Municipal Design Guidelines

2021

Part C: Drawing Standards

HALIFAX

Contents

1.0 PURPOSE AND AUTHORITY

1.1 GENERAL

- The purpose of this document is to standardize and identify requirements for the preparation and delivery of computer aided drafting drawings (CAD) being done by or for the Halifax Regional Municipality (HRM), and drawings requiring the approval of the HRM.
- These standards are issued under the authority of the HRM.
- These standards are mandatory for all drawings prepared for and submitted to HRM, including Subdivision drawings, Design Engineering drawings, Right-of-Way infrastructure drawings, any other engineering drawings and Legal drawings.
- These standards apply to hard copy and digital drawing preparations.
- These standards define the structure for digital drawing files for the purpose of compiling HRM's Infrastructure GIS database.
- This procedure is subject to change without notification and the onus is on the user to ensure that they use the latest revised edition.
- Any deviation from these standards is prohibited unless approved by HRM and must be submitted with documentation detailing the CAD drawing structure so as to facilitate the compilation of HRM's Infrastructure GIS database.

2.0 DIGITAL STANDARDS

2.1 GENERAL

- The Halifax Regional Municipality creates engineering drawings with AutoCAD Civil 3D.
- All design and record drawings created for submission to HRM shall be compatible with AutoCAD's DWG format.
- The digital standards described in this document are contained within HRMs PROTOTYPE drawings (DWT/DWG) and are available upon request.
- Details regarding the standards are outlined in the remainder of the document.
- Drawings prepared using other CAD packages are acceptable if and only if they meet the requirements defined in this procedure.

3.0 GEOGRAPHIC REFERENCE

3.1 GENERAL

Nova Scotia Coordinate Referencing System: all work shall be referenced using real world coordinates.

3.1.1 Horizontal Datum

All geographic referenced points shall be NAD83(CSRS) Epoch 2010.0, as defined by the control monuments in the Nova Scotia Coordinate Referencing System.

3.1.2 Vertical Datum

All geographic referenced points shall be Canadian Geodetic Vertical Datum 2013 (CGVD2013), as defined by the control monuments in the Nova Scotia Coordinate Referencing System.

3.1.3 Map Projection

All geographic referenced data shall be referred to zone 5 (Central Meridian 64º 30' West Longitude) or zone 4 (Central Meridian 61º 30' West Longitude) of the Nova Scotia 3º Modified Transverse Mercator Projection of the horizontal datum (MTM Zone 4 and Zone 5).

3.1.4 Units

All coordinates, measurements and dimensions shall be expressed in metric units.

3.1.5 Unit Accuracy

All coordinates, measurements and dimensions shall be expressed to a minimum of 3 decimal places.

3.2 SURVEY DATA

The surveyor shall:

(a) Separate features by layer before the information is transferred to the CAD drawing to simplify the drawing structure as per Section 7.0 - Digital CAD Drawing Structure;

(b) All features captured via survey shall be identified and coded according to HRM feature codes (FCODES) as defined in the HRM Survey field code library, and Appendix D;

(c) The HRM survey field code library is available at http://www.halifax.ca/designcon/design/munservices.html or upon by request;

(d) Original Survey shots shall be submitted digitally as per Section 6.0 - Submission of Digital CAD files.

4.0 DESIGN DRAWINGS

4.1 GENERAL

All design drawings, hard copy and digital, shall include (with each specification detailed further in the document):

- Plan
- Profile
- Details as required / project specification
- Overall plan
- Legend

- Scale
- Title block
- North arrow
- Key plan
- Survey control table
- Proposed centerline alignment table and layout

4.2 PRESENTATION

The presentation of the plan and profile components of the engineering design drawing shall be as follows:

4.2.1 Units

METRIC

4.2.2 Scale

1:500, 1:250, 1:200 or as directed by the HRM Engineer in charge or the engineer the CAD technician reports to.

4.2.3 Title block

The title block is to be located in the lower right-hand corner of the sheet as seen in figure DS 02 and is to include key plan, legend, notes, revisions, dates, scales, drawing number, approving signatures, drawing title and company name as seen in figures DS 04, DS 05 and DS 07.

4.2.4 Standard notes

Standard notes must be placed in appropriate sections of the title block as seen in figure DS 24.

4.2.5 Key plan

The key plan is to be placed in the area provided at the top of the title block for all drawings, which clearly shows the project location within the community.

4.2.6 Sheet size

Drawings comprising a set shall be of uniform size. A standard plan/profile drawing shall be sheet size A1, refer to figure DS 01 for details or as approved by HRM. A1 and A1+ sheet size with layouts are included in the HRMTEMPLATE.dwt.

4.2.7 North arrow

A north arrow shall be placed in the upper right-hand corner of the plan area. A NORTH arrow symbol shall be used for all plans as shown in Figure DS 10.

4.2.8 Plan orientation

Plans shall be drawn to be viewed from the bottom or right-hand side only with north arrow pointing upwards (between 9 and 3 o'clock), when possible. All Horizontal and Vertical chainages shall increase from left to right.

4.2.9 Plan details

See appropriate procedure for details on drafting various types of plans (i.e., survey plan, tentative plan, final plan, street design plan, etc.).

4.2.10 Details

To be included as required by or as directed by the Engineer.

4.3 PLAN

The engineering design plan shall include:

(a) The existing and proposed location and horizontal alignment of:
  (i) Curbed roads, sidewalks and driveways;
  (ii) Traffic markings and infrastructure;
  (iii) Sanitary and storm sewer systems and appurtenances;
  (iv) Water system and appurtenances;
  (v) Fencing, retaining walls, guide rails and other barrier infrastructure;
  (vi) Utility systems both above and below ground, including underground power, telecommunication systems or gas lines etc.;
  (vii) All other public services and their appurtenances;
  (viii) Cross-section and details are to be scaled to fully illustrate the subject matter.
(b) Street dimensioning and name;
(c) Boundary lines of each lot, civic number and PID where available;
(d) Chainage at 50m intervals along the centreline of the street and the chainage of all intersecting street centrelines;
(e) Any control monuments and bench marks that are within the area of the plan;
(f) Limits of the construction;
(g) Survey control table as per figure DS 12;
(h) Proposed centreline alignment table and layout as per figure DS 12.

4.4 PROFILE

Engineering design drawing profile shall include the existing and proposed location and vertical alignment of:

(a) The proposed centreline street grade;
(b) The finished grade;
(c) The water system, including size, material, elevation/depth, fitting inverts;
(d) The sanitary sewer and storm sewer systems, including manhole and catch basin lead inverts, material, size, elevation, depth of cover;
(e) Any other underground services and appurtenances;
(f) Profile grid - the profile section of a plan must be plotted on Halifax Regional Municipality standard grid. See figures DS 17 and DS 18 for line weights, placement of text, etc.;
(g) Scale - 1:50.

4.5 SIGNING OF DRAWINGS

The engineering design drawing shall be stamped and signed by a Professional Engineer currently registered to practise in Nova Scotia.

4.6 FORMAT

The format of the design drawing shall be:

- Hard copy on 20 lbs paper;
- Electronic format as per Section 6.0 - Submission of Digital CAD files.

5.0 RECORD DRAWINGS

5.1 GENERAL

- The record drawing shall include all information on the “Design Drawing” as per Section 4 revised to reflect the “as recorded” information.
- Record Drawings are required upon completion of all engineering projects to reflect “as recorded” information. The parties responsible for the preparation of Record Drawings will be determined and agreed upon prior to the awarding of all contracts.

5.2 FORMAT

Record information submission shall include both of the following formats:

5.2.1 Hard Copy

All signed original plots shall be plotted on stable base (minimum) 3 mil film as per Section 9.0 - Hard Copy Plots;

5.2.2 Electronic format

As per Section 6.0 - Submission of Digital CAD Files, Section 7.0 - Digital CAD Drawing Structure and Section 8.0 Auto CAD Data Entry: Feature Creation.

5.3 SPATIAL DATA DELIVERY FORMAT

All RECORD data must be submitted in ASCII format as described in Section 6 - Submission of Digital CAD Files and within a CAD drawing, conforming to HRM’s Drawing Standards defined in this document. Specifically;

(a) RECORD data must be placed on “RECORD SURVEY” layers as defined in the HRM Prototype Drawing, described in Section 7 - Digital CAD Drawing Structure;
(b) Proposed data / future development data shall be removed from the digital record drawing submission;
(c) RECORD submission shall include RECORD SURVEY data only.

5.4 FEATURE CODES

All RECORD features shall be identified and coded according to HRM feature codes (FCODES) both in the submitted digital CAD file and the submitted ASCII file as described in Section 6 - Submission of Digital CAD Files.

HRM FCODES are listed in Appendix C of this document.

6.0 SUBMISSION OF DIGITAL CAD FILES

6.1 GENERAL

The following guidelines must be followed for acceptable delivery of CAD files to Halifax Regional Municipality. Unless otherwise directed CAD files will not be required for legal drawings.

6.2 DELIVERY MEDIA

(a) Compact disk (CD);
(b) e-mail;
(c) as otherwise approved by HRM.

6.3 ACCEPTABLE DELIVERY FORMAT

(a) AutoCAD Drawing File Format (DWG);
(b) Original Survey Field Shots: Data file or Text file in ASCII Format, where:

ASCII files shall contain fields in the following order: Point#, Northing, Easting, Elevation, FCODE (using HRM define FCODES);

(c) If files are compressed, include appropriate software to explode or decompress files.

6.4 DRAWING CLEAN-UP

Prior to drawing submission ensure the following CAD functions have been performed on the digital drawing file (DWG):

- PURGE: removing unused layers and block references, removing PROPOSED or FUTURE Development layers;
- DRAWING CLEANUP: removing and correcting pseudo nodes, undershoots/overshoots, duplicate features and other topological errors;
- ETRANSMIT: automatically including associated XREFS, plot styles and font files with submission.

6.5 DOCUMENTATION

Documentation must accompany all CAD files. This documentation should contain the following information:

(a) Contract number;

(b) File name listing with descriptions;
(c) Drawing name listing (if different from above);
(d) Revision status and dates of CAD files;
(e) CAD software name and version number;
(f) ASCII file data structures, field sites (database information if applicable);
(g) Data history (source, scale of original map if digitized, operations performed on data).

7.0 DIGITAL CAD DRAWING STRUCTURE

7.1 GENERAL

The digital CAD drawing structure ensures all drawing files (DWG) are produced with a consistent schema, regardless of producer, so that a single process can be used to migrate infrastructure features created via engineering efforts to a single GIS Infrastructure Database thereby eliminating human error and redundant efforts in the data creation process.

All CAD drawing files must contain a definite structure with respect to layering, linetypes, block references, lettering and dimensions. For specific details, refer to the appropriate template drawing details described in this section.

7.2 LAYERS

Layers have been defined to hold specific features. Each feature must be placed on the correct drawing layer. All layers are defined in the prototype drawings for the specific application:

Engineering Drawings: **HRMTEMPLATE.DWT**

Subdivision Engineering Drawings: **HRMSUBTEMPLATE.DWT**

Legal Survey Drawings: **LEGAL.DWG**

A list of layers (layer name, description, and linetype) is contained in Appendix A for Engineering Drawings and Subdivision Engineering Drawings as they follow the same layer structure as described in this section. See Appendix B for Legal Drawings.

7.3 FCODES

All features identified in the CAD file must be coded according to HRM feature codes (FCODES). FCODES are included in all HRM template drawings and listed in Appendix C.

7.3.1 Block Reference - Point Features

For point features this is accomplished through block references. Point features such as manholes, trees, poles, etc. must be symbolized using HRM block

references thereby assigning the correct HRM FCODE. Block references are included in all HRM template drawings.

All RECORD SURVEY symbolized point features are to be placed on layer HE-SYMBOLS-ALL

Ex. a Utility Pole is identified as UTPO therefore

Layer = HE-SYMBOLS-ALL

Block Reference = UTPO

All Blocks and Symbols listed in this document are contained in the prototype drawings.

Refer to figures DS 10 and DS 11 for commonly used symbols. For the remainder see HRMTEMPLATE.dwt and LEGAL.dwg or refer to Appendix C for the full block reference library.

All symbols used shall be denoted in the legend.

7.3.2 Linetype - Line Features

For linear features this is accomplished through linetypes. Linear features such as pipes, sidewalk, curb etc. must be symbolized using HRM linetypes thereby assigning the correct HRM FCODE and placed on the appropriate layer. Linetypes are included in all HRM template drawings.

Ex. a Curbed Road is identified as a RRCB therefore,

LAYER = HE-ROAD

LINETYPE = RRCB

See figures DS 14, DS 15 (for plan), and figures DS 17, DS 18 (for profile) for line weights, placement of text. A partial listing of lines (layer, linetype, description) is contained figure DS 25 of this procedure or refer to Appendix C.

For a complete list print “hrmlinesltscale1.lin”.

7.4 PROTOTYPE DRAWINGS

HRM’s Design staff have developed the following template drawings to facilitate the production of engineering drawings relating to HRM infrastructure.

They include:

(a) hrmtemplate.dwt
(b) assemblies.dwg
(c) hrmpp.dwt

(d) hrmmapbook.dwt
(e) HRMSUBTEMPLATE.dwt

7.4.1 Hrmtemplate.dwt

This template drawing contains HRM's drawing standards for typical Design & Record Drawings.

7.4.1.1 Layer Structure

(a) "HE-" layers represent Horizontal Existing (RECORD SURVEY) and hold various line features. See 7.4.1.7 for a complete list of RECORD LAYERS;
(b) HE-SYMBOLS-All (RECORD SURVEY) - containing all symbolized points
(c) "HP-" layers represent Horizontal Proposed features (point and line). See 7.4.1.8 for a complete list of PROPOSED LAYERS;
(d) "...from HRM GIS" indicates data extracted from HRM's Infrastructure GIS database (point or line);
(e) "VE-" layers represent Vertical Existing profile features (point and line);
(f) "VP-" layers represent Vertical Proposed profile features (point and line)
(g) "K-" layers represent Key Plan features;
(h) Where a layer does not exist for a particular feature and a new layer must be added, it must follow HRM's standardized layer naming convention where RECORD SURVEY layers begin with "HE" and PROPOSED layers begin with "HP" and include an appropriate description in the layers' description field.

7.4.1.2 Block References - defined by HRM Feature Codes (FCODE);

7.4.1.3 Linetypes - defined by HRM FCODES and listed in "hrmlinesltscale1.lin";

7.4.1.4 Standard drawing sheet sizes;

7.4.1.5 Civil 3D Styles - defined within the template to control the display and design characteristics of drawing objects. Any style defined by HRM is named as such. i.e. Point Label - HRM NO DISPLAY turns off the label display for POINT objects.

These styles are applicable to Civil 3D users only;

7.4.1.6 Description Keys - Defined for importing LandXML points by matching the raw Survey description key (FCODE) to the properties specified in that description key, applying the template properties to the point when it is created. The description keys show the code and sets the point style, the point label style, the format, and the layer properties.

Description Keys are applicable to Civil 3D users only;

7.4.1.7 Record Layers are as follows, all begin with “HE”:

Layer Name	Description
HE-BREAKLINES	RECORD SURVEY: Breaklines for TIN / Back of Curb / Centerline
HE-BUILDING	RECORD SURVEY: Building Line
HE-COMBINED	RECORD SURVEY: Combined Sewer Pipe
HE-CONTOUR	RECORD SURVEY: Contour Line
HE-DRIVEWAY	RECORD SURVEY: Driveway-parking-walkway Line
HE-FENCE	RECORD SURVEY: Fence Line
HE-GAS	RECORD SURVEY: Natural Gas Pipe Line
HE-HYDRO	RECORD SURVEY: Ditch-Lake-Stream Coast Line
HE-LABEL-ALL	RECORD SURVEY: All Labels
HE-OTHER	RECORD SURVEY: Miscellaneous Line
HE-PARCEL	RECORD SURVEY: Parcel Line
HE-POINTS-ALL	RECORD SURVEY: All Points
HE-ROAD	RECORD SURVEY: Road Line
HE-SAMPLE	RECORD SURVEY: Section Line of Plan
HE-SANITARY	RECORD SURVEY: Sanitary Sewer Pipe
HE-SIDEWALK	RECORD SURVEY: Sidewalk Line
HE-SLOPES	RECORD SURVEY: Slope Line
HE-STORM	RECORD SURVEY: Storm Sewer Pipe
HE-STREETLINE	RECORD SURVEY: Edge of Right-of-Way
HE-STRUCTURE	RECORD SURVEY: Structure Line
HE-SURFACE	RECORD SURVEY: Surface for TIN Line
HE-SYMBOLS-	RECORD SURVEY: All Symbolized Points
HE-TRAFFIC	RECORD SURVEY: Traffic Line
HE-TREE LINE	RECORD SURVEY: Tree Line
HE-UTILITY	RECORD SURVEY: Utility Line
HE-WATER	RECORD SURVEY: Water Pipe

7.4.1.8 Proposed data must be placed on “PROPOSED” layers as defined below for Design Drawings and is applicable to Design Drawings only and not for Record Drawings.

Proposed Layers are as follows, all begin with “HP”.

Layer Name	Description
HP-ASSEMBLY	PROPOSED: Assembly Template
HP-COMBINED	PROPOSED: Combined Sewer Pipe

HP-CORRIDOR	PROPOSED: Corridor
HP-MARKING	PROPOSED: Pavement Markings
HP-LINK	PROPOSED: Assembly Link
HP-CORRIDOR-FLI	PROPOSED: Corridor
HP-ROAD	PROPOSED: Road Line
HP-SANITARY	PROPOSED: Sanitary Sewer Pipe
HP-SIDEWALK	PROPOSED: Sidewalk Line
HP-STORM	PROPOSED: Storm Sewer Pipe
HP-TABLE	PROPOSED: Alignment Table

7.4.2 assemblies.dwg

For those using Civil 3D's corridor modelling functionality, this template combines horizontal and vertical constraints to generate a proposed roadway cross-section for a typical HRM 9m road with 2% crown. The template accounts for elements along the right-of-way that affect a road design. It has the ability to show changes in road width (following an alignment) and changes to the road crown.

7.4.3 hrmpp.dwt

For those using Civil 3D's Plan-Production Tools, this template contains the content to build a plot according to HRM's hard copy plot standard for 1:500 scale drawings. It contains HRM standard notes, title block, logo, legend, etc. It rotates views and the north arrow; it creates match lines; it generates HRM's standard profile.

7.4.4 hrmmapbook.dwt

This template is set-up to plot cross-sections for "working" drawings using mapbookcreate.

