Survey Program Solutions



SPS Survey Feature Code Book

Print Date: ######## Rev. 0

LEGEND

BLACK POINT CODE
RED SYMBOL CODE
BLUE LINESTRING CODE

PURPLE SYMBOL AND LINESTRING CODE GREEN LINESTRING AND BREAKLINE CODE

Note: All feature codes are designed to have a maximum number of 25 characters total between the codes, figure commands and notes. The first code entered will determine the layer placement and/or symbol of the point. Only one symbol can be shown per point and it is recommended not to combine symbol and line string codes that have not already been combined (Purple Text).

BY CODE Page 3
BY DESCRIPTION Page 15
BY GROUP Page 27
FIGURE COMMANDS Page 39

Alphabetical By Code

Code Description

Α	
AC*	ASPHALT SPOT SHOT
AD*	ASPHALT DIKE/CURB
ATM*	ATM
В	
BBQ*	BBQ
BCD*	BARRICADE
BFC*	BOTTOM FACE OF CURB
BGAW*	BUILDING AWNING
BGDK*	BUILDING DECK
BGEN*	BUILDING ENTRY (W/ADDRESS)
BGFF*	BUILDING FINISH FLOOR
BGHR*	BUILDING HANDRAIL
BGLC*	BUILDING LINE/CORNER
BGOH*	BUILDING OVERHEAD
BGPH*	BUILDING PORCH
BGRD*	BUILDING ROOF DRAIN
BGVN*	BUILDING VENTS
BH*	BENCH SEAT
BK*	BIKE RACK
BL*	BOLLARD
BM*	BENCHMARK
BOD*	BOTTOM OF DITCH
BRAB*	BRIDGE ABUTMENT
BRCJ*	BRIDGE CONSTRUCTION JOINT
BRDK*	BRIDGE DECK
BRGR*	BRIDGE GUARDRAIL
BS*	BACKSIGHT CHECK
BWL*	BARRIER WALL

Alphabetical By Description

Code Description

	Α
AD*	ASPHALT DIKE/CURB
AC*	ASPHALT SPOT SHOT
ATM*	ATM
	В
BS*	BACKSIGHT CHECK
BCD*	BARRICADE
BWL*	BARRIER WALL
BBQ*	BBQ
TBM*	BENCH MARK - TEMPORARY
BH*	BENCH SEAT
BM*	BENCHMARK
BK*	BIKE RACK
BL*	BOLLARD
BFC*	BOTTOM FACE OF CURB
BOD*	BOTTOM OF DITCH
BRAB*	BRIDGE ABUTMENT
BRCJ*	BRIDGE CONSTRUCTION JOINT
BRDK*	BRIDGE DECK
BRGR*	BRIDGE GUARDRAIL
BGAW*	BUILDING AWNING
BGDK*	BUILDING DECK
BGEN*	BUILDING ENTRY (W/ADDRESS)
BGFF*	BUILDING FINISH FLOOR
BGHR*	BUILDING HANDRAIL
BGLC*	BUILDING LINE/CORNER
BGOH*	BUILDING OVERHEAD
BGPH*	BUILDING PORCH
BGRD*	BUILDING ROOF DRAIN
BGVN*	BUILDING VENTS

