

memorandum

subject: Contract Plan CAD Standards
Office of Engineering

date: April 3, 2007

to: Mr. Thomas A. Harley
Mr. John F. Carey
Mr. Joseph J. Obara
Manager of State Design

from: James H. Norman
Acting Engineering Administrator
Bureau of Engineering and
Highway Operations

As part of the effort to standardize the Department's contract plans, the Office of Engineering is issuing a CTDOT CAD Standard for all projects initiated after June 1, 2007.

Currently, the Office of Engineering does not conform to one CAD standard for text attributes (text fonts, size and style), and plans contain inconsistencies across disciplines. Text attributes are important for the proper communication of our CAD drawings. Inconsistent annotation techniques across disciplines can lead to confusion and compromise the plans. Therefore, a CTDOT CAD Standard for all contract plans being developed under the Office of Engineering will be implemented. This includes all state and consultant design projects.

The new CTDOT CAD Standards will result in uniform, professional contract documents. Such plans will facilitate communications with other engineers, contractors, and stake holders. Delivering and maintaining one CAD Standard promotes efficiency and will help streamline requirements for the consultant community.

Along with the new CTDOT CAD Standards, there will be a change in Contract Drawing Size. The CTDOT CAD Standard will be an "ANSI D" (34"x22") size. The change in size will allow half scale prints to be printed on 11"x17" paper. The CTDOT Standard borders will be changed from a reference file to a call for productivity enhancements.

Please inform all personnel that projects initiated after June 1, 2007 are to be developed using the CTDOT CAD Standards. Users may change existing projects to use the new standards with the approval of the prime designer.

Engineering Applications has developed new design libraries that contain these new text styles, new seed files for the "ANSI D" sheet size, along with a new project folder template. Representatives from Engineering Applications will be scheduling a meeting with the discipline representatives for help with any migration of discipline standard CAD drawings, details, cells and bar menus. This standard will be available for consultant engineers on our internet site at <http://www.ct.gov/dot/digitaldesign> after May 16, 2007.

Please see the attachment for the CTDOT CAD Standards. Also attached is a copy of the recently issued ConnDOT Policy No. F&A-24 regarding Computer Aided Design, Survey and Roadway Design Software File Formats.