7.4.5 hrmsubtemplate.dwt

This template is set-up for Developers creating subdivision drawings in HRM and is the exact same as HRMTEMPLATE.dwt described in 7.4.1. in terms of layer structure, block reference library, linetype library, C3D styles, description keys, plot style and uses accompanying templates from sections 7.4.2, 7.4.3, 7.4.4. It differs in TITLEBLOCK layout only.

7.5 AVAILABLE DATA

The following data is available for the preparation of engineering drawings:

(a) GIS Extracts - available if required by consultants preparing drawings initiated by the Halifax Regional Municipality and is released through a data license agreement, to be signed by the Consultant and a Halifax Regional Municipality representative. For a GIS data extraction, contact GEOINFO@halifax.ca
(b) Survey Field Code Library is available at http://www.halifax.ca/designcon/design/munservices.html or upon request.

7.6 LETTERING AND DIMENSIONS

All lettering and dimensions must follow Halifax Regional Municipality standards defined in this document, refer to the standard drawings in Appendix D.

7.7 RULES FOR WRITING NUMBERS

(a) Both the point and comma are widely used as the decimal marker. Only one type of marker shall be used in the one text. The decimal marker shall be positioned in line with the base of the associated numerals.
(b) When the triad separator is required to facilitate the reading of long numbers, the separator shall be a space unless there is a compelling reason for it to be otherwise but in no case shall a point or comma be used. A space is not necessary with a four-digit group except when required for consistency, e.g. when it is in a column with other numbers having five or more digits.

Examples:

32 453.246 072 5

1245 (1 245 optional)

3.1416 (3.141 6 optional) but 3.141 59

This clause need not apply to monetary values.

(c) If a numerical value less than one is written in decimal form, a zero shall precede the decimal.
(d) Acceptable formats when showing Length, Area and Volume:

metres: **128.5** or **128.5 m** (in notes and on details)

millimetres: **1285** or **1285 mm** (in notes and on details)

square metres: **1285 m²**

cubic metres: **1285 m³**

8.0 AUTOCAD DATA ENTRY: FEATURE CREATION

8.1 GENERAL

The following guidelines are recommended for data entry using AutoCAD.

(a) The PLINE command should be used instead of the LINE command for linear and polygon shaped features. PLINE will create a node/vertex combination which is important for developing topology within a GIS. SPLINE command shall never be used.

(b) If data is obtained through digitizing, document the scale of the original source map.

(c) All polygon features must be closed by using OSNAP tools (Near, Int, End, etc.).

(d) Do not double-digitize boundary lines which separate adjacent polygons. Adjacent polygons (within a thematic layer) should share a common boundary.

(e) All feature outlines will be captured so that the feature lies to the right of the line (right hand rule).

(f) All single line features which possesses a direction of flow will be captured in the direction of flow (e.g. Sewer Pipe).

8.2 FEATURE COLLECTION

8.2.1 Road

- For curbed roadways locate face of curb at the gutter (RRCB) elevation to be taken at the top of the curb. Curves PC's plus enough shots in between to properly show curb location. Beginning and end of driveway cuts and pedestrian ramps.
- Medians and traffic islands will be collected in the same manner.

8.2.2 Sidewalk

Front and back edge of sidewalk (RRSW), all walkways (RRWK) and driveways (RRDR) where they intersect the curb and sidewalk.

8.2.3 Fences

Fences (STFE), guiderails (STGR), retaining Walls (STRW) and walls (STWL) - beginning, end and at any point where a change in direction occurs at ground level.

8.2.4 Buildings

Locate the actual corner of the siding of corner boards with sufficient points to create a building polygon (BLDG).

8.2.5 Structures

- For large concrete bases or platforms, the corners of that structure should be located, but if the base is 0.3 metres square or less, then locate the centre of the feature.

- Super mailboxes - locate as point features (midpoint of base nearest the curb).
- Bus shelters with no base pad instead they are located on sidewalks (midpoint of feature nearest the curb).

8.2.6 Trees, signs, poles

Locate centre of feature on ground nearest the curb.

9.0 HARD COPY PLOTS

9.1 GENERAL

The following guidelines must be followed when producing hard copy plots for the HRM.

- Plotting Media: All plots shall be plotted on stable base (minimum) 3 mil film.
- Size of plotting media: Sheet A1 and A1+ sizes can be found in the prototype drawings. See figure DS 01 for details.

9.2 SCALES

Plan scales for other drawings shall be as follows:

(a) Survey plan shall be:

(i) 1:1000

(ii) 1:500

(iii) 1:250

(iv) 1:200 (where warranted for legibility reasons)

(v) as directed by HRM.

(b) Drainage plan shall be:

(i) 1:500

(ii) 1:1000

(iii) as approved by the Engineer in charge.

(c) Key plan shall be not less than 1:20,000 or greater than 1:2,500.

(d) Expropriation plan shall be:

(i) 1:500; or

(ii) 1:200; or

(iii) as approved by the HRM.

(e) Detail plan shall be to a scale that will fully illustrate the subject matter.

(f) Other plans - as directed by the HRM Engineer in charge.

9.3 PLOT STYLE

HRM's plot style must be followed in order to produce standard plots. All entities must be plotted with the correct line thickness as described in the standard drawings included as appendices to this section. See figures DS 14, DS 15 (plan), and DS 17, DS 18 (profile) for line weights, placement of text, etc.

HRM uses the named plot style HRMplotstyle.stb which is found in template drawing.

The named plot styles refer to traditional pen widths for lines when plotted. For example, the plot style "width 0.15" is a thin faded line used for "HE" record layers while the plot style "width 0.53" is a bold line to highlight and make construction features prominent so is used for "HP" proposed layers for construction drawings to show proposed features.

10.0 GENERAL CONDITIONS

10.1 STREET NAMES

All streets shall be identified with their proper names and printed outside of the street right-of-way for engineering drawings and inside the street right-of-way for all survey drawings.

10.2 INTERSECTION IDENTIFICATION

At intersecting streets or where the continuation of the streets is on other plans, the following shall be shown on the plan:

For Continuation See Plan No. 00000000

10.3 PERCENT (%) GRADE

Percent (%) grades (slopes) shall be shown for all appropriate services to two decimal places.

10.4 REVISIONS TO PLAN

If plans are revised, amended or altered, the date and the revisers initials shall be noted in the revision area of the Title Block on both the CAD drawing and on the hard copy. The revised hard copy must be updated with the appropriate approval signature. If two plans are retained with the same drawing number (original and revised), then a note must be placed on the original indicating that another plan exists with the same number. However, only one CAD file will be retained (the revised drawing).

10.5 SIGNING OF PLANS

Boundary Plans used in land conveyance, expropriation, subdivision, etc., shall be stamped and/or certified by a Nova Scotia Land Surveyor (N.S.L.S.).

11.0 LEGAL PLANS DETAILS

See the following drawing standards figures:

- Drawing Sizes: DS 01;
- Titleblock: DS 06, DS 08, DS 09;
- Linetype: DS 18;
- Legend: DS 19;
- Lot Identifier: DS 20;
- Drawing Layers: Appendix B

12.0 APPENDICES

Appendix A - Layers for Design Drawings

Appendix B - Layers for Legal Drawings

Appendix C - Feature Code (FCODE) Listing

Appendix D - Drawing Standards Index

Municipal Design Guidelines

2021

Part C: Drawing Standards

Appendix A – Layers for Design Drawings

HALIFAX

APPENDIX 'A'

LAYERS FOR DESIGN DRAWINGS

HRMTEMPLATE.DWT/HRMSUBTEMPLATE.DWT

Layer Name	Description	Linetype	Plot Style
0		Continuous	Width 0.20
BASELINE	Alignment	Centerline	Width 0.20
BUILDING FROM HRM GIS	Building Polygon from HRM GIS	Continuous	Width 0.65
CDIRB	Property Line from HRM GIS: Internal Road Boundary	CDIRB	Width 0.15
CDPL	Property Line from HRM GIS: Property Line	cdpl	Width 0.15
CDRRAB	Property Line from HRM GIS: Arbitrary Road Line	CDRRAB	Width 0.15
CDRRRD	Property Line from HRM GIS: Road Parcel	CDRRRD	Width 0.40
CDWACO	Property Line from HRM GIS: Coast Line	CDWACO	Width 0.15
CORRIDORS SURFACE	Corridor	Continuous	Width 0.20
DEFPOINTS	Definition Points	Continuous	Width 0.30
DLMG	Property Line from HRM GIS: Management Units	Continuous	Width 0.15
FINISHED SURFACE	Finished Surface	Continuous	Width 0.30
GRID	PROFILE: Grid Lines for Profile	Continuous	Width 0.15
GSCD	Natural Gas Conduit from HRM GIS	GSPI	Width 0.15
GSPI	Natural Gas Pipeline from HRM GIS	GSPI	Width 0.15
GSTL	Natural Gas Transmission Line from HRM GIS	GSTL	Width 0.20

Layer Name	Description	Linetype	Plot Style
HE-BREAKLINES	RECORD SURVEY: Breaklines for TIN / Back of Curb/ Centerline	Continuous	Width 0.20
HE-BUILDING	RECORD SURVEY: Building Line	bldg	Width 0.18
HE-COMBINED	RECORD SURVEY: Combined Sewer Pipe	SWPICO	Width 0.18
HE-CONTOUR	RECORD SURVEY: Contour Line	Continuous	Width 0.30
HE-DRIVEWAY	RECORD SURVEY: Driveway-Parking-Walkway Line	RRDR or RRPA or RRWK	Width 0.18
HE-FENCE	RECORD SURVEY: Fence Line	STFE	Width 0.15
HE-GAS	RECORD SURVEY: Natural Gas Pipeline	GSPI / GSTL/ GSLA/ GSPE	Width 0.15
HE-HYDRO	RECORD SURVEY: Pitch Lake-Stream-Coast Line	WADI/ WAOH/ WASL/ WAWM	Width 0.15
HE-LABEL-ALL	RECORD SURVEY: All Labels	Continuous	Width 0.20
HE-OTHER	RECORD SURVEY: Miscellaneous Line	Continuous	Width 0.15
HE-PARCELL	RECORD SURVEY: Parcel Line	CDPL	Width 0.15
HE-POINTS-ALL	RECORD SURVEY: All Points	Continuous	Width 0.20
HE-ROAD	RECORD SURVEY: Road Line	RRCB/ RRRD	Width 0.30
HE-SAMPLE	RECORD SURVEY: Section Line of Plan	Continuous	Width 0.20
HE-SANITARY	RECORD SURVEY: Sanitary Sewer Pipe	SWPISA	Width 0.15
HE-SIDEWALK	RECORD SURVEY: Sidewalk Line	RRSW	Width 0.20
HE-SLOPES	RECORD SURVEY: Slope Line	Continuous	Width 0.15
HE-STORM	RECORD SURVEY: Storm Sewer Pipe	SWPIST	Width 0.15

Layer Name	Description	Linetype	Plot Style
HE-STREETLINE	RECORD SURVEY: Edge of Right-of-Way	Continuous	Width 0.40
HE-STRUCTURE	RECORD SURVEY: Structure Line	Continuous	Width 0.15
HE-SURFACE	RECORD SURVEY: Surface for TIN Lines	Continuous	Width 0.30
HE-SYMBOLS-ALL	RECORD SURVEY: All Symbolized Points	Continuous	Width 0.18
HE-TRAFFIC	RECORD SURVEY: Traffic Line	Continuous	Width 0.15
HE-TREE LINE	RECORD SURVEY: Tree Line	Continuous	Width 0.15
HE-UTILITY	RECORD SURVEY: Utility Line	Continuous	Width 0.15
HE-WATER	RECORD SURVEY: Water Pipe	Continuous	Width 0.18
HP-ASSEMBLY	PROPOSED: Assembly Template	Continuous	Width 0.30
HP-COMBINED	PROPOSED: Combined Sewer Pipe	Continuous	Width 0.65
HP-CORRIDOR	PROPOSED: Corridor	Continuous	Width 0.30
HP-CORRIDOR FLINE	PROPOSED: Corridor	Continuous	Width 0.30
HP-LINK	PROPOSED: Assembly Link	Continuous	Width 0.30
HP-ROAD	PROPOSED: Road Line	Continuous	Width 0.65
HP-SANITARY	PROPOSED: Sanitary Sewer Pipe	Continuous	Width 0.65
HP-SIDEWALK	PROPOSED: Sidewalk Line	Continuous	Width 0.40
HP-STORM	PROPOSED: Storm Sewer Pipe	Continuous	Width 0.65
HP-TABLE	PROPOSED: Alignment Table	Continuous	Width 0.30
HRWC-DIM-AND-TEXT	HALIFAX WATER: Dimenions and Text	Continuous	Width 0.30
HRWC-LOGO	HALIFAX WATER: Logo Line	Continuous	Width 0.30
HRWC-LOGO-TXT	HALIFAX WATER: Logo Text	Continuous	Width 0.30

Layer Name	Description	Linetype	Plot Style
HRWC HYDRANT FROM HRM GIS	HALIFAX WATER: Hydrant from HRM GIS	Continuous	Width 0.15
HRWC PIPE FROM HRM GIS	HALIFAX WATER: Pipe from HRM GIS	Continuous	Width 0.18
HRWC VALVE FROM HRM GIS	HALIFAX WATER: Valve from HRM GIS	Continuous	Width 0.15
K-ROADANNO	KEYPLAN: Annotation	Continuous	Width 0.20
K-STREET	KEYPLAN: Street Line	Continuous	Width 0.30
K-WAOC10	KEYPLAN: Water Line	Continuous	Width 0.30
MATCHLINE	Matchline for series of Plans	Continuous	Width 0.65
MISC	TEMPORARY: Miscellaneous Construction Lines	Continuous	Width 0.30
NATURAL GAS SERVICE LATERAL HRM GIS	Natural Gas Service Lateral from HRM GIS	GSLA	Width 0.15
NO PLOT	No Plotting Features	Continuous	Normal
POINTS TABLE	Table for Points	Continuous	Width 0.30
Poles	Solid Hatch	Continuous	Poles
RRCB	Curbed Road from HRM GIS	RRCB	Width 0.30
RRDR	Driveway from HRM GIS	RRDR	Width 0.18
RRPA	Parking Area from HRM GIS	RRPA	Width 0.18
RRPW	Pathway from HRM GIS	RRPW	Width 0.18
RRRD	Edge of Asphalt from HRM GIS	RRRD	Width 0.30
RRRR	Railroad from HRM GIS	RRRR	Width 0.20
RRSW	Sidewalk from HRM GIS	RRSW	Width 0.20
RRTR	Trail from HRM GIS	RRTR	Width 0.15

Layer Name	Description	Linetype	Plot Style
RRWK	Hard Surface Walkway from HRM GIS	RRWK	Width 0.18
SCHEMATIC SEWER FROM HRM GIS	Schematic Sewer from HRM GIS	Continuous	Width 0.15
SEWER INLET FROM HRM GIS	Sewer Inlet-Catchbasin from HRM GIS	Continuous	Width 0.15
SEWER MANHOLE FROM HRM GIS	Sewer Manhole from HRM GIS	Continuous	Width 0.15
SHADE	Solid Hatch for Pave	Continuous	Shade
SHEET	Sheet	Continuous	Width 0.8
STFE	Fence Line from HRM GIS	STFE	Width 0.15
STGR	Guiderail Line from HRM GIS	STGR	Width 0.15
STREET CENTRELINE FROM HRM GIS	Key Plan Street Name		Width 0.20
STREET FROM HRM G/S	Key Plan Street Line		Width 0.30
STRW	Retaining Wall from HRM GIS	STRW	Width 0.15
STWL	Wall from HRM GIS	STWL	Width 0.15
SWFMAB	Abandoned Sewer Forcemain from HRM GIS	SWFMAB	Width 0.15
SWFMCO	Combined Sewer Forcemain from HRM GIS	SWFMAB	Width 0.15
SWFMSA	Sanitary Sewer Forcemain from HRM GIS	SWFMSA	Width 0.15
SWFMST	Storm Sewer Forcemain from HRM GIS	SWFMST	Width 0.15
SWLACO	Combined Sewer Lateral from HRM GIS	SWLACO	Width 0.15

Layer Name	Description	Linetype	Plot Style
SWLASA	Sanitary Sewer Lateral from HRM GIS	SWLASA	Width 0.15
SWLAST	Storm Sewer Lateral from HRM GIS	SWLAST	Width 0.15
SWPICL	Catchbasin Lead from HRM GIS	SWPICL	Width 0.15
SWPICO	Combined Sewer Pipe from HRM GIS	SWPICO	Width 0.15
SWPICOTK	Combined Trunk Sewer Pipe from HRM GIS	SWPICOTK	Width 0.15
SWPISA	Sanitary Sewer Pipe from HRM GIS	SWPISA	Width 0.15
SWPISATK	Sanitary Trunk Sewer Pipe from HRM GIS	SWPISATK	Width 0.15
SWPIST	Storm Sewer Pipe from HRM GIS	SWPIST	Width 0.15
SWPIUK	Unknown Sewer Pipe from HRM GIS	SWPIUK	Width 0.15
TREE FROM HRM GIS	Tree Point from HRM GIS	Continuous	Width 0.15
TREE LINE FROM HRM GIS	Tree Line from HRM GIS	Continuous	Width 0.15
UTFO	Fibre Optic Line from HRM GIS	UTFO	Width 0.15
UTILITY POINT FROM HRM GIS	Utility Point Features from HRM GIS	Continuous	Width 0.15
UTPI	Pipeline from HRM GIS	UTPI	Width 0.15
UTSS	Utility Substation Line from HRM GIS	UTSS	Width 0.15
UTTK	Utility Tank Line from HRM GIS	UTTK	Width 0.15
UTTR	Utility Transmission Line from HRM GIS	UTTR	Width 0.15
UTWT	Utility Water Tank Line from HRM GIS	UTWT	Width 0.15

