPa at 28 days, and conform to exposure class C-1 with a maximum water-cement ratio of 0.40 and air content of 5-8%. Maximum aggregate size to be 19mm.
- 7. No calcium chloride is permitted, in any form, in any concrete mix. Curing and protection of concrete for hot, cold or dry weather is to be as per clauses 7.4.1.8 and 7.4.2 of CAN/CSA.

STRUCTURAL ALUMINUM

- 1. Aluminum sections shall be new.
- 2. Aluminum alloys shall conform to the Aluminum Association publication Aluminum Standards and Data ISO 6361-2 or ISO 6362-2.
- 3. Extruded shapes, Tubes, Bolts, and Plate to be 6061 alloy uno.
- 4. Aluminum in contact with concrete or grout shall be given a heavy coat of alkali-resistant bituminous paint or other equivalent coating before installation.
- 5. Welding operators and procedures shall be qualified according to CSA W47.2.
- 6. Submit shop drawings for review prior to start of steel fabrication.
- 7. Fabrication practices and tolerances shall be in accordance with CAN/CSA-S16, except bolt holed edge distance tolerance to be -0, +2mm.
- 8. Anchor and connection bolts to be ASTM A193 Stainless Steel. Anchors shall be embedded 300mm into concrete, complete with a nut and washer each end.
- 9. Unless noted otherwise, column base plates shall be 20 mm minimum thick. Anchor bolt holes shall be punched undersize and reamed to size.
- 10. Provide 6 mm cap plates for all tube members uno.
- 11. Aluminum shall be connected with fillet welds all-around uno. Weld size shall match the wall thickness of the thinnest part being connected uno. Welds to be ground smooth.

TAMPER RESISTANCE AND CONNECTIONS

- 1. Connection hardware to be stainless steel uno.
- 2. Aluminum panels to be connected to structure with 6.4mm diameter stainless steel self-tapping screws at 450mm maximum centre to centre spacing.
- 3. Non-removable panels may be welded or glued by the manufacturer, as approved by Structural Engineer.
- 4. Panel connection screws to be tamper resistant “Torx-Pin” screws as supplied by O.E.M. Hardware of Surrey BC, or equivalent as approved by Structural Engineer.
- 5. Visible connection bolts shall be “Pentagon” tamper resistant bolts, with “Pentagon” nuts as supplied by O.E.M. Hardware of Surrey BC, or equivalent as approved by Structural Engineer. Anchor bolts to be secured with “Pentagon” security nuts.







# Sign No. 3B

## Vehicular - Building Identification

Sheet List	
Sheet Number	Sheet Name
01	title sheet and drawing list
02	typography, colours and pictograms
03	sign design - overview
04	sign design - graphic design details
05	sign construction - sections
06	sign construction - details
07	general notes

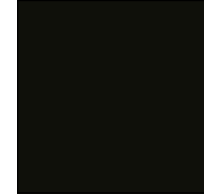
## core colours



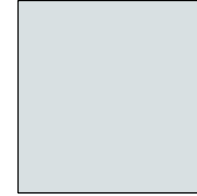
clear anodized coating  
application: sign structure



PANTONE 185 C  
application:  
pinstrip, arrows



PANTONE 426 C  
application: text,  
crest - monochromatic



PANTEONE 7541 C  
application: background,  
back panel (single sided sign)



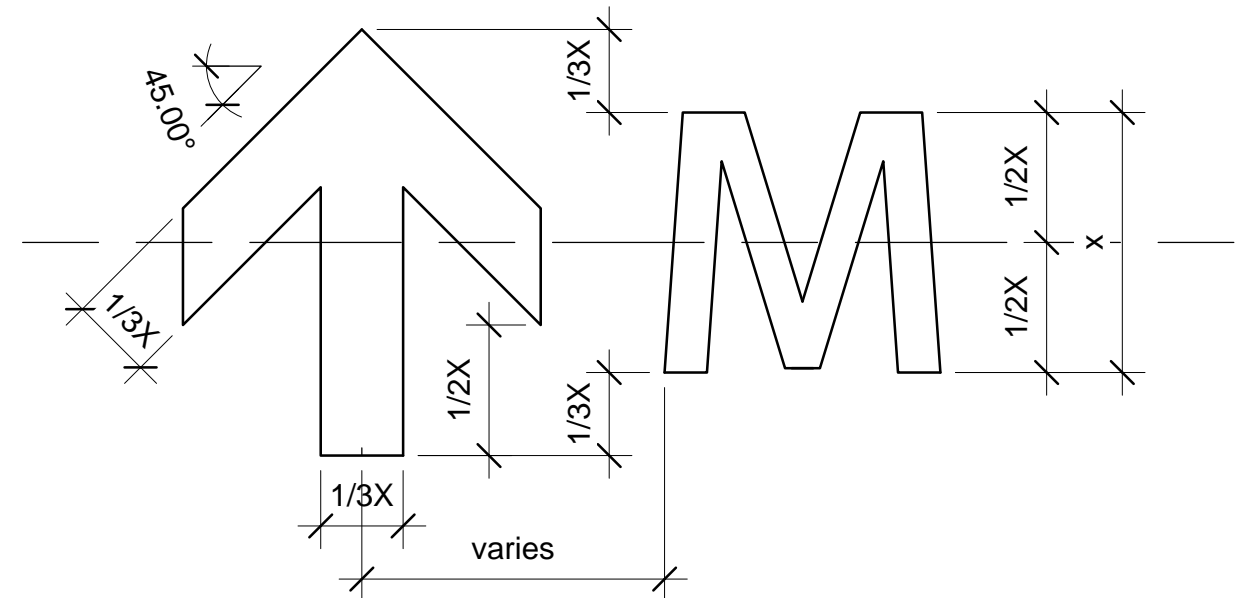
gary oak motif - digital file is to be delivered  
by University of Victoria

## samples of typeface family

# Myriad Pro Semi Bold

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
1234567890

### arrow style and arrow size in relation to text height



**University of Victoria Logo, horizontal standard**



# University of Victoria



**full colour**

**reverse monochromatic** -shown against background for clarity

project: Campus Wayfinding  
number: -  
issue date: April 1, 2019

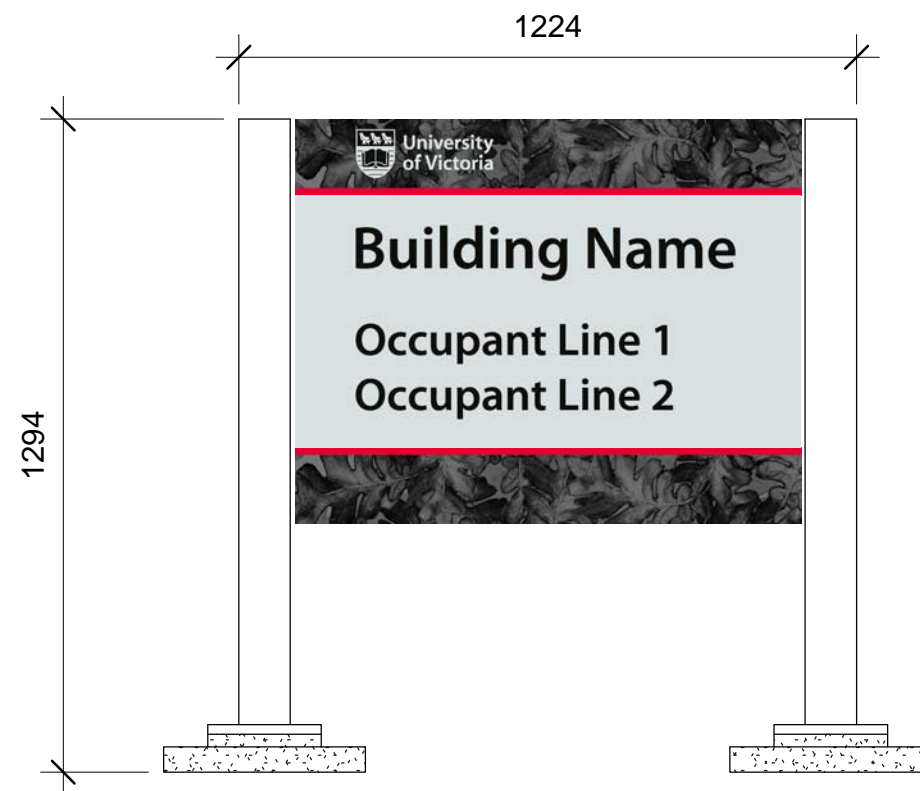
sign: Sign No. 3B - Building Identification  
sheet name: typography, colours and pictograms  
scale: as noted

sheet  
number:

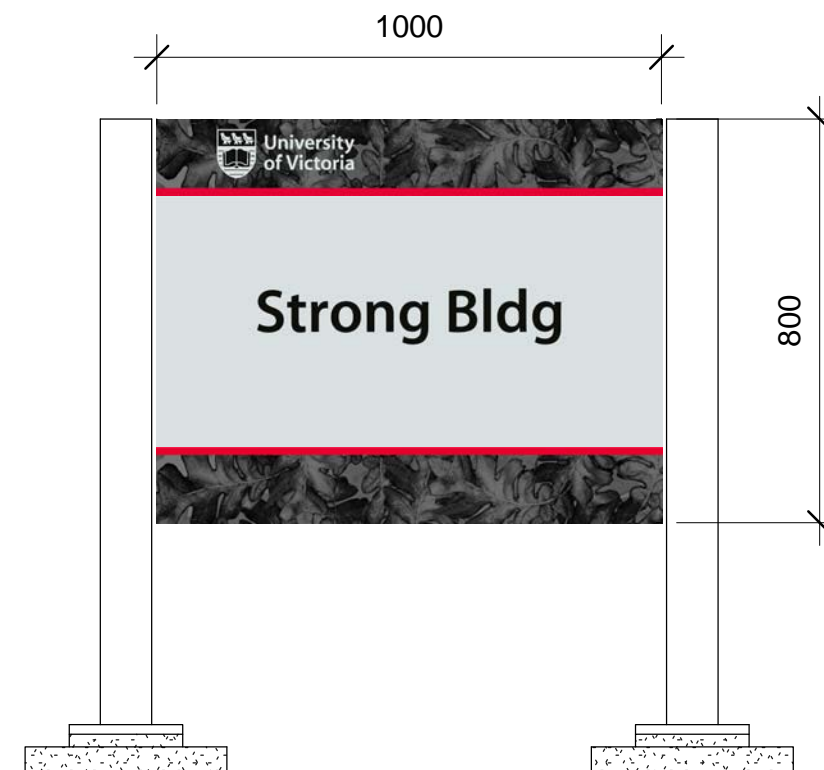
02



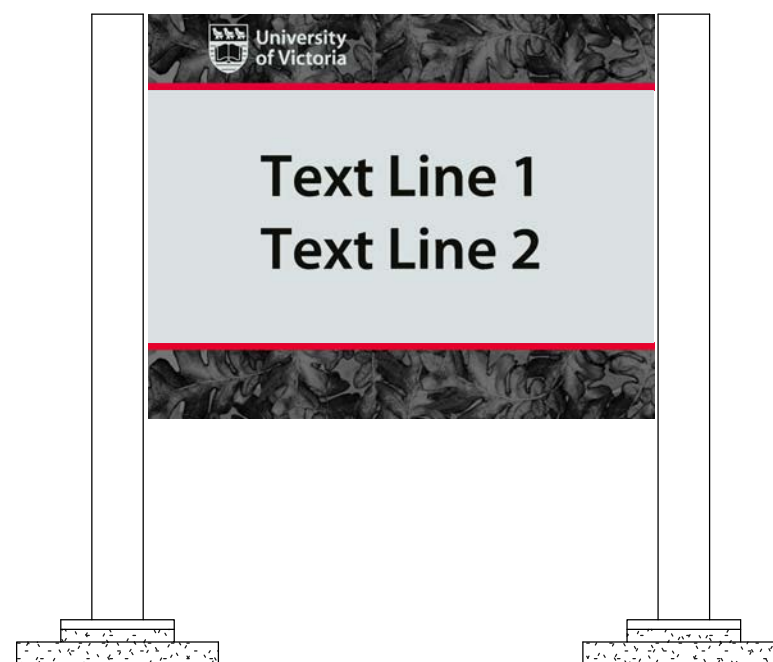
**University  
of Victoria**



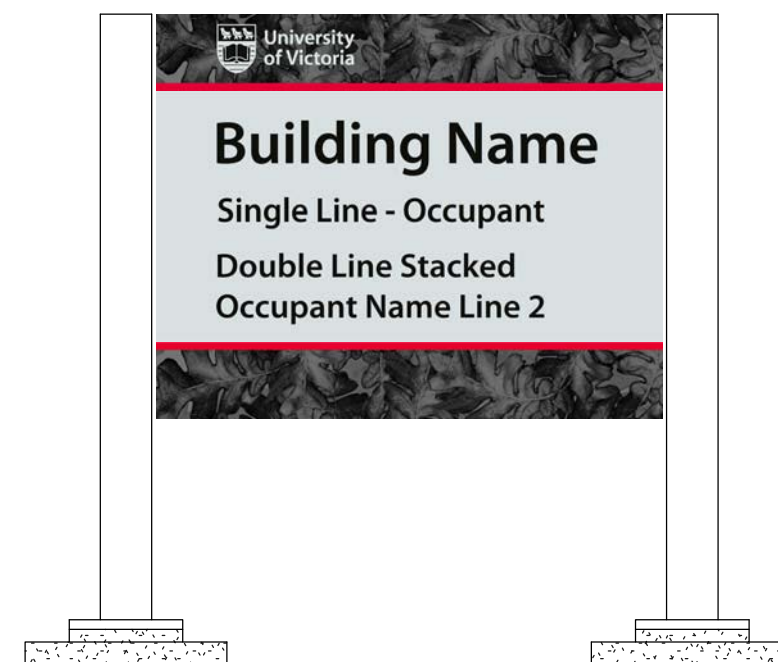
**building name with occupant names**  
**scale 1:15**



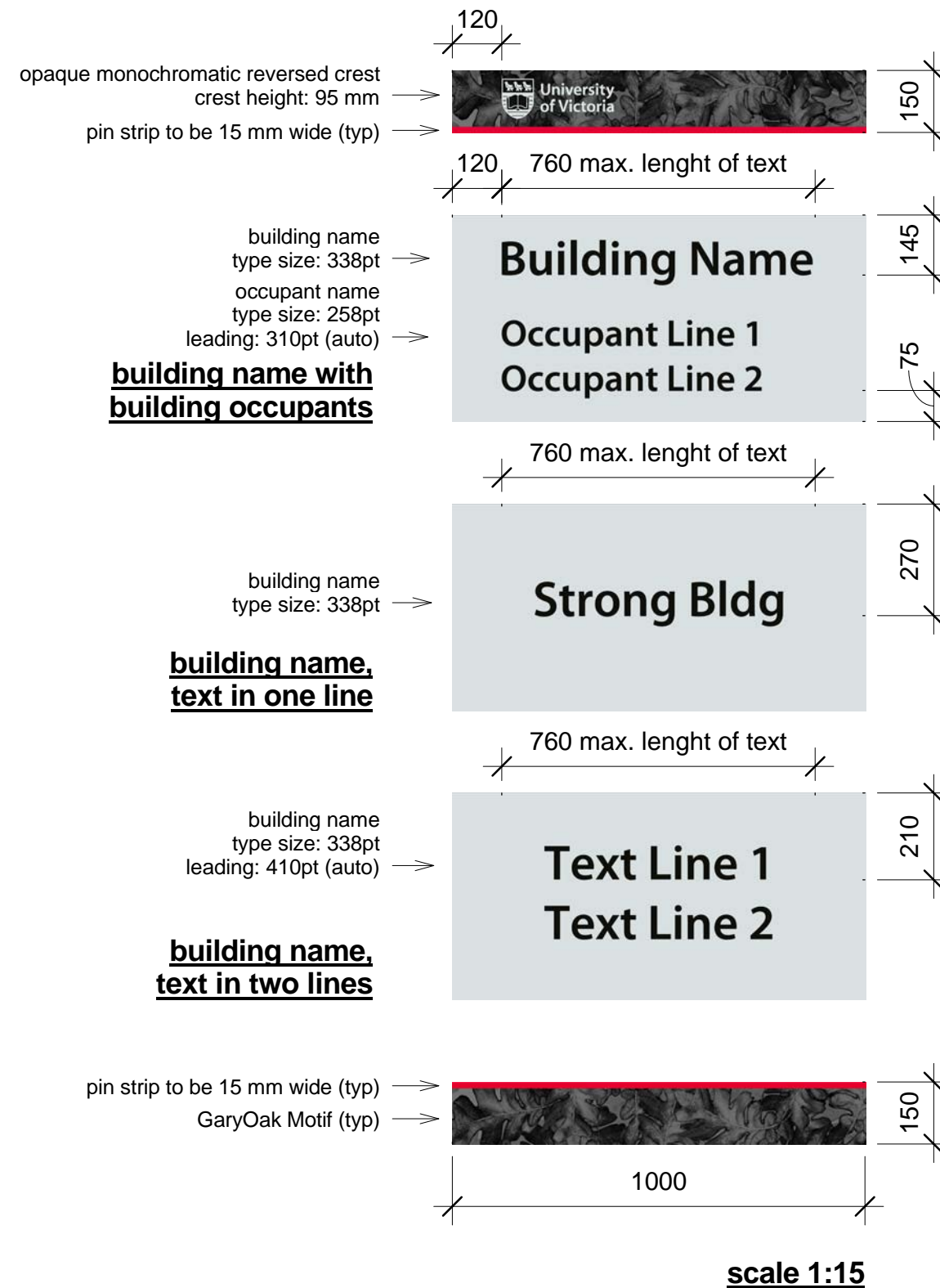
**building name, text in one line**  
**scale 1:15**



**building name, text in two lines**  
**scale 1:15**



**building name, text in two lines (double line stacked)**  
**scale 1:15**

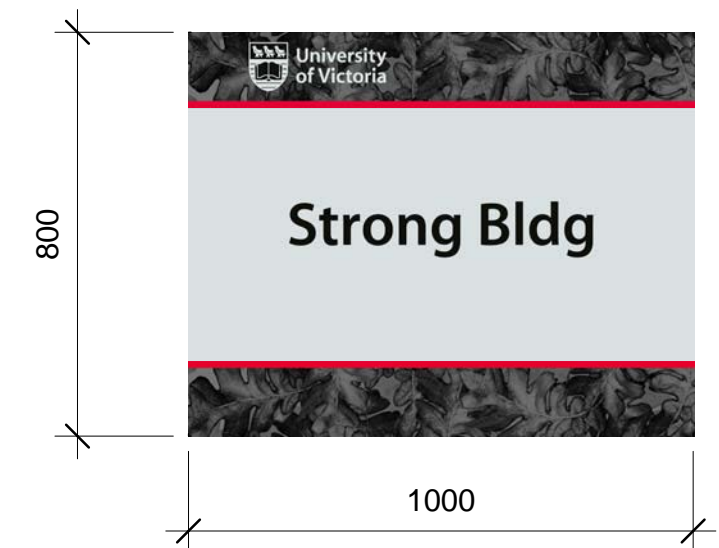


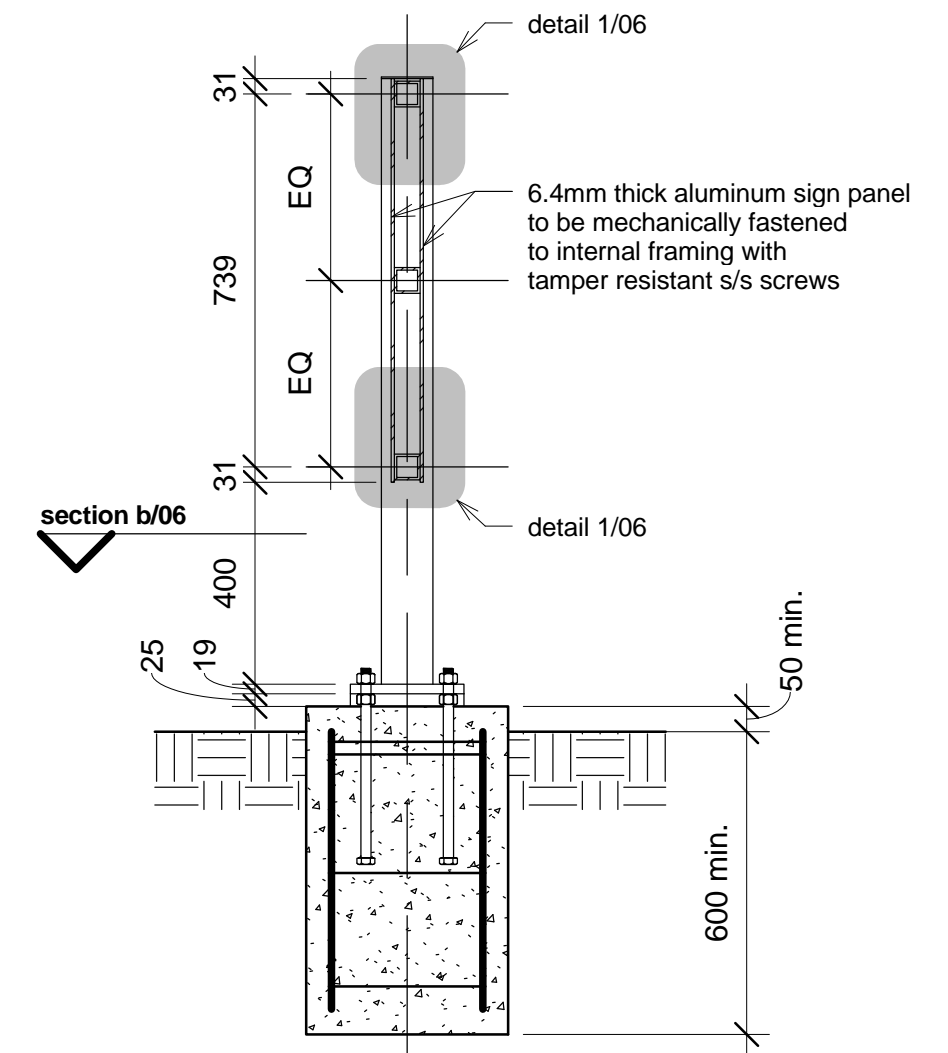
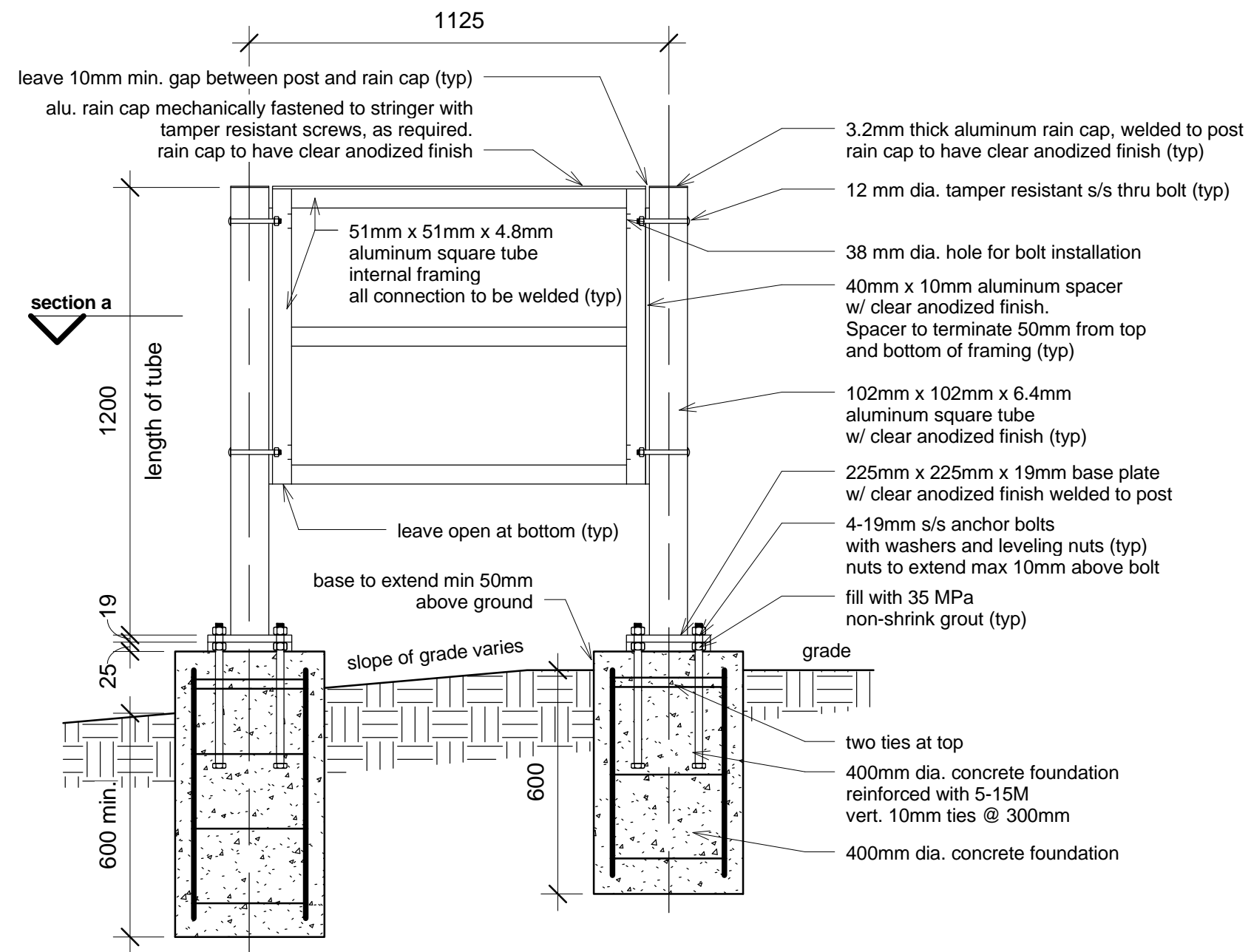
Description  
Digitally printed vinyl protected with  
anti-graffiti, optically clear overlaminate  
Aluminum panel size (one piece): 1000 mm x 800 mm x 6.4 mm  
See sheet 05 for details.

Vinyl: 3M IJ180, MPI 2005 or equivalent  
Overlaminate: 3M 8914, Avery DOL 6060 or equivalent.

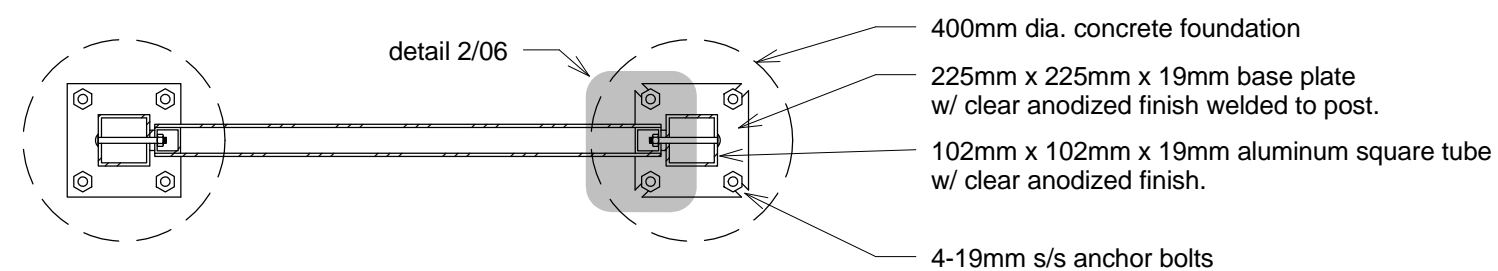
- 1) One piece vinyl to be printed on, installed as per manufacturer's recommendations.
- 2) Use compatible UV inks and overlaminates as recommended by manufacturer
- 3) Wrap vinyl and overlaminate over the edges of the aluminum panel.
- 4) If single sided sign then back panel to receive vinyl printed with PANTEONE 7541 C

Refer to Adobe Photoshop files for detailed sample layout

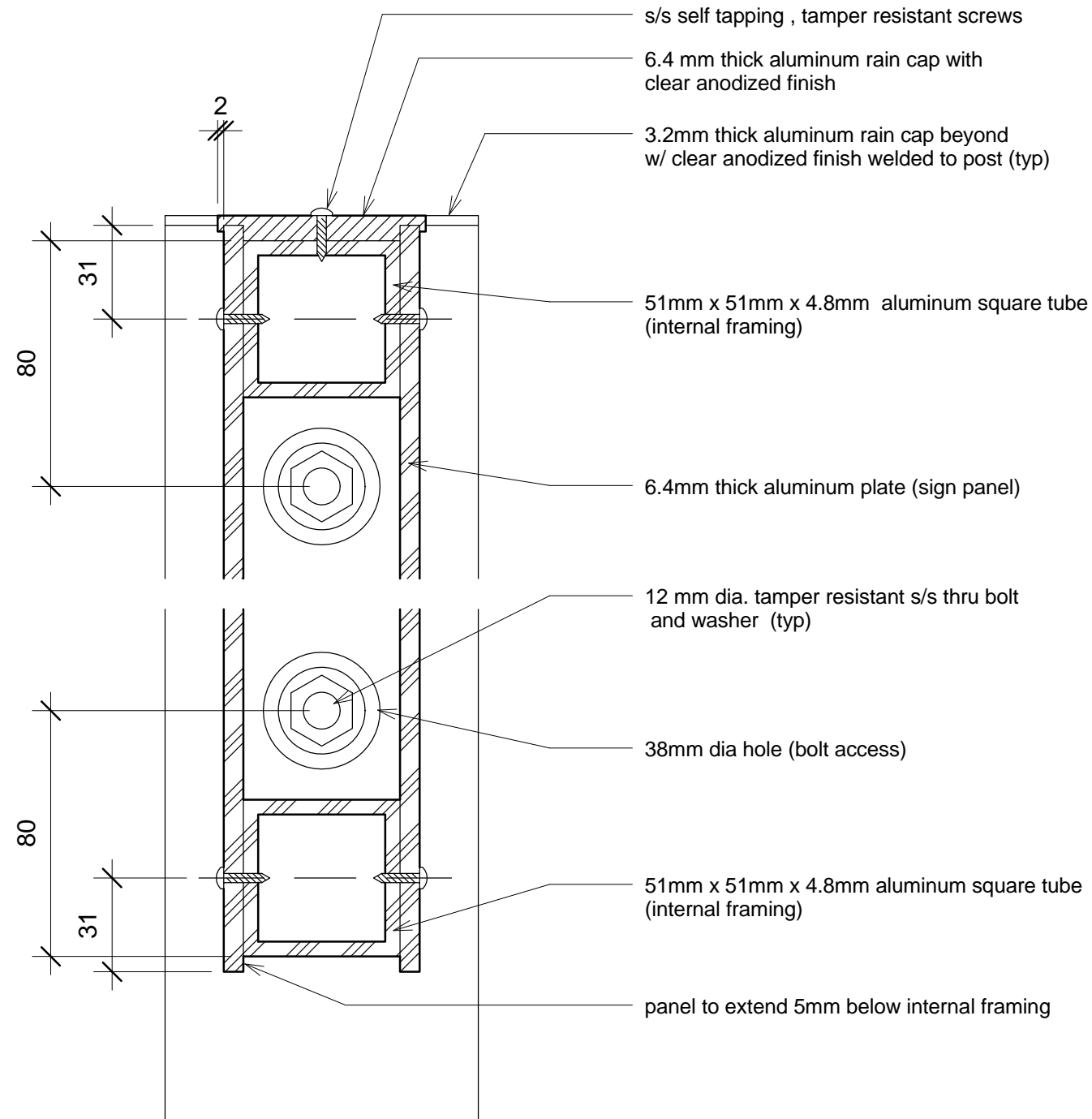




General Note:  
Manufacturer to verify all diemnsions  
prior to sign fabrication. All discrepancies  
should be reported to the Architect.

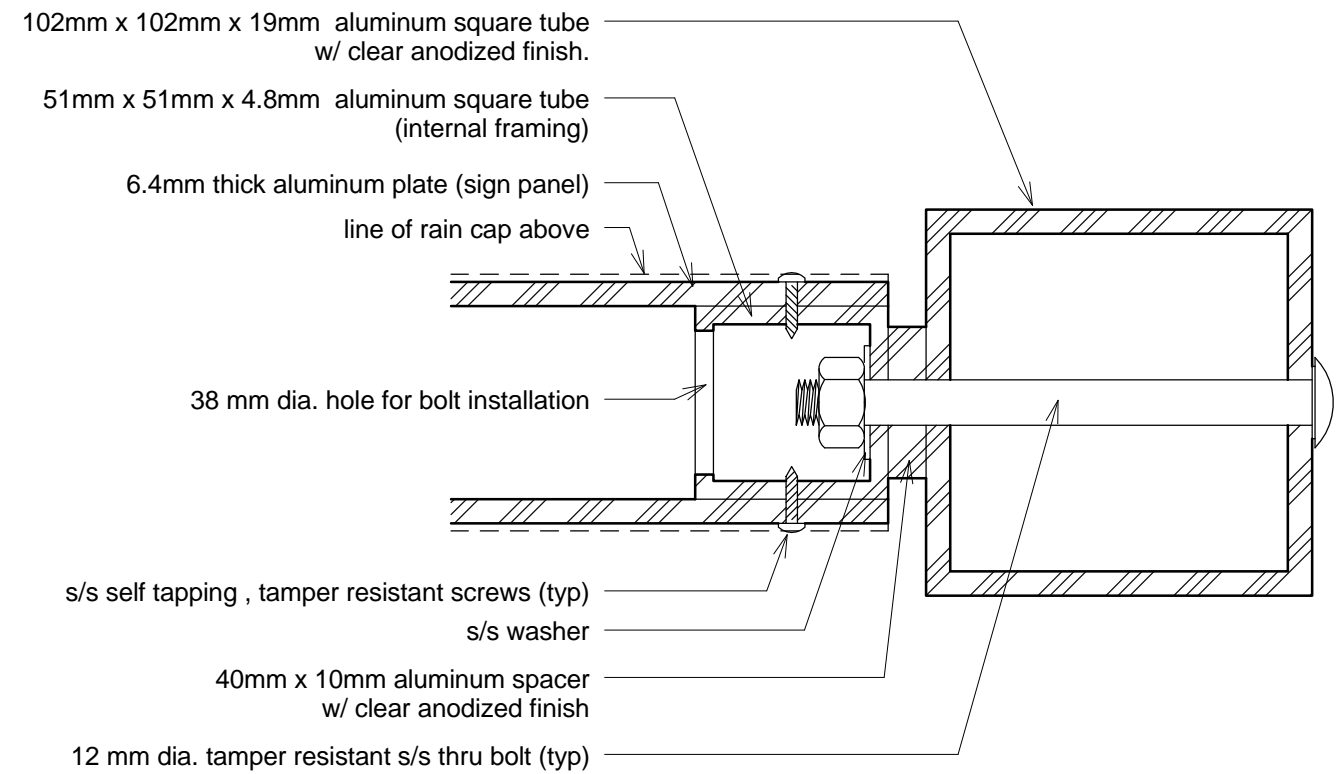




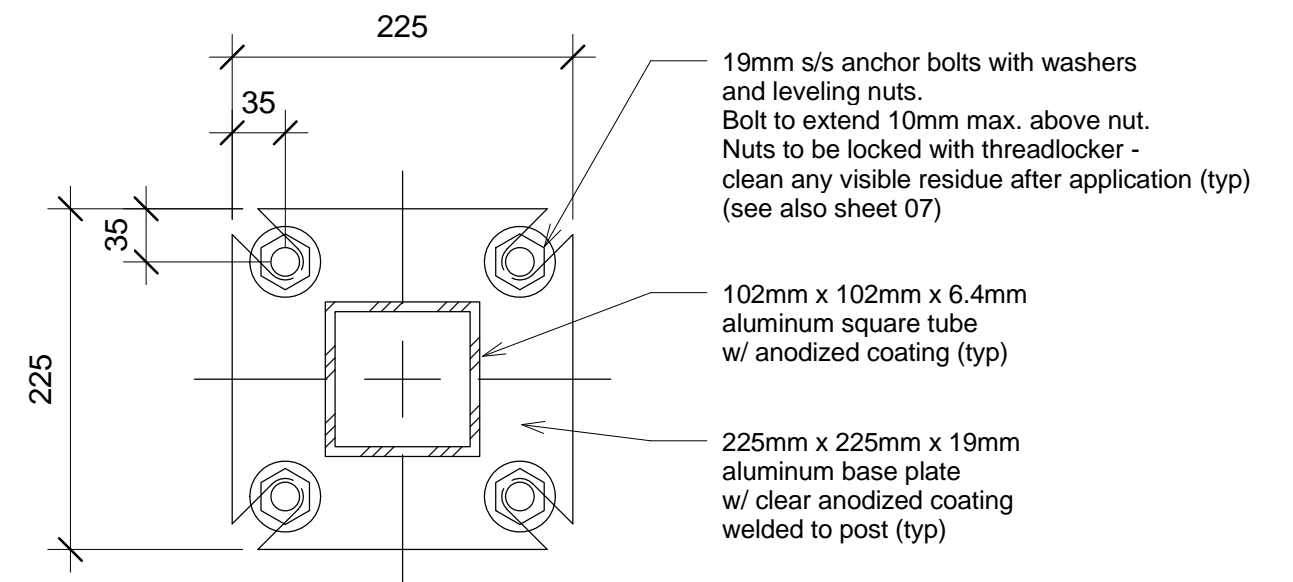


General Note:  
Manufacturer to verify all dimensions prior to sign fabrication. All discrepancies should be reported to the Architect.

**section detail 1 scale 1:2**



**section detail 2 scale 1:2**



**section b (slip base) scale 1:5**

project: Campus Wayfinding  
number: -  
issue date: April 1, 2019

sign: Sign No. 3B - Building Identification  
sheet name: sign construction - details  
scale: as noted

sheet  
number:

06



**University  
of Victoria**

GENERAL NOTES

- 1. Provide self adhesive sign ID stickers. ID's should correspond with ID's shown on location plan
- Form and placement of stickers on signs is to be coordinated with University of Victoria
- 2. Fasteners:
  - foundation (anchor bolts):
  - bolts: Fastenal part #47406 (1/2" s/s threaded rod)
  - washers: Fastenal part #71021 (1/2" s/s washers)
  - nuts: Fastenal part #70714 (1/2" s/s nuts)
  - posts:
  - thru bolts: Fastenal part #174786 (1/2" s/s x 5" button Socket Cap Screw)
  - thru bolt washers: Fastenal part #71021 (1/2" s/s washers)
  - thru bolt nuts: 70714 (1/2" s/s nuts)
  - panels:
  - security screws panel attachment: Fastenal part #BS0160024SSH200 (10-24 x 3/4" button head security screw )
  - rain cap attachment: Fastenal part #BS0160024SSH200 (10-24 x 3/4" button head security screw)
- 3. Threadlocker: Locktite 271 Red
- 4. Whenever anchor bolts are cut, contractor to ensure cut surfaces (terminated coating) are protected against rusting.
- 5. Manufacturer to verify all diemnsions prior to sign fabrication. All discrepancies should be reported to the Architect.

STRUCTURAL NOTES

DRAWINGS

- 1. These drawings show the completed project. The drawings do not show components that may be necessary for construction safety, which is the responsibility of the contractor.
- 2. The use of these drawings is limited to that indicated in the revisions column.
- 3. The information on these drawings shall not be used for any other project or works.

DESIGN

- 1. The structures shown have been designed in substantial accordance with the British Columbia Building Code 2006, which is based on the National Building Code of Canada 2005.
- 2. The following wind loads and factors were used: q50=0.63kPa, lw=1.0-ULS, 0.75-SLS.

FIELD REVIEW BY STRUCTURAL ENGINEER

- 1. Structural Engineer provides field review only for the work shown on these structural drawings, and it is conducted with such frequency as Structural Engineer deems appropriate to ascertain that the work is in general conformance with the documents prepared by Structural Engineer.  
Field review by Structural Engineer is not carried out for the Contractor's benefit, nor does it make Structural Engineer guarantors of the Contractor's work. It remains the Contractor's responsibility to build the work in conformance with the contract documents. Structural Engineer shall not be responsible for the acts or omissions of the Contractor, Sub-Contractor, or any other persons performing any of the work or for the failure of any of them to carry out the work in accordance with the contract documents.
- 2. Provide 24 hours advance notice of each required field review. Field reviews shall be scheduled to be carried out during normal business hours unless special arrangements are made with Structural Engineer.
- 3. The work to be reviewed shall be generally complete.

STRUCTURAL NOTES (cont)

CONCRETE AND REINFORCING STEEL

- 1. Concrete work shall conform to CAN/CSA-A23.1, CAN/CSA -A23.2, CAN/CSA -A23.3 and referenced documents.
- 2. Reinforcing shall conform to CAN/CSA-G30.18R – Grade 400MPa.
- 3. Cover to reinforcing steel to be 50mm uno.
- 4. Portland cement shall be type gu unless noted otherwise.
- 5. Concrete shall have a unit weight of 23±1 kn/m3/ (145±5 pcf) unless noted otherwise.
- 6. Concrete shall have a compressive strength of 35MPa at 28 days, and conform to exposure class C-1 with a maximum water-cement ratio of 0.40 and air content of 5-8%. Maximum aggregate size to be 19mm.
- 7. No calcium chloride is permitted, in any form, in any concrete mix. Curing and protection of concrete for hot, cold or dry weather is to be as per clauses 7.4.1.8 and 7.4.2 of CAN/CSA.

STRUCTURAL ALUMINUM

- 1. Aluminum sections shall be new.
- 2. Aluminum alloys shall conform to the Aluminum Association publication Aluminum Standards and Data ISO 6361-2 or ISO 6362-2.
- 3. Extruded shapes, Tubes, Bolts, and Plate to be 6061 alloy uno.
- 4. Aluminum in contact with concrete or grout shall be given a heavy coat of alkali-resistant bituminous paint or other equivalent coating before installation.
- 5. Welding operators and procedures shall be qualified according to CSA W47.2.
- 6. Submit shop drawings for review prior to start of steel fabrication.
- 7. Fabrication practices and tolerances shall be in accordance with CAN/CSA-S16, except bolt holed edge distance tolerance to be -0, +2mm.
- 8. Anchor and connection bolts to be ASTM A193 Stainless Steel. Anchors shall be embedded 300mm into concrete, complete with a nut and washer each end.
- 9. Unless noted otherwise, column base plates shall be 20 mm minimum thick. Anchor bolt holes shall be punched undersize and reamed to size.
- 10. Provide 6 mm cap plates for all tube members uno.
- 11. Aluminum shall be connected with fillet welds all-around uno. Weld size shall match the wall thickness of the thinnest part being connected uno. Welds to be ground smooth.

TAMPER RESISTANCE AND CONNECTIONS

- 1. Connection hardware to be stainless steel uno.
- 2. Aluminum panels to be connected to structure with 6.4mm diameter stainless steel self-tapping screws at 450mm maximum centre to centre spacing.
- 3. Non-removable panels may be welded or glued by the manufacturer, as approved by Structural Engineer.
- 4. Panel connection screws to be tamper resistant “Torx-Pin” screws as supplied by O.E.M. Hardware of Surrey BC, or equivalent as approved by Structural Engineer.
- 5. Visible connection bolts shall be “Pentagon” tamper resistant bolts, with “Pentagon” nuts as supplied by O.E.M. Hardware of Surrey BC, or equivalent as approved by Structural Engineer. Anchor bolts to be secured with “Pentagon” security nuts.





