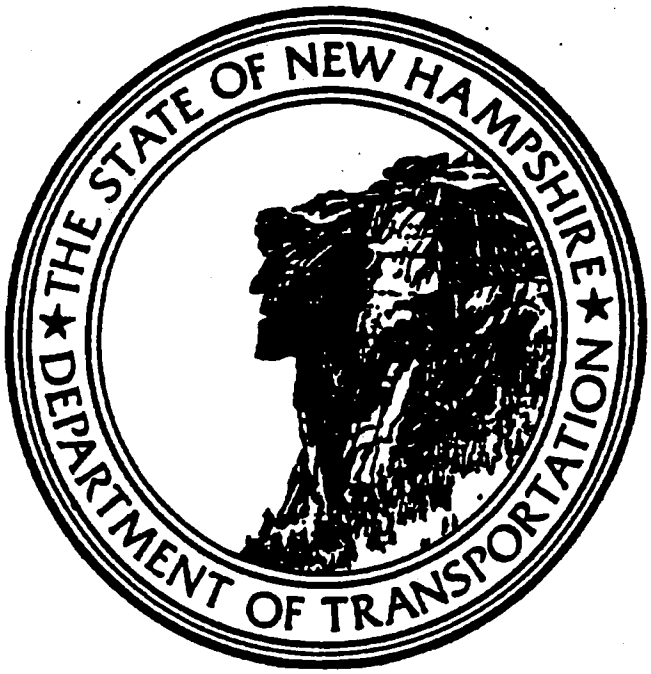


CAD/D SPECIFICATIONS FOR

DATA TRANSFER PROCEDURES

Version number 1.0
Revised 16 February 1995

This document was prepared by the Bureau of Data Management in cooperation with the Bureau of Highway Design. It is intended to document standard procedures for transferring CAD/D drawing files between the Department and it's consultants. To provide the information necessary to transfer data in an efficient manner while maintaining it's integrity. Designers shall comply with the following requirements to ensure uniformity of nomenclature, design standards and procedures throughout the Department and among consultants.

Please direct any comments, additions, or corrections to:

Bureau of Data Management
1 Hazen Dr.
P.O. Box 483
Concord, NH 03302-0483

- *A hard copy of all translated planimetrics shall be provided.*

Translation of drawing data may be less than 100% complete. The CONSULTANT shall be responsible for rectifying any deficiencies occurring from translation and for producing a complete and accurate plan with appropriate symbols, line and character styles.

3.) ***General Notes***

- *Additional data (e.g. abstracting, utilities, etc.) will be provided on paper and the CONSULTANT shall be responsible for transferring this information to appropriate CAD/D drawings in correct DEPARTMENT format.*

- *Any updates of DEPARTMENT supplied CAD/D data will be released throughout the contract duration, if necessary.*

- *The DEPARTMENT shall be held harmless from any and all loss damage expense or liability whatsoever resulting from the use of DEPARTMENT supplied programs and macros. Documentation may be supplied but the DEPARTMENT will not be responsible for any training in their use.*

CAD/D DATA TO BE PROVIDED TO THE CONSULTANT

1.) Projects Using GDS & MOSS

If the project is to be designed using the GDS and MOSS software the following data shall be provided on 9 track 1600 BPI magnetic reel tape, or TK-50 or TK-70 cartridges in VMS backup format fully compatible with and readable by the VAX/VMS version 5.5-2 (or later) operating system. The transfer media shall be provided by the consultant.

- *All GDS drawing (FGB) files containing survey detail necessary to design the project.*
- *MOSS model file.*
- *A copy of this document shall be made available, if requested.*
- *A copy of the Department's GDS symbol library (DOTLIB.FGB), sheet borders (BORDERS.FGB), MOSS macro file, and documentation for the MOSS macros shall be made available, if requested. Updates of this data is available on an irregular basis as the need warrants.*

2.) Projects Using Other CAD/D Systems

If the project will not be designed using the GDS and MOSS software the following data shall be provided on 9 track 1600 BPI magnetic reel tape, TK-50 or TK-70 cartridges or 3.5" floppy disks in a format mutually acceptable to the Consultant and the Department.

- *DXF files containing plotted survey detail necessary to design the project translated from GDS/MOSS using procedures outlined herein.*
- *DXF files of MOSS triangulation and string polylines for use in development of DTM. ASCII format files containing point coordinate data may also be provided to augment DXF file.*
- *A copy of this document shall be made available, if requested.*
- *A printed description and log file of each DXF file.*

Table of Contents

CAD/D DATA TO BE PROVIDED TO THE CONSULTANT 1

Projects Using GDS & MOSS 1

Projects Using Other CAD/D Systems 1

General Notes 2

REQUIREMENTS DURING CONSULTANT DESIGN 3

GDS Drafting Requirements 3

AutoCAD Drafting Requirements 3

Intergraph (Microstation) Drafting Requirements 5

RETURN OF CAD/D DATA TO THE DEPARTMENT 6

FGB File Requirements 6

DXF File Requirements 6

Spreadsheets 8

Coordinate Layout Data 8

Submission Requirements 8

Equivalence Mapping Tables 10

APPENDIX A-1

and adhere to the naming convention outlined in the attached appendix.

- *AutoCAD LINE/CHARACTER STYLES used shall conform to those shown in the Highway Design Manual and shall be related to NHDOT CAD/D equivalents by creation of equivalency mapping tables as described later in this document.*

- *AutoCAD Layers shall be named according to the layer name listing contained in the attached appendix. Only graphics described by the layer name shall be contained on that layer as these graphics will later be converted to GDS objects. If the DEPARTMENT's layer naming convention is not used then the consultant shall provide an entity equivalency mapping table as described later in this document to properly translate the drawing to GDS.*

A single drawing sheet may be composed of more than one drawing type. In these cases, the layer names used shall be the ones corresponding to the drawing types contained in the sheet.

- *P-LINES translate as a simple line. If they are intended to produce a thickened line they must be equated to an appropriate GDS linestyle as described later in this document.*

- *Only the following special symbols may be used in AutoCAD text blocks:*

  1.) %%d (Degrees Symbol)
  2.) %%p (Plus/Minus Symbol)
  3.) %%c (Diameter Symbol)
  4.) %%% (Percent Sign)

All other special symbols are not to be used.

- *TEXT JUSTIFICATION will be at lower left, unless noted otherwise.*

- *TEXTSTYLES shall not use an oblique angle nor be defined to run backwards or upside down. Also, text shall not be created using the fit option.*

REQUIREMENTS DURING CONSULTANT DESIGN

1.) *GDS Drafting Requirements*

- *All final Contract Drawings and Record Drawings containing proposed planimetric features defined by or tied to the New Hampshire State Plane Coordinate System shall be created on a CAD/D System on the level of accuracy and precision specified in the New Hampshire Highway Design Manual. A minimum of three New Hampshire State Plane Coordinate System reference points shall be clearly marked and labeled on all of these drawings.*

- *Object/drawing naming conventions and drawing file names established by the department shall be adhered to by the consultant.*

- *Line and character styles shall conform to those shown in the Highway Design Manual.*

2.) *AutoCAD Drafting Requirements*

- *In order for the DXF files to translate properly to AutoCAD format they must be loaded into a "clean" drawing. That is, one that is not based on any prototype, including any Softdesk drawing creation processes.*

- *All final Contract Drawings and Record Drawings containing proposed planimetric features defined by or tied to the New Hampshire State Plane Coordinate System shall be created on a CAD/D System at the level of accuracy and precision specified in the New Hampshire Highway Design Manual. A minimum of three New Hampshire State Plane Coordinate System reference points shall be clearly marked and labeled on all of these drawings.*

- *AutoCAD SYMBOLS used shall be created as blocks and shall conform to the symbology shown in the Highway Design Manual*

- *SOLID FILL should not be used for files that may be translated to other systems, as it does not translate as a filled GDS block. The outline of the AutoCAD solid is translated but the fill is ignored. To successfully translate as a filled solid, the AutoCAD linetype/pen used to draw the solid outline must be equated to the appropriate GDS filled linestyle in the linestyle equivalency mapping table.*

- *DIFFERENTIAL SCALING (different X and Y scales) in AutoCAD drawings shall not be used. Furthermore, all information on the drawing should be a single scale.*

- *DOUGHNUTS will not translate to GDS and should not be used.*

- *SHAPES Use "BLOCKS" instead of SHAPES.*

- *POINT entities shall not be used.*

- *AUTOCAD ATTRIBUTE DATA shall be used as annotation only as attribute data translate to GDS text blocks.*

- *AUTOCAD EXTERNAL REFERENCES are ignored by the translator. If used all appropriate DXF files shall be provided and it shall be clearly documented how they relate. Preferably each DXF file should contain all data for that drawing.*

3.) *Intergraph (Microstation) Drafting Requirements*

(In addition to any applicable AutoCAD requirements mentioned above.)

- *LEVEL and CELL names shall be mapped to the Department's AutoCAD layer/block naming convention.*

RETURN OF CAD/D DATA TO THE DEPARTMENT

1.) *FGB File Requirements*

- *All drawing files related to the project shall be provided to the department. These include, but are not limited to, quantity sheets, typical and detail sections, general plans and profiles, traffic signalization plans, and cross sections.*
- *A copy of the MOSS model file shall be provided.*
- *If the Department's line and character style library was not used, then a copy of the appropriate style file shall be provided.*
- *Any auxiliary files, such as border drawing files, necessary to the proper display of the GDS drawings shall be provided.*

2.) *DXF File Requirements*

- *All project plan sheet drawings represented in the contract plans or the proposed preliminary layout shall be provided in DXF format. These include, but are not limited to, quantity sheets, typical and detail sections, general plans and profiles, traffic signalization plans, and cross sections.*
- *Vertical alignment data shall be provided in ASCII file format report of STA, PI ELEV., and CURVE LENGTH.*
- *For preliminary designs the proposed ground surface template as developed for study purposes shall be provided as 3D polylines in DXF format.*

When data are to be transferred to the GDS system, the following requirements for the preparation of an AutoCAD Drawing Exchange Format (DXF) file are to be followed.

DXF file

The DXF file shall be a full file containing Header and Table Sections needed to fully reconstruct the drawing (i.e. no seed file).

Script files

If layer manipulation script files are used to generate different cut sheet types(i.e. pavement layout,curb layout) from the same base drawing, all appropriate documentation to facilitate cut sheet reproduction shall be provided .

Paperspace

If paperspace or other 'clipping' operations are used to generate cut sheets from the same base drawing(s) and one for one drawings per cut sheet do not exist, all drawing files needed to reproduce cut sheets as well as all appropriate documentation shall be provided. A layer or drawing called SHEETS representing cut sheet modelspace outlines shall be provided. The paperspace cut sheet drawings shall be provided as separate DXF files.

Invisible layers/unused data

Prior to generation of a DXF file, the WBLOCK command, or other similar method, shall be used to create a file that contains the graphics visible on the current drawing while eliminating unnecessary data such as empty, frozen, or turned off layers. In addition, if graphics are contained outside the plotted window of the drawing, these shall also be deleted prior to generation of the DXF file.

DXF filenames

DXF filenames shall contain a maximum of eight characters with the first two characters being the letters SH.

The remaining characters shall be the sheet number from the title block at the bottom of the drawing sheet.

For example, the DXF filename for an AutoCAD drawing of sheet number 24 would be SH24.DXF.

3.) ***Spreadsheets***

Any summary sheets or other material included as part of the contract plans that was created using a PC spreadsheet program shall be provided to the Department in a format compatible with Microsoft Excel version 4 (or current version used by the Department).

4.) ***Coordinate Layout Data***

When required, the consultant shall submit electronic files of alignment or other project feature coordinate data for survey layout purposes. An ASCII file and hard copy containing four fields shall be provided such that the first field consists of a unique point sequence number, field 2 the points north coordinate, field 3 the east coordinate, and field 4 a description of the point(STATION for alignment layout; type,station offset etc for others). The data shall be in the following format:

1 2 3 4 5 •• 1 2 3 4 5 6 7 . 8 9 •• 1 2 3 4 5 6 7 . 8 9 ••*<description field>*

where the •'s represent spaces. This can also be expressed as Fortran format (I5,2X,1F10.2,2X,1F10.2,2X,A--)

5.) ***Submission Requirements***

Electronic CAD/D data shall be submitted to the Department on 9 track 1600 BPI magnetic reel tape, or TK-50 or TK-70 cartridges in VMS backup format fully compatible with and readable by the VAX/VMS version 5.5-2 (or current) operating system.

DXF files may be submitted on 3.5" floppy disks. Any compression software used on these disks shall be included with the submission to properly decompress the files.

1.) *Intermediate DXF files are encouraged prior to final submission to ensure translatability. A hard copy corresponding to each DXF file shall be submitted.*

2.) *A file containing the linestyle equivalence mapping table is required. For a description see "Linestyle Mapping Table" on page 10.*

3.) *A file containing the characterstyle equivalence mapping table is required. For a description, see "Character Style Mapping Table" on page 11.*

4.) *An entity mapping table shall be provided in cases where the AutoCAD drawings do not follow the Department's standard naming conventions. For a description, see "Entity Mapping Table" on page 12.*

5.) *A tape information file containing one line for every DXF file on the submitted tape. Each line of the tape information file will be composed of three fields. Each field has a variable length and is separated from its adjacent field by a space.*

Each field shall contain the following information:

- *Field #1: DXF filename*

  This field contains the DXF filename.

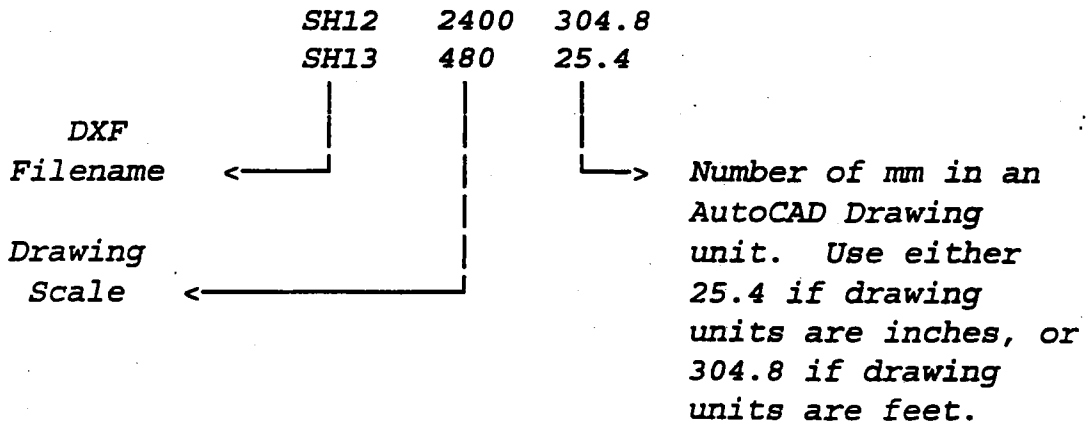
- *Field #2: Drawing scale*

  The field contains the AutoCAD drawing scale. This is the scale used when the AutoCAD drawing is plotted in a non-dimensional format.

- *Field #3: AutoCAD Drawing Unit*

  This field contains the number of mm in one AutoCAD drawing unit. A sample tape information file is shown below.

Example:



5.) ***Equivalence Mapping Tables***

Mapping tables are required to control how AutoCAD linetypes and colors, text styles , layering and blocking are translated to GDS. The mapping tables are text files created using the operating system text editor. These mapping tables shall be submitted with DXF files. Sample mapping tables are shown at the end of this document. NHDOT base mapping tables will be made available upon request.

LINESTYLE MAPPING TABLE

The linestyle mapping table will be used to specify how an AutoCAD linetype will be mapped to a GDS linestyle. The mapping table is divided into three fields. Field one contains the name of the AutoCAD linetype, field two contains the AutoCAD color number used by that linetype, and field three contains the GDS linestyle name.

The available GDS linestyles are shown in the Appendix. The mapping table shall be created by listing all AutoCAD linetypes, the corresponding color number, and the appropriate GDS linestyle name selected from the table in the Appendix.

The mapping table may contain any number of AutoCAD linetypes, regardless of whether they are all used on each DXF file. Therefore, only one linestyle mapping table is required for each project.

Consultants using customized AutoCAD linetypes which do not match any of the GDS linestyles listed in the appendix may submit these linetypes to the NHDOT Consultant Section prior to using them on a project. These linetypes will be translated, and if successful, the appropriate GDS linestyles will be made available for use in the linestyle mapping table.

A NOTE ON NHDOT GDS LINESTYLES:

> *GDS linestyles as defined by NHDOT contain embedded objects and thickness' as part of the linestyle definition. Most thickened linestyles (i.e. LR00A, LR1A) depend on the linestyle definition and NOT on the plotter pen. Three thickness' (normal, medium, heavy) are defined for plotter pens 0,1,2 and are indicated, where applicable, in the linestyle name by the suffix A,B,C respectively (i.e. LDIMA,LDIMB,LDIMC).*

CHARACTER STYLE MAPPING TABLE

The character style mapping table will be used to specify how an AutoCAD text font will be mapped to a GDS character style. The mapping table is divided into three fields. Field one contains the name of the AutoCAD text font, field two contains the AutoCAD color number used with that text font, and field three contains the GDS character style name. The mapping table shall be created by listing all AutoCAD text fonts, the corresponding color number, and the appropriate GDS characterstyle name selected from the table in the Appendix. The mapping table may contain any number of AutoCAD text fonts, regardless of whether they are all used on each DXF file. Therefore, only one character style mapping table is required for each project.

The available GDS characterstyles are shown in the attached Appendix. The mapping of the AutoCAD font/color number combination to one of the displayed styles should be based on the desired style appearance and pen weight, and not on the actual size of the text blocks. AutoCAD users should be aware that the current version of the translator uses the first eight characters from the font specification as a search string when looking through the mapping table. Therefore, when the font

specification includes the file extension, the first eight characters used by the translator could include part of the file extension. (Ex. if font is specified as ROMANS.SHX the translator will search the mapping table for fonts ROMANS.S not ROMANS).

For this reason it is suggested that the font file extension is not included in the definition of AutoCAD character styles. If it is included, the 8 character limit should be taken into consideration in the preparation of the characterstyle mapping table.

A NOTE ON NHDOT GDS CHARACTERSTYLES :

> *Boldness in characterstyles is achieved by either an appropriate characterstyle definition or by designating a pen number in the GDS characterstyle name (i.e. C1E50, C170, C1PIR50).*

ENTITY MAPPING TABLE

The ENTITY mapping table will be used to specify how an AutoCAD layer or block will be mapped to GDS objects. The mapping table is divided into three fields. Field one contains the name of the AutoCAD layer or block, field two contains the GDS object name , and field three contains the blocked /unblocked indicator which is only used by the translator when translating from GDS to DXF.

The available GDS object naming convention is shown in the Appendix. The mapping table shall be created by listing all AutoCAD layers and Blocks, and the appropriate GDS object name selected from the table in the Appendix.

The mapping table may contain any number of AutoCAD layers and blocks, regardless of whether they are all used on each DXF file. Therefore, only one entity mapping table is required for each project.

APPENDIX

- ***NHDOT GDS Drawing File Parameters***
- ***Sample Linestyle Equivalency Mapping Table***
- ***Sample Charactersytle Equivalency Mapping Table***
- ***Sample Entity Equivalency Mapping Table***
- ***NHDOT GDS to DXF Procedures***
- ***GDS Object Naming Convention/AutoCAD Layer Listing***
- ***Available GDS Characterstyles***
- ***Available GDS Linestyles***

NHDOT GDS DRAWING FILE PARAMETERS

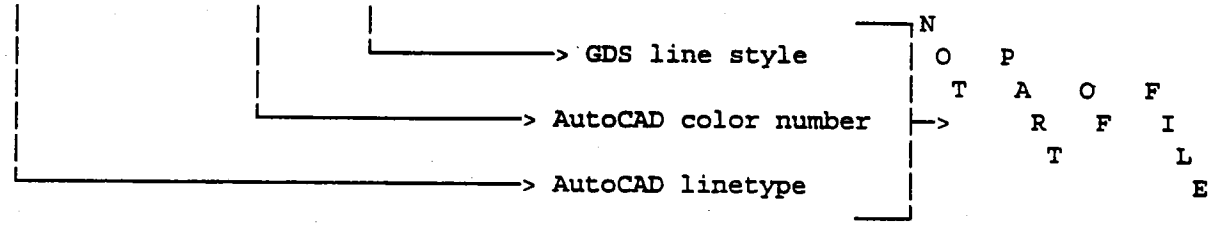
This listing is provided for informational purposes. Metric values are shown in parenthesis.

```
STORED UNIT:        FT (METER) TO 4 DECIMAL PLACES
PAPER UNIT:         IN (mm) TO 4 DECIMAL PLACES
ANGLES:             ANTICLOCKWISE IN  D TO 1 SECONDS OF ARC
OBJECT:             NONE
UNIT:               FT (METER) TO 4 DECIMAL PLACES
AXIS:               SCALE varies from project to project.
                    ORIGIN varies
                    ROTATED varies
                    Typically 1:600 or 1:240 for Imperial unit
    projects and 1:500 or 1:250 for metric projects.
REPEAT:             ROTATION 0D0M0S LOCKED
                    SCALE  1:1 LOCKED
GRID:               SCALE 1:1 X10.0000 Y10.0000 FT (METER)
                    ORIGIN X0.0000/Y0.0000 FT (METER) ROTATION 0D0M0S WRT AXES
LINESTYLE:          LA
CHARSTYLE:          CI100
JUSTIFICATION:      CENTRE CENTRE
MARK:               BOTH
EDIT RANGE:         UNRESTRICTED
FIGURES:            LINEAR UNIT
                    ANGULAR DEG    TO 1 SECONDS OF ARC
                    PROJECTION LINE GAP 0.0033 FT  (0.0010 M )
                    PROJECTION LINE OVERSHOOT 0.0066 FT  (0.0020 M )
NAME:               DIMENSIONS - LAST FACET
                    HATCHING - LAST FACET
DIGITIZER:          NONE
MENUS:              TABLET    1   TFIX46
                    TABLET    2   TSET46
                    TABLET    3   TGRP46
                    TABLET    4   TRNG46
                    TABLET BUTTON TBUT1
PERSONAL FILE:          filename                                PRECISION: DOUBLE
MAIN FILE:              filename                                PRECISION: DOUBLE
                        HAS STYLE FILE NH_DISK:[NHDOT.MASTER]DOTLIB.FGB;1
EXTERNAL FILE:          NH_DISK:[NHDOT.MASTER]DOTLIB.FGB;1  PRECISION: DOUBLE
WINDOW FILE:            NONE
AUXILIARY FILES:        NH_DISK:[NHDOT.MASTER]BORDERS.FGB;1  PRECISION: DOUBLE
                        HAS STYLE FILE NH_DISK:[NHDOT.MASTER]DOTLIB.FGB;1
PROPERTY FORMAT FILE:NH_DISK:[NHDOT.MASTER]HIGHWAY_PROP.FGB;1
GAZETTEER FILE:         NONE
BASIC PERSONAL FILE:    NONE
BASIC MASTER FILE:      NH_DISK:[NHDOT.MASTER.BASIC]BASIC.FGB;1
MENU PERSONAL FILE:     MENU.FGB;1 in login directory
MENU APPLIC'N FILE:     NH_DISK:[NHDOT.MASTER]DOTMENU.FGB;1
MENU MASTER FILE:       GDS_ROOT:[MASTER]MENU.FGB;1
```

SAMPLE LINESTYLE EQUIVALENCY MAPPING TABLE

The following is a sample linestyle mapping table. Lines beginning with the `!' character are comment lines and are ignored by the translator.