Layer Name	Description	Linetype	Plot Style
VE-COMBINED	PROFILE-EXISTING: Combined Sewer Pipe	Continuous	Width 0.30
VE-PROFILE	PROFILE-EXISTING: Ground	Continuous	Width 0.30
VE-SANITARY	PROFILE-EXISTING: Sanitary Sewer Pipe	Continuous	Width 0.30
VE-SECTION	CROSS SECTION-EXISTING: Section View	Continuous	Width 0.30
VE-SECTION-DATA	CROSS SECTION-EXISTING: Ground Line	Continuous	Width 0.30
VE-SECTION-PIPE	CROSS SECTION-EXISTING: Pipe	Continuous	Width 0.30
VE-STORM	PROFILE-EXISTING: Storm Sewer Pipe	Continuous	Width 0.30
VE-WATER	PROFILE-EXISTING: Water Pipe	waterprof	Width 0.30
VIEW	MODEL VIEW: Polyline for Window	Continuous	Width 0.15
VP-COMBINED	PROFILE-PROPOSED: Combined Sewer Pipe	Continuous	Width 0.53
VP-PROFILE	PROFILE-PROPOSED: Ground	Continuous	Width 0.53
VP-SANITARY	PROFILE-PROPOSED: Sanitary Sewer Pipe	Continuous	Width 0.53
VP-SECTION-DATA	CROSS SECTION-PROPOSED: Section Ground Line	Continuous	Width 0.53
VP-STORM	PROFILE-PROPOSED: Storm Sewer Pipe	Continuous	Width 0.53
WIDTH 0.15	MISCELLANEOUS TEXT-LINE: Plot @ Line Weight 0.15 NOT RECORD	Continuous	Width 0.15
WIDTH 0.2	MISCELLANEOUS TEXT-LINE: Plot @ Line Weight 0.2 NOT RECORD	Continuous	Width 0.20
WIDTH 0.3	MISCELLANEOUS TEXT-LINE: Plot @ Line Weight 0.3 NOT RECORD	Continuous	Width 0.30

Layer Name	Description	Linetype	Plot Style
WIDTH 0.4	MISCELLANEOUS TEXT-LINE: Plot @ Line Weight 0.4 NOT RECORD	Continuous	Width 0.40
WIDTH 0.8	MISCELLANEOUS TEXT-LINE: Plot @ Line Weight 0.8 NOT RECORD	Continuous	Width 0.80
WIDTH 0.53	MISCELLANEOUS TEXT-LINE: Plot @ Line Weight 0.53 NOT RECORD	Continuous	Width 0.53
WIDTH 0.65	MISCELLANEOUS TEXT-LINE: Plot @ Line Weight 0.65 NOT RECORD	Continuous	Width 0.65
WIDTH 1.06	MISCELLANEOUS TEXT-LINE: Plot @ Line Weight 1.06 NOT RECORD	Continuous	Width 1.06
WIDTH 1.4	MISCELLANEOUS TEXT-LINE: Plot @ Line Weight 1.4 NOT RECORD	Continuous	Width 1.4

Municipal Design Guidelines

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Part C: Drawing Standards

Appendix B – Layers for Legal Drawings

HALIFAX

APPENDIX 'B'

LAYERS FOR LEGAL DRAWINGS **HRMLEGALTEMPLATE.DWT**

Layer	Description	Linetype	Plot Style
0	Miscellaneous	Continuous	Width 0.20
CALCP	Calculated Points	Continuous	Width 0.20
HE-BUILDING	Lines from Survey: Building	Continuous	Width 0.20
HE-DRIVEWAY	Lines from Survey: Driveway/Parking/Walkway Line	RRDR/RRPA/ RRWK	Width 0.20
HE-FENCE	Lines from Survey: Fence	STFE	Width 0.20
HE-GAS	Lines from Survey: Gas	GSPI	Width 0.20
HE-HYDRO	Lines from Survey: Stream/Lake/Coast	WADI/WAOH/ WASL/WAWM	Width 0.20
HE-OTHER	Lines from Survey: Miscellaneous Line	Continuous	Width 0.20
HE-PARCEL	Lines from Survey: Adjoining Parcels	Continuous	Width 0.25
HE-POINTS-ALL	All Points from Survey	Continuous	Width 0.20
HE-ROAD	Lines from Survey: Curb & Sidewalk	Continuous	Width 0.20
HE-RRRR	Lines from Survey: Railway Lines	RRRR	Width 0.20
HE-STRUCTURE	Lines from Survey: Structure Line	Continuous	Width 0.20
HE-SURVEY	Boundaries dealt with by this survey.	Continuous	Width 0.80
HE-SYMBOLS-ALL	All Symbolized Points from Survey	Continuous	Width 0.20
HE-TRAFFIC	Lines from Survey: Traffic Lights, Lines & Signs	Continuous	Width 0.20
HE-TREE LINE	Lines from Survey: Tree, Hedge, Tree Line	Cont./LCHG	Width 0.20
HE-UTILITY	Lines from Survey: Pole & other Utility features	Continuous	Width 0.20

HE-WATER	Lines from Survey: Valve, Hydrant, Pipe, etc.	Continuous	Width 0.20
NO PLOT	No Plotting Features	Continuous	Normal
SHADE	Shading using Solid	Continuous	Shade
SHEET	Sheet	Continuous	Width 0.80
SURVEYP	Survey Points from Survey: Evidence, Monumentation & Control Points	Continuous	Width 0.30
VIEW	Polyline for Viewport	Continuous	Width 0.15
WIDTH 0.2	Miscellaneous text-line: Plot @ Line Weight 0.2	Continuous	Width 0.20
WIDTH 0.3	Miscellaneous text-line: Plot @ Line Weight 0.3	Continuous	Width 0.30
WIDTH 0.4	Miscellaneous text-line: Plot @ Line Weight 0.4	Continuous	Width 0.40
WIDTH 0.53	Miscellaneous text-line: Plot @ Line Weight 0.53	Continuous	Width 0.53
WIDTH 0.65	Miscellaneous text-line: Plot @ Line Weight 0.65	Continuous	Width 0.65
WIDTH 0.8	Miscellaneous text-line: Plot @ Line Weight 0.8	Continuous	Width 0.80
WIDTH 1.06	Miscellaneous text-line: Plot @ Line Weight 1.06	Continuous	Width 1.06
WIDTH 1.4	Miscellaneous text-line: Plot @ Line Weight 1.4	Continuous	Width 1.4

Municipal Design Guidelines

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Part C: Drawing Standards

Appendix C – Feature Code (FCODE) Listing

HALIFAX

APPENDIX 'C'

FEATURE CODE (FCODE) LISTING

FCODE	DESCRIPTION	Symbol Type	Symbol	DWG Layer - RECORD SURVEY	DWG Layer - Extracted from HRM GIS
ROAD					
RRCB	Curbed Road	Linetype / Linear	rrcb, _____	HE-ROAD	RRCB
RRCB-A	Curb Top Back-Asphalt	Linetype / Linear	rrcb-a, _____	HE-BREAKLINES	RRCB
RRCB-C	Curb Top Back - Concrete	Linetype / Linear	rrcb-c, _____	HE-BREAKLINES	RRCB
RRCC	Driveway Cut	Point / Block Reference	X	HE-POINTS-ALL	N/A
RRCL	Centreline	Linetype / Linear	RRCL, _____	HE-BREAKLINES	RRCL
RRDR	Driveway	Linetype / Linear	rrdr, _____	HE-DRIVEWAY	RRDR
RRDR-A	Driveway - Asphalt	Linetype / Linear	RRDR-A, _____	HE-DRIVEWAY	RRDR
RRDR-B	Driveway - Brick	Linetype / Linear	RRDR-B, _____	HE-DRIVEWAY	RRDR
RRDR-C	Driveway - Concrete	Linetype / Linear	RRDR-C, _____	HE-DRIVEWAY	RRDR
RRDR-G	Driveway - Gravel	Linetype / Linear	RRDR-G, - - - - - - -	HE-DRIVEWAY	RRDR
RRGT-A	Gutter-Asphalt	Linetype / Linear	rrcb-a, _____	HE-ROAD	RRCB
RRGT-C	Gutter-Concrete	Linetype / Linear	rrcb-c, _____	HE-ROAD	RRCB
RRJB	Jersey Barrier	Linetype / Linear	RRJB, _____	HE-ROAD	RRJB
RRPA-A	Parking Area - Asphalt	Linetype / Linear	rrpa-a,_____	HE-DRIVEWAY	RRPA
RRPA-C	Parking Area-Concrete	Linetype / Linear	rrpa, _____	HE-DRIVEWAY	RRPA
RRPA-G	Parking Area - Gravel	Linetype / Linear	rrpa-g,_____	HE-DRIVEWAY	RRPA
RRPW	Pathway	Linetype / Linear	rrpw,_____	HE-DRIVEWAY	RRPW
RRRD	Edge of Road (no curb)	Linetype / Linear	rrrd,_____	HE-ROAD	RRRD
RRRD-A	Edge of Road - Asphalt (no curb)	Linetype / Linear	rrrd-a,_____	HE-ROAD	RRRD
RRRD-G	Edge of Road - Gravel (no curb)	Linetype / Linear	rrrd-g,_____	HE-ROAD	RRRD
RRRR	Railroad	Linetype / Linear	RRRR, _____	HE-OTHER	RRRR
RRRRSW	Railroad Switch	Point / Block Reference	X	HE-POINTS-ALL	N/A
RRSH-G	Shoulder - Gravel	Linetype / Linear	RRSH-G, - - - - - - -	HE-ROAD	N/A
RRSW	Sidewalk	Linetype / Linear	rrsw,_____	HE-SIDEWALK	RRSW
RRSW-A	Sidewalk - Asphalt	Linetype / Linear	rrsw-a,_____	HE-SIDEWALK	RRSW
RRSW-B	Sidewalk - Brick	Linetype / Linear	rrsw-b,_____	HE-SIDEWALK	RRSW
RRSW-C	Sidewalk - Concrete	Linetype / Linear	rrsw-c,_____	HE-SIDEWALK	RRSW
RRWK	Walkway	Linetype / Linear	rrwk,_____	HE-DRIVEWAY	RRWK
RRWK-A	Walkway - Asphalt	Linetype / Linear	rrwk-a,_____	HE-DRIVEWAY	RRWK
RRWK-B	Walkway - Brick	Linetype / Linear	rrwk-b,_____	HE-DRIVEWAY	RRWK
RRWK-C	Walkway - Concrete	Linetype / Linear	rrwk-c,_____	HE-DRIVEWAY	RRWK
RRWK-G	Walkway - Gravel	Linetype / Linear	rrwk-g, - - - - - - - - - -	HE-DRIVEWAY	RRWK

FENCE					
STFE	Fence	Linetype / Linear	stfe,---- X ---- X ----	HE-FENCE	STFE
STFE-CH	Fence - Chainlink	Linetype / Linear	stfe-ch,---- X ---- X ----	HE-FENCE	STFE
STFE-WR	Fence - Wire	Linetype / Linear	stfe-wr,---- X ---- X ----	HE-FENCE	STFE
STFE-WD	Fence - Wood	Linetype / Linear	stfe-wd,---- X ---- X ----	HE-FENCE	STFE
STGR	Guiderail	Linetype / Linear	STGR,---- GR ---- GR -	HE-FENCE	STFE
STGT	Fence - Gate	Linetype / Linear	STGT, _____	HE-FENCE	STFE
STPT	Fence - Post	Point / Block Reference	X	HE-POINTS-ALL	STPT
STWL	Wall	Linetype / Linear	stwl,---- W ---- W ----	HE-FENCE	STWL
STRUCTURE					
STBB	Billboard	Linetype / Linear	STBB, _____	HE-STRUCTURE	Structure Line from HRM GIS
STBL	Bleachers	Linetype / Linear	STBL, _____	HE-STRUCTURE	Structure Line from HRM GIS
STCO	Column\Pillar	Linetype / Linear	STCO, _____	HE-STRUCTURE	Structure Line from HRM GIS
STDK	Deck	Linetype / Linear	STDK,_____	HE-STRUCTURE	Structure Line from HRM GIS
STFL	Fountain	Linetype / Linear	STFL, _____	HE-STRUCTURE	Structure Line from HRM GIS
STGP	Guard Post/Bollard	Point / Block Reference	X	HE-POINTS-ALL	STGP
STGT	Gate	Linetype / Linear	STGT, _____	HE-STRUCTURE	Structure Line from HRM GIS
STHW	Concrete Headwall	Point / Block Reference	SWHW	HE-STRUCTURE	Collection System Headwall from HRM GIS
STHW	Concrete Headwall	Linetype / Linear	STHW, --- HW--- HW--	HE-STRUCTURE	Structure Line from HRM GIS
STMB	Community Mailbox	Linetype / Linear	STMB,_____	HE-STRUCTURE	Structure Line from HRM GIS
STMO	Monument/Statue	Linetype / Linear	STMO,_____	HE-STRUCTURE	Structure Line from HRM GIS
STN	Stone/Rock	Linetype / Linear	STN,_____	HE-STRUCTURE	Structure Line from HRM GIS
STPR	Pier (bridge support)	Linetype / Linear	STPR,_____	HE-STRUCTURE	Structure Line from HRM GIS
STRW	Retaining Wall	Linetype / Linear	strw,---- RW ---- RW ---	HE-STRUCTURE	STRW
STRW-C	Retaining Wall - Concrete	Linetype / Linear	strw-c,---- RW ---- RW -	HE-STRUCTURE	STRW
STRW-B	Retaining Wall - Brick	Linetype / Linear	strw-b,---- RW ---- RW -	HE-STRUCTURE	STRW
STRW-G	Retaining Wall - Gabion	Linetype / Linear	STRW-G--- RW --- RW	HE-STRUCTURE	STRW
STRW-WD	Retaining Wall - Wood	Linetype / Linear	STRW-WD,--- RW-- RW	HE-STRUCTURE	STRW
STRW-R	Retaining Wall - Rock	Linetype / Linear	STRW-R--- RW --- RW	HE-STRUCTURE	STRW

STSB	Concrete Slab	Linetype / Linear	STSB, _____	HE-STRUCTURE	Structure Line from HRM GIS
STST	Steps	Linetype / Linear	STST,_____	HE-STRUCTURE	Structure Line from HRM GIS
STST-C	Steps - Concrete	Linetype / Linear	STST-C,_____	HE-STRUCTURE	Structure Line from HRM GIS
STST-WD	Steps - Wood	Linetype / Linear	STST-WD,_____	HE-STRUCTURE	Structure Line from HRM GIS
STWH	Wharf	Linetype / Linear	STWH, _____	HE-STRUCTURE	Structure Line from HRM GIS
STUN	Unknown Structure	Linetype / Linear	STUN, _____	HE-STRUCTURE	Structure Line from HRM GIS
TWSI	Tactile Walking Surface Indicator	Point / Block Reference	 TWSI	HE-SYMBOLS-ALL	T.W.S.I. from HRM GIS
VEGETATION					
LCSA	Shrub Area	Linetype / Linear	LCSA, _____	HE-TREE LINE	Tree Line from HRM GIS
LCSA	Shrub	Point / Block Reference	 SHRUB	HE-SYMBOLS-ALL	N/A
LCCG	Cultivated Garden	Linetype / Linear	LCCG, _____	HE-TREE LINE	Tree Line from HRM GIS
LCHG	Hedge	Linetype / Linear	lchg,---- H ---- H ----	HE-TREE LINE	Tree Line from HRM GIS
LCGR	Edge of Grass	Linetype / Linear	LCGR, _____	HE-TREE LINE	Tree Line from HRM GIS
LCPL	Planter	Linetype / Linear	LCPL, _____	HE-STRUCTURE	Tree Line from HRM GIS
LCTR	Tree Line Breakline	Linetype / Linear	LCTR,_____	HE-TREE LINE	Tree Line from HRM GIS
LCTS	Tree	Point / Block Reference	 LCTL	HE-SYMBOLS-ALL	Tree from HRM GIS
LCTS	Tree Line	Linetype / Linear	LCTR, _____	HE-TREE LINE	Tree Line from HRM GIS
TRAFFIC					
BKS	Bike Lane Symbol	Point / Block Reference	 BKS	HE-SYMBOLS-ALL	N/A
BUS	Bus Lane Symbol	Point / Block Reference	TFMKRL	HE-SYMBOLS-ALL	N/A
TFCDSL	U/G Street Light Conduit	Linetype / Linear	TFCDSL,---SL --- SL ---	HE-TRAFFIC	N/A
TFBS	Bus Shelter	Linetype / Linear	trbssh, _____	HE-TRAFFIC	Bus Shelter from HRM GIS
TFBT	Bus Stop	Point / Block Reference	 BUS	HE-SYMBOLS-ALL	Bus Stop from HRM GIS
TFCDTL	U/G Traffic Light Conduit	Linetype / Linear	tfcdtl,-----TL-----TL-----	HE-TRAFFIC	N/A
TFCDFA	U/G Fire Alarm Conduit	Linetype / Linear	tfcdfa,-----FA-----FA-----	HE-TRAFFIC	N/A
TFDL	Detector Loop	Linetype / Linear	TFDL,_____	HE-TRAFFIC	N/A
TFMKAC	Advanced Cross Walk	Point / Block Reference	 TFTL	HE-SYMBOLS-ALL	N/A
TFMKCW	Cross Walk	Linetype / Linear	tfmkcw,_____	HE-TRAFFIC	N/A
TFMKCL	Center Line Pavement Marking	Linetype / Linear	tfmkcl,_____	HE-TRAFFIC	N/A
TFMKCM	Channel Marking	Linetype / Linear	tfmkcm,_____	HE-TRAFFIC	N/A