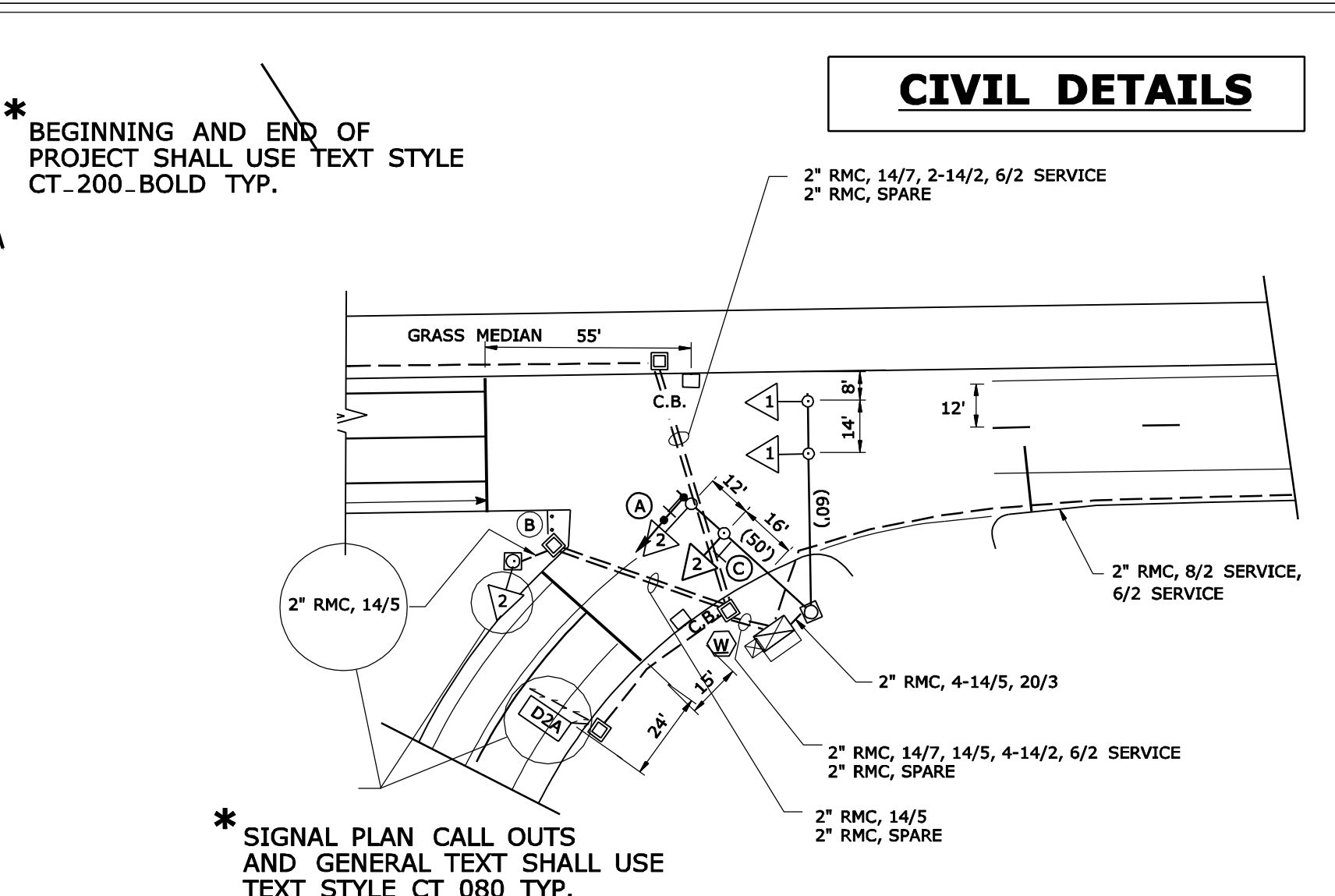
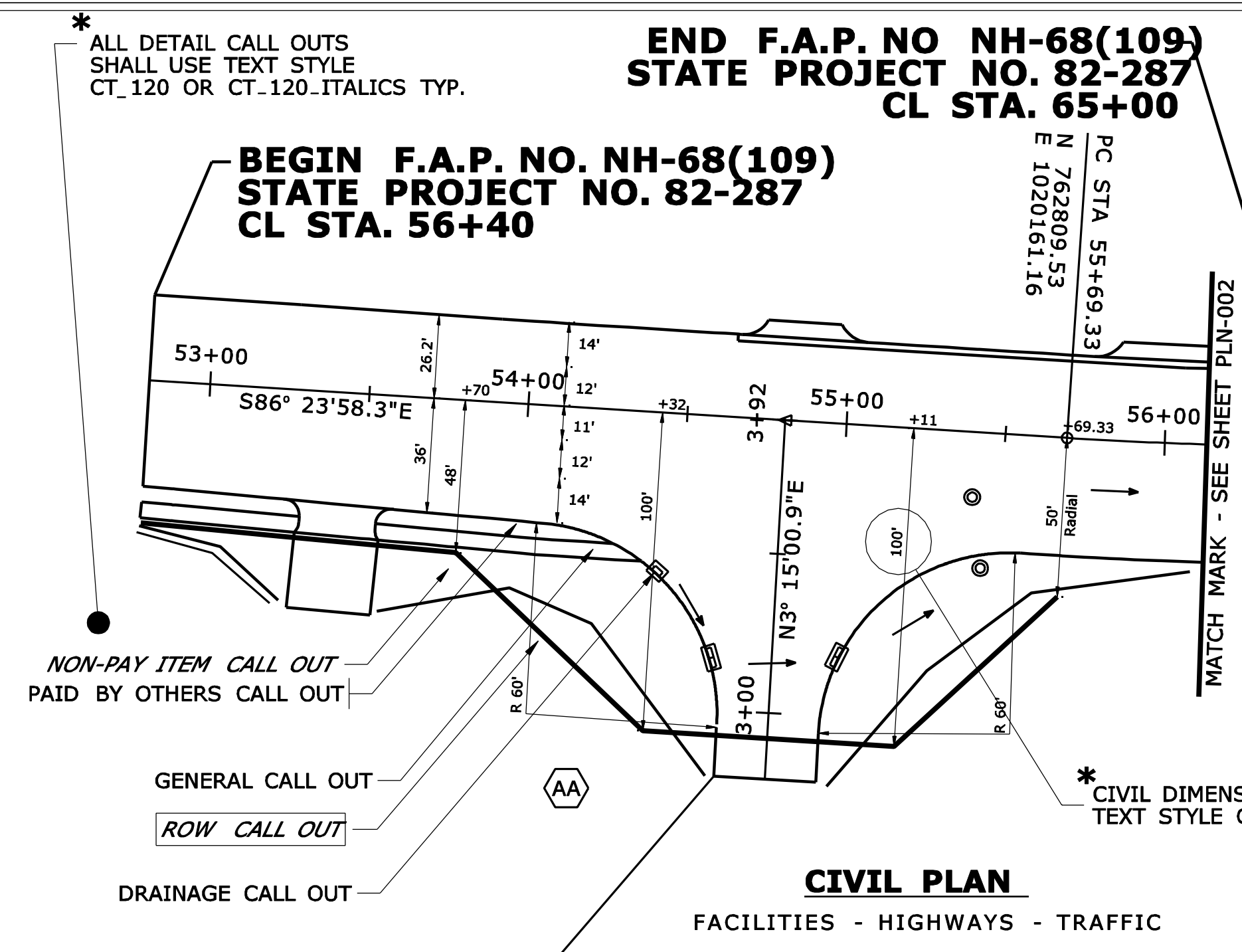
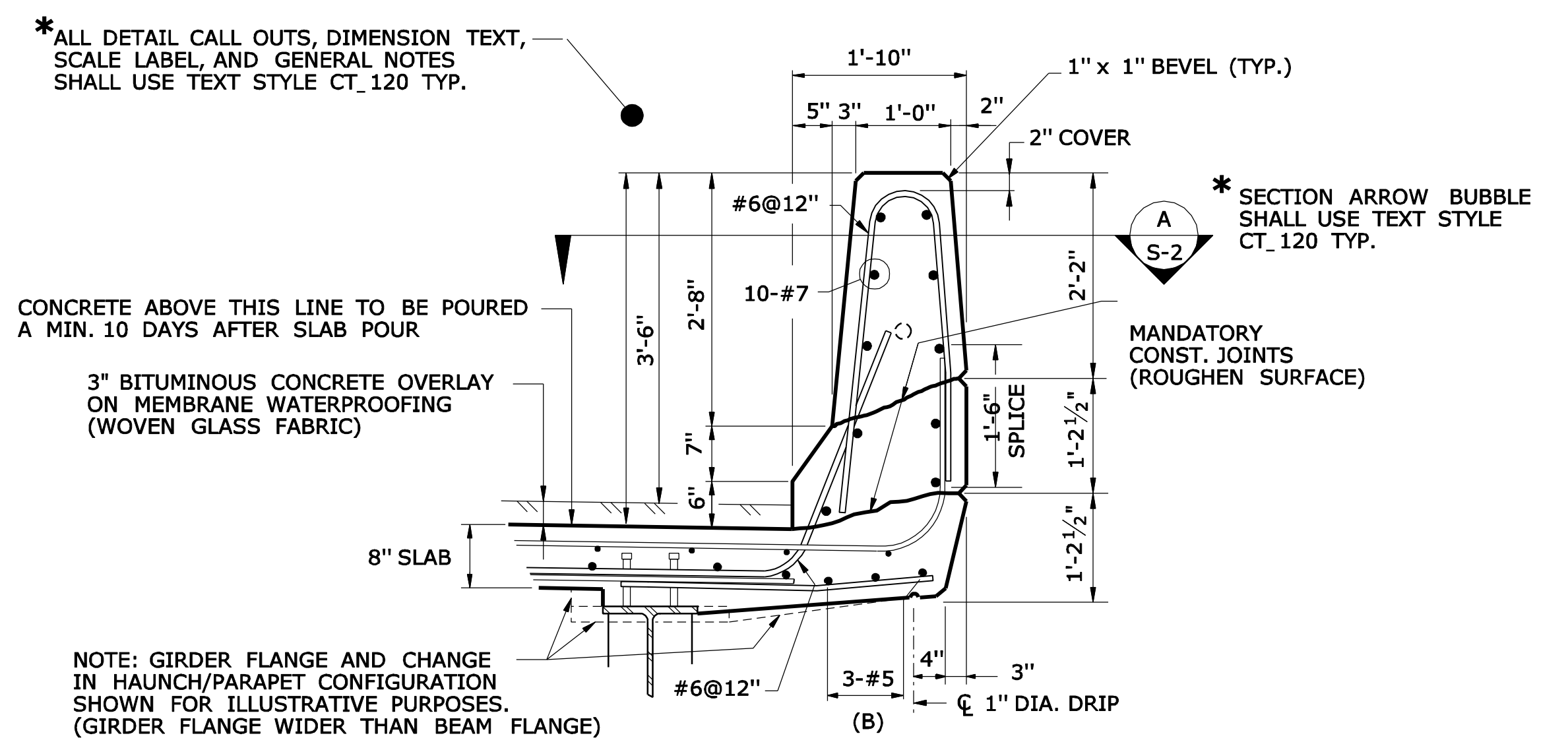
CTDOT CAD STANDARDS (CONTRACT DOCUMENTS)

ARCHITECTURAL DETAILS

CT TEXT STYLES (ALLOWABLE TEXT)			
TEXT STYLE	SIZE	FONT	GENERAL USE
CT_080	0.080"	VERDANA	TRAFFIC SIGNAL PLANS, HIGHWAY ROW, LANE AND ROADWAY DIMENSIONS
CT_120	0.120"	VERDANA	ALL DETAIL CALL OUTS AND NOTES
CT_120_ITALIC	0.120"	VERDANA ITALIC	ALL DETAIL CALL OUTS - NON PAY ITEMS
CT_175	0.175"	VERDANA	CHART AND GRID NUMBERS
CT_175_BOLD	0.175"	VERDANA_BOLD	DETAIL AND NOTE TITLES
CT_200_BOLD	0.200"	VERDANA_BOLD	TITLE HEADERS

LEGEND
 * - TEXT STYLE USED

ALL CONNECTICUT TEXT STYLES AND DIMENSION STYLES WILL BE MADE AVAILABLE AND FULLY AUTOMATED THROUGH THE USE OF DISCIPLINE BAR MENUS



COMMON DETAILS

SIGNAL PLANS

- ALL TEXT SHALL BE CAPITAL LETTERS
- ALL CALL OUTS SHALL USE TEXT STYLE CT_120, OR CT_120 ITALIC (NON PAY ITEMS) (EXCEPT SIGNAL PLANS USE CT_080)
- ALL GENERAL NOTES SHALL USE TEXT STYLE CT_120, SEE EXAMPLE BELOW
- ALL DIMENSION LINES SHALL BE WEIGHT ZERO, I.E., LEADERS; CALLOUT BUBBLES, AND EXTENSION LINES; (EXCEPT BEGINNING, END OF PROJECT, AND LIMITS OF CONSTRUCTION CALLOUTS)
- DIMENSION ARROWS SHALL BE (1.0 x TEXT HEIGHT) & (0.333 X TEXT WIDTH)
- ALL ARCHITECTURAL DIMENSIONS SHALL USE TEXT STYLE CT_120
- ALL TITLES SHALL USE TEXT STYLE CT_175_BOLD AND SHALL HAVE ONE UNDERLINED WEIGHT 2
- WHERE DETAIL TITLES SHARE A COMMON TITLE HEADER THE HEADER SHALL USE TEXT STYLE CT_200_BOLD AND SHALL HAVE ONE UNDERLINED WEIGHT 2, SEE EXAMPLE BELOW

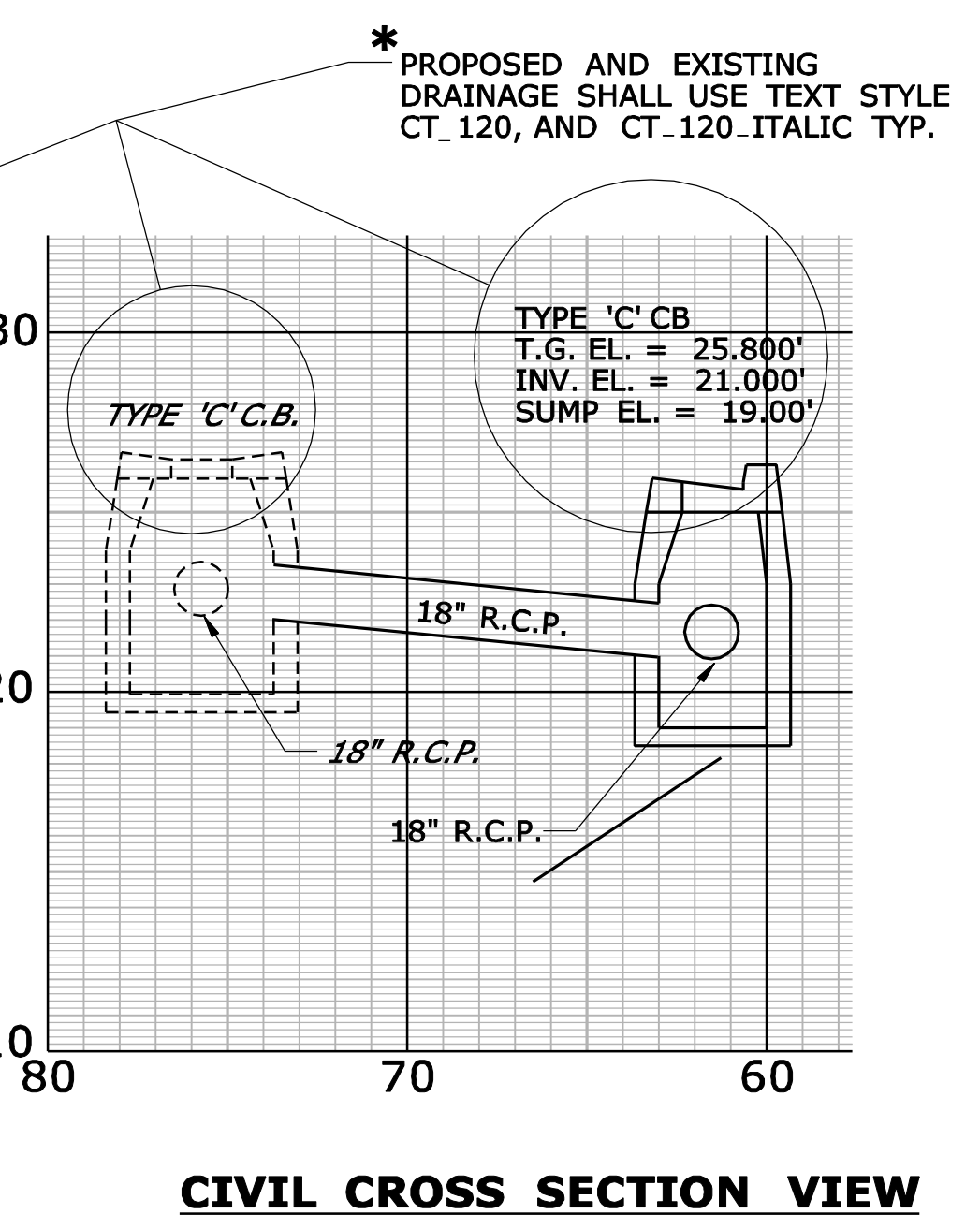
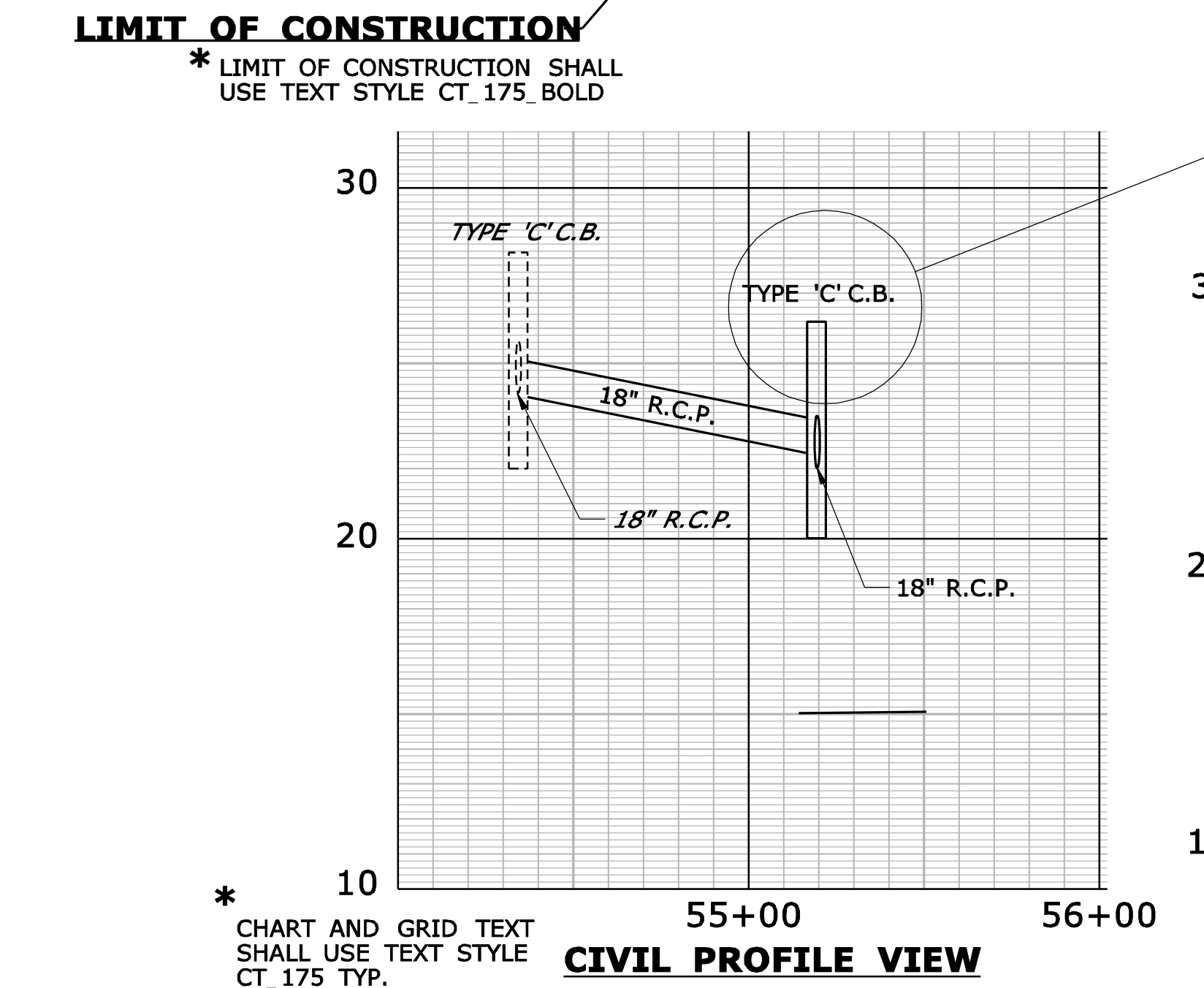
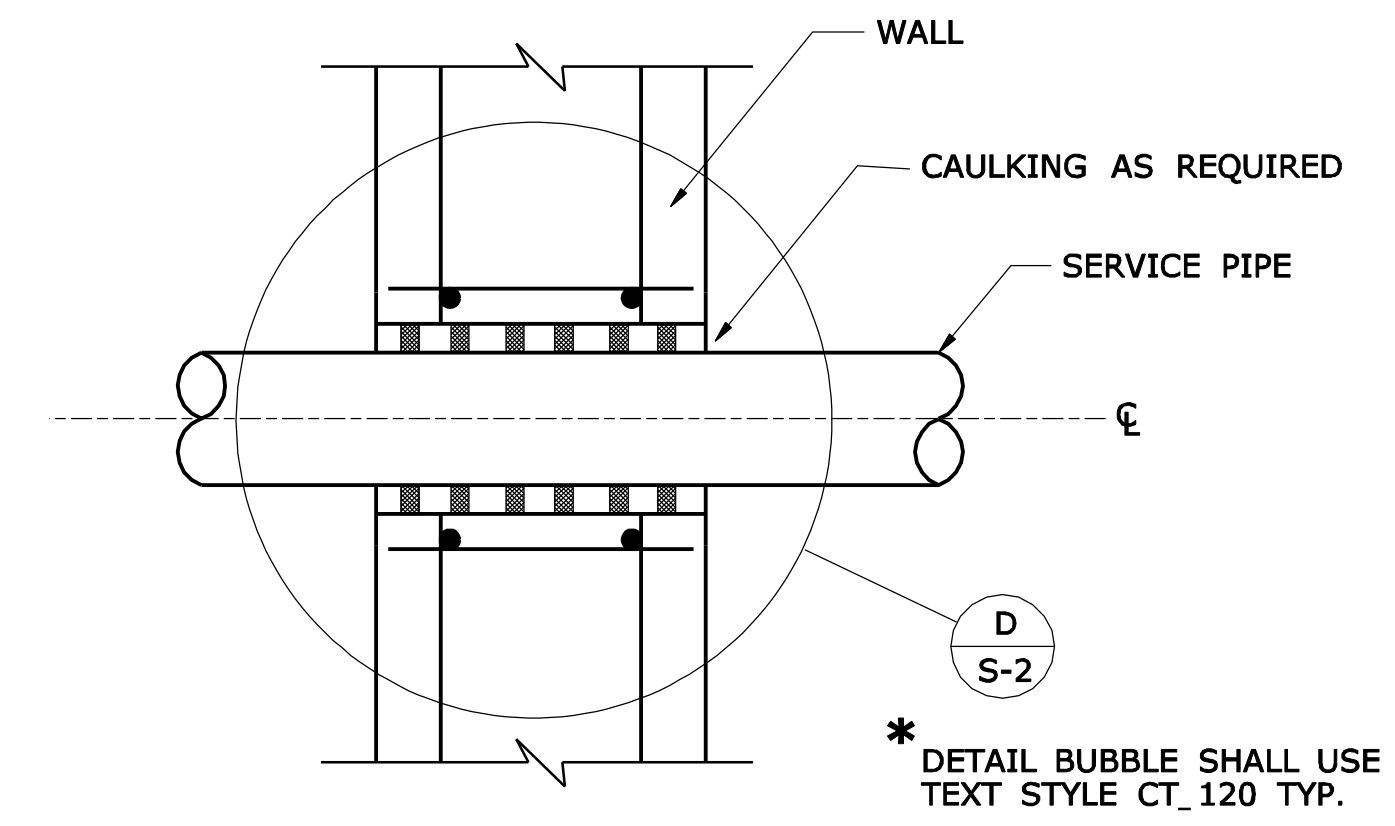
GENERAL NOTES

SPECIFICATIONS: CONNECTICUT DEPARTMENT OF TRANSPORTATION FORM 816 (2004), SUPPLEMENTAL SPECIFICATIONS DATED (07/05) AND SPECIAL PROVISIONS.

DETAIL TITLE 1 **DETAIL TITLE 2** CT_175_BOLD TYP.

TITLE HEADER

CT_200_BOLD TYP.



REV.	DATE	REVISION DESCRIPTION	SHEET NO.

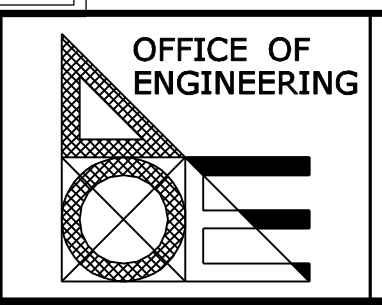
Filename: all_fonts_proposal#1.dgn
 Border Version: 3/28/07

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

DESIGNER/DRAFTER: -
 CHECKED BY: -
 SCALE IN FEET
 0 40 80
 SCALE 1"=40'

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

ENGINEER: OFFICE OF ENGINEERING
 APPROVED BY: -
 DATE: -



PROJECT TITLE:
CTDOT 2007 CAD STANDARDS

TOWN:
VARIOUS

DRAWING TITLE:
TEXT STYLES

PROJECT NO.
100-100

DRAWING NO.
S-1

SHEET NO.