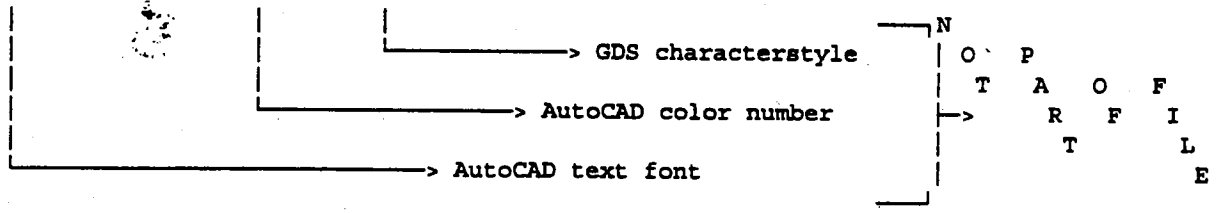
```
! GDS/DXF Linestyle Mapping Table
!Field 1      Field 2   Field 3
!
CONTINUOUS          1      LA
CONTINUOUS          3      LR00A
CONTINUOUS          5      LR0A
CENTER              1      LCENT
DASHED              1      LDASHA
DASHED              3      LDASHB
DOT                 1      LDOTA
DOT                 3      LDOTB
DOT                 5      LDOTC
HIDDEN              1      LDASHA
HIDDEN              3      LDASHB
PHANTOM             1      LDDASHA
PHANTOM             3      LDDASHB
```



SAMPLE CHARACTERSTYLE EQUIVALENCY MAPPING TABLE

The following is a sample character style mapping table. Lines beginning with the '!' character are comment lines and are ignored by the translator.

```
! GDS/DXF Characterstyle Mapping Table
!Field 1     Field 2   Field 3
!
MONOTXT              5      C70
MONOTXT              3      C50
MONOTXT              1      C25
TXT                  5      CI290
TXT                  3      CI200
TXT                  1      CI140
ROMANS               5      CPE50
ROMANS               3      CPE35
ROMANS               1      CPE25
ROMANC               5      CPR70
ROMANC               3      CPR50
ROMANC               1      CPR25
ITALICC              5      CPIR70
ITALICC              3      CPIR50
```



NOTE: This table is for illustrative purposes only and should not be duplicated. Consultants are responsible for creating mapping tables customized to their text styles.

SAMPLE ENTITY EQUIVALENCY MAPPING TABLE

The following is a sample entity mapping table. Lines beginning with the '!' character are comment lines and are ignored by the translator. Consultants are responsible for using recommended layering or creating mapping tables customized to their layering

```
! GDS 5.2 compatible
! GDS/DXF entity mapping table for consultant study
! Field 1          Field 2          Field 3
ALIGN,             ALIGN,            Y
CL,                ALIGN,            N
CEMETERY,          TPO:CM,           N
E-BRIDGE,          TPO:BG,           N
E-BUILDING,        TPO:BD,           N
E-DRN-STRUCT,      E:PCBD:DRN,       Y
E-EP,              TPO:EP,           N
E-ROW,             E:BR:ROW          N
E-ROW-MARKER,      E:PIPN:ROW,       Y
P-GRAIL,           P:BL,             N
SLOPE-CUT,         P:ICR,            N
SLOPE-FILL,        P:IF,             N
P-EP               P:EP              N
P-ROW              P:BR:ROW          N
TREE-DECIDUOUS,    TPO:PTDS,         Y
TREELINE,          TPO:WL,           N
```

Blocking invoked (valid only from GDS to AutoCAD)

GDS Object Name

AutoCAD Block or Layer name

All unblocked entities are mapped to GDS objects with the object name derived from the entities' layer.

Examples: entities on Layer **ALIGN** --> GDS Objects **ALIGN**
entities on Layer **CL** --> GDS Objects **P:BR:ROW**

Each Block is translated to a GDS object with the object name derived from the Block name.

Examples: Block **ALIGN-M001** --> GDS Object **ALIGN:M001**
Block **CL-M001-TEXT** --> GDS Object **ALIGN:M001:TEXT**

NHDOT GDS to DXF Procedures

The following is procedure used within NHDOT to generate the DXF file that will be provided to consultants who will not be using GDS and MOSS to design the project. This procedure has evolved over time and will continue to do so as more efficient methods are discovered.

Plan Data

To create a DXF file from a GDS drawing, draw a window containing all the data to be transferred. Make a plot of this window. Run the GDS-Basic program to generate the DXF file. This program will bring the plot file back into GDS as a new drawing and create a DXF file from this new drawing. By doing this the GDS linestyles are broken down to their constituent graphic blocks and the CONSULTANT will see the linestyle in their proper format. This procedure may be altered as a result of enhancements within AutoCAD version 13.

The DXF file will be created using standard NHDOT equivalency mapping tables to create a layering convention as documented on the GDS object naming/layering convention chart (See end of this appendix). Log files generated by the translation process shall be included in the data provided to the CONSULTANT.

Ground Model (DTM)

Gound model data will be provided by translating the MOSS triangulation model and topo string model to DXF files. The topo string DXF file will contain the infprmation as 3D polylines which can be used for fault line interpretation and DTM development. The triangulation DXF file will contain the infromation as 3D faces which can be used by the CONSULTANT as the source point data for DTM development and/or visual check against consultant developed DTM. These files are created as follows from MOSS:

```
MOSS>3DDXF,<filename>
3DDXF>001,<triangle model name>
3DDXF>453,<triangle string label>
3DDXF>999
```

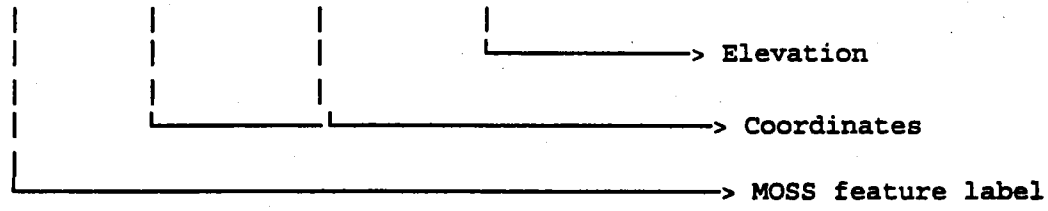
```
MOSS>3DDXF,<filename>
 3DDXF>001,<topo model name>
 3DDXF>019,<string mask>
 3DDXF>451,<blank for allstrings>
 3DDXF>999
```

***NOTE**: Points which MOSS interprets as null (i.e. Z = -999) are carried with the DXF file as the Z-value. These should be addressed and set to null within the destination software.*

Three-dimensional ground model data from MOSS may be augmented by an ASCII file format of coordinate point data. The data will be extracted from the MOSS model by use of the User Programmable Module (UPM) program CONREPO. It shows only the most basic information about a feature: its MOSS code, X and Y coordinates, and elevation. This type of file has been used effectively for translations to both AutoCAD and Intergraph Microstation sites.

To do this the operator will issue the UPM, CONREPO *command at the MOSS> prompt. The program will prompt for the name of the model to be extracted. The data will be stored in a file called STRING-REPORT.PRN. A sample of this file is shown below.*

```
CLW1  1018614.370  268499.826  246.355
CLW1  1018621.538  268509.892  246.766
CLW1  1018628.068  268520.385  247.176
CLW1  1018633.933  268531.262  247.587
CLW1  1018638.998  268542.214  248.051
CLW1  1018643.390  268553.453  248.515
CLW1  1018647.092  268564.937  248.980
CLW1  1018650.092  268576.625  249.444
CLW1  1018657.917  268611.573  250.607
CLW1  1018667.232  268654.040  251.783
CLW2  1018314.994  268668.052  263.948
CLW2  1018336.121  268676.678  263.404
CLW2  1018350.862  268682.943  262.963
CLW2  1018362.541  268687.350  262.726
CLW2  1018379.054  268693.660  262.360
CLW2  1018395.796  268699.332  261.994
CLW2  1018410.206  268703.653  261.527
CLW2  1018424.749  268707.501  261.059
CLW2  1018439.410  268710.874  260.592
CLW2  1018443.444  268711.870  260.426
CLW2  1018447.257  268713.520  260.260
CLW2  1018450.745  268715.778  260.095
```



Sectional Data

In cases where it has been decided that the Department will provided specific sectional data in lieu of the CONSULTANT deriving this information for themselvs from ground model DTM, It shall be clearly designated as to the type of sections required.

- *Study sections (raw sections) will be translated from MOSS using the 2DDXF translator to convert the sectional DPF file to a DXF file.*

- *Cut sheet formated base cross sections embellished with existing detail will be prepared in GDS and converted to DXF format using the GDS translator and appropriate mapping tables.*

GDS OBJECT NAMING/LAYERING CONVENTIONS

The following chart contains the standard NHDOT object naming naming convention and recommended layering conventions for roadway projects.

Data supplied to the consultant:

- DXF files of NHDOT plan data will be generated using the layering conventions contained herein.

- Layer names are determined as indicated on the chart. The GDS object will reside as UNBLOCKED entites on these layers unless noted. Example:

  from sheet 6: TPO:EP --> Entities on layer E-EP

- By default anything not specifically listed will translate to UNBLOCKED Entities on Layer determined by the GDS objects first facet. Example:

  from sheet 6: TEXT:MISC --> Entities on layer TEXT

  Block names are determined by the specified layer/block name and the remainder of the object name. Example:

  from sheet 1: ALIGN:M001/1 --> Block ALIGN-M001-1 on layer ALIGN
  from sheet 3: E:PCBD:DRN:50/1 --> Block E-DRN-STR-50-1 on layer E-DRN-STR

- In general all feature lines (lane lines, woods lines etc) are translated UNBLOCKED. All point symbols (Trees, Utliity poles, etc) are translated BLOCKED.

Data supplied by the Consultant:

- The layering convention specified in the chart should be adhered to. Blocking guidelines above should be followed.

- When returned to NHDOT GDS object names are derived directly from the Block name. GDS object names are derived from layer name that Unblocked entities reside upon.

GDS DRAWING	GDS OBJECTS	DESCRIPTION	GDS CHARACTER STYLE	GDS LINE STYLE	MOSS NG L	SYMBOL	DOTLIB PAGE	AUTOCAD LAYER/BLOCK NAME	16 NOV 1994 ET 1 COMMENTS
ALIGN (Phase 7) ALIGN.FGB	ALIGN:N---:BEARING	Bearings	CI120/CI140	N/A	N/A			ALIGN	OBJECTS BEGINNING WITH 'ALIGN' WILL BE MAPPED TO LAYER 'ALIGN' AND BLOCK NAMES DERIVED FROM THE REMAINDER OF THE OBJECT BY REPLACING ':' WITH '-' I.E. 'ALIGN:FRAME' GOES TO BLOCK 'ALIGN-FRAME' ON LAYER 'ALIGN'
	ALIGN:N---:CONTROL	Angles Symbols	CI120/CI140	Varies	N/A	○ △ ○ ◇		ALIGN	
	ALIGN:N---:CONTROL:TEXT	Text & Leader Line	CI120/CI140	LA	N/A			ALIGN	
	ALIGN:FRAME	Frame	Mose Default	Mose default	None			ALIGN	
	ALIGN:GRID	Grid crosses & coord. text	Mose Default	Mose default	None			ALIGN	
	ALIGN:N---:LINE	Line Across Control Mark	N/A	LA	N/A	——		ALIGN	
	ALIGN:MO-- ALIGN:MI--	Survey Line Construction Line	C36 CE36/CE80	LA LR00A	MO-- MI--			ALIGN	ALIGNMENTS AND ASSOCIATED ANNOTATION WILL HAVE A UNIQUE 4 CHARACTER NAME BEGINNING WITH M AND BLOCKED FOR RETURN TO MAGOT EXAMPLE: ALIGN-M001
	ALIGN:M2--	Detour Alignment	CE36/CE80	LR00A	M2--			ALIGN	
	ALIGN:MB--:BRK	Stream or Brook Alignment	CI120/CI140	VARIES	MB--			ALIGN	
	ALIGN:MD--:DRIVE:LT or RT	Proposed Drive & Alignment	CE36/CE80	LPARROW	MD--			ALIGN	
	ALIGN:N---:MAJOR:STATION	500 Foot Station & Tick	C36/CE36	LA	N/A			ALIGN	
	ALIGN:N---:MISC	Misc. comments only	CI120/CE25	VARIES	N/A			ALIGN	
	ALIGN:N---:NAME	String label	C18	N/A	N/A			ALIGN	
	ALIGN:PSSA	Traverse Set-up Points	Mose Default	LA	PSSA	△		ALIGN	
	ALIGN:N---:TEXT	Stations/Street Names SURVEY BOOK & PAGE TEXT	Varies	Varies	N/A	Varies As Needed		ALIGN	
	ALIGN:N---:TICK	Alignment 50' Ticks	N/A	LA	N/A			ALIGN	
	DIGI:POINTS	Points for Digitizing	CI120	LA		◆ SHEET_27			
	MAG:NORTH:ARROW	Magnetic North Arrow	CE18	N/A	N/A			GRID-ARW	BLOCKED
	GRID:NORTH:ARROW	N.H.Grid North Arrow	CE25	N/A	N/A			GRID-ARW	BLOCKED
	PLOT:DETAIL:STAMP	Self Explanatory	CI080	LR1A/LA	N/A			TITLE-STAMPS	
	PRELIM:PLAN:STAMP	See Above	CPR50/CPR35	LA	N/A			TITLE-STAMPS	
	SCALE:20: or SCALE:50	Scale	CE25	LFCBT100/LA	N/A			TITLE-STAMPS	
	TEXT:CURVE:DATA	Curve Data	CI120/CI140	LR00A	N/A			ALIGN	GOES TO BLOCK ALIGN-DATA
	TITLE:	Project Name and Number Federal Project Number	CPR70 CI240	Varies	N/A			TITLE	
FALIGN (Phase 27) ALIGN.FGB	Use Above Object Names No Needed Additional Names May Include The Following								
	ALIGN:MA--	Preliminary Design Alternate	CE36/CE80	LR0A	MA--	N/A		ALIGN	

GDS DRAWING	GDS OBJECTS	DESCRIPTION	GDS CHARACTER STYLE	GDS LINE STYLE	GDS STRING LABEL	SYMBOL	DOTLIB PAGE	AUTOCAD LAYER/BLOCK NAME	15 NOV 1984 SHEET 2 COMMENTS
BACKGR ASSEMBLER.PGB									ALL THE DATA ON THIS SHEET WILL USE DEFAULT MAPPING i.e. LAYER DERIVED FROM ^ FIRST FACET
	TITLE:DRAW:CONST:SHEET## TITLE:DRAW:ROV:SHEET##	Drawing Name	CE26	N/A	N/A				
	TITLE:JOB:CONST: TITLE:JOB:ROV	Total # of Sheets, Project #'s "DRAFTED BY" names & dates	CE25/CE36	N/A	N/A				
	TITLE:*:CONST: TITLE:*:ROV	Plan Title Such As "GENERAL PLANS"	CE50	N/A	N/A				
	TITLE:*:CONST:SHEET## TITLE:*:ROV:SHEET##	Sheet Number, Window Name	CE25	N/A	N/A				
	The *'s in object names are to be substituted with an abbreviation of the type of plan represented, such as: DRN - Drainage Plans GEN - General Plans PVT - Pavement Layout Plans ROW - Right-of-way Plans SGN - Signing Plans SIG - Signalization Plans TCP - Traffic Control Plans UTL - Utility Plans								
CONTOURS (Phase 4 & 5) CONTOUR.PGB	CONTOURS:CA--	Approx Exist Major Contours	Mose Default	Mose Default	CA--				
	CONTOURS:CB--	Approx Exist Depress Major Cont	Mose Default	Mose Default	CB--				
	CONTOURS:CD--	Exist Depress Major Contour	Mose Default	Mose Default	CD--				
	CONTOURS:CS--	Exist Standard Major Contour	Mose Default	Mose Default	CS--				
	CONTOURS:ZA--	Approx Exist Minor Contours	Mose Default	Mose Default	ZA--				
	CONTOURS:ZB--	Approx Exist Depress Minor Cont	Mose Default	Mose Default	ZB--				
	CONTOURS:ZD--	Exist Depress Minor Contour	Mose Default	Mose Default	ZD--				
	CONTOURS:ZF--	Exist Standard Minor Contour	Mose Default	Mose Default	ZF--				
DRNSUM● SUMMARIES.PGB	DRAIN:FRAME	Outline of drainage summary							
	DRAIN:NUMBER	"Sheet #" text	CPHN175						
	DRAIN:SUMMT:N---	Item quantities for alignment N---	CE25						
	DRAIN:TOTAL	Item sub-totals and totals	CE25						

Use as a background to drawings generated by sheet assembler.

Drainage summary elements

GDS DRAWING	GDS OBJECTS	DESCRIPTION	GDS CHARACTER STYLE	GDS LINE STYLE	MOSS ING FIL	SYMBOL	DOTLIB PAGE	AUTOCAD LAYER/BLOCK NAME	16 NOV 1994 ET 3 MENTS
EXIST_IN (Phase 1) EXIST_IN.PGB									
				DRAINAGE SYMBOLS					
	E:MEND:DRN:20 E:MEND:DRN:50	Metal Pipe End Section	N/A	LA	N/A			E-DRN-STR	ALL BLOCKED EXCEPT AS NOTED
	E:PCBD:DRN:20 E:PCBD:DRN:50	Catch Basin	C18	LA	PCBD	C.B.		E-DRN-STR	
	E:PDID:DRN:20 E:PDID:DRN:50	Drop Inlet	C18	LA	PDID	D.I.		E-DRN-STR	
	E:PMHD:DRN:20 E:PMHD:DRN:50	Drainage Manhole	C18	LA	PMHD	M.H.		E-DRN-STR	
	E:REND:DRN:20 E:REND:DRN:50	Reinforced Concrete Pipe End Section.	N/A	LA	N/A			E-DRN-STR	
				RIGHT-OF-WAY SYMBOLS					
	E:PCON:ROW:20 E:PCON:ROW:50	Bound	C12 C1100	LA	PCON	Bnd.		E-ROW-BND	
	E:PDHL:ROW:20 E:PDHL:ROW:50	Drill Hole	C1100 C1000	LA	PDHL	D.H.		E-ROW-MRK	
	E:PIPN:ROW:20 E:PIPN:ROW:50	Iron Pipe	C12 C1100	LA	PIPN	I.P.		E-ROW-MRK	
	E:PRJM:ROW:20 E:PRJM:ROW:50	Project Marker	C12 C1100	LA	PRJM			E-ROW-MRK	
	E:PSLN:ROW:20 E:PSLN:ROW:50	State Line Marker	C12 C1100	LA	PSLN	SL		E-ROW-MRK	
	E:PTLN:ROW:20 E:PTLN:ROW:50	Town Line Marker	C12 C1100	LA	PTLN	TL		E-ROW-MRK	
				TRAFFIC SYMBOLS					
	E:DS:TRF	Magnetic Detector Sleeve	C1120	LEMAGDET	DS--			E-TRF	UNBLOCKED
	E:PCCT:TRF:20 E:PCCT:TRF:50	Controller Cabinet	C12	LDOTA	PCCT	C.C.		E-TRF	
	E:PHHL:TRF:20 E:PHHL:TRF:50	Handhole	C12	LDOTA	PHHL			E-TRF	
	E:PMAP:TRF:20 E:PMAP:TRF:50	Mast Arm Pole	C1120	LA/LMASTFIL	PMAP			E-TRF	
	E:PPBX:TRF:20 E:PPBX:TRF:50	Pullbox	C12	LDOTA	PPBX	P.B.		E-TRF	
	E:PSGL:TRF:20 E:PSGL:TRF:50	Post Traffic Signal No Mast Arm	C12	LA	PSGL			E-TRF	
	E:SLD:TRF	Loop Detector	C1120	LDASHA	SLD-			E-TRF	UNBLOCKED

All survey and/or aerial data including vertical controls to be included for existing conditions.

GDS DRAWING	GDS OBJECTS	DESCRIPTION	GDS CHARACTER STYLE	GDS LINE STYLE	GDS STRING LABEL	SYMBOL	DOTLIB PAGE	AUTOCAD LAYER/BLOCK NAME	13 NOV 1994 SHEET 4 COMMENTS
EXIST_IN (Phase I) EXIST_IN.PGB				UTILITY SYMBOLS					ALL BLOCKED EXCEPT AS NOTED
	E:AE:UTL	Aerial Electrical Transmission Line	CI100	LAELEC	AE--	—«——«		E-UT-ELEC	UNBLOCKED
	E:PANC:UTL	Guywire/Anchor	CI120	LA	PANC	—<		E-UT-POLE	
	E:PGSO:UTL:20 E:PGSO:UTL:60	Gas Shutoff	CI2	LA	PGSO			E-UT-MISC	
	E:PGUY:UTL:20 E:PGUY:UTL:60	Guy Pole or Stub	CI120	LFBBN60	PGUY			E-UT-POLE	
	E:PHYD:UTL:20 E:PHYD:UTL:60	Hydrant	CI2	LA	PHYD			E-UT-MISC	
	E:PJCT:UTL:20 E:PJCT:UTL:60	Utility Junction Box	CI120/CI100	LDOTA	PJCT			E-UT-MISC	
	E:PJNT:UTL:20 E:PJNT:UTL:60	Joint Pole	CI120	LFBBN60	PJNT			E-UT-POLE	
	E:PLIT:UTL:20 E:PLIT:UTL:60	Light Pole	CI120	LA	PLIT			E-UT-POLE	
	E:PLTJ:UTL:20 E:PLTJ:UTL:60	Light on Joint Pole	CI120	LFBBN60	PLTJ			E-UT-POLE	
	E:PLTP:UTL:20 E:PLTP:UTL:60	Light on Power Pole	CI120	LFBBN60	PLTP			E-UT-POLE	
	E:PMHE:UTL:20 E:PMHE:UTL:60	Electric Manhole	CI2	LA	PMHE			E-UT-MANH	
	E:PMHG:UTL:20 E:PMHG:UTL:60	Gas Manhole	CI2	LA	PMHG			E-UT-MANH	
	E:PMHS:UTL:20 E:PMHS:UTL:60	Sewer Manhole	CI2	LA	PMHS			E-UT-MANH	
	E:PMHT:UTL:20 E:PMHT:UTL:60	Telephone Manhole	CI2	LA	PMHT			E-UT-MANH	
	E:PMHW:UTL:20 E:PMHW:UTL:60	Water Manhole	CI2	LA	PMHW			E-UT-MANH	
	E:PPOL:UTL:20 E:PPOL:UTL:60	General Pole	CI120	LFBBN60	PPOL			E-UT-POLE	
	E:PPTR:UTL:20 E:PPTR:UTL:60	Transmission Line Tower	CI120	LA	PPTR			E-UT-MISC	
	E:PPWR:UTL:20 E:PPWR:UTL:60	Power Pole	CI120	LFBBN60	PPWR			E-UT-POLE	
	E:PRSL:UTL:20 E:PRSL:UTL:60	Railroad Signal	N/A	LA	PRSL			E-RR	

All symbols to be included for existing conditions.