TFMKSB	Stop Bar	Linetype / Linear	tfmksb,_____	HE-TRAFFIC	N/A
TFMKMM	Parking Meter Lines	Linetype / Linear	tfmkmm,_____	HE-TRAFFIC	N/A
TFMKDL	Dashed Line	Linetype / Linear	tfmkdl, _____	HE-TRAFFIC	N/A
TFMKDY	Double Yellow Line	Linetype / Linear	tfmkdy, _____	HE-TRAFFIC	N/A
TFMKSY	Single Yellow Line	Linetype / Linear	tfmksy, _____	HE-TRAFFIC	N/A
TFMKWS	Single White Line	Linetype / Linear	tfmksw, _____	HE-TRAFFIC	N/A
TFJB	Traffic Loop Junction Box	Point / Block Reference	 TFJB	HE-SYMBOLS-ALL	N/A
TFPM	Parking Pay Station	Point / Block Reference	 TFPM	HE-SYMBOLS-ALL	TFPM
TFCB	Traffic Cabinet or Controller Box	Point / Block Reference	 TFCB	HE-SYMBOLS-ALL	N/A
TFSL	Street Light Standard	Point / Block Reference	 TFSL	HE-SYMBOLS-ALL	Streetlights from HRM GIS
TFSLOR	Ornamental Street Light Standard	Point / Block Reference	 TFSLOR	HE-SYMBOLS-ALL	N/A
TFSP	Sign -Multiple Posts	Linetype / Linear	TFSP, _____	HE-TRAFFIC	N/A
TFSP	Sign Post	Point / Block Reference	 TFSP	HE-SYMBOLS-ALL	TFSP
TFAR3T	Pavement Marking - 3 turn arrow	Point / Block Reference	 TFMKAR3T	HE-SYMBOLS-ALL	N/A
TFMARRL	Pavement Marking - right/left arrow	Point / Block Reference	 TFMKARRLT	HE-SYMBOLS-ALL	N/A
TFMARLT	Pavement Marking - left turn only	Point / Block Reference	 TFMKARLT	HE-SYMBOLS-ALL	N/A
TFARRT	Pavement Marking - right turn only	Point / Block Reference	 TFMKARRT	HE-SYMBOLS-ALL	N/A
TFARST	Pavement Marking - straight only	Point / Block Reference	 TFMKARST	HE-SYMBOLS-ALL	N/A
TFARTR	Pavement Marking - straight/right turn	Point / Block Reference	 TFMKARTR	HE-SYMBOLS-ALL	N/A
TFARTL	Pavement Marking - straight/left turn	Point / Block Reference	 TFMKARTL	HE-SYMBOLS-ALL	N/A
TFTL	Traffic Light Standard	Point / Block Reference	 TFTL	HE-SYMBOLS-ALL	Traffic Pole from HRM GIS
UTILITY					
UTGW	Guy Wire	Linetype / Linear	UTGW, _____	HE-UTILITY	N/A
UTGW	Guy Wire Anchor	Point / Block Reference	 UTGW	HE-SYMBOLS-ALL	N/A
UTCDTL	U/G Communication Conduit	Linetype / Linear	UTCDTL,----TD ---- TD	HE-UTILITY	N/A
UTCDPW	U/G Electrical Conduit	Linetype / Linear	UTCDPW,----ET ---- ET	HE-UTILITY	N/A
UTOH	Overhead Wires	Linetype / Linear	UTOH, ____ . ____ .	HE-UTILITY	UTTR
UTTK	Tank (oil, propane, etc.)	Linetype / Linear	UTTK, _____	HE-UTILITY	UTTK

UTTR	Telephone Pedestal	Linetype / Linear	UTTR,_____	HE-UTILITY	UTTR
UTTB	Telephone Booth	Linetype / Linear	UTTB,_____	HE-UTILITY	UTTB
UTJB	Junction Box	Linetype / Linear	UTJB,_____	HE-UTILITY	UTJB
UTMHPW	NS Power Manhole or Junction Box	Point / Block Reference	 UTMHPW	HE-SYMBOLS-ALL	Utility Point from HRM GIS
UTPO	Utility Pole	Point / Block Reference	 UTPO	HE-SYMBOLS-ALL	Utility Point from HRM GIS
UTFO	Fibre Optic Line	Linetype / Linear	UTFO,----------	HE-OTHER	UTFO
UTMHTL	Aliant Manhole	Point / Block Reference	 UTMHTL	HE-SYMBOLS-ALL	N/A
GAS					
GSPI	Gas Line	Linetype / Linear	GSPI, — G — G —	HE-GAS	GSPI
GSLA	Gas Lateral	Linetype / Linear	GSLA,_____	HE-GAS	GSLA
GSMT	Gas Meter	Point / Block Reference	X	HE-SYMBOLS-ALL	GSMT
GSMH	Gas Manhole	Point / Block Reference	 GSMH	HE-SYMBOLS-ALL	N/A
GSTEE	Gas Tee	Point / Block Reference	X	HE-SYMBOLS-ALL	N/A
GSVL	Gas Valve	Point / Block Reference	 GSVL	HE-SYMBOLS-ALL	Natural Gas Valves from HRM GIS
SLOPE					
LFBL	Miscellaneous Breakline	Linetype / Linear	LFBL, _____	HE-BREAKLINES	N/A
LFTS	Top of Slope	Linetype / Linear	LFTS, _____	HE-SLOPES	N/A
LFBS	Bottom of Slope	Linetype / Linear	LFBS, _____	HE-SLOPES	N/A
LFSH	Spot Elevation	Point / Block Reference	X	HE-POINTS-ALL	N/A
LFFE	Finish Floor Elevation	Point / Block Reference	X	HE-POINTS-ALL	N/A
STRW-TOP	Top of Retaining Wall	Linetype / Linear	STRW, _____	HE-BREAKLINES	N/A
STRW-BOTTOM	Bottom of Retaining Wall	Linetype / Linear	STRW, _____	HE-BREAKLINES	N/A
BUILDING					
BLDG	Building – No Elevation	Linetype / Linear	bldg,_____	HE-BUILDING	Building Polygon from HRM GIS
BLDGOT	Building - Other	Linetype / Linear	bldg,_____	HE-BUILDING	Building Polygon from HRM GIS
BLDG-B	Building - Brick	Linetype / Linear	BLDG-B,_____	HE-BUILDING	Building Polygon from HRM GIS
BLDG-DR	Building – Door Sill	Point / Block Reference	X	HE-POINTS-ALL	N/A
BLDG-FD	Building - Foundation	Linetype / Linear	BLDG-FD,_____	HE-BUILDING	Building Polygon from HRM GIS
BLDG-SD	Building - Siding	Linetype / Linear	BLDG-SD,_____	HE-BUILDING	Building Polygon from HRM GIS
BLDG-SH	Building - Shingles	Linetype / Linear	BLDG-SH,_____	HE-BUILDING	Building Polygon from HRM GIS

BLDG-WS	Building – Window Sill	Point / Block Reference	X	HE-POINTS-ALL	N/A
RECREATION					
DAPG	Playground	Linetype / Linear	DAPG,_____	HE-OTHER	Recreation Area from HRM GIS
HYDRO					
WADI	Ditch	Linetype / Linear	WADI,_____ _ _ _	HE-HYDRO	Ditch from HRM GIS
WAOH	Ordinary High Watermark	Linetype / Linear	WAOH,_____	HE-HYDRO	N/A
WASL	Shore Line	Linetype / Linear	WASL,_____	HE-HYDRO	Lake from HRM GIS
WAST	Edge of Stream or Brook	Linetype / Linear	WAST,_____	HE-HYDRO	N/A
SURVEY					
CALC	Calculated Point	Point / Block Reference	X	HE-POINTS-ALL	N/A
NSCM	NS Coordinate Monument	Point / Block Reference	 MNNSCM	HE-SYMBOLS-ALL	Survey Monument from HRM GIS
RRST	Streetline Tie	Point / Block Reference	X	HE-POINTS-ALL	N/A
SVAI	Angle Iron	Point / Block Reference	O	HE-SYMBOLS-ALL	N/A
SVBT	Blazed Tree	Point / Block Reference	X	HE-POINTS-ALL	N/A
SVCC	Cut Cross	Point / Block Reference	 XCIR	HE-SYMBOLS-ALL	N/A
SVCNCM	Concrete Monument	Point / Block Reference	 MNNSCM	HE-SYMBOLS-ALL	N/A
SVDH	Drill Hole	Point / Block Reference	 SVDH	HE-SYMBOLS-ALL	N/A
SVIB	Iron Bar	Point / Block Reference	 SVIB	HE-SYMBOLS-ALL	N/A
SVIP	Iron Pipe	Point / Block Reference	 SVIP	HE-SYMBOLS-ALL	N/A
SVNL	Nail in Disk	Point / Block Reference	 SVNL	HE-SYMBOLS-ALL	N/A
SVPS	Stone Pile	Point / Block Reference	X	HE-POINTS-ALL	N/A
SVRP	Rock Post	Point / Block Reference	 SVRP	HE-SYMBOLS-ALL	N/A
SVRS	Railway Spike	Point / Block Reference	 SVRR	HE-SYMBOLS-ALL	N/A
SVSK	Survey Spike	Point / Block Reference	 SVSK	HE-SYMBOLS-ALL	N/A
SVSM	Survey Marker	Point / Block Reference	 SVSM	HE-SYMBOLS-ALL	N/A
SVWP	Wood Post	Point / Block Reference	X	HE-POINTS-ALL	N/A
WATER					
WAWL	Water Well	Point / Block Reference	X	HE-POINTS-ALL	N/A
WCCHMH	Halifax Water Manhole	Point / Block Reference	 WCCHMH	HE-SYMBOLS-ALL	HRWC Manhole from HRM GIS

WCHY	HRWC Fire Hydrant	Point / Block Reference	 WCHY	HE-SYMBOLS-ALL	HRWC Hydrant from HRM GIS
WCMW	Monitor Well	Point / Block Reference	 MWELL	HE-SYMBOLS-ALL	HRWC MW from HRM GIS
WCVL	HRWC Water Valve	Point / Block Reference	 WCVL	HE-SYMBOLS-ALL	HRWC Valve from HRM GIS
WCWM	Underground Water Pipe	Linetype / Linear	WCWM,_____	HE-WATER	HRWC PIPE FROM HRM GIS
CNLM	Limits of Construction	Point / Block Reference	 CNLM	HE-SYMBOLS-ALL	N/A
SEWER/STORM					
SWCB	Catch Basin	Point / Block Reference	 SWCB	HE-SYMBOLS-ALL	Collection System Catchbasin from HRM GIS
SWCU	Culvert	Point / Block Reference	 SWCU	HE-SYMBOLS-ALL	N/A
SWCU	Underground Storm Pipe	Linetype / Linear	swcu,_____	HE-STORM	SWCU
SWIN	Culvert Inlet	Point / Block Reference	 SWCU	HE-SYMBOLS-ALL	N/A
SWMH	Manhole	Point / Block Reference	 SWMHT	HE-SYMBOLS-ALL	Collection System Manhole from HRM GIS
SWOF	Culvert Outfall	Point / Block Reference	 SWCU	HE-SYMBOLS-ALL	HWADM_ HWCS_ OUTFALL
SWPI	Underground Sewer Pipe	Linetype / Linear	swpisa,_____	HE-SEWER	SWPISA
SWPI-PVC	PVC Pipe	Linetype / Linear	SWPIPVC,_____	HE-SEWER	SWPISA
SWPI-VENT	Vent Pipe	Linetype / Linear	SWPIVP,_____	HE-SEWER	N/A
SWPS	Pump Station	Point / Block Reference	 SWPS	HE-SYMBOLS-ALL	Collection System Pumping Station from HRM GIS

Municipal Design Guidelines

2021

Part C: Drawing Standards

Appendix D: Drawing Standards

HALIFAX

Part C – Appendix D: Drawing Standards

Contents

DS 25 Linetypes for Typical Plan & Profile

ENGINEERING DRAWING STANDARDS

DRAWING SIZES

STANDARD DRAWING SIZES
BASIS FOR SIZES

METRIC DRAWING SIZES ARE BASED ON THE A0 SIZE, HAVING AN AREA OF ONE SQUARE METRE, AND A LENGTH–TO–WIDTH RATIO OF ONE TO ROOT TWO. EACH SMALLER SIZE HAS AN AREA OF ONE HALF OF THE PRECEDING SIZE, AND THE LENGTH–TO–WIDTH RATIO REMAINS CONSTANT.

INSIDE BORDER: THE INSIDE BORDER ENCLOSES THE WORKING AREA, INCLUDING THE TITLE BLOCK AND OTHER TABLES.

TRIMMED SIZE: TRIMMED SIZE IS THE NOMINAL SIZE OF THE DRAWING WHICH INCLUDES A MARGIN OUTSIDE THE BORDER, AND IS THE SIZE TO WHICH THE FINISHED PRINTS ARE TRIMMED.

LAYOUT NAME	DRAWING SIZE	MILLIMETRES			
		TRIMMED SIZE		INSIDE BORDER	
		Y	V	X	W
	A3* A2* A0*	297 420 841	420 594 1189	277 400 821	400 574 1169
A1 A1+	A1 A1+	594 594	841 1189	574 574	821 1169

* FOR LEGAL PLANS

NOTE:
WHEN DRAWINGS LARGER THAN A0 ARE REQUIRED, THE DRAWINGS SHALL HAVE A WIDTH (Y) OF 841 mm AND A LENGTH IN INCREMENTS OF 210 mm

NOTE:
ALL ENGINEERING DESIGN DRAWINGS ARE TO BE CREATED USING A–1 SIZE SHEET. STANDARD DRAWING SIZES ARE INCLUDED IN HRMTEMPLATE.dwt.

HALIFAX

DRAWING STANDARDS

STANDARD DRAWING SIZES

DATE: 2021	REFERENCE	APPROVED
SCALE: NTS		FIG No.: DS 01

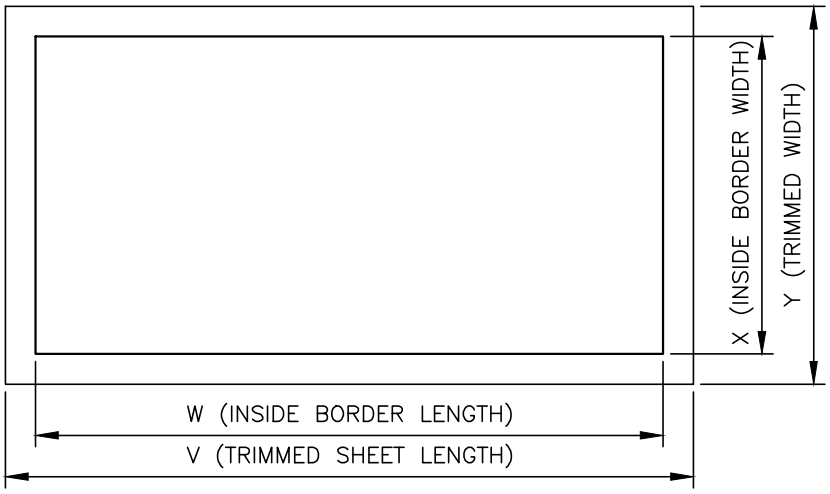


FIGURE 1

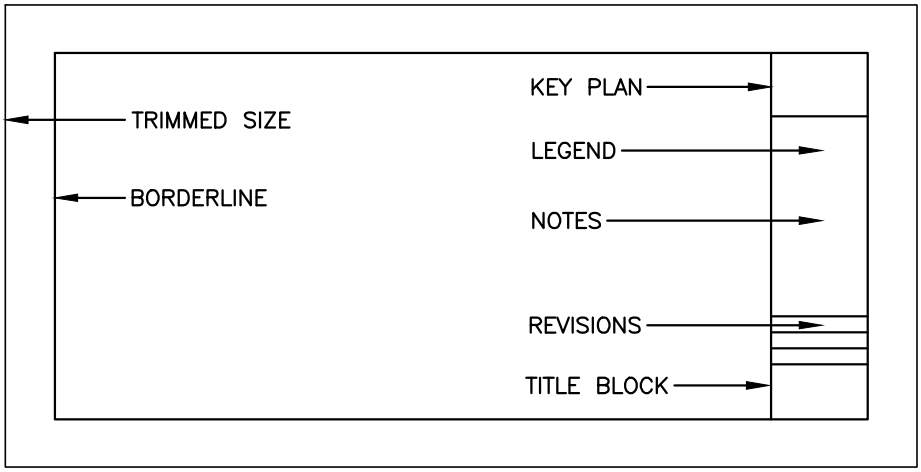


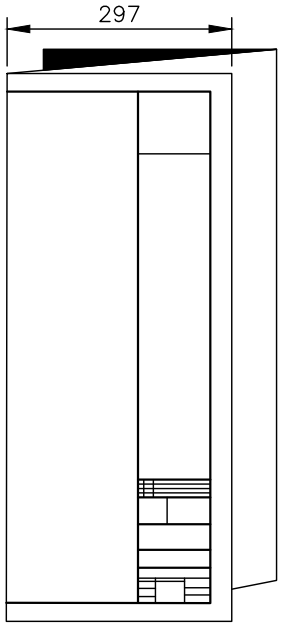
FIGURE 2

HALIFAX

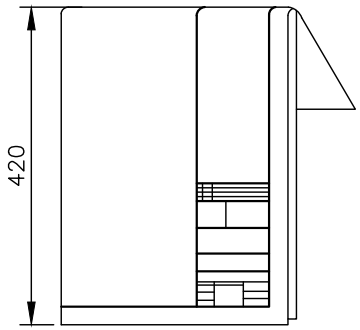
DRAWING STANDARDS

DRAWING SHEETS FORMAT FOR SIZES AND LAYOUT

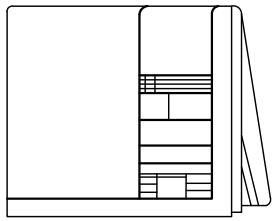
DATE: 2021	REFERENCE	APPROVED
SCALE: NTS		FIG No.: DS 02



FOLD 1 & 2

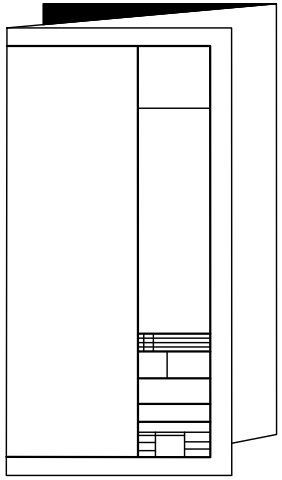


FOLD 3

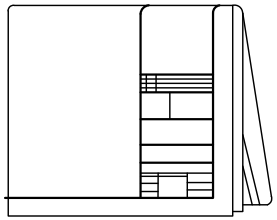


FOLD 4

SIZE A1, A1+ & A0

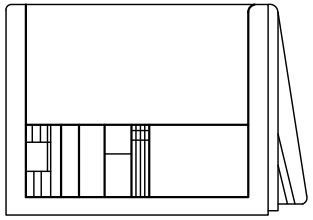


FOLD 1



FOLD 2

SIZE A2



SIZE A3

FOLDING OF PRINTS:

1. TO FACILITATE HANDLING, MAILING, AND FILING, PRINTS SHOULD BE FOLDED TO 210 x 297 IN SUCH A WAY THAT THE TITLE BLOCK AND AUXILIARY NUMBER WILL ALWAYS APPEAR ON THE FRONT FACE, AND THE LAST FOLD WILL ALWAYS BE AT THE TOP. IN FILING, THIS PREVENTS OTHER DRAWINGS FROM BEING PUSHED IN THE FOLDS OF FILED PRINTS.
2. METHODS OF FOLDING PRINTS AS ILLUSTRATED PRINTS LARGER THAN A2 ARE FOLDED IN VERTICAL FOLDS ON 297 CENTRES THEN FOLDED AT 420 FROM THE LOWER EDGE.
3. ON PREPRINTED FORMS LARGER THAN SIZE A2 IT IS RECOMMENDED THAT FOLD MARKS FOR THE FIRST VERTICAL AND HORIZONTAL FOLDS BE INCLUDED IN THE MARGIN, AND IDENTIFIED BY NUMBER, FOR EXAMPLE, 'FOLD 1', 'FOLD 3'. IN ZONED PRINTS THE FOLD LINES WILL COINCIDE WITH ZONE BOUNDARIES BUT SHOULD NEVERTHELESS BE IDENTIFIED.
4. TO AVOID LOSS OF CLARITY BY FREQUENT FOLDING, IMPORTANT DETAILS SHOULD NOT BE PLACED IN CLOSE PROXIMITY TO FOLD.
5. DIMENSIONS ARE IN MILLIMETRES.