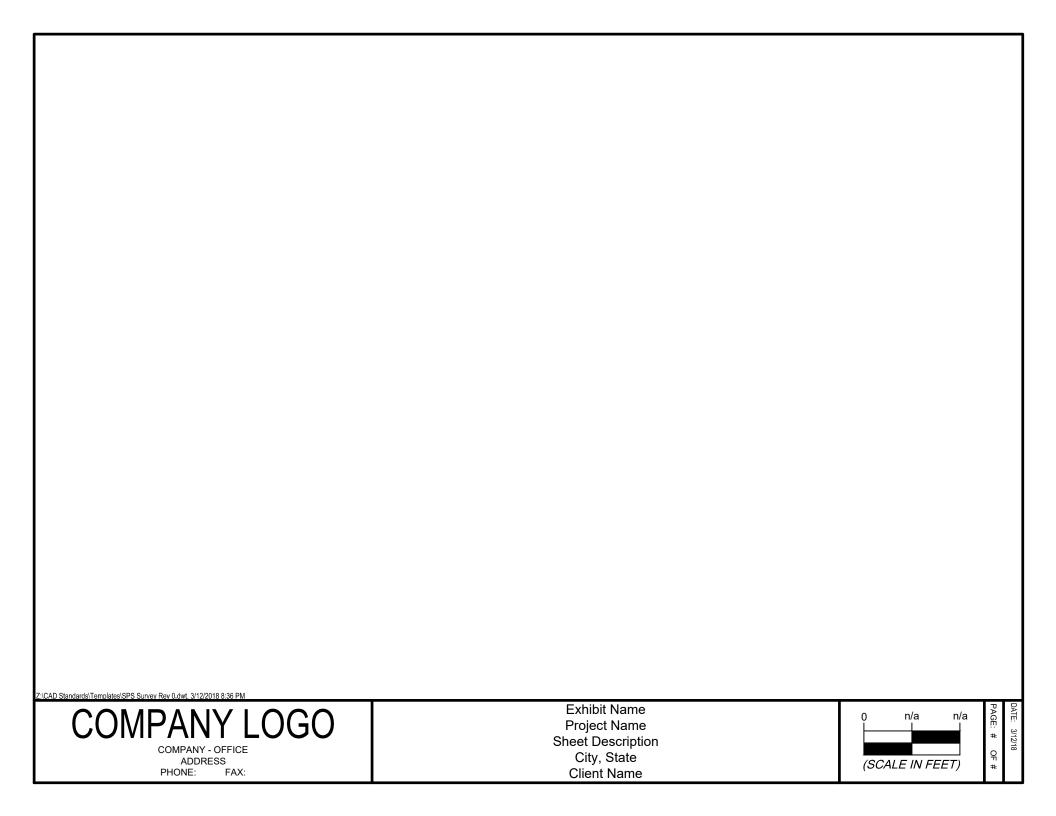
Alphabetical By Group

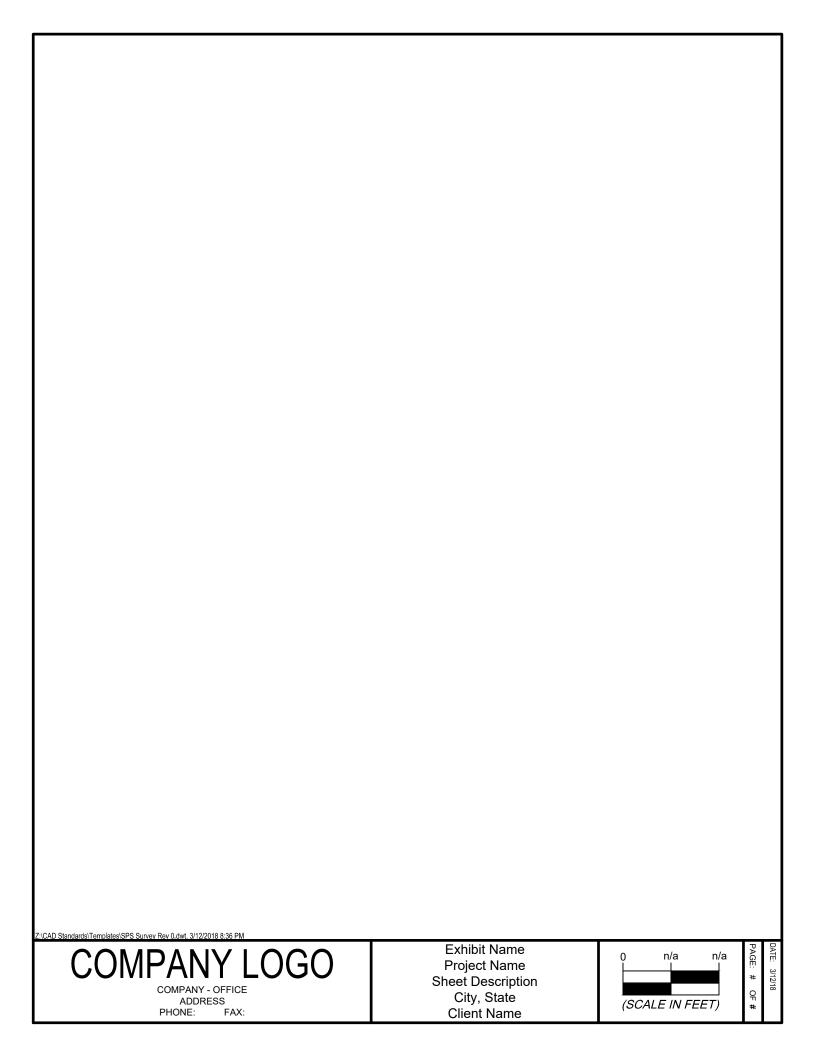
Code Description

	Buildings
BGAW*	BUILDING AWNING
BGDK*	BUILDING DECK
BGEN*	BUILDING ENTRY (W/ADDRESS)
BGFF*	BUILDING FINISH FLOOR
BGHR*	BUILDING HANDRAIL
BGLC*	BUILDING LINE/CORNER
BGOH*	BUILDING OVERHEAD
BGPH*	BUILDING PORCH
BGRD*	BUILDING ROOF DRAIN
BGVN*	BUILDING VENTS
	Cable TV
TVBL*	CABLE TV BOX LINE
TVBX*	CABLE TV BOX SYMBOL
TVCB*	CABLE TV CABINET SYMBOL
TVCD*	CABLE TV CONDUIT
TVCL*	CABLE TV CABINET LINE
TVGM*	CABLE TV GEOPHYSICAL MARK
TVMC*	CABLE TV MISC.
TVOH*	CABLE TV OVERHEAD
TVPF*	CABLE TV PIN FLAG
TVPM*	CABLE TV PAINT MARK
TVRI*	CABLE TV RISER
TVTH*	CABLE TV TRENCH
TVVL*	CABLE TV VAULT LINE
TVVT*	CABLE TV VAULT SYMBOL
	Communication
CMAN*	COMMUNICATION ANTENNA
CMBL*	COMMUNICATION BOX LINE