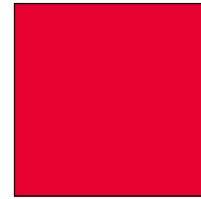
Sign No. 6  
Vehicular - Directional

Sheet List	
Sheet Number	Sheet Name
01	title sheet and drawing list
02	typography, colours and pictograms
03	sign design - overview
04	sign design - graphic design details
05	sign construction - sections
06	sign construction - details
07	general notes

## core colours



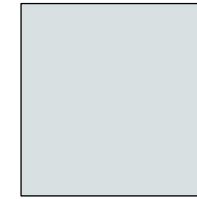
clear anodized coating  
application: sign structure



PANTONE 185 C  
application:  
pinstrip, arrows



PANTONE 426 C  
application: text,  
crest - monochromatic



PANTONE 7541 C  
application: background,  
back panel (single sided sign)



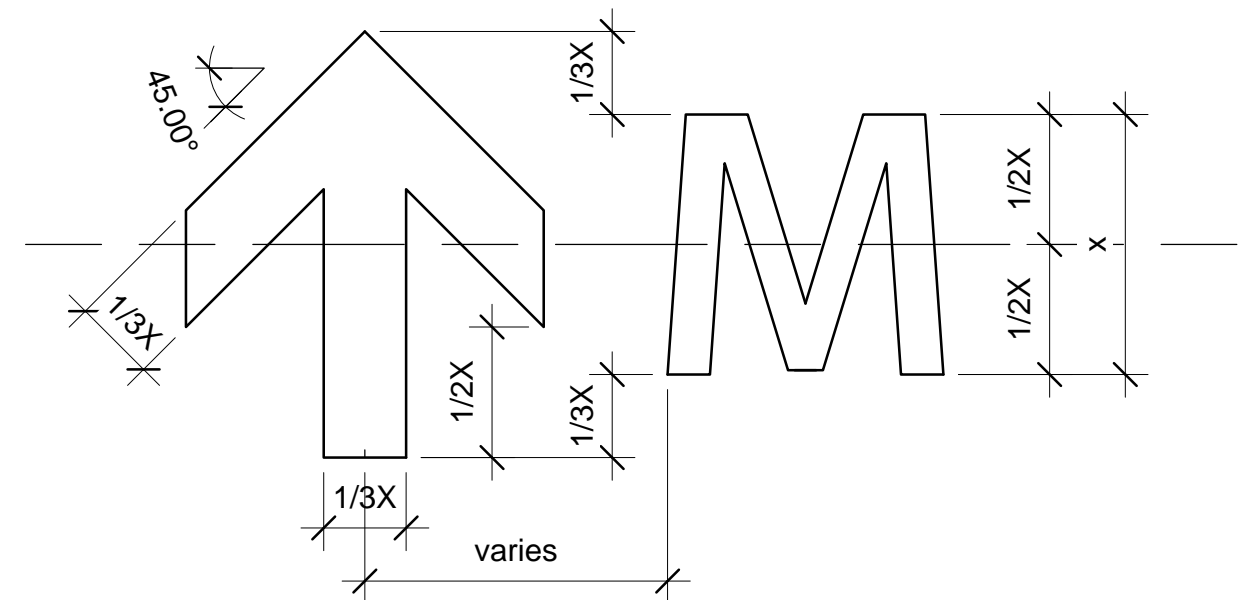
garry oak motif - digital file is to be delivered  
by University of Victoria

## samples of typeface family

Myriad Pro Semi Bold

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
1234567890

## arrow style and arrow size in relation to text height



## University of Victoria Logo, horizontal standard



University  
of Victoria



## full colour

## reverse monochromatic - shown against background for clarity

project: Campus Wayfinding  
number: FM 09-8567  
issue date: April 1, 2019

sign: Sign No. 6 - Directional  
sheet name: typography, colours and pictograms  
scale: as noted

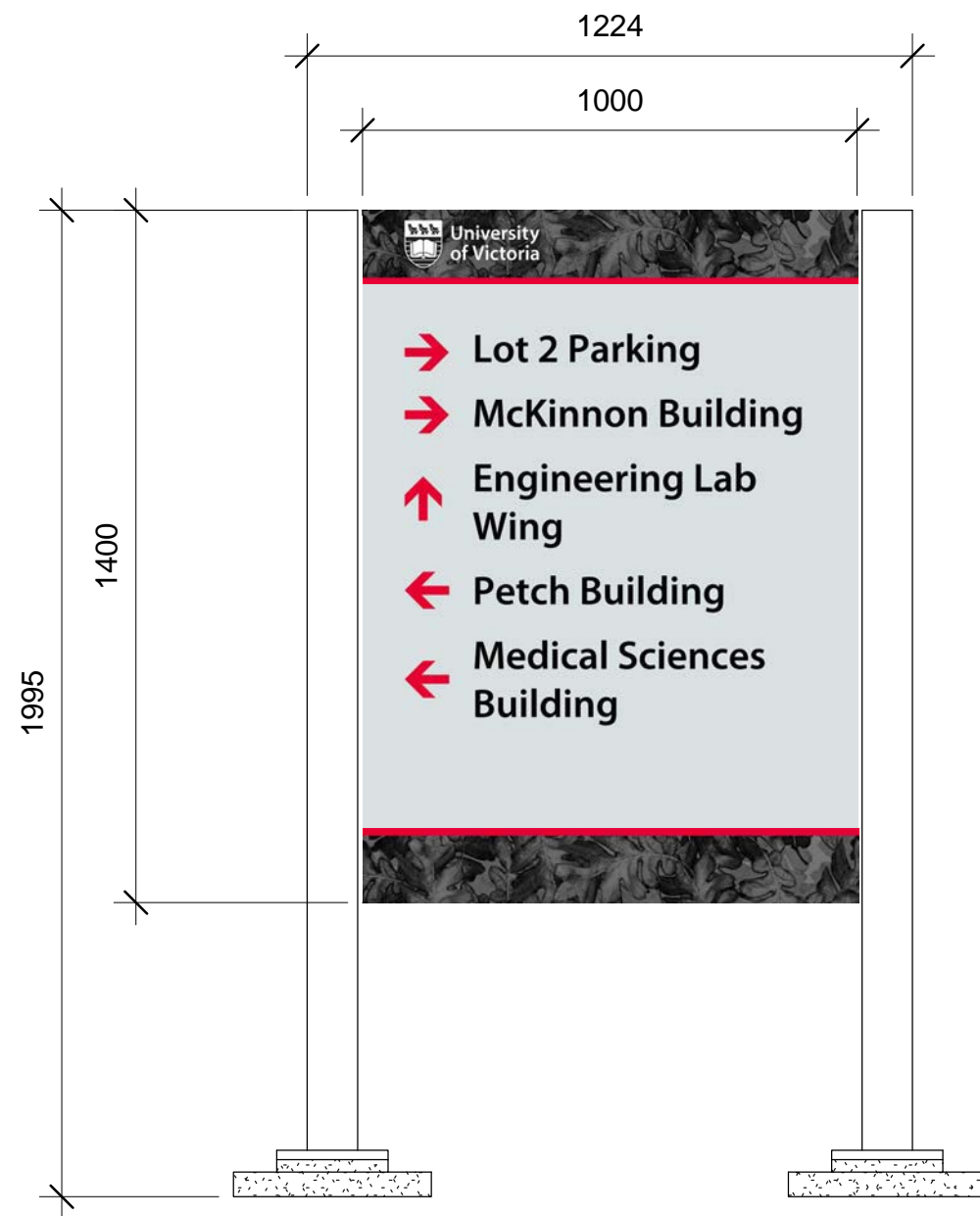
sheet  
number:

02



University  
of Victoria





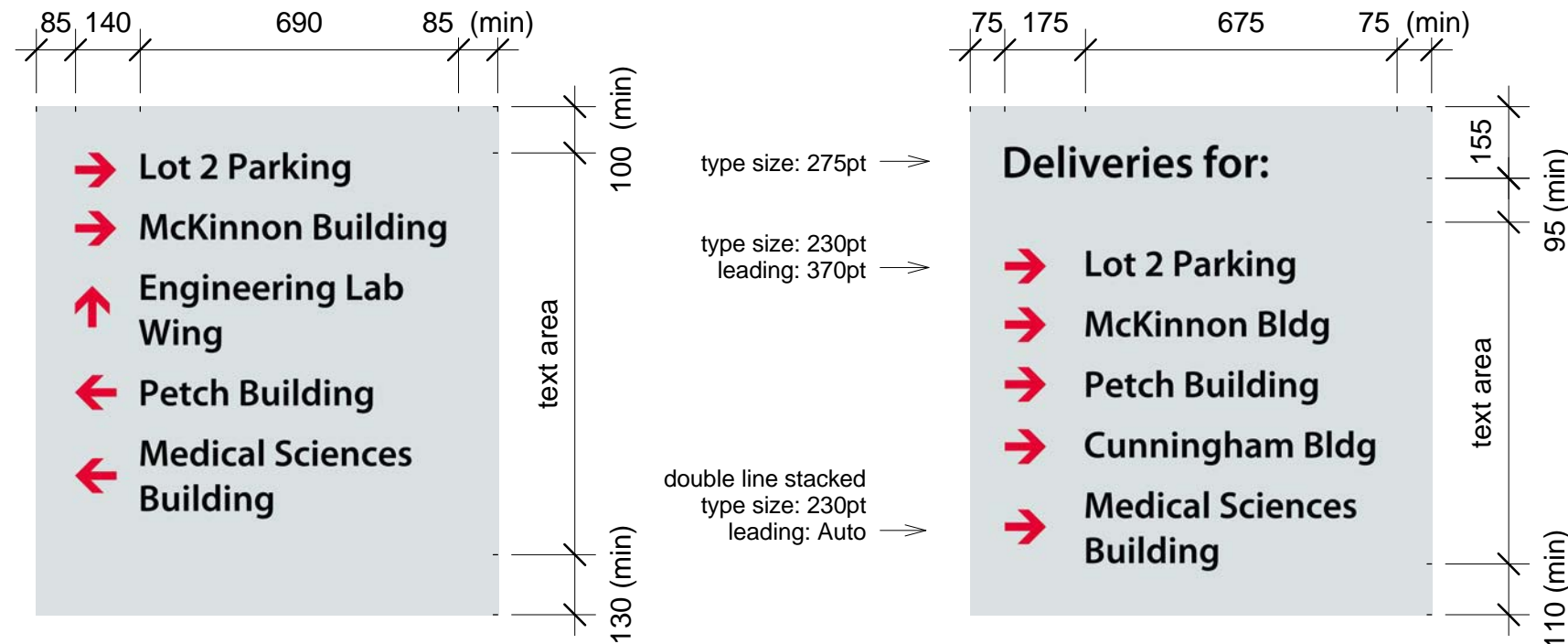
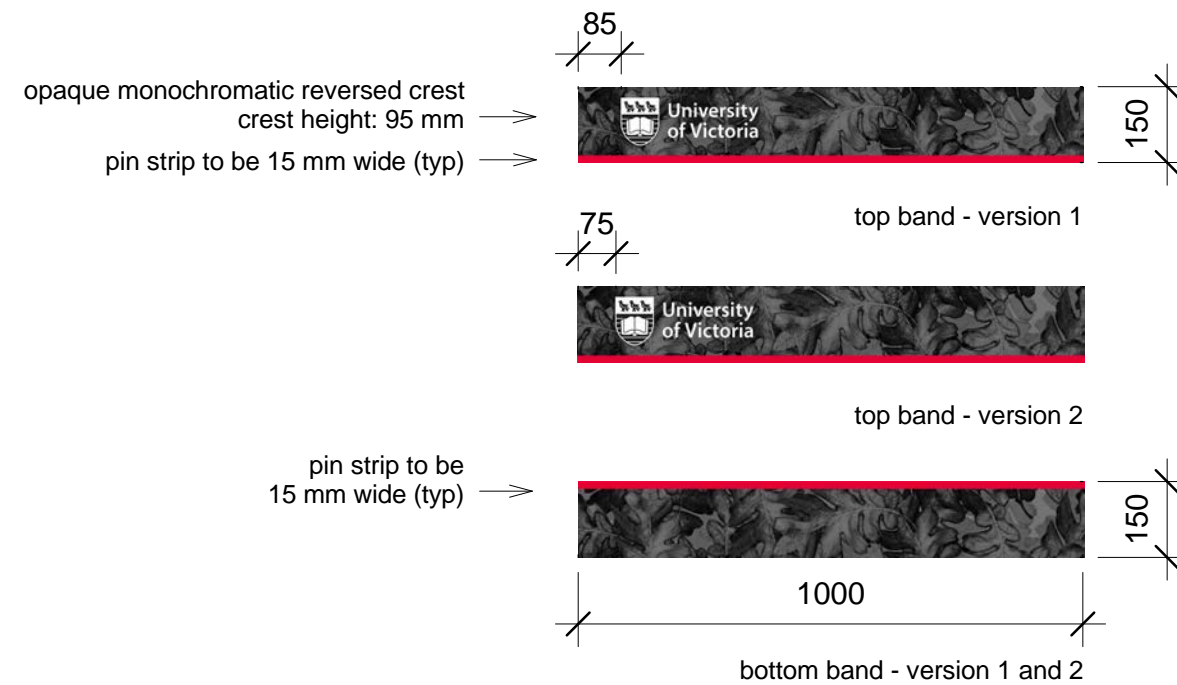
**Directional version 1**  
**scale 1:15**



**Directional version 2**  
**scale 1:15**







version 1

version 2

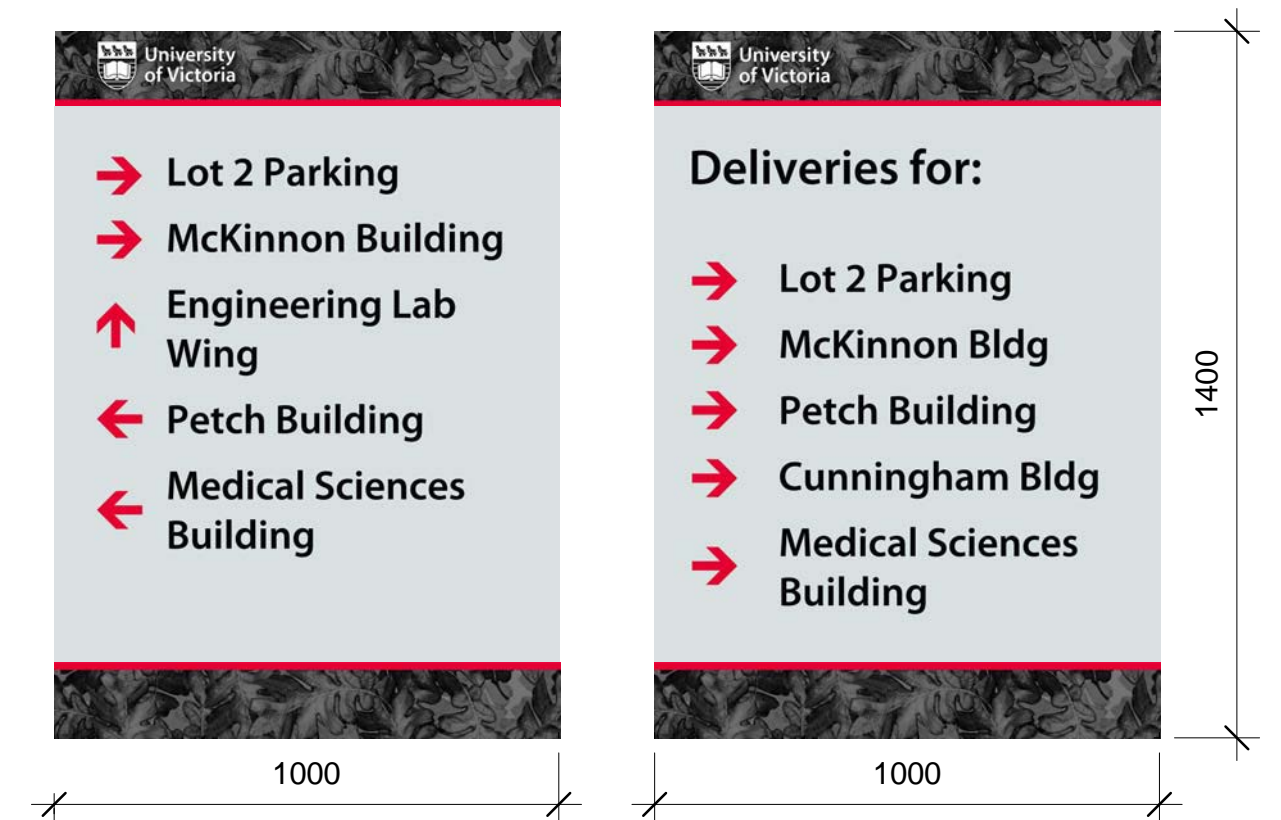
**scale 1:15**

Description  
Digitally printed vinyl protected with  
anti-graffiti, optically clear overlaminate  
Aluminum panel size (one piece): 1000 mm x 1400 mm x 6.4 mm  
See sheet 05 for details.

Vinyl: 3M IJ180, MPI 2005 or equivalent  
Overlaminate: 3M 8914, Avery DOL 6060 or equivalent.

- 1) One piece vinyl to be printed on, installed as per manufacturer's recommendations.
- 2) Use compatible UV inks and overlaminates as recommended by manufacturer
- 3) Wrap vinyl and overlaminate over the edges of the aluminum panel.
- 4) If single sided sign then back panel to receive vinyl printed with PANTEONE 7541 C

Refer to Adobe Photoshop files for detailed sample layout



version 1

version 2

**scale 1:15**

project: Campus Wayfinding  
number: FM 09-8567  
issue date: April 1, 2019

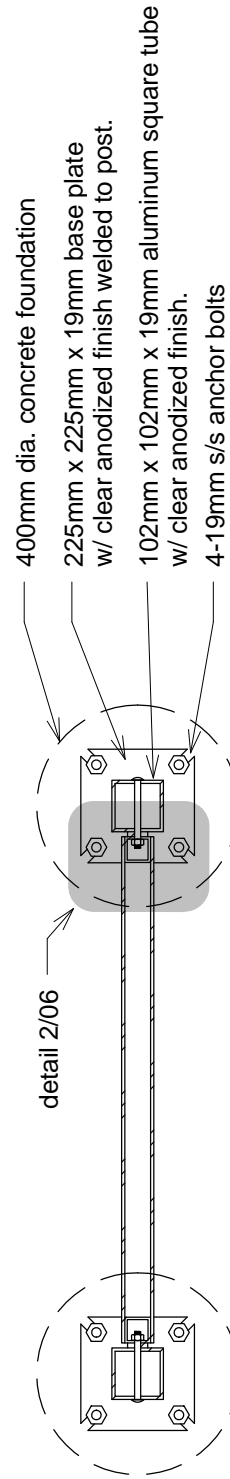
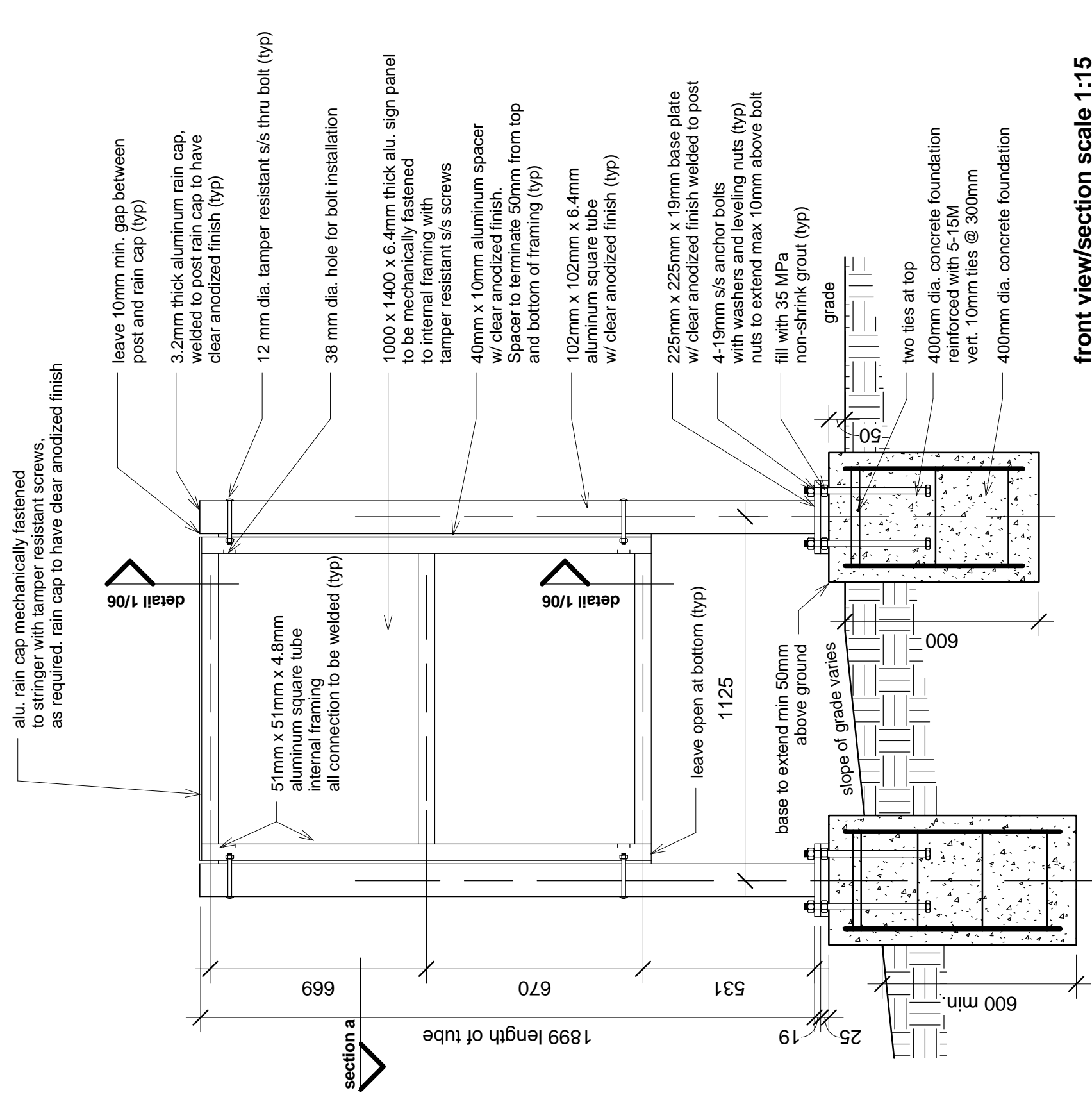
sign: Sign No. 6 - Directional  
sheet name: sign design - graphic design details  
scale: as noted

sheet  
number:

04

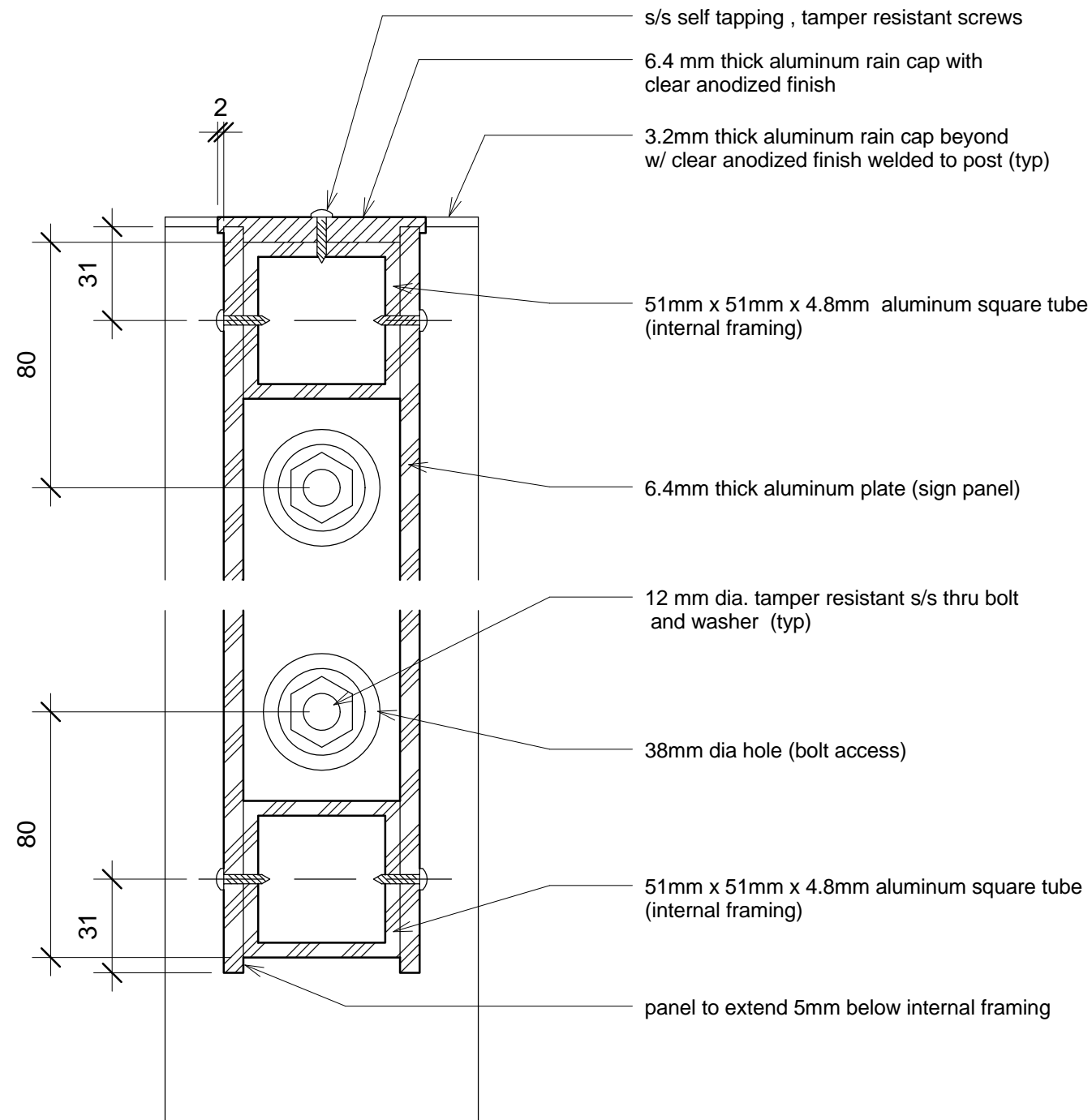


University  
of Victoria



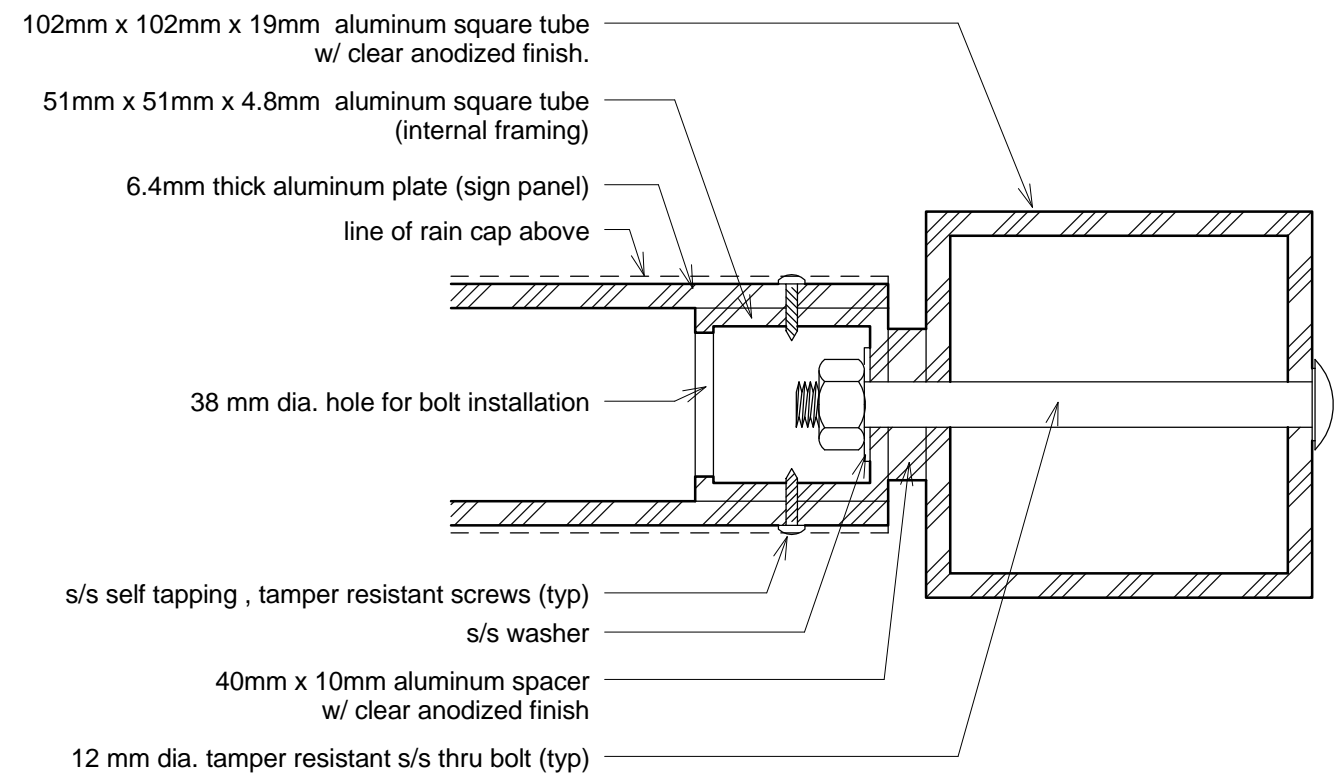
section a scale 1:15

General Note:  
 Manufacturer to verify all dimensions prior to sign fabrication. All discrepancies should be reported to the Architect.

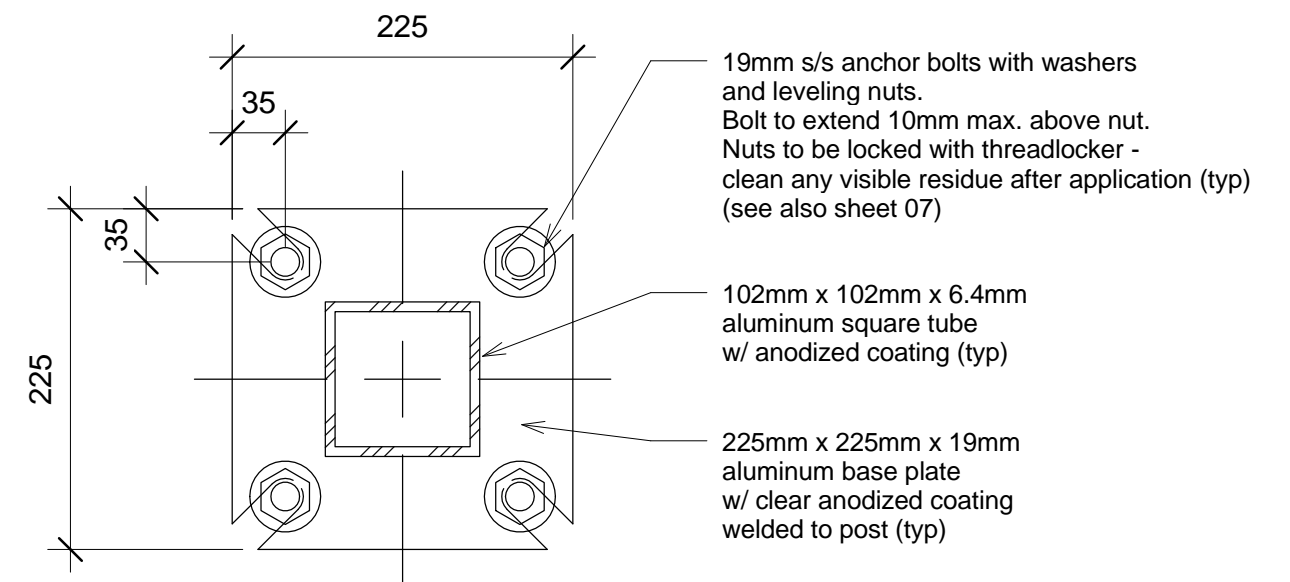


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prior to sign fabrication. All discrepancies  
should be reported to the Architect.

**section detail 1 scale 1:2**



**section detail 2 scale 1:2**



**section b (slip base) scale 1:5**

GENERAL NOTES

- 1. Provide self adhesive sign ID stickers. ID's should correspond with ID's shown on location plan  
Form and placement of stickers on signs is to be coordinated with University of Victoria
- 2. Fasteners:
  - foundation (anchor bolts):
  - bolts: Fastenal part #47406 (1/2" s/s threaded rod)
  - washers: Fastenal part #71021 (1/2" s/s washers)
  - nuts: Fastenal part #70714 (1/2" s/s nuts)
  - posts:
  - thru bolts: Fastenal part #174786 (1/2" s/s x 5" button Socket Cap Screw)
  - thru bolt washers: Fastenal part #71021 (1/2" s/s washers)
  - thru bolt nuts: 70714 (1/2" s/s nuts)
  - panels:
  - security screws panel attachment: Fastenal part #BS0160024SSH200 (10-24 x 3/4" button head security screw )
  - rain cap attachment: Fastenal part #BS0160024SSH200 (10-24 x 3/4" button head security screw)
- 3. Threadlocker: Locktite 271 Red
- 4. Whenever anchor bolts are cut, contractor to ensure cut surfaces (terminated coating) are protected against rusting.
- 5. Manufacturer to verify all diemnsions prior to sign fabrication. All discrepancies should be reported to the Architect.

STRUCTURAL NOTES

**DRAWINGS**

- 1. These drawings show the completed project. The drawings do not show components that may be necessary for construction safety, which is the responsibility of the contractor.
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- 2. The following wind loads and factors were used: q50=0.63kPa, lw=1.0-ULS, 0.75-SLS.

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- 1. Structural Engineer provides field review only for the work shown on these structural drawings, and it is conducted with such frequency as Structural Engineer deems appropriate to ascertain that the work is in general conformance with the documents prepared by Structural Engineer.  
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- 2. Provide 24 hours advance notice of each required field review. Field reviews shall be scheduled to be carried out during normal business hours unless special arrangements are made with Structural Engineer.
- 3. The work to be reviewed shall be generally complete.

STRUCTURAL NOTES (cont)

**CONCRETE AND REINFORCING STEEL**

- 1. Concrete work shall conform to CAN/CSA-A23.1, CAN/CSA -A23.2, CAN/CSA -A23.3 and referenced documents.
- 2. Reinforcing shall conform to CAN/CSA-G30.18R – Grade 400MPa.
- 3. Cover to reinforcing steel to be 50mm uno.
- 4. Portland cement shall be type gu unless noted otherwise.
- 5. Concrete shall have a unit weight of 23±1 kn/m3/ (145±5 pcf) unless noted otherwise.
- 6. Concrete shall have a compressive strength of 35MPa at 28 days, and conform to exposure class C-1 with a maximum water-cement ratio of 0.40 and air content of 5-8%. Maximum aggregate size to be 19mm.
- 7. No calcium chloride is permitted, in any form, in any concrete mix. Curing and protection of concrete for hot, cold or dry weather is to be as per clauses 7.4.1.8 and 7.4.2 of CAN/CSA.

**STRUCTURAL ALUMINUM**

- 1. Aluminum sections shall be new.
- 2. Aluminum alloys shall conform to the Aluminum Association publication Aluminum Standards and Data ISO 6361-2 or ISO 6362-2.
- 3. Extruded shapes, Tubes, Bolts, and Plate to be 6061 alloy uno.
- 4. Aluminum in contact with concrete or grout shall be given a heavy coat of alkali-resistant bituminous paint or other equivalent coating before installation.
- 5. Welding operators and procedures shall be qualified according to CSA W47.2.
- 6. Submit shop drawings for review prior to start of steel fabrication.
- 7. Fabrication practices and tolerances shall be in accordance with CAN/CSA-S16, except bolt holed edge distance tolerance to be -0, +2mm.
- 8. Anchor and connection bolts to be ASTM A193 Stainless Steel. Anchors shall be embedded 300mm into concrete, complete with a nut and washer each end.
- 9. Unless noted otherwise, column base plates shall be 20 mm minimum thick. Anchor bolt holes shall be punched undersize and reamed to size.
- 10. Provide 6 mm cap plates for all tube members uno.
- 11. Aluminum shall be connected with fillet welds all-around uno. Weld size shall match the wall thickness of the thinnest part being connected uno. Welds to be ground smooth.

**TAMPER RESISTANCE AND CONNECTIONS**

- 1. Connection hardware to be stainless steel uno.
- 2. Aluminum panels to be connected to structure with 6.4mm diameter stainless steel self-tapping screws at 450mm maximum centre to centre spacing.
- 3. Non-removable panels may be welded or glued by the manufacturer, as approved by Structural Engineer.
- 4. Panel connection screws to be tamper resistant “Torx-Pin” screws as supplied by O.E.M. Hardware of Surrey BC, or equivalent as approved by Structural Engineer.
- 5. Visible connection bolts shall be “Pentagon” tamper resistant bolts, with “Pentagon” nuts as supplied by O.E.M. Hardware of Surrey BC, or equivalent as approved by Structural Engineer. Anchor bolts to be secured with “Pentagon” security nuts.





Sheet List	
Sheet Number	Sheet Name
01	title sheet and drawing list
02	typography, colours and pictograms
03	sign design - overview
04	sign design - graphic design details
05	sign construction - sections
06	sign construction - details
07	general notes

project: Campus Wayfinding - Phase 1  
number: -  
issue date: April 1, 2019

sign: Sign No. 6A  
sheet name: title sheet and drawing list  
scale: as noted

sheet  
number:

01



# Sign No. 6A

## Vehicular - Directional



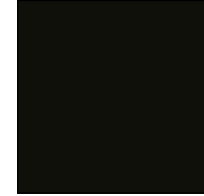
## core colours



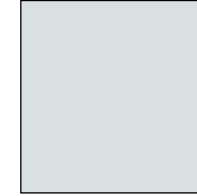
clear anodized coating  
application: sign structure



PANTONE 185 C  
application:  
pinstrip, arrows



PANTONE 426 C  
application: text,  
crest - monochromatic



PANTEONE 7541 C  
application: background,  
back panel (single sided sign)



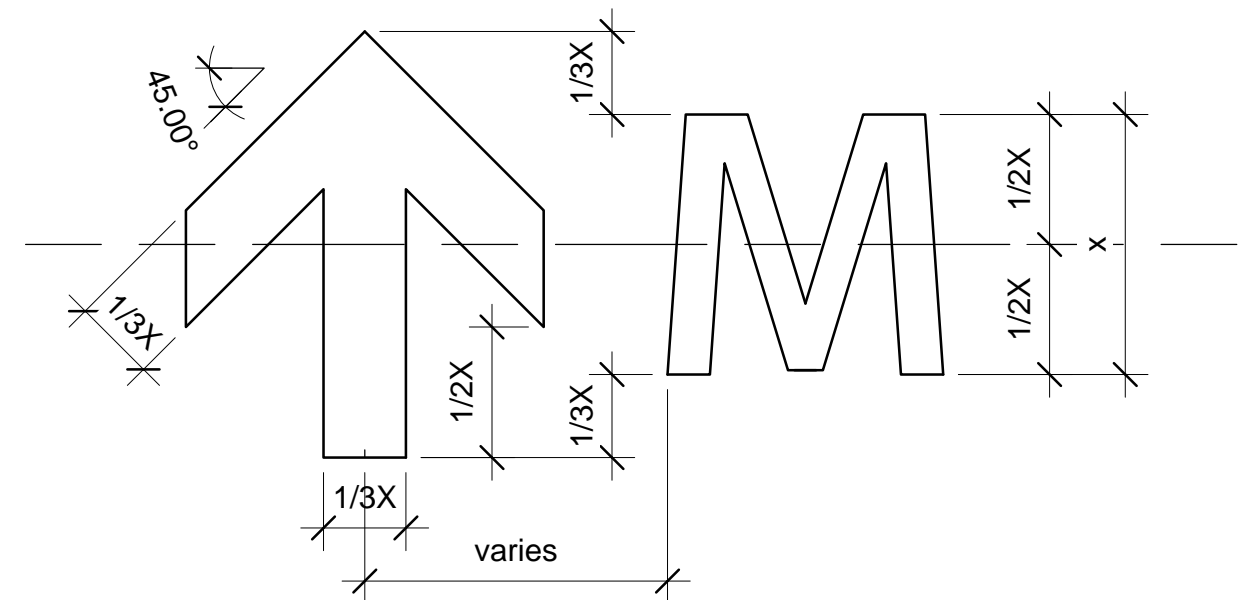
gary oak motif - digital file is to be delivered  
by University of Victoria

**samples of typeface family**

**Myriad Pro Semi Bold**

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
1234567890

### arrow style and arrow size in relation to text height



**University of Victoria Logo, horizontal standard**



# University of Victoria



**full colour**

**reverse monochromatic** - shown against background for clarity

project: Campus Wayfinding - Phase 1  
number: -  
issue date: April 1, 2019

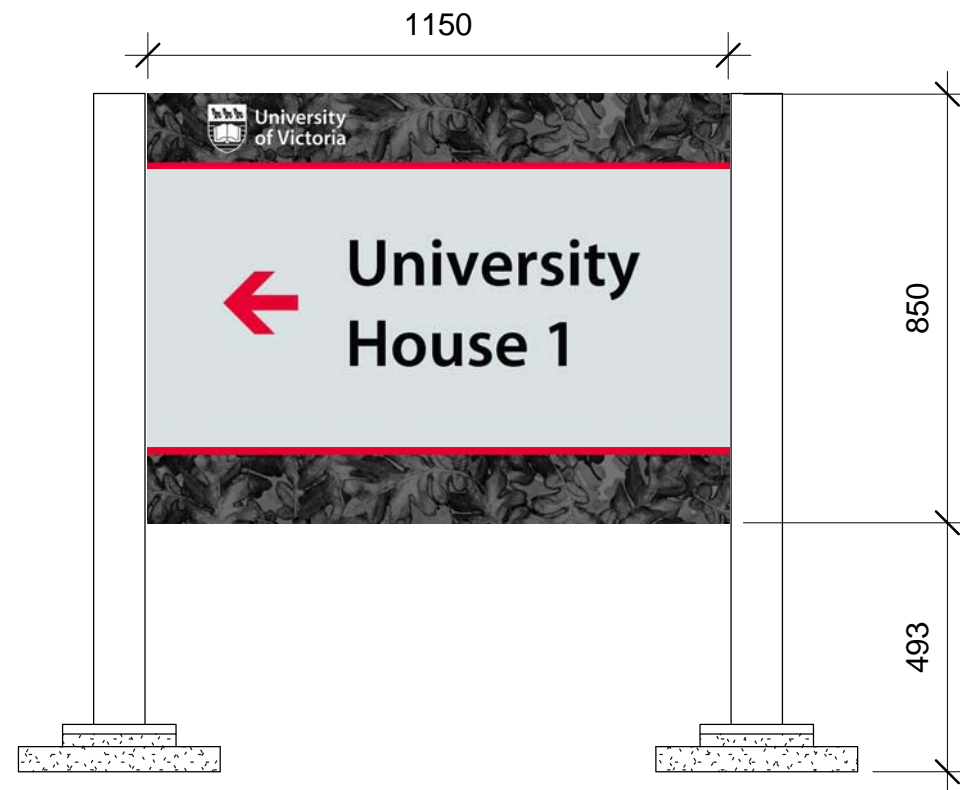
sign: Sign No. 6A  
sheet name: typography, colours and pictograms  
scale: as noted

sheet  
number:

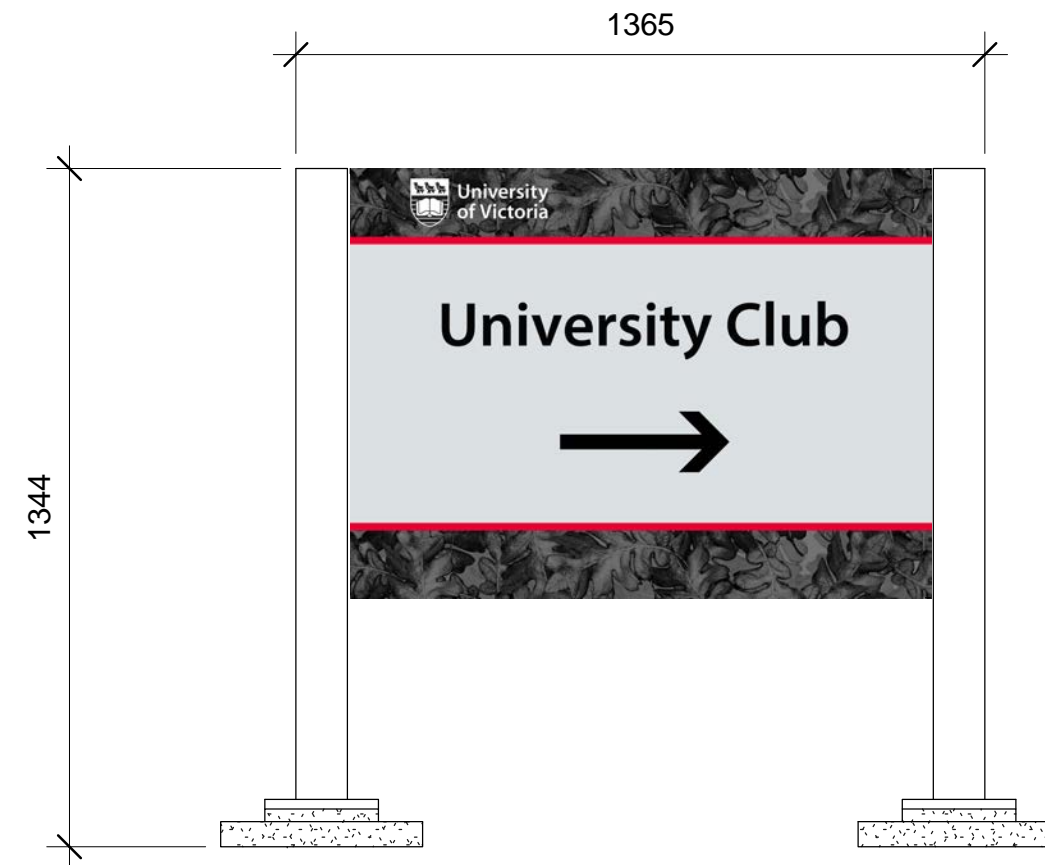
02



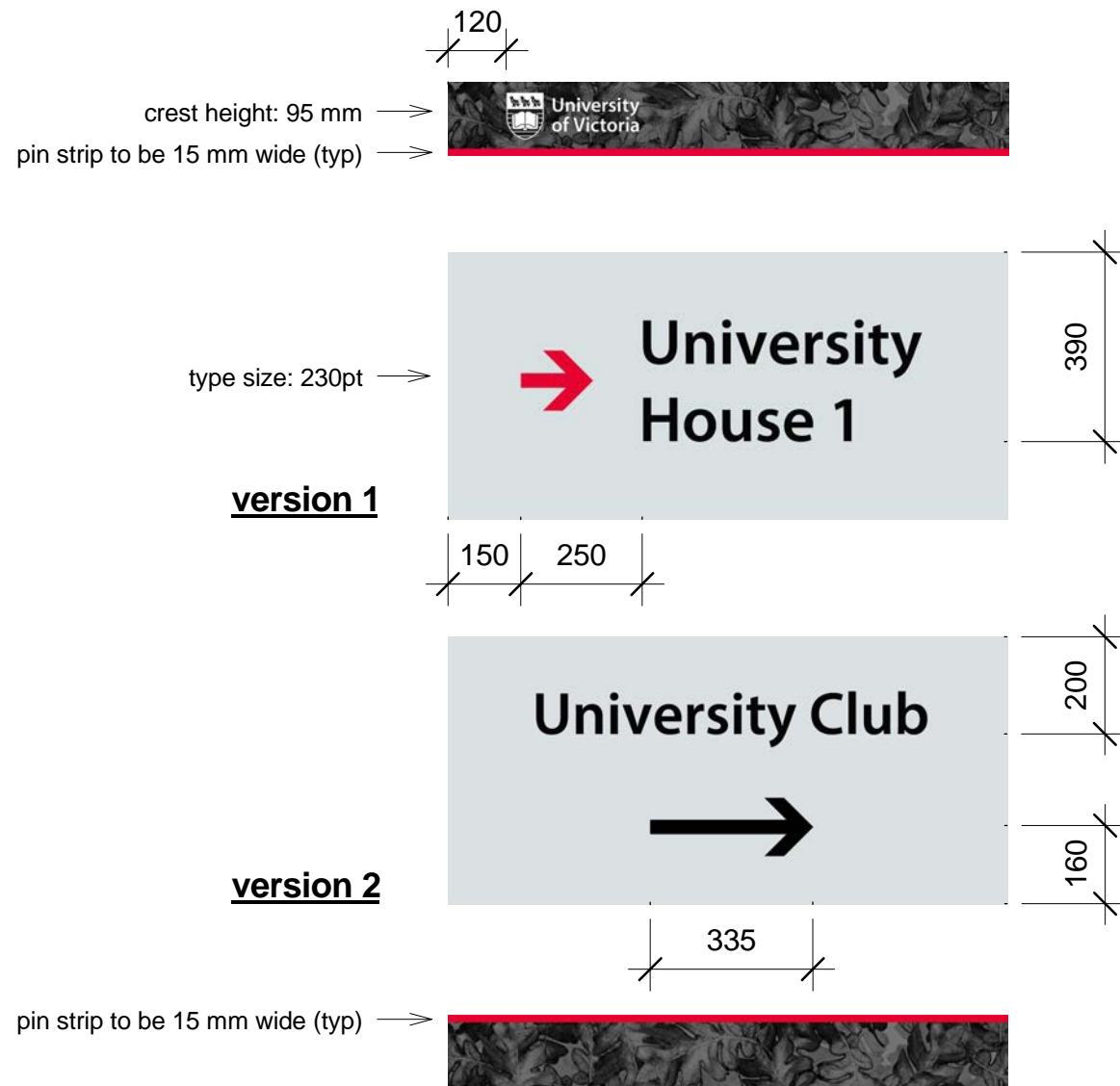
**University  
of Victoria**



**Version 1 scale 1:15**



**Version 2 scale 1:15**



**scale 1:15**



#### Description

Digitally printed vinyl protected with anti-graffiti, optically clear overlaminate  
Aluminum panel size (one piece): 1150 mm x 850 mm x 6.4 mm

Reflective vinyl: SRV (white reflective)

Overlaminate: DOL 6060

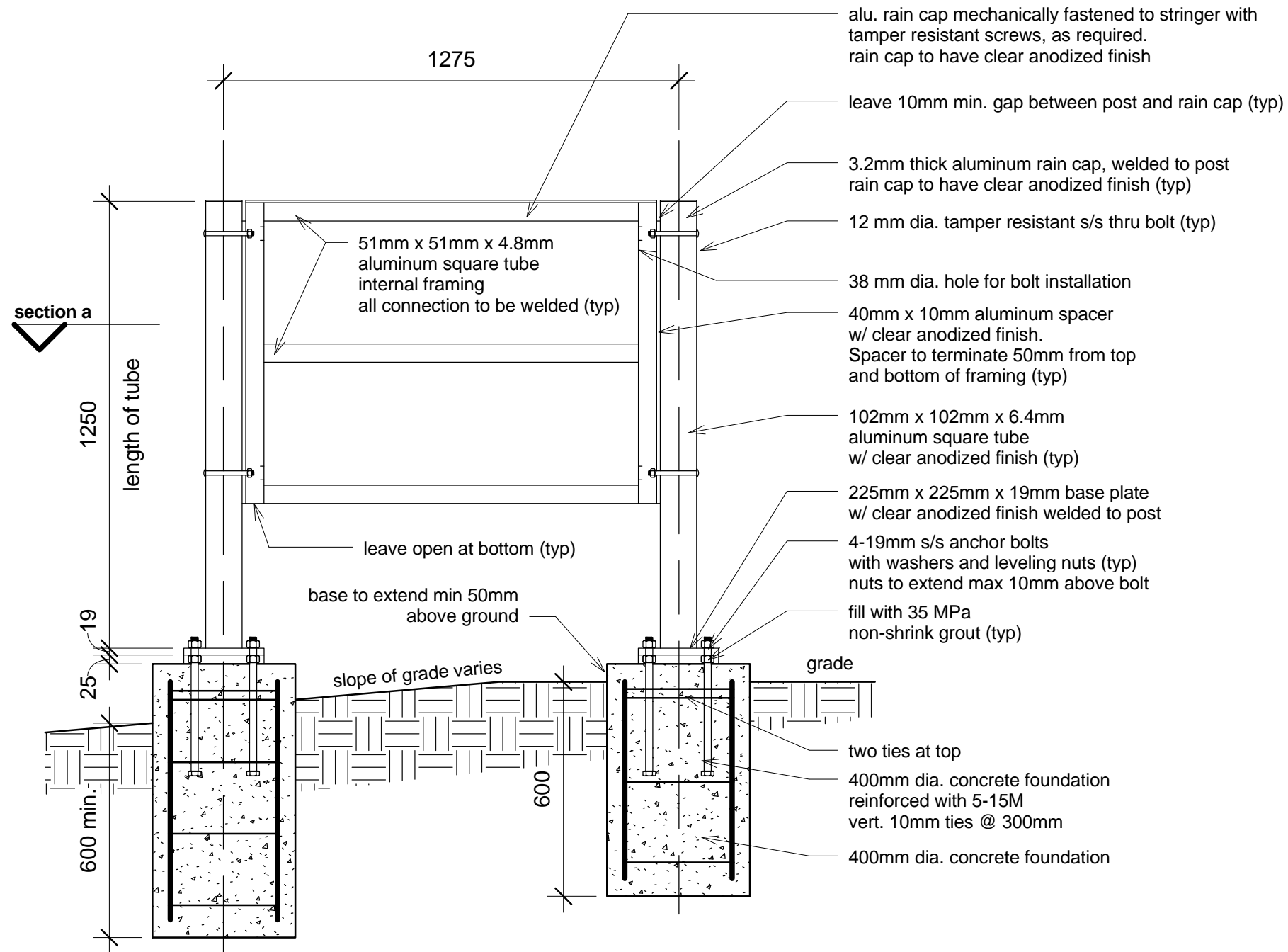
- 1) One piece vinyl to be printed on, installed as per manufacturer's recommendations.
- 2) Use compatible UV inks and overlaminates as recommended by manufacturer
- 3) Wrap vinyl and overlaminate over the edges of the aluminum panel.