HALIFAX

DRAWING STANDARDS

FOLDING OF PAPER PRINTS

DATE: 2021	REFERENCE	APPROVED
SCALE: NTS		FIG No.: DS 03

NOTES:

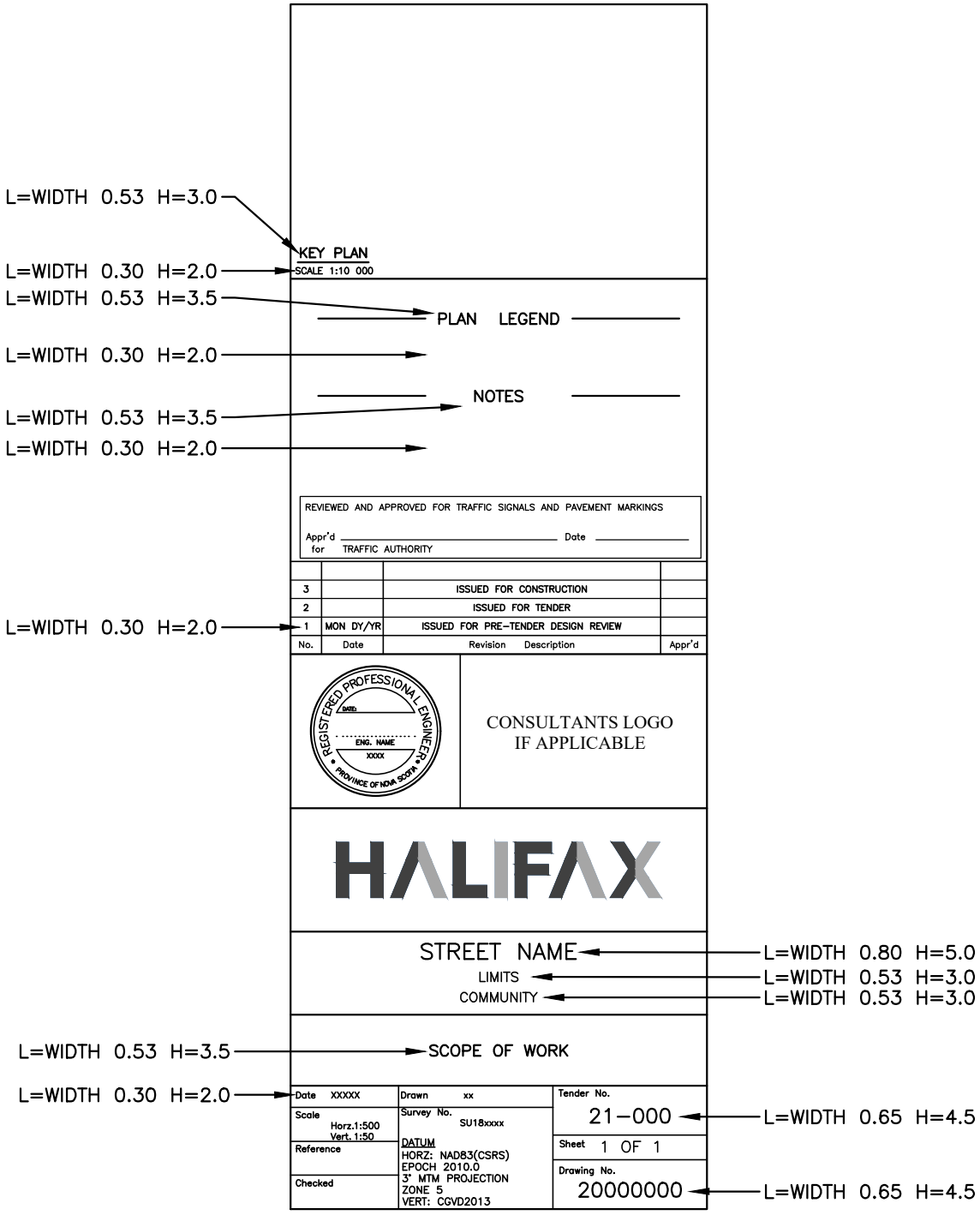
1. TITLE BLOCK FOR SHEETS A1 AND A1+.
2. DIMENSIONS ARE IN METRES.

HALIFAX

DRAWING STANDARDS

TITLE BLOCK – TYPE I SHOWING BLOCK DIMENSIONS

DATE: 2021	REFERENCE	APPROVED
SCALE: NTS		FIG No.: DS 04



NOTES:

H=HEIGHT
L=LAYER

1. ALL TEXT TO BE OF THE STYLE "ROMANS" EXCEPT WHERE NOTED.

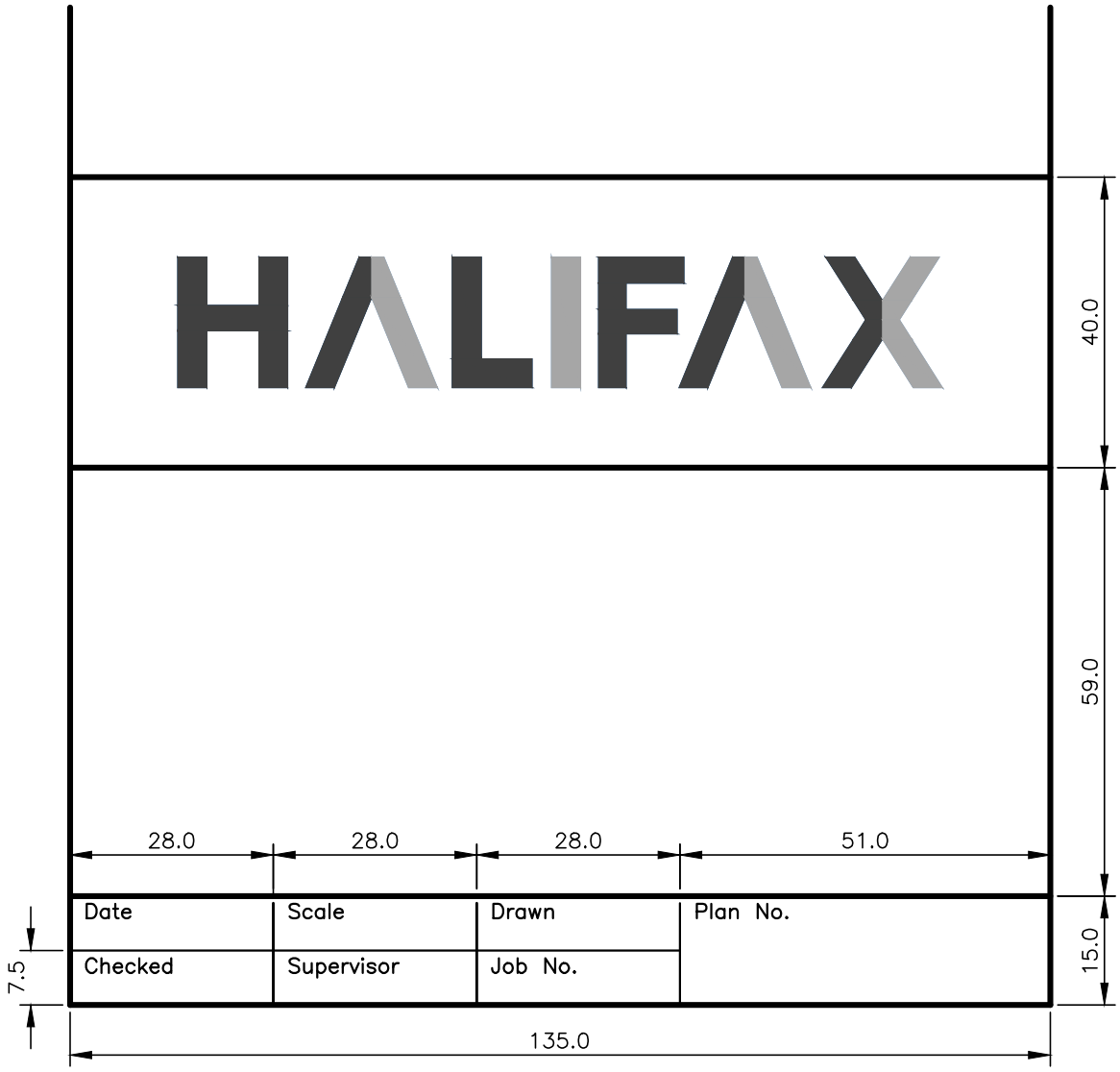
2. TITLE BLOCK FOR SHEETS A1 AND A1+.

HALIFAX

DRAWING STANDARDS

TITLE BLOCK – TYPE I SHOWING LAYER, HEIGHT AND STYLE

DATE: 2021	REFERENCE	APPROVED
SCALE: NTS		FIG No.: DS 05



NOTES:

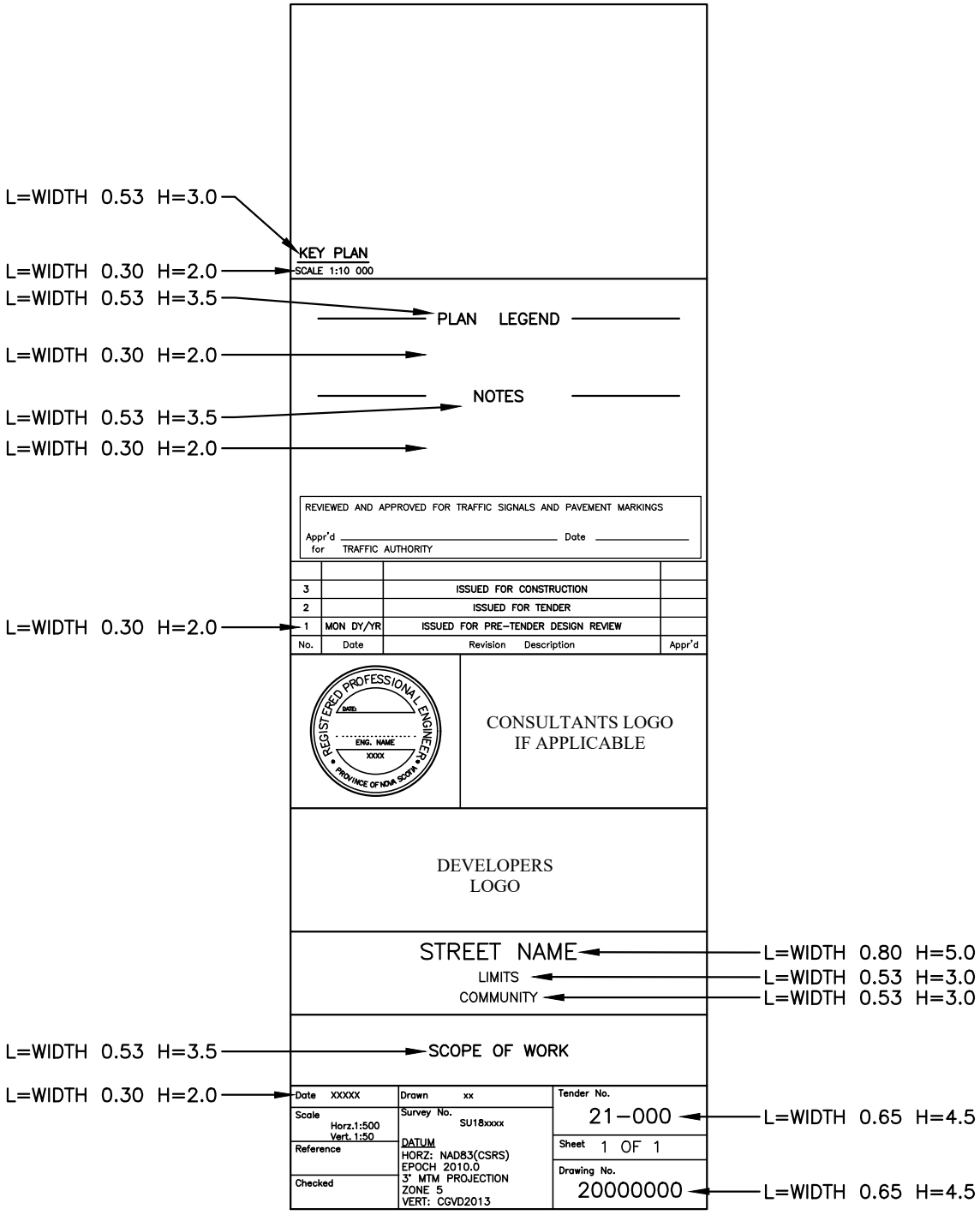
1. TITLE BLOCK FOR SHEET SIZE A2.
2. DIMENSIONS ARE IN METRES.

HALIFAX

DRAWING STANDARDS

TITLE BLOCK LEGAL PLANS SHOWING BLOCK DIMENSIONS

DATE: 2021	REFERENCE	APPROVED
SCALE: NTS		FIG No.: DS 06



NOTES:

H=HEIGHT
L=LAYER

1. ALL TEXT TO BE OF THE STYLE "ROMANS" EXCEPT WHERE NOTED.

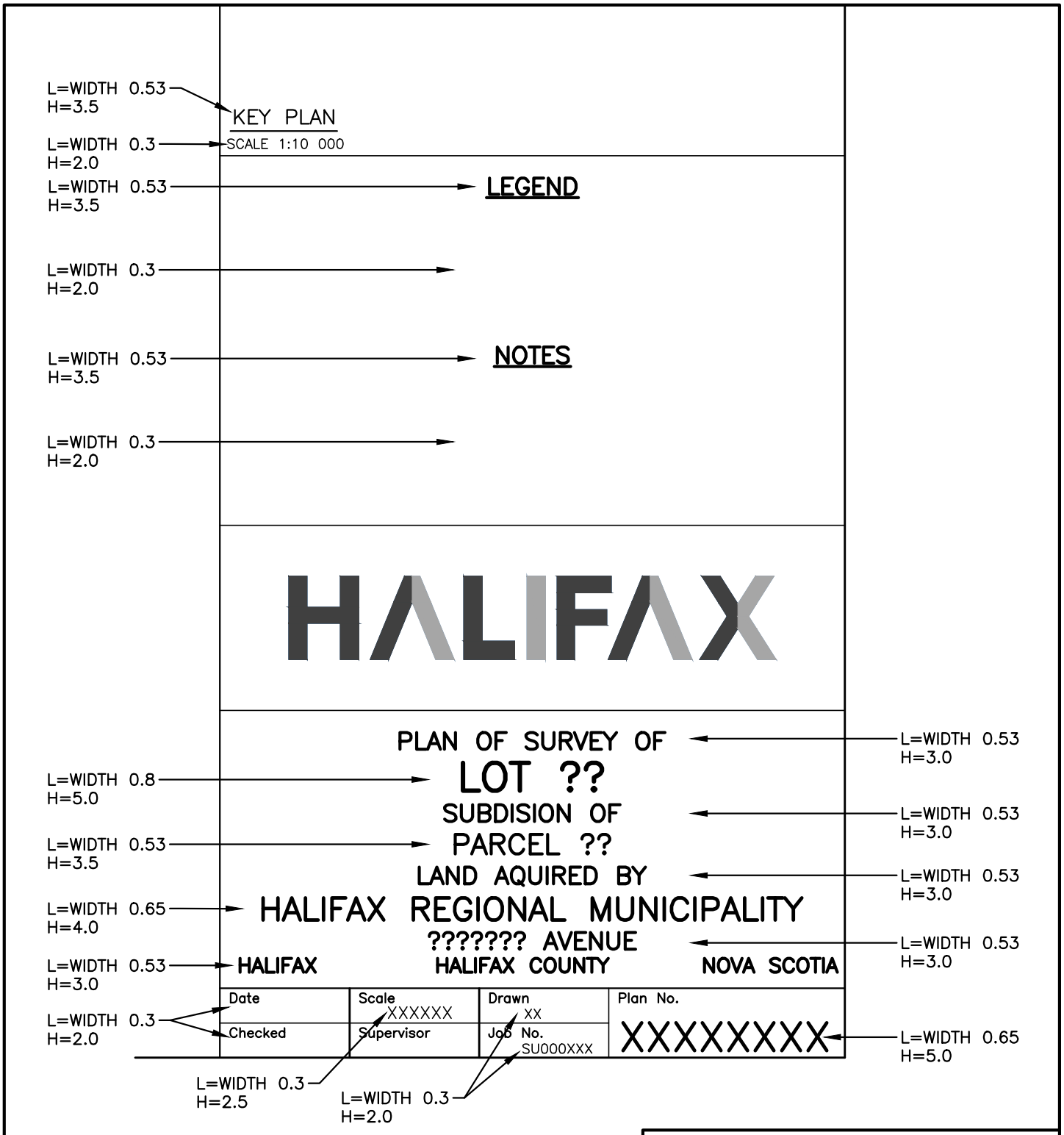
2. TITLE BLOCK FOR SHEETS A1 AND A1+.

HALIFAX

DRAWING STANDARDS

TITLE BLOCK FOR DEVELOPERS USED FOR SUBDIVISIONS SHOWING LAYER, HEIGHT AND STYLE

DATE: 2021	REFERENCE	APPROVED
SCALE: NTS		FIG No.: DS 07



NOTE:

ALL TEXT TO BE OF THE STYLE "ROMANS".