GDS DRAWING	GDS OBJECTS	DESCRIPTION	GDS CHARACTER STYLE	GDS LINE STYLE	MOSS NG L	SYMBOL	DOTLIB PAGE	AUTOCAD LAYER/BLOCK NAME	16 NOV 1994 YT 6 MENTS
EXIST_IN (Phase 1) EXIST_IN.PGB				UTILITY SYMBOLS					ALL BLOCKED EXCEPT AS NOTED
	E:PRSV:UTL:20 E:PRSV:UTL:50	Railroad Switchstand	CI120	LA	PRSV	⊙ RS		E-RR	UNBLOCKED
	E:PTEL:UTL:20 E:PTEL:UTL:50	Telephone Pole	CI120	LFCENSO	PTEL			E-UT-POLE	
	E:PVNT:UTL	Vent Pipe	CI080	LA	PVNT	⊙		E-UT-MISC	
	E:PVBT:UTL:20 E:PVBT:UTL:50	Water Beta	C12	LA	PVBT			E-UT-MISC	
	E:PVSO:UTL:20 E:PVSO:UTL:50	Water Shutoff	C12	LA	PVSO			E-UT-MISC	
	E:RR:UTL	Railroad	CI100	LRAILR20 LRAILR50	RR--/ /R---			E-RR	
				OTHER OBJECTS					
	E:ARROW:RIVER:20 E:ARROW:RIVER:50	Stream or River Flow Arrow	VARIES	LPIPE				WATER	UNBLOCKED
	E:FA	Stream or River Flow Arrow	VARIES	LPIPE	FA--			WATER	UNBLOCKED
	E:PBMK:20 E:PBMK:50	Bench Mark	CI120	LA	PBMK			BENCH	
	E:PDAT:20 E:PDAT:50	Satellite Dish Antenna	C12	LA/LFBENSO	PDAT			E-MISC	
	E:PFTR:20 E:PFTR:50	Fire Tower						E-MISC	UNBLOCKED
	E:PGLT:20 E:PGLT:50	Ground Light (Lawn ornaments)	CI100 CI080	LA	PGLT	G.L.		E-UT-MISC	
	E:PLPT:20 E:PLPT:50	Private Light/Lamp Post	CI100/CI080	LA	PLPT	L.P.		E-UT-POLE	
	E:PRSN:20: E:PRSN:50	Railroad Sign	N/A	LA	PRSN			E-RR	

All survey control points shown should be included for existing conditions.

GDS DRAWING	GDS OBJECTS	DESCRIPTION	CHARACTER STYLE	LINE STYLE	STRING LABEL	SYMBOL	DOTLIB PAGE	AUTOCAD LAYER/BLOCK NAME	SHEET 6 COMMENTS
EXIST_IN (Phase 1) EXIST_IN.FGB (Cont.)									
	FLOW:ARROW	Stream Flow Arrow						WATER	ALL UNBLOCKED EXCEPT AS NOTED
	POINTS:	Plotting Points Or Guides	N/A	LA	N/A				
	SWAMPTHD:	Swamp Marsh or Wetlands						WETLAND	BLOCKED
	TEXT:GENERAL	General text	VARIES	N/A	N/A			TEXT	
	TEXT:MISC	Misc. text that doesn't need to be on final plans.	CI100/CI120	N/A	N/A			TEXT	
	TEXT:NAME	Names of major features (streets,rivers,ponds,etc.)	VARIES	N/A	N/A			TEXT	
	TEXT:SURVEY	Survey Book Info Bench Mark Info	CI140 C2S or C3S	N/A	N/A			TEXT	
	TPO:AF	Athletic Field	CI100/CI120	LA	AF--		L-1	E-MISC	
	TPO:BD TPO:BE	Building	CI120	LROOA	BD--		L-3	E-BLDG	
	TPO:BF	Bottom of Footing (exposed)	CI120	LROOA	BF--		L-3	E-BRIDGE	
	TPO:BG	Bridge Deck	N/A	LROOA	BG--		L-3	E-BRIDGE	
	TPO:BL	Beam Guard Rail Left	N/A	LEGRBL20 LEGRBL60	BL--		L-14 L-12A	E-GRAIL	
	TPO:BLDR	Boulder	CI120	LROCKLIN	RO--		L-12	E-ROCKLINE	
	TPO:BM	Earth berm	CI120	LA	BM--		L-1	E-MISC	
	TPO:BR	Beam Guard Rail Right	N/A	LEGRBR20 LEGRBR60	BR--		L-14 L-12A	E-GRAIL	
	TPO:BS	Bottom Of Slope	CI120	LDASHA	BS--		L-1 L-12	E-SLOPE	
	TPO:CL	Curb Left	N/A	LECURBL	CL--		L-12	E-CURB	
	TPO:CM	Cemetery	CI140	LDASHA LA	CM--	OR OR	L-1 L-12	CEMETERY	
	TPO:CP	Concrete Island/Pad	CI120	LA	CP--		L-1	E-MISC	
	TPO:CR	Curb Right	N/A	LECURBR	CR--		L-12	E-CURB	
	TPO:DF	Double Faced Guard Rail	N/A	LEGRBD20 LEGRBD60	DF--			E-GRAIL	
	TPO:DL	Ditch Line	CI100	LRIV	DL--		L-12	E-DITCH	
	TPO:DM	Dam	CI120	LA	DM--		L-1	E-MISC	

Symbols to be included for existing conditions.

GDS DRAWING	GDS OBJECTS	DESCRIPTION	GDS CHARACTER STYLE	GDS LINE STYLE	MOSS NG L	SYMBOL	DOTLIB PAGE	AUTOCAD LAYER/BLOCK NAME	16 NOV 1994 YT ? MENTS
EXIST_IN (Phase 1) EXIST_IN.FGB (Cont.)									
	TPO:DP:DRN	Drainage Pipe	CI100	LEP20-- LEP50--	DP--			E-DRN-PIPE	ALL UNBLOCKED EXCEPT AS NOTED
	TPO:DR	Driveway	CI120	LDASHA	DR--		L-1 L-12	E-DRIVE	
	TPO:EP	Edge of Pavement	N/A	LDASHA	EP--		L-1 L-12	E-EP	
	TPO:FB	Fence-Barbed Wire	N/A	LFNB/LFNBS	FB--		L-14 L-12A	E-FENCE	
	TPO:FD	Foundation or Ruins	CI100	LDASHA	FD--		L-1 L-12	E-FOUND	
	TPO:FM	Misc. Feature	CI100	LA	FM--		L-1	E-MISC	
	TPO:FO	Fence-Other than barbed wire	CI100	LFND/LFNDS	FO--		L-14 L-12A	E-FENCE	
	TPO:FT	Fire Tower	CI100	LA	FT--		L-3	E-MISC	
	TPO:GA	Gate	CI100	LA	GA--		L-3	E-MISC	
	TPO:GL	Cable Guard Rail-Left	N/A	LEGRCL20 LEGRCL50	GL--		L-14 L-12A	E-GRAIL	
	TPO:GP	Gas Pumps	N/A	LA	GP--		L-1	E-MISC	
	TPO:GR	Cable Guard Rail-Right	N/A	LEGRCR20 LEGRCR50	GR--		L-14 L-12A	E-GRAIL	
	TPO:HE	Hedge	N/A	LHEDGE20 LHEDGE50	HE--		L-14 L-12A	E-BUSH	
	TPO:JB	Jersey Barrier	N/A	LRBA L10A	JB--			E-GRAIL	
	TPO:LF	Leach Field	CI100	LDASHA	LF--		L-1 L-12	E-SEPTIC	
	TPO:ORC	Orchard	CI100	LA	ORC-			E-MISC	
	TPO:ORN	Misc. Lawn Features	CI080/CI100	VARIES	N/A			E-MISC	
	TPO:PBTH:20 TPO:PBTH:50	Public telephone	CI120/CI140	LA	PBTH			E-MISC	BLOCKED
	TPO:PFPL:20 TPO:PFPL:50	Flag Pole	CI100 CI080	LA	PFPL	F.P.		E-MISC	BLOCKED
	TPO:PGPT	Gate Post	CI080	LA	PGPT			E-FENCE	BLOCKED
	TPO:PGRV	Single Grave Marker	CI120	LA	N/A			CEMETERY	BLOCKED
	TPO:PBUS	Bush/Shrub	N/A	LA/LBUSH	PBUS			E-BUSH	
	TPO:PMBX:20 TPO:PMBX:50	Mail Box	CI2 CI080	LA	PMBX			E-MISC	BLOCKED
	TPO:PMDF	Misc Detail Feature Points	CI080	LA	PMDF			E-MISC	BLOCKED
	TPO:PMON	Monument, Statue	CI080	LA	PMON			E-MISC	BLOCKED
	P:PPST	Post (any type)	CI100/CI120	LA	PPST			E-SIGN	BLOCKED
	TPO:PSGN:20:1POST TPO:PSGN:50:1POST	Single Post Sign	CI120/CI140	LRGDA	PSGN			E-SIGN	BLOCKED
	TPO:PSGD:20:2POST TPO:PSGD:50:2POST	Double Post Sign						E-SIGN	BLOCKED
	TPO:PSTK:20 TPO:PSTK:50	Septic Tank	CI0	LA	PSTK			E-SEPTIC	BLOCKED

GDS DRAWING	GDS OBJECTS	DESCRIPTION	CHARACTER STYLE	LINE STYLE	STRING LABEL	SYMBOL	DOTLIB PAGE	AUTOCAD LAYER/BLOCK NAME	SHEET 8 COMMENTS
									ALL UNBLOCKED EXCEPT AS NOTED
EXIST_IN (Phase 1) EXIST_IN.FGB (CONT.)	TPO:PSTP:20 TPO:PSTP:80	Stump	CI120/CI140	LA	PSTP			TREE	BLOCKED
	TPO:PSTT	Storage Tank Fill Cap	CI100/CI120	LA	PSTT			E-MISC	BLOCKED
	TPO:PSWP	Swamp Symbol (swamp thing)	N/A	LA	PSWP			WETLAND	BLOCKED
	TPO:PTCS:20 TPO:PTCS:80	Coniferous Tree	CI120/CI140	LA/LCONFTRI	PTCS			TREE	BLOCKED
	TPO:PTDS:20 TPO:PTDS:80	Deciduous Tree	CI120/CI140	LA	PTDS			TREE	BLOCKED
	TPO:PWEL:20 TPO:PWEL:80	Well	CI8	LA	PWEL			WELL	BLOCKED
	TPO:SP	Pool	CI100/CI120	LA	SP--			E-MISC	
	TPO:SS	Stockpile/Lumber Pile	CI100/CI120	LA	SS--			E-MISC	
	TPO:RM	Ramp - Boat , Etc.	CI120	LDASHA	RM--			E-MISC	
	TPO:RO	Rock Outcrop	N/A	LROCKLIN	RO--			E-ROCKLINE	
	TPO:RWL	Retaining Wall Left	CI100/CI120	LEVALLRL	RWL-			E-RETWALL	
	TPO:RWR	Retaining Wall Right	CI100/CI120	LEVALLRR	RWR-			E-RETWALL	
	TPO:SK	Sidewalk	CI120/CI140	LDASHA	SK--			E-SIDEWALK	
	TPO:SL	River or Pond- Left Shore	N/A	LERIVLT	SL--			WATER	
	TPO:SLV	Sluiceway	CI120	LRODA	SLV-			E-DRN-STR	
	TPO:SN	Billboard or other large sign	CI120/CI140	LRODA	SN--			E-SIGN	
	TPO:SP	Slope	N/A	LA	SP--			E-MISC	
	TPO:SR	River or Pond- Right Shore	N/A	LERIVRT	SR--			RIVER	
	TPO:ST	Stream	N/A	LRIV	ST--			RIVER	
	TPO:STT	Storage Tank	CI120/CI140	LA	STT-			E-MISC	
	TPO:SW	Stone Wall	N/A	LSTWALL LSTWASO	SW--			E-STWALL	
	TPO:TB	Top of Bridge Abutment	CI120/CI140	LA	TB--			E-BRIDGE	
	TPO:TC	Top Of Curb	CI120/CI140	LA	TC--			E-CURB	
	TPO:TF	Top Of Bridge Footing	CI120/CI140	LA	TF--			E-BRIDGE	
	TPO:TH	Top Of Header	CI120	LA	TH--			E-DRN-STRUCT	
	TPO:TL	Trail	N/A	LDASHA	TL--			E-TRAIL	
	TPO:TP	Top Of Bridge Pier	CI120	LA	TP--			E-BRIDGE	
	TPO:TS	Top Of Slope	CI120	LDOTA	TS--			E-SLOPE	
	TPO:TV	Edge of Travelled Way	N/A	LDASHA	TV--			E-TV	
	TPO:WA	Swamp, Marsh or Wetland Bdry.	N/A	LRIV	WA--			WETLAND	
	TPO:WD	Delineated Wetland		LWETLND	WD--			WETLAND	
	TPO:WF	Waterfall	CI120	LRIV	WF--			WATER	
	TPO:WL	Woodline Left	CI120/CI140	LVOGL/LBUSH	WL--			TREELINE	
	TPO:WR	Woodline Right	CI120/CI140	LVOGR/LBUSH				TREELINE	
	TPO:WT	Top of Bridge - Wing Wall	CI120	LA					

concepts to be included for existing conditions.

GDS DRAWING	GDS OBJECTS	DESCRIPTION	GDS CHARACTER STYLE	GDS LINE STYLE	MOSS ING EL	SYMBOL	DOTLIB PAGE	AUTOCAD LAYER/BLOCK NAME	16 NOV 1994 ET 9 MENTS
EXIST_UT (Phase 6)									
	E:LC:UTL	Light Conduit	CI100	LESTLITC	LC--			E-UT-LCOND	ALL UNBLOCKED
	E:SC:TRF	Signal Conduit	CI100	LESIGCON	SC--			E-UT-SCOND	
	E:UD:DRN	Existing Underdrain	CI100	LEPIPE50 LEUND50	UD--			E-DRN-PIPE	
	E:UE:UTL	Existing Underground Electric	CI100	LEELEC/LEEL50	UE--			E-UT-ELEC	
	E:UG:UTL	Existing Underground Gas	CI100	LEGAS/LEGAS50	UG--			E-UT-GAS	
	E:US:UTL	Existing Underground Sewer	CI100	LESEWER/LESEW50	US--			E-UT-SEWER	
	E:UT:UTL	Existing Underground Telephone	CI100	LETEL/LETEL50	UT--			E-UT-TEL	
	E:UW:UTL	Existing Underground Water	CI100	LEWATER/LEWAT50	UW--			E-UT-WATER	
GRLSUM* SUMMARIES.PGB	GRAIL:FRAME	Outline of drainage summary							
	GRAIL:NUMBER	"Sheet #" text	CPHN175						
	GRAIL:QUANT:M---	Item quantities for alignment M---	CE25						
	GRAIL:TITLE	Item Numbers & Descriptions	CE25						
	GRAIL:TOTAL	Item sub-totals and totals	CE25						
HEARCOLO HEARING.PGB	COLOR:BROWN	Shoulders		LF8NT00					
	COLOR:BUILDING	Buildings		LHEARRED					
	COLOR:GRAY	Existing Pavement		LF7NT50					
	COLOR:ISLAND	Traffic Islands		LF60NT00					
	COLOR:ORANGE	Drives, Parking Areas		LF9NT00					
	COLOR:PURPLE	Sidewalks		LF33NT00					
	COLOR:SLOPE	Slope Areas		LF42NT00					
	COLOR:SWAMP	Wet Areas		LF50NT50					
	COLOR:TREE	Woods Lines		LHEARGRN					
	COLOR:WATER	Water		LHEARBLU					
	COLOR:YELLOW	Proposed Pavement		LF8NT00					
	PAVE:REMOVE:FILL	Pavement to be Removed		L7H/L42H/LOH					

All data &/or corrections supplied by or Penobscot Bay Company (Usually underground utilities but not limited to only those.)

Guard rail summary sheet(s)

Color fill objects for bearing plans

GDS DRAWING	GDS OBJECTS	DESCRIPTION	CHARACTER STYLE	LINE STYLE	STRING LABEL	SYMBOL	DOTLIB PAGE	AUTOCAD LAYER/BLOCK NAME	SHEET 10 COMMENTS
HEARING HEARPLAN.FGB	HEARING:MAJOR:STATION	500' Stations & Ticks	CPHB240	N/A	N/A				
	HEARING:MINOR:STATION	Other Stations & Ticks	CE50	N/A	N/A				
	HEARING:NAMES	Street Names, etc.	CPHB240	N/A	N/A				
	HEARING:OWNERS	Propert Owners Names	CPHB240	N/A	N/A				
PROFM---- PROFILES.FGB	EXIST:TEXT	Existing Elevations	C36					PEGCT	
	GRADE:	VPI, VPC, VPT Points and Annotation	CE36	LR2A				PFGCT	
	GRID:TEXT	Grid elevations	CE36					GRID	
	PROFM----:DATUM	Datum Elevation	CE36					DATUM	
	PROFM----:M----:EXISTING	Old Ground Grade Line		LR00A				PEGC	
	PROFM----:M----:PROPOSED	Proposed Grade Line		LR2A				PFGC	
	PROFM----:TITLE	Project name & Number	CPHN500					TITLE	
	PROP:TEXT	Proposed Elevations	CE36					PFGCT	
	STATION:MAJOR	500' Station Text	CE36					STATION	DEFAULT
	STATION:TEXT	Station Text	CE36					STATION	DEFAULT
	TEXT:GRADE:LINE	Proposed ℄ Marker	CI120					PFGCT	
	TEXT:OD:CONST	Existing ℄ Marker	CI120					PEGCT	
	TITLE:BGN:APPROACH	Beginning of Approach Work	CE36	LR1A	N/A				DEFAULT
	TITLE:BGN:CONST	Beginning of Construction	CPHN240	LR1A/LFCBT100					
	TITLE:BGN:ROV	Beginning of ROV & Appr. Work	CPHN240	LR1A/LFCBT100					
	TITLE:END:APPROACH	End of Approach Work	CE36	LR1A					
	TITLE:END:CONST	End of Construction	CPHN240	LR1A/LFCBT100					
	TITLE:END:ROV	End of ROV & Approach Work	CPHN240	LR1A/LFCBT100					
	TITLE:LIMIT:CONST	Limit of Work	CE36	LPARROV					
	TITLE:LIMIT:CONST:STA	Limit of Work	CE36	LR1A/LFCBT100					

GDS DRAWING	GDS OBJECTS	DESCRIPTION	GDS CHARACTER STYLE	GDS LINE STYLE	MOSS LAYER	SYMBOL	DOTLIB PAGE	AUTOCAD LAYER/BLOCK NAME	16 NOV 1994 PLOT 11 COMMENTS
PROP_DR (Phase 8) PROP_GEN.FGB	DRAIN:NOTE	General Drainage note	CE25	LPARROW	N/A	N/A		DRN-NOTE	ALL UNBLOCKED EXCEPT AS NOTED
	P:DL:DRN	Ditch Line	CE25	LCUT LA LCUTR				P-DITCH	
	P:DP:DRN	Drainage Pipe	CI100	LPP20-- LPP50--	DP--			P-DRN-PIPE	
	P:HP:DRN:50	Drainage High Point	CE25	LR0A/LPARROW	N/A	H.P.		DRN-NOTE	
	P:MEND:DRN:20 P:MEND:DRN:50	Metal End Section	CE25	LR00A				P-DRN-STR	BLOCKED
	P:PCSD:DRN:20 P:PCSD:DRN:50	Catch Basin	C10	LFBBN50	PCSD			P-DRN-STR	BLOCKED
	P:PDID:DRN:20 P:PDID:DRN:50	Drop Inlet	C10	LFBBN50	PDID			P-DRN-STR	BLOCKED
	P:PMHD:DRN:20 P:PMHD:DRN:50	Drainage Manhole	C10	LFBBN50	PMHD			P-DRN-STR	BLOCKED
	P:REND:DRN:20 P:REND:DRN:50	Rigid End Section	CE25	LR00A				P-DRN-STR	BLOCKED
	P:SLV	Sluiceway	CE25	LR00A	SLV-			P-DRN-STR	
	P:TH:DRN	Header	CI100	LFBBN50	TH--			P-DRN-STR	
	P:UD:DRN	Underdrain	CI100/CE25	LPUND20 LPUND50	UD--			P-DRN-PIPE	
PROP_GR (Phase 9) PROP_GEN.FGB	GRAIL:NOTE	Guard Rail Note	CE35	LA/LARROV	N/A			GRAIL-NOTE	
	GRAIL:NOTE:ROV	Guard Rail Note - ROV Plans	CE35	LA/LARROV	N/A			GRAIL-NOTE	
	P:BL	Proposed Beam Guard Rail-Left	N/A	LPGRBL20 LPGRBL50	BL--			P-GRAIL	
	P:BR	Proposed Beam Guard Rail-Right	N/A	LPGRBR20 LPGRBR50	BR--			P-GRAIL	
	P:BR:APPROACH:20 P:BR:APPROACH:50	Bridge Approach Unit	N/A	LPGRBR20 LPGRBR50	BR--			P-GRAIL	
	P:BR:MELT:BEG or END:20 P:BR:MELT:BEG or END:50	Terminal Unit Type MELT	N/A	LPGRBR20 LPGRBR50	BR--			P-GRAIL	
	P:BR:TERMF:BEG or END:20 P:BR:TERMF:BEG or END:50	Terminal Unit Type F	N/A	LPGRBR20 LPGRBR50	BR--			P-GRAIL	
	P:BR:TERMFM:BEG or END:20 P:BR:TERMFM:BEG or END:50	Modified F Unit	N/A	LPGRBR20 LPGRBR50	BR--			P-GRAIL	
	P:BR:TERMO:20 P:BR:TERMO:50	Terminal Unit Type 8	N/A	LPGRBR20 LPGRBR50	BR--			P-GRAIL	
	P:DB	Double Faced Guard Rail	N/A	LPGRBD20 LPGRBD50	DB--			P-GRAIL	

DRAWING	CDS OBJECTS	DESCRIPTION	CHARACTER STYLE	LINE STYLE	STRING LABEL	SYMBOL	BOILER PAGE	AUTOCAD LAYER/BLOCK NAME	SHEET 12 COMMENTS
PROP_IN (Phase 10) PROP_IN.FGB	DRIVE:MD--:FALIGN	Proposed Drive ℄	CE25	LARROW	MD--			P-DRIVE	ALL UNBLOCKED EXCEPT AS NOTED
	P:BD	Proposed Building or Location	CE35	LR0A	BD--			P-BLDG	
	P:BB	Proposed Bridge Outline	CE35	LR0A	BD--			P-BRIDGE	
	P:BM	Proposed Earth Berm	CE35	LR0A	BM--			P-MISC	
	P:CL	Proposed curb - left.	CE25	LPCURBL	CL--			P-CURB	
	P:CLEAR:LINE	Clearing Line & Limits	CE25	LR00A	N/A			SLOPES	
	P:CP	Proposed Concrete Pad/Island	CE25	LR00A	CP--			P-MISC	
	P:CR	Proposed curb - right.	CE25	LPCURBR	CR--			P-CURB	
	P:DM	Proposed Dam	CE25	LR00A	DM--			P-MISC	
	P:DR	Proposed Driveway	CE35	LR0A	DR--			P-DRIVE	
	P:EL	Proposed Edge of Lane	CE25	LR00A	EL--			P-TV	
	P:EP	Proposed Edge of Pavement	CE35	LR0A	EP--			P-EP	
	P:FO	Proposed Fence - Other	CE25	LFNO	FO--			P-FENCE	
	P:GA	Proposed Gate	CE25	LR00A	GA--			P-FENCE	
	P:ICL	Cut Slope Left		LCUT	ICL-			SLOPES	
	P:ICR	Cut Slope Right		LCUTR	ICR-			SLOPES	
	P:IF	Fill Slope		LFILL	IF--			SLOPES	
	P:JB	Jersey Barrier		LR8A L10A	JB--			P-GRAIL	
	P:PMBX	Proposed Relocation of Mailbox	CE25		PMBX			P-MISC	
	P:PPST	Proposed Location of Post	CE25		PPST			P-MISC	
	P:RM	Proposed Boat Ramp	CE25		RM--			P-MISC	
	P:RWL	Proposed Retaining Wall Lt	CE25	LPWALLWL	RWL-			P-RETWALL	
	P:RWR	Proposed Retaining Wall Rt	CE25	LPWALLWR	RWR-			P-RETWALL	
	P:SK	Proposed Sidewalk	CE25	LR00A	SK--			P-SIDEWALK	
	P:SL	New Edge Stream Left	CE25	LERIVLT	SL--			P-WATER	
	P:SLOPE:LINE	Proposed Slope Line	CE25	LCUT LCUTR LFILL	ICL- ICR- IF--			SLOPES	
	P:SR	New Edge Stream Right	CE25	LERIVRT	SR--			P-WATER	
	P:ST	New Stream Location	CE25	LRIV	ST--			P-WATER	
	P:TB	Proposed Top Of Bridge Abutment	CE25		TB--			P-BRIDGE	
	P:TL	Proposed Trail Location	CE25		TL--			P-TRAIL	
	P:TV	Proposed TV	CE35	LR00A	TV--			P-TV	
	P:WA	Swamp,Marsh or Wetland Boundary	CE25					P-WETLAND	
	SLOPE:TEXT	Text blocks at slope line	CI100/CI120	LA/LARROW				SLOPE-NOTE	
	SLOPE:NOTE	Slope note	CE35	LA/LARROW				SLOPE-NOTE	