Refer to Adobe Photoshop files for detailed sample layout

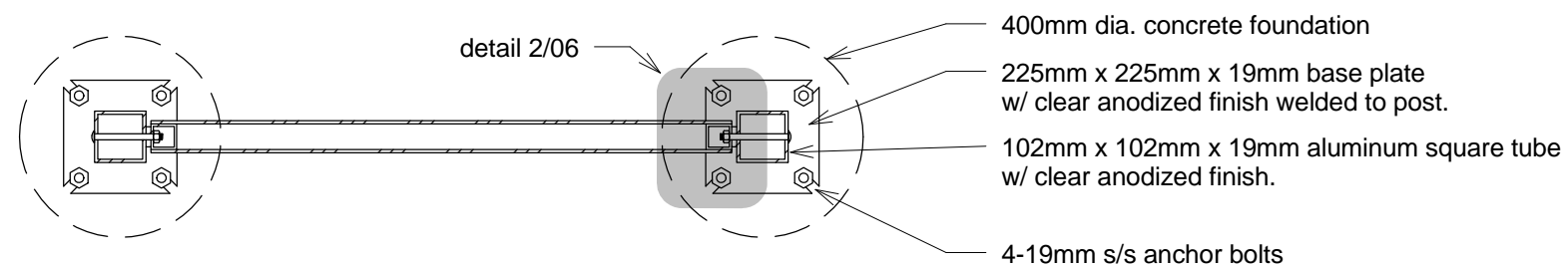
version 1 to be used in locations where traffic approaches at low speeds

version 2 to be used in locations where traffic approaches at high speeds

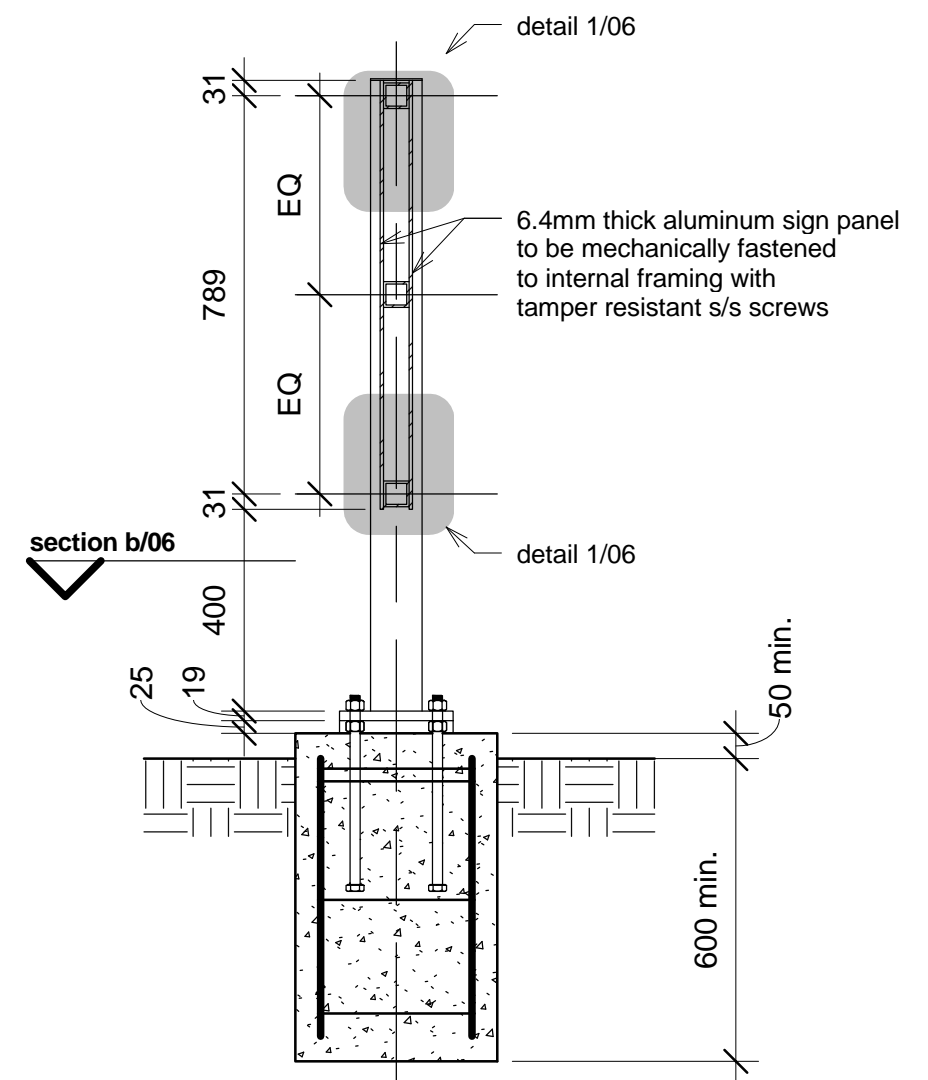




**front view/section scale 1:15**



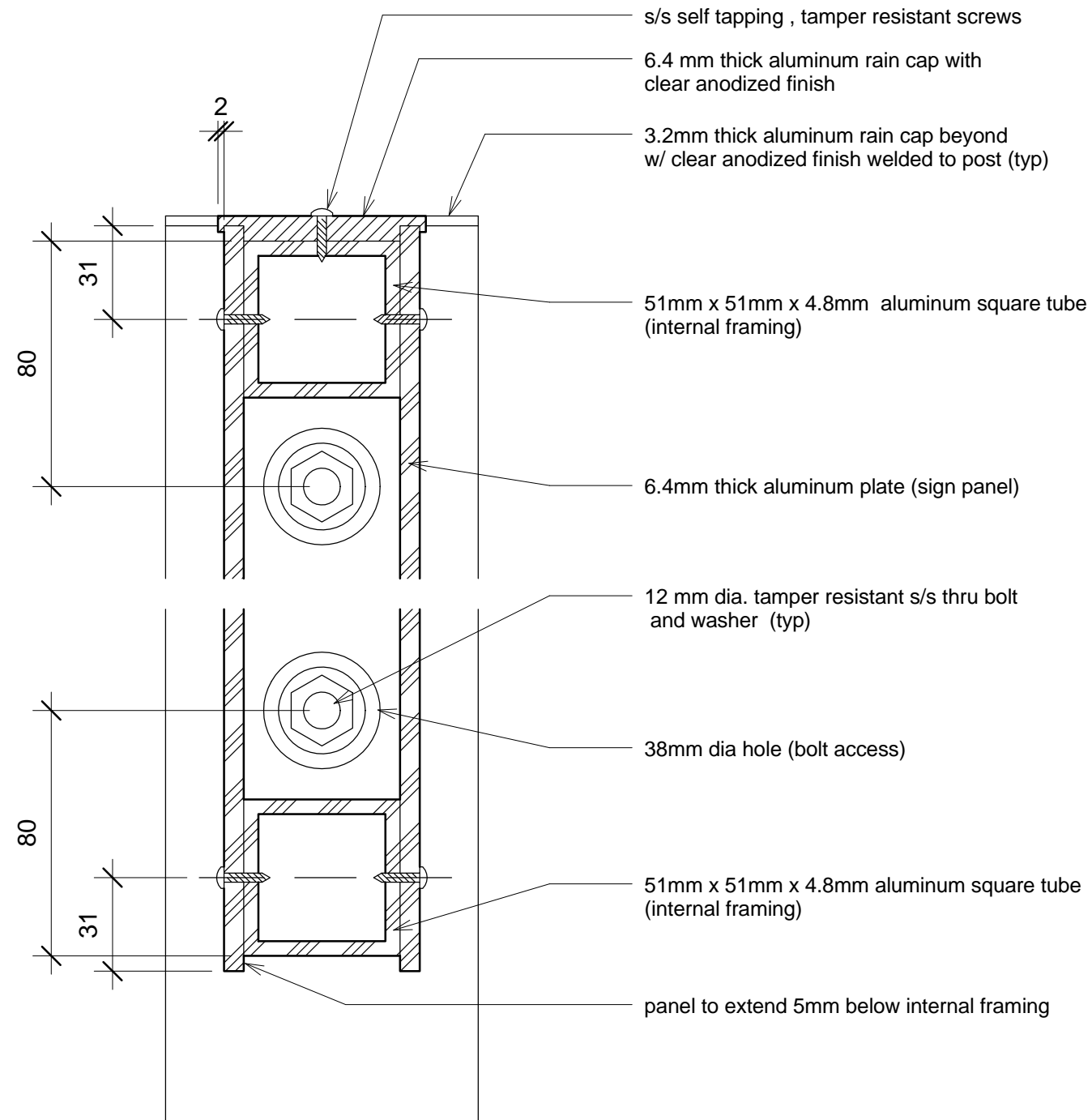
**section a scale 1:15**



**side view/section scale 1:15**

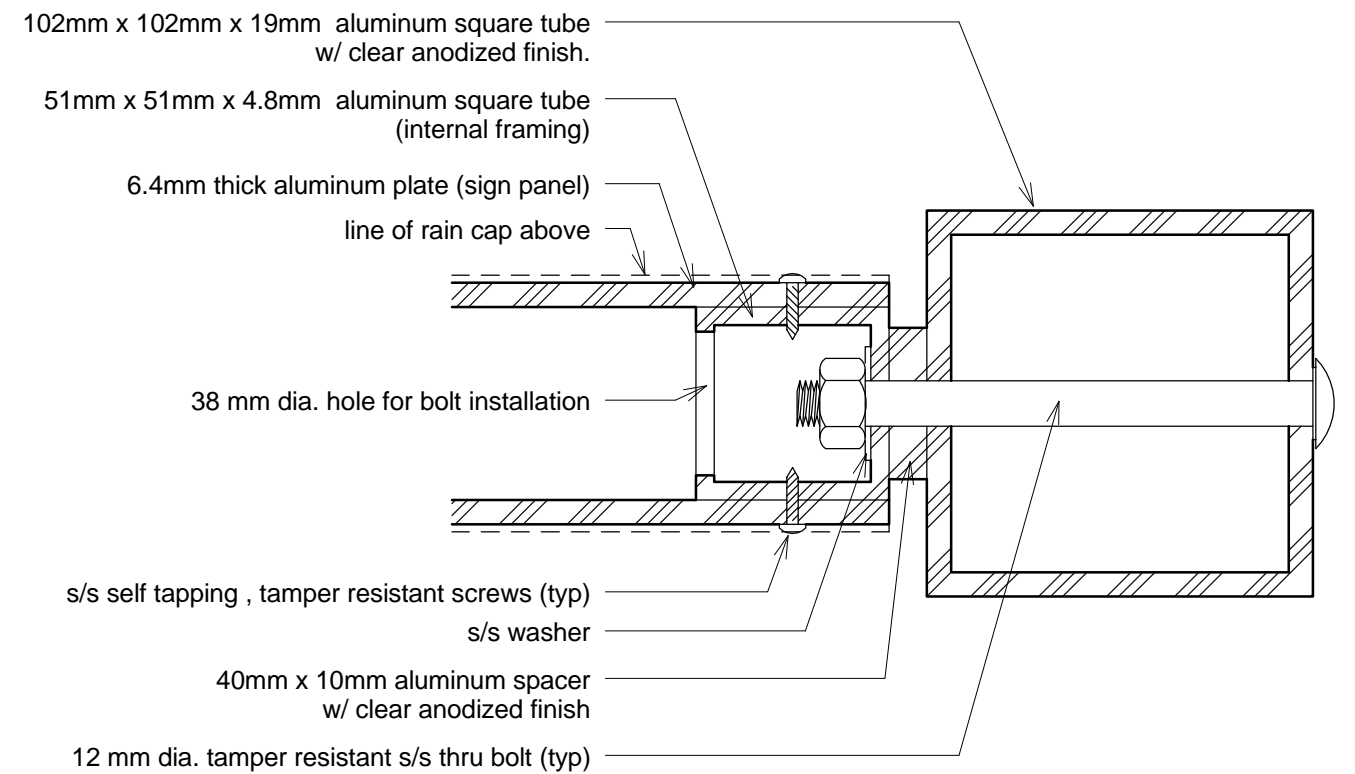
General Note:  
Manufacturer to verify all dimensions prior to sign fabrication. All discrepancies should be reported to the Architect.



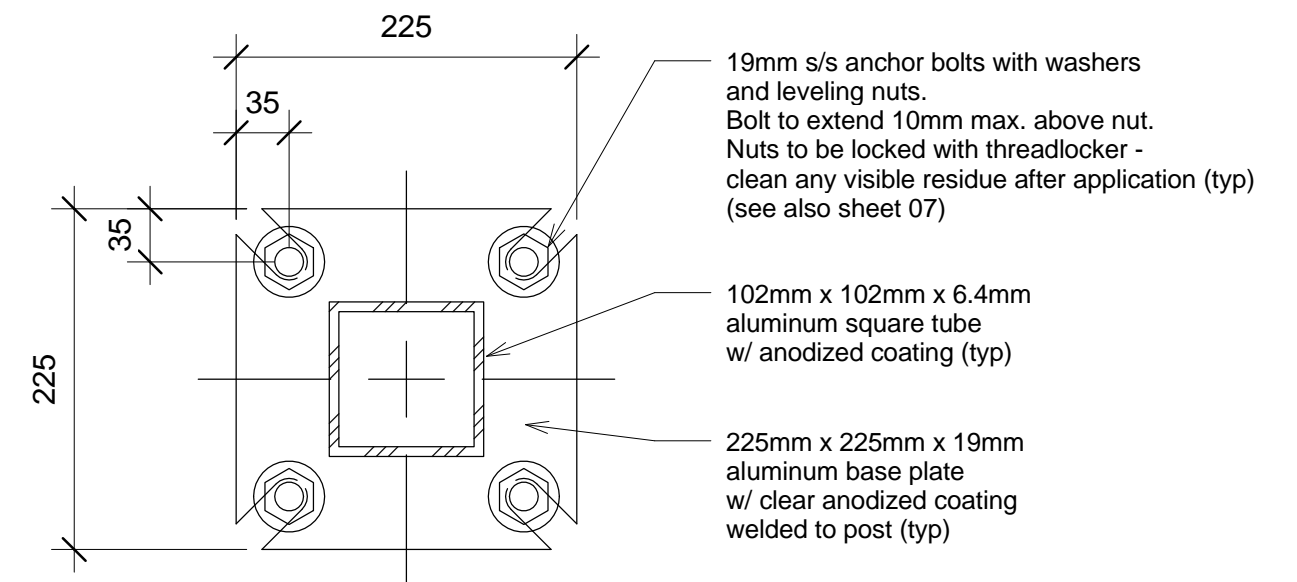


General Note:  
Manufacturer to verify all dimensions prior to sign fabrication. All discrepancies should be reported to the Architect.

**section detail 1 scale 1:2**



**section detail 2 scale 1:2**



**section b (slip base) scale 1:5**

GENERAL NOTES

- 1. Provide self adhesive sign ID stickers. ID's should correspond with ID's shown on location plan
- Form and placement of stickers on signs is to be coordinated with University of Victoria
- 2. Fasteners:
  - foundation (anchor bolts):
  - bolts: Fastenal part #47406 (1/2" s/s threaded rod)
  - washers: Fastenal part #71021 (1/2" s/s washers)
  - nuts: Fastenal part #70714 (1/2" s/s nuts)
  - posts:
  - thru bolts: Fastenal part #174786 (1/2" s/s x 5" button Socket Cap Screw)
  - thru bolt washers: Fastenal part #71021 (1/2" s/s washers)
  - thru bolt nuts: 70714 (1/2" s/s nuts)
  - panels:
  - security screws panel attachment: Fastenal part #BS0160024SSH200 (10-24 x 3/4" button head security screw )
  - rain cap attachment: Fastenal part #BS0160024SSH200 (10-24 x 3/4" button head security screw)
- 3. Threadlocker: Locktite 271 Red
- 4. Whenever anchor bolts are cut, contractor to ensure cut surfaces (terminated coating) are protected against rusting.
- 5. Manufacturer to verify all diemnsions prior to sign fabrication. All discrepancies should be reported to the Architect.

STRUCTURAL NOTES

DRAWINGS

- 1. These drawings show the completed project. The drawings do not show components that may be necessary for construction safety, which is the responsibility of the contractor.
- 2. The use of these drawings is limited to that indicated in the revisions column.
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DESIGN

- 1. The structures shown have been designed in substantial accordance with the British Columbia Building Code 2006, which is based on the National Building Code of Canada 2005.
- 2. The following wind loads and factors were used: q50=0.63kPa, lw=1.0-ULS, 0.75-SLS.

FIELD REVIEW BY STRUCTURAL ENGINEER

- 1. Structural Engineer provides field review only for the work shown on these structural drawings, and it is conducted with such frequency as Structural Engineer deems appropriate to ascertain that the work is in general conformance with the documents prepared by Structural Engineer. Field review by Structural Engineer is not carried out for the Contractor's benefit, nor does it make Structural Engineer guarantors of the Contractor's work. It remains the Contractor's responsibility to build the work in conformance with the contract documents. Structural Engineer shall not be responsible for the acts or omissions of the Contractor, Sub-Contractor, or any other persons performing any of the work or for the failure of any of them to carry out the work in accordance with the contract documents.
- 2. Provide 24 hours advance notice of each required field review. Field reviews shall be scheduled to be carried out during normal business hours unless special arrangements are made with Structural Engineer.
- 3. The work to be reviewed shall be generally complete.

STRUCTURAL NOTES (cont)

CONCRETE AND REINFORCING STEEL

- 1. Concrete work shall conform to CAN/CSA-A23.1, CAN/CSA -A23.2, CAN/CSA -A23.3 and referenced documents.
- 2. Reinforcing shall conform to CAN/CSA-G30.18R – Grade 400MPa.
- 3. Cover to reinforcing steel to be 50mm uno.
- 4. Portland cement shall be type gu unless noted otherwise.
- 5. Concrete shall have a unit weight of 23±1 kn/m3/ (145±5 pcf) unless noted otherwise.
- 6. Concrete shall have a compressive strength of 35MPa at 28 days, and conform to exposure class C-1 with a maximum water-cement ratio of 0.40 and air content of 5-8%. Maximum aggregate size to be 19mm.
- 7. No calcium chloride is permitted, in any form, in any concrete mix. Curing and protection of concrete for hot, cold or dry weather is to be as per clauses 7.4.1.8 and 7.4.2 of CAN/CSA.

STRUCTURAL ALUMINUM

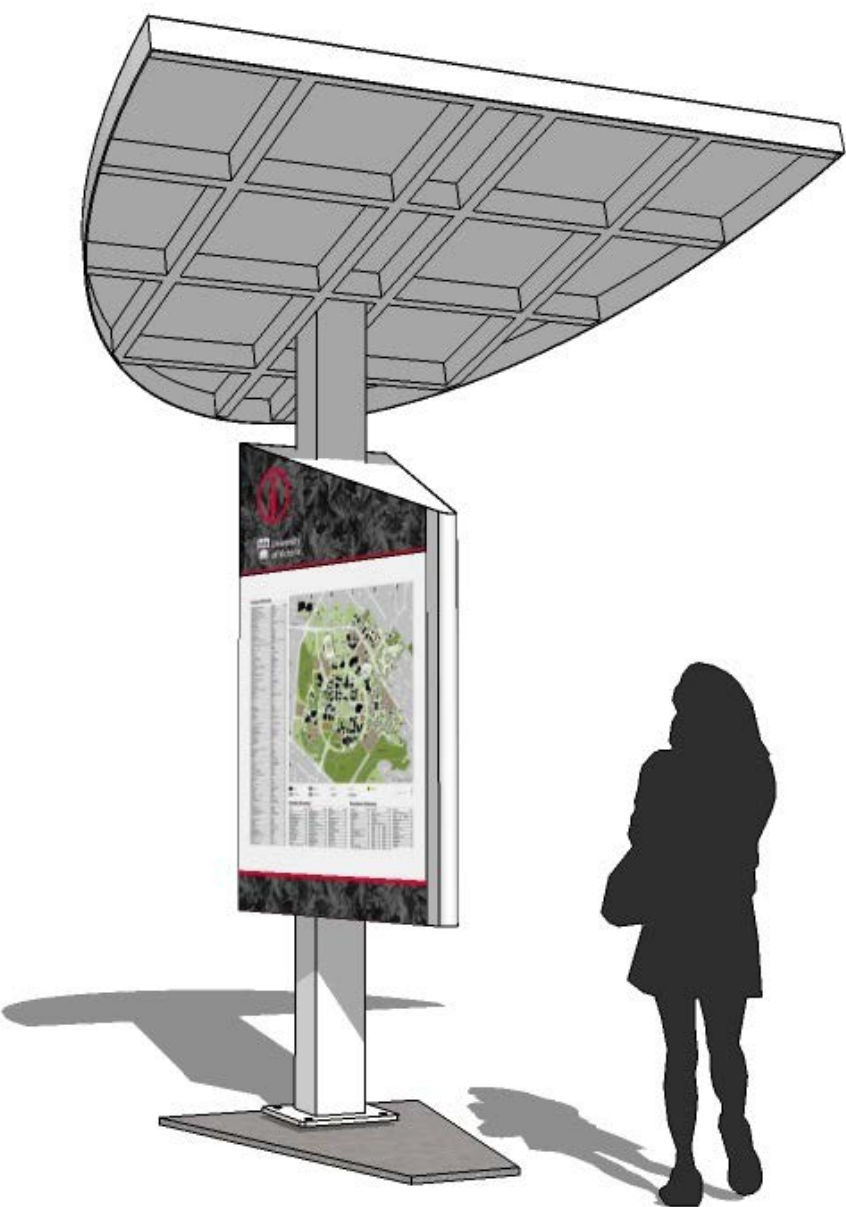
- 1. Aluminum sections shall be new.
- 2. Aluminum alloys shall conform to the Aluminum Association publication Aluminum Standards and Data ISO 6361-2 or ISO 6362-2.
- 3. Extruded shapes, Tubes, Bolts, and Plate to be 6061 alloy uno.
- 4. Aluminum in contact with concrete or grout shall be given a heavy coat of alkali-resistant bituminous paint or other equivalent coating before installation.
- 5. Welding operators and procedures shall be qualified according to CSA W47.2.
- 6. Submit shop drawings for review prior to start of steel fabrication.
- 7. Fabrication practices and tolerances shall be in accordance with CAN/CSA-S16, except bolt holed edge distance tolerance to be -0, +2mm.
- 8. Anchor and connection bolts to be ASTM A193 Stainless Steel. Anchors shall be embedded 300mm into concrete, complete with a nut and washer each end.
- 9. Unless noted otherwise, column base plates shall be 20 mm minimum thick. Anchor bolt holes shall be punched undersize and reamed to size.
- 10. Provide 6 mm cap plates for all tube members uno.
- 11. Aluminum shall be connected with fillet welds all-around uno. Weld size shall match the wall thickness of the thinnest part being connected uno. Welds to be ground smooth.

TAMPER RESISTANCE AND CONNECTIONS

- 1. Connection hardware to be stainless steel uno.
- 2. Aluminum panels to be connected to structure with 6.4mm diameter stainless steel self-tapping screws at 450mm maximum centre to centre spacing.
- 3. Non-removable panels may be welded or glued by the manufacturer, as approved by Structural Engineer.
- 4. Panel connection screws to be tamper resistant “Torx-Pin” screws as supplied by O.E.M. Hardware of Surrey BC, or equivalent as approved by Structural Engineer.
- 5. Visible connection bolts shall be “Pentagon” tamper resistant bolts, with “Pentagon” nuts as supplied by O.E.M. Hardware of Surrey BC, or equivalent as approved by Structural Engineer. Anchor bolts to be secured with “Pentagon” security nuts.



Sheet List	
Sheet Number	Sheet Name
01	title sheet and drawing list
02	typography, colours and pictograms
03	sign design - overview
04	sign design - overview cont.
05	sign design - graphic design details
06	sign design - graphic design details cont.
07	sign construction - cross section
08	sign construction - section plans
09	sign construction - painted canopy plan and details
10	sign construction - details
11	typical concrete slab
12	general notes



# Sign No. 8

## Pedestrian - Map Directory Kiosk

**core colours**



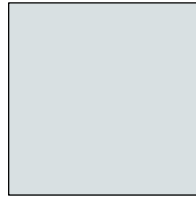
clear anodized coating  
application: sign structure



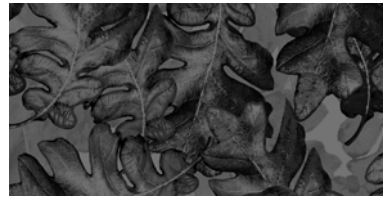
PANTONE 185 C  
application:  
pinstrip, arrows



PANTONE 426 C  
application: text,  
crest - monochromatic



PANTONE 7541 C  
application: background



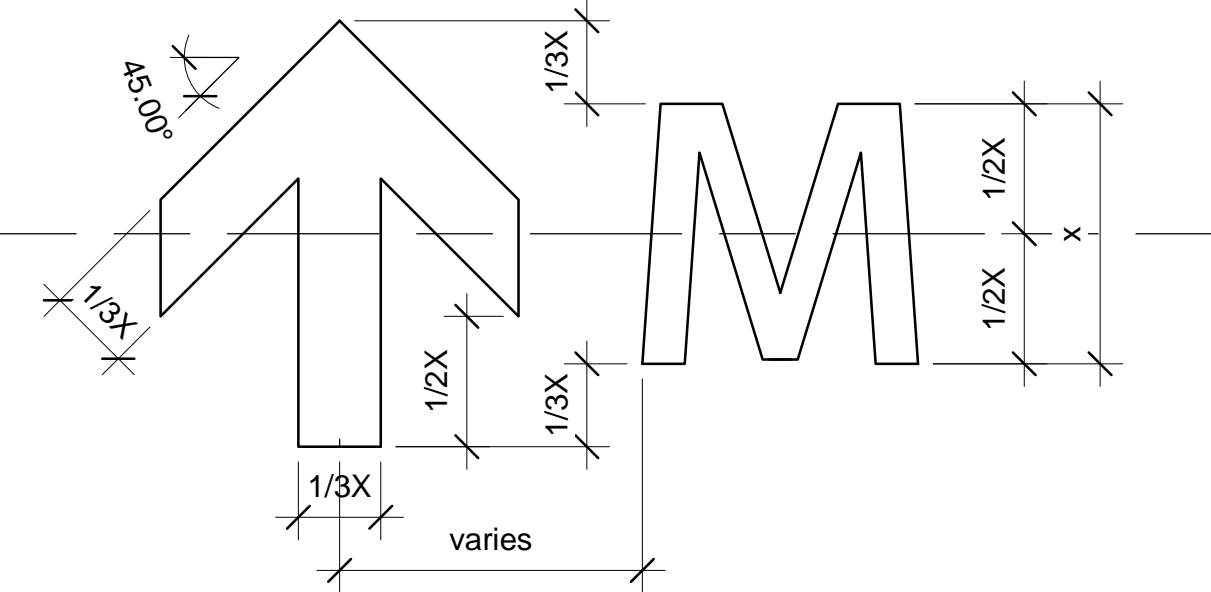
garry oak motif - digital file is to be delivered  
by University of Victoria

**samples of typeface family**

Myriad Pro Semi Bold

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
1234567890

**arrow style and arrow size in relation to text height**



**University of Victoria Logo, horizontal standard**



University  
of Victoria

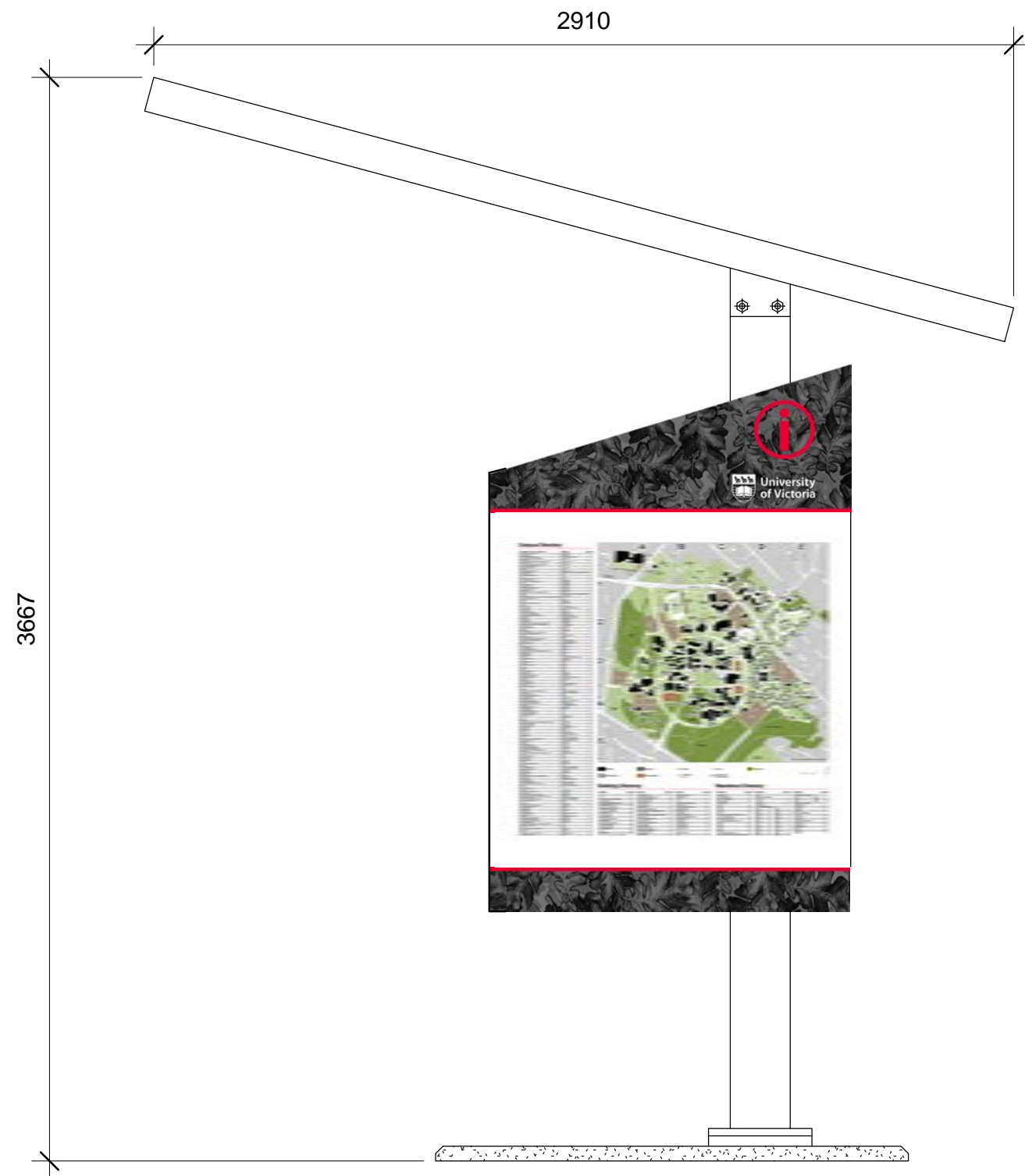


**full colour**

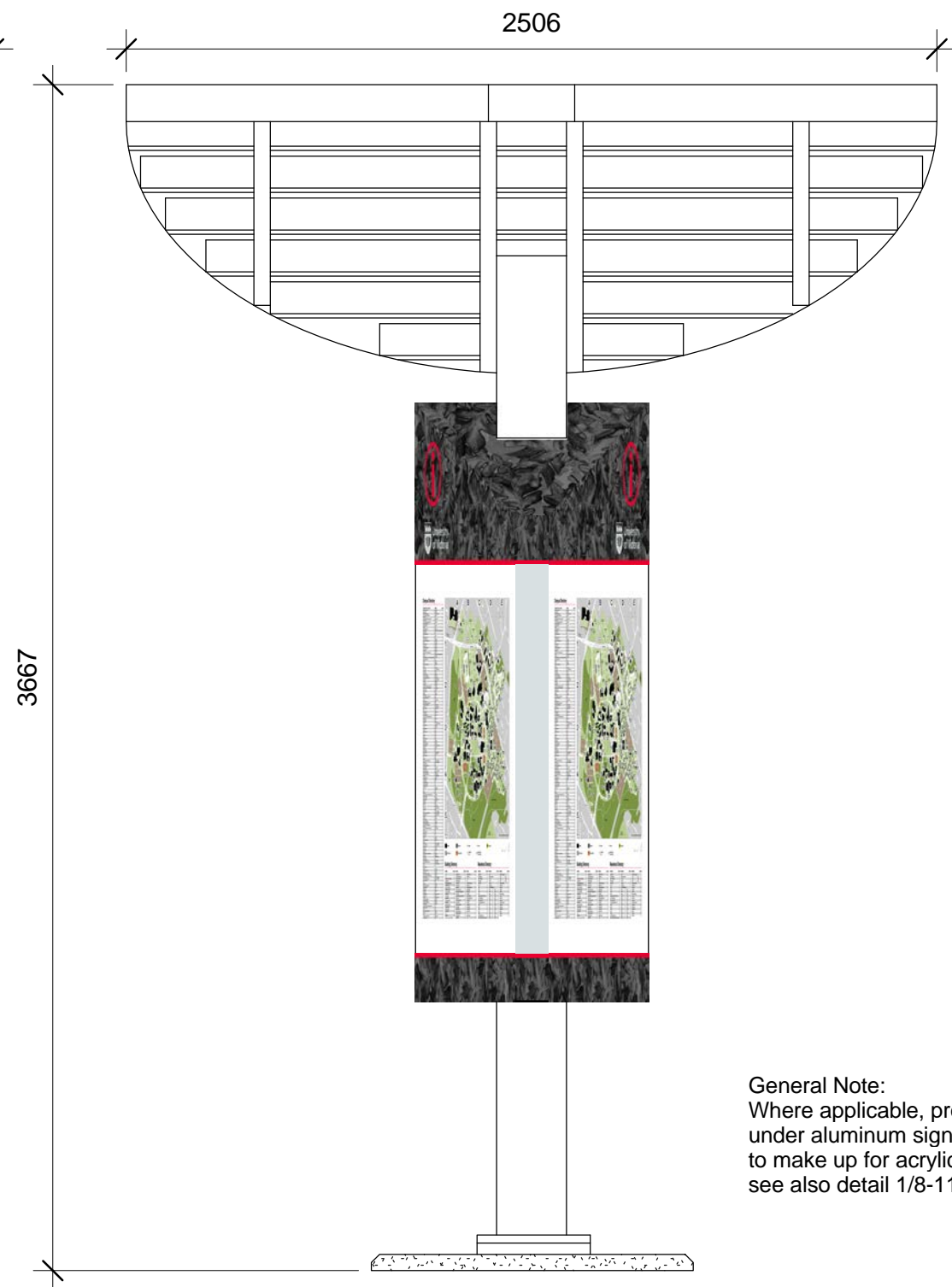
**reverse monochromatic - shown against background for clarity**







**side elevation scale 1:20**



**front elevation scale 1:20**

General Note:  
Where applicable, provide 6.4mm thick aluminum spacer  
under aluminum sign panels  
to make up for acrylic panel thickness  
see also detail 1/8-11

project: Campus Wayfinding  
number: FM 09-8567  
issue date: April 1, 2019

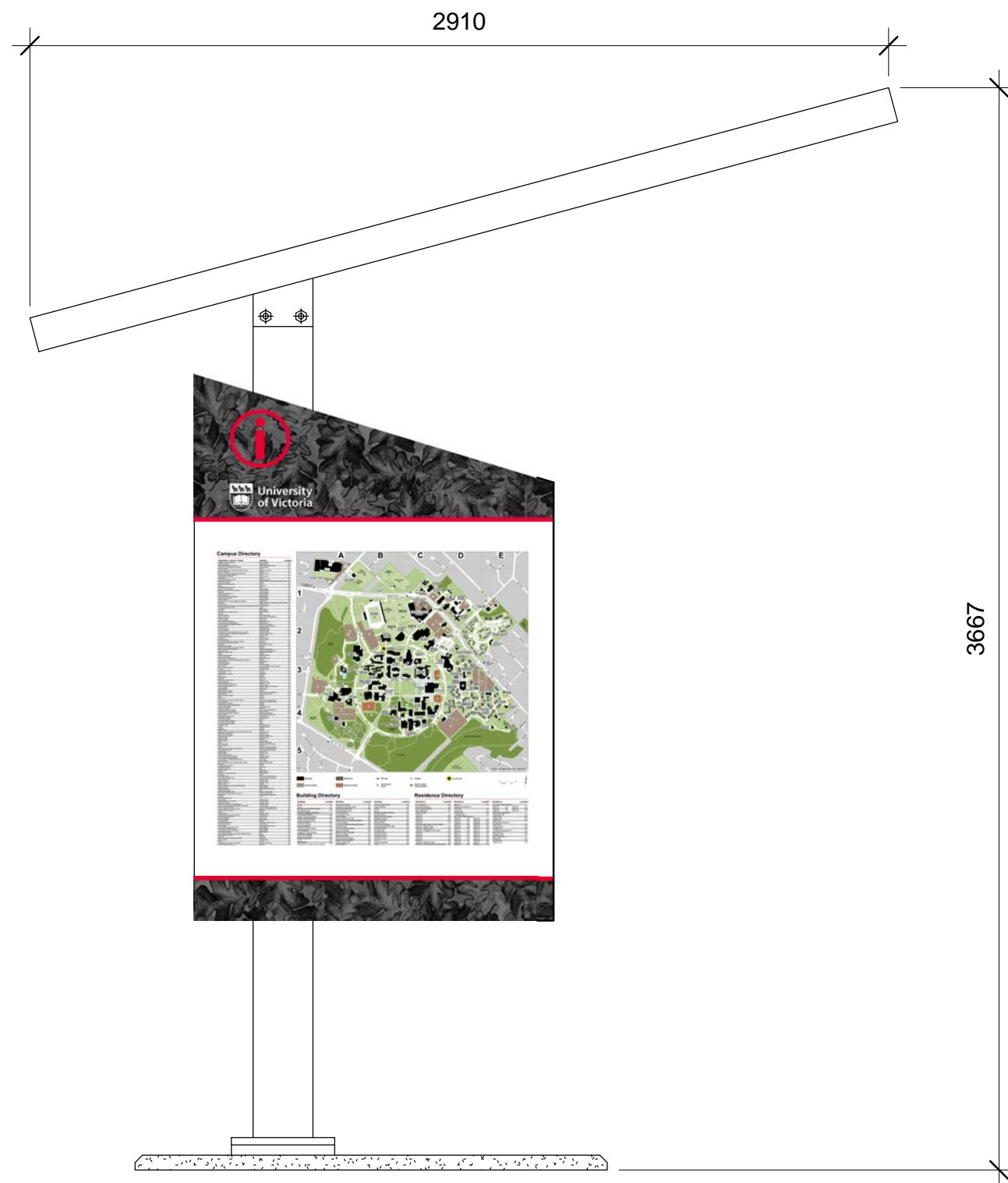
sign: Sign No. 8 Pedestrian Map Directory Kiosk  
sheet name: sign design - overview  
scale: as noted

sheet  
number:

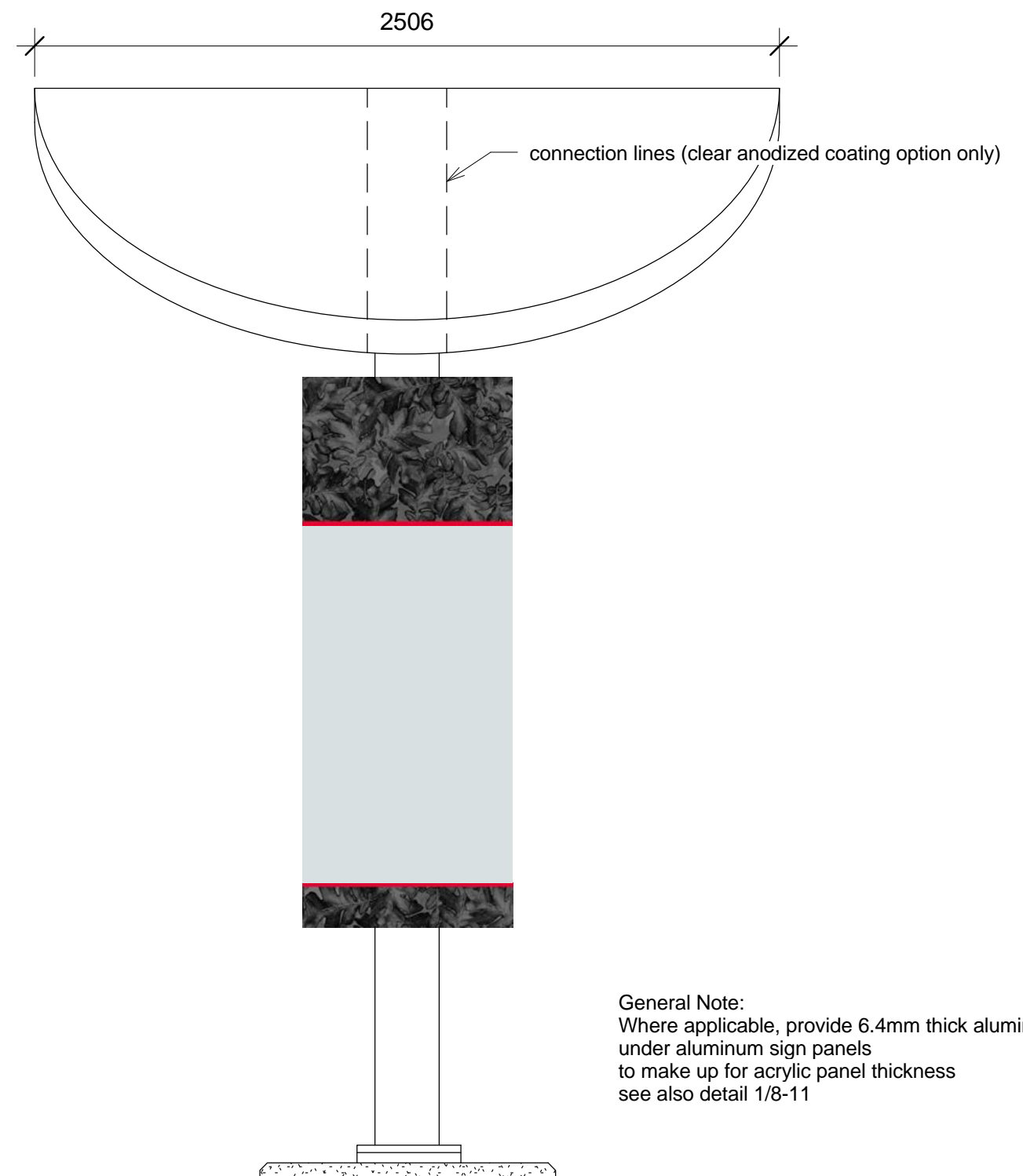
03



**University  
of Victoria**



**side elevation scale 1:20**



General Note:  
Where applicable, provide 6.4mm thick aluminum spacer  
under aluminum sign panels  
to make up for acrylic panel thickness  
see also detail 1/8-11

**back elevation scale 1:20**

project: Campus Wayfinding  
number: FM 09-8567  
issue date: April 1, 2019

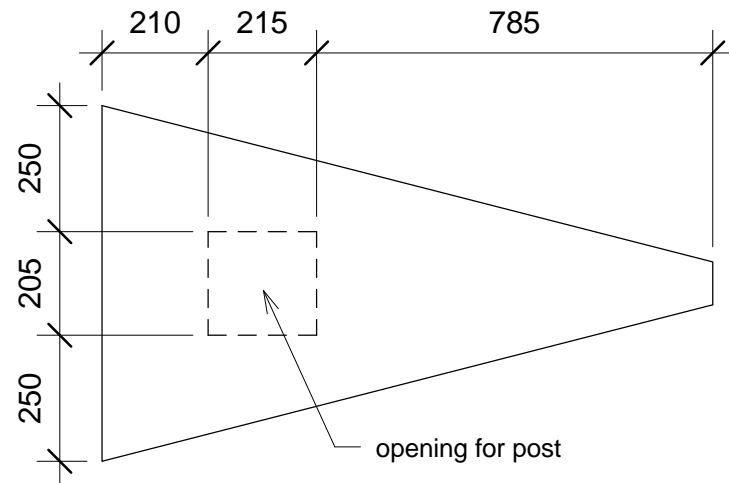
sign: Sign No. 8 Pedestrian Map Directory Kiosk  
sheet name: sign design - overview cont.  
scale: as noted

sheet  
number:

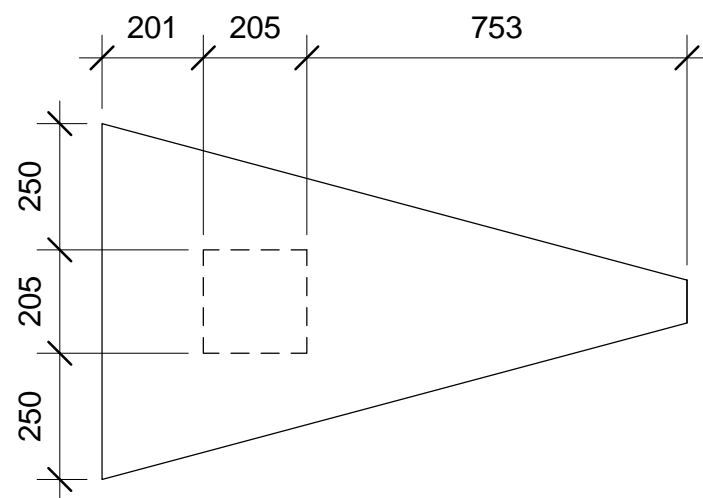
04



**University  
of Victoria**

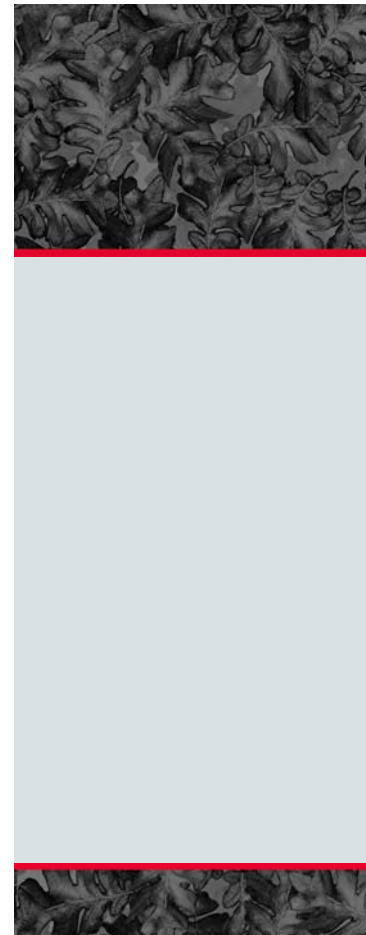


top panel:  
3.2mm thick aluminum with  
digitally printed vinyl (Gary Oak motif)  
protected with anti-graffiti,  
optically clear overlaminate.



bottom panel:  
3.2 mm thick aluminum with  
clear anodized coating

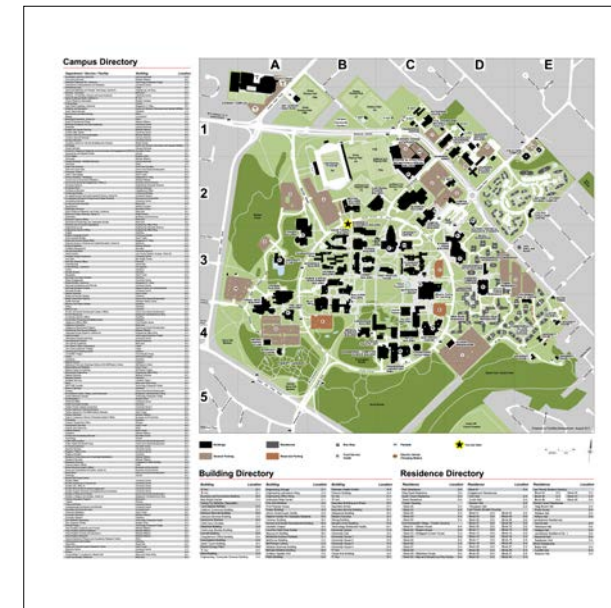
General note:  
Manufacturer to confirm all dimensions  
prior to fabrication.



back panel:  
Digitally printed vinyl protected  
with anti-graffiti,  
optically clear overlaminate.  
Aluminum panel size:  
710 mm x 1848 mm x 3.2 mm



Digitally printed vinyl protected with  
anti-graffiti, optically clear overlaminate.  
19mm thick acrylic push-thru pictogram  
Aluminum panel size:  
1190 mm x 500 mm x 3.2 mm



non-glare clear acrylic panel,  
digitally printed-on vinyl, diffusion layer.  
Acrylic panel size: 1200 mm x 1200 mm x 6.4 mm



Digitally printed vinyl protected with  
anti-graffiti, optically clear overlaminate.  
Aluminum panel size:  
1190 mm x 150 mm x 3.2 mm

Non-glare clear acrylic:  
Plaskolite OPTIX Abrasion Resistant Non-Glare  
or equivalent.  
Clear acrylic (pictograms):  
Plaskolite OPTIX, Chemcast GP or equivalent

First surface prints:  
Vinyl: 3M IJ180, MPI 2005 or equivalent  
Overlaminate: 3M 8914, Avery DOL 6060 or equivalent.

2nd surface prints:  
CAV-50 reverse print - i/w/i (2nd surface)  
Overlaminate: 3M 8914, Avery DOL 6060  
or equivalent (first surface)

- 1) Vinyl to be printed on, installed as per manufacturer's recommendations.
- 2) Use compatible UV inks and overlaminates as recommended by manufacturer
- 3) Where applicable wrap vinyl and overlaminate over the edges of the alu. panel.
- 4) All panels to be mechanically fastened to substrate.
- 5) Directory map shown for reference only. directory map with all associated texts and pictograms to be provided in digital format by University of Victoria
- 6) Manufacturer to confirm all dimensions prior to fabrication.

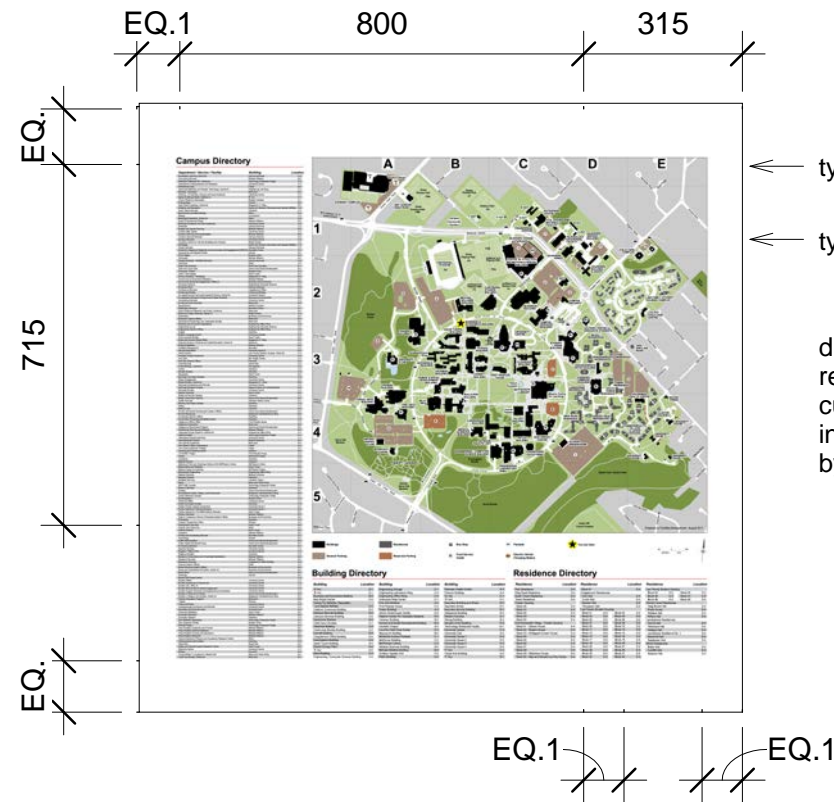
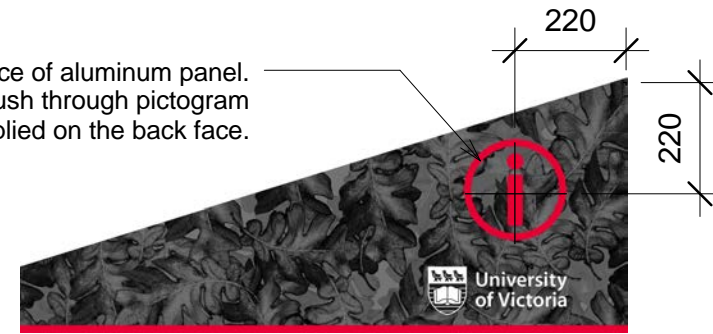


opaque monochromatic reversed  
crest height: 95 mm

pin strip to be 15 mm wide (typ)



19mm thick clear acrylic glued to inside face of aluminum panel.  
Red translucent vinyl applied to front of push through pictogram  
and white diffuser vinyl applied on the back face.



type size: 50pt

type size: 22pt

directory map shown for  
reference only.  
current directory map to be provided  
in digital format  
by University of Victoria

pin strip to be 15 mm wide (typ)



General note:  
Manufacturer to confirm all dimensions  
prior to fabrication.

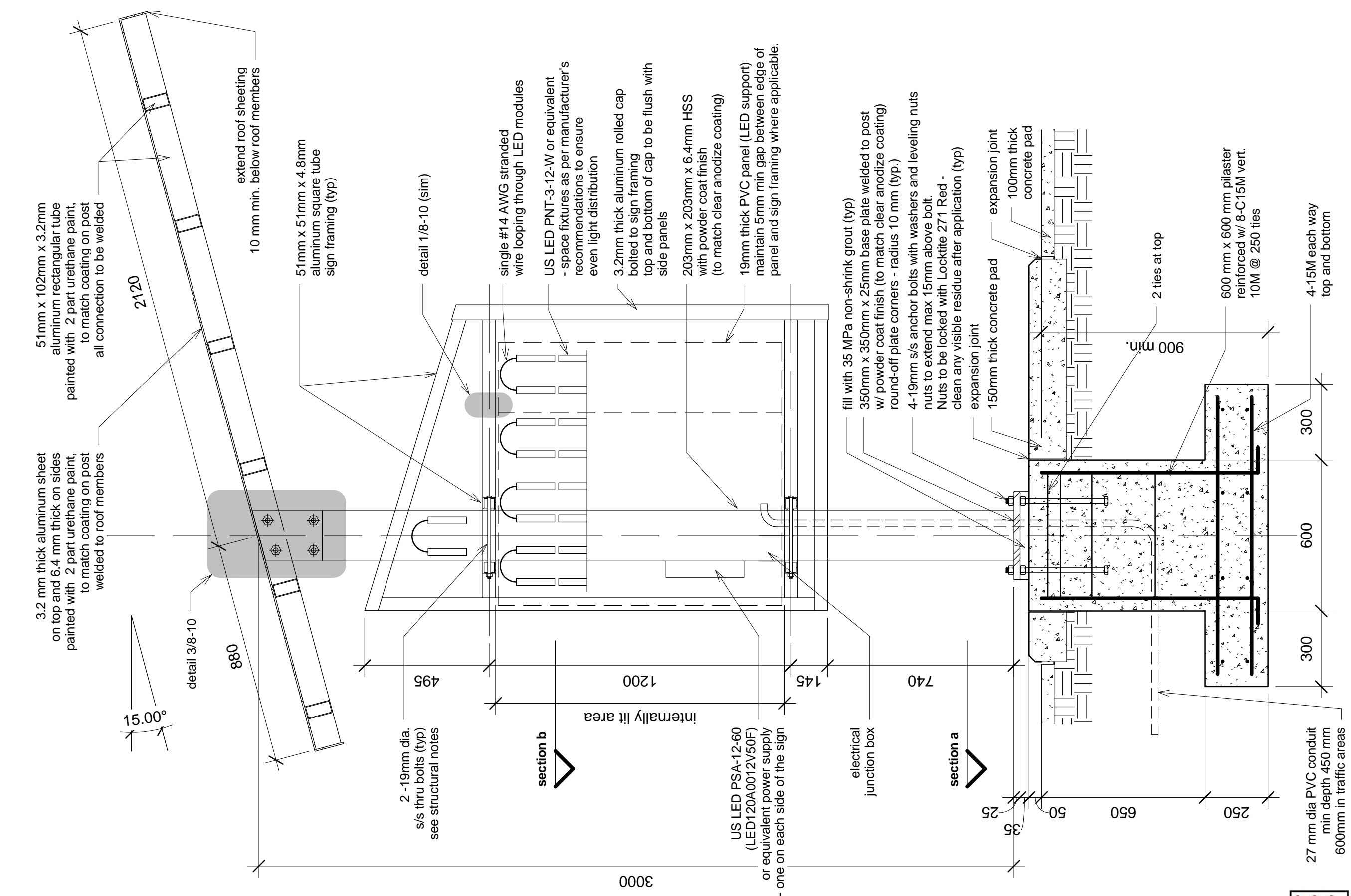
project: Campus Wayfinding  
number: FM 09-8567  
issue date: April 1, 2019

sign: Sign No. 8 Pedestrian Map Directory Kiosk  
sheet name: sign design - graphic design details cont.  
scale: as noted

sheet  
number:

06

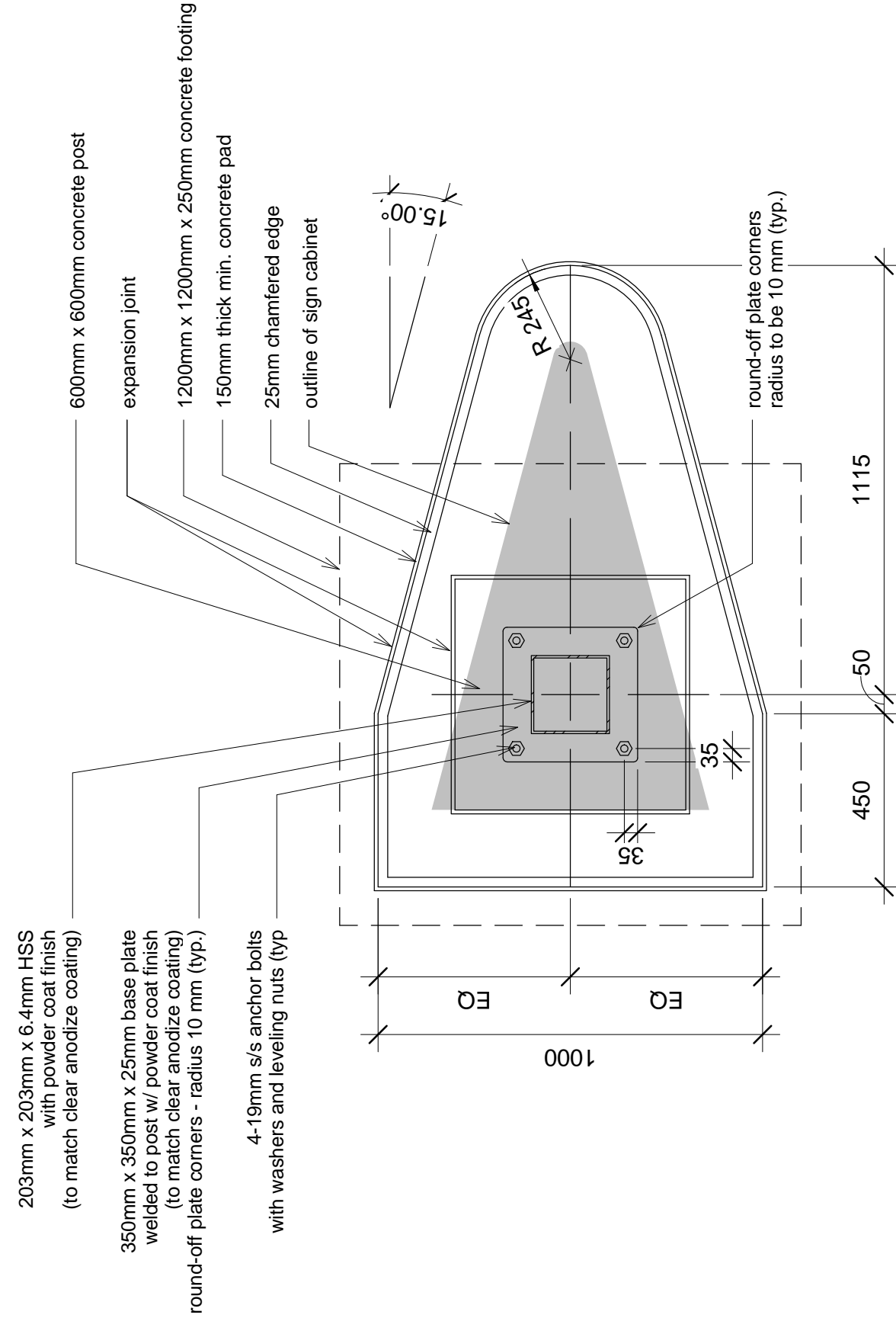




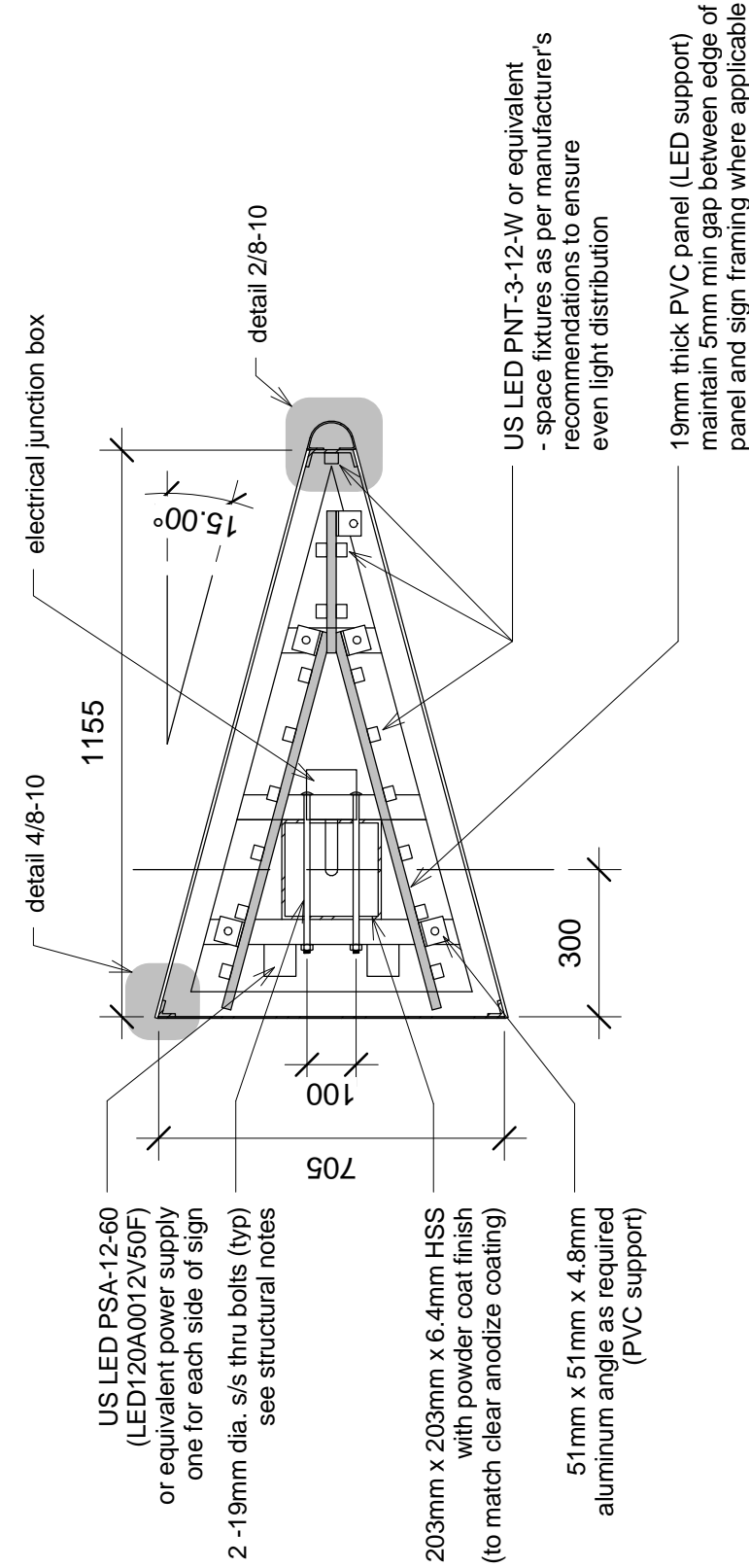
**long section scale 1:15**

- General Note:

Manufacturer to verify all diemnsions prior to sign fabrication. All discrepancies should be reported to the Architect.
- 1) provide ventilation holes as required
  - 2) US LED PSA-12-60 power supply to provide source of power to a maximum of 50 MegaBright 12 LED Modules
  - 3) Sign must have a CSA label as an assembly



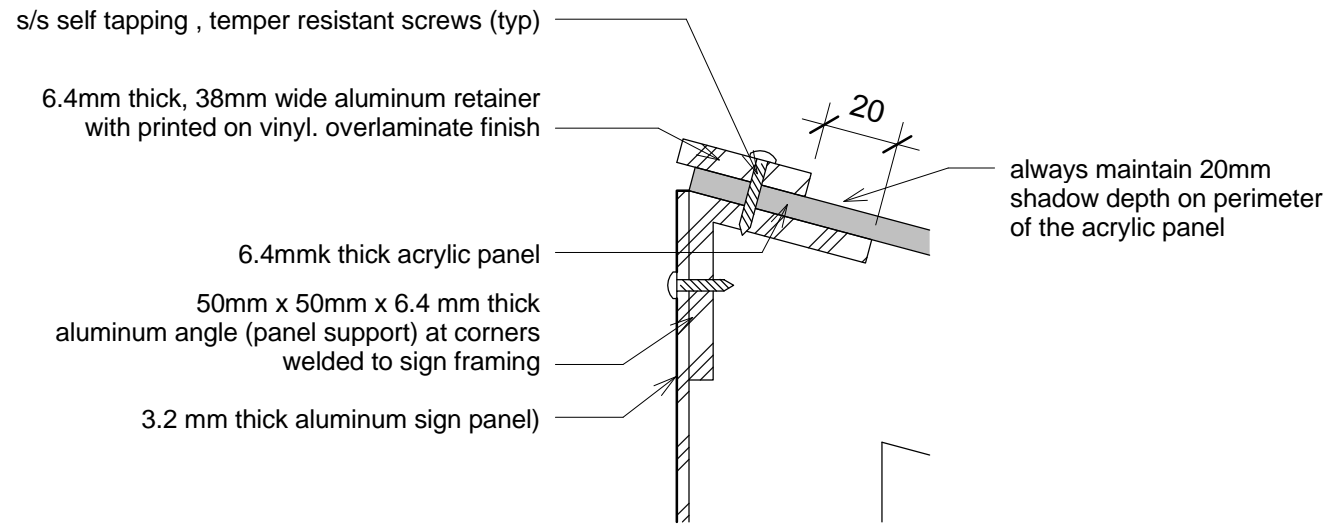
section a scale 1:15



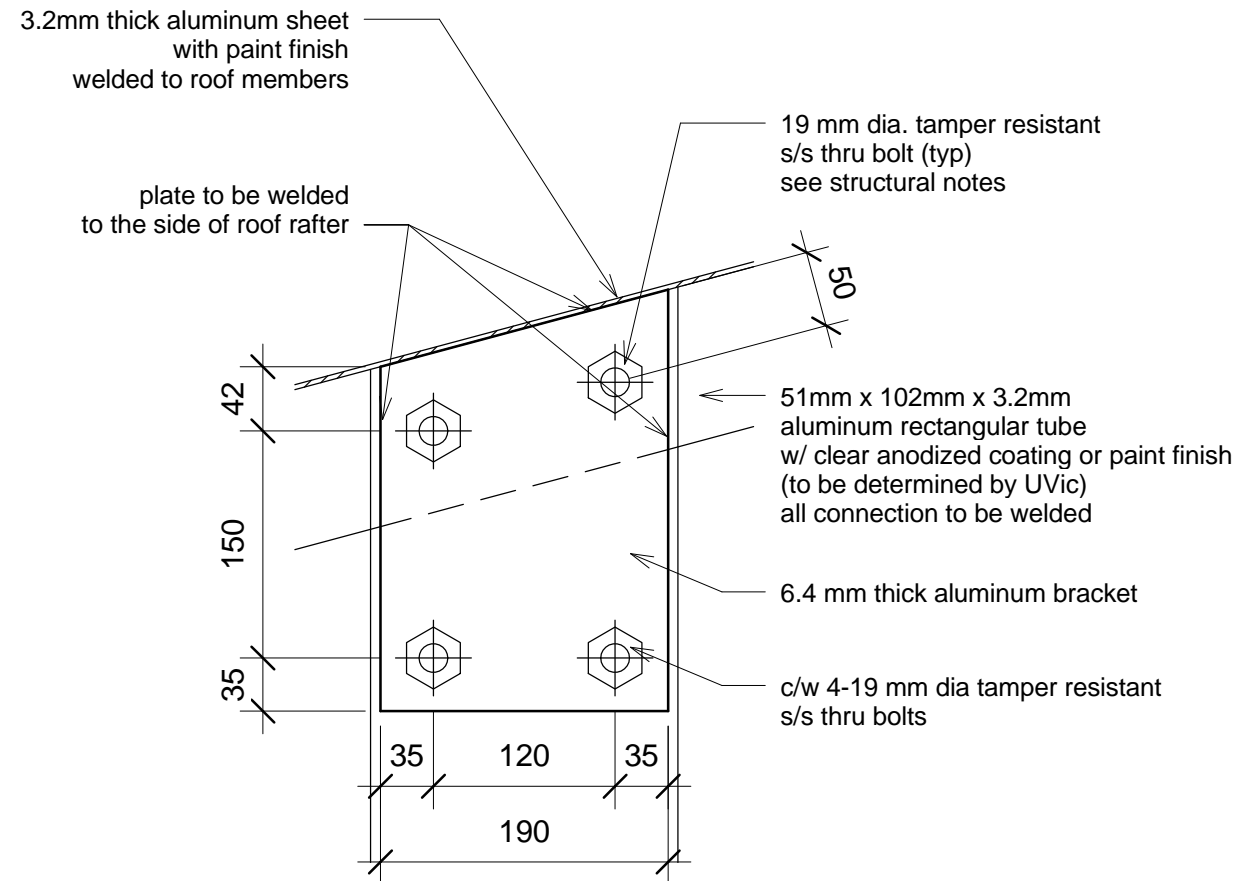
section b scale 1:15

General Note:  
Manufacturer to verify all diemnsions prior to sign fabrication. All discrepancies should be reported to the Architect.

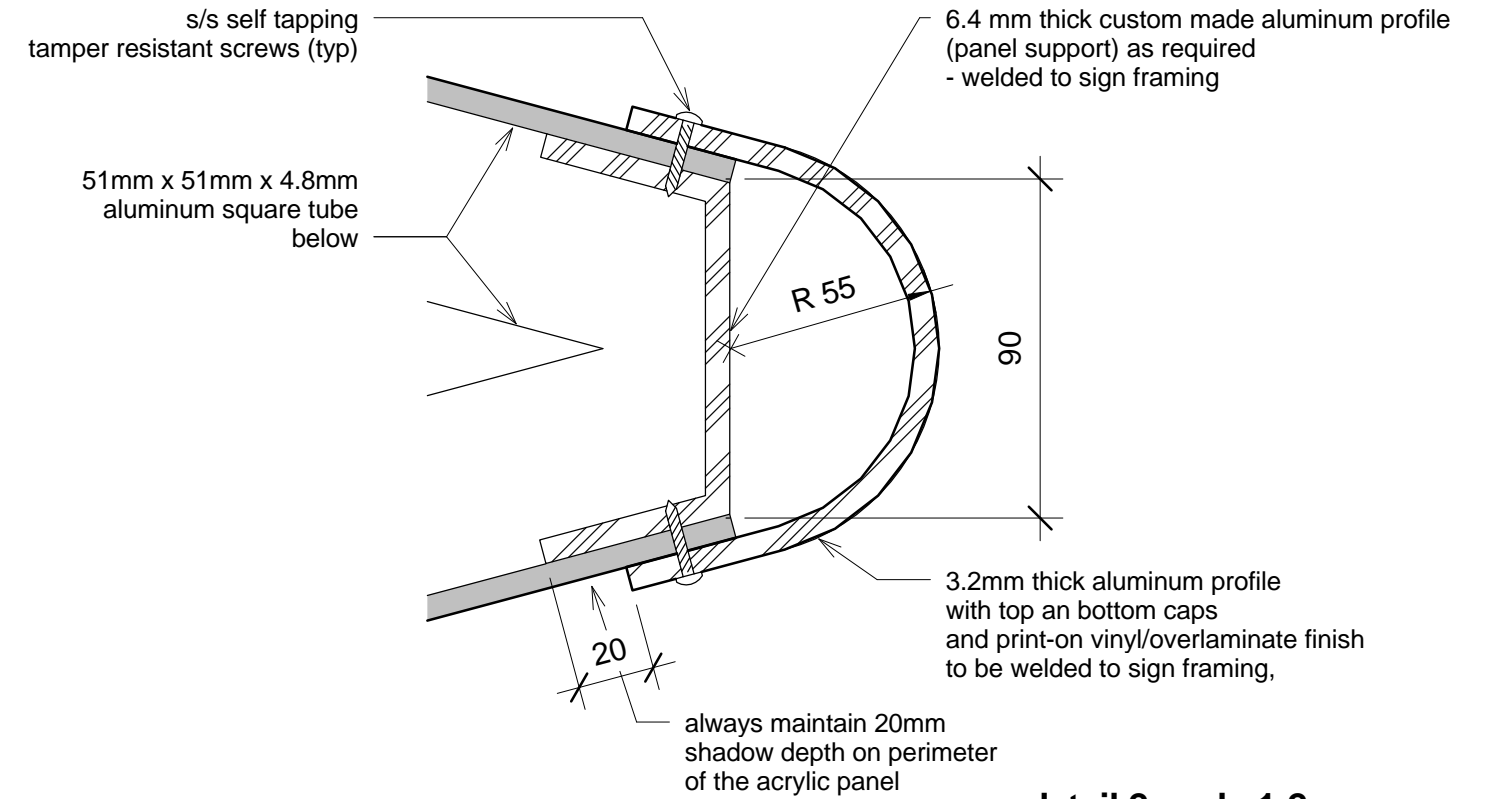




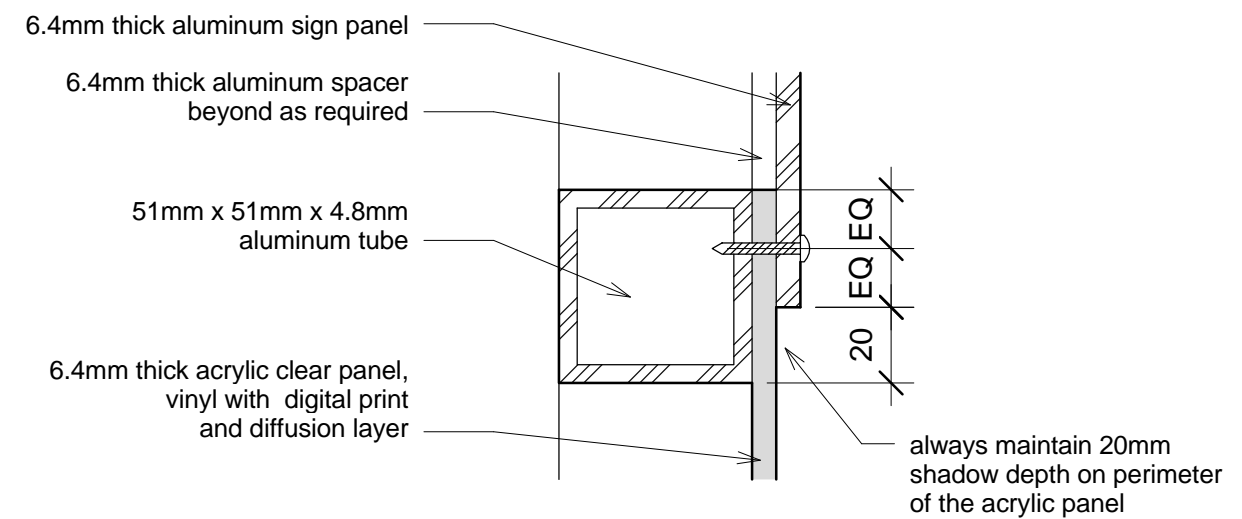
**detail 4 scale 1:2**



**detail 3 scale 1:5**



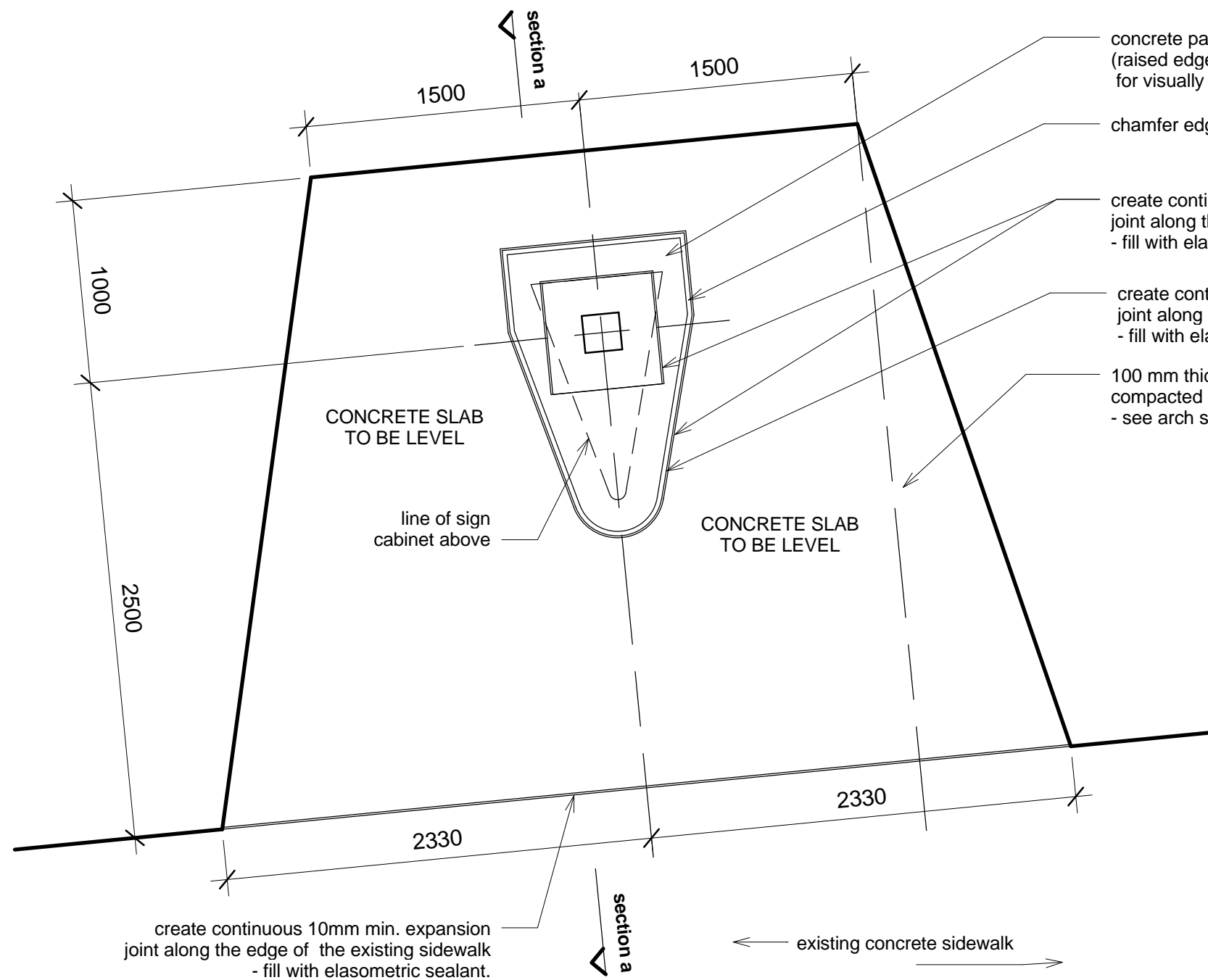
**detail 2 scale 1:2**



**detail 1 scale 1:2**

General Note:  
Manufacturer to verify all diemnsions prior to sign fabrication. All discrepancies should be reported to the Architect.

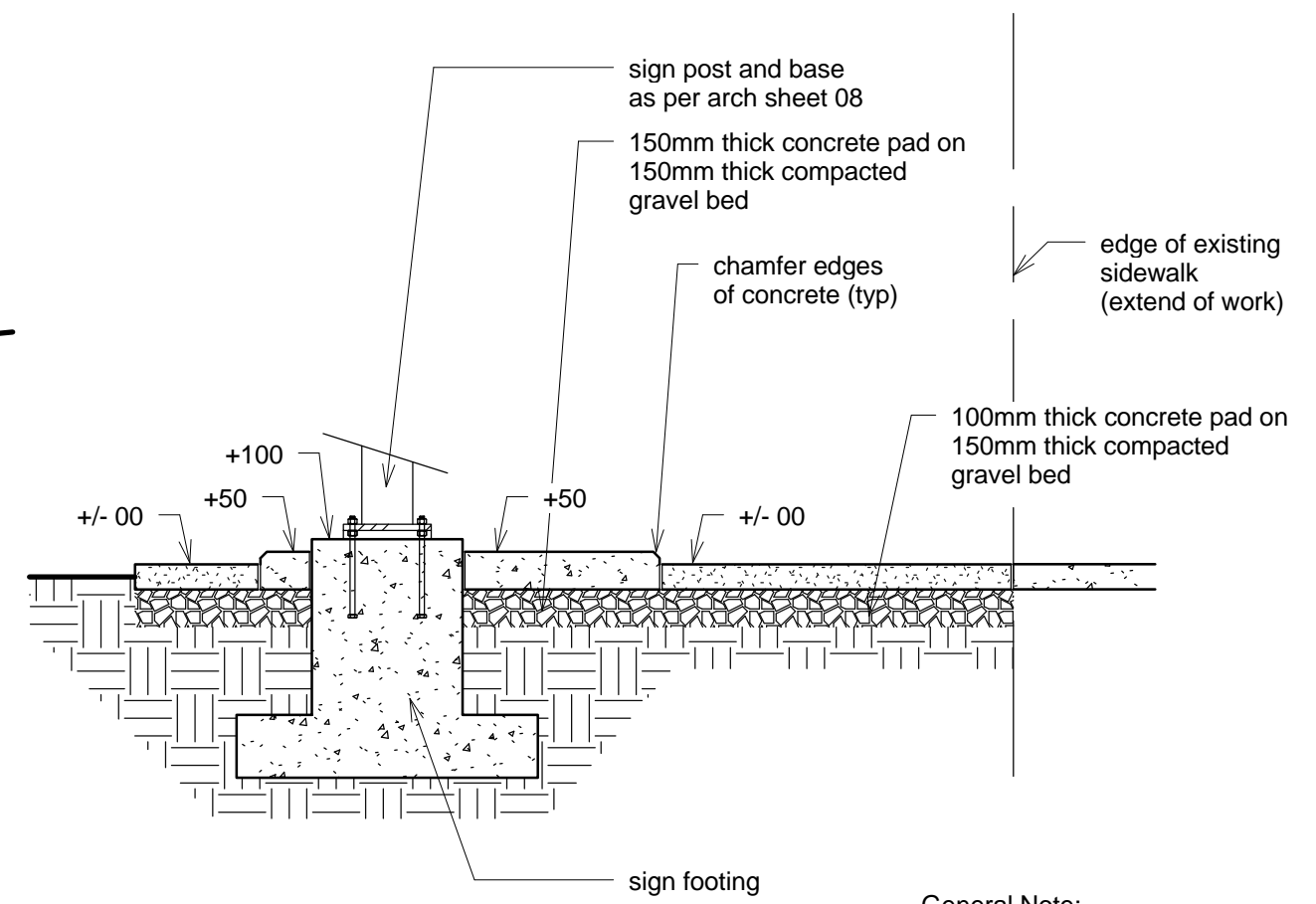




- concrete pad as per sheet 08 of arch. drawings (raised edge of the pad acts as a warning element for visually impaired.)
- chamfer edges
- create continuous 10mm min. expansion joint along the edge of the existing sidewalk - fill with elasometric sealant
- create continuous 10mm expansion joint along the edge of the concret pad - fill with elasometric sealant.
- 100 mm thick concrete slab on compacted gravel bed to match existing sidewalk - see arch specifications Section 32 13 13 (typ)

General Notes:

- 1) top of 100mm thick concrete slab to be flush with existing sidewalk. Concrete pad is to be modified accordingly - always maintain 50mm height difference.
- 2) drawing should be read in conjunction with arch. specifications
- 3) Contractor to verify all dimensions on site prior to sign installation



General Note:  
Manufacturer to verify all diemnsions prior to sign fabrication. All discrepancies should be reported to the Architect.

**1. plan view scale 1:30**

**2. section a-a scale 1:30**

GENERAL NOTES

- 1. Provide self adhesive sign ID stickers. ID's should correspond with ID's shown on location plan
- Form and placement of stickers on signs is to be coordinated with University of Victoria
- 2. Fasteners:
  - foundation (anchor bolts):
  - bolts: Fastenal part #47349 (3/4" s/s threaded )
  - washers: Fastenal part #71027 (3/4" s/s wahers)
  - nuts: Fastenal part #70717 (3/4" s/s nuts)
  - panels:
  - security screws panel attachment: Fastenal part #BS0160024SSH200 (10-24 x 3/4" button head security screw)
- 3. Whenever anchor bolts are cut, contractor to ensure cut surfaces (terminated coating) are protected against rusting.
- 4. Manufacturer to verify all diemnsions prior to sign fabrication. All discrepancies should be reported to the Architect.

STRUCTURAL NOTES

**DRAWINGS**

- 1. These drawings show the completed project. The drawings do not show components that may be necessary for construction safety, which is the responsibility of the contractor.
- 2. The use of these drawings is limited to that indicated in the revisions column.
- 3. The information on these drawings shall not be used for any other project or works.

**DESIGN**

- 1. The structures shown have been designed in substantial accordance with the British Columbia Building Code 2006, which is based on the National Building Code of Canada 2005.
- 2. The following wind loads and factors were used: q50=0.63kPa, lw=1.0-ULS, 0.75-SLS.

**FIELD REVIEW BY STRUCTURAL ENGINEER**

- 1. Structural Engineer provides field review only for the work shown on these structural drawings, and it is conducted with such frequency as Structural Engineer deems appropriate to ascertain that the work is in general conformance with the documents prepared by Structural Engineer.  
Field review by Structural Engineer is not carried out for the Contractor's benefit, nor does it make Structural Engineer guarantors of the Contractor's work. It remains the Contractor's responsibility to build the work in conformance with the contract documents. Structural Engineer shall not be responsible for the acts or omissions of the Contractor, Sub-Contractor, or any other persons performing any of the work or for the failure of any of them to carry out the work in accordance with the contract documents.
- 2. Provide 24 hours advance notice of each required field review. Field reviews shall be scheduled to be carried out during normal business hours unless special arrangements are made with the Structural Engineer.
- 3. The work to be reviewed shall be generally complete.

**CONCRETE AND REINFORCING STEEL**

- 1. Concrete work shall conform to CAN/CSA-A23.1, CAN/CSA -A23.2, CAN/CSA -A23.3 and referenced documents.
- 2. Reinforcing shall conform to CAN/CSA-G30.18R – Grade 400MPa.
- 3. Cover to reinforcing steel to be 50mm uno.
- 4. Portland cement shall be type gu unless noted otherwise.
- 5. Concrete shall have a unit weight of 23±1 kn/m3/ (145±5 pcf) unless noted otherwise.

STRUCTURAL NOTES (cont)

- 6. Concrete shall have a compressive strength of 35MPa at 28 days, and conform to exposure class C-1 with a maximum water-cement ratio of 0.40 and air content of 5-8%. Maximum aggregate size to be 19mm.
- 7. No calcium chloride is permitted, in any form, in any concrete mix. Curing and protection of concrete for hot, cold or dry weather is to be as per clauses 7.4.1.8 and 7.4.2 of CAN/CSA.

**STRUCTURAL ALUMINUM**

- 1. Aluminum sections shall be new.
- 2. Aluminum alloys shall conform to the Aluminum Association publication Aluminum Standards and Data ISO 6361-2 or ISO 6362-2.
- 3. Extruded shapes, Tubes, Bolts, and Plate to be 6061 alloy uno.
- 4. Aluminum in contact with concrete or grout shall be given a heavy coat of alkali-resistant bituminous paint or other equivalent coating before installation.
- 5. Welding operators and procedures shall be qualified according to CSA W47.2.
- 6. Submit shop drawings for review prior to start of steel fabrication.
- 7. Fabrication practices and tolerances shall be in accordance with CAN/CSA-S16, except bolt holed edge distance tolerance to be -0, +2mm.
- 8. Anchor and connection bolts to be ASTM A193 Stainless Steel. Anchors shall be embedded 300mm into concrete, complete with a nut and washer each end.
- 9. Unless noted otherwise, column base plates shall be 20 mm minimum thick. Anchor bolt holes shall be punched undersize and reamed to size.
- 10. Provide 6 mm cap plates for all tube members uno.
- 11. Aluminum shall be connected with fillet welds all-around uno. Weld size shall match the wall thickness of the thinnest part being connected uno. Welds to be ground smooth.

**TAMPER RESISTANCE AND CONNECTIONS**

- 1. Connection hardware to be stainless steel uno.
- 2. Aluminum panels to be connected to structure with 6.4mm diameter stainless steel self-tapping screws at 450mm maximum centre to centre spacing.
- 3. Non-removable panels may be welded or glued by the manufacturer, as approved by Structural Engineer.
- 4. Panel connection screws to be tamper resistant "Torx-Pin" screws as supplied by O.E.M. Hardware of Surrey BC, or equivalent as approved by Structural Engineer.
- 5. Visible connection bolts shall be "Pentagon" tamper resistant bolts, with "Pentagon" nuts as supplied by O.E.M. Hardware of Surrey BC, or equivalent as approved by Structural Engineer. Anchor bolts to be secured with "Pentagon" security nuts.

ELECTRICAL NOTES

- 1. Signs must be provided with CSA label
- 2. LED modules, power supplies, cable, wire and junction box must be integral with signs
- 3. All electrical installations to be done in accordance with the Canadian Electrical Code and as reccomended by the LED lighting manufacturer.
- 4. Run 2#8 +GND conductors in 27mm PVC conduit from sign to existing campus exterior lighting pole standard. Intercept existing underground conduit, install an H20 rated flush junction box with bolt-on cover and splice into exterior lighting circuit.
- 4. The sign manufacturer shall provide an electrical shop drawings indicating input power requirements and a schematic wiring diagram for the sign.



Sheet List	
Sheet Number	Sheet Name
01	title sheet and drawing list
02	typography, colours and pictograms
03	sign design - overview
04	sign design - graphic design details
05	sign construction - section
06	sign construction - plans and sections
07	sign construction - details
08	sign construction - push thru pictogram
09	general notes



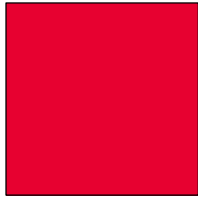
# Sign No. 9

## Pedestrian - Major Directional

core colours



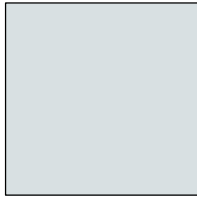
clear anodized coating  
application: sign structure



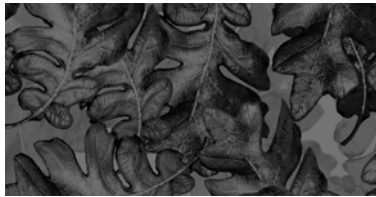
PANTONE 185 C  
application:  
pinstrip, arrows



PANTONE 426 C  
application: text,  
crest - monochromatic



PANTONE 7541 C  
application: background



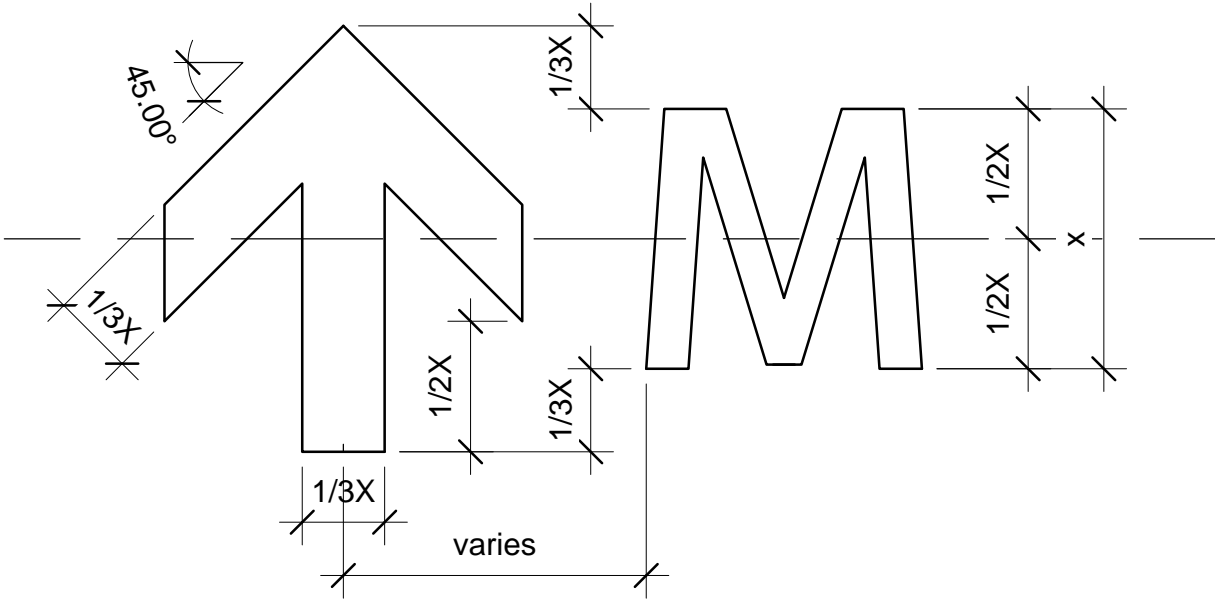
garry oak motif - digital file is to be delivered  
by University of Victoria

samples of typeface family

Myriad Pro Semi Bold

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
1234567890

arrow style and arrow size in relation to text height



University of Victoria Logo, horizontal standard



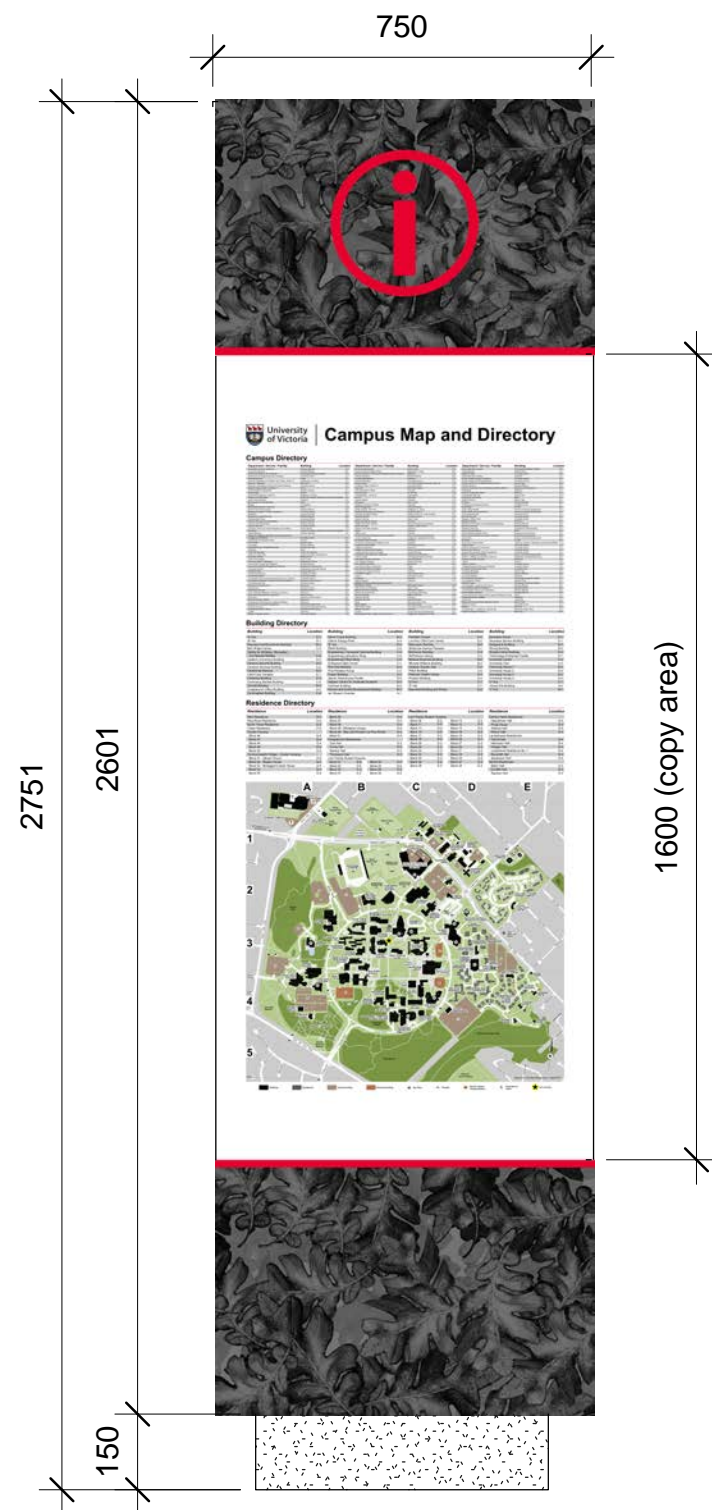
University  
of Victoria



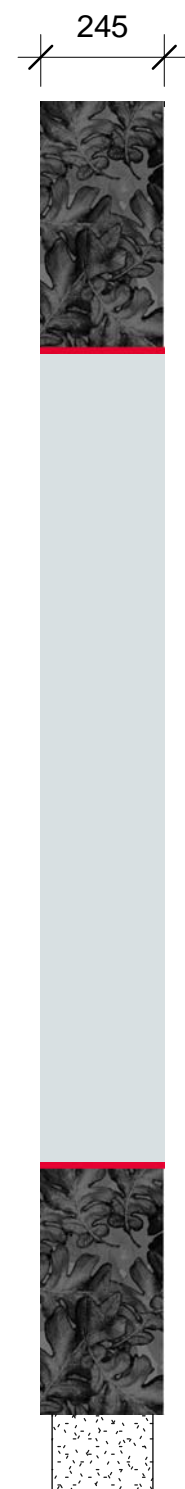
full colour

reverse monochromatic - shown against background for clarity

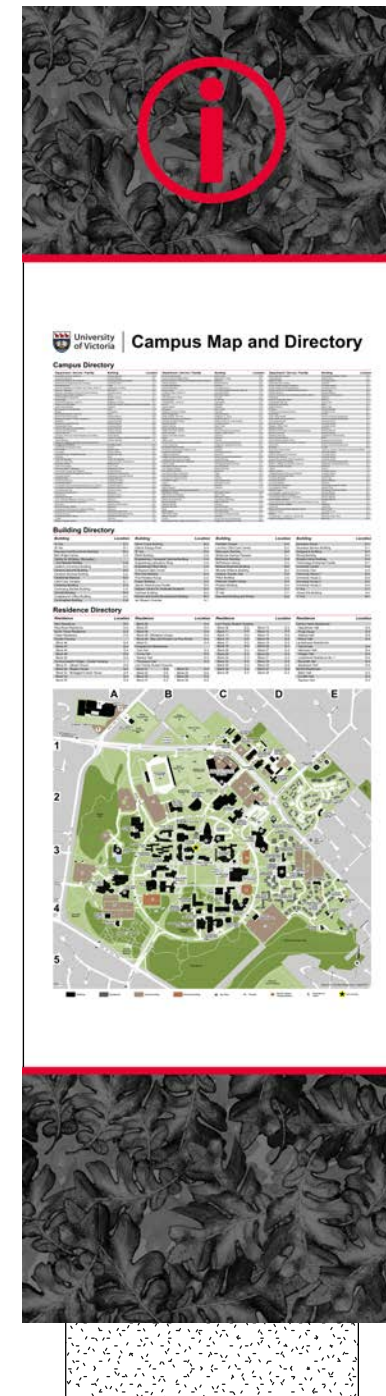




**back**



**side**



**front**



**side**

General Note:  
Where applicable, provide 6.4mm  
thick aluminum spacer  
under aluminum sign panels  
to make up for acrylic panel  
thickness  
see also detail 3/9-07

**scale 1:15**

project: Campus Wayfinding  
number: FM 09-8567  
issue date: April 1, 2019

sign: Sign No. 9 - Major Directional  
sheet name: sign design - overview  
scale: as noted

sheet  
number:

03



University  
of Victoria

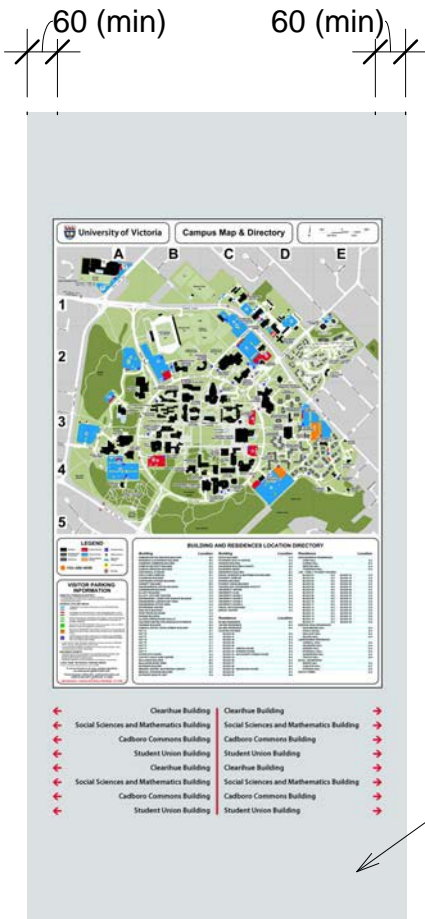
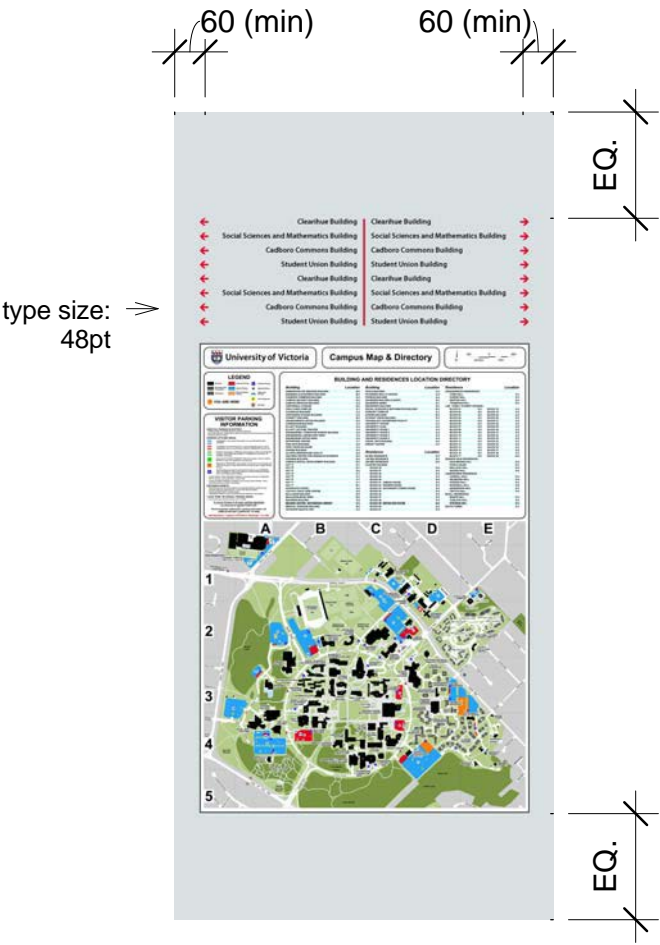
Digitally printed vinyl protected with anti-graffiti, optically clear overlaminate.  
Aluminum panel size:  
283 mm x 744 mm x 3.2 mm



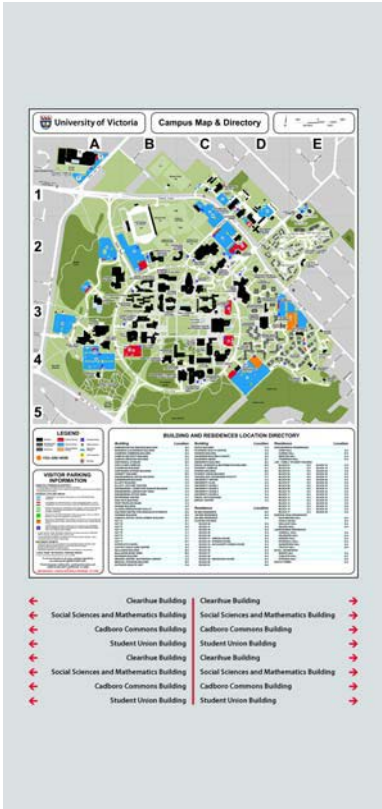
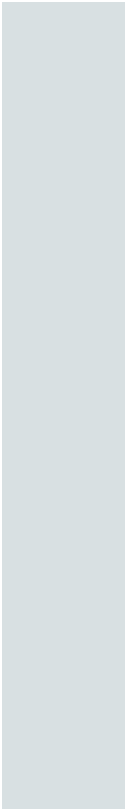
Digitally printed vinyl protected with anti-graffiti, optically clear overlaminate.  
Aluminum panel size:  
270 mm x 506 mm x 3.2 mm



Digitally printed vinyl protected with anti-graffiti, optically clear overlaminate.  
19mm thick acrylic push-thru pictogram - see dwg 08 for details.  
Aluminum panel size:  
744 mm x 506 mm x 6.4 mm



Digitally printed vinyl protected with anti-graffiti, optically clear overlaminate.  
For aluminum panel size see sign construction drawings



Non-glare clear acrylic:  
Plaskolite OPTIX Abrasion Resistant Non-Glare or equivalent.  
Clear acrylic (pictograms):  
Plaskolite OPTIX, Chemcast GP or equivalent

First surface prints:  
Vinyl: 3M IJ180, MPI 2005 or equivalent  
Overlaminate: 3M 8914, Avery DOL 6060 or equivalent.

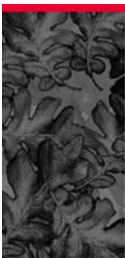
2nd surface prints:  
CAV-50 reverse print - i/w/i (2nd surface)  
Overlaminate: 3M 8914, Avery DOL 6060 or equivalent (first surface)

- 1) Vinyl to be printed on, installed as per manufacturer's recommendations.
- 2) Use compatible UV inks and overlaminates as recommended by manufacturer
- 3) Where applicable wrap vinyl and overlaminate over the edges of the alu. panel.
- 4) All panels to be mechanically fastened to substrate.
- 5) Directory map shown for reference only. directory map with all associated texts and pictograms to be provided in digital format by University of Victoria
- 6) Manufacturer to confirm all dimensions prior to fabrication.
- 7) Manufacturer to ensure watertightness of panel conenctions.

pin strip to be 15 mm wide (typ) →



Digitally printed vinyl protected with anti-graffiti, optically clear overlaminate.  
Aluminum panel size:  
270 mm x 506 mm x 3.2 mm



Refer to Adobe Photoshop files for detailed sample layout

Digitally printed vinyl protected with anti-graffiti, optically clear overlaminate.  
Aluminum panel size:  
744 mm x 506 mm x 6.4 mm

**scale 1:15**

**sides**

**front**

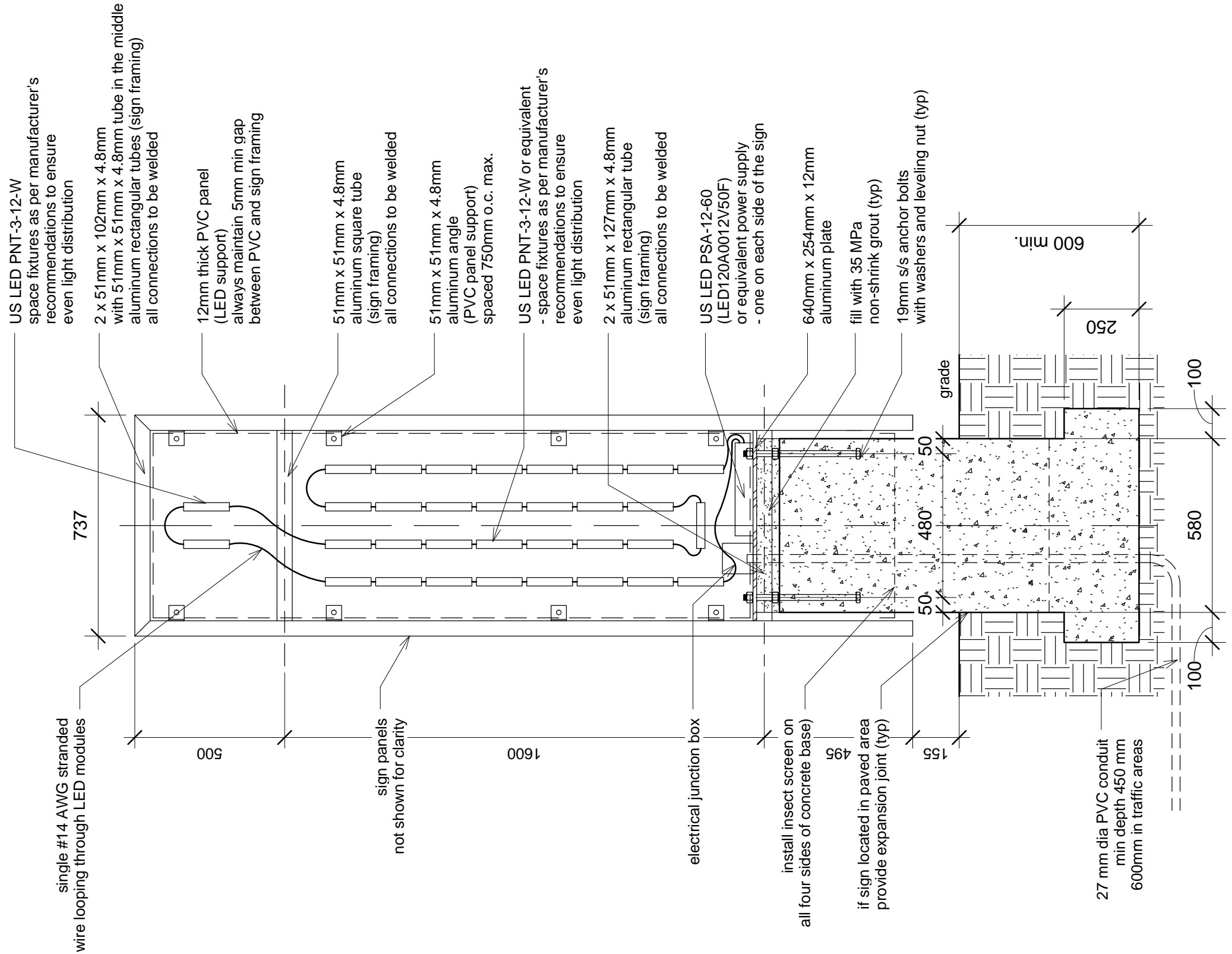
project: Campus Wayfinding  
number: FM 09-8567  
issue date: April 1, 2019

sign: Sign No. 9 - Major Directional  
sheet name: sign design - graphic design details  
scale: as noted

sheet number:

**04**

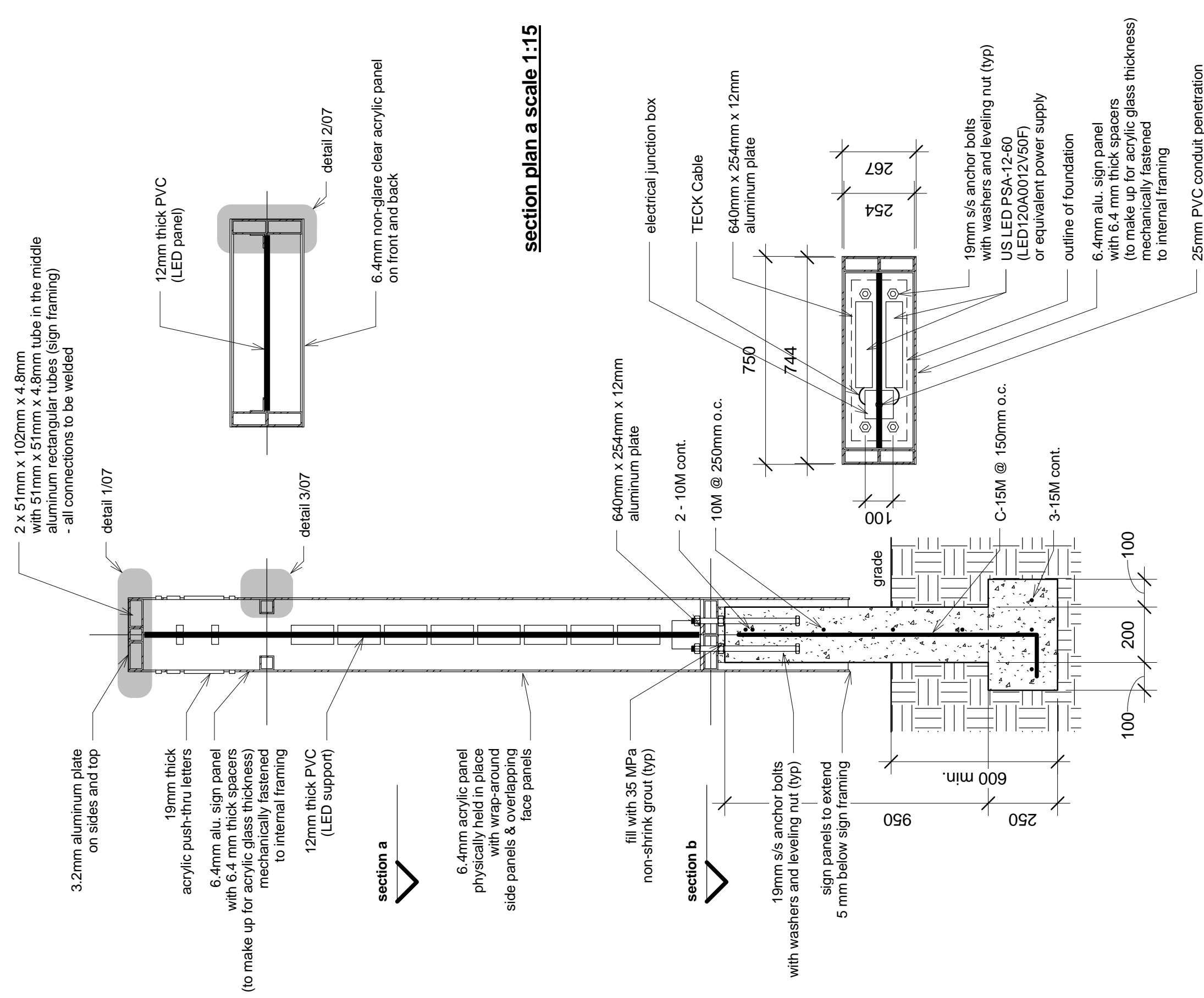




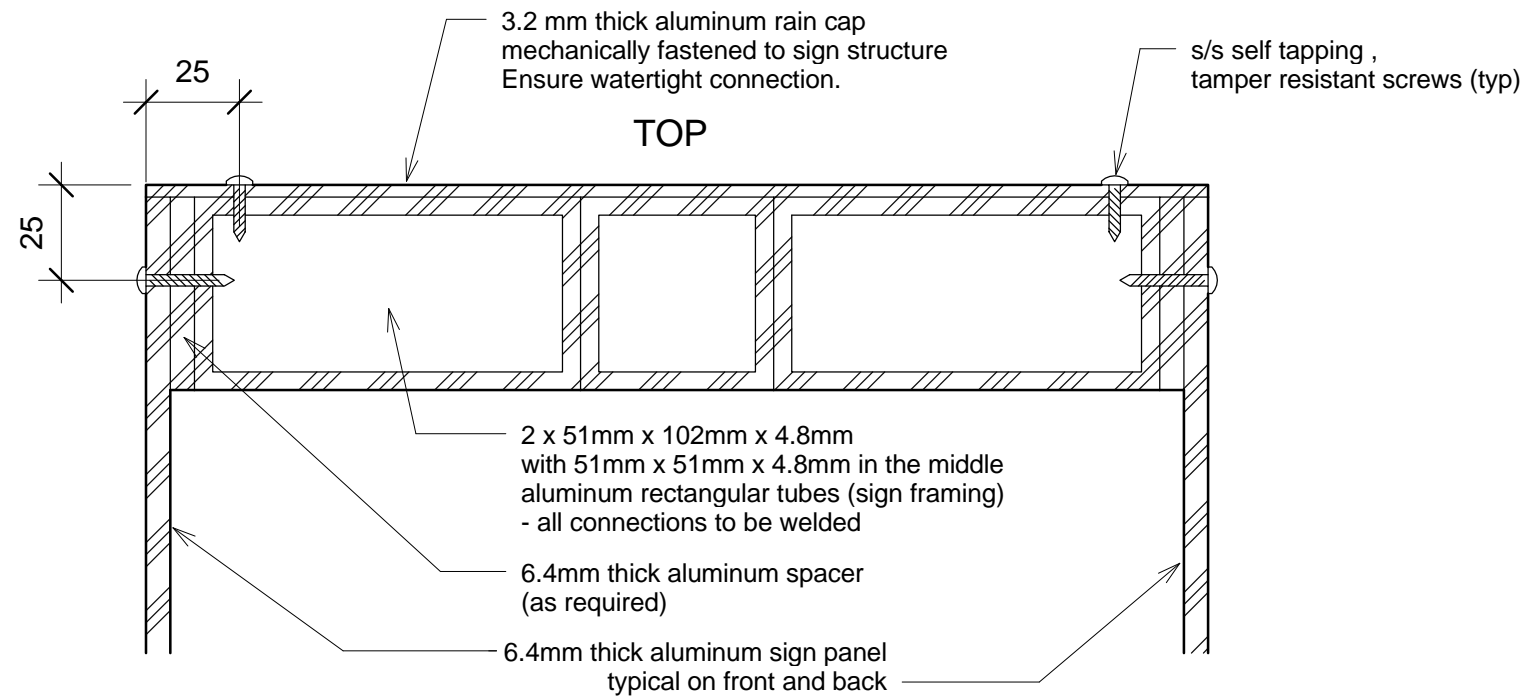
- 1) provide ventilation holes as required
- 2) US LED PSA-12-60power supply to provide source of power to a max. of 50 MegaBright 12 LED Modules
- 3) Sign must have a CSA label as an assembly

General Note:  
 Manufacturer to verify all diemnsions prior to sign fabrication. All discrepancies should be reported to the Architect.

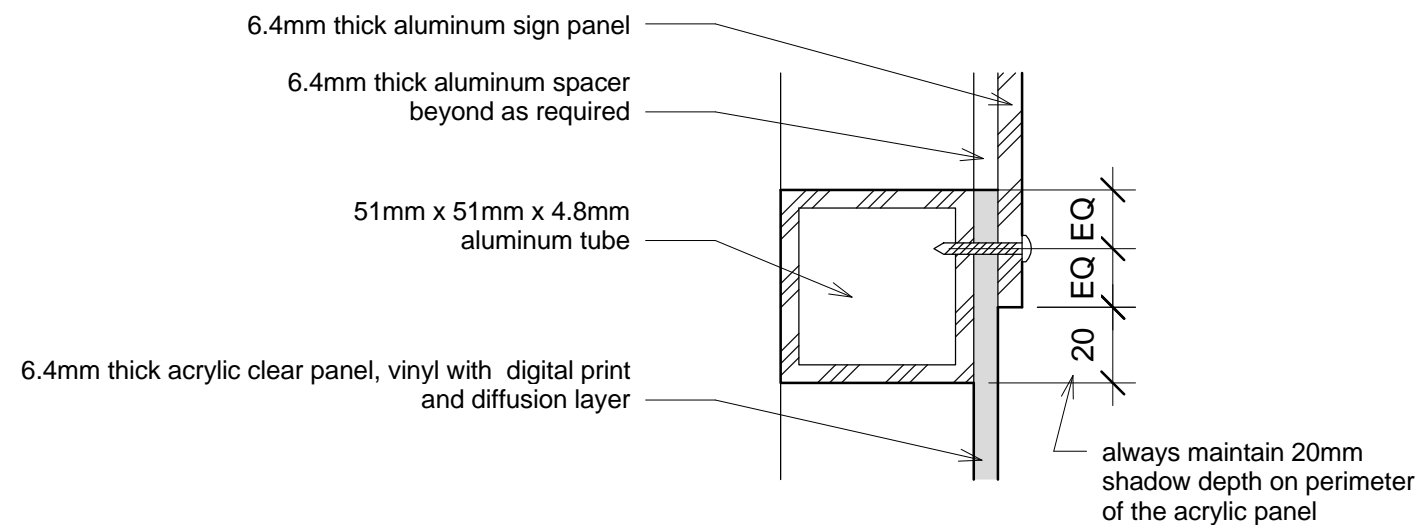






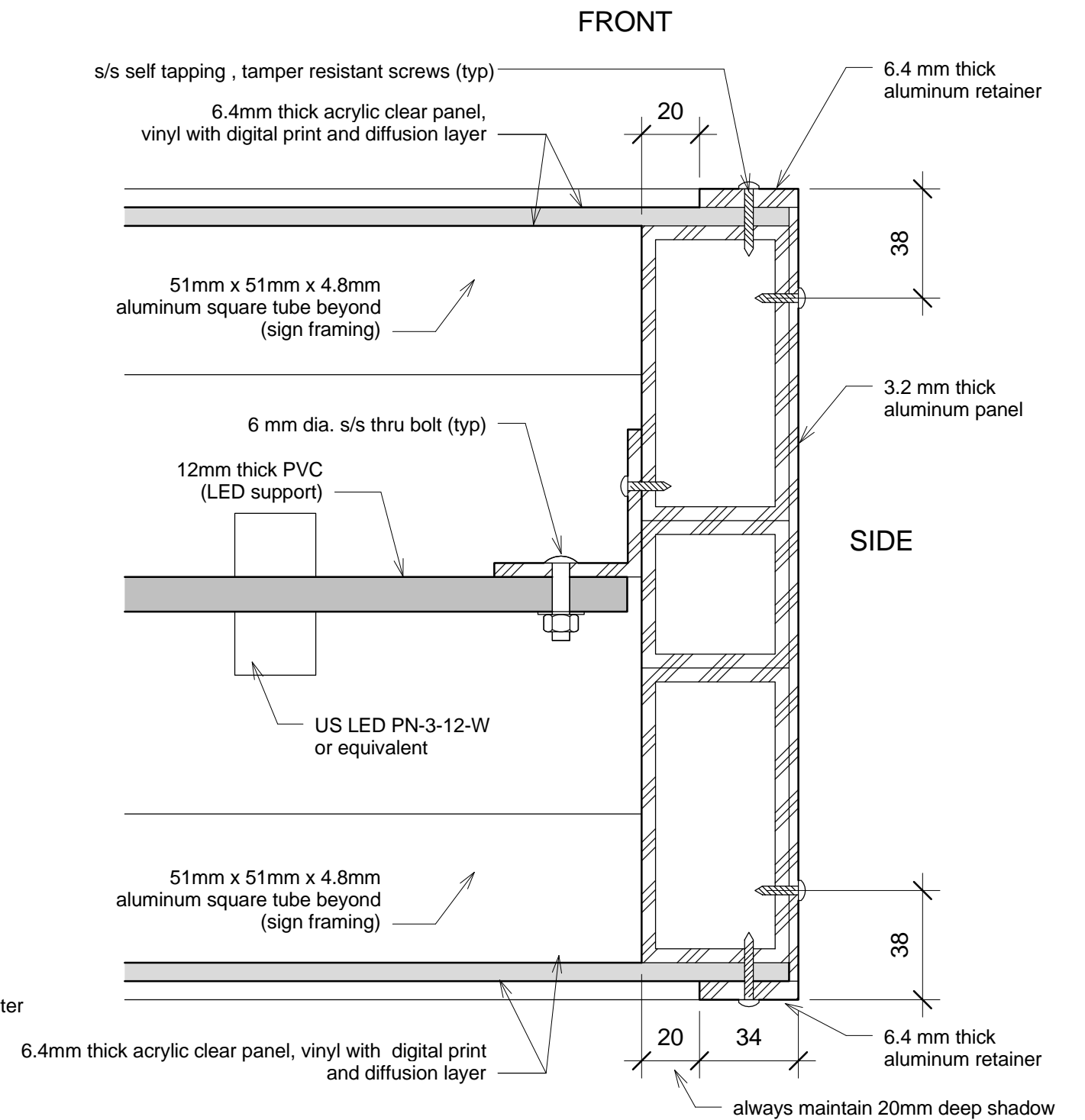


**detail 1 scale 1:2**

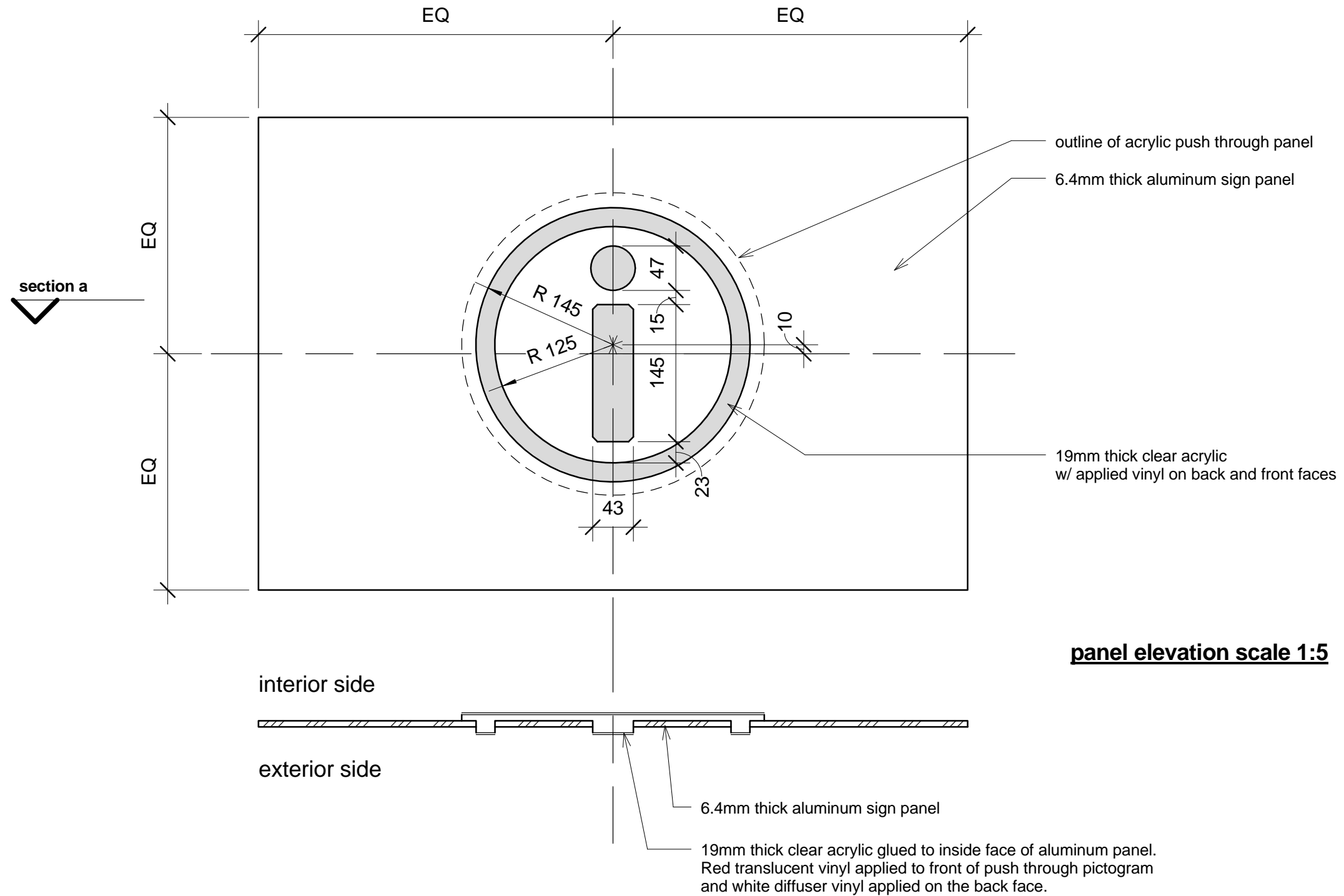


**detail 3 scale 1:2**

General Note:  
Manufacturer to verify all dimensions prior to sign fabrication. All discrepancies should be reported to the Architect.



**detail 2 scale 1:2**



General Note:  
Manufacturer to verify all dimensions prior to sign fabrication. All discrepancies should be reported to the Architect.

**section a scale 1:5**

GENERAL NOTES

- 1. Provide self adhesive sign ID stickers. ID's should correspond with ID's shown on location plan  
Form and placement of stickers on signs is to be coordinated with University of Victoria
- 2. Fasteners:
  - foundation (anchor bolts):
  - bolts: Fastenal part #47349 (3/4" s/s threaded )
  - washers: Fastenal part #71027 (3/4" s/s wahers)
  - nuts: Fastenal part #70717 (3/4" s/s nuts)
  - panels:
  - security screws panel attachment: Fastenal part #BS0160024SSH200 (10-24 x 3/4" button head security screw)
- 3. Whenever anchor bolts are cut, contractor to ensure cut surfaces (terminated coating) are protected against rusting.
- 4. Manufacturer to verify all diemnsions prior to sign fabrication. All discrepancies should be reported to the Architect.

STRUCTURAL NOTES

DRAWINGS

- 1. These drawings show the completed project. The drawings do not show components that may be necessary for construction safety, which is the responsibility of the contractor.
- 2. The use of these drawings is limited to that indicated in the revisions column.
- 3. The information on these drawings shall not be used for any other project or works.