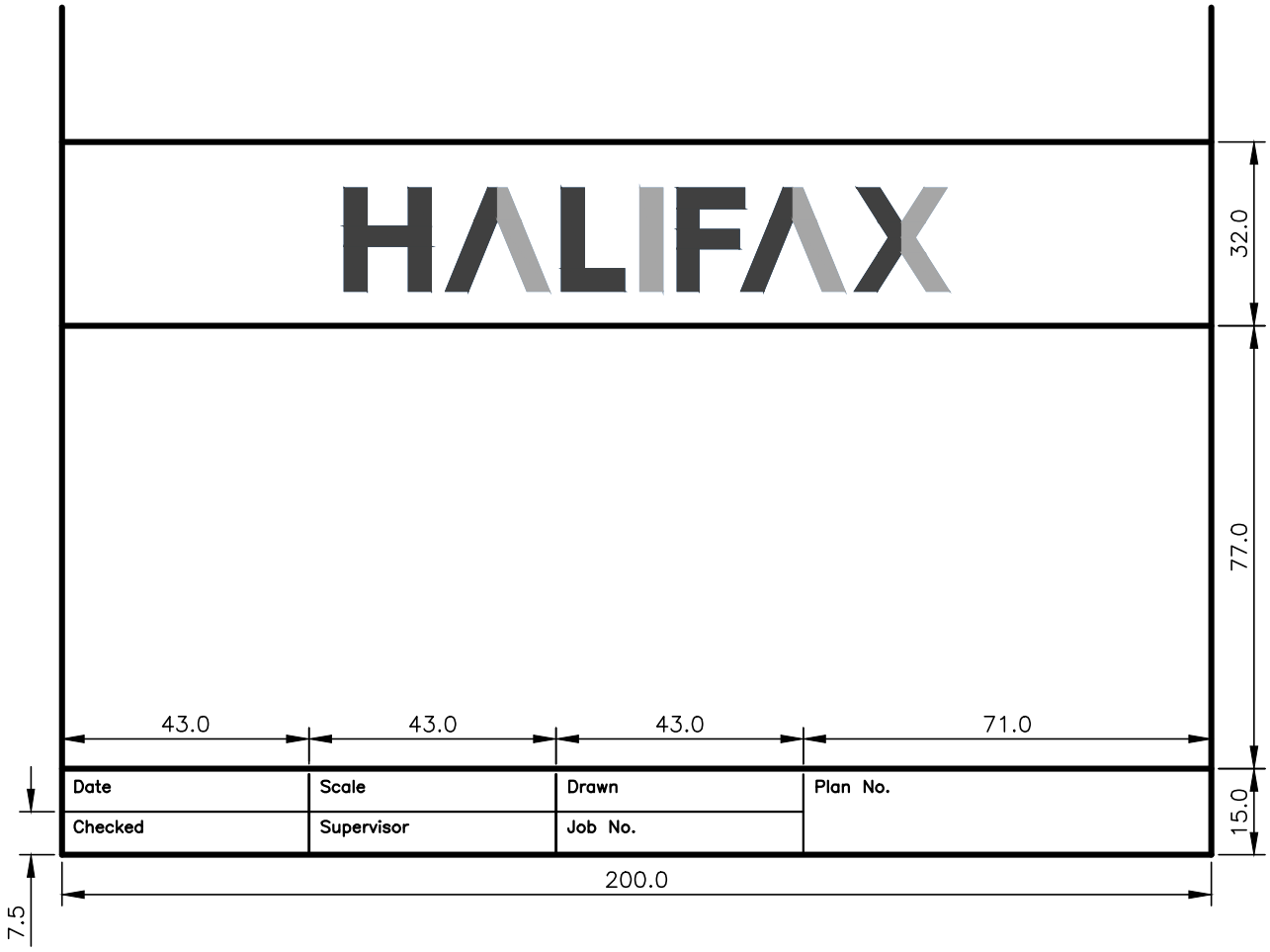
L = LAYER
H = HEIGHT

HALIFAX

DRAWING STANDARDS

TITLE BLOCK LEGAL PLANS SHOWING TEXT HEIGHTS

DATE: 2021	REFERENCE	APPROVED
SCALE: NTS		FIG No.: DS 08



NOTES:

1. TITLE BLOCK FOR SHEET SIZES A1 AND A0.
2. DIMENSIONS ARE IN METRES.

HALIFAX

DRAWING STANDARDS

TITLE BLOCK LEGAL PLANS SHOWING BLOCK DIMENSIONS

DATE: 2021	REFERENCE	APPROVED
SCALE: NTS		FIG No.: DS 09

HALIFAX REGIONAL MUNICIPALITY SYMBOLS

BLOCK NAME	SYMBOL	DESCRIPTION
SWMHCO		COMBINED MANHOLE
PLSWMHCO		PROPOSED COMBINED MANHOLE
SWMHST		STORM MANHOLE
PLSWMHST		PROPOSED STORM MANHOLE
SWMHSA		SANITARY MANHOLE
PLSWMHSA		PROPOSED SANITARY MANHOLE
SWCB		CATCHBASIN
PLSWCB		PROPOSED CATCHBASIN
SWCBDB		DOUBLE CATCHBASIN
PLSWCBDB		PROPOSED DOUBLE CATCHBASIN
SWPS		PUMPING STATION
PLSWPS		PROPOSED PUMPING STATION
SWMHUK		UNKNOWN MANHOLE
UTMHTL		ALIANT MANHOLE
UTMHPW	PW	N.S. POWER MANHOLE OR JUNCTION BOX
WCHY		HRWC FIRE HYDRANT
PLWCHY		PROPOSED HRWC FIRE HYDRANT
WCVL		HRWC WATER VALVE
PLWCVL		PROPOSED HRWC WATER VALVE
UTPO		UTILITY POLE
PLUTPO		PROPOSED UTILITY POLE
TFTL		TRAFFIC LIGHT STANDARD
PLTFTL		PROPOSED TRAFFIC LIGHT STANDARD
TFSL		STREET LIGHT STANDARD
PLTFSL		PROPOSED STREET LIGHT STANDARD
TFSP		SIGN POST
PLTFSP		PROPOSED SIGN POST
LCTS		TREE
PLLCTS		PROPOSED TREE
LCSA		SHRUB
MNNSCM		NOVA SCOTIA COORDINATE MONUMENT
PLTFPR		PROPOSED PEDESTRIAN RAMP
TFPR		PEDESTRIAN RAMP
TFPM	PM	PARKING PAY STATION
UTGW		GUY WIRE ANCHOR
TRBS		BUS STOP
SVIB	IB	IRON BAR
SVIP	IP	IRON PIPE
SVDH	D.H.	DRILL HOLE
SVRS	RR	RAILWAY SPIKE
SVSM		SURVEY MARKER
SVRP	RP	ROCK POST
SVNL	N	NAIL
TFJB	JB	TRAFFIC LOOP JUNCTION BOX
TFCB		TRAFFIC CABINET OR CONTROLLER BOX
SWIN		SEWER INLET
SWOF		SEWER OUTFALL
WCCHMH		HRWC MAHNOLE
GSVL		GAS VALVE
TFRS		PROPOSED RADAR SYSTEM
TFSH		TRAFFIC SIGNAL HEAD
TFPH		PEDESTRIAN HEAD
PLTFSH		PROPOSED TRAFFIC SIGNAL HEAD
PLTFPH		PROPOSED PEDESTRIAN HEAD
CNLM		LIMIT OF CONSTRUCTION

NOTE: ALL SYMBOLS ON LAYER HE-SYMBOLS-ALL

North Arrow

NORTH ARROW PLAN

North Arrow 2

NORTH ARROW KEY PLAN

HALIFAX

DRAWING STANDARDS

STANDARD DRAWING SYMBOLS PLAN

DATE: 2021	REFERENCE	APPROVED
SCALE: NTS		FIG No.: DS 10

HALIFAX REGIONAL MUNICIPALITY SYMBOLS

BLOCK NAME	SYMBOL	DESCRIPTION
TFMKAR3T		TRAFFIC ARROW RIGHT–STRAIGHT–LEFT
TFMKARLT		LEFT TURN ARROW
TFMKARRT		RIGHT TURN ARROW
TFMKARTL		TRAFFIC ARROW STRAIGHT–LEFT
TFMKARTR		TRAFFIC ARROW STRAIGHT–RIGHT
TFMKARST		TRAFFIC ARROW STRAIGHT
TFMKARRLT		TRAFFIC ARROW LEFT–RIGHT

* NOTE: ALL SYMBOLS ON LAYER HE–SYMBOLS–ALL

 DEPRESSION

 CUT

 FILL

 TRAIL

 STREAM

 350 352 CONTOURS

+N 4 945 783.000 E 5 565 324.000 COORDINATES

 POWER TRANSMISSION TOWER

 WELL

 TREED AREA OR BUSH

 SWAMP AREA

56.75 SPOT ELEVATION

 GASOLINE PUMPS WITH ISLAND

 CULVERT (STATE TYPE, ID. & LENGTH)

 PROPOSED CONCRETE SURFACE

 PROPOSED ASPHALT SURFACE

HALIFAX

DRAWING STANDARDS

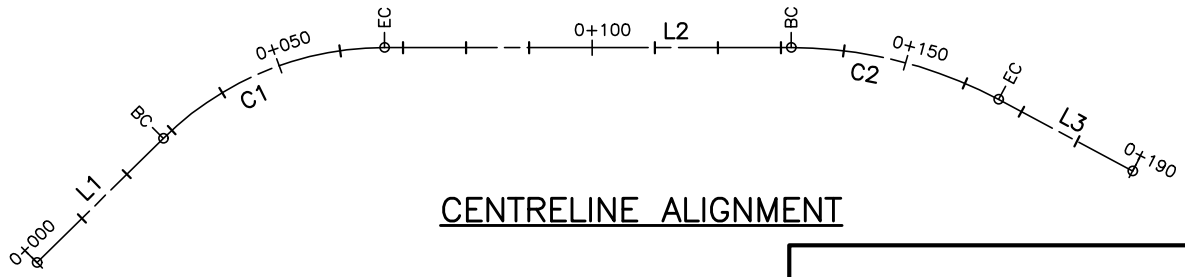
STANDARD DRAWING SYMBOLS PLAN

DATE: 2021	REFERENCE	APPROVED
SCALE: NTS		FIG No.: DS 11

CONTROL VALUES – SUXXXXX COORDINATE VALUES – NAD83(CSRS) EPOCH 2010.0 3° MTM PROJECTION ZONE 5, VERTICAL CGVD2013				
PT. NO.	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	4 958 712.713	25 563 994.063	50.878	DRILL HOLE
2	4 958 760.369	25 564 037.398	49.632	DRILL HOLE
3	4 958 793.231	25 563 989.019	53.447	SPIKE
222185	4 958 867.433	25 563 264.290	64.472	NSCM–MEAS.
223681	4 958 203.467	25 565 530.677	27.623	NSHPN–PUB.

VALUES SHOWN ARE BASED ON THE NOVA SCOTIA COORDINATE REFERENCING SYSTEM. PLAN DETAILS ARE REFERRED TO THE CONTROL TABLE ABOVE. BOUNDARY LINES ARE APPROXIMATE, AND ARE SUBJECT TO A FIELD SURVEY.

STREET NAME CENTRELINE ALIGNMENT					
ID #	STATION	RADIUS	NORTHING	EASTING	DEF ANGLE
L1	0+000.00 0+028.12		–0.662 19.077	24.297 44.320	
C1	BC 0+028.12 EC 0+067.03	50.000	19.077 33.471	44.320 79.423	44° 35' 30"
L2	0+067.03 0+131.61		33.471 33.471	79.423 144.003	
C2	BC 0+131.61 EC 0+165.90	70.000	33.471 25.238	144.003 176.940	28° 04' 07"
L3	0+165.90 0+190.00		25.238 13.900	176.940 198.202	



CENTRELINE ALIGNMENT

HALIFAX

DRAWING STANDARDS

CONTROL TABLES (SHOWING INFORMATION FOR PROJECT LAYOUT)

DATE: 2021	REFERENCE	APPROVED
SCALE: NTS		FIG No.: DS 12

IDENTIFICATION	MATERIAL	ITEM	SIZE/WIDTH	COLOUR	QUANTITY
P1.1	PAINT	SINGLE LINE–SOLID	100 mm	WHITE	#m
P1.2	PAINT	SINGLE LINE–BROKEN	100 mm (3 m LINE, 6 m SPACING)	WHITE	#m
P1.3	PAINT	SINGLE LINE–BROKEN	100 mm (3 m LINE, 3 m SPACING)	WHITE	#m
P1.4	PAINT	SINGLE LINE–BROKEN	100 mm (1.8 m LINE, 1.8 m SPACING)	WHITE	#m
P1.5	PAINT	SINGLE LINE–BROKEN	100 mm (1.5 m LINE, 1.5 m SPACING)	WHITE	#m
P1.6	PAINT	SINGLE LINE–BROKEN	100 mm (1.0 m LINE, 1.0 m SPACING)	WHITE	#m
P1.7	PAINT	SINGLE LINE–BROKEN	100 mm (0.5 m LINE, 0.5 m SPACING)	WHITE	#m
P1.10	PAINT	SINGLE LINE–SOLID	100 mm	YELLOW	#m
P1.11	PAINT	SINGLE LINE–BROKEN	100 mm (3 m LINE, 6 m SPACING)	YELLOW	#m
P1.12	PAINT	DOUBLE CENTRELINE–SOLID	100 mm	YELLOW	#m
P1.13	PAINT	DOUBLE CENTRELINE– SINGLE SOLID $\overline{w}$ SINGLE BROKEN	100 mm (3 m LINE, 6 m SPACING)	YELLOW	#m
P1.14	PAINT	DOUBLE LINE–BROKEN	100 mm (3 m LINE, 6 m SPACING)	YELLOW	#m
P2	PAINT	STOP BAR	450 mm	WHITE	#m
P3	PAINT	YIELD LINE	450 mm WIDE, SPACING VARIES, SEE HRM STANDARD DETAIL 90	WHITE	#m
P4	PAINT	CROSSWALK	2 x 200 mm	WHITE	#m
P5	PAINT	ZEBRA CROSSWALK	600 mm WIDE, 600 mm SPACING, 2.5 m WIDE	WHITE	#m
P6	PAINT	HATCHING	100 mm LANE LINES, 450 mm HATCH LINES, 6.0 m SPACING	WHITE	#m^2
P7	PAINT	HATCHING	100 mm LANE LINES, 450 mm HATCH LINES, 6.0 m SPACING	YELLOW	#m^2
P8	PAINT	INTERSECTION BOX $\overline{w}$ HATCHING	200 mm LINES, 1.2 m SPACING	WHITE	#m^2
P9.1	PAINT	ARROW	3/4 TAC SIZE	WHITE	#EA.
P9.2	PAINT	ARROW	1/2 TAC SIZE	WHITE	#EA.
P9.3	PAINT	ROUNDABOUT ARROW	SEE HRM STANDARD DETAIL 95	WHITE	#EA.
P10	PAINT	BICYCLE SYMBOL	1.2 m X 2.1 m	WHITE	#EA.
P11	PAINT	ADVANCE YIELD TO PEDESTRIANS LINE (TRIANGLES)	SEE HRM STANDARD DETAIL 93	WHITE	#m
P12	PAINT	SPEED HUMP/SPEED TABLE MARKINGS	SEE HRM STANDARD DETAIL 31 & 143	WHITE	# SITES
P13	PAINT	RESERVED LANE DIAMOND SYMBOL	0.75 m X 3.0 m	WHITE	#EA.
P15.1	PAINT	SHARED USE LANE SYMBOL	1.2 m X 3.0 m	WHITE	#EA.
P30	PAINT	NEW INTERSECTION MARKINGS	–	–	LS
P31	PAINT	REMOVAL OF EXISTING MARKINGS	–	–	LS
P32	PAINT	REPLACEMENT OF EXIST. MARKINGS	–	–	LS

HALIFAX

DRAWING STANDARDS

PAVEMENT MARKING TABLE (PAINT)

DATE: 2021	REFERENCE	APPROVED
SCALE: NTS		FIG No.: DS 13.1

IDENTIFICATION	MATERIAL	ITEM	SIZE/WIDTH	COLOUR	QUANTITY
T1.1	THERMOPLASTIC	SINGLE LINE–SOLID	100 mm	WHITE	#m
T1.2	THERMOPLASTIC	SINGLE LINE–BROKEN	100 mm (3 m LINE, 6 m SPACING)	WHITE	#m
T1.3	THERMOPLASTIC	SINGLE LINE–BROKEN	100 mm (3 m LINE, 3 m SPACING)	WHITE	#m
T1.4	THERMOPLASTIC	SINGLE LINE–BROKEN	100 mm (1.8 m LINE, 1.8 m SPACING)	WHITE	#m
T1.5	THERMOPLASTIC	SINGLE LINE–BROKEN	100 mm (1.5 m LINE, 1.5 m SPACING)	WHITE	#m
T1.6	THERMOPLASTIC	SINGLE LINE–BROKEN	100 mm (1.0 m LINE, 1.0 m SPACING)	WHITE	#m
T1.7	THERMOPLASTIC	SINGLE LINE–BROKEN	100 mm (0.5 m LINE, 0.5 m SPACING)	WHITE	#m
T1.10	THERMOPLASTIC	SINGLE LINE–SOLID	100 mm	YELLOW	#m
T1.11	THERMOPLASTIC	SINGLE LINE–BROKEN	100 mm (3 m LINE, 6 m SPACING)	YELLOW	#m
T1.12	THERMOPLASTIC	DOUBLE CENTRELINE–SOLID	100 mm	YELLOW	#m
T1.13	THERMOPLASTIC	DOUBLE CENTRELINE– SINGLE SOLID $\overline{w}$ SINGLE BROKEN	100 mm (3 m LINE, 6 m SPACING)	YELLOW	#m
T1.14	THERMOPLASTIC	DOUBLE LINE–BROKEN	100 mm (3 m LINE, 6 m SPACING)	YELLOW	#m
T2	THERMOPLASTIC	STOP BAR	450 mm	WHITE	#m
T3	THERMOPLASTIC	YIELD LINE	450 mm	WHITE	#m
T4	THERMOPLASTIC	CROSSWALK	2 x 200 mm	WHITE	#m
T5	THERMOPLASTIC	ZEBRA CROSSWALK	600 mm	WHITE	#m
T6	THERMOPLASTIC	HATCHING	100 mm LANE LINES, 450 mm HATCH LINES, 6.0 m SPACING	WHITE	#m^2
T7	THERMOPLASTIC	HATCHING	100 mm LANE LINES, 450 mm HATCH LINES, 6.0 m SPACING	YELLOW	#m^2
T8	THERMOPLASTIC	INTERSECTION BOX $\overline{w}$ HATCHING	200 mm LINES, 1.2 m SPACING	WHITE	#m^2
T9.1	THERMOPLASTIC	ARROW	3/4 TAC SIZE	WHITE	#EA.
T9.2	THERMOPLASTIC	ARROW	1/2 TAC SIZE	WHITE	#EA.
T9.3	THERMOPLASTIC	ROUNDABOUT ARROW	SEE HRM STANDARD DETAIL 95	WHITE	#EA.
T10.1	THERMOPLASTIC	BICYCLE SYMBOL ON BLACK BACKGROUND	1.2 m X 2.1 m	WHITE ON BLACK BACKGROUND	#EA.
T10.2	THERMOPLASTIC	BICYCLE SYMBOL ON GREEN BACKGROUND	1.2 m X 2.1 m	WHITE ON GREEN BACKGROUND	#EA.
T11	THERMOPLASTIC	ADVANCE YIELD TO PEDESTRIANS LINE (TRIANGLES)	SEE HRM STANDARD DETAIL 93	WHITE	#m
T12	THERMOPLASTIC	SPEED HUMP/SPEED TABLE MARKINGS	SEE HRM STANDARD DETAIL 31 & 143	WHITE	# SITES
T13	THERMOPLASTIC	RESERVED LANE DIAMOND SYMBOL ON BLACK BACKGROUND	0.75 m X 3.0 m	WHITE	#EA.
			0.75 m X 3.0 m	BLACK	
T14	THERMOPLASTIC	RESERVED LANE DIAMOND SYMBOL ON RED BACKGROUND	0.75 m X 3.0 m	WHITE	#EA.
			2.8 m X 4.3 m	RED	
T15.1	THERMOPLASTIC	SHARED USE LANE SYMBOL ON BLACK BACKGROUND	1.2 m X 3.3 m	WHITE ON BLACK BACKGROUND	#EA.
T15.2	THERMOPLASTIC	SHARED USE LANE SYMBOL ON GREEN BACKGROUND	1.2 m X 3.3 m	WHITE ON GREEN BACKGROUND	#EA.