GDS DRAWING	GDS OBJECTS	DESCRIPTION	GDS CHARACTER STYLE	GDS LINE STYLE	MOSS ING EL	SYMBOL	DOTLIB PAGE	AUTOCAD LAYER/BLOCK NAME	16 NOV 1994 ET 13 MENTS
PROP_NTE (Phase 11) PROP_GEN.PGB	BRIDGE:NOTE	General brige notes.	CE25	LPARROW	N/A	N/A		BRIDGE-NOTE	
	CLEAR:NOTE:AREA	Clearing Area Note	CE35	LA/LARROW	N/A			CLEAR-NOTE	
	CLEAR:NOTE:LINE	Clearing Line Note	CE35	LA/LARROW	N/A				
	CONST:NOTE	General Const.Note	CE25	LPARROW	N/A	N/A		CONST-NOTE	
	CURB:NOTE	Curbing Note	CE25	LPARROW	N/A	N/A		CURB-NOTE	
	DEMO:NOTE:CONST	Demolition Note - Const. Plans	CE25	LPARROW	N/A	N/A		DEMO-NOTE	
	DEMO:NOTE:ROV	Demolition Note - ROV Plans	CE25	LPARROW	N/A	N/A			
	DRIVE:NOTE	Const./aband. etc. Note	CE25	LPARROW	N/A	N/A		DRIVE-NOTE	
	FENCE:NOTE	Fence Note	CE25	LPARROW	N/A	N/A		FENCE-NOTE	
	MISC:NOTE	General misc. information	CE25	LPARROW	N/A	N/A		MISC-NOTE	
	ROV:NOTE	ROV plan Notes - misc	CE25	LPARROW	N/A	N/A		ROV-NOTE	
	OFFSET:NOTE	General offsets	CE25	LPARROW	N/A	N/A			
	OFFSET:NOTE:MISC	Miscellaneous Offsets	CE25	LARROW	N/A	N/A		PVMT-NOTE	
	PVMT:NOTE	Pavement widths & types	CE25	LPARROW	N/A	N/A			
	RADIUS:NOTE	Radius dimension R=xx'	CE25	LPARROW	N/A	R=xx'		RAD-NOTE	
	RADIUS:POINT	CC or RP for curve/radii		LROA	N/A	◇			
	ROV:NOTE	ROV Note	CE25	LPARROW	N/A	N/A			
	RW:NOTE	Retaining Wall Note	CE25	LPARROW	N/A	N/A			
	SLOPE:NOTE	Slope Line Notes	CE25	LPARROW	N/A	N/A		SLOPE-NOTE	
	TAPER:NOTE	Tapers & Stations	CE25	LDIM	N/A	N/A		PVMT-NOTE or MISC-NOTE	
	TITLE:BGN:APPROACH	Beginning of Approach Work	CE35	LR1A	N/A				
	TITLE:BGN:CONST	Beginning of Construction	CPHH240	LR1A/LFCBT100					
	TITLE:BGN:ROV	Beginning of ROV & Appr. Work	CPHH240	LR1A/LFCBT100					
	TITLE:END:APPROACH	End of Approach Work	CE35	LR1A					
	TITLE:END:CONST	End of Construction	CPHH240	LR1A/LFCBT100					
	TITLE:END:ROV	End of ROV & Approach Work	CPHH240	LR1A/LFCBT100					
	TITLE:LIMIT:CONST	Limit of Work	CE35	LPARROW					
	TITLE:LIMIT:CONST:STA	Limit of Work	CE35	LR1A/LFCBT100					
	TRAFFIC:NOTE	Pavement Striping Note	C25/CE25					TRAF-NOTE	
PROP_SIG (Phase 12) PROP_GEN.PGB	P:DS:TRF	Magnetic Detector Sleeve	C25/CE25	?	DS--			P-SIG	
	P:PCCT:TRF:20 P:PCCT:TRF:50	Controller Cabinet	C25/CE25	LR00A	PCCT	C.C.		P-SIG	
	P:PEDP:TRF:20 P:PEDP:TRF:50	Pedestrian Signal Pole	C25/CE25		PEDP			P-SIG	
	P:PEDS:TRF:20 P:PEDS:TRF:50	Pedestrian Signal	C25/CE25		PEDS			P-SIG	
	P:PHED:TRF:20 P:PHED:TRF:50	Signal Head	C25/CE25		PHED			P-SIG	
	P:PHHL:TRF:20 P:PHHL:TRF:50	Handhole	C25/CE25	LR00A	PHHL	H.H.		P-SIG	
	P:PHAP:TRF:20 P:PHAP:TRF:50	Mast Arm Plce	C25/CE25	LR00A	PHAP			P-SIG	
	P:PPBX:TRF:20 P:PPBX:TRF:50	Pullbox	C25/CE25	LR00A	PPBX	P.B.		P-SIG	
	P:SC:TRF	Signal Conduit	C25/CE25	LPCOND	SC--			P-UT-SCOND	
	P:SLD:TRF	Loop Detector		LDASHA	SLD-			P-SIG	
	SIG:NOTE	Signalization Notes	CE25	N/A	N/A			SIG-NOTE	

GDS DRAWING	GDS OBJECTS	DESCRIPTION	CHARACTER STYLE	LINE STYLE	STRING LABEL	SYMBOL	DOTLIB PAGE	AUTOCAD LAYER/BLOCK NAME	SHEET 14 COMMENTS
P_SIGN (Phase 14) PROP_GEN.FGB (Cont.)									ALL BLOCKED EXCEPT AS NOTED
	P:ARV:TRF:L:20 P:ARV:TRF:L:50	Left Arrow	N/A	LFCBN100	N/A		YES	P-ARROW	
	P:ARV:TRF:LTR:20 P:ARV:TRF:LTR:50	Left - Thru - Right Arrow	N/A	LFCBN100	N/A		YES	P-ARROW	
	P:ARV:TRF:R:20 P:ARV:TRF:R:50	Right Arrow	N/A	LFCBN100	N/A		YES	P-ARROW	
	P:ARV:TRF:T:20 P:ARV:TRF:T:50	Thru Arrow	N/A	LFCBN100	N/A		YES	P-ARROW	
	P:ARV:TRF:TL:20 P:ARV:TRF:TL:50	Thru - Left Arrow	N/A	LFCBN100	N/A		YES	P-ARROW	
	P:ARV:TRF:TR:20 P:ARV:TRF:TR:50	Thru - Right Arrow	N/A	LFCBN100	N/A		YES	P-ARROW	
	P:LN:TRF	Traffic Paint,Tape Or Plastic	CE3S		LN--		NO	P-MARKING	UNBLOCKED
	P:ONLY:TRF:20 P:ONLY:TRF:50	Only	N/A	LFCBN100	N/A		YES	P-ARROW	
	P:PSGN:20:1POST P:PSGN:50:1POST	Sign (Single Post)	C2S/CE2S	LR00A	PSGN	??	??	P-SIGN	
	P:PSGD:20:2POST: P:PSGD:50:2POST	Sign (Double Post) Billboard	C2S/CE2S	LR00A	PSGD	??	??	P-SIGN	

Utility items proposed as part of the current project or to be constructed by others during or after the project.

GDS DRAWING	GDS OBJECTS	DESCRIPTION	GDS CHARACTER STYLE	GDS LINE STYLE	MOSS ING EL	SYMBOL	DOTLIB PAGE	AUTOCAD LAYER/BLOCK NAME	16 NOV 1994 ET 15 MENTS
PROP_UT (Phase 13) PROP_UT.FGB	P:AE:UTL	Aerial Electrical Transmission Lines	C25/CE25	?	AE--			P-UT-ELEC	
	P:LC:UTL	Light Conduit	C25/CE25	LPSTLITC	LC--			P-UT-LCOND	
	P:PGUY:UTL:20 P:PGUY:UTL:50	Guy Pole or Stub	C25/CE25	LFBBN50	PGUY			P-UT-POLE	
	P:PHYD:UTL:20 P:PHYD:UTL:50	Hydrant - Water/Fire	C25/CE25	LFBBN50	PHYD			P-UT-MISC	
	P:PJCT:UTL:20 P:PJCT:UTL:50	Utility Junction Box	C25/CE25	LA	PJCT			P-UT-MISC	
	P:PJNT:UTL:20 P:PJNT:UTL:50	Joint Pole	C25/CE25	LFBBN50	PJNT			P-UT-POLE	
	P:PLIT:UTL:20 P:PLIT:UTL:50	Light Pole	C25/CE25	LFBBN50	PLIT			P-UT-POLE	
	P:PLTJ:UTL:20 P:PLTJ:UTL:50	Light on Joint Pole	C25/CE25	LFBBN50	PLTJ			P-UT-POLE	
	P:PLTP:UTL:20 P:PLTP:UTL:50	Light on Power Pole	C25/CE25	LFBBN50	PLTP			P-UT-POLE	
	P:PMHE:UTL:20 P:PMHE:UTL:50	Manhole - Electric	C25/CE25	LFBBN50	PMHE	MH-E		P-UT-MANH	
	P:PMHG:UTL:20 P:PMHG:UTL:50	Manhole - Gas	C25/CE25	LFBBN50	PMHG	MH-G		P-UT-MANH	
	P:PMHS:UTL:20 P:PMHS:UTL:50	Manhole - Sewer	C25/CE25	LFBBN50	PMHS	MH-S		P-UT-MANH	
	P:PMHT:UTL:20 P:PMHT:UTL:50	Manhole - Telephone	C25/CE25	LFBBN50	PMHT	MH-T		P-UT-MANH	
	P:PMHW:UTL:20 P:PMHW:UTL:50	Manhole - Water	C25/CE25	LFBBN50	PMHW	MH-W		P-UT-MANH	
	P:PPOL:UTL:20 P:PPOL:UTL:50	General Pole	C25/CE25	LFBBN50	PPOL			P-UT-POLE	
	P:PPWR:UTL:20 P:PPWR:UTL:50	Power Pole	C25/CE25	LFBBN50	PPWR			P-UT-POLE	
	P:PRSL:UTL:20 P:PRSL:UTL:50	Railroad Signal	C25/CE25		PRSL			P-RR	
	P:PTEL:UTL:20 P:PTEL:UTL:50	Telephone Pole	C25/CE25	LFCBN50	PTEL			P-UT-POLE	
	P:UE:UTL	Underground Electric	C25/CE25	LPELEC/LPELE50	UE--			P-UT-ELEC	
	P:UG:UTL	Underground Gas	C25/CE25	LPGAS/LPGAS50	UG--			P-UT-GAS	
	P:US:UTL	Underground Sewer	C25/CE25	LPSEVER/LPSEVE50	US--			P-UT-SEVER	
	P:UT:UTL	Underground Telephone	C25/CE25	LPTEL/LPTEL50	UT--			P-UT-TEL	
	P:UW:UTL	Underground Water	C25/CE25	LPWATER/LPWATE50	UW--			P-UT-WATER	
	UTILITY:NOTE	Utility Notes	CE25	N/A	N/A			UTIL-NOTE	

GDS DRAWING	GDS OBJECTS	DESCRIPTION	CHARACTER STYLE	LINE STYLE	STRING LABEL	SYMBOL	DOTLIB PAGE	AUTOCAD LAYER/BLOCK NAME	SHEET 16 COMMENTS
ROW (Phase 2) ROW.FGB									
	ANGLE:TEXT:ROW	ROW Flag	C25	LARROW/LR00A	N/A			E-BND	
	BOUND:TEXT:ROW	Bound Definition	CE25	LARROW/LA	N/A			P-BND	
	E:BC:ROW	County Line		LCNTYLINE	BC--			E-ROW	
	E:BN:ROW	National Forest Line		LNATFLIN	BN--			E-ROW	
	E:BP:ROW	Property Line Prop. Line - Common Owner		LPROPL LZLINE	BP--			E-ROW	
	E:BR:ROW	Right-Of-Way Line		LEXROV	BR--			E-ROW	
	E:BRC:ROW	Controlled Access ROW Line		LEXROV				E-ROW	
	E:BRL:ROW	Limited Access ROW Line		LEXROV				E-ROW	
	E:BSL:ROW	State Line		LSTLINE	BSL-			E-ROW	
	E:BT:ROW	Town Line		LTNLINE	BT--			E-ROW	
	E:EASE:ROW	Area Outline Of Easement	CI120	Filled	N/A	Outline Of Area	NO	E-ROW-EAS	
	E:PCON:ROV:20 E:PCON:ROV:80	Existing Bound	CI120	LA	PCON	⊡Bnd.		E -BND	BLOCKED
			C80						
	E:PROP:PAR:NUM	Parcel Circle & Number Owner Name Property Line Names	C25 C25	LA	N/A	Ⓟ		E-ROW-PROP	BLOCKED
	P:ANGLE:BOUND	Proposed bound definition	C25	LARROV/LA	N/A			P-BOUND	
	P:BR:ROV	Proposed ROW Line	C35	LPRROV	N/A			P-ROW	
	P:BRC:ROV	Proposed CAROV Line	C35	LPRROV	N/A			P-ROW	
	P:BRL:ROV	Proposed LAROV Line	C35	LPRROV	N/A			P-ROW	
	P:PBND:ROV:20 P:PBND:ROV:80	Proposed R.O.W. bound	N/A	LR00A	PBND	⊡		P-BOUND	
	P:PIPN:ROV:20 P:PIPN:ROV:80	Proposed Iron Pin Location	C25	LR00A	PIPN	⊙I.P.		P-BOUND	
	PERM:EASE:ROV:0	Area Outline Of Easement	CI120	Filled	N/A	Outline Of Area	NO	P-ROW-PEAS	
	TEMP:EASE:ROV:0	Area Outline Of Easement	CI120	Filled	N/A	Outline Of Area	NO	P-ROW-TEAS	
	TEXT:MISC:ROV	Comments Not For Final Plans	CI120	LARROV	N/A				
	TITLE:BOX:ROV	ROV Title Box	N/A	LR00A	N/A			TITLE	
	ROV:CHART	ROV cut sheet summary chart						P-ROV-CHART	
SHEETS (Phase 17) MATCHLIN.FGB	SHEET:	Sheet Outline	N/A	LDOTA	N/A				
	PATCH:	Outline of area to be included on final cut sheet.	N/A	LA	N/A				

GDS Line and character styles

1/64 :1F64	17/64 :17F64	33/64 :33F64	49/64 :49F64	¢ :642	Ω :672	Ë :713	Ü :734	ì :755
1/32 :2F64	9/32 :18F64	17/32 :34F64	25/32 :50F64	£ :643	» :673	Ì :714	Ý :735	î :756
3/64 :3F64	19/64 :19F64	35/64 :35F64	51/64 :51F64	¥ :645	¼ :674	Í :715	ß :737	ï :757
1/16 :4F64	5/16 :20F64	9/16 :36F64	13/16 :52F64	§ :647	½ :675	Î :716	à :740	ñ :761
5/64 :5F64	21/64 :21F64	37/64 :37F64	53/64 :53F64	☒ :650	¿ :677	Ï :717	á :741	ò :762
3/32 :6F64	11/32 :22F64	19/32 :38F64	27/32 :54F64	© :651	À :700	Ñ :721	â :742	ó :763
7/64 :7F64	23/64 :23F64	39/64 :39F64	55/64 :55F64	ª :652	Á :701	Ò :722	ã :743	ô :764
1/8 :8F64	3/8 :24F64	5/8 :40F64	7/8 :56F64	« :653	Â :702	Ó :723	ä :744	õ :765
9/64 :9F64	25/64 :25F64	41/64 :41F64	57/64 :57F64	° :660	Ã :703	Ô :724	å :745	ö :766
5/32 :10F64	13/32 :26F64	21/32 :42F64	29/32 :58F64	± :661	Ä :704	Õ :725	æ :746	œ :767
11/64 :11F64	27/64 :27F64	43/64 :43F64	59/64 :59F64	² :662	Å :705	Ö :726	ç :747	ø :770
3/16 :12F64	7/16 :28F64	11/16 :44F64	15/16 :60F64	³ :663	Æ :706	Œ :727	è :750	ù :771
13/64 :13F64	29/64 :29F64	45/64 :45F64	61/64 :61F64	µ :665	Ç :707	Ø :730	é :751	ú :772
7/32 :14F64	15/32 :30F64	23/32 :46F64	31/32 :62F64	¶ :666	È :710	Ù :731	ê :752	û :773
15/64 :15F64	31/64 :31F64	47/64 :47F64	63/64 :63F64	• :667	É :711	Ú :732	ë :753	ü :774
1/4 :16F64	1/2 :32F64	3/4 :48F64	¡ :641	¹ :671	Ê :712	Û :733	ì :754	ÿ :775

NOTE: CHARSTYLES TO BS308 STANDARDS ARE NAMED USING THE HEIGHT IN TENTHS OF A MILLIMETRE, PEN SELECTIONS ASSUME NIBS ARE .3, .5, AND .7MM.
CHARSTYLES TO ANSI Y14.2M-1979 STDS. ARE NAMED USING THE HEIGHT IN THOUSANDTHS OF AN INCH, PEN SELECTIONS ASSUME NIBS ARE .008, .016, AND .032 INCHES.

GENERAL SYMBOLS

° :DEG ∅ :DIA :TAPERL :BOUND :BORING :TESTPIT

□ :SQUARE © :COPY :TAPERR

£ :POUND ± :PM △ :DELTA

℄ :CL ℘ :PL ⊖ :THETA

℄ :CL2 ℘ :PL2 π :PI

℄ :CL3 ℳ :MU ⌋⌊ :DBLIT

℄ :GL ⌊ :RTLIT ⌋ :LTLIT

℄ :GL2 ℳ :ML QM :QML

ISO TOLERANCE SYMBOLS

:FLAT :RD :CYL

:PROFS // :PAR ⊥ :SO

:POSN :CONC ≑ :SYM

Ⓜ :MMC :PROFL ∠ :ANG

:STR :RUN

REBAR BEND SYMBOLS

:BN1 :BN7 :BS5

:BN2 :BN8 :BS6

:BN2A :B9 :BS11

:BN3 :B10 :BT1

:BN3A :B14 :BT2

:BN3B :B17 :BT3

:BN4 :B19 :B17DH

:BN5 :B20 :B17DV

:BN6 :BS4

ANSI Y14.2M-1979 sizes

C1060
C1080
C1100
C1120
C1140
PEN 0

C1175
C1200
C1240
PEN 1

C1290

BS308 sizes

C12
C18
C25
C35
PEN 0

C50
PEN 1

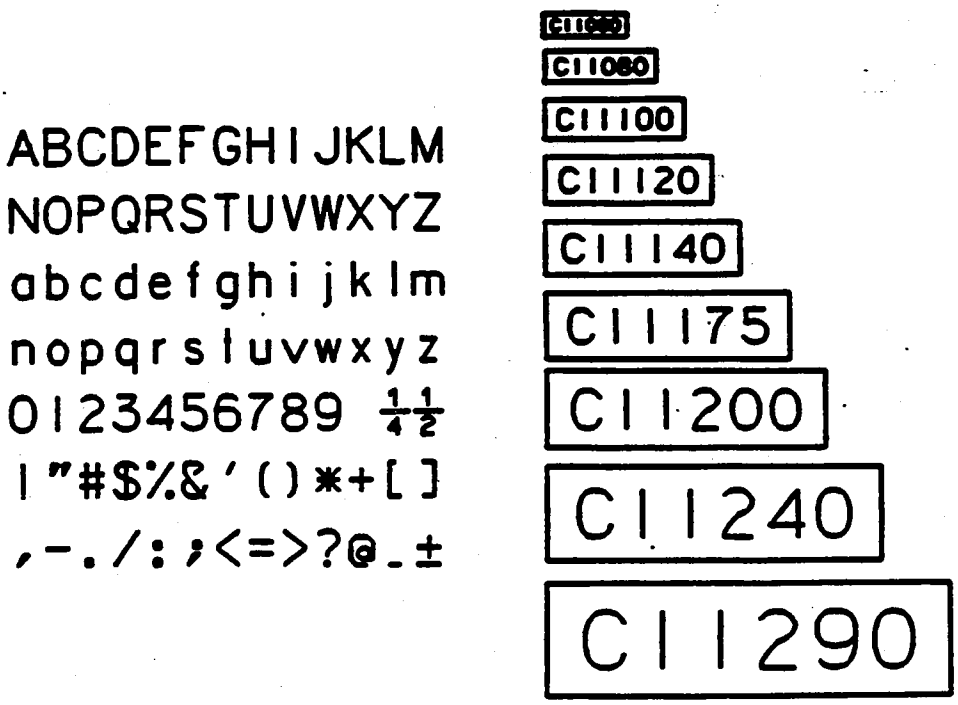
C70
PEN 2

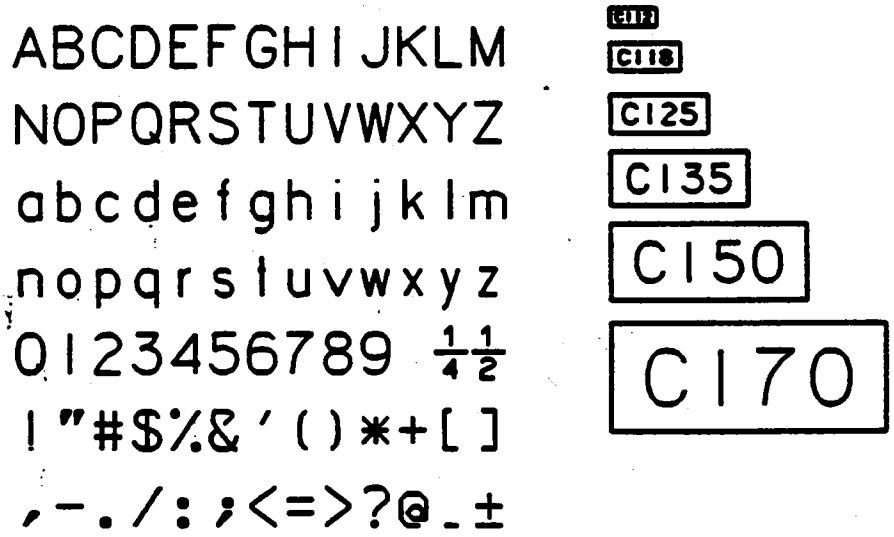
NHDOT Graphic Library

NOTES
STANDARD SYMBOLS FOR HARDWARE
STYLES TO BS308 AND
ANSI Y14.2M-1979
DIN MICRONORM SYMBOLS
INCLUDING ALTERNATIVE
INTERNATIONAL CHARACTERS

REVISED - 30 JANUARY 1992 - MWR

DRAWING: C-1	SCALE: 1:1 5 / 1:1 2
OBJECT CLASS: GDS:CHARS:	SHEET: C-1
FILEGROUP NAME: DOTLIB.FGB	





NHDOT
Graphic Library

NOTES
STANDARD HARDWARE CHARACTERS USING PEN 1.
SEE PREVIOUS PAGE FOR OTHER NOTES.