DESIGN

- 1. The structures shown have been designed in substantial accordance with the British Columbia Building Code 2006, which is based on the National Building Code of Canada 2005.
- 2. The following wind loads and factors were used: q50=0.63kPa, lw=1.0-ULS, 0.75-SLS.

FIELD REVIEW BY STRUCTURAL ENGINEER

- 1. Structural Engineer provides field review only for the work shown on these structural drawings, and it is conducted with such frequency as Structural Engineer deems appropriate to ascertain that the work is in general conformance with the documents prepared by Structural Engineer.  
Field review by Structural Engineer is not carried out for the Contractor's benefit, nor does it make Structural Engineer guarantors of the Contractor's work. It remains the Contractor's responsibility to build the work in conformance with the contract documents. Structural Engineer shall not be responsible for the acts or omissions of the Contractor, Sub-Contractor, or any other persons performing any of the work or for the failure of any of them to carry out the work in accordance with the contract documents.
- 2. Provide 24 hours advance notice of each required field review. Field reviews shall be scheduled to be carried out during normal business hours unless special arrangements are made with the Structural Engineer.
- 3. The work to be reviewed shall be generally complete.

CONCRETE AND REINFORCING STEEL

- 1. Concrete work shall conform to CAN/CSA-A23.1, CAN/CSA -A23.2, CAN/CSA -A23.3 and referenced documents.
- 2. Reinforcing shall conform to CAN/CSA-G30.18R – Grade 400MPa.
- 3. Cover to reinforcing steel to be 50mm uno.
- 4. Portland cement shall be type gu unless noted otherwise.
- 5. Concrete shall have a unit weight of 23±1 kn/m3/ (145±5 pcf) unless noted otherwise.

STRUCTURAL NOTES (cont)

- 6. Concrete shall have a compressive strength of 35MPa at 28 days, and conform to exposure class C-1 with a maximum water-cement ratio of 0.40 and air content of 5-8%. Maximum aggregate size to be 19mm.
- 7. No calcium chloride is permitted, in any form, in any concrete mix. Curing and protection of concrete for hot, cold or dry weather is to be as per clauses 7.4.1.8 and 7.4.2 of CAN/CSA.

STRUCTURAL ALUMINUM

- 1. Aluminum sections shall be new.
- 2. Aluminum alloys shall conform to the Aluminum Association publication Aluminum Standards and Data ISO 6361-2 or ISO 6362-2.
- 3. Extruded shapes, Tubes, Bolts, and Plate to be 6061 alloy uno.
- 4. Aluminum in contact with concrete or grout shall be given a heavy coat of alkali-resistant bituminous paint or other equivalent coating before installation.
- 5. Welding operators and procedures shall be qualified according to CSA W47.2.
- 6. Submit shop drawings for review prior to start of steel fabrication.
- 7. Fabrication practices and tolerances shall be in accordance with CAN/CSA-S16, except bolt holed edge distance tolerance to be -0, +2mm.
- 8. Anchor and connection bolts to be ASTM A193 Stainless Steel. Anchors shall be embedded 300mm into concrete, complete with a nut and washer each end.
- 9. Unless noted otherwise, column base plates shall be 20 mm minimum thick. Anchor bolt holes shall be punched undersize and reamed to size.
- 10. Provide 6 mm cap plates for all tube members uno.
- 11. Aluminum shall be connected with fillet welds all-around uno. Weld size shall match the wall thickness of the thinnest part being connected uno. Welds to be ground smooth.

TAMPER RESISTANCE AND CONNECTIONS

- 1. Connection hardware to be stainless steel uno.
- 2. Aluminum panels to be connected to structure with 6.4mm diameter stainless steel self-tapping screws at 450mm maximum centre to centre spacing.
- 3. Non-removable panels may be welded or glued by the manufacturer, as approved by Structural Engineer.
- 4. Panel connection screws to be tamper resistant “Torx-Pin” screws as supplied by O.E.M. Hardware of Surrey BC, or equivalent as approved by Structural Engineer.
- 5. Visible connection bolts shall be “Pentagon” tamper resistant bolts, with “Pentagon” nuts as supplied by O.E.M. Hardware of Surrey BC, or equivalent as approved by Structural Engineer. Anchor bolts to be secured with “Pentagon” security nuts.

ELECTRICAL NOTES

- 1. Signs must be provided with CSA label
- 2. LED modules, power supplies, cable, wire and junction box must be integral with signs
- 3. All electrical installations to be done in accordance with the Canadian Electrical Code and as reccomended by the LED lighting manufacturer.
- 4. Run 2#8 +GND conductors in 27mm PVC conduit from sign to existing campus exterior lighting pole standard. Intercept existing underground conduit, install an H20 rated flush junction box with bolt-on cover and splice into exterior lighting circuit.
- 4. The sign manufacturer shall provide an electrical shop drawings indicating input power requirements and a schematic wiring diagram for the sign.



Sheet List	
Sheet Number	Sheet Name
01	title sheet and drawing list
02	typography, colours and pictograms
03	sign design - overview
04	graphic design details
05	sign construction - sections
06	sign construction - details
07	general notes - structural



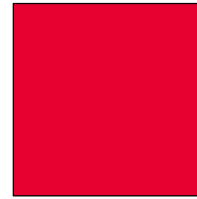
# Sign No. 10 Pedestrian - Intermediate Directional



## core colours



clear anodized coating



PANTONE 185 C  
pinstrip, arrows



PANTONE 426 C  
text



PANTEONE 7541 C  
background



gary oak motif - digital file is to be delivered  
by University of Victoria

## **samples of typeface family**

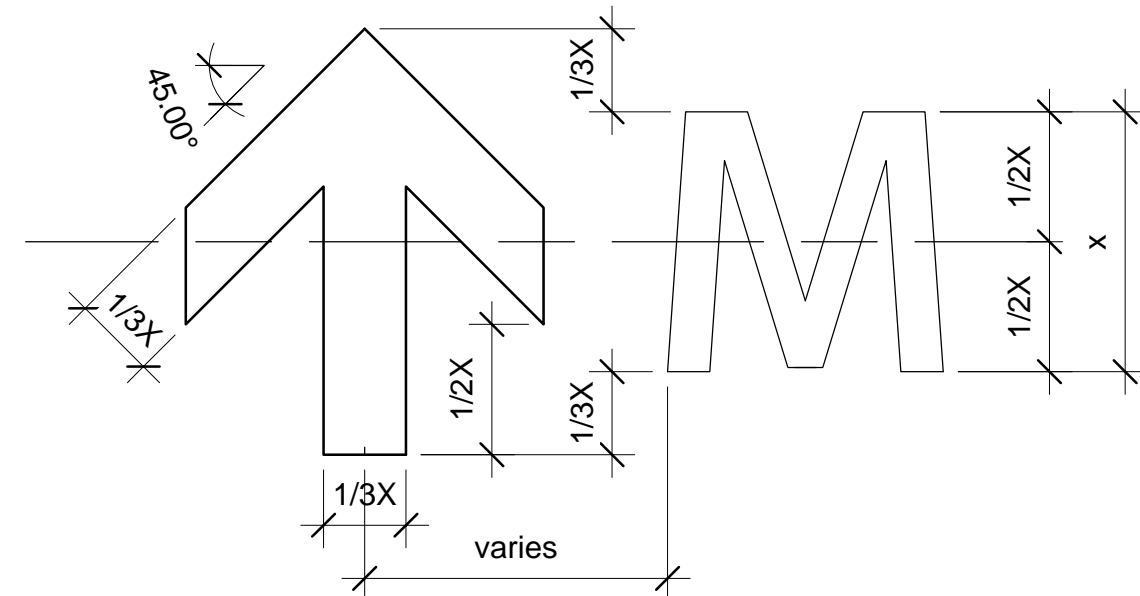
## Myriad Pro Semi Bold

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

1234567890

### arrow style and arrow size in relation to text height



**University of Victoria Logo, horizontal standard**

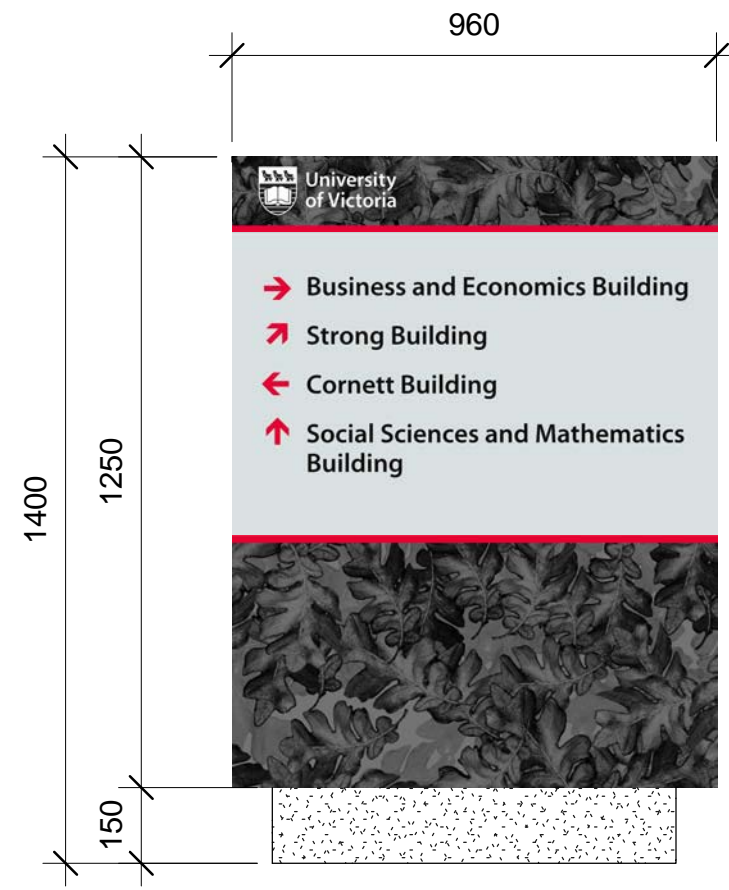


# University of Victoria



**full colour**

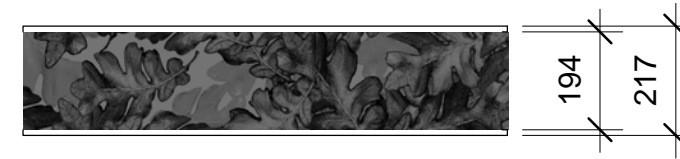
**reverse monochromatic - shown against background for clarity**



**back**



**side**



**top**

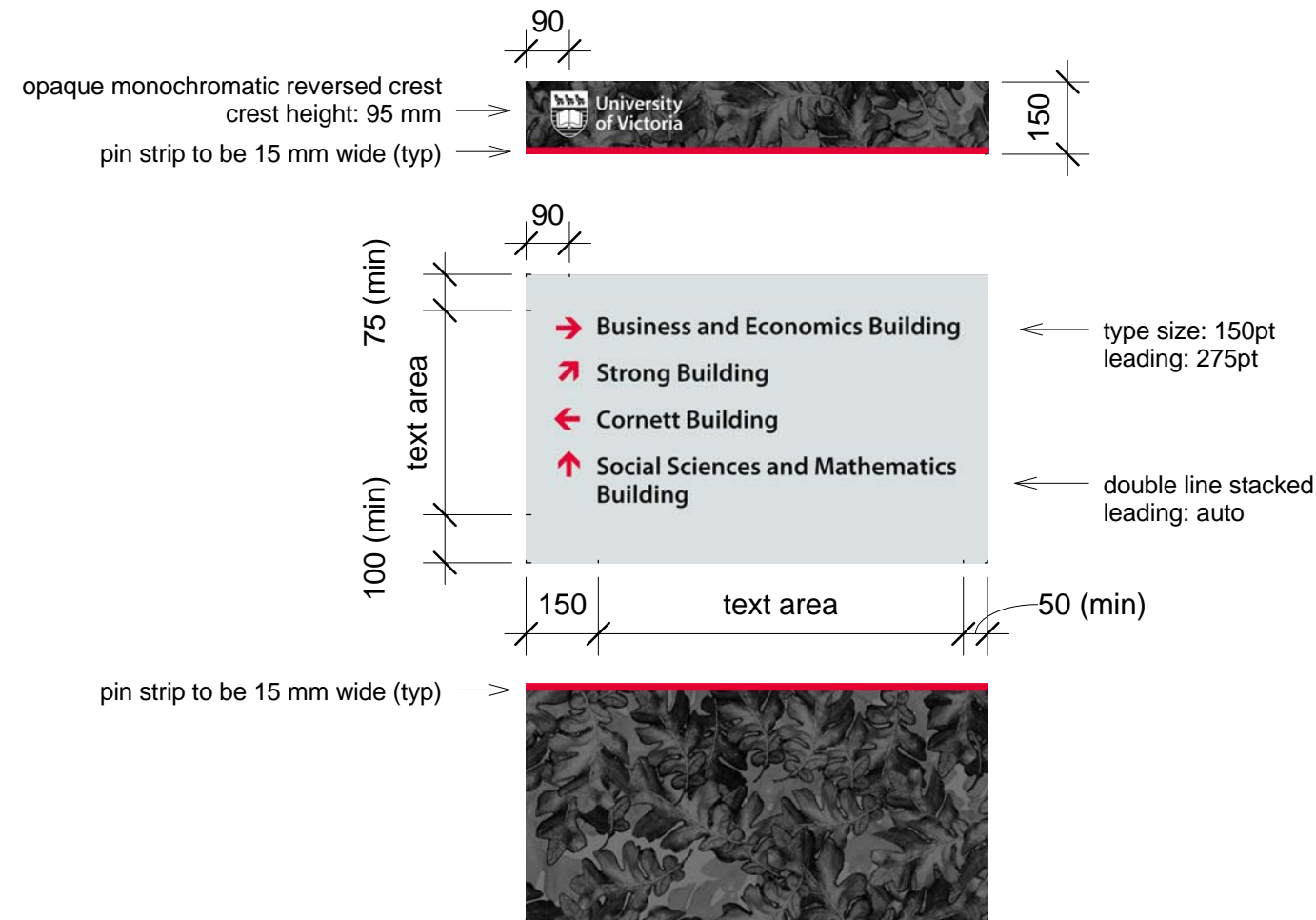


**front**



**side**

**scale 1:15**



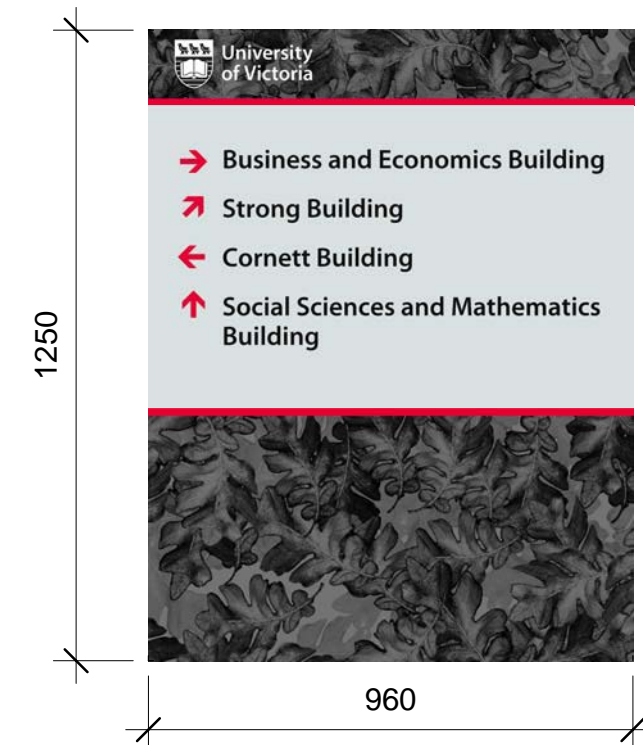
**scale 1:15**

Description  
Digitally printed vinyl protected with  
anti-graffiti, optically clear overlaminate  
Front/Back aluminum panel size (one piece): 960 mm x 1250 mm x 6.4 mm  
Top Aluminum panel size (one piece): 194 mm x 960 mm x 3.2 mm  
Side aluminum panle size (one piece): 194 mm x 1243.6 mm x 3.2 mm  
See sheet 05 for details.

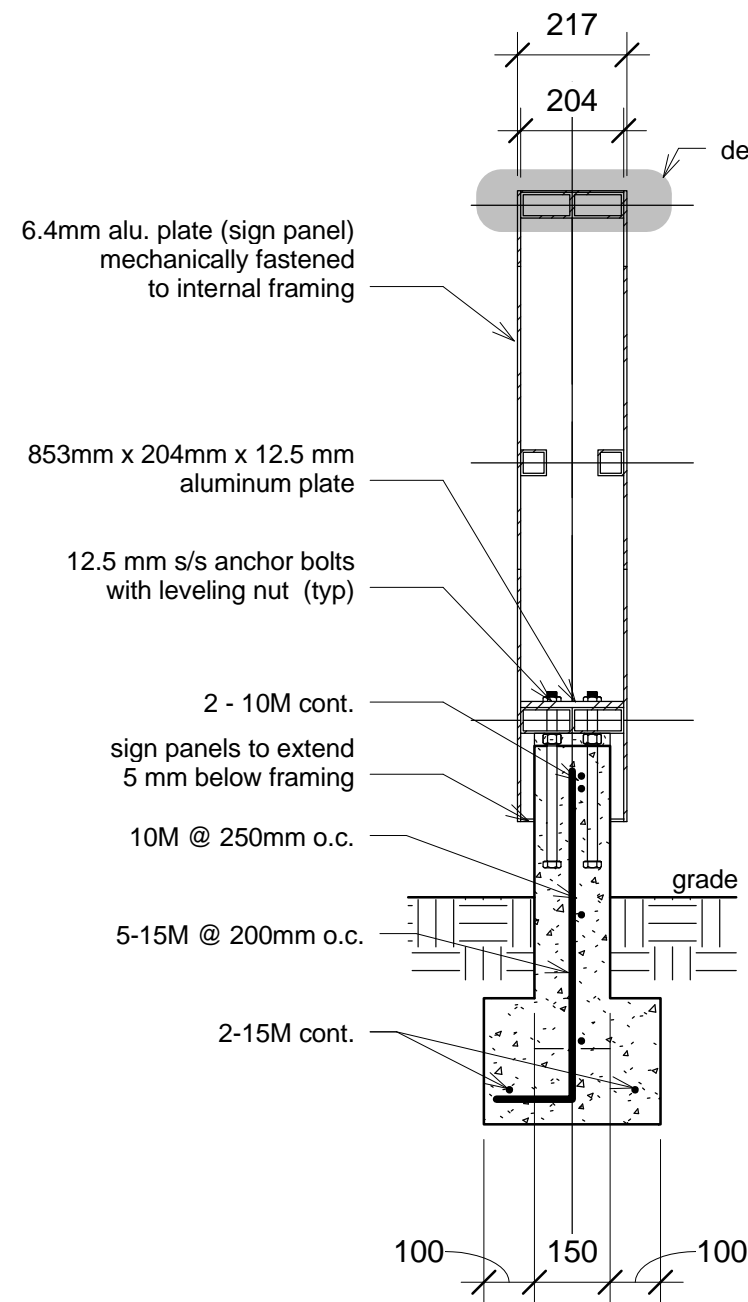
Vinyl: 3M IJ180, MPI 2005 or equivalent  
Overlaminate: 3M 8914, Avery DOL 6060 or equivalent.

- 1) One piece vinyl to be printed on, installed as per manufacturer's recommendations.
- 2) Use compatible UV inks and overlaminates as recommended by manufacturer
- 3) Wrap vinyl and overlaminate over the edges of the aluminum panels.

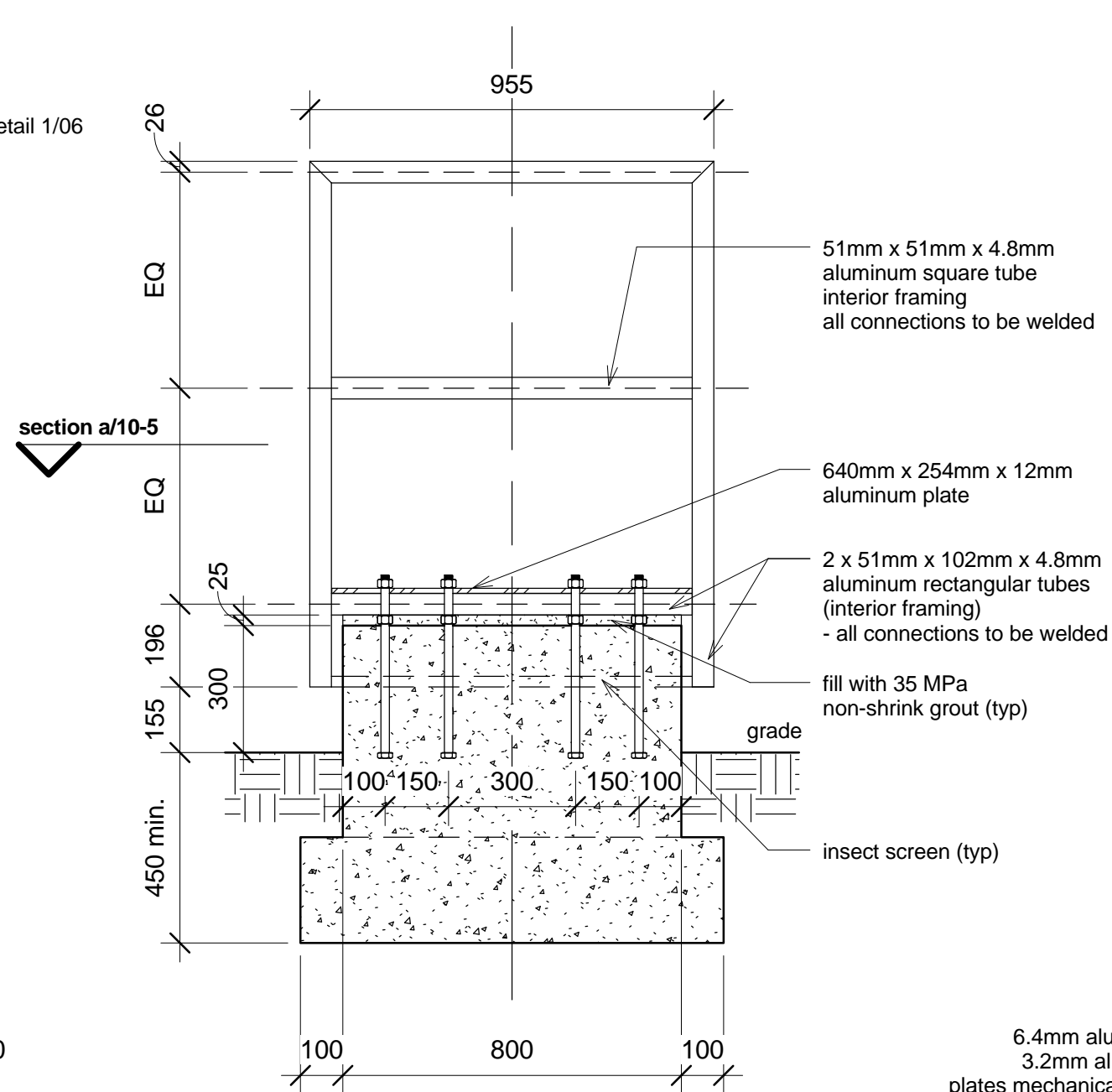
Refer to Adobe Photoshop files for detailed sample layout



**scale 1:15**

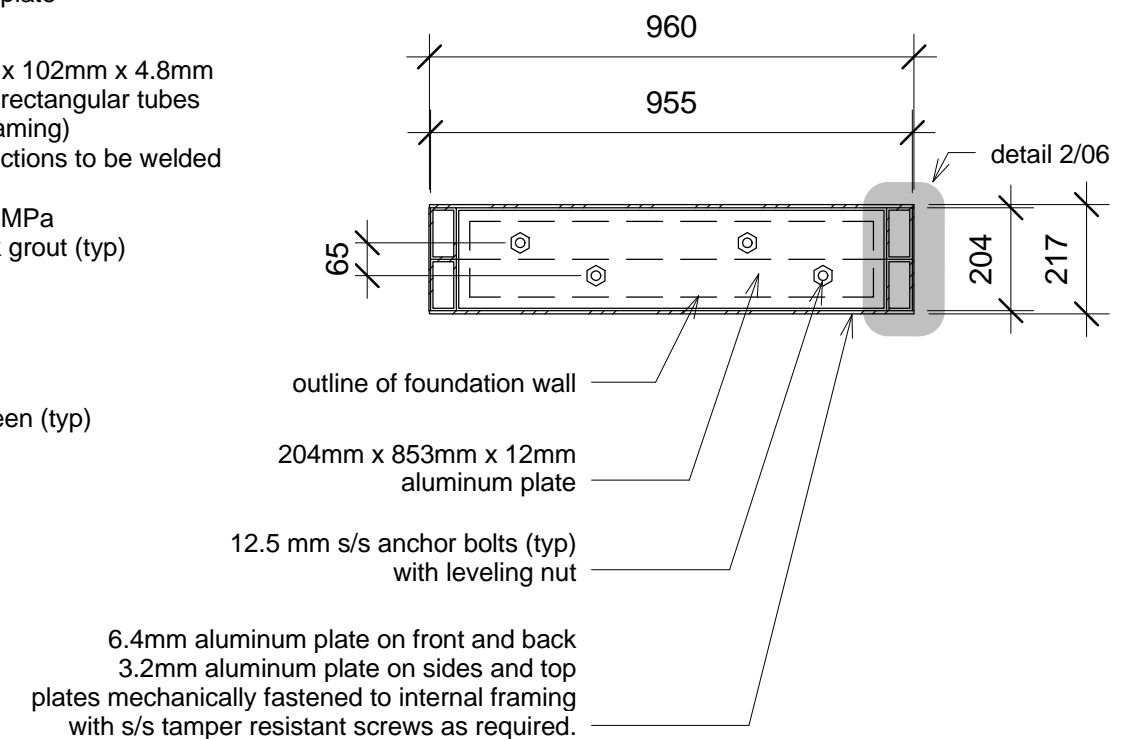


**cross section scale 1:15**



**long section scale 1:15**

General Note:  
Manufacturer to verify all dimensions  
prior to sign fabrication. All discrepancies  
should be reported to the Architect.



**plan section a scale 1:15**

project: Campus Wayfinding  
number: FM 09-8567  
issue date: April 1, 2019

sign: Sign No. 10 - Intermediate Directional  
sheet name: sign construction - sections  
scale: as noted

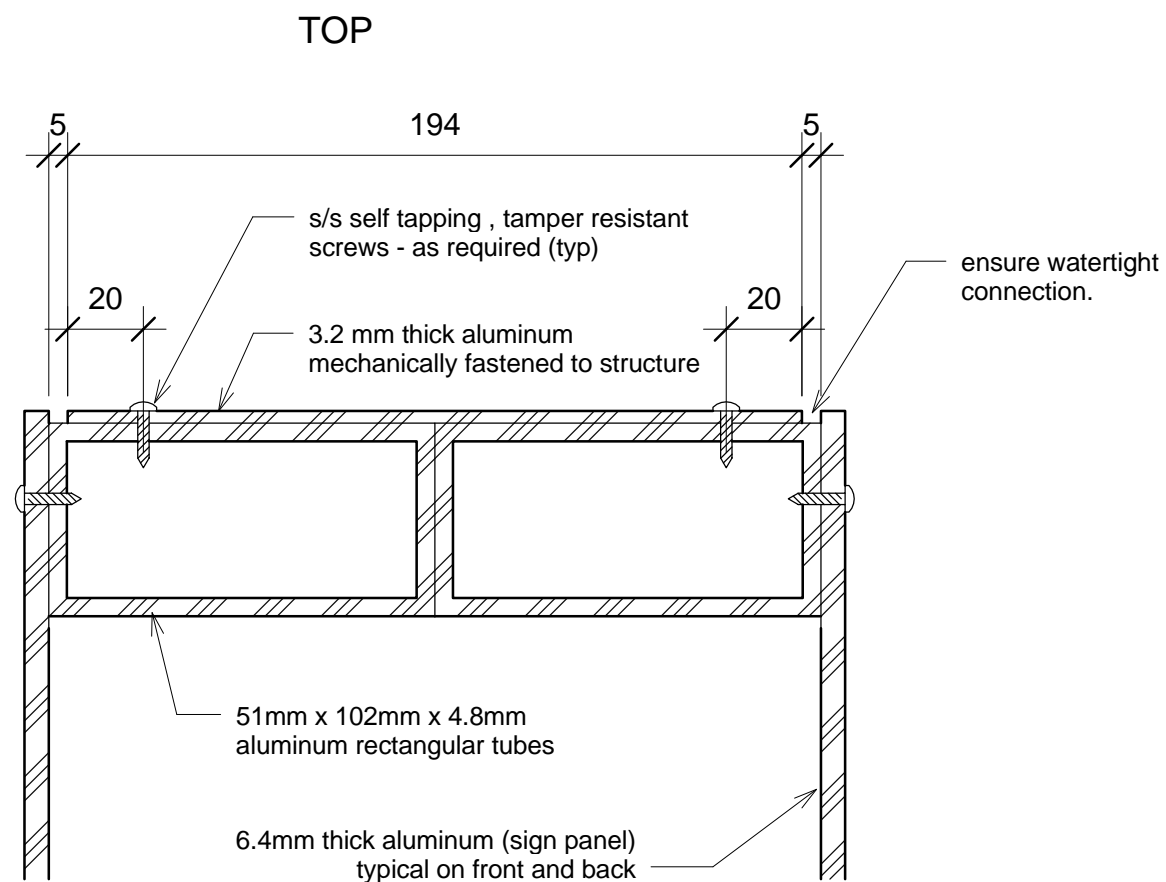
sheet  
number:

05

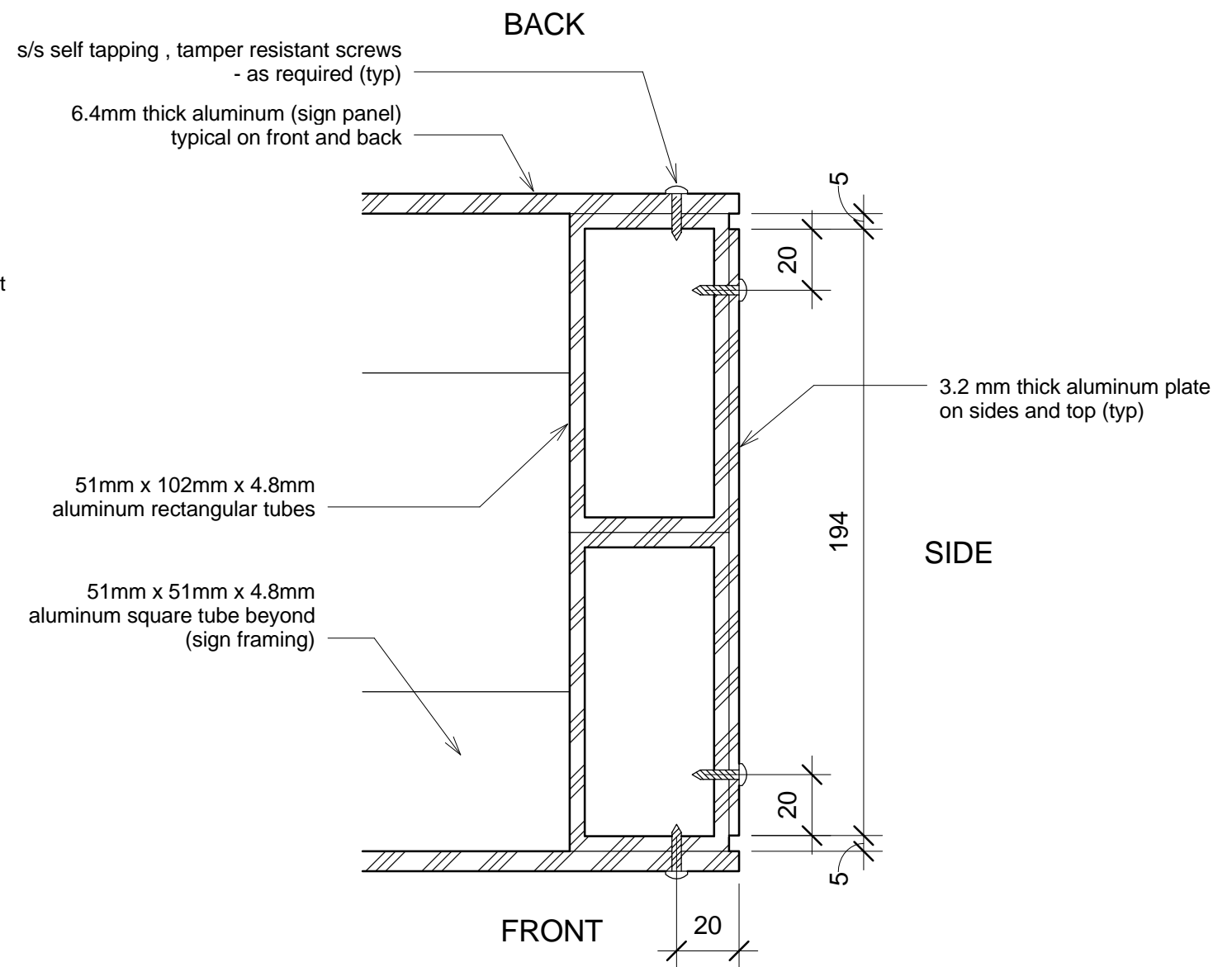


University  
of Victoria





**section detail 1 scale 1:2**



**plan detail 2 scale 1:2**

General Note:  
Manufacturer to verify all dimensions prior to sign fabrication. All discrepancies should be reported to the Architect.

GENERAL NOTES

- 1. Provide self adhesive sign ID stickers. ID's should correspond with ID's shown on location plan  
Form and placement of stickers on signs is to be coordinated with University of Victoria
- 2. Fasteners:
  - foundation (anchor bolts):
  - bolts: Fastenal part #47406 (1/2" s/s threaded rod)
  - washers: Fastenal part #71021 (1/2" s/s washers)
  - nuts: Fastenal part #70714 (1/2" s/s nuts)
  - panels:
  - security screws panel attachment: Fastenal part #BS0160024SSH200 (10-24 x 3/4" button head security screw )
- 3. Threadlocker: Loctite 271 Red
- 4. Whenever anchor bolts are cut, contractor to ensure cut surfaces (terminated coating) are protected against rusting.
- 5. Manufacturer to verify all diemnsions prior to sign fabrication. All discrepancies should be reported to the Architect.

STRUCTURAL NOTES

DRAWINGS

- 1. These drawings show the completed project. The drawings do not show components that may be necessary for construction safety, which is the responsibility of the contractor.
- 2. The use of these drawings is limited to that indicated in the revisions column.
- 3. The information on these drawings shall not be used for any other project or works.

DESIGN

- 1. The structures shown have been designed in substantial accordance with the British Columbia Building Code 2006, which is based on the National Building Code of Canada 2005.
- 2. The following wind loads and factors were used: q50=0.63kPa, lw=1.0-ULS, 0.75-SLS.

FIELD REVIEW BY STRUCTURAL ENGINEER

- 1. Structural Engineer provides field review only for the work shown on these structural drawings, and it is conducted with such frequency as Structural Engineer deems appropriate to ascertain that the work is in general conformance with the documents prepared by Structural Engineer.  
Field review by Structural Engineer is not carried out for the Contractor's benefit, nor does it make Structural Engineer guarantors of the Contractor's work. It remains the Contractor's responsibility to build the work in conformance with the contract documents. Structural Engineer shall not be responsible for the acts or omissions of the Contractor, Sub-Contractor, or any other persons performing any of the work or for the failure of any of them to carry out the work in accordance with the contract documents.
- 2. Provide 24 hours advance notice of each required field review. Field reviews shall be scheduled to be carried out during normal business hours unless special arrangements are made with Structural Engineer.
- 3. The work to be reviewed shall be generally complete.

STRUCTURAL NOTES (cont)

CONCRETE AND REINFORCING STEEL

- 1. Concrete work shall conform to CAN/CSA-A23.1, CAN/CSA -A23.2, CAN/CSA -A23.3 and referenced documents.
- 2. Reinforcing shall conform to CAN/CSA-G30.18R – Grade 400MPa.
- 3. Cover to reinforcing steel to be 50mm uno.
- 4. Portland cement shall be type gu unless noted otherwise.
- 5. Concrete shall have a unit weight of 23±1 kn/m3/ (145±5 pcf) unless noted otherwise.
- 6. Concrete shall have a compressive strength of 35MPa at 28 days, and conform to exposure class C-1 with a maximum water-cement ratio of 0.40 and air content of 5-8%. Maximum aggregate size to be 19mm.
- 7. No calcium chloride is permitted, in any form, in any concrete mix. Curing and protection of concrete for hot, cold or dry weather is to be as per clauses 7.4.1.8 and 7.4.2 of CAN/CSA.

STRUCTURAL ALUMINUM

- 1. Aluminum sections shall be new.
- 2. Aluminum alloys shall conform to the Aluminum Association publication Aluminum Standards and Data ISO 6361-2 or ISO 6362-2.
- 3. Extruded shapes, Tubes, Bolts, and Plate to be 6061 alloy uno.
- 4. Aluminum in contact with concrete or grout shall be given a heavy coat of alkali-resistant bituminous paint or other equivalent coating before installation.
- 5. Welding operators and procedures shall be qualified according to CSA W47.2.
- 6. Submit shop drawings for review prior to start of steel fabrication.
- 7. Fabrication practices and tolerances shall be in accordance with CAN/CSA-S16, except bolt holed edge distance tolerance to be -0, +2mm.
- 8. Anchor and connection bolts to be ASTM A193 Stainless Steel. Anchors shall be embedded 300mm into concrete, complete with a nut and washer each end.
- 9. Unless noted otherwise, column base plates shall be 20 mm minimum thick. Anchor bolt holes shall be punched undersize and reamed to size.
- 10. Provide 6 mm cap plates for all tube members uno.
- 11. Aluminum shall be connected with fillet welds all-around uno. Weld size shall match the wall thickness of the thinnest part being connected uno. Welds to be ground smooth.

TAMPER RESISTANCE AND CONNECTIONS

- 1. Connection hardware to be stainless steel uno.
- 2. Aluminum panels to be connected to structure with 6.4mm diameter stainless steel self-tapping screws at 450mm maximum centre to centre spacing.
- 3. Non-removable panels may be welded or glued by the manufacturer, as approved by Structural Engineer.
- 4. Panel connection screws to be tamper resistant “Torx-Pin” screws as supplied by O.E.M.  
Hardware of Surrey BC, or equivalent as approved by Structural Engineer.
- 5. Visible connection bolts shall be “Pentagon” tamper resistant bolts, with “Pentagon” nuts as supplied by O.E.M. Hardware of Surrey BC, or equivalent as approved by Structural Engineer.  
Anchor bolts to be secured with “Pentagon” security nuts.

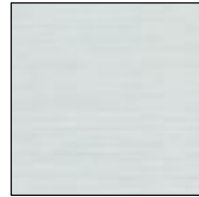


Sheet List	
Sheet Number	Sheet Name
01	title sheet and drawing list
02	typography, colours and pictograms
03	sign design/graphic design details
04	sign construction - sections and plans
05	general notes



# Sign No. 11 Pedestrian - Street Blade

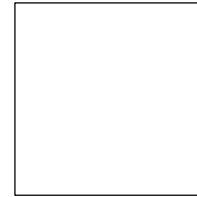
### core colours



clear anodized coating  
application: sign structure



PANTONE 185 C  
application: pinstrip, arrows



white  
application: text



PANTONE Cool Gray 11 C  
application: background



PANTONE Black 3 C  
application: background



PMS Black 3C  
black anodized  
application: blade body

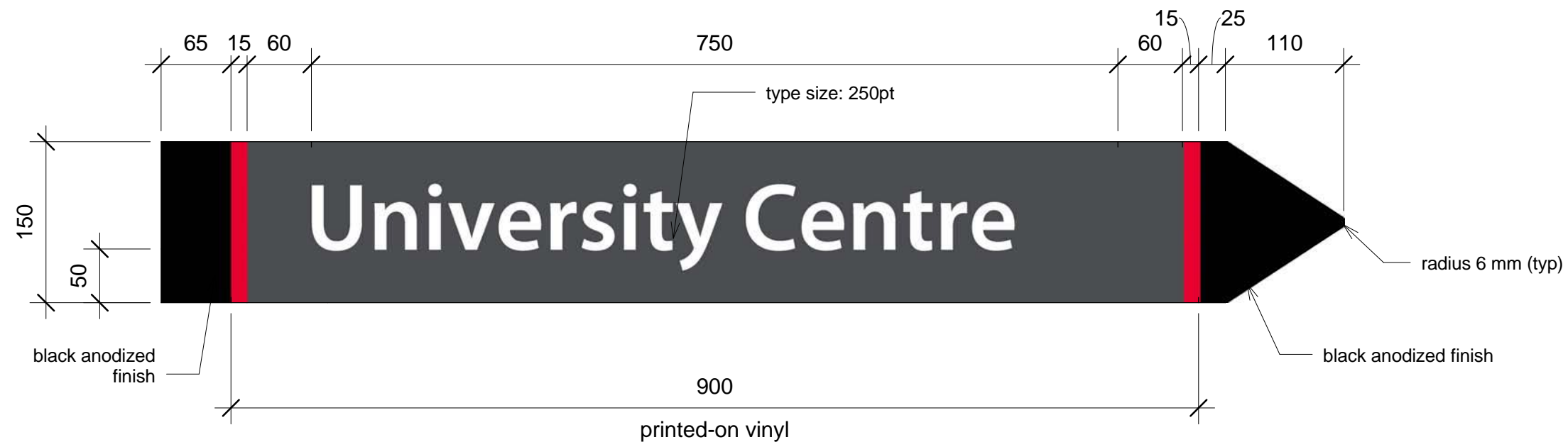
### samples of typeface family

Myriad Pro Semi Bold

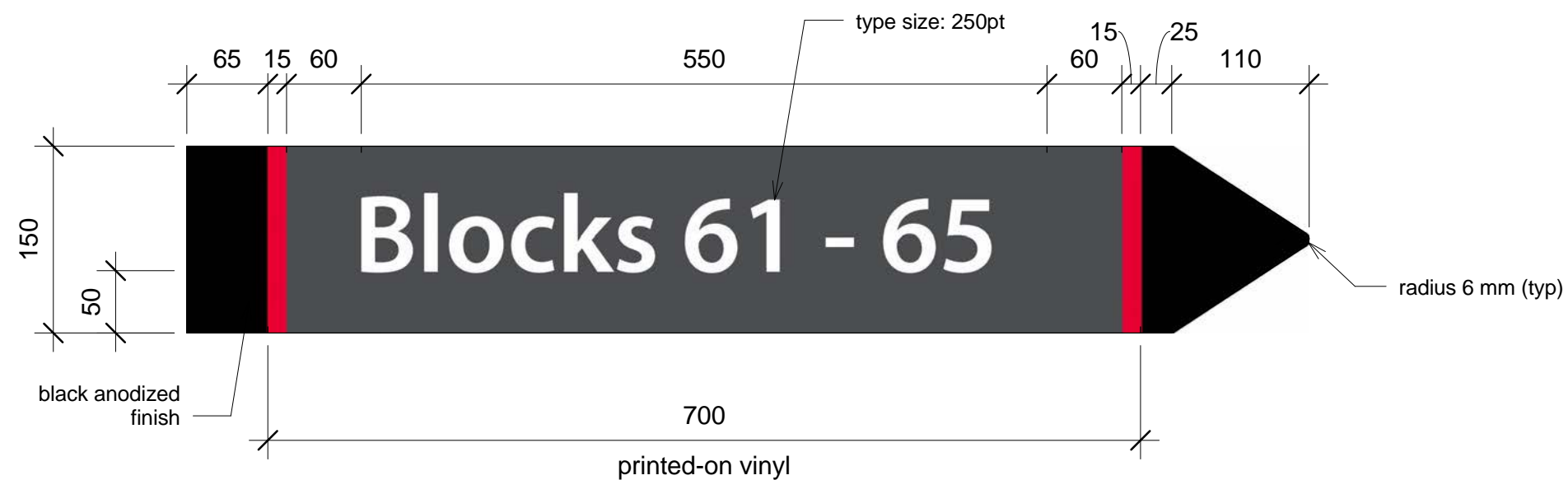
ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
1234567890







**blade type a (long) double sided scale 1:5**



**blade type b (short) double sided scale 1:5**

Description  
Digitally printed vinyl protected with  
anti-graffiti, optically clear overlaminate

Blade: black anodized aluminum  
Vinyl: 3M IJ180, MPI 2005 or equivalent  
Overlaminate: 3M 8914, Avery DOL 6060 or equivalent.

- 1) One piece vinyl to be printed on, installed as per manufacturer's recommendations.
- 2) Use compatible UV inks and overlaminates as recommended by manufacturer
- 3) Wrap vinyl and overlaminate over the edges of the aluminum panel.
- 4) If long text message, then typeset should be scaled down horizontally to fit in the provided space - coordinate all cases with University of Victoria

Refer to Adobe Photoshop files for detailed sample layout



GENERAL NOTES

- 1. Provide self adhesive sign ID stickers. ID's should correspond with ID's shown on location plan  
Form and placement of stickers on signs is to be coordinated with University of Victoria
- 2. Fasteners:
  - foundation (anchor bolts):
  - bolts: Fastenal part #47406 (1/2" s/s threaded rod)
  - washers: Fastenal part #71021 (1/2" s/s washers)
  - nuts: Fastenal part #70714 (1/2" s/s nuts)
  - bracket/posts:
  - thru bolts: Fastenal part #73815 (3/8" s/s x 1" button Socket cap screw)
- 3. Threadlocker: Loctite 271 Red
- 4. Whenever anchor bolts are cut, contractor to ensure cut surfaces (terminated coating) are protected against rusting.
- 5. Manufacturer to verify all diemnsions prior to sign fabrication. All discrepancies should be reported to the Architect.

STRUCTURAL NOTES

**DRAWINGS**

- 1. These drawings show the completed project. The drawings do not show components that may be necessary for construction safety, which is the responsibility of the contractor.
- 2. The use of these drawings is limited to that indicated in the revisions column.
- 3. The information on these drawings shall not be used for any other project or works.

**DESIGN**

- 1. The structures shown have been designed in substantial accordance with the British Columbia Building Code 2006, which is based on the National Building Code of Canada 2005.
- 2. The following wind loads and factors were used: q50=0.63kPa, lw=1.0-ULS, 0.75-SLS.

**FIELD REVIEW BY STRUCTURAL ENGINEER**

- 1. Structural Engineer provides field review only for the work shown on these structural drawings, and it is conducted with such frequency as Structural Engineer deems appropriate to ascertain that the work is in general conformance with the documents prepared by Structural Engineer.  
Field review by Structural Engineer is not carried out for the Contractor's benefit, nor does it make Structural Engineer guarantors of the Contractor's work. It remains the Contractor's responsibility to build the work in conformance with the contract documents. Structural Engineer shall not be responsible for the acts or omissions of the Contractor, Sub-Contractor, or any other persons performing any of the work or for the failure of any of them to carry out the work in accordance with the contract documents.
- 2. Provide 24 hours advance notice of each required field review. Field reviews shall be scheduled to be carried out during normal business hours unless special arrangements are made with Structural Engineer.
- 3. The work to be reviewed shall be generally complete.

STRUCTURAL NOTES (cont)

**CONCRETE AND REINFORCING STEEL**

- 1. Concrete work shall conform to CAN/CSA-A23.1, CAN/CSA -A23.2, CAN/CSA -A23.3 and referenced documents.
- 2. Reinforcing shall conform to CAN/CSA-G30.18R – Grade 400MPa.
- 3. Cover to reinforcing steel to be 50mm uno.
- 4. Portland cement shall be type gu unless noted otherwise.
- 5. Concrete shall have a unit weight of 23±1 kn/m3/ (145±5 pcf) unless noted otherwise.
- 6. Concrete shall have a compressive strength of 35MPa at 28 days, and conform to exposure class C-1 with a maximum water-cement ratio of 0.40 and air content of 5-8%. Maximum aggregate size to be 19mm.
- 7. No calcium chloride is permitted, in any form, in any concrete mix. Curing and protection of concrete for hot, cold or dry weather is to be as per clauses 7.4.1.8 and 7.4.2 of CAN/CSA.

**STRUCTURAL ALUMINUM**

- 1. Aluminum sections shall be new.
- 2. Aluminum alloys shall conform to the Aluminum Association publication Aluminum Standards and Data ISO 6361-2 or ISO 6362-2.
- 3. Extruded shapes, Tubes, Bolts, and Plate to be 6061 alloy uno.
- 4. Aluminum in contact with concrete or grout shall be given a heavy coat of alkali-resistant bituminous paint or other equivalent coating before installation.
- 5. Welding operators and procedures shall be qualified according to CSA W47.2.
- 6. Submit shop drawings for review prior to start of steel fabrication.
- 7. Fabrication practices and tolerances shall be in accordance with CAN/CSA-S16, except bolt holed edge distance tolerance to be -0, +2mm.
- 8. Anchor and connection bolts to be ASTM A193 Stainless Steel. Anchors shall be embedded 300mm into concrete, complete with a nut and washer each end.
- 9. Unless noted otherwise, column base plates shall be 20 mm minimum thick. Anchor bolt holes shall be punched undersize and reamed to size.
- 10. Provide 6 mm cap plates for all tube members uno.
- 11. Aluminum shall be connected with fillet welds all-around uno. Weld size shall match the wall thickness of the thinnest part being connected uno. Welds to be ground smooth.

**TAMPER RESISTANCE AND CONNECTIONS**

- 1. Connection hardware to be stainless steel uno.
- 2. Aluminum panels to be connected to structure with 6.4mm diameter stainless steel self-tapping screws at 450mm maximum centre to centre spacing.
- 3. Non-removable panels may be welded or glued by the manufacturer, as approved by Structural Engineer.
- 4. Panel connection screws to be tamper resistant “Torx-Pin” screws as supplied by O.E.M. Hardware of Surrey BC, or equivalent as approved by Structural Engineer.
- 5. Visible connection bolts shall be “Pentagon” tamper resistant bolts, with “Pentagon” nuts as supplied by O.E.M. Hardware of Surrey BC, or equivalent as approved by Structural Engineer. Anchor bolts to be secured with “Pentagon” security nuts.





Sign No. 12

Pedestrian - Minor Wayfinding A

Sheet List	
Sheet Number	Sheet Name
01	title sheet and drawing list
02	typography, colours and pictograms
03	sign design - overview
04	sign design - graphic design details
05	sign construction - sections
06	sign construction - details
07	general notes

project: Campus Wayfinding  
number: FM 09-8567  
issue date: April 1, 2019

sign: Sign No. 12 - Minor Wayfinding A  
sheet name: title sheet and drawing list  
scale: as noted

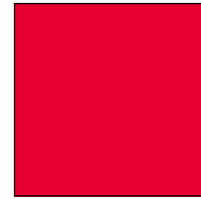
sheet number: 01



## core colours



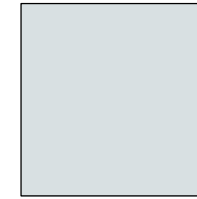
clear anodized coating  
application: sign structure



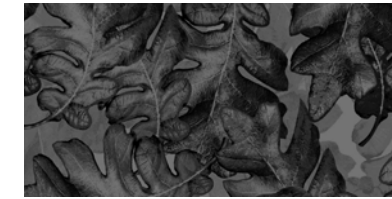
PANTONE 185 C  
application:  
pinstrip, arrows



PANTONE 426 C  
application: text,  
crest - monochromatic



PANTEONE 7541 C  
application: background,  
back panel (single sided sign)



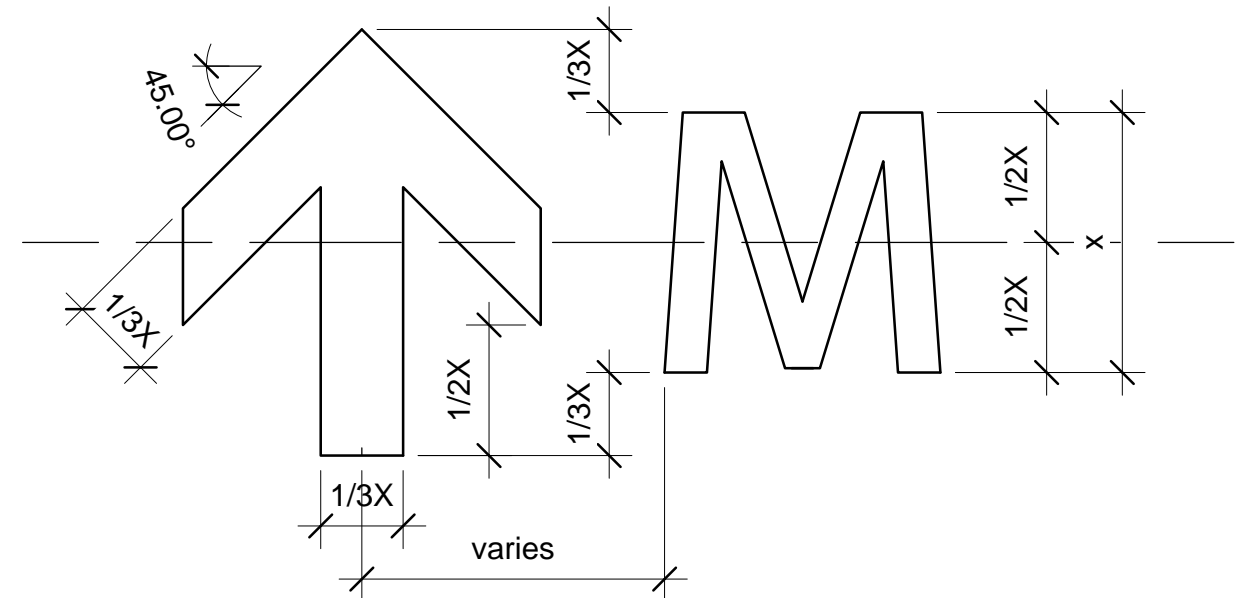
gary oak motif - digital file is to be delivered  
by University of Victoria

## samples of typeface family

# Myriad Pro Semi Bold

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
1234567890

### arrow style and arrow size in relation to text height



**University of Victoria Logo, horizontal standard**



# University of Victoria



**full colour**

**reverse monochromatic** - shown against background for clarity

project: Campus Wayfinding  
number: FM 09-8567  
issue date: April 1, 2019

sign: Sign No. 12 - Minor Wayfinding A  
sheet name: typography, colours and pictograms  
scale: as noted

sheet  
number:

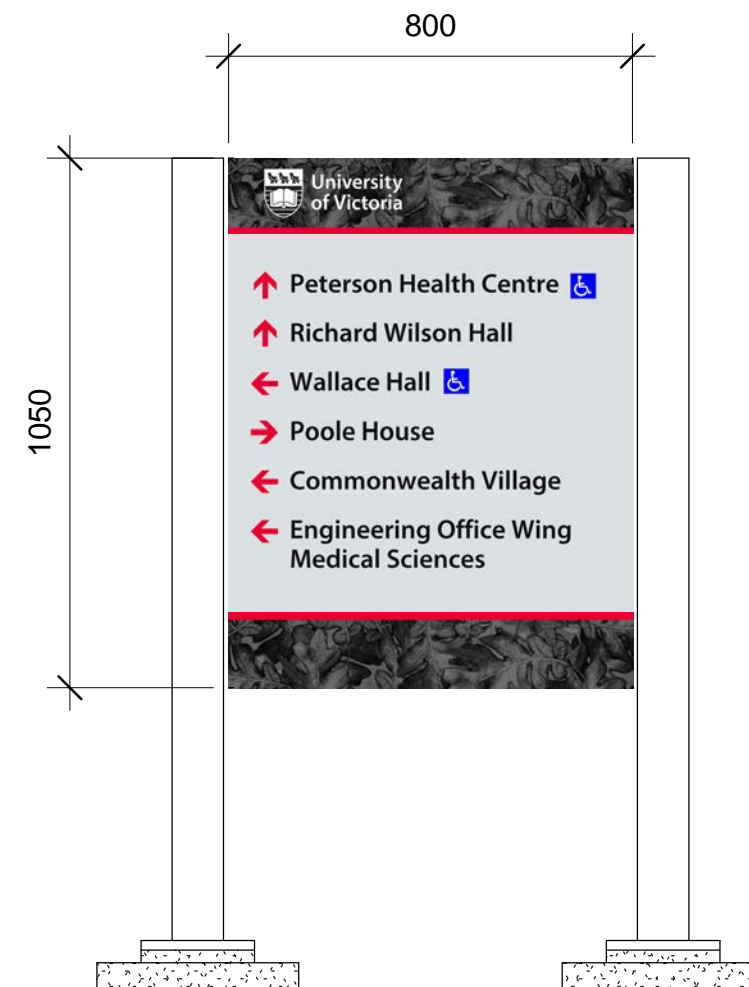
02



**University  
of Victoria**



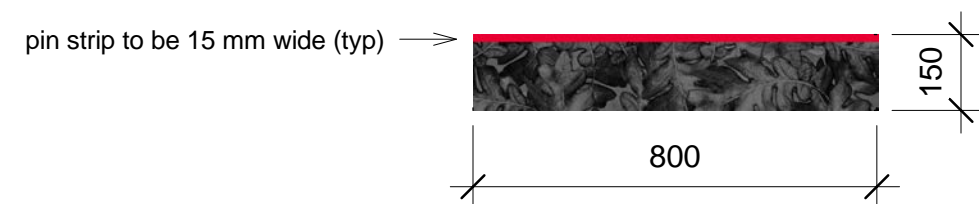
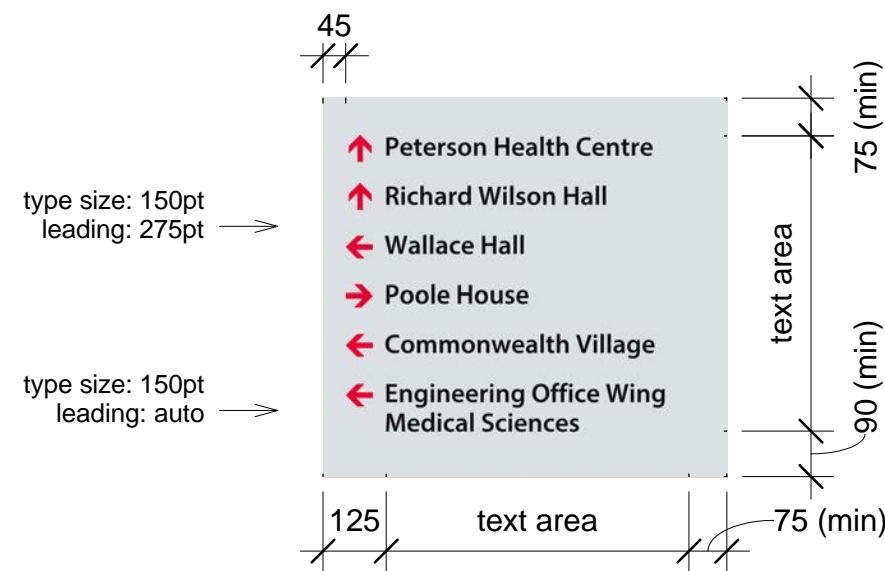
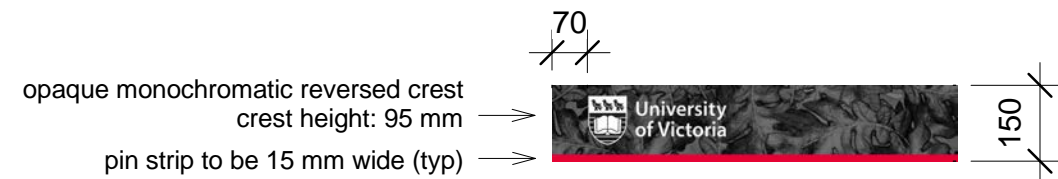
**Minor Wayfinding A**  
**scale 1:15**



**Minor Wayfinding A (with pictograms)**  
**scale 1:15**



**placement of pictogram**  
**scale 1:5**



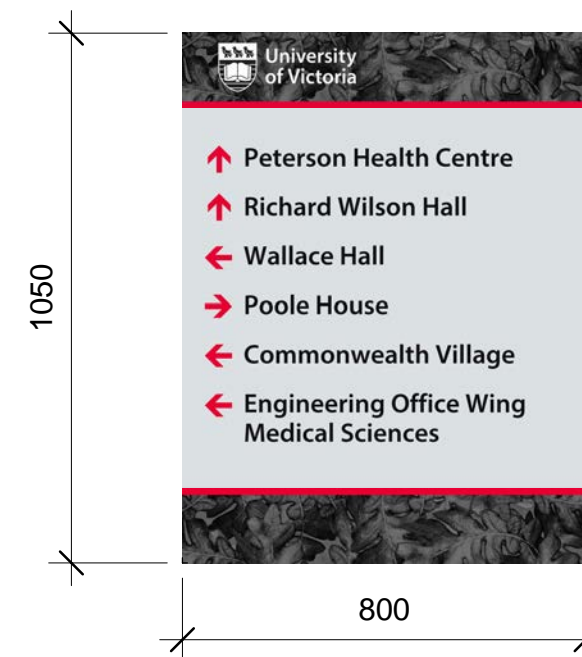
**scale 1:15**

Description  
Digitally printed vinyl protected with anti-graffiti, optically clear overlamine  
Aluminum panel size (one piece): 800 mm x 1050 mm x 6.4 mm  
See sheet 05 for details.

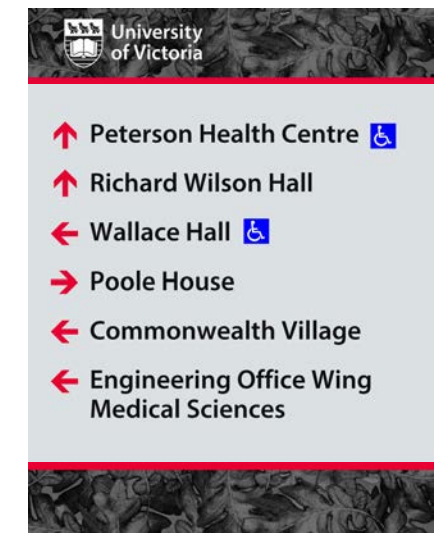
Vinyl: 3M IJ180, MPI 2005 or equivalent  
Overlamine: 3M 8914, Avery DOL 6060 or equivalent.

- 1) One piece vinyl to be printed on, installed as per manufacturer's recommendations.
- 2) Use compatible UV inks and overlaminates as recommended by manufacturer
- 3) Wrap vinyl and overlamine over the edges of the aluminum panel.
- 4) If single sided sign then back panel to receive vinyl printed with PANTEONE 7541 C

Refer to Adobe Photoshop files for detailed sample layout

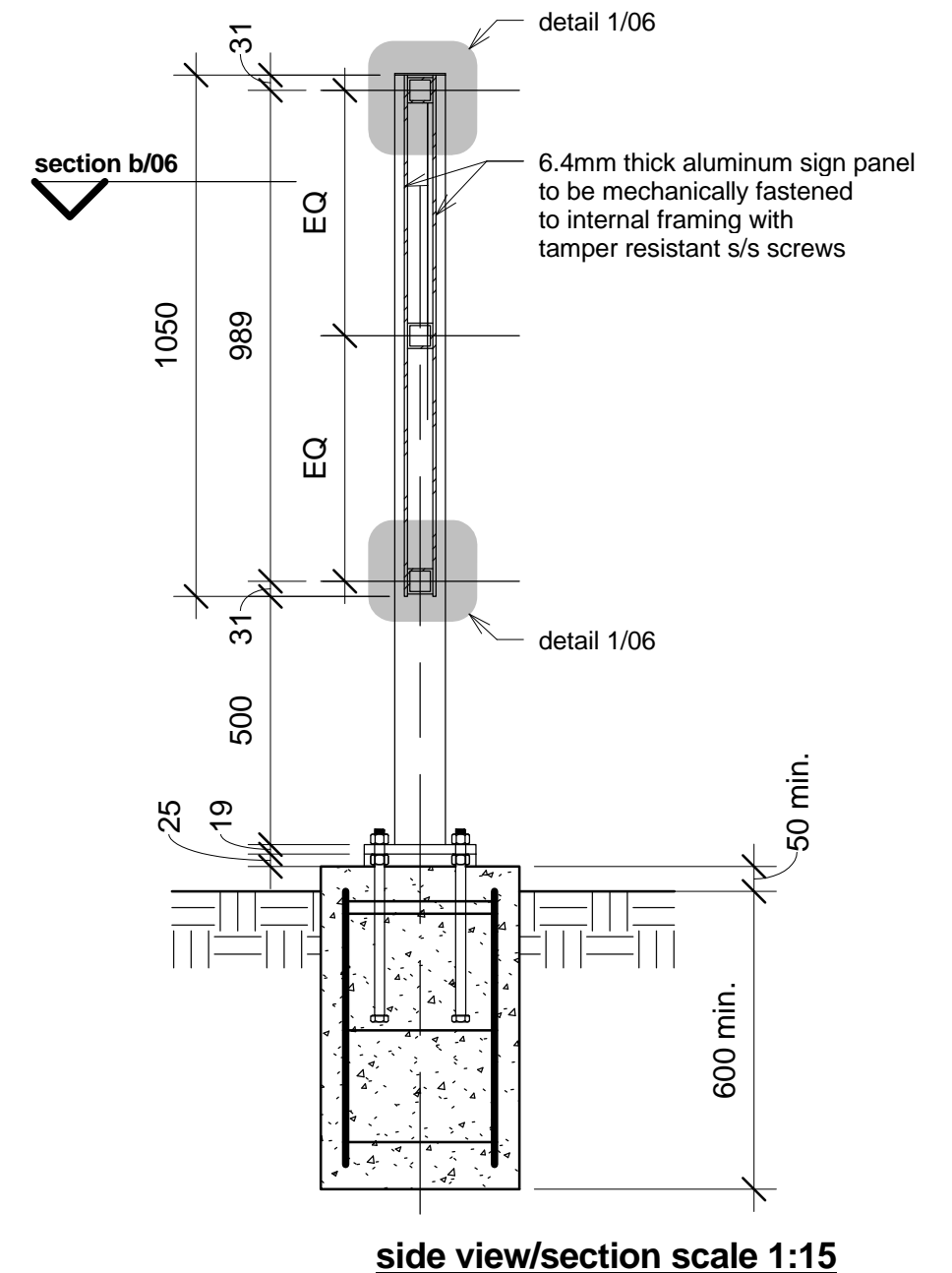
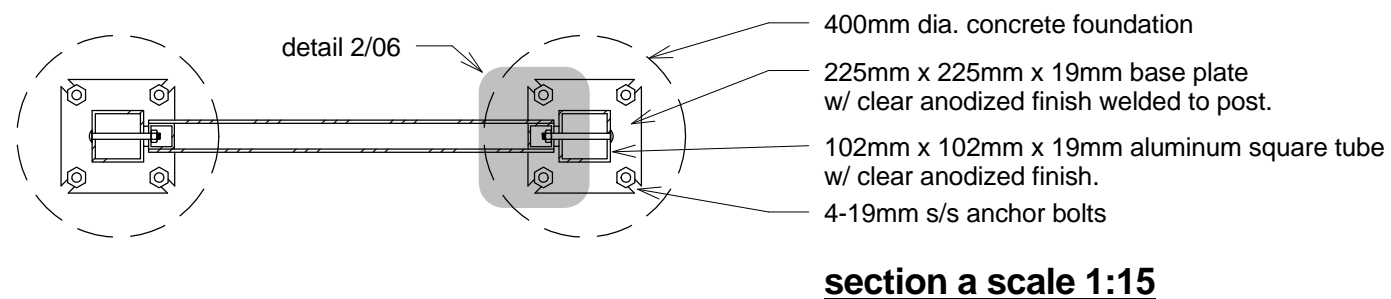
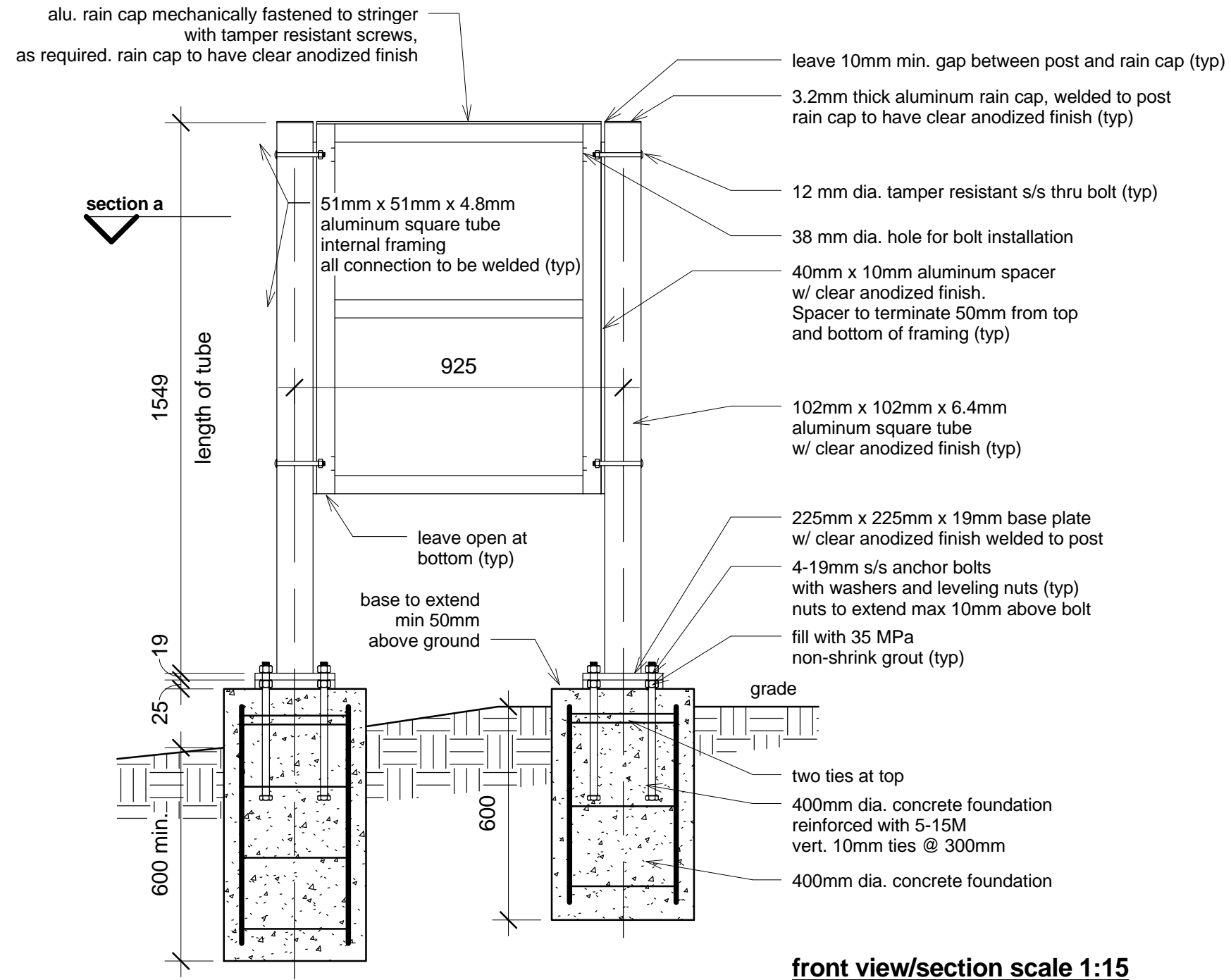


option without pictograms



option w/ pictograms

**scale 1:15**



General Note:  
Manufacturer to verify all dimensions prior to sign fabrication. All discrepancies should be reported to the Architect.

project: Campus Wayfinding  
number: FM 09-8567  
issue date: April 1, 2019

sign: Sign No. 12 - Minor Wayfinding A  
sheet name: sign construction - sections  
scale: as noted

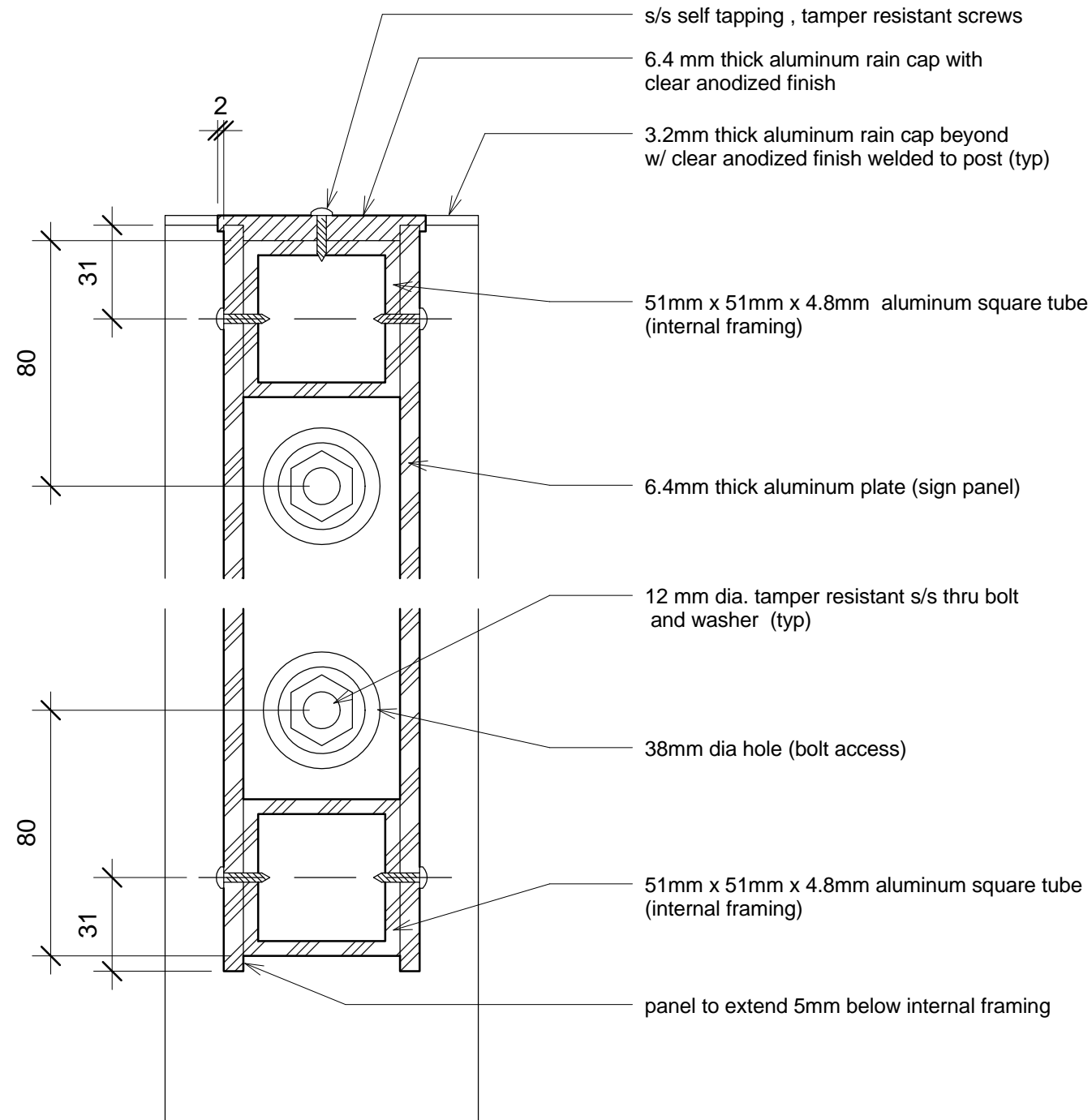
sheet number:

05



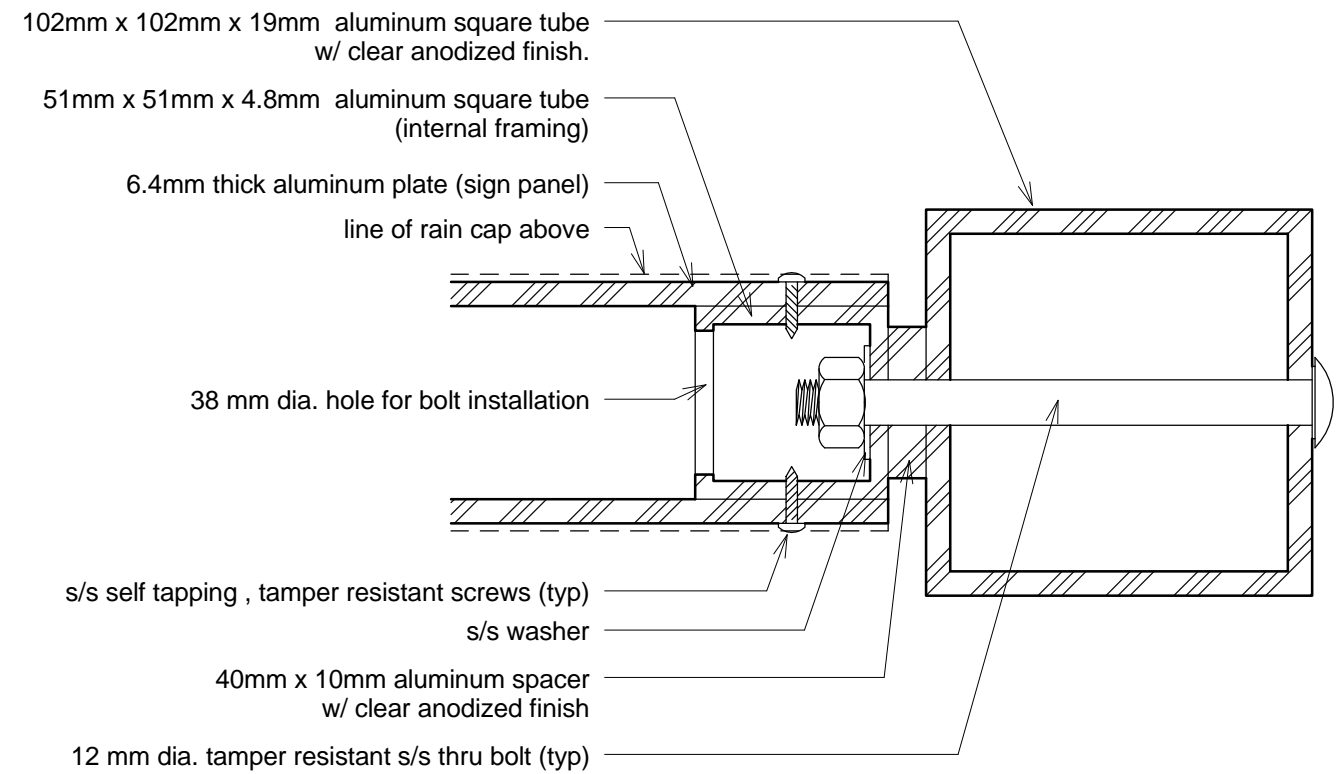
University of Victoria



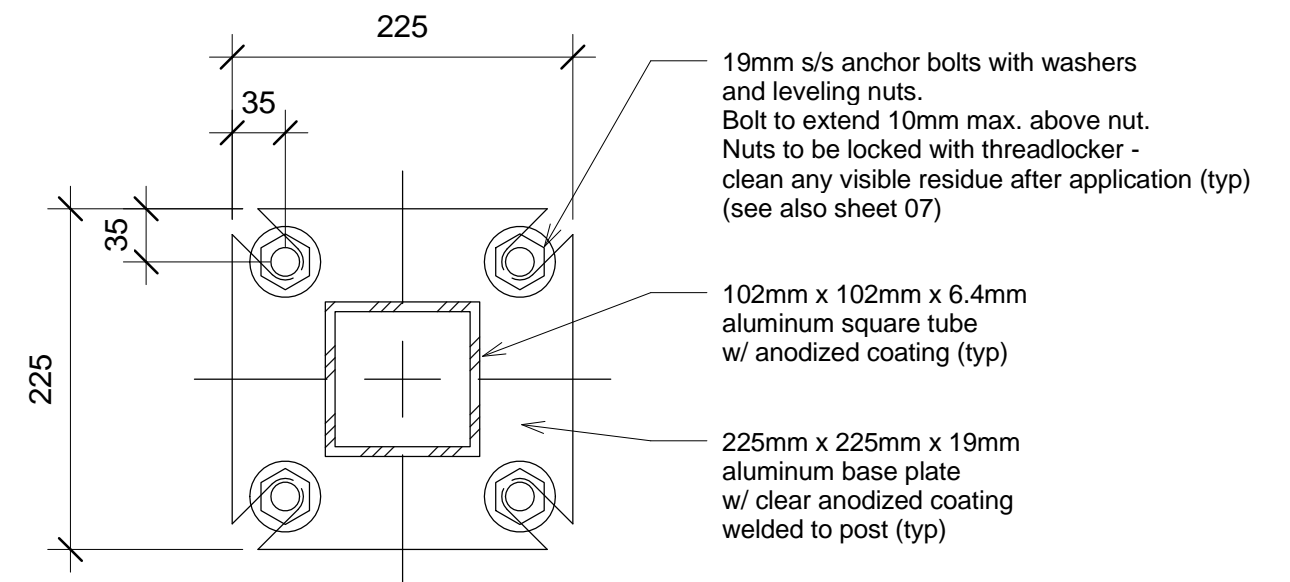


General Note:  
Manufacturer to verify all dimensions prior to sign fabrication. All discrepancies should be reported to the Architect.

**section detail 1 scale 1:2**



**section detail 2 scale 1:2**



**section b (slip base) scale 1:5**

project: Campus Wayfinding  
number: FM 09-8567  
issue date: April 1, 2019

sign: Sign No. 12 - Minor Wayfinding A  
sheet name: sign construction - details  
scale: as noted

sheet  
number:

06



**University  
of Victoria**

GENERAL NOTES

- 1. Provide self adhesive sign ID stickers. ID's should correspond with ID's shown on location plan
- Form and placement of stickers on signs is to be coordinated with University of Victoria
- 2. Fasteners:
  - foundation (anchor bolts):
  - bolts: Fastenal part #47406 (1/2" s/s threaded rod)
  - washers: Fastenal part #71021 (1/2" s/s washers)
  - nuts: Fastenal part #70714 (1/2" s/s nuts)
  - posts:
  - thru bolts: Fastenal part #174786 (1/2" s/s x 5" button Socket Cap Screw)
  - thru bolt washers: Fastenal part #71021 (1/2" s/s washers)
  - thru bolt nuts: 70714 (1/2" s/s nuts)
  - panels:
  - security screws panel attachment: Fastenal part #BS0160024SSH200 (10-24 x 3/4" button head security screw )
  - rain cap attachment: Fastenal part #BS0160024SSH200 (10-24 x 3/4" button head security screw)
- 3. Threadlocker: Locktite 271 Red
- 4. Whenever anchor bolts are cut, contractor to ensure cut surfaces (terminated coating) are protected against rusting.
- 5. Manufacturer to verify all diemnsions prior to sign fabrication. All discrepancies should be reported to the Architect.

STRUCTURAL NOTES

**DRAWINGS**

- 1. These drawings show the completed project. The drawings do not show components that may be necessary for construction safety, which is the responsibility of the contractor.
- 2. The use of these drawings is limited to that indicated in the revisions column.
- 3. The information on these drawings shall not be used for any other project or works.

**DESIGN**

- 1. The structures shown have been designed in substantial accordance with the British Columbia Building Code 2006, which is based on the National Building Code of Canada 2005.
- 2. The following wind loads and factors were used: q50=0.63kPa, lw=1.0-ULS, 0.75-SLS.

**FIELD REVIEW BY STRUCTURAL ENGINEER**

- 1. Structural Engineer provides field review only for the work shown on these structural drawings, and it is conducted with such frequency as Structural Engineer deems appropriate to ascertain that the work is in general conformance with the documents prepared by Structural Engineer.  
Field review by Structural Engineer is not carried out for the Contractor's benefit, nor does it make Structural Engineer guarantors of the Contractor's work. It remains the Contractor's responsibility to build the work in conformance with the contract documents. Structural Engineer shall not be responsible for the acts or omissions of the Contractor, Sub-Contractor, or any other persons performing any of the work or for the failure of any of them to carry out the work in accordance with the contract documents.
- 2. Provide 24 hours advance notice of each required field review. Field reviews shall be scheduled to be carried out during normal business hours unless special arrangements are made with Structural Engineer.
- 3. The work to be reviewed shall be generally complete.

STRUCTURAL NOTES (cont)

**CONCRETE AND REINFORCING STEEL**

- 1. Concrete work shall conform to CAN/CSA-A23.1, CAN/CSA -A23.2, CAN/CSA -A23.3 and referenced documents.
- 2. Reinforcing shall conform to CAN/CSA-G30.18R – Grade 400MPa.
- 3. Cover to reinforcing steel to be 50mm uno.
- 4. Portland cement shall be type gu unless noted otherwise.
- 5. Concrete shall have a unit weight of 23±1 kn/m3/ (145±5 pcf) unless noted otherwise.
- 6. Concrete shall have a compressive strength of 35MPa at 28 days, and conform to exposure class C-1 with a maximum water-cement ratio of 0.40 and air content of 5-8%. Maximum aggregate size to be 19mm.
- 7. No calcium chloride is permitted, in any form, in any concrete mix. Curing and protection of concrete for hot, cold or dry weather is to be as per clauses 7.4.1.8 and 7.4.2 of CAN/CSA.

**STRUCTURAL ALUMINUM**

- 1. Aluminum sections shall be new.
- 2. Aluminum alloys shall conform to the Aluminum Association publication Aluminum Standards and Data ISO 6361-2 or ISO 6362-2.
- 3. Extruded shapes, Tubes, Bolts, and Plate to be 6061 alloy uno.
- 4. Aluminum in contact with concrete or grout shall be given a heavy coat of alkali-resistant bituminous paint or other equivalent coating before installation.
- 5. Welding operators and procedures shall be qualified according to CSA W47.2.
- 6. Submit shop drawings for review prior to start of steel fabrication.
- 7. Fabrication practices and tolerances shall be in accordance with CAN/CSA-S16, except bolt holed edge distance tolerance to be -0, +2mm.
- 8. Anchor and connection bolts to be ASTM A193 Stainless Steel. Anchors shall be embedded 300mm into concrete, complete with a nut and washer each end.
- 9. Unless noted otherwise, column base plates shall be 20 mm minimum thick. Anchor bolt holes shall be punched undersize and reamed to size.
- 10. Provide 6 mm cap plates for all tube members uno.
- 11. Aluminum shall be connected with fillet welds all-around uno. Weld size shall match the wall thickness of the thinnest part being connected uno. Welds to be ground smooth.

**TAMPER RESISTANCE AND CONNECTIONS**

- 1. Connection hardware to be stainless steel uno.
- 2. Aluminum panels to be connected to structure with 6.4mm diameter stainless steel self-tapping screws at 450mm maximum centre to centre spacing.
- 3. Non-removable panels may be welded or glued by the manufacturer, as approved by Structural Engineer.
- 4. Panel connection screws to be tamper resistant “Torx-Pin” screws as supplied by O.E.M. Hardware of Surrey BC, or equivalent as approved by Structural Engineer.
- 5. Visible connection bolts shall be “Pentagon” tamper resistant bolts, with “Pentagon” nuts as supplied by O.E.M. Hardware of Surrey BC, or equivalent as approved by Structural Engineer. Anchor bolts to be secured with “Pentagon” security nuts.



Sheet List	
Sheet Number	Sheet Name
01	title sheet and drawing list
02	sign design/graphic design details
03	sign and graphic design
04	sign and graphic design, mounting details
05	general notes

project: Campus Wayfinding  
 number: FM 09-8567  
 issue date: April 1, 2019

sign: Sign No. 13 - Minor Wayfinding B  
 sheet name: title sheet and drawing list  
 scale: as noted

sheet  
 number: 01



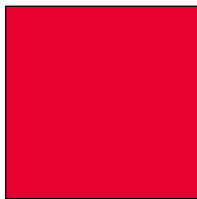
# Sign No. 13

## Pedestrian - Minor Wayfinding B

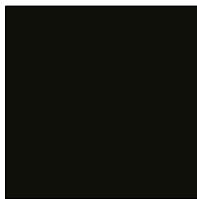
**core colours**



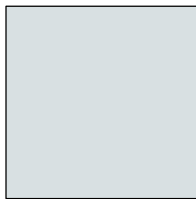
clear anodized coating  
application: sign structure



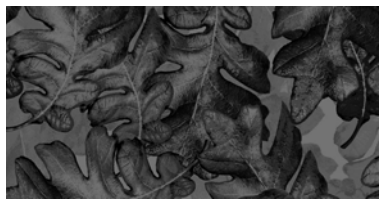
PANTONE 185 C  
application:  
pinstrip, arrows



PANTONE 426 C  
application: text,  
crest - monochromatic



PANTONE 7541 C  
application: background



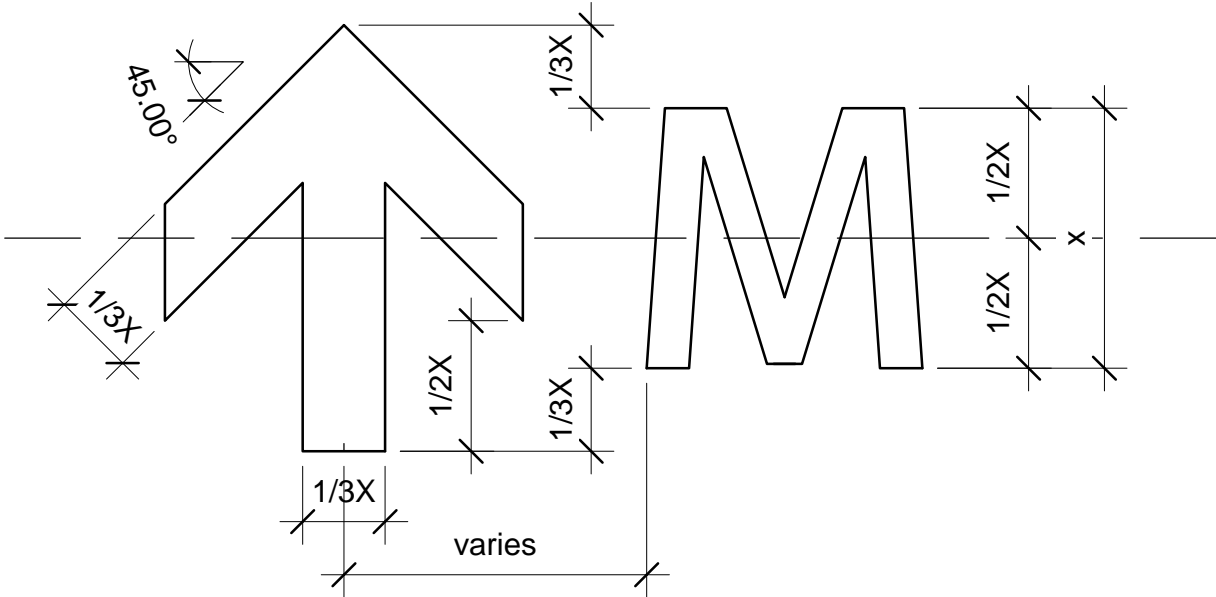
garry oak motif - digital file is to be delivered  
by University of Victoria

**samples of typeface family**

Myriad Pro Semi Bold

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
1234567890

**arrow style and arrow size in relation to text height**



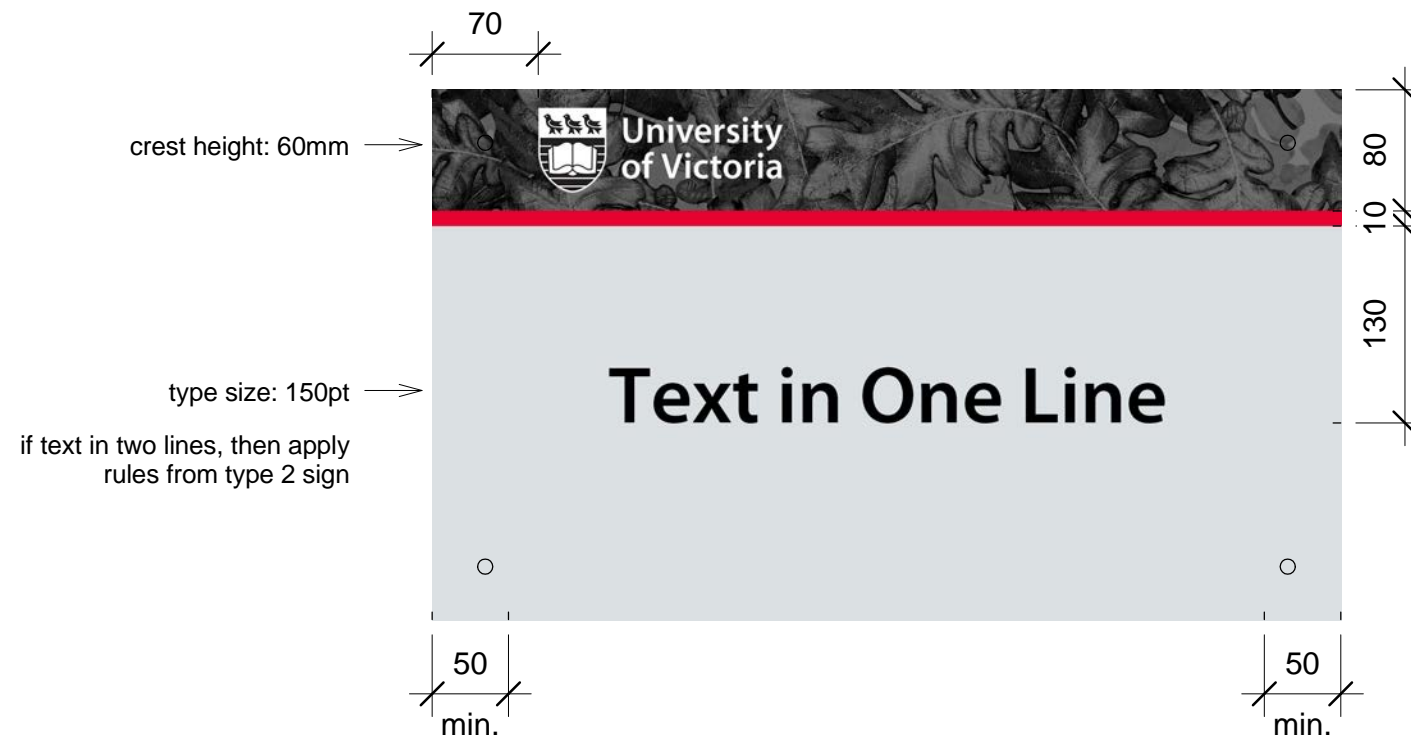
**University of Victoria Logo, horizontal standard**



**full colour**

**reverse monochromatic - shown against bacground for clarity**





**type 1 sign scale 1:5**

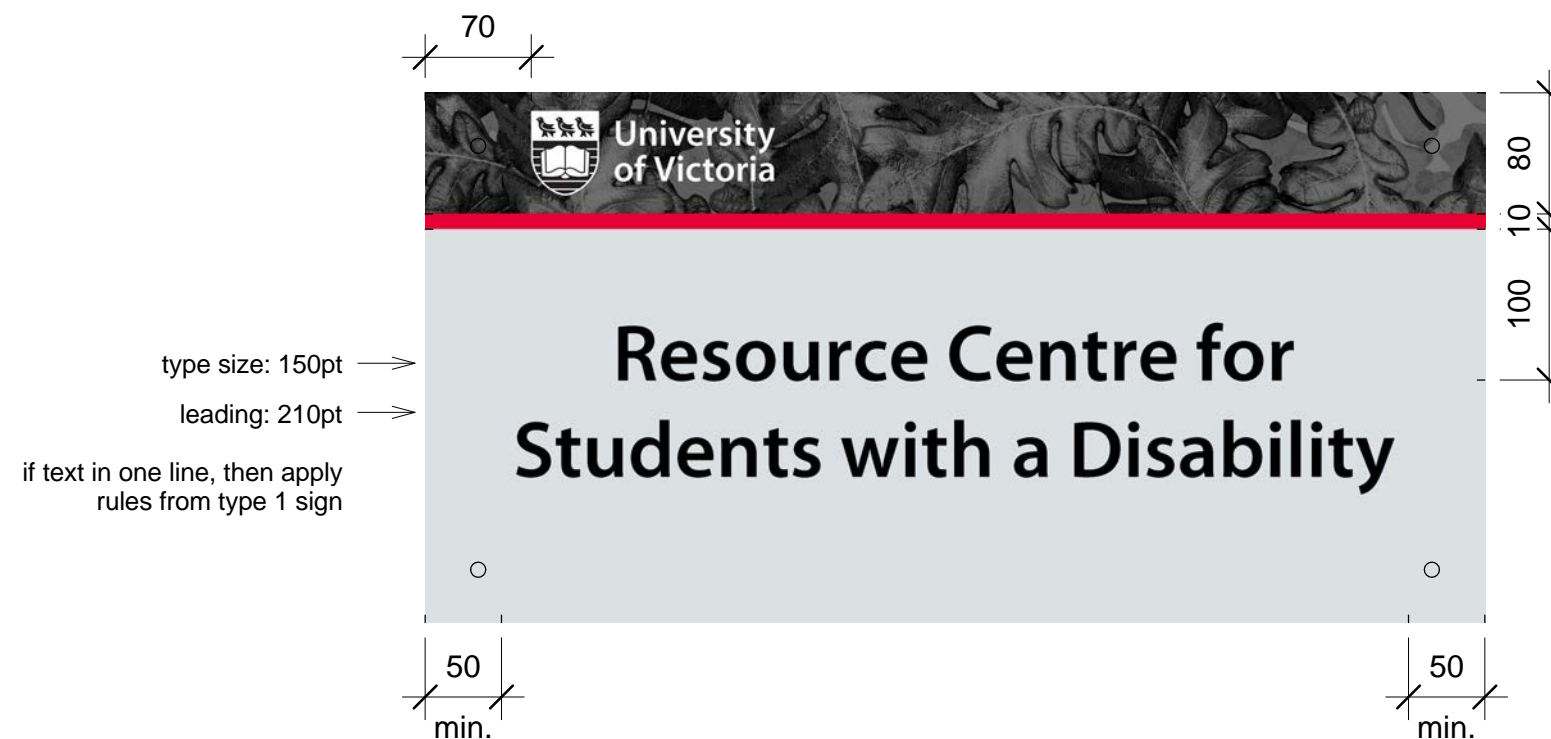
Aluminum panel size:  
600 mm x 350 mm x 6.4 mm

Description:  
One sided sign.  
Digitally printed vinyl protected with anti-graffiti, optically clear overlamine. Vinyl and overlamine to lap over the sign edges.

Vinyl: 3M IJ180, MPI 2005 or equivalent  
Overlamine: 3M 8914, Avery DOL 6060 or equivalent.

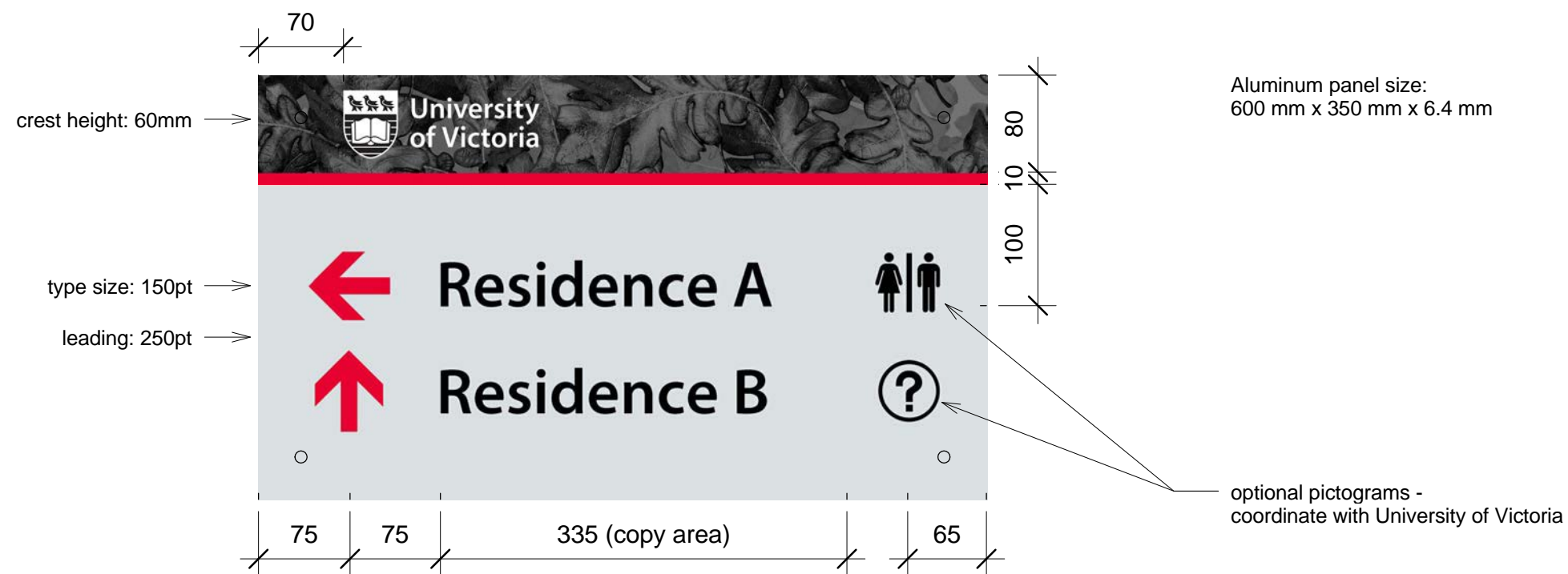
- 1) One piece vinyl to be printed on, installed as per manufacturer's recommendations.
- 2) Use compatible UV inks and overlaminates as recommended by manufacturer

Refer to Adobe Photoshop files for detailed sample layout

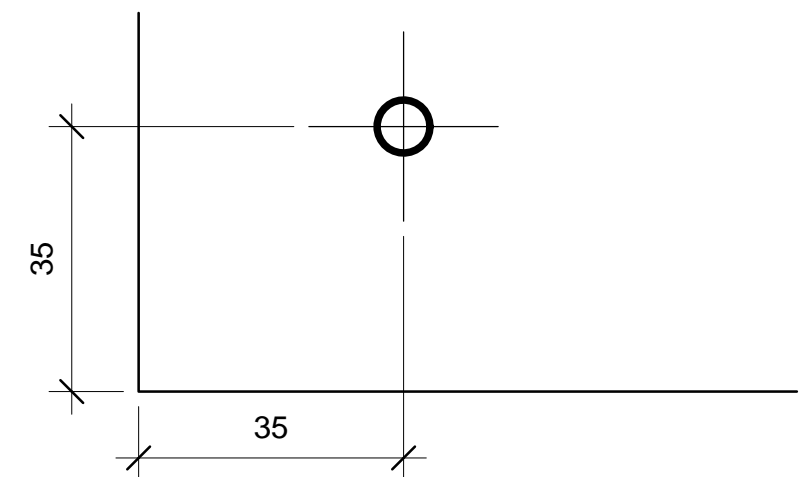


**type 2 sign scale 1:5**

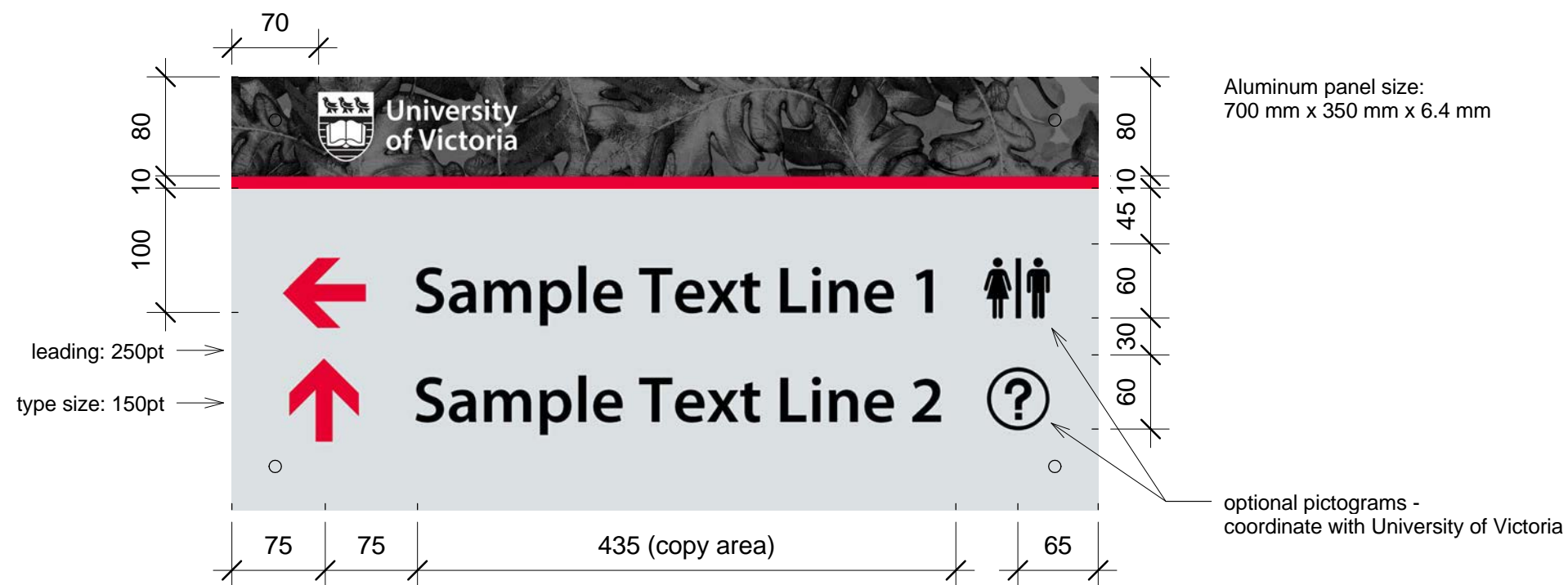
Aluminum panel size:  
700 mm x 350 mm x 6.4 mm



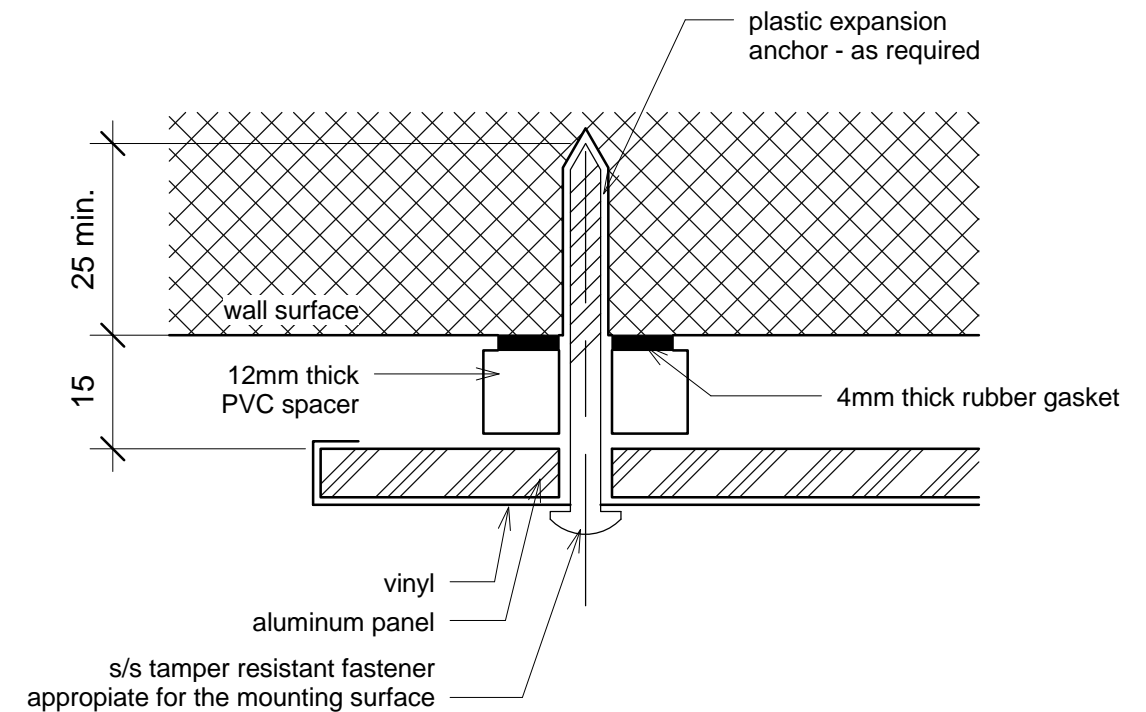
**type 3 sign scale 1:5**



**fastener typical location on sign**  
**scale 1:1**



**type 4 sign scale 1:5**



**typical mounting detail**  
**scale 1:1**

GENERAL NOTES

- 1. Provide self adhesive sign ID stickers. ID's should correspond with ID's shown on location plan  
Form and placement of stickers on signs is to be coordinated with University of Victoria
- 2. Fasteners:  
panels:  
security screws panel attachment: Fastenal part #160951 (10 x 2" button head tapping screw s/s 6 lobe)
- 3. Manufacturer to verify all diemnsions prior to sign fabrication. All discrepancies should be reported to the Architect.

STRUCTURAL NOTES

DRAWINGS

- 1. These drawings show the completed project. The drawings do not show components that may be necessary for construction safety, which is the responsibility of the contractor.
- 2. The use of these drawings is limited to that indicated in the revisions column.
- 3. The information on these drawings shall not be used for any other project or works.

DESIGN

- 1. The structures shown have been designed in substantial accordance with the British Columbia Building Code 2006, which is based on the National Building Code of Canada 2005.
- 2. The following wind loads and factors were used: q50=0.63kPa, lw=1.0-ULS, 0.75-SLS.

FIELD REVIEW BY STRUCTURAL ENGINEER

- 1. Structural Engineer provides field review only for the work shown on these structural drawings, and it is conducted with such frequency as Structural Engineer deems appropriate to ascertain that the work is in general conformance with the documents prepared by Structural Engineer.  
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- 2. Provide 24 hours advance notice of each required field review. Field reviews shall be scheduled to be carried out during normal business hours unless special arrangements are made with Structural Engineer.
- 3. The work to be reviewed shall be generally complete.

STRUCTURAL NOTES (cont)

CONCRETE AND REINFORCING STEEL

- 1. Concrete work shall conform to CAN/CSA-A23.1, CAN/CSA -A23.2, CAN/CSA -A23.3 and referenced documents.
- 2. Reinforcing shall conform to CAN/CSA-G30.18R – Grade 400MPa.
- 3. Cover to reinforcing steel to be 50mm uno.
- 4. Portland cement shall be type gu unless noted otherwise.
- 5. Concrete shall have a unit weight of 23±1 kn/m3/ (145±5 pcf) unless noted otherwise.
- 6. Concrete shall have a compressive strength of 35MPa at 28 days, and conform to exposure class C-1 with a maximum water-cement ratio of 0.40 and air content of 5-8%. Maximum aggregate size to be 19mm.
- 7. No calcium chloride is permitted, in any form, in any concrete mix. Curing and protection of concrete for hot, cold or dry weather is to be as per clauses 7.4.1.8 and 7.4.2 of CAN/CSA.

STRUCTURAL ALUMINUM

- 1. Aluminum sections shall be new.
- 2. Aluminum alloys shall conform to the Aluminum Association publication Aluminum Standards and Data ISO 6361-2 or ISO 6362-2.
- 3. Extruded shapes, Tubes, Bolts, and Plate to be 6061 alloy uno.
- 4. Aluminum in contact with concrete or grout shall be given a heavy coat of alkali-resistant bituminous paint or other equivalent coating before installation.
- 5. Welding operators and procedures shall be qualified according to CSA W47.2.
- 6. Submit shop drawings for review prior to start of steel fabrication.
- 7. Fabrication practices and tolerances shall be in accordance with CAN/CSA-S16, except bolt holed edge distance tolerance to be -0, +2mm.
- 8. Anchor and connection bolts to be ASTM A193 Stainless Steel. Anchors shall be embedded 300mm into concrete, complete with a nut and washer each end.
- 9. Unless noted otherwise, column base plates shall be 20 mm minimum thick. Anchor bolt holes shall be punched undersize and reamed to size.
- 10. Provide 6 mm cap plates for all tube members uno.
- 11. Aluminum shall be connected with fillet welds all-around uno. Weld size shall match the wall thickness of the thinnest part being connected uno. Welds to be ground smooth.

TAMPER RESISTANCE AND CONNECTIONS

- 1. Connection hardware to be stainless steel uno.
- 2. Aluminum panels to be connected to structure with 6.4mm diameter stainless steel self-tapping screws at 450mm maximum centre to centre spacing.
- 3. Non-removable panels may be welded or glued by the manufacturer, as approved by Structural Engineer.
- 4. Panel connection screws to be tamper resistant “Torx-Pin” screws as supplied by O.E.M. Hardware of Surrey BC, or equivalent as approved by Structural Engineer.
- 5. Visible connection bolts shall be “Pentagon” tamper resistant bolts, with “Pentagon” nuts as supplied by O.E.M. Hardware of Surrey BC, or equivalent as approved by Structural Engineer. Anchor bolts to be secured with “Pentagon” security nuts.



Sheet List	
Sheet Number	Sheet Name
01	title sheet and drawing list
02	typography, colours and pictograms
03	sign design/graphic design details
04	sign construction - sections and details
05	general notes

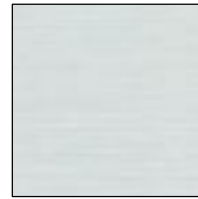


# Sign No. 15

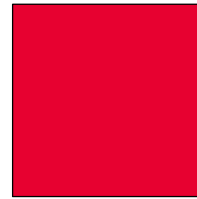
## Minor Pedestrian Map



## core colours



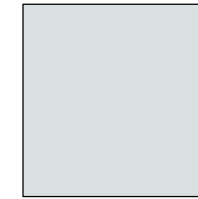
clear anodized coating  
application: sign structure



PANTONE 185 C  
application:  
pinstrip, arrows



PANTONE 426 C  
application: text,  
crest - monochromatic



PANTEONE 7541 C  
application: background



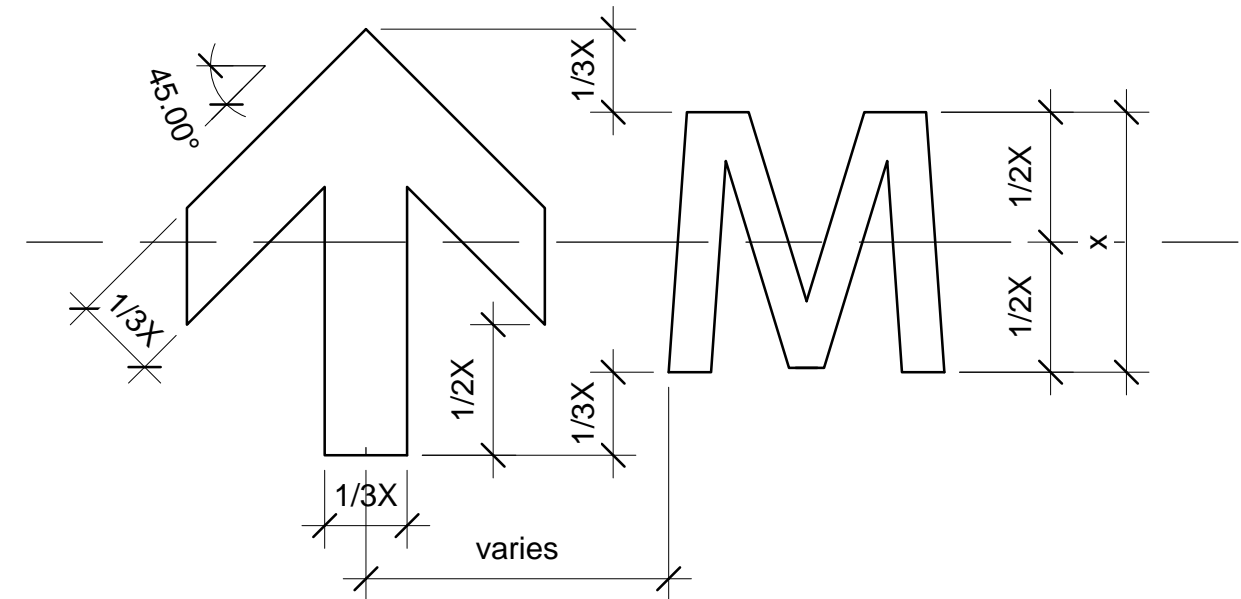
gary oak motif - digital file is to be delivered  
by University of Victoria

## **samples of typeface family**

**Myriad Pro Semi Bold**

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
1234567890

### arrow style and arrow size in relation to text height



**University of Victoria Logo, horizontal standard**



# University of Victoria



**full colour**

**reverse monochromatic - shown against background for clarity**

project: Campus Wayfinding  
number: FM 09-8567  
issue date: April 1, 2019

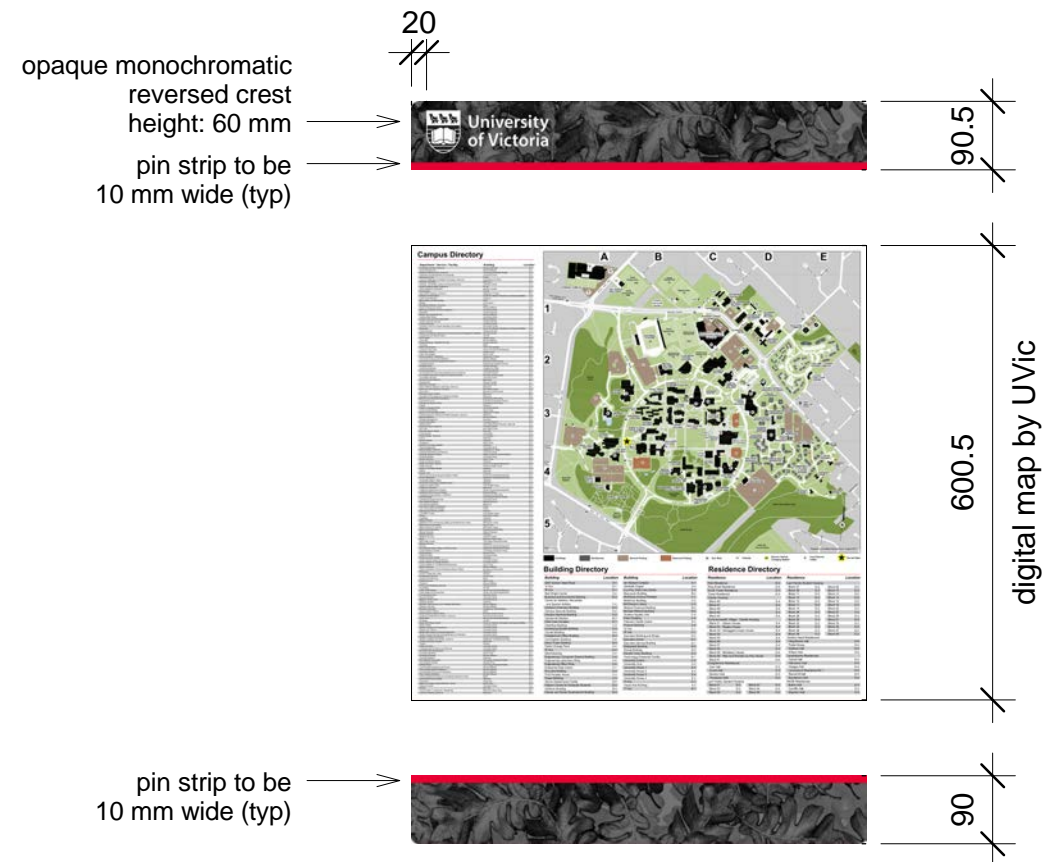
sign: Sign No. 15 - Minor Pedestrian Map  
sheet name: typography, colours and pictograms  
scale: as noted

sheet  
number:

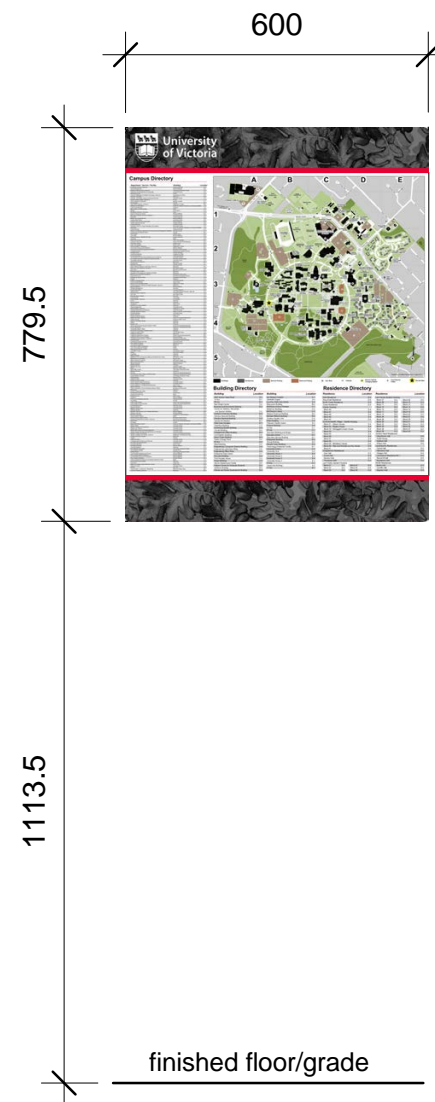
02



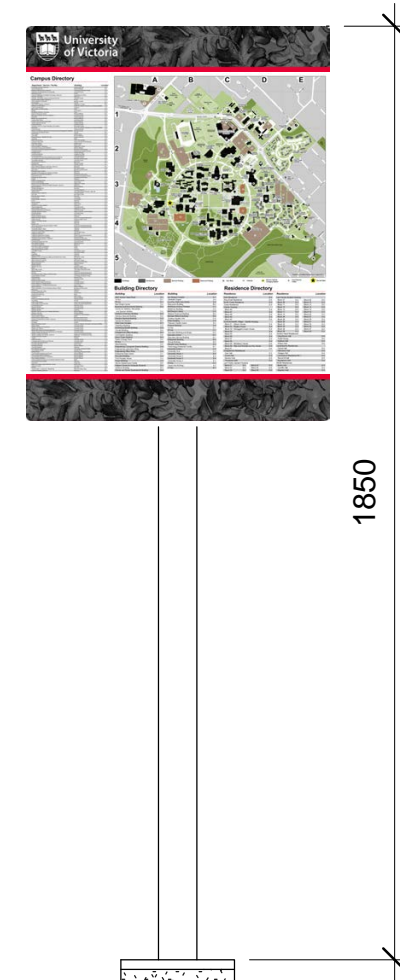
**University  
of Victoria**



**panel front view scale 1:10**



**wall mounted option**



**post mounted option**

**scale 1:15**

**Description**

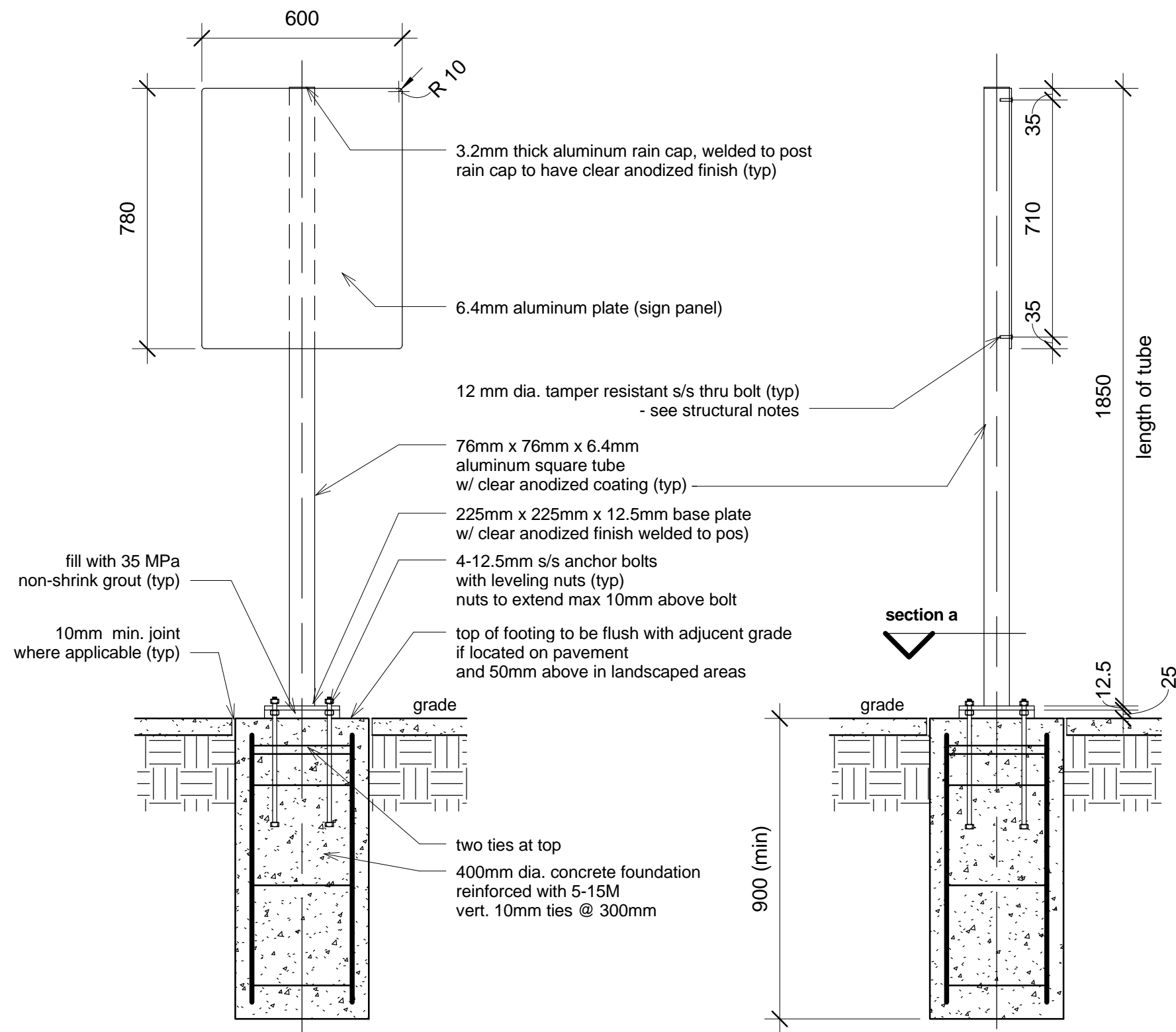
Digitally printed vinyl protected with  
anti-graffiti, optically clear overlaminate  
on front and back of panel.

Edges of the panel to be spray painted with  
Mathews, two part Acrylic Polyurethane or equivalent  
Aluminum panel size: 780 mm x 600 mm x 6.4 mm

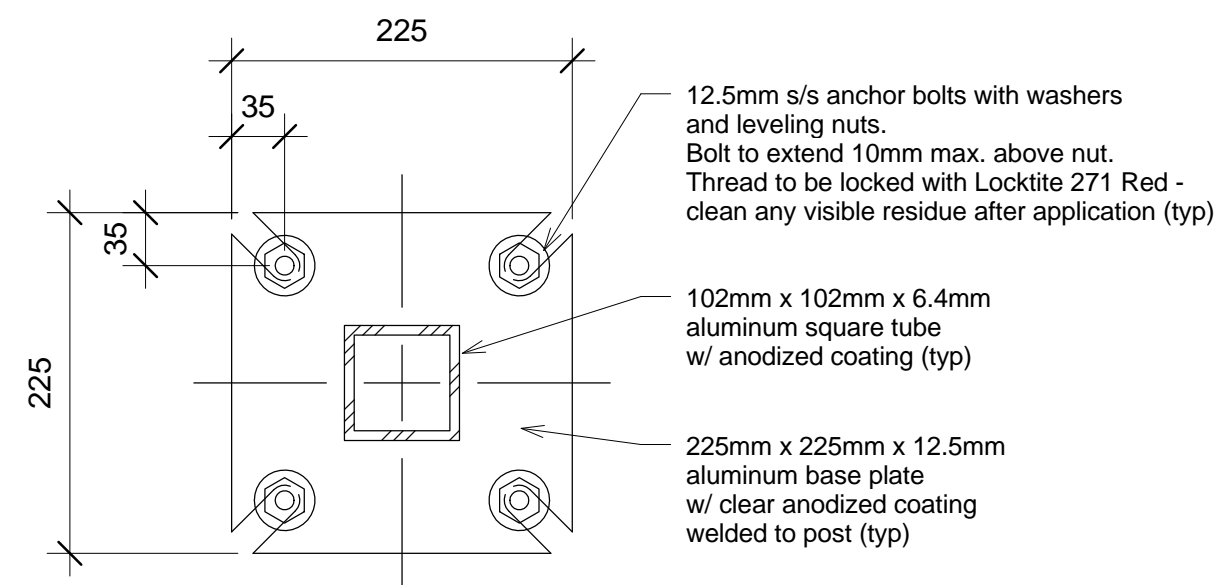
Vinyl: 3M IJ180, MPI 2005 or equivalent  
Overlamine: 3M 8914, Avery DOL 6060 or equivalent.

- 1) One piece vinyl to be printed on, installed as per  
manufacturer's recommendations.
- 2) Use compatible UV inks and overlaminates  
as recommended by manufacturer
- 3) Edges of the aluminum panel to be spray painted  
with PANTEONE 7541 C colour
- 4) Back of the panel to receive vinyl with printed  
PANTEONE 7541 C colour
- 4) Digital file with Directory Map is to be delivered  
by University of Victoria

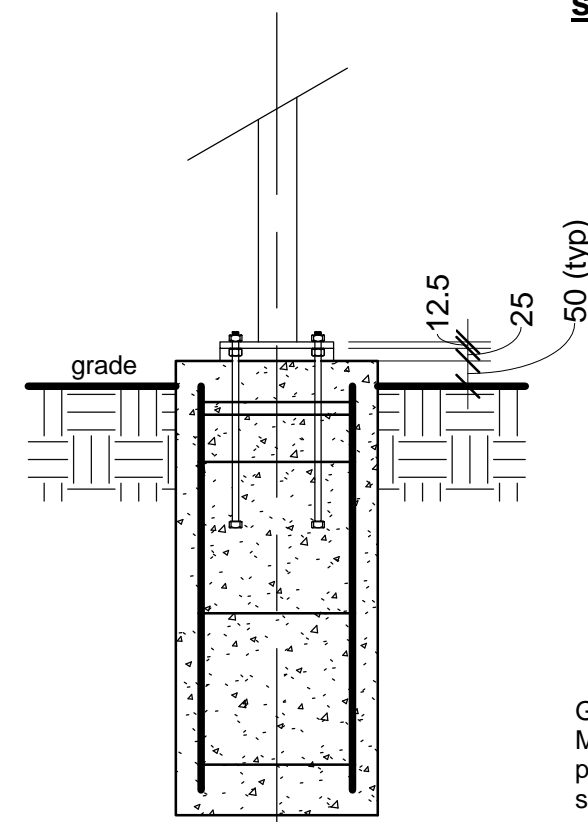
Refer to Adobe Photoshop files for detailed sample layout



**front view/section scale 1:15**



**section a (slip base) scale 1:5**



**side view/section scale 1:15  
(sign located in landscaped areas)**

General Note:  
Manufacturer to verify all dimensions prior to sign fabrication. All discrepancies should be reported to the Architect.

GENERAL NOTES

- 1. Provide self adhesive sign ID stickers. ID's should correspond with ID's shown on location plan
- Form and placement of stickers on signs is to be coordinated with University of Victoria
- 2. Fasteners:
  - foundation (anchor bolts):
  - bolts: Fastenal part #47406 (1/2" s/s threaded rod)
  - washers: Fastenal part #71021 (1/2" s/s washers)
  - nuts: Fastenal part #70714 (1/2" s/s nuts)
  - posts:
  - thru bolts: Fastenal part #10630-04183 (1/2" s/s x 4" button Socket Cap Screw)
  - thru bolt washers: Fastenal part #71021 (1/2" s/s washers)
  - thru bolt nuts: 70714 (1/2" s/s nuts)
- 3. Threadlocker: Locktite 271 Red
- 4. Whenever anchor bolts are cut, contractor to ensure cut surfaces (terminated coating) are protected against rusting.
- 5. Manufacturer to verify all diemnsions prior to sign fabrication. All discrepancies should be reported to the Architect.

STRUCTURAL NOTES

**DRAWINGS**

- 1. These drawings show the completed project. The drawings do not show components that may be necessary for construction safety, which is the responsibility of the contractor.
- 2. The use of these drawings is limited to that indicated in the revisions column.
- 3. The information on these drawings shall not be used for any other project or works.

**DESIGN**

- 1. The structures shown have been designed in substantial accordance with the British Columbia Building Code 2006, which is based on the National Building Code of Canada 2005.
- 2. The following wind loads and factors were used: q50=0.63kPa, lw=1.0-ULS, 0.75-SLS.

**FIELD REVIEW BY STRUCTURAL ENGINEER**

- 1. Structural Engineer provides field review only for the work shown on these structural drawings, and it is conducted with such frequency as Structural Engineer deems appropriate to ascertain that the work is in general conformance with the documents prepared by Structural Engineer.  
Field review by Structural Engineer is not carried out for the Contractor's benefit, nor does it make Structural Engineer guarantors of the Contractor's work. It remains the Contractor's responsibility to build the work in conformance with the contract documents. Structural Engineer shall not be responsible for the acts or omissions of the Contractor, Sub-Contractor, or any other persons performing any of the work or for the failure of any of them to carry out the work in accordance with the contract documents.
- 2. Provide 24 hours advance notice of each required field review. Field reviews shall be scheduled to be carried out during normal business hours unless special arrangements are made with the Structural Engineer.
- 3. The work to be reviewed shall be generally complete.

STRUCTURAL NOTES (cont)

**CONCRETE AND REINFORCING STEEL**

- 1. Concrete work shall conform to CAN/CSA-A23.1, CAN/CSA -A23.2, CAN/CSA -A23.3 and referenced documents.
- 2. Reinforcing shall conform to CAN/CSA-G30.18R – Grade 400MPa.
- 3. Cover to reinforcing steel to be 50mm uno.
- 4. Portland cement shall be type gu unless noted otherwise.
- 5. Concrete shall have a unit weight of 23±1 kn/m3/ (145±5 pcf) unless noted otherwise.
- 6. Concrete shall have a compressive strength of 35MPa at 28 days, and conform to exposure class C-1 with a maximum water-cement ratio of 0.40 and air content of 5-8%. Maximum aggregate size to be 19mm.
- 7. No calcium chloride is permitted, in any form, in any concrete mix. Curing and protection of concrete for hot, cold or dry weather is to be as per clauses 7.4.1.8 and 7.4.2 of CAN/CSA.

**STRUCTURAL ALUMINUM**

- 1. Aluminum sections shall be new.
- 2. Aluminum alloys shall conform to the Aluminum Association publication Aluminum Standards and Data ISO 6361-2 or ISO 6362-2.
- 3. Extruded shapes, Tubes, Bolts, and Plate to be 6061 alloy uno.
- 4. Aluminum in contact with concrete or grout shall be given a heavy coat of alkali-resistant bituminous paint or other equivalent coating before installation.
- 5. Welding operators and procedures shall be qualified according to CSA W47.2.
- 6. Submit shop drawings for review prior to start of steel fabrication.
- 7. Fabrication practices and tolerances shall be in accordance with CAN/CSA-S16, except bolt holed edge distance tolerance to be -0, +2mm.
- 8. Anchor and connection bolts to be ASTM A193 Stainless Steel. Anchors shall be embedded 300mm into concrete, complete with a nut and washer each end.
- 9. Unless noted otherwise, column base plates shall be 20 mm minimum thick. Anchor bolt holes shall be punched undersize and reamed to size.
- 10. Provide 6 mm cap plates for all tube members uno.
- 11. Aluminum shall be connected with fillet welds all-around uno. Weld size shall match the wall thickness of the thinnest part being connected uno. Welds to be ground smooth.

**TAMPER RESISTANCE AND CONNECTIONS**

- 1. Connection hardware to be stainless steel uno.
- 2. Aluminum panels to be connected to structure with 6.4mm diameter stainless steel self-tapping screws at 450mm maximum centre to centre spacing.
- 3. Non-removable panels may be welded or glued by the manufacturer, as approved by Structural Engineer.
- 4. Panel connection screws to be tamper resistant "Torx-Pin" screws as supplied by O.E.M. Hardware of Surrey BC, or equivalent as approved by Structural Engineer.
- 5. Visible connection bolts shall be "Pentagon" tamper resistant bolts, with "Pentagon" nuts as supplied by O.E.M. Hardware of Surrey BC, or equivalent as approved by Structural Engineer. Anchor bolts to be secured with "Pentagon" security nuts.