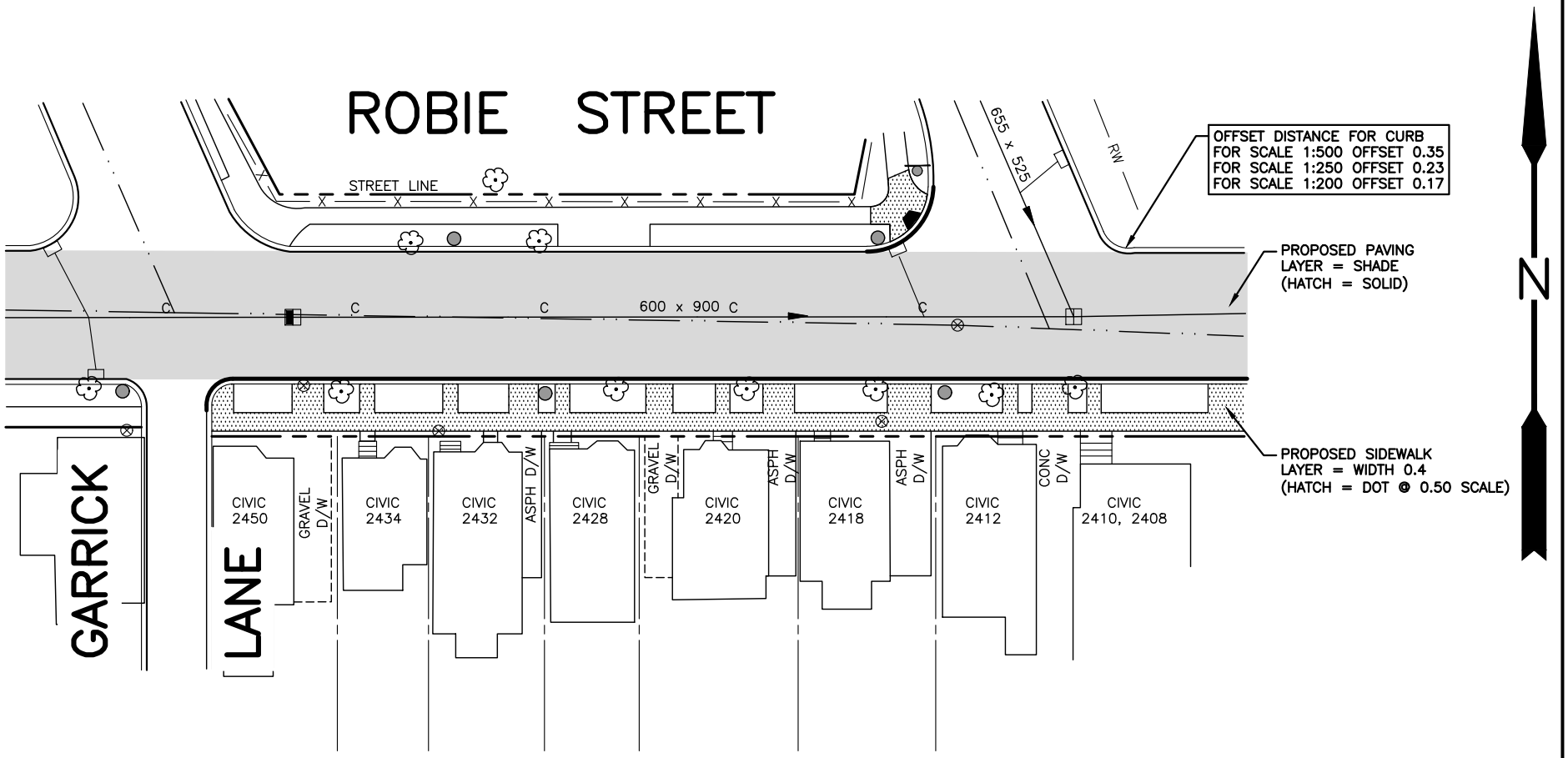
IDENTIFICATION	MATERIAL	ITEM	SIZE/WIDTH	COLOUR	QUANTITY
T16	THERMOPLASTIC	SHARKS TEETH TRIANGLES	450 mm X 150 mm, 5 PER ROW	WHITE	# ROWS
T17	THERMOPLASTIC	TWO STAGE BICYCLE LEFT TURN BOX	2.0 m X 3.0 m	WHITE ON GREEN BACKGROUND	#EA.
T18	THERMOPLASTIC	VEHICLE/BICYCLE ZEBRA CONFLICT MARKING (1.8 m X 0.6 m TOTAL)	1.5 m X 0.6 m	GREEN	#EA.
			ADD. 0.15 m EA. END	WHITE	
T19	THERMOPLASTIC	DRIVEWAY/BICYCLE ZEBRA CONFLICT MARKING (1.3 m X 0.6 m TOTAL)	1.0 m X 0.6 m	GREEN	#EA.
			ADD. 0.15 m EA. END	WHITE	
T20	THERMOPLASTIC	BICYCLE/PEDESTRIAN ZEBRA CONFLICT MARKING	2.5 m X 0.3 m WIDE, 0.3 m SPACING	WHITE	#m
T21	THERMOPLASTIC	TRAIL CROSSWALK	200 mm SOLID LINE (2.5 m WIDTH) 200 mm BROKEN LINE 0.4 m LINE, 0.4m SPACING (4.5 m WIDTH)	WHITE	#m
T30	THERMOPLASTIC	NEW INTERSECTION MARKINGS	–	–	LS
T31	THERMOPLASTIC	REMOVAL OF EXISTING MARKINGS	–	–	LS
T32	THERMOPLASTIC	REPLACEMENT OF EXIST. MARKINGS	–	–	LS

HALIFAX

DRAWING STANDARDS

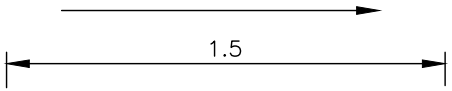
PAVEMENT MARKING TABLE (THERMOPLASTIC)

DATE: 2021	REFERENCE	APPROVED
SCALE: NTS		FIG No.: DS 13.2



DIMENSION STYLE OVERRIDES:

DIMASZ	3.5000
DIMCLRD	9
DIMCLRE	9
DIMCLRT	9
DIMEXE	1.5000
DIMEXO	1.5000
DIMGAP	1.0000
DIMSCALE	0.0000
DIMTAD	1
DIMTXSTY	ROMANS
DIMTXT	2.0000

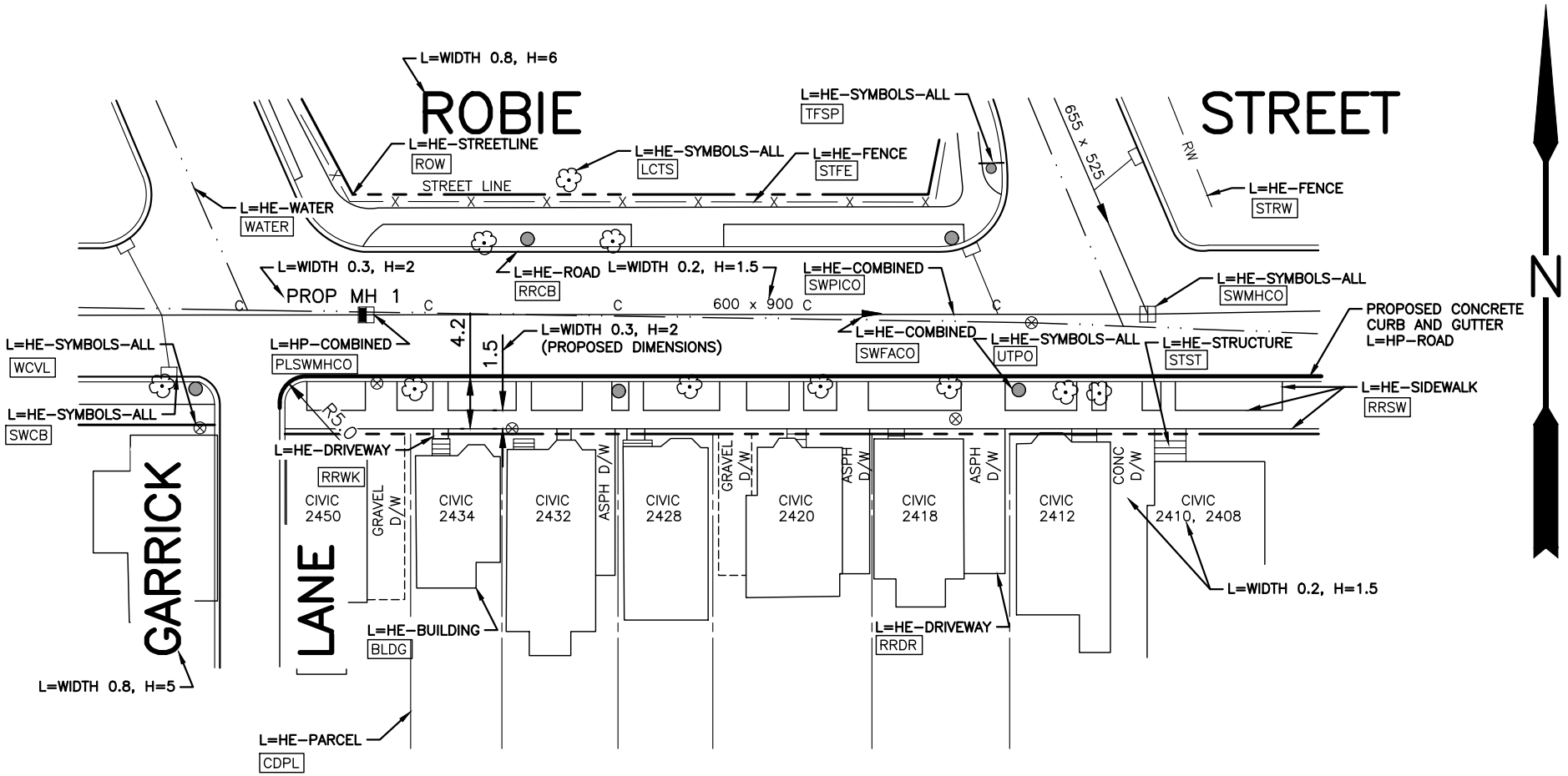


HALIFAX

DRAWING STANDARDS

PLAN HATCHING LAYERS AND LINETYPES

DATE: 2021	REFERENCE	APPROVED
SCALE: NTS		FIG No.: DS 14



NOTE:
1. ALL TEXT WHICH PERTAINS TO PROPOSED INFORMATION SHALL BE A MINIMUM HEIGHT OF 2.0.