CREATED - 27 SEPT. 1991 - WSC
EDITED - 11 AUG. 1992

DRAWING: C-1A	SCALE:
OBJECT CLASS: GDS:CHARS:	SHEET: C-1A
FILEGROUP NAME: DOTLIB.FGB	

A	:301	N	:316	a	:341	n	:356	0	:260	!	:241	,	:254
B	:302	O	:317	b	:342	o	:357	1	:261	"	:242	_	:255
C	:303	P	:320	c	:343	p	:360	2	:262	#	:243	.	:256
D	:304	Q	:321	d	:344	q	:361	3	:263	$	:244	/	:257
E	:305	R	:322	e	:345	r	:362	4	:264	%	:245	:	:272
F	:306	S	:323	f	:346	s	:363	5	:265	&	:246	;	:273
G	:307	T	:324	g	:347	t	:364	6	:266	'	:247	<	:274
H	:310	U	:325	h	:350	u	:365	7	:267	(	:250	=	:275
I	:311	V	:326	i	:351	v	:366	8	:270	)	:251	>	:276
J	:312	W	:327	j	:352	w	:367	9	:271	*	:252	?	:277
K	:313	X	:330	k	:353	x	:370			+	:253	@	:300
L	:314	Y	:331	l	:354	y	:371						
M	:315	Z	:332	m	:355	z	:372						

C1100

NAMED USING HEIGHTS IN TENTHS OF A MILLIMETRE

C1125 PEN 0

C1135 PEN 0

C1150 PEN 1

C1170

ALL LARGE STYLES USE PEN 2

C1140

C1200

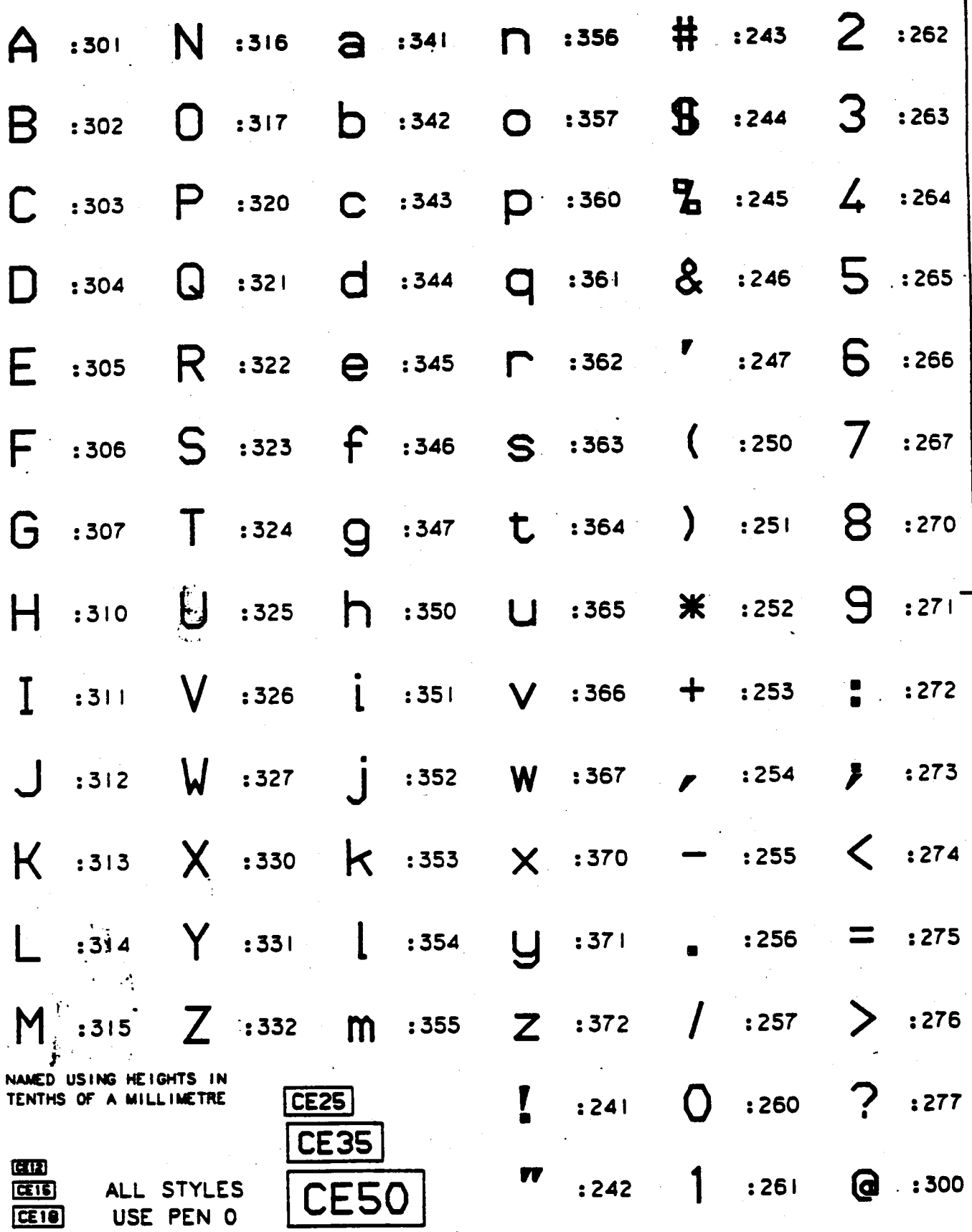
NHDOT Graphic Library

NOTES

ISOINC - ISORNORM LETTRING 'A' INCLINED. SUITABLE FOR INCLUSION IN A CHARACTER STYLE.
HOOKS BOTTOM LEFT. HEIGHT 8.4cm.

© 1986 McDonnell Douglas

DRAWING C-2	SCALE 1:10
OBJECT CLASS GDS:CHARS:ISOINC:	SHEET C-2
FILEGROUP NAME DOTLIB.FGB	



NAMED USING HEIGHTS IN TENTHS OF A MILLIMETRE

CE12
CE16
CE18

ALL STYLES USE PEN 0

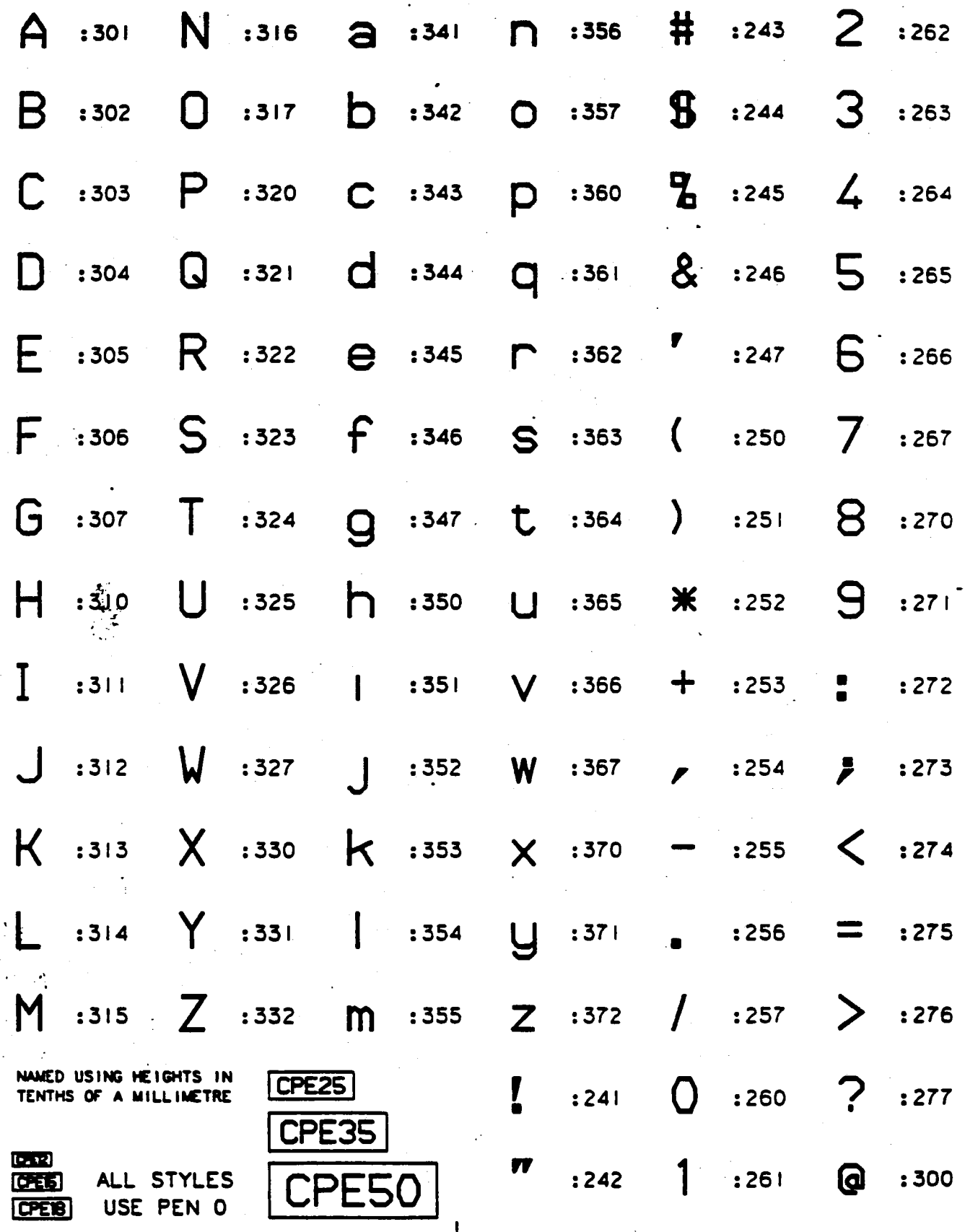
CE25
CE35
CE50

NHDOT Graphic Library

NOTES
ELEC - A THICKENED FONT SUITABLE FOR USE IN CHARSTYLES. HOOKS BOTTOM LEFT. HEIGHT 6cm
COURTESY OF SCOTT BROWNRIGG & TURNER

Revised 1-24-92 - WSC

DRAWING C-3	SCALE 1:10
OBJECT CLASS GDS:CHARS:ELEC:	SHEET C-3
FILEGROUP NAME DOTLIB.FGB	



NHDOT Graphic Library

NOTES
PELEC - A THICKENED FONT SUITABLE FOR USE IN CHARSTYLES. HOOKS BOTTOM LEFT. HEIGHT 6cm
COURTESY OF SCOTT BROWNRIGG & TURNER

© 1986 McDonnell Douglas

DRAWING: C-3A	SCALE: 1:10
OBJECT CLASS: GDS:CHARS:PELEC:	SHEET: C-3a
FILEGROUP NAME: DOTLIB.FGB	

A	:301	N	:316	a	:341	n	:356	0	:260	$	:244	;	:273		
B	:302	O	:317	b	:342	o	:357	1	:261	%	:245	<	:274		
C	:303	P	:320	c	:343	p	:360	2	:262	&	:246	=	:275		
D	:304	Q	:321	d	:344	q	:361	3	:263	'	:247	>	:276		
E	:305	R	:322	e	:345	r	:362	4	:264	(	:250	?	:277		
F	:306	S	:323	f	:346	s	:363	5	:265	)	:251	@	:300		
G	:307	T	:324	g	:347	t	:364	6	:266	*	:252				
H	:310	U	:325	h	:350	u	:365	7	:267	+	:253				
I	:311	V	:326	i	:351	v	:366	8	:270	,	:254				
J	:312	W	:327	j	:352	w	:367	9	:271	-	:255				
K	:313	X	:330	k	:353	x	:370	!	:241	.	:256				
L	:314	Y	:331	l	:354	y	:371	"	:242	/	:257				
M	:315	Z	:332	m	:355	z	:372	#	:243	:	:272				

NAMED USING HEIGHTS IN TENTHS OF A MILLIMETRE

CPEU035 PEN 0

CPEU050 PEN 1

CPEU070

ALL LARGE STYLES USE PEN 2

CPEU0100

CPEU0140

CPEU0200

NHDOT Graphic Library

NOTES

PEUROUTL - A FONT SUITABLE FOR INCLUSION IN A PROPORTIONAL CHARACTER STYLE.
HOOKS BOTTOM LEFT. HEIGHT 6cm.

© 1986 McDonnell Douglas

DRAWING C-4	SCALE 1:10
OBJECT CLASS GDS:CHARS:PEUROUTL:	SHEET C-4
FILEGROUP NAME DOTLIB.FGB	

A	:301	N	:316	a	:341	n	:356	0	:260	!	:241	,	:254		
B	:302	O	:317	b	:342	o	:357	1	:261	"	:242	—	:255		
C	:303	P	:320	c	:343	p	:360	2	:262	#	:243	.	:256		
D	:304	Q	:321	d	:344	q	:361	3	:263	$	:244	/	:257		
E	:305	R	:322	e	:345	r	:362	4	:264	%	:245	:	:272		
F	:306	S	:323	f	:346	s	:363	5	:265	&	:246	;	:273		
G	:307	T	:324	g	:347	t	:364	6	:266	'	:247	⟨	:274		
H	:310	U	:325	h	:350	u	:365	7	:267	(	:250	=	:275		
I	:311	V	:326	i	:351	v	:366	8	:270	)	:251	⟩	:276		
J	:312	W	:327	j	:352	w	:367	9	:271	*	:252	?	:277		
K	:313	X	:330	k	:353	x	:370			+	:253	@	:300		
L	:314	Y	:331	l	:354	y	:371			`	:340	°	:377		
M	:315	Z	:332	m	:355	z	:372								

NAMED USING HEIGHTS IN TENTHS OF A MILLIMETRE

CPR18 PEN 0

CPR25 PEN 0

CPR30 PEN 0

CPR35 PEN 0

CPR50 PEN 1

CPR70 PEN 2

NHDOT Graphic Library

NOTES
PROMAN - FONT SUITABLE FOR USE IN A PROPORTIONAL CHARACTER STYLE. HOOKS BOTTOM LEFT. HEIGHT 6cm. COURTESY OF QUEENSLAND DEPT. OF MINES
CHARACTER STYLE CPR30 ADDED 05/20/91
© 1986 McDonnell Douglas

DRAWING C-5	SCALE 1:10
OBJECT CLASS GDS:CHARS:PROMAN:	SHEET C-5
FILEGROUP NAME DOTLIB.FGB	

A :301	N :316	a :341	n :356	0 :260	! :241	, :254
B :302	O :317	b :342	o :357	1 :261	" :242	_ :255
C :303	P :320	c :343	p :360	2 :262	# :243	. :256
D :304	Q :321	d :344	q :361	3 :263	$:244	/ :257
E :305	R :322	e :345	r :362	4 :264	% :245	: :272
F :306	S :323	f :346	s :363	5 :265	& :246	; :273
G :307	T :324	g :347	t :364	6 :266	' :247	< :274
H :310	U :325	h :350	u :365	7 :267	(:250	= :275
I :311	V :326	i :351	v :366	8 :270	) :251	> :276
J :312	W :327	j :352	w :367	9 :271	* :252	? :277
K :313	X :330	k :353	x :370		+ :253	@ :300
L :314	Y :331	l :354	y :371		` :340	° :377
M :315	Z :332	m :355	z :372			

CPIR18 PEN 0 NAMED USING HEIGHTS IN TENTHS OF A MILLIMETRE

CPIR25 PEN 0

CPIR35 PEN 0

CPIR50 PEN 1

CPIR70 PEN 2

NHDOT Graphic Library

NOTES

IPROMAN - FONT SUITABLE FOR USE IN A PROPORTIONAL CHARACTER STYLE. HOOKS BOTTOM LEFT. HEIGHT 6cm. COURTESY OF QUEENSLAND DEPT. OF MINES

© 1986 McDonnell Douglas

DRAWING C-6	SCALE 1:10
OBJECT CLASS GDS:CHARS:IPROMAN:	SHEET C-6
FILEGROUP NAME DOTLIB.FGB	

A	:301	N	:316	a	:341	n	:356	0	:260	+	:253
B	:302	O	:317	b	:342	o	:357	1	:261	=	:255
C	:303	P	:320	c	:343	p	:360	2	:262	≡	:275
D	:304	Q	:321	d	:344	q	:361	3	:263	.	:256
E	:305	R	:322	e	:345	r	:362	4	:264	,	:254
F	:306	S	:323	f	:346	s	:363	5	:265	'	:247
G	:307	T	:324	g	:347	t	:364	6	:266	;	:273
H	:310	U	:325	h	:350	u	:365	7	:267	?	:277
I	:311	V	:326	i	:351	v	:366	8	:270	(	:250
J	:312	W	:327	j	:352	w	:367	9	:271	)	:251
K	:313	X	:330	k	:353	x	:370	:	:272	/	:257
L	:314	Y	:331	l	:354	y	:371	"	:242	$	:244
M	:315	Z	:332	m	:355	z	:372	!	:241	&	:246

% :245 * :252

NAMED USING HEIGHTS IN THOUSANTHS OF AN INCH

CPHM140 PEN1

CPHM175 PEN 1

CPHM200 PEN 1

CPHM240

CPHM290

CPHM375

NAMED USING HEIGHTS IN TENTHS OF A MILLIMETRE

PEN 1 CPHM25

PEN 1 CPHM35

PEN 1 CPHM50

LARGE STYLES
USE PEN 2

CPHM70

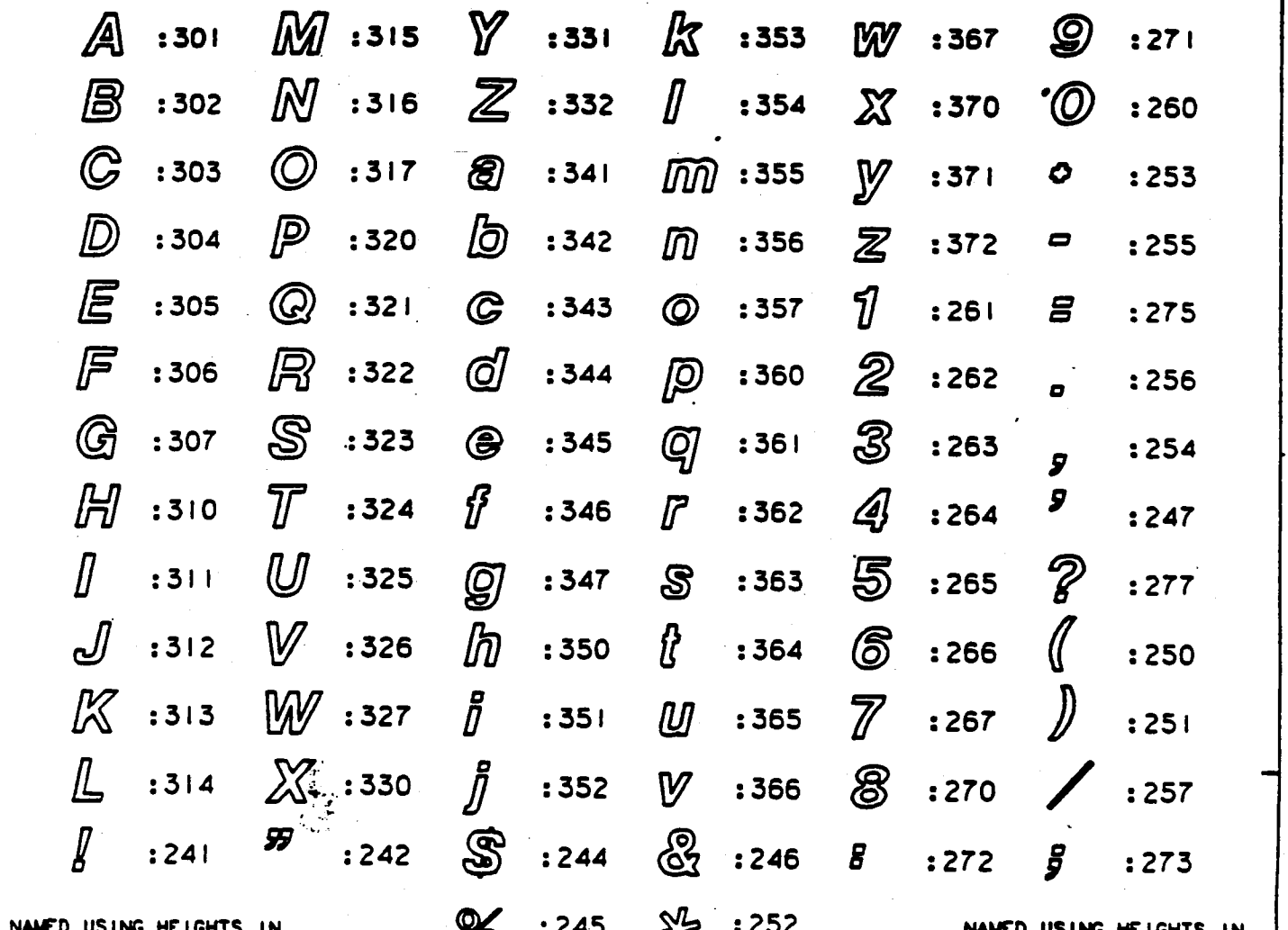
CPHM100

NHDOT
Graphic Library

NOTES
HELVETICA MED - OUTLINE FONT
SUITABLE FOR INCLUSION IN
PROPORTIONAL CHARSTYLES

REVISED 12/09/91

DRAWING C-7	SCALE 1:10
OBJECT CLASS GDS:CHARS:HELV:MED:	SHEET C-7
FILEGROUP NAME DOTLIB.FGB	



NAMED USING HEIGHTS IN THOUSANTHS OF AN INCH

CPHMI140 PEN 1

CPHMI175 PEN 1

CPHMI200 PEN 1

CPHMI240

CPHMI290

CPHMI375

NAMED USING HEIGHTS IN TENTHS OF A MILLIMETRE

PEN 1 CPHMI25

PEN 1 CPHMI35

PEN 1 CPHMI50

CPHMI100

CPHMI70

LARGE STYLES USE PEN 2

NHDOT Graphic Library

NOTES

HELVETICA MEDIUM OUTLINE ITALIC CHARACTERS SUITABLE FOR PROPORTIONAL CHARSTYLES

REVISED 12/09/91

DRAWING: C-8	SCALE: 1:10
OBJECT CLASS: GDS:CHAR:HELV:MI:	SHEET: C-8
FILEGROUP NAME: DOTLIB.FGB	

A :301	N :316	a :341	n :356	0 :260	+ :253
B :302	O :317	b :342	o :357	1 :261	- :255
C :303	P :320	c :343	p :360	2 :262	= :275
D :304	Q :321	d :344	q :361	3 :263	. :256
E :305	R :322	e :345	r :362	4 :264	, :254
F :306	S :323	f :346	s :363	5 :265	' :247
G :307	T :324	g :347	t :364	6 :266	; :273
H :310	U :325	h :350	u :365	7 :267	? :277
I :311	V :326	i :351	v :366	8 :270	(:250
J :312	W :327	j :352	w :367	9 :271	) :251
K :313	X :330	k :353	x :370	: :272	/ :257
L :314	Y :331	l :354	y :371	" :242	$:244
M :315	Z :332	m :355	z :372	! :241	& :246
% :245					* :252

CPHB175

CPHB200

CPHB240

CPHB290

CPHB375

CPHB750

CPHB500

CPHB425

NHDOT Graphic Library

NOTES

THESE CHAR. STYLES SHOULD BE USED ONLY FOR TITLES AS THEY REDRAW VERY SLOWLY.

REVISED 12/09/91

DRAWING: C-9	SCALE:
OBJECT CLASS: GDS:CHARS:HELV:BOLD:	SHEET: C-9
FILEGROUP NAME: DOTLIB.FGB	

A	:301	N	:316	a	:341	n	:356	0	:260	+	:253
B	:302	O	:317	b	:342	o	:357	1	:261	-	:255
C	:303	P	:320	c	:343	p	:360	2	:262	=	:275
D	:304	Q	:321	d	:344	q	:361	3	:263	.	:256
E	:305	R	:322	e	:345	r	:362	4	:264	,	:254
F	:306	S	:323	f	:346	s	:363	5	:265	'	:247
G	:307	T	:324	g	:347	t	:364	6	:266	;	:273
H	:310	U	:325	h	:350	u	:365	7	:267	?	:277
I	:311	V	:326	i	:351	v	:366	8	:270	(	:250
J	:312	W	:327	j	:352	w	:367	9	:271	)	:251
K	:313	X	:330	k	:353	x	:370	:	:272	/	:257
L	:314	Y	:331	l	:354	y	:371	"	:242	$	:244
M	:315	Z	:332	m	:355	z	:372	!	:241	&	:246
%	:245									*	:252

CPHN175

CPHN200

CPHN750

CPHN240

CPHN290

CPHN500

CPHN375

CPHN425

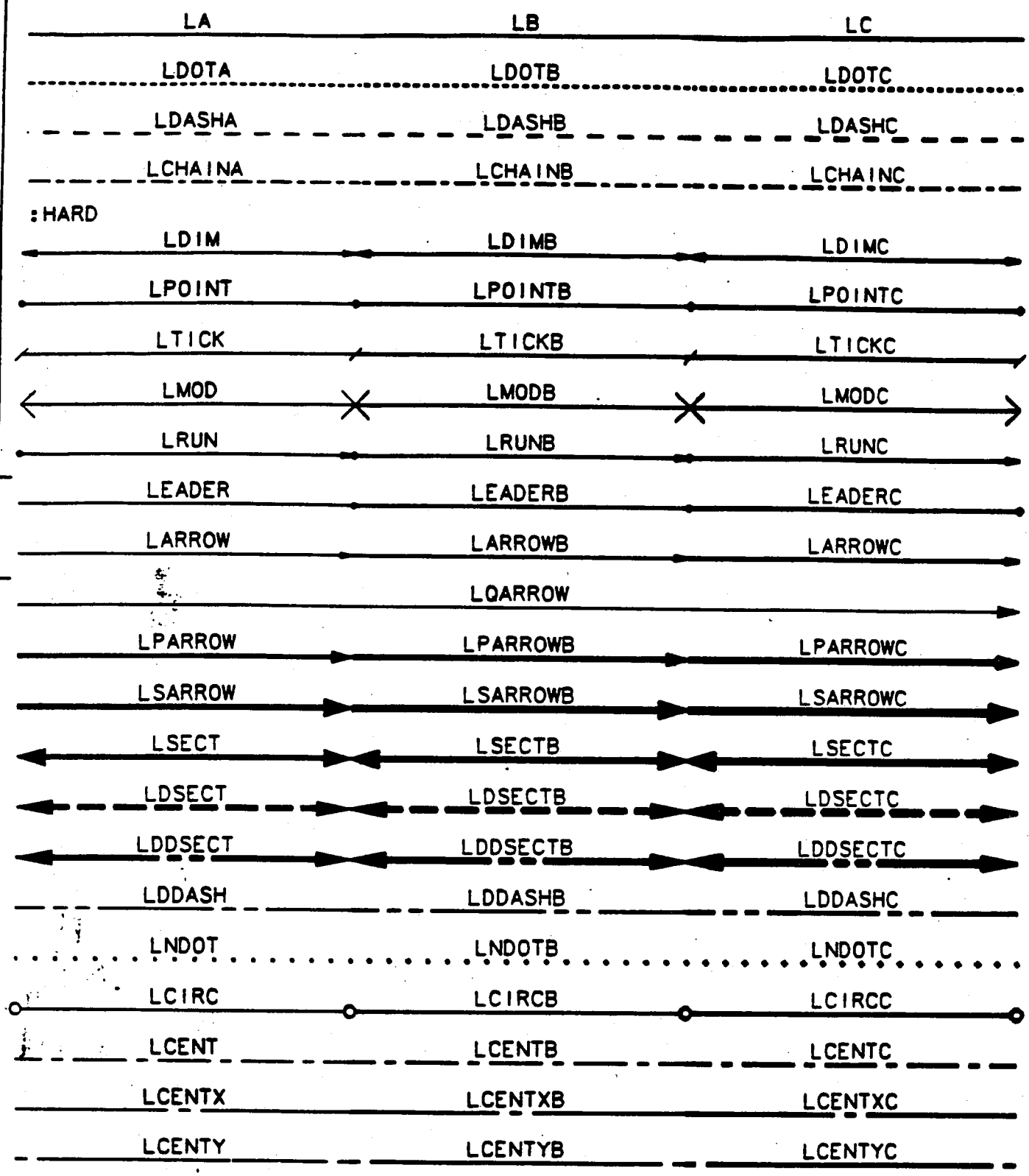
NHDOT Graphic Library

NOTES

THESE CHAR. STYLES SHOULD BE USED ONLY FOR TITLES AS THEY REDRAW VERY SLOWLY.

REVISED 12/09/91

DRAWING: C-9A	SCALE:
OBJECT CLASS: GDS:CHARS:HELV:NARROW:	SHEET: C-9A
FILEGROUP NAME: DOTLIB.FGB	

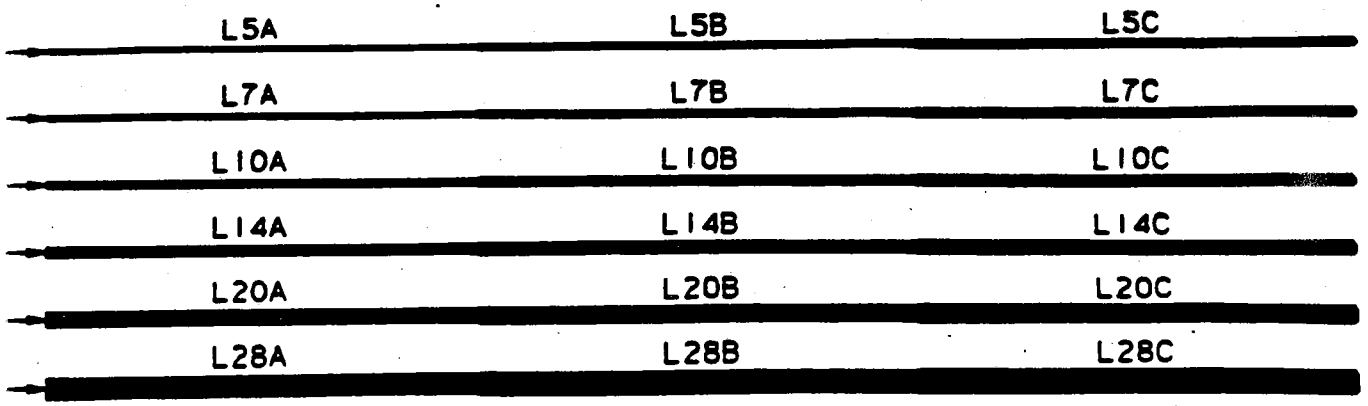


NHDOT Graphic Library

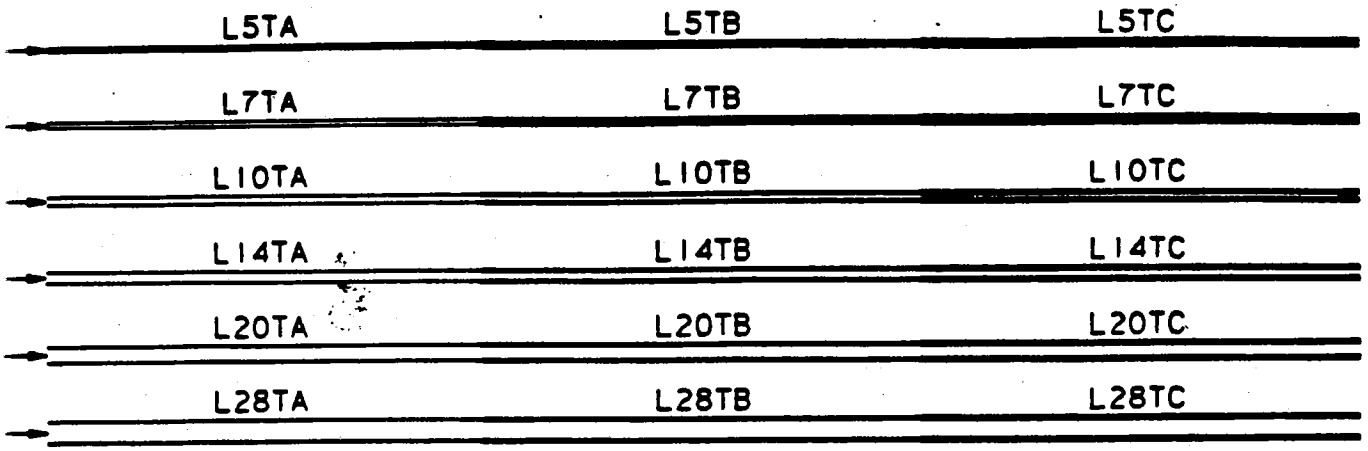
NOTES
STANDARD LINESTYLES. SUFFIX A/B/C INDICATES PENS 0/1/2

REVISED 11/04/91

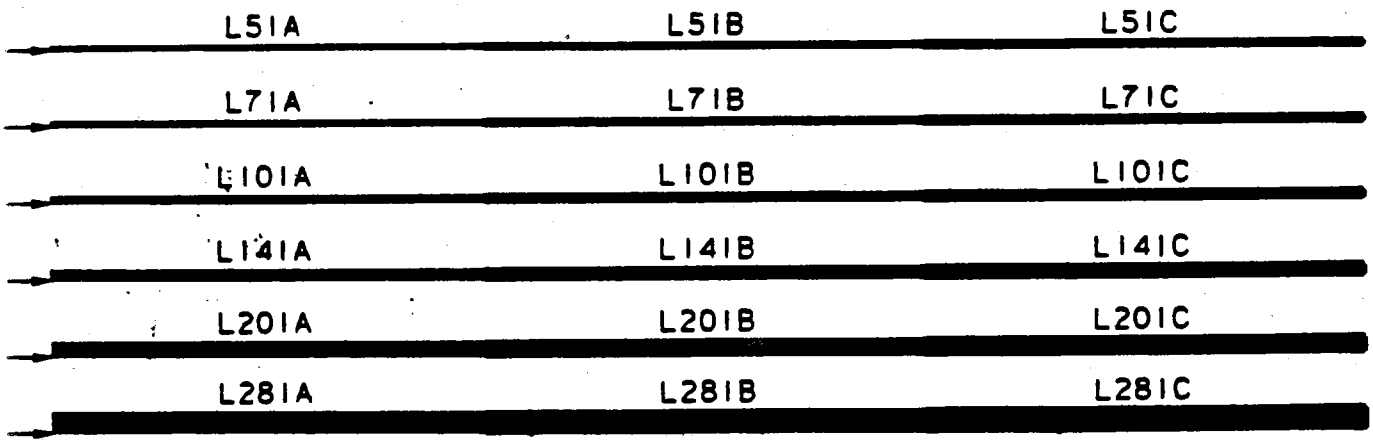
DRAWING	L-1
SCALE	1:1
OBJECT CLASS	GDS:LINES:
SHEET	L-1
FILEGROUP NAME	DOTLIB.FGB



HICK LINES ARE SYMMETRICAL ABOUT THEIR TRUE POSITION



WIN LINES ARE SYMMETRICAL ABOUT THEIR TRUE POSITION



NSET LINES ARE THICKENED ON THE LEFT-HAND SIDE, WHICH IS THE INSIDE OF A RECTANGLE, CIRCLE OR OTHER ANTICLOCKWISE BLOCK

NHDOT Graphic Library

NOTES
THICK, TWIN, AND INSET LINESTYLES. SUFFIX A/B/C INDICATES PEN 0/1/2. DIMENSIONS IN TENTHS OF A MILLIMETER. ARROW INDICATES TRUE POSITION.

© 1986 McDonnell Douglas

DRAWING: L-2	SCALE: 1:1
OBJECT CLASS: GDS:LINES:	SHEET: L-2
FILEGROUP NAME: DOTLIB.FGB	

THICKNESS (INCHES)				
.004	.1	LR0000A	LR0000B	LR0000C
.008	.2	LR000A	LR000B	LR000C
.013	.33	LR00A	LR00B	LR00C
.017	.43	LR0A	LR0B	LR0C
.021	.53	LR1A	LR1B	LR1C
.026		LR2A	LR2B	LR2C
.035	.6	LR3A	LR3B	LR3C
.043		LR4A	LR4B	LR4C
.055		LR5A	LR5B	LR5C
.067		LR6A	LR6B	LR6C
.083		LR7A	LR7B	LR7C
.098		LR8A	LR8B	LR8C
.125		LR9A	LR9B	LR9C
.150		LR10A	LR10B	LR10C
.200		LR12A	LR12B	LR12C
.250		LR14A	LR14B	LR14C

:THICK LINES ARE SYMMETRICAL ABOUT THEIR TRUE POSITION.

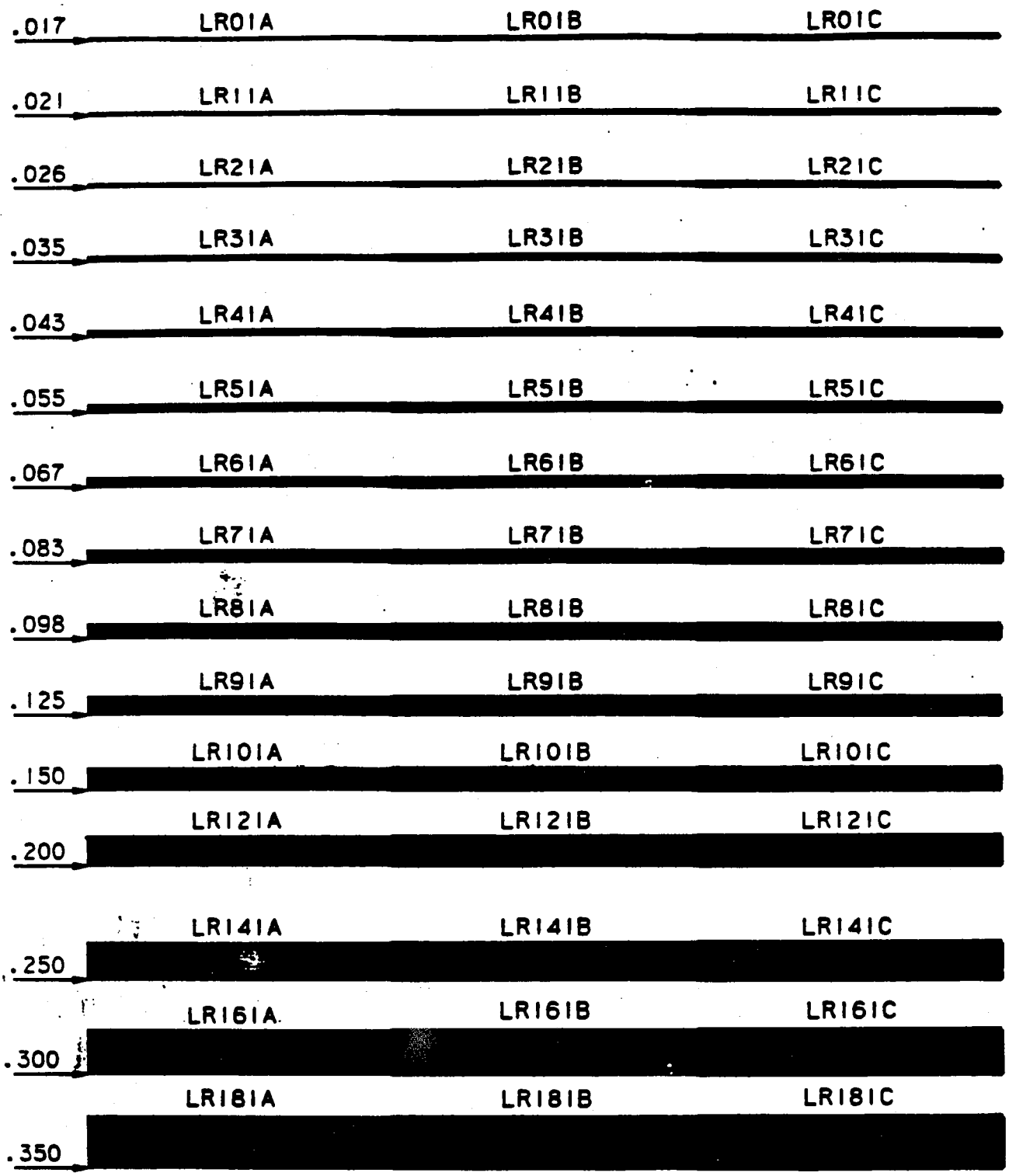
NHDOT Graphic Library

NOTES
RAPIDOGRAPH SERIES THICK LINES
SUFFIX A/B/C INDICATES PEN 0/1/2
ARROW INDICATES TRUE POSITION

Revised 07-Jan-1991 DRF

DRAWING: L-3	SCALE: 1:1
OBJECT CLASS: GDS:LINES:LR	SHEET: L-3
FILEGROUP NAME: DOTLIB.FGB	

THICKNESS
(INCHES)



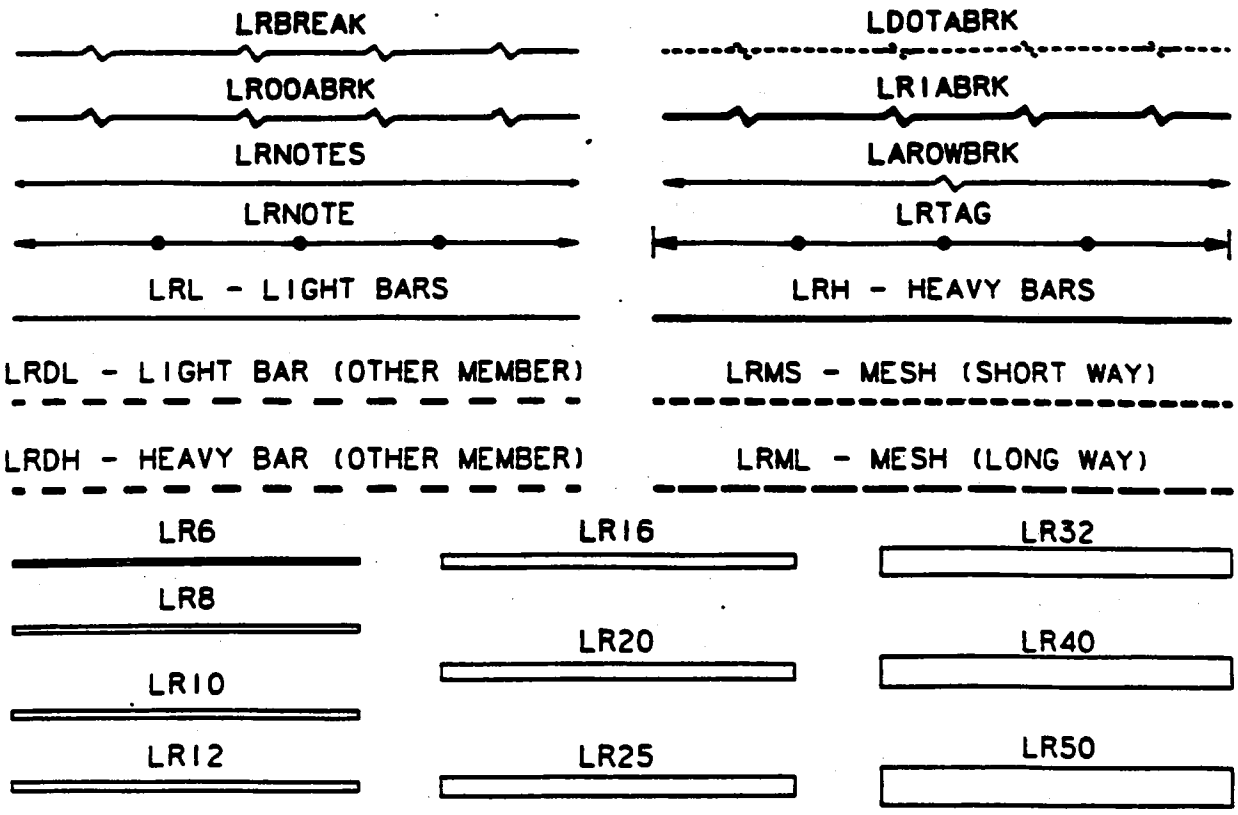
:INSET LINES ARE THICKENED ON THE LEFT HAND SIDE, WHICH IS THE INSIDE OF A RECTANGLE, CIRCLE, OR OTHER ANTICLOCKWISE BLOCK

NHDOT Graphic Library

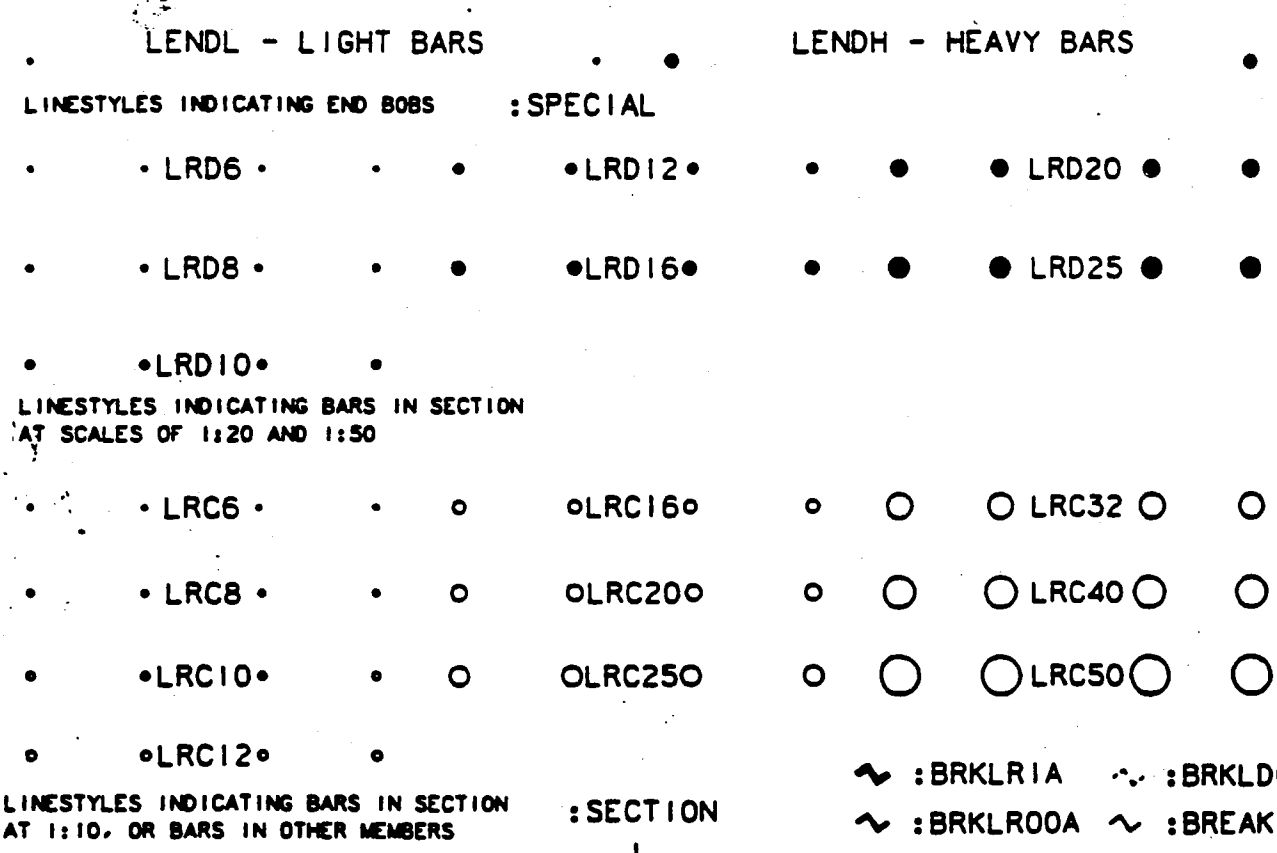
NOTES
RAPIDOGRAPH SERIES INSET LINES
SUFF.IX A/B/C INDICATES PEN 0/1/2
ARROW INDICATES TRUE POSITION

1 Revised: 08-Jan-1991 DRF

DRAWING: L-4	SCALE: 1:1
OBJECT CLASS: GDS:LINES:LR:	SHEET: L-4
FILEGROUP NAME: DOTLIB.FGB	



HOLLOW LINES FOR 1:10 SCALE BARS (AND SPACERS AT 1:20)
NOT SUITABLE FOR BLOCKS WITH SHARP CORNERS



NHDOT Graphic Library

NOTES

LINESTYLES USED BY RC DETAILING SYSTEM. SPECIFICATIONS MAY BE ALTERED TO SUIT INSTALLATION. NAMES MAY NOT BE CHANGED

REVISED - OCT 1991 - MWR

DRAWING: L-6	SCALE: 1:1
OBJECT CLASS: GDS:LINES:RCD:	SHEET: L-6
FILEGROUP NAME: DOTLIB.FGB	

LRETWALR

LRETWALL

LBUILDGR

LBUILDGL

LSECFNCE

LOWWALLR

LOWWALLL

LPROMCNT

LOPNBLDR

LOPNBLDL

LDIDRCUL

LCONTOUR

LVRGFPTR

LOPNFNCE

LOVRHEAD

MOSSI

: SLASH

: TRIANGLE

NHDOT Graphic Library

NOTES
GROUND SURVEY MACROLINES
USED BY MOSS INTERFACE
PEN 0

© 1986 McDonnell Douglas

DRAWING: L-7	SCALE: 1:1
OBJECT CLASS: GDS:LINES:	SHEET: L-7
FILEGROUP NAME: DOTLIB.FGB	

L4ELDF

L4ELDD

L4ELDV

L4ELD1

L4EL01

L4EL02

L4EL03

L4EL04

L4EL05

L4EL06

L4EL07

L4EL08

L4EL09

L4EL10

:MOSS2

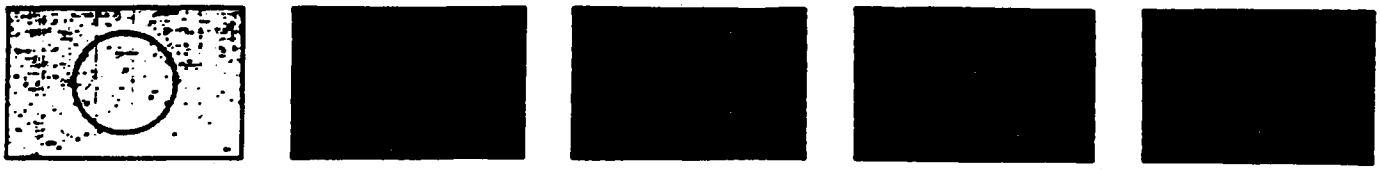
NHDOT Graphic Library

NOTES
STANDARD 4-ELEMENT DASHED LINES
USED BY MOSS INTERFACE
PEN 0

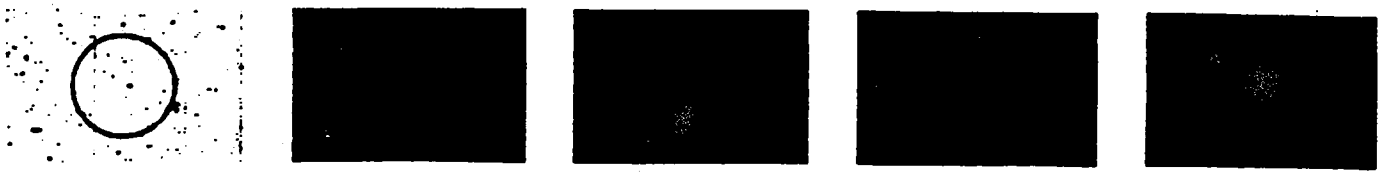
© 1986 McDonnell Douglas

DRAWING: L-8	SCALE: 1:1
OBJECT CLASS: GDS:LINES:	SHEET: L-8
FILEGROUP NAME: DOTLIB.FGB	

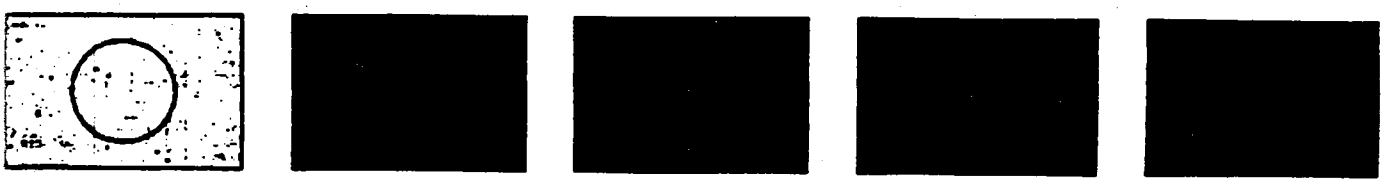
TRANSPARENCY WILL SHOW CORRECTLY ON THE TEK 4125, 4111, AND VAXSTATION. THE TEK 4207 WILL ALWAYS SHOW THESE LINESTYLES AS NON-TRANSPARENT.



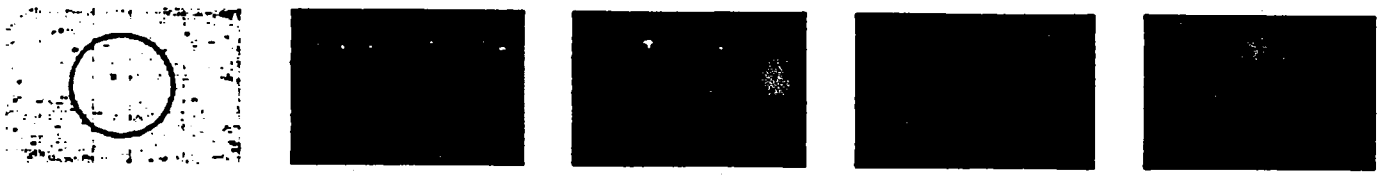
LFABT10 LFBBT30 LFBBT50 LFBBT70 LFCBT100



LFANT10 LFBNT30 LFBNT50 LFBNT70 LFCNT100



LFABN10 LFBBN30 LFBBN50 LFBBN70 LFCBN100



LFANN10 LFBNN30 LFBNN50 LFBNN70 LFCNN100

The Postscript plotter will plot these linestyles as nontransparent. The C5735 and the LN03 will always plot these linestyles transparent.

THE STYLE NAMES ARE MADE UP AS FOLLOWS:

LFABT50

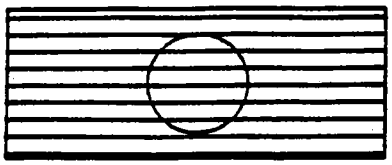
- LF — FILLED LINE
- A — PEN REFERENCE
- B — DRAW BOUNDARY (B or N)
- T — TRANSPARENCY (T or N)
- 50 — FILL INTENSITY %

NHDOT Graphic Library

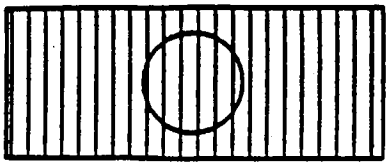
NOTES
EXAMPLES OF FILLED LINESTYLES USING SOLID FILL
FOR USE WITH INTELLIGENT TERMINALS AND ELECTROSTATIC PLOTTERS

1986 McDonnell Douglas
© REVISED 7-25-91

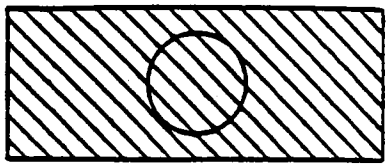
DRAWING	SCALE
L-9	1:1
OBJECT CLASS	SHEET
	L-9
FILEGROUP NAME	
DOTLIB.FGB	



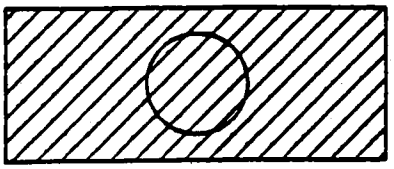
LFABNH



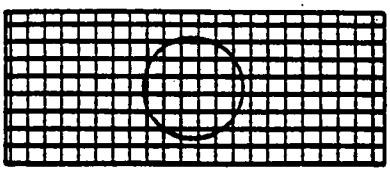
LFBBNV



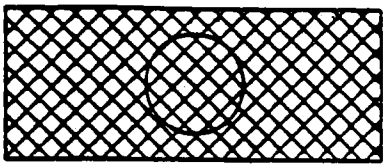
LFCBNL



LFABNR

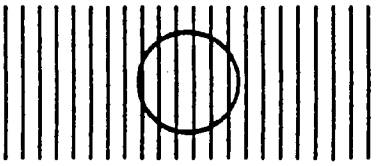


LFBBNHC

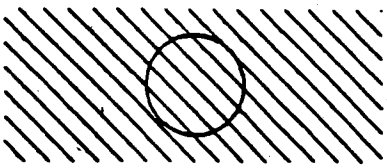


LFCBNDC

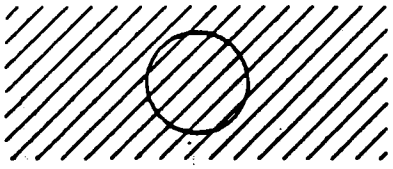
LFANTH



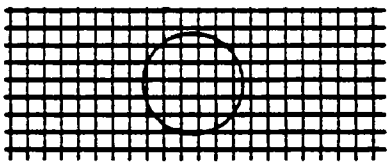
LFBNTV



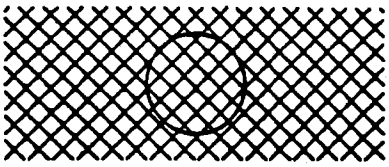
LFCNTL



LFANTR

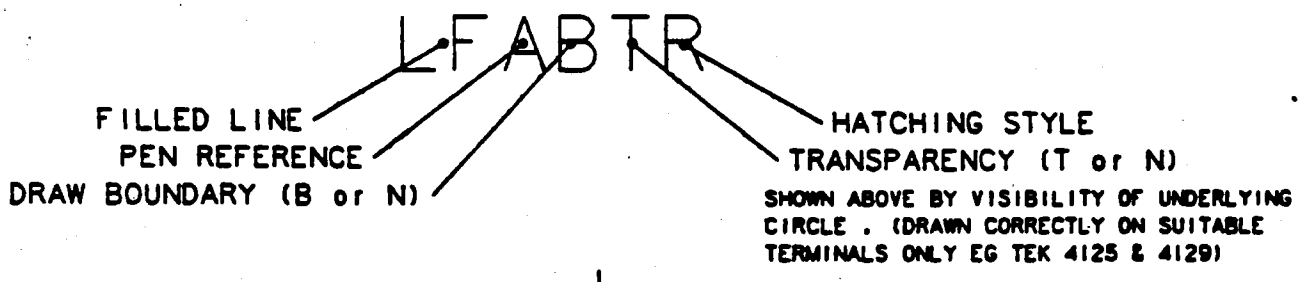


LFBNTHC



LFCNTDC

THE STYLE NAMES ARE MADE UP AS FOLLOWS:



SHOWN ABOVE BY VISIBILITY OF UNDERLYING CIRCLE . (DRAWN CORRECTLY ON SUITABLE TERMINALS ONLY EG TEK 4125 & 4129)

NHDOT Graphic Library

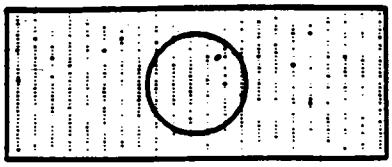
NOTES

EXAMPLES OF FILLED LINESTYLES USING THE SIX HATCHING STYLES FOR USE WITH DUMB TERMINALS AND PEN PLOTTERS

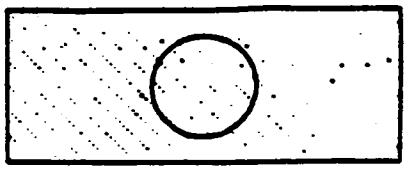
© 1986 McDonnell Douglas

DRAWING: L-10	SCALE: 1:1
OBJECT CLASS: GDS:LINES:FILL:HATCH	SHEET: L-10
FILEGROUP NAME: DOTLIB.FGB	

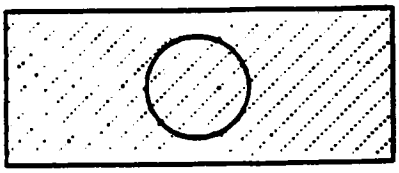
LFBH7



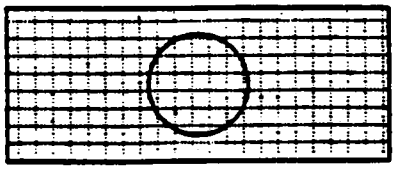
LFBV7



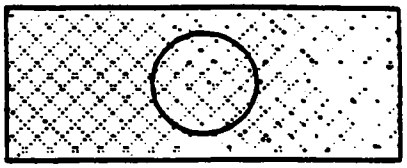
LFBL7



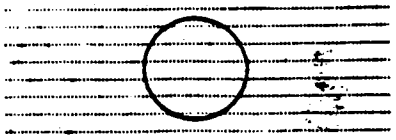
LFBR7



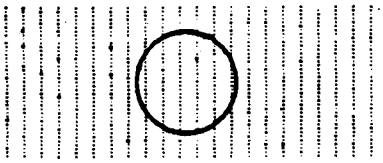
LFBHC7



LFBDC7

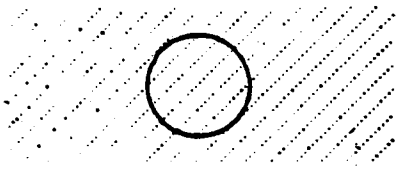


LFNH7

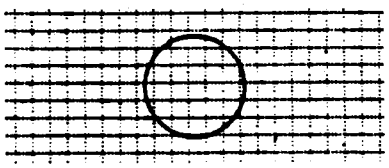


LFNV7

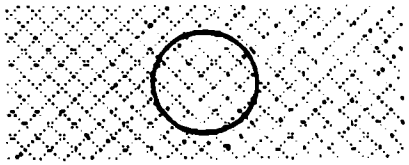
LFNL7



LFNR7

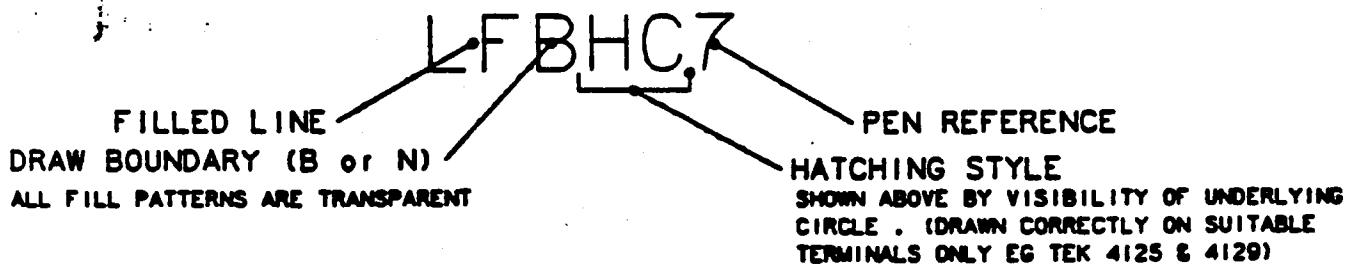


LFNHC7



LFNDC7

THE STYLE NAMES ARE MADE UP AS FOLLOWS:



NHDOT Graphic Library

NOTES

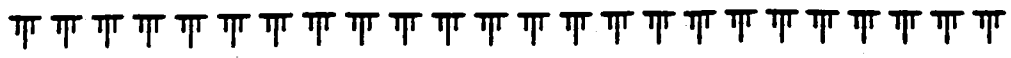
EXAMPLES OF FILLED LINESTYLES USING THE SIX HATCHING STYLES FOR USE WITH DUMB TERMINALS AND PEN PLOTTERS

© 1986 McDonnell Douglas

DRAWING	SCALE
L-10A	1:1
OBJECT CLASS: GDS:LINES:FILL:HATCH	SHEET: L-10A
FILEGROUP NAME: DOTLIB.FGB	

NATURAL FEATURES

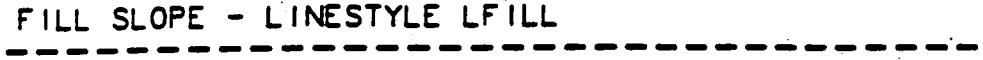
LEDGE LINE - LINESTYLE LLEDGE



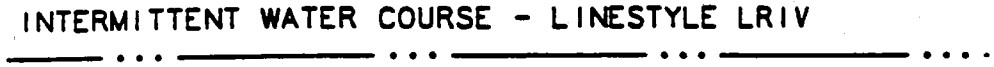
CUT SLOPE LEFT - LINESTYLE LCUT

CUT SLOPE RIGHT - LINESTYLE LCUTR

FILL SLOPE - LINESTYLE LFILL



INTERMITTENT WATER COURSE - LINESTYLE LRIV



EDGE OF RIVER LT. - LINESTYLE LERIVLT

EDGE OF RIVER RT. - LINESTYLE LERIVRT

DELINEATED WET AREA - LINESTYLE LWETLND

WOODS LINE LT. - LINESTYLE LWDSL - 50 OR 20 SCALE

WOODS LINE RT. - LINESTYLE LWDSR - 50 OR 20 SCALE

BUSH OUTLINE - LINESTYLE LBUSH

HEDGE - LINESTYLE LHEDGE50

ROCK OUTCROP - LINESTYLE LROCKLIN

SYM:LEDGE/0
WATER:COURSE/0
RET:WALL:SYMBOL:LT/0
RET:WALL:SYMBOL:RT/0
RXSYM:/0

NHDOT Graphic Library

NOTES

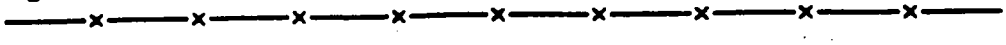
REVISED 9 JULY 1992 WSC

DRAWING L-12	SCALE
OBJECT CLASS	SHEET L-12
FILEGROUP NAME DOTLIB.FGB	

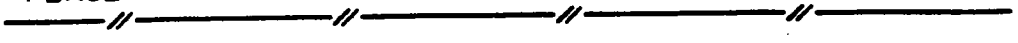
FENCES AND WALLS

BARBED WIRE FENCE - LINESTYLE LFNB

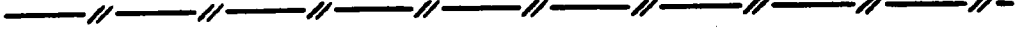
BARBED WIRE FENCE (SHORT) - LINESTYLE LFNBS



FENCE (CHAIN LINK, WOVEN WIRE, ETC) - LINESTYLE LFNO



FENCE (CHAIN LINK, WOVEN WIRE, ETC) (SHORT) - LINESTYLE LFNOS



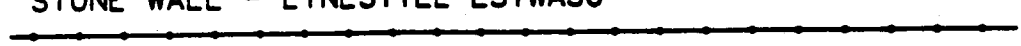
EXISTING RETAINING WALL LT - LINESTYLE LEWALLRL

EXISTING RETAINING WALL RT - LINESTYLE LEWALLRR

PROPOSED RETAINING WALL LT - LINESTYLE LPWALLRL

PROPOSED RETAINING WALL RT - LINESTYLE LPWALLRR

STONE WALL - LINESTYLE LSTWA50



STONE WALL (SHORT) - LINESTYLE LSTWA50S

LBUSH:/0
SYM:CABGRR/0
SYM:CAGRL/0
EX:GRAIL:RT/0
EX:GRAIL:LT/0
FN:SYM:50/0
BWIRE:FN/0
SYM:WOODS:1/0
SYM:WOODS:2/0
WOODS:RT:1/0
WOODS:RT:2/0
STONE:WALL:50/0

NHDOT Graphic Library

NOTES

REVISED 9 JULY 1992 WSC

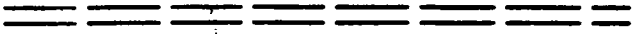
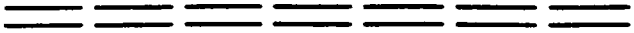
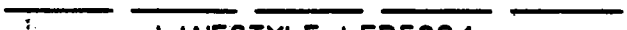
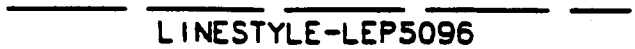
DRAWING L-12A	SCALE 1"=50'
OBJECT CLASS	SHEET L-12A
FILEGROUP NAME DOTLIB.FGB	

DRAINAGE

EXIST. UNDERDRAIN - LINESTYLE LEUND50

PROPOSED UND. - LINESTYLE LPUND50

ON HIGHWAY DESIGN PLANS
USE THE 36" PIPE LINESTYLES FOR PIPES LESS THAN 36"

EXISTING	PROPOSED
LINESTYLE-LEP5024	LINESTYLE-LPP5024
LINESTYLE-LEP5030	LINESTYLE-LPP5030
LINESTYLE-LEP5036	LINESTYLE-LPP5036
LINESTYLE-LEP5042	LINESTYLE-LPP5042
	
LINESTYLE-LEP5048	LINESTYLE-LPP5048
	
LINESTYLE-LEP5054	LINESTYLE-LPP5054
LINESTYLE-LEP5060	LINESTYLE-LPP5060
LINESTYLE-LEP5066	LINESTYLE-LPP5066
LINESTYLE-LEP5072	LINESTYLE-LPP5072
LINESTYLE-LEP5078	LINESTYLE-LPP5078
	
LINESTYLE-LEP5084	LINESTYLE-LPP5084
LINESTYLE-LEP5090	LINESTYLE-LPP5090
	
LINESTYLE-LEP5096	LINESTYLE-LPP5096

NHDOT Graphic Library

NOTES

THE LAST TWO DIGITS OF THE PIPE LINESTYLES ARE THE SIZE IN INCHES.

DRAWING: L-12B	SCALE: 1"=50'
OBJECT CLASS:	SHEET: L-12B
FILEGROUP NAME: DOTLIB.FGB	

RIGHT-OF-WAY

PROPERTY LINE - LINESTYLE LPROPL

COMMON OWNER PARCEL LINE - LINESTYLE LZLINE

EXIST. RIGHT-OF-WAY LINE - LINESTYLE LEXROW

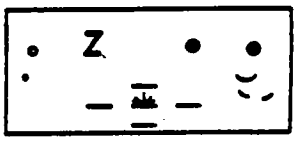
PROP. RIGHT-OF-WAY LINE - LINESTYLE LPRROW

TOWN LINE - LINESTYLE LTNLINE

COUNTY LINE - LINESTYLE LCNTYLINE

STATE LINE - LINESTYLE LSTLINE

NATIONAL FOREST LINE - LINESTYLE LNATFLINE



MAPPING

LINESTYLE - LWAVE TO HORIZ. HATCH LAKES & PONDS

LINESTYLE - LMAPRIV

LINESTYLE LERIVML

LINESTYLE - LERIVMR

LINESTYLE - LSTATE

LINESTYLE - LCOUNTY

LINESTYLE - LSWAMP

LINESTYLE - LSWAMPS

NHDOT Graphic Library

NOTES

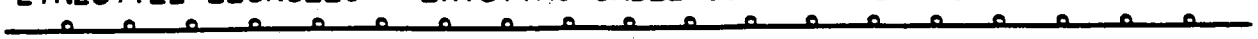
HOOK POINTS ARE AT THE CENTER OF THE OBJECTS.

DRAWING L-13	SCALE 1"=50'
OBJECT CLASS	SHEET L-13
FILEGROUP NAME DOTLIB.FGB	

REVISED 12-24-90

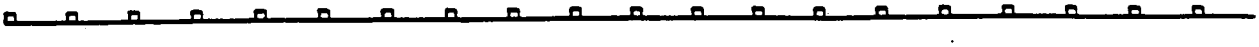
GENERAL USE

LINESTYLE LEGRCL20 - EXISTING CABLE GUARD RAIL - LEFT

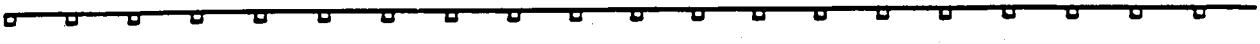


LINESTYLE LEGRCR20 - EXISTING CABLE GUARD RAIL - RIGHT

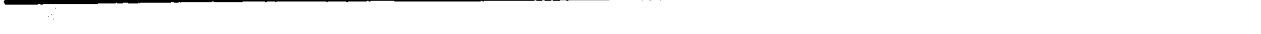
LINESTYLE LEGRBL20 - EXISTING BEAM GUARD RAIL - LEFT



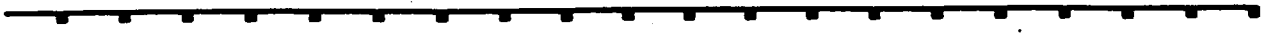
LINESTYLE LEGRBR20 - EXISTING BEAM GUARD RAIL - RIGHT



LINESTYLE LPGRBL20 - PROPOSED BEAM GUARD RAIL - LEFT



LINESTYLE LPGRBR20 - PROPOSED BEAM GUARD RAIL - RIGHT



LINESTYLE LEGRBD20 - EXISTING DOUBLE FACED GUARD RAIL

LINESTYLE LPGRBD20 - PROPOSED DOUBLE FACED GUARD RAIL

LINESTYLE LSTWALL - STONE WALL

LINESTYLE LFNB10 - BARBED WIRE FENCE 10 AND 20 SCALES

LINESTYLE LFN10 - STANDARD FENCE 10 AND 20 SCALES

LINESTYLE LWDSL10 - WOODS LINE LT. 10 SCALE

LINESTYLE LWDSR10 - WOODS LINE RIGHT - 10 SCALE

LINESTYLE LHEDGE20 - HEDGE

NHDOT Graphic Library

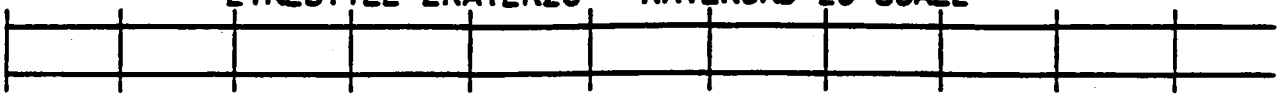
NOTES

REVISED 14 JULY 1992 WSC

DRAWING: L-14	SCALE: 1"=20'
OBJECT CLASS:	SHEET: L-14
FILEGROUP NAME: DOTLIB.FGB	

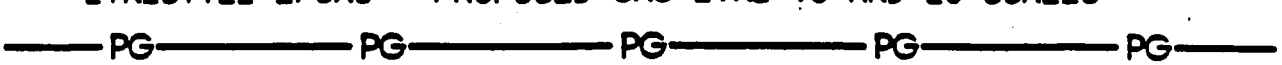
UTILITY

LINESTYLE LRAILR20 - RAILROAD 20 SCALE



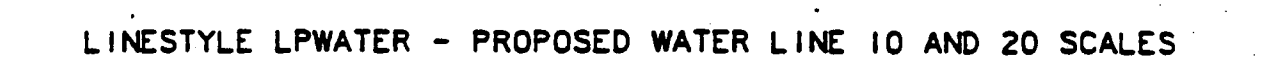
LINESTYLE LEGAS - EXISTING GAS 10 AND 20 SCALES

LINESTYLE LPGAS - PROPOSED GAS LINE 10 AND 20 SCALES



LINESTYLE LEWATER - EXISTING WATER LINE 10 AND 20 SCALES

LINESTYLE LPWATER - PROPOSED WATER LINE 10 AND 20 SCALES



LINESTYLE LAELEC - AERIAL ELECTRIC LINES 10 AND 20 SCALES

LINESTYLE LEELEC - EXISTING ELECTRIC LINE 10 AND 20 SCALES

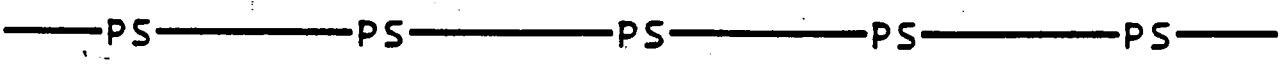
LINESTYLE LPELEC - PROPOSED ELECTRIC LINE 10 AND 20 SCALES

LINESTYLE LESEWER - EXISTING SEWER LINE 10 AND 20 SCALES

LINESTYLE LPSEWER - PREOPOSED SEWER LINE 10 AND 20 SCALES

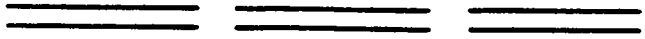
LINESTYLE LETEL - EXISTING TELEPHONE LINE 10 AND 20 SCALES

LINESTYLE LPTEL - PROPOSED TELEPHONE LINE 10 AND 20 SCALES



DRAINAGE

LINESTYLE - LEPIPE20



LINESTYLE - LPPIPE20

NHDOT Graphic Library

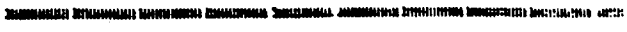
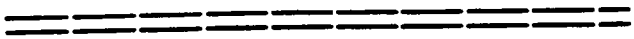
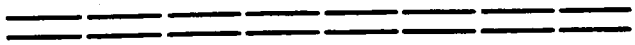
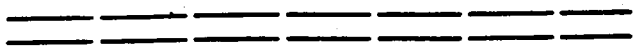
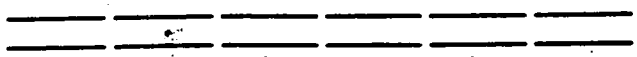
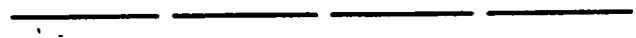
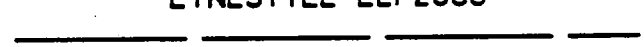
NOTES
THE RAILROAD LINESTYLE IS CENTERED ABOUT THE RIGHT RAIL.

REVISED 12-24-90

DRAWING: L-15	SCALE: 1"=20'
OBJECT CLASS:	SHEET: L-15
FILEGROUP NAME: DOTLIB.FGB	

DRAINAGE

ON HIGHWAY DESIGN PLANS
USE THE 24" PIPE LINESTYLES FOR PIPES SMALLER THAN 24"

EXISTING	PROPOSED
LINESTYLE-LEP2012	LINESTYLE-LPP2012
LINESTYLE-LEP2015	 LINESTYLE-LPP2015
 LINESTYLE-LEP2018	LINESTYLE-LPP2018
 LINESTYLE-LEP2024	LINESTYLE-LPP2024
 LINESTYLE-LEP2030	LINESTYLE-LPP2030
 LINESTYLE-LEP2036	LINESTYLE-LPP2036
LINESTYLE-LEP2042	LINESTYLE-LPP2042
LINESTYLE-LEP2048	LINESTYLE-LPP2048
LINESTYLE-LEP2054	LINESTYLE-LPP2054
 LINESTYLE-LEP2060	LINESTYLE-LPP2060
LINESTYLE-LEP2066	LINESTYLE-LPP2066
 LINESTYLE-LEP2072	LINESTYLE-LPP2072

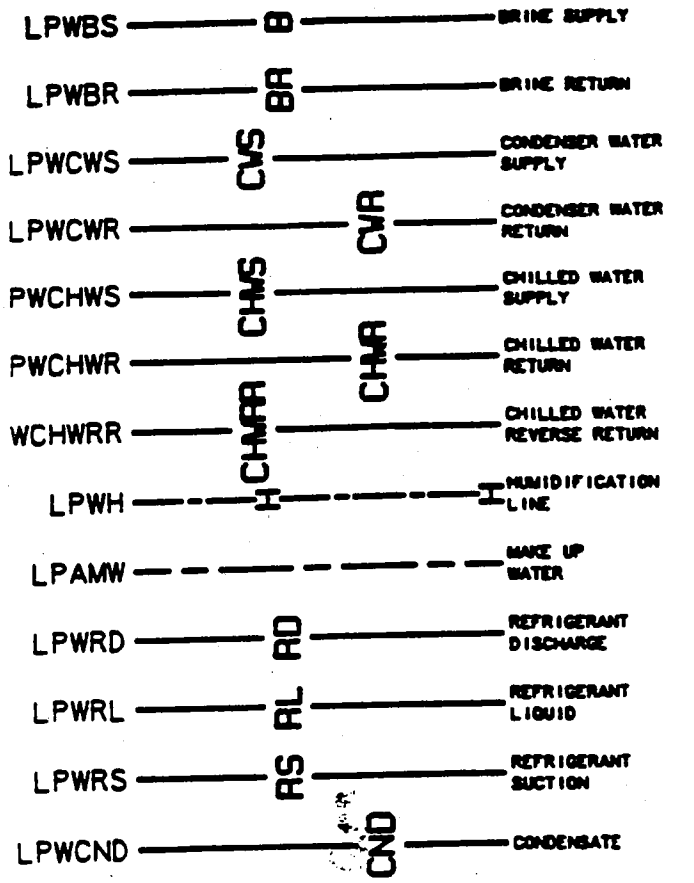
NHDOT Graphic Library

NOTES

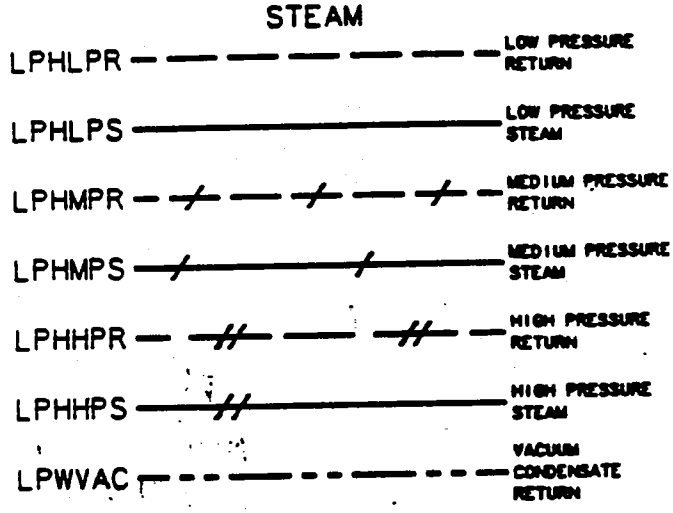
THE LAST TWO DIGITS OF THE PIPE LINESTYLES ARE THE SIZE IN INCHES.

DRAWING: L-15A	SCALE: 1"=20
OBJECT CLASS:	SHEET: L-15A
FILEGROUP NAME: DOTLIB.FGB	

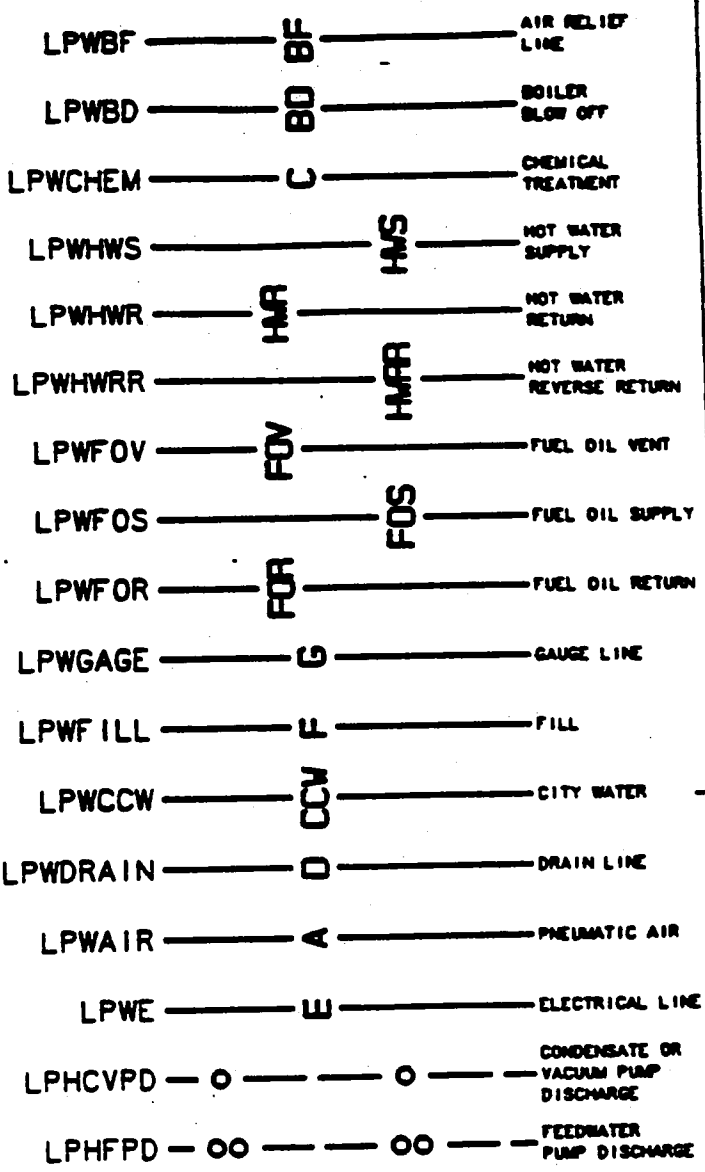
AIR CONDITIONING



STEAM



HEATING



A	:PA	H	:PH	/	:PSL
D	:PD	RD	:PRD	CW	:PCW
BD	:PBD	RL	:PRL	F	:PF
BF	:PBF	RS	:PRS	G	:PG
B	:PB	BR	:PBR	E	:PE
CWS	:CWS	CWR	:CWR	CHWS	:CHWS
CHWR	:CHWR	CHWRR	:CHWRR	HWRR	:HHWRR
HWR	:HHWR	HWS	:HHWS	C	:AC
FOR	:HFOR	FOS	:HFOS	FOV	:HFOV
CCW	:CCW	CND	:CND	O	:PO OO

NOTES

NHDOT Graphic Library

REVISED: 10/8/90

DRAWING: L-16	SCALE: 1:1
OBJECT CLASS:	SHEET: L-16
FILEGROUP NAME: DOTLIB.FGB	

GENERAL CULTURE

TREE (DECIDUOUS). (TPO:PTDS:50).....

TREE (CONIFEROUS). (TPO:PTCS:50).....

WELL (TPO:PWEL:50).....

SEPTIC TANK (TPO:PSTK:50).....

SWAMP, MARSH, OR WETLANDS (SWAMPTHG:).....

STUMP (TPO:PSTP:50).....

RIVER OR STREAM FLOW ARROW (TPO:FA:50).....

SIGN (SINGLE POST).. (TPO:PSGN:50:1POST).....

SIGN (DOUBLE POST). (TPO:PSND:50:2POST).....

RAILROAD SIGN (E:PRSN:50).....

FLAG POLE (TPO:PFPL:50)..... F.P.

MAIL BOX (TPO:PMBX:50)..... Mailbox

PUBLIC PHONE (TPO:PBTH:50)..... Phone

BENCH MARK (E:PBMK:50).....

BM #^() ^()
STA. ^() ^(), ELEV. ^()
^()^()

SATELLITE DISH ANTENNA (E:PDAT:50)..... D.A.

NHDOT Graphic Library

NOTES

Revised 9-25-89

DRAWING: H-1	SCALE: 1"=50'
OBJECT CLASS:	SHEET: H-1
FILEGROUP NAME: DOTLIB.FGB	

TRAFFIC SYMBOLS

TRAFFIC SIGNAL (E:PSGL:TRF:50).....

PULLBOX-EXISTING (E:PPBX:TRF:50).....

-PROPOSED (P:PPBX:TRF:50).....

HANDHOLE-EXISTING (E:PHHL:TRF:50).....

-PROPOSED (P:PHHL:TRF:50).....

CONTROLLER CABINET -EXISTING (E:PCCT:TRF:50).....

-PROPOSED (P:PCCT:TRF:50).....

THRU ARROW (P:ARW:TRF:T:50).....

LEFT ARROW (P:ARW:TRF:L:50).....

RIGHT ARROW (P:ARW:TRF:R:50).....

THRU-LEFT ARROW (P:ARW:TRF:TL:50).....

THRU-RIGHT ARROW (P:ARW:TRF:TR:50).....

LEFT-THRU-RIGHT ARROW (P:ARW:TRF:LTR:50).....

ONLY (P:ONLY:TRF:50).....

MAST ARM POLE (E:PMAP:TRF:50).....

PEDESTRIAN SIGNAL (P:PEDS:TRF:50).....

PEDESTRIAN SIGNAL POLE (P:PEDP:TRF:50).....

SIGNAL HEAD (P:PHED:TRF:50).....

NHDOT Graphic Library

NOTES

EDITED 01-10-92

DRAWING H-2	SCALE 1"=50'
OBJECT CLASS	SHEET H-2
FILEGROUP NAME DOTLIB.FGB	

UTILITIES

TELEPHONE POLE (E:PTEL:UTL:50).....

POWER POLE (E:PPWR:UTL:50).....

JOINT POLE (E:PJNT:UTL:50).....

POLE (E:PPOL:UTL:50).....

GUY POLE OR STUB (E:PGUY:UTL:50).....

LIGHT POLE (E:PLIT:UTL:50).....

LIGHT ON POWER POLE (E:PLTP:UTL:50).....

LIGHT ON JOINT POLE (E:PLTJ:UTL:50).....

PRIVATE LIGHT/LAMP POST (E:PLPT:50).....

GROUND LIGHT (E:PGLT:50).....

HYDRANT (E:PHYD:UTL:50).....

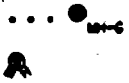
MANHOLE TELEPHONE (E:PMHT:UTL:50).....

(P:PMHT:UTL:50).....

ELECTRIC (E:PMHE:UTL:50).....

(P:PMHE:UTL:50).....

GAS (E:PMHG:UTL:50).....

(P:PMHG:UTL:50)..... 

WATER (E:PMHW:UTL:50).....

(P:PMHW:UTL:50).....

SEWER (E:PMHS:UTL:50).....

(P:PMHS:UTL:50).....

VENT PIPE OUTLET (E:PVNT:UTL:50).....

WATER SHUTOFF (E:PWSO:UTL:50).....

WATER GATE (E:PWGT:UTL:50).....

GAS SHUTOFF (E:PGSO:UTL:50).....

UTILITY JUNCTION BOX - EXISTING (E:PJCT:UTL:50).....

- PROPOSED (P:PJCT:UTL:50).....

RAILROAD SIGNAL (E:PRSL:UTL:50).....

NHDOT Graphic Library

NOTES

HOOK POINTS ARE AT THE FACE OF THE POLES AND AT THE CENTERS OF ALL OTHER OBJECTS.

REVISED 01-18-90

DRAWING: H-3	SCALE: 1"=50'
OBJECT CLASS:	SHEET: H-3
FILEGROUP NAME: DOTLIB.FGB	

DRAINAGE

MANHOLE-EXISTING (E:PMHD:DRN:50) ..... ⊙ M.H.
MANHOLE-PROPOSED (P:PMHD:DRN:50) ..... ●
CATCH BASIN-EXISTING (E:PCBD:DRN:50) ..... ⊡ C.B.
CATCH BASIN-PROPOSED (P:PCBD:DRN:50) ..... ■
DROP INLET-EXISTING (E:PDID:DRN:50) ..... ⊡ D.I.
DROP INLET-PROPOSED (P:PDID:DRN:50) ..... ■

H.P.

HIGH POINT OF DRAINAGE (P:HP:DRN:50) ..... ←|→

RIGHT-OF-WAY

EXISTING BOUND (E:PCON:ROW:50) ..... ⊡ Bnd.
PROPOSED BOUND (P:PBND:ROW:50) ..... ⊡
IRON PIN (E:PIPN:ROW:50) ..... ⊙ I.P.
IRON PIN (P:PIPN:ROW:50) ..... ⊙ I.P.
DRILL HOLE (E:PDHL:ROW:50) ..... ⊙ D.H.
STATE LINE MARKER (E:PSLM:ROW:50) .... ⊡ S/L
TOWN LINE MARKER (E:PTLM:ROW:50) ..... ⊡ T/L
PROJECT MARKER (E:PRJM:ROW:50) ..... △

NHDOT Graphic Library

NOTES

HOOK POINTS ARE AT THE CENTER OF ALL OBJECTS.

REVISED 17 JULY 1992 WSC

DRAWING: H-3A	SCALE: 1"=50'
OBJECT CLASS:	SHEET: H-3A
FILEGROUP NAME: DOTLIB.FGB	

UTILITIES

POLES

GENERAL (E:PPOL:UTL:20).....

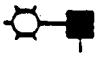
TELEPHONE (E:PTEL:UTL:20)...

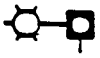
POWER (E:PPWR:UTL:20).....

JOINT (E:PJNT:UTL:20).....

GUY OR STUB (E:PGUY:UTL:20).

WITH LIGHT (E:PLIT:UTL:20)...

WITH LIGHT (E:PLTP:UTL:20)... 

WITH LIGHT (E:PLTJ:UTL:20)... 

OTHER UTILITY OBJECTS

PRIVATE LIGHT/LAMP POST (E:PLPT:20)..... L.P.

GROUND LIGHT (E:PGLT:20).....

HYDRANT (E:PHYD:UTL:20).....

MANHOLE - TELEPHONE (E:PMHT:UTL:20).....

(P:PMHT:UTL:20)..... MH-T

ELECTRIC (E:PMHE:UTL:20).....

(P:PMHE:UTL:20)..... MH-E

GAS (E:PMHG:UTL:20).....

(P:PMHG:UTL:20)..... MH-G

WATER (E:PMHW:UTL:20).....

(P:PMHW:UTL:20)..... MH-W

SEWER (E:PMHS:UTL:20).....

(P:PMHS:UTL:20)..... MH-S

VENT PIPE OUTLET (E:PVNT:UTL:20)..... Vent pipe

WATER SHUTOFF (E:PWSO:UTL:20).....

WATER GATE (E:PWGT:UTL:20).....

GAS SHUTOFF (E:PGSO:UTL:20).....

UTILITY JUNCTION BOX - EXISTING (E:PJCT:UTL:20).....

- PROPOSED (P:PJCT:UTL:20).....

RAILROAD SIGNAL (E:PRSL:UTL:20).....

NHDOT Graphic Library

NOTES

HOOK POINTS ARE AT THE FACE OF THE POLES AND AT THE CENTERS OF ALL OTHER OBJECTS

REVISED 01-18-90

DRAWING: H-4	SCALE: 1"=20'
OBJECT CLASS:	SHEET: H-4
FILEGROUP NAME: DOTLIB.FGB	

DRAINAGE

MANHOLE-EXISTING (E:PMHD:DRN:20)..... ⊙ M.H.
MANHOLE-PROPOSED (P:PMHD:DRN:20)..... ●
CATCH BASIN-EXISTING (E:PCBD:DRN:20)..... ⊡ C.B.
CATCH BASIN-PROPOSED (P:PCBD:DRN:20)..... ■
DROP INLET-EXISTING (E:PDID:DRN:20)..... ⊡ D.I.
DROP INLET-PROPOSED (P:PDID:DRN:20)..... ■

RIGHT-OF-WAY

EXISTING BOUND (E:PCON:ROW:20)..... ⊡ Bnd.
PROPOSED BOUND (P:PBND:ROW:20)..... ⊡
IRON PIN (E:PIPN:ROW:20)..... ⊙ I.P.
IRON PIN (P:PIPN:ROW:20)..... ⊙ I.P.
DRILL HOLE (E:PDHL:ROW:20)..... ⊙ D.H.
STATE LINE MARKER (E:PSLM:ROW:20).... ⊡ S/L
TOWN LINE MARKER (E:PTLM:ROW:20)..... ⊡ T/L
PROJECT MARKER (E:PRJM:ROW:20)..... △

NHDOT Graphic Library

NOTES

HOOK POINTS OF ALL OBJECTS ARE AT THE CENTER.

REVISED 10-16-91

DRAWING: H-5	SCALE: 1"=20'
OBJECT CLASS:	SHEET: H-5
FILEGROUP NAME: DOTLIB.FGB	