Figure Commands

Code	Command	Description
В	Begin Figure	Begin a figure with the name of the preceding feature code
С	Continue	Continue a figure with the name of the preceding feature code
E	End Figure	End a figure with the name of the preceding feature code
ВС	Begin Curve	Begin tangent, non-tangent, compound or reverse curve and continue until end curve code (EC) is input
EC	End Curve	End tangent, non-tangent, compound or reverse curve
CLS	Close Figure	Closes figure by creating a single segment from the current location to the first point on the figure
/note/	Note in Code	used to enter notes within a feature code, NO SPACES AT BEGINNING OR END OF NOTE
CIR	Circles	1, 2 or 3 point circles can be collected
H or V	Horz. or Vert. Offset	Horizontal and vertical offsets can be input by H# and V#, where # is positive to the right or up and negative (-) to the left or down
ос	Point on Curve	Use 2 tangent shots before and after a curve with a point on the curve to automatically create a figure with 2 tangent lines and a curve between with calculated PC and PT points



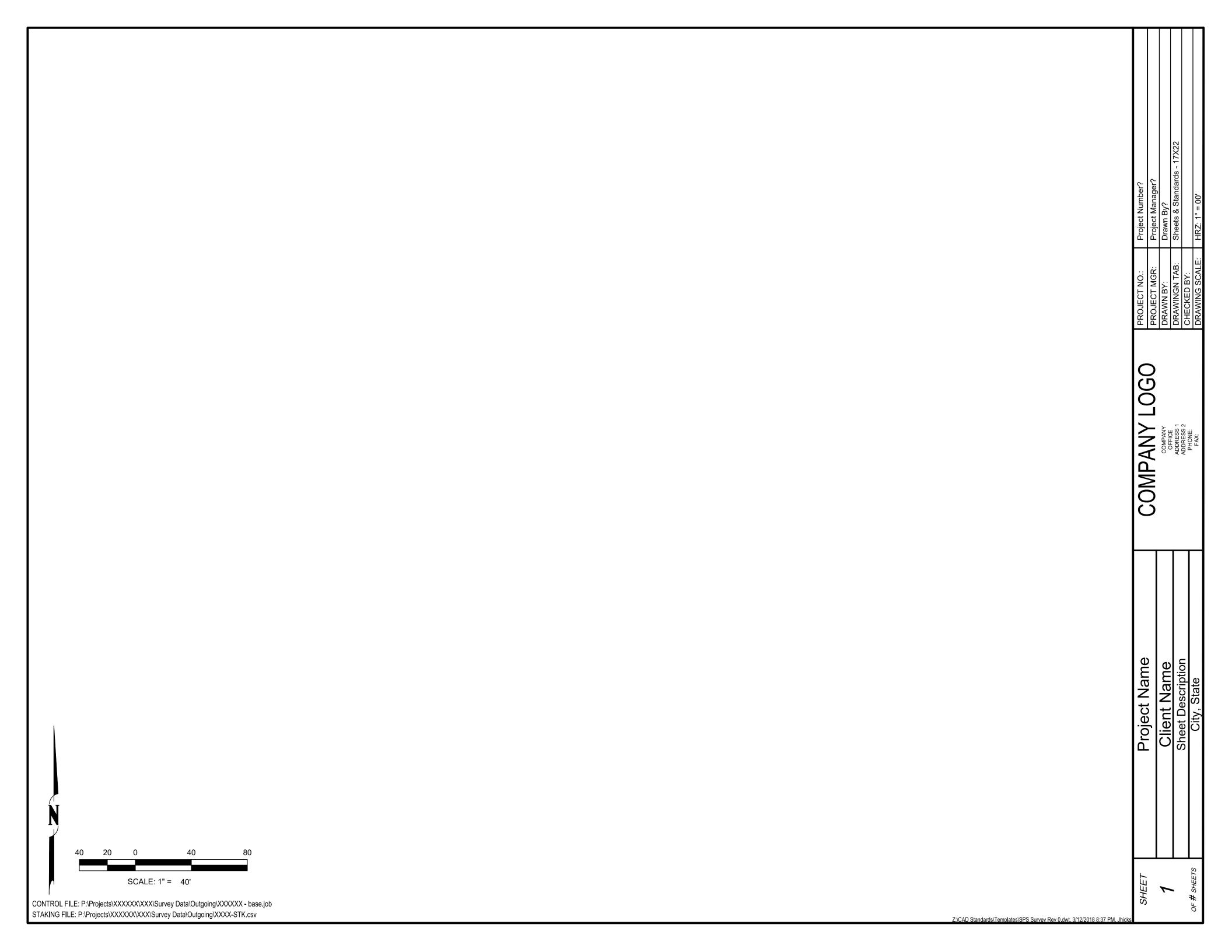


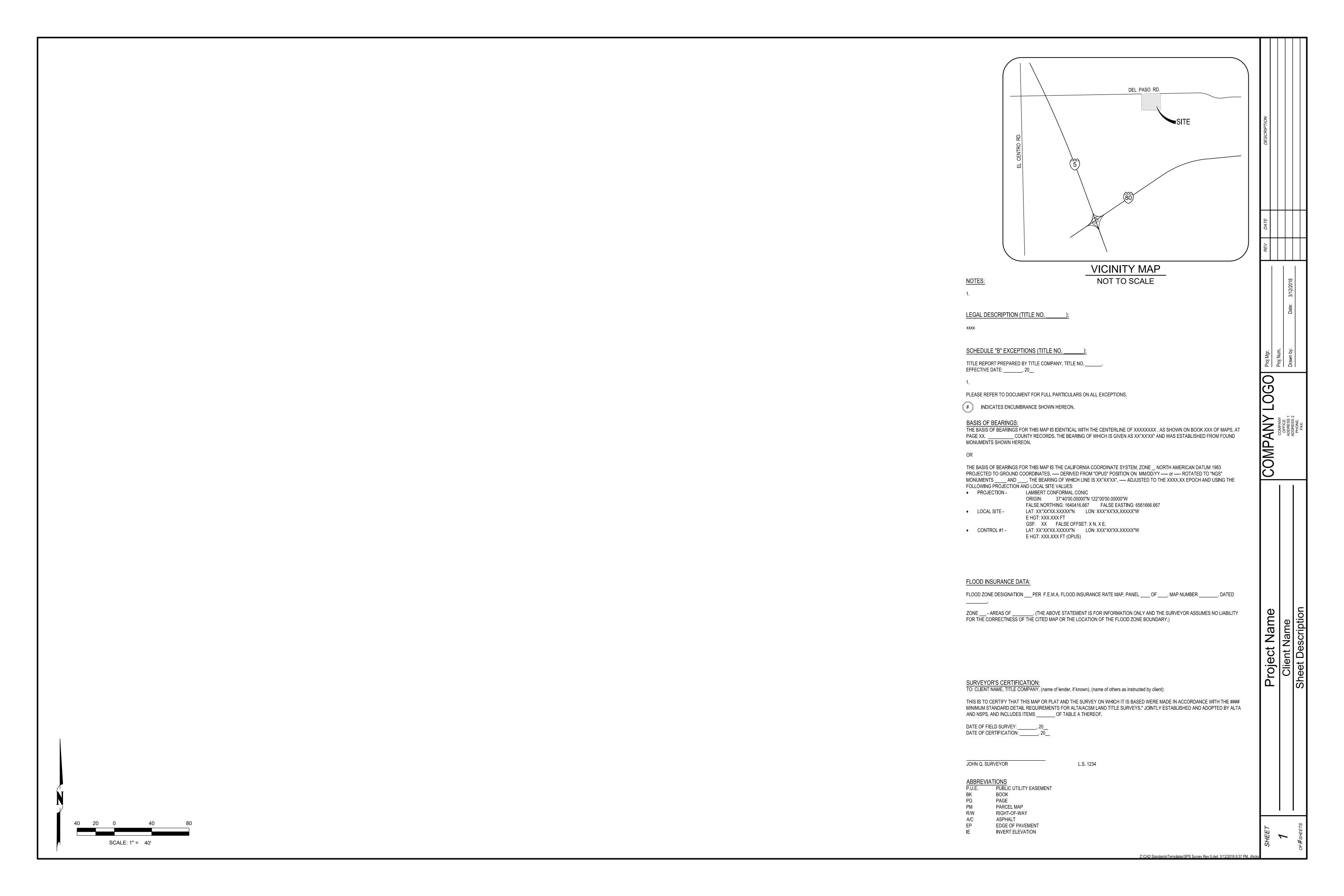
CONTROL TABLE: PT# NORTHING **EASTING** ELEV. DESC. 10000.00 10000.00 1000.00 CP-1 40 80 20 SCALE: 1" = 40'

COMPANY LOGO
COMPANY - OFFICE
ADDRESS
PHONE: FAX: Client Name Project Name Sheet Description City, State

OF#SHEETS

SHEET



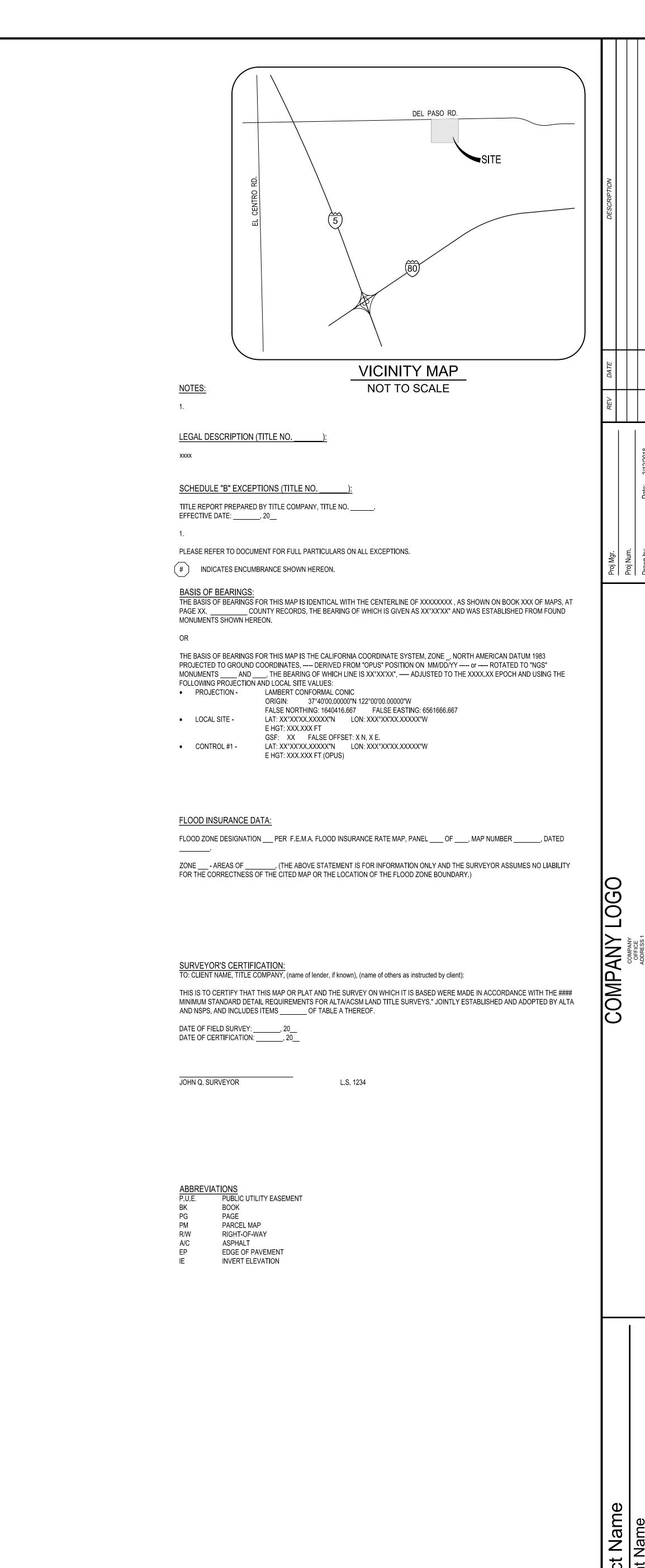


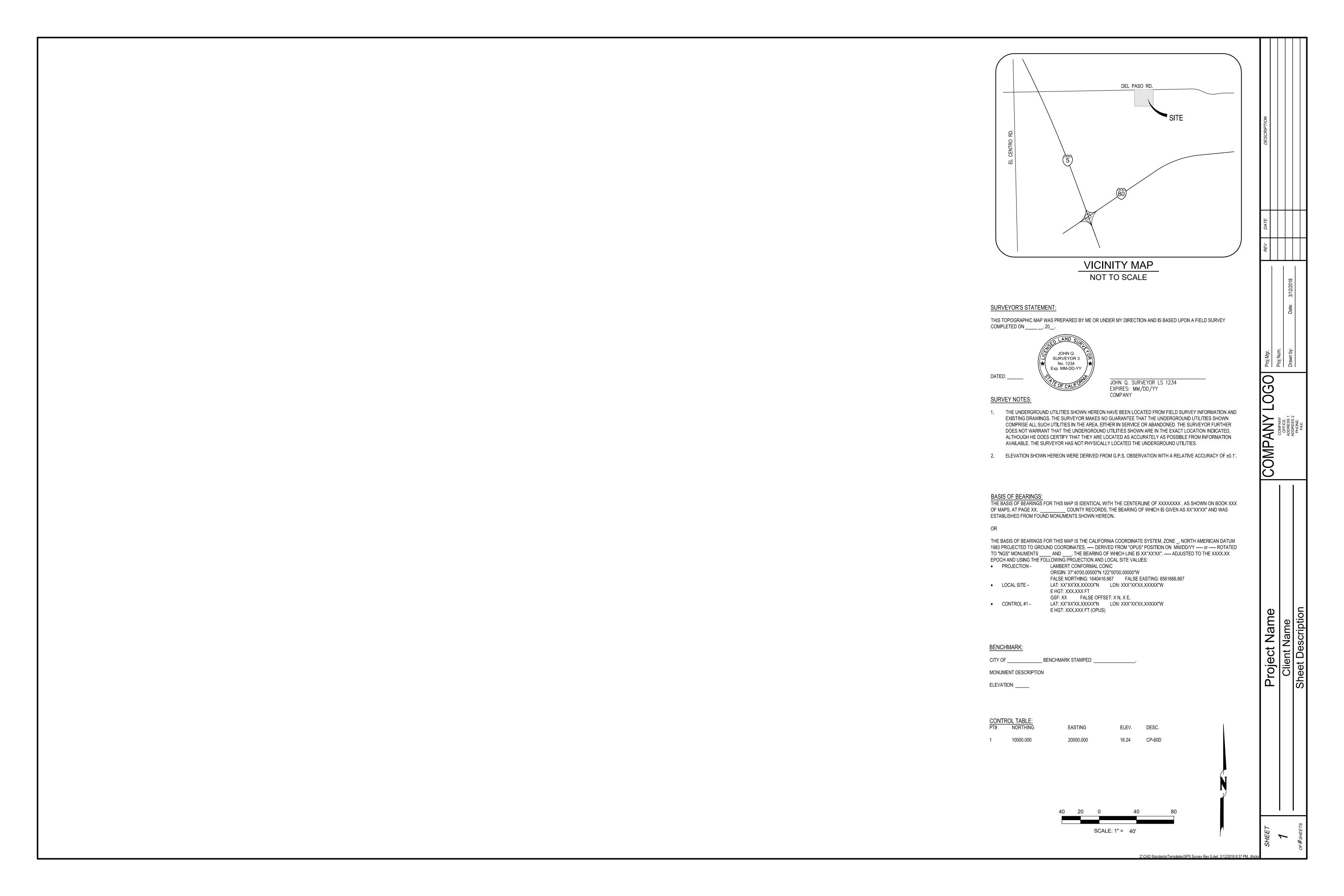
DEL PASO RD. **VICINITY MAP** NOT TO SCALE LEGAL DESCRIPTION (TITLE NO. _____): SCHEDULE "B" EXCEPTIONS (TITLE NO. ____): TITLE REPORT PREPARED BY TITLE COMPANY, TITLE NO. _____.
EFFECTIVE DATE: ______, 20__ PLEASE REFER TO DOCUMENT FOR FULL PARTICULARS ON ALL EXCEPTIONS. # INDICATES ENCUMBRANCE SHOWN HEREON. BASIS OF BEARINGS:
THE BASIS OF BEARINGS FOR THIS MAP IS IDENTICAL WITH THE CENTERLINE OF XXXXXXXX , AS SHOWN ON BOOK XXX OF MAPS, AT PAGE XX, _____ COUNTY RECORDS, THE BEARING OF WHICH IS GIVEN AS XX°XX'XX" AND WAS ESTABLISHED FROM FOUND MONUMENTS SHOWN HEREON. THE BASIS OF BEARINGS FOR THIS MAP IS THE CALIFORNIA COORDINATE SYSTEM, ZONE _, NORTH AMERICAN DATUM 1983 PROJECTED TO GROUND COORDINATES, ----- DERIVED FROM "OPUS" POSITION ON MM/DD/YY ----- or ----- ROTATED TO "NGS" MONUMENTS _____ AND ____, THE BEARING OF WHICH LINE IS XX°XX'XX", ----- ADJUSTED TO THE XXXX.XX EPOCH AND USING THE FOLLOWING PROJECTION AND LOCAL SITE VALUES: PROJECTION - LAMBERT CONFORMAL CONIC ORIGIN: 37°40'00.00000"N 122°00'00.00000"W FALSE NORTHING: 1640416.667 FALSE EASTING: 6561666.667 LOCAL SITE - LAT: XX°XX'XX.XXXXX"N LON: XXX°XX'XX.XXXXX"W E HGT: XXX.XXX FT GSF: XX FALSE OFFSET: X N, X E.

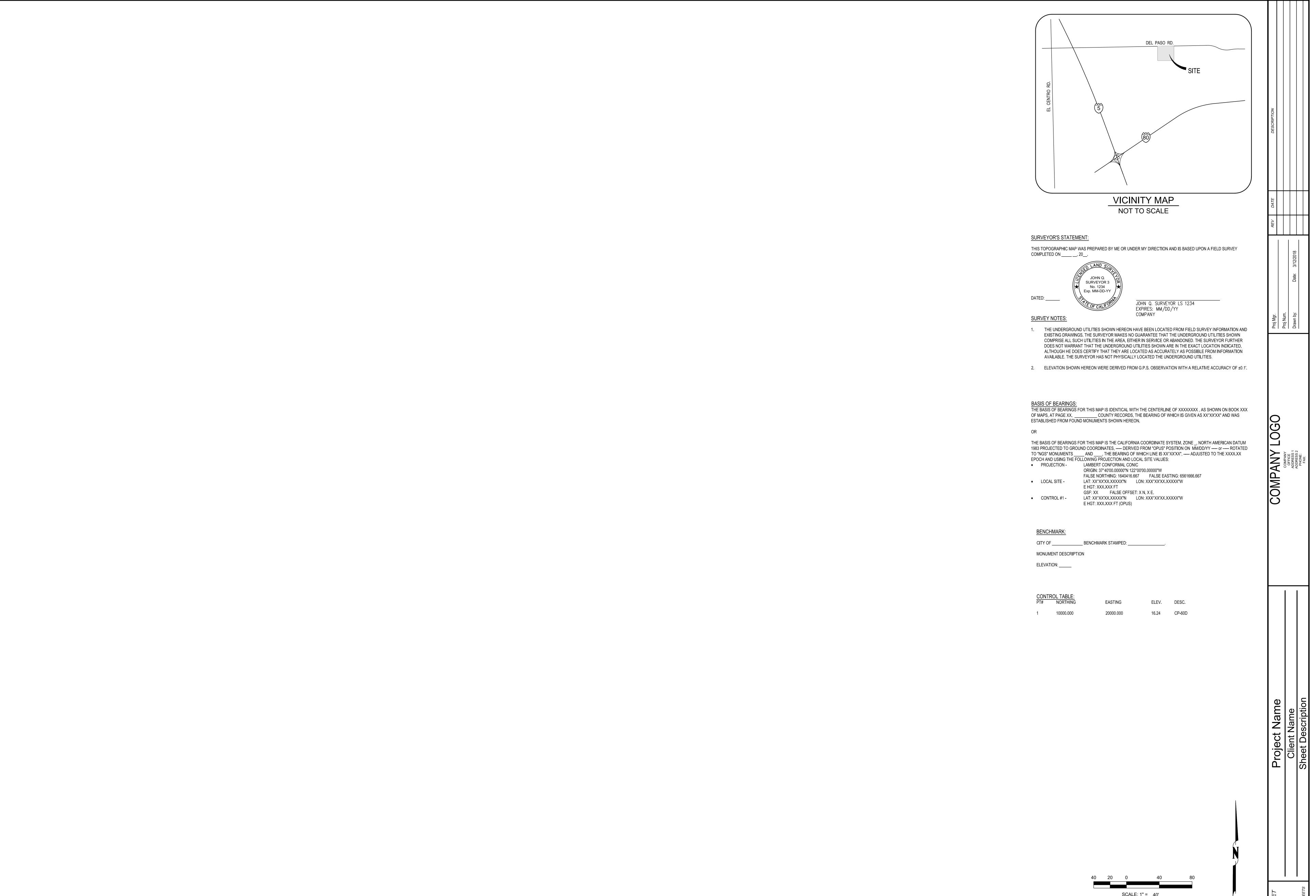
• CONTROL #1 - LAT: XX°XX'XX.XXXXX"N LON: XXX°XX'XX.XXXXX"W E HGT: XXX.XXX FT (OPUS) FLOOD INSURANCE DATA: FLOOD ZONE DESIGNATION ___ PER F.E.M.A. FLOOD INSURANCE RATE MAP, PANEL ____ OF ____, MAP NUMBER _____, DATED ZONE ___ - AREAS OF _____. (THE ABOVE STATEMENT IS FOR INFORMATION ONLY AND THE SURVEYOR ASSUMES NO LIABILITY FOR THE CORRECTNESS OF THE CITED MAP OR THE LOCATION OF THE FLOOD ZONE BOUNDARY.) SURVEYOR'S CERTIFICATION:
TO: CLIENT NAME, TITLE COMPANY, (name of lender, if known), (name of others as instructed by client): THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE #### MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/ACSM LAND TITLE SURVEYS," JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS _____ OF TABLE A THEREOF. DATE OF FIELD SURVEY: DATE OF CERTIFICATION: ____ JOHN Q. SURVEYOR L.S. 1234 BOOK PAGE PARCEL MAP RIGHT-OF-WAY ASPHALT EDGE OF PAVEMENT INVERT ELEVATION

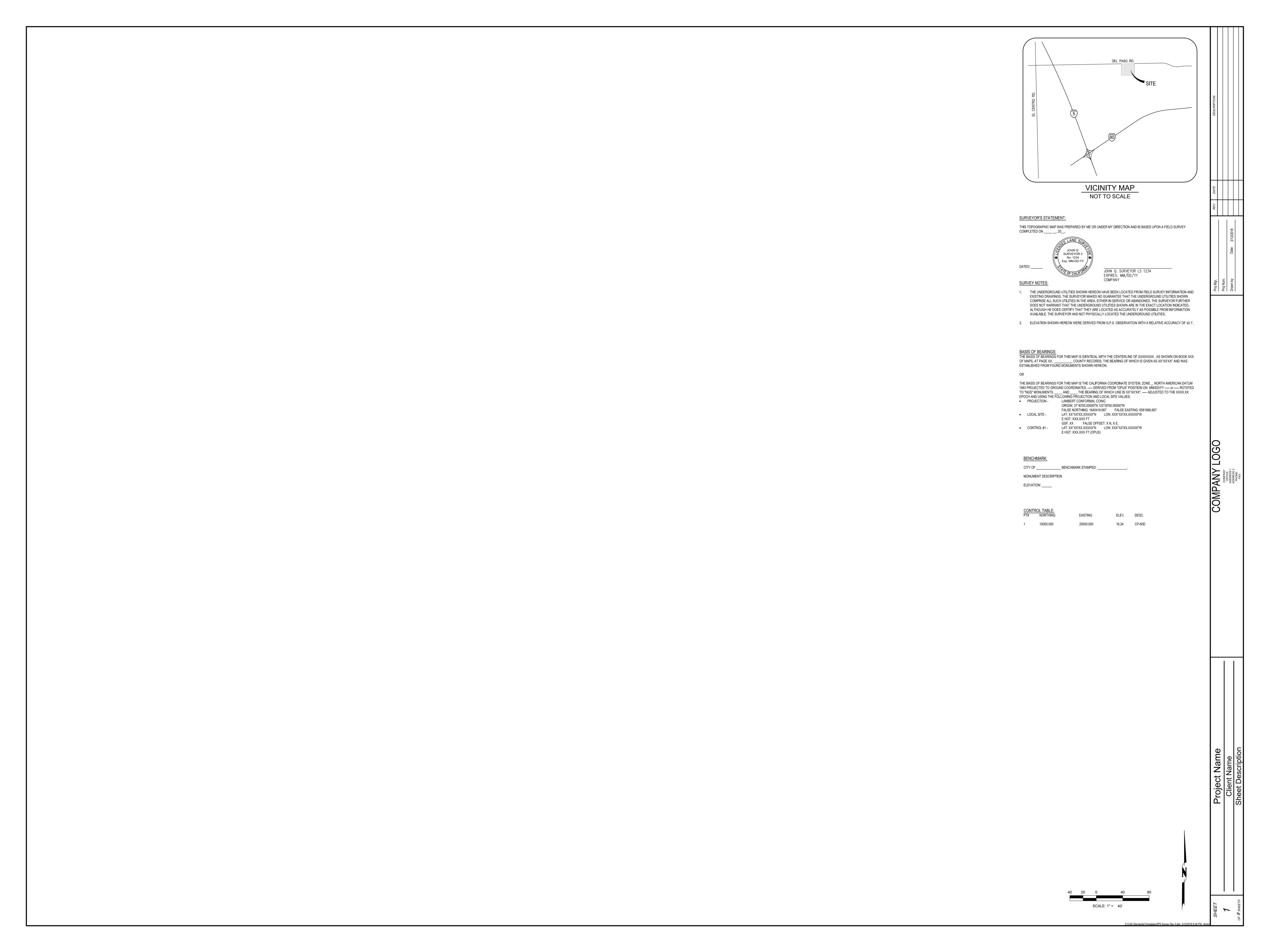
40 20 0 40 SCALE: 1" = 40'

знеет

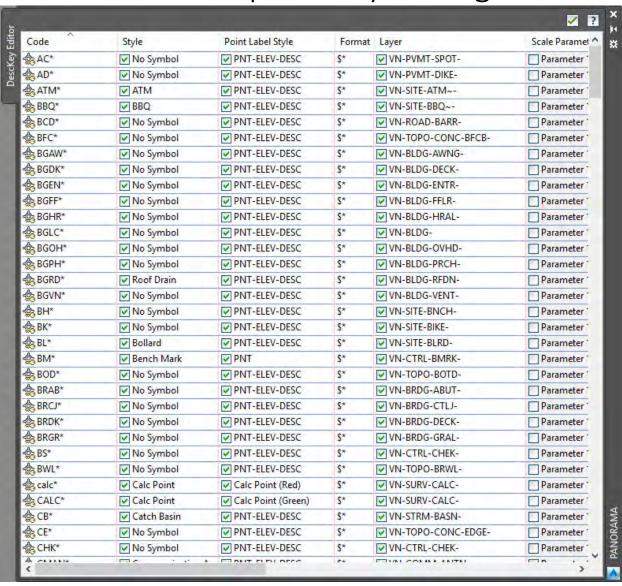




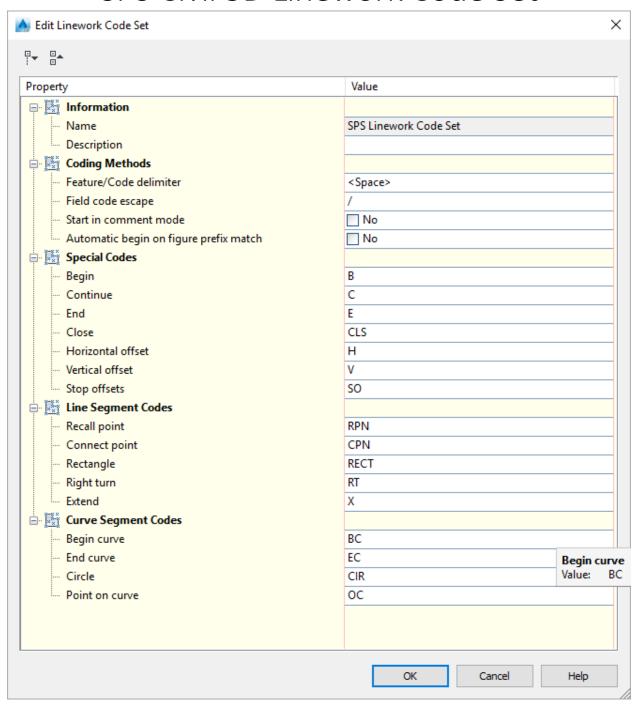




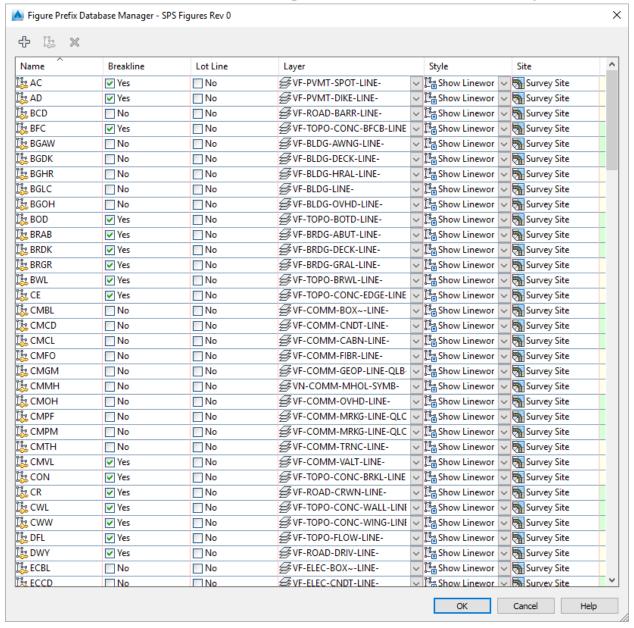
SPS Description Key Manager