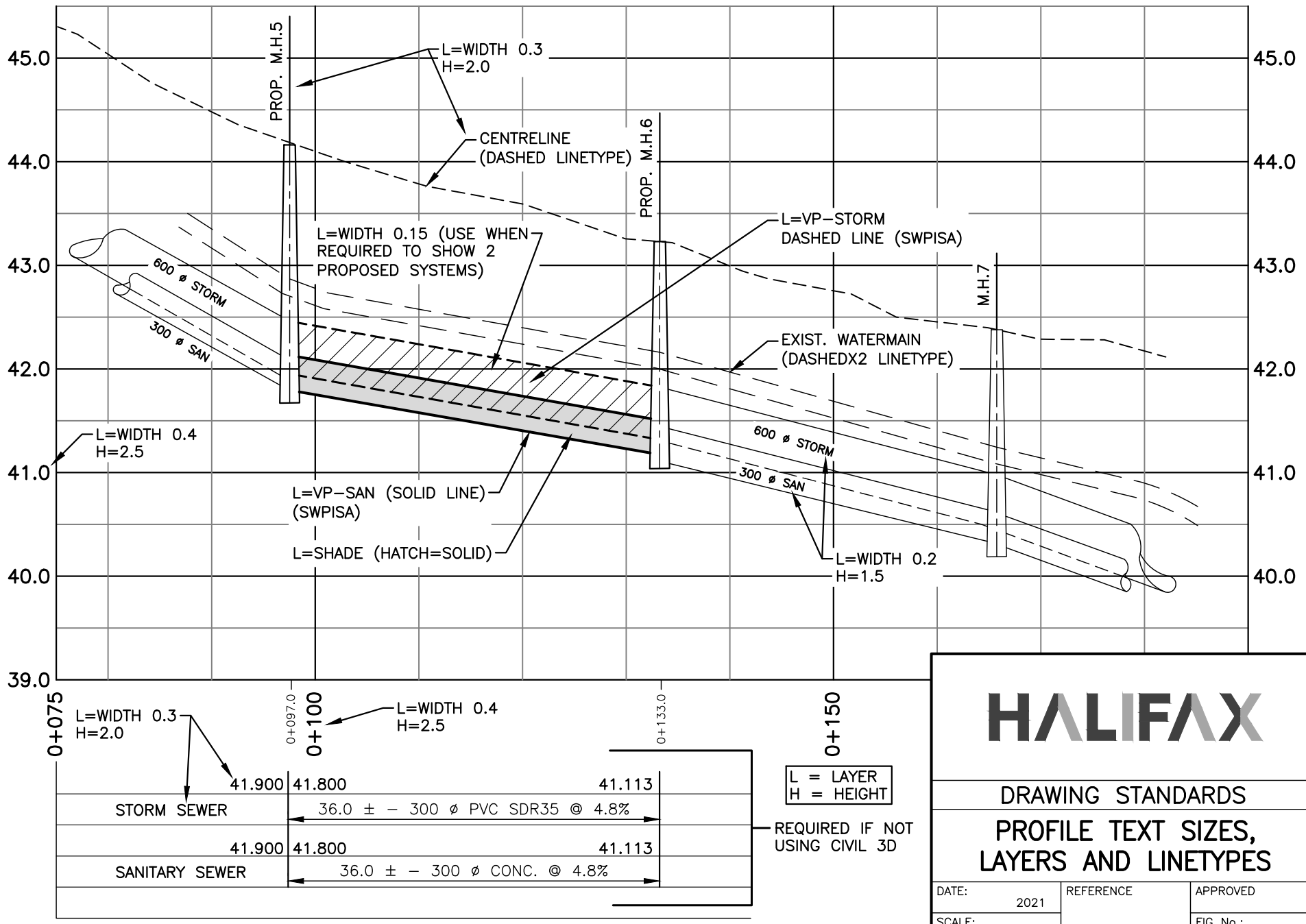
BLDG	BLOCK NAMES OR LINETYPES
L	LAYER
H	HEIGHT

HALIFAX

DRAWING STANDARDS

PLAN TEXT SIZES LAYERS, AND LINETYPES

DATE: 2021	REFERENCE	APPROVED
SCALE: NTS		FIG No.: DS 15

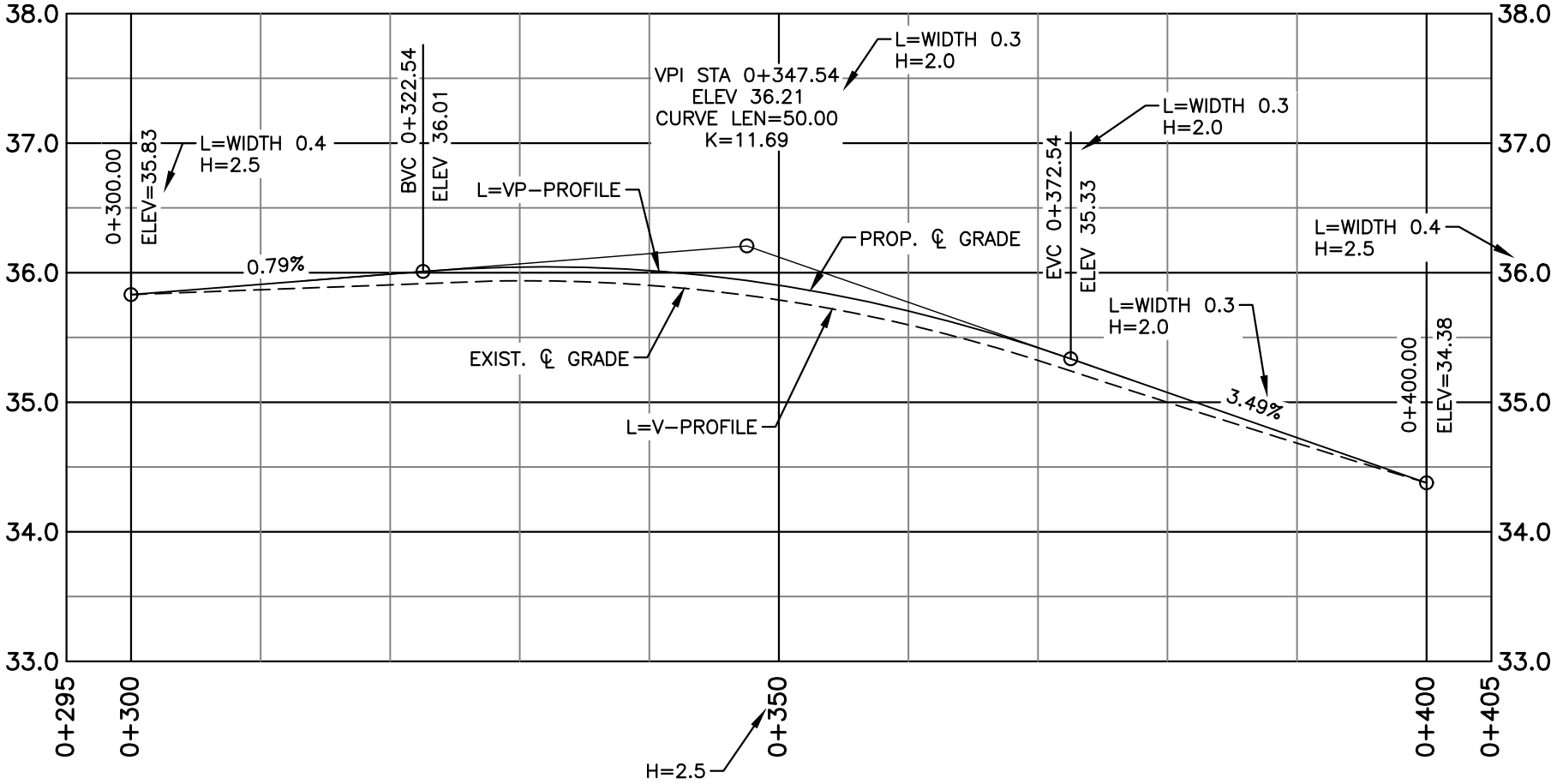


HALIFAX

DRAWING STANDARDS

PROFILE TEXT SIZES, LAYERS AND LINETYPES

DATE: 2021	REFERENCE	APPROVED
SCALE: NTS		FIG No.: DS 17



L = LAYER
H = HEIGHT

HALIFAX

DRAWING STANDARDS

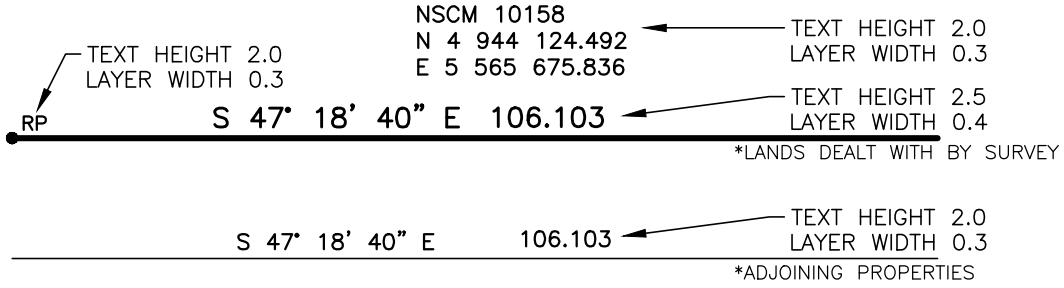
PROFILE TEXT SIZES, LAYERS AND LINETYPES

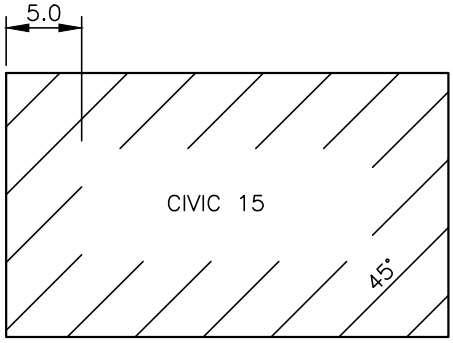
DATE: 2021	REFERENCE	APPROVED
SCALE: NTS		FIG No.: DS 18

LINETYPES FOR LEGAL DRAWINGS

LABEL	LINETYPE NAME	LAYER
TIE LINE	TIELINE	HE–PARCEL
RADIAL LINE	RADLINE	HE–PARCEL
CO TERMINAL BOUNDARY – PROPOSED	PROPLINE	HE–PARCEL
CO TERMINAL BOUNDARY – APPROVED	CDPL	HE–PARCEL
RIGHT OF WAY	ROW	HE–PARCEL
EASEMENT	CDES	HE–PARCEL
SURVEYED BOUNDARY	CONTINUOUS	HE–SURVEY
DITCH	WADI	HE–HYDRO
WATERCOURSE	WATER	HE–HYDRO
SEWER	LINE SHOULD BE CONSISTENT WITH ENG. DWGS. HE–SEWER	
EDGE OF ASPHALT (LABEL) EDGE OF D/W, ETC	CONTINUOUS	HE–ROAD/ HE–DRIVEWAY
EDGE OF GRAVEL (LABEL) EDGE OF D/W, ETC	RRWK–G	HE–ROAD/ HE–DRIVEWAY
FENCE (CHAIN–LINK FENCE)	STFE	HE–FENCE
HEDGE	LCHG	HE–TREE LINE
WALL	STWL	HE–FENCE
RETAINING WALL	STRW	HE–STRUCTURE

NOTE:
ANY LINETYPES THAT ARE DRAWN ON A LEGAL DRAWING, (EXAMPLE: SEWER, GUYWIRE, FENCE, RETAINING WALL ETC.) SHOULD BE CONSISTENT WITH ENGINEERING DRAWINGS. THAT ALSO APPLYS TO SYMBOLS.





HATCH SURVEYED BUILDINGS USING:
HATCH PATTERN – LINE
LAYER WIDTH 0.2
HATCH ANGLE 45° TO THE BUILDING LINE

HALIFAX

DRAWING STANDARDS

LINETYPES FOR LEGAL DRAWINGS

DATE: 2021	REFERENCE	APPROVED
SCALE: NTS		FIG No.: DS 19

LEGEND

———	SURVEYED BOUNDARY
—— x —— x ——	FENCE
⊙	SURVEY MARKER
△ NSHPN	NOVA SCOTIA HIGH PRECISION MONUMENT
FD	FOUND
○ IB	IRON BAR
○ IP	IRON PIPE
● N	NAIL
● RP	ROCK POST
⊗ CC	CUT CROSS
○ DH	DRILL HOLE
●	UTILITY POLE
(	GUY WIRE ANCHOR
✿	TREE
PID	PARCEL IDENTIFICATION NUMBER
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PRC	POINT OF REVERSE CURVATURE
A	ARC
R	RADIUS
SQ M	SQUARE METRES
SQ FT	SQUARE FEET
D	DEED
P	PLAN
M	MEASURED
PR	PLAN REFERENCE
R–O–W	RIGHT OF WAY
WIT	WITNESS
C	CALCULATED
HRM	HALIFAX REGIONAL MUNICIPALITY
NSPI	NOVA SCOTIA POWER INCORPORATED
ROD	REGISTRY OF DEEDS
LRO	LAND REGISTRATION OFFICE
[ ]	LAND SURVEYOR IDENTIFICATION
NI	NO IDENTIFICATION
OHWM	ORDINARY HIGH WATER MARK
BK, PG	BOOK, PAGE
DOC NO	DOCUMENT NUMBER

NOTES:

1. IF YOU ARE PUTTING A SURVEY SYMBOL WITH TEXT ON A PLAN THE TEXT SHOULD BE A TEXT HEIGHT 2, LAYER WIDTH 0.3. EX: IP, M, AC.
2. ANY SYMBOLS INSERTED ON A SURVEY DRAWING EX: MANHOLE, TREE, UTILITY POLE, SHOULD BE CONSISTENT WITH ENGINEERING DRAWINGS

HALIFAX

DRAWING STANDARDS

LEGEND FOR LEGAL DRAWINGS

DATE: 2021	REFERENCE	APPROVED
SCALE: NTS		FIG No.: DS 20

EXAMPLES

SUBJECT LANDS

P.I.D. NO.'S	L=WIDTH 0.3 H=2.0
LOT OR PARCEL IDENTIFIER	L=WIDTH 0.8 H=5.0 (TEXT HEIGHT MAY VARY ACCORDING TO DRAWING SIZE BUT SHOULD MATCH THE TITLE BLOCK).
AREA 000 SQ.M.	L=WIDTH 0.3 H=2.0
PLAN REFERENCE	L=WIDTH 0.3 H=2.0
OWNER(S) NAME(S)	L=WIDTH 0.53 H=3.5
BOOK & PAGE REFERENCE	L=WIDTH 0.3 H=2.0
GHOSTED TEXT	L=WIDTH 0.2 H=4.5
PLAN REFERENCE (USUALLY A SUBJECT LOT THAT IS BEING SUBDIVIDED)	L=WIDTH 0.3 H=2.0

ADJOINERS LAND

P.I.D. NO.'S	L=WIDTH 0.3 H=2.0
LOT OR PARCEL IDENTIFIER	L=WIDTH 0.53 H=3.0
LOT OR PARCEL IDENTIFIER	L=WIDTH 0.53 H=3.5

SIZE MAY VARY ACCORDING TO SPACE

PLAN REFERENCE	L=WIDTH 0.3 H=2.0
OWNER(S) NAME(S)	L=WIDTH 0.4 H=3.0
BOOK & PAGE REFERENCE	L=WIDTH 0.3 H=2.0

L = LAYER
H = HEIGHT

NOTES:

1. STREET NAMES SHOULD BE LARGE AND STAND OUT.
2. ALL TEXT SHOULD BE A MINIMUM HEIGHT OF 2.0.
3. CHANGES IN TEXT HEIGHT AND WEIGHT MAY VARY ACCORDING TO THE PROJECT.
4. WHEN SHOWING COORDINATES, AREAS, ETC IN METRIC DO NOT USE COMMAS. USE A SPACE TO SEPARATE BLOCKS OF 3 DIGITS. A SPACE IS OPTIONAL WITH A 4 DIGIT NUMBER.

HALIFAX

DRAWING STANDARDS

LOT IDENTIFIERS & TEXT SIZES FOR LEGAL DRAWINGS

DATE: 2021	REFERENCE	APPROVED
SCALE: NTS		FIG No.: DS 21

PLAN LEGEND

EXISTING		PROPOSED
PT NO	SURVEY CONTROL POINT	
	WATERVALVE	
	FIRE HYDRANT	
	UTILITY POLE AND GUY WIRE	
	SIGN POST/BASE	
X X	FENCE	X X
GR GR	GUIDERAIL	GR
RW RW	RETAINING WALL	RW
	CONCRETE CURB	
	PROPERTY LINE	
	BASELINE	
	SEWER MANHOLES	
	CATCHBASIN	
G G	GAS MAIN	
	CONCRETE SURFACE	
	ASPHALT SURFACE	
	EDGE OF GRAVEL SURFACE	
	WATERMAIN	
	TREE	
DL	DETECTOR LOOP	
	PEDESTRIAN RAMP	
	BUS STOP AND/OR SHELTER	
H H	HEDGE	

HALIFAX

DRAWING STANDARDS

LEGEND FOR TYPICAL PLAN & PROFILE

DATE: 2021	REFERENCE	APPROVED
SCALE: NTS		FIG No.: DS 22

PLAN LEGEND

EXISTING		RECORD
PT NO	SURVEY CONTROL POINT	
	WATERVALVE	
	FIRE HYDRANT	
	UTILITY POLE AND GUY WIRE	
	SIGN POST/BASE	
X X	FENCE	X X
GR GR	GUIDERAIL	GR
RW RW	RETAINING WALL	RW
	CONCRETE CURB	
	PROPERTY LINE	
	BASELINE	
	SEWER MANHOLES	
	CATCHBASIN	
G G	GAS MAIN	
	CONCRETE SURFACE	
	ASPHALT SURFACE	
	EDGE OF GRAVEL SURFACE	
	WATERMAIN	
	TREE	
DL	DETECTOR LOOP	
	PEDESTRIAN RAMP	
	BUS STOP AND/OR SHELTER	
H H	HEDGE	

HALIFAX

DRAWING STANDARDS

LEGEND FOR TYPICAL RECORD DRAWING

DATE: 2021	REFERENCE	APPROVED
SCALE: NTS		FIG No.: DS 23

NOTES

1. PLAN VALUES ARE BASED ON THE NOVA SCOTIA COORDINATE REFERENCING SYSTEM.
2. ALL WORK IS TO BE DONE IN ACCORDANCE WITH HRM CONTRACT DOCUMENTS.
3. GRADES SHOWN ARE APPROXIMATE. FINISHED GRADE IS TO BE APPROVED IN THE FIELD BY THE ENGINEER.
4. UTILITY INFORMATION IS APPROXIMATE ONLY. CONTRACTOR IS RESPONSIBLE TO ARRANGE FOR ON SITE LOCATES WITH ALL UTILITIES PRIOR TO START OF WORK. CONTACT www.info-ex.com AND OTHERS AS REQUIRED.
5. CONTRACTOR TO OBTAIN ALL NECESSARY PERMITS REQUIRED TO PERFORM WORK AND TO COMPLY WITH ALL APPLICABLE ENVIRONMENTAL REGULATIONS.
6. WHERE EXISTING CONDITIONS ARE SHOWN THEY ARE NOT NECESSARILY ACCURATE OR COMPLETE. THE CONTRACTOR SHALL CONFIRM ALL EXISTING DIMENSIONS AND LOCATIONS AND REPORT ANY DISCREPANCIES TO THE ENGINEER.
7. THE CONTRACTOR SHALL CHECK AND VERIFY ALL PROPOSED DIMENSIONS BEFORE PROCEEDING WITH CONSTRUCTION. ANY ADJUSTMENTS WILL BE MADE BY THE ENGINEER AS NECESSARY.
8. CONTRACTOR IS RESPONSIBLE FOR SETTING GRADES AND LAYOUT CONTROL.
9. TRAFFIC SIGNS ARE NOT TO BE REMOVED OR REPLACED WITHOUT AUTHORIZATION FROM THE TRAFFIC AUTHORITY AND THE ENGINEER.
10. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF TREES. TREES ARE NOT TO BE REMOVED WITHOUT PERMISSION FROM THE ENGINEER.
11. WORK IN THE IMMEDIATE AREA OF A NOVA SCOTIA COORDINATE MONUMENT MUST BE CARRIED OUT BY HAND. THE CONTRACTOR IS RESPONSIBLE FOR ANY COSTS IF MONUMENTS ARE DISTURBED.
12. AT COMPLETION OF WORK REINSTATE ALL DISTURBED SURFACES TO THE SATISFACTION OF THE ENGINEER.
13. WATER VALVE BOX EXTENSIONS – THE MINIMUM INSIDE DIAMETER OF A VALVE BOX EXTENSION SHALL BE 125 mm AND THE MINIMUM LENGTH OF A VALVE BOX EXTENSION SHALL BE 300 mm. CONTRACTOR TO CONFIRM APPROPRIATE PRODUCT TO BE USED WITH HALIFAX WATER OPERATIONS DEPARTMENT STAFF.
14. ALL PROPOSED PEDESTRIAN RAMPS TO INCLUDE TACTILE WALKING SURFACE INDICATOR PLATES AS PER HRM DETAIL 131 UNLESS OTHERWISE NOTED.

HALIFAX

DRAWING STANDARDS

NOTES FOR
TYPICAL PLAN & PROFILE

DATE: 2021	REFERENCE	APPROVED
SCALE: NTS		FIG No.: DS 24

LINETYPES FOUND IN THE PROTOTYPE DRAWING

LAYER	LINETYPE NAME		DESCRIPTION
HE–ROAD	RRRD	———	ROAD (UNCURBED)
	RRCB	———	ROAD CURBED (FACE OF CURB)
HE–SIDEWALK	RRSW	———	SIDEWALK
HE–DRIVEWAY	RRDR	———	DRIVEWAY
	RRPA	———	PARKING AREA (ASPHALT)
	RRWK	———	HARD SURFACED WALKWAY
HE–FENCE	STFE	——— X ——— X ——— X ——— X ——— X ———	FENCE
	STGR	——— GR ——— GR ——— GR ——— GR ———	GUIDE RAIL
	STRW	——— RW ——— RW ——— RW ——— RW ———	RETAINING WALL
	STWL	——— W ——— W ——— W ——— W ——— W ———	WALL
HE–HYDRO	WADI	— – – – — – – – — – – – —	DITCH
	WALA	———	LAKE AREA
HE–STRUCTURE	STST	———	STEPS
	STDK	———	DECK
HE–WATER	WATER	——— · · ——— · · ——— · · ——— · · ———	WATER MAIN
HE–COMBINED	SWFMCO	——— – – FM CO ——— – – FM CO ———	SEWER FORCE MAIN COMBINED
	SWPICO	——— C ——— C ———	SEWER PIPE COMBINED
HE–SANITARY	SWPISA	———	SEWER PIPE SANITARY
	SWFMSA	——— – – FM SA ——— – – FM SA ———	SEWER FORCE MAIN SANITARY
HE–STORM	SWPICL	———	CATSHBASIN LEAD
	SWCU	– – – – – – – – – – – – – – – – – – – –	CULVERT
	SWFMST	——— – – FM ST ——— – – FM ST ———	SEWER FORCE MAIN STORM
	SWPIST	——— ——— ——— ———	SEWER PIPE STORM
HE–BUILDING	BLDG	———	BUILDING OUTLINE
HE–TREE LINE	LCHG	——— H ——— H ——— H ——— H ——— H ———	HEDGE
HE–TRAFFIC	TFCDTL	——— SL——— SL——— SL——— SL——— SL———	STREET LIGHT CONDUIT
	TFCD	——— T ——— T ——— T ——— T ——— T ———	TRAFFIC CONDUIT
	TFDL	———	TRAFFIC DETECTOR LOOP
HE–UTILITY	UTGW	———	GUY WIRE
	UTCDTL	——— TD——— TD——— TD——— TD——— TD———	TELECOMMUNICATIONS CONDUIT
	UTCDPW	——— ET——— ET——— ET——— ET——— ET———	ELECTRICAL CONDUIT
HE–GAS	GSPI	——— G ——— G ——— G ——— G ——— G ———	GAS MAIN
	GSLA	———	GAS LATERAL

NOTE:
FOR COMPLETE LIST OF LINETYPES AND LAYERS SEE HRMLINES.LIN.

HALIFAX

DRAWING STANDARDS

LINETYPES FOR TYPICAL PLAN & PROFILE

DATE: 2021	REFERENCE	APPROVED
SCALE: NTS		FIG No.: DS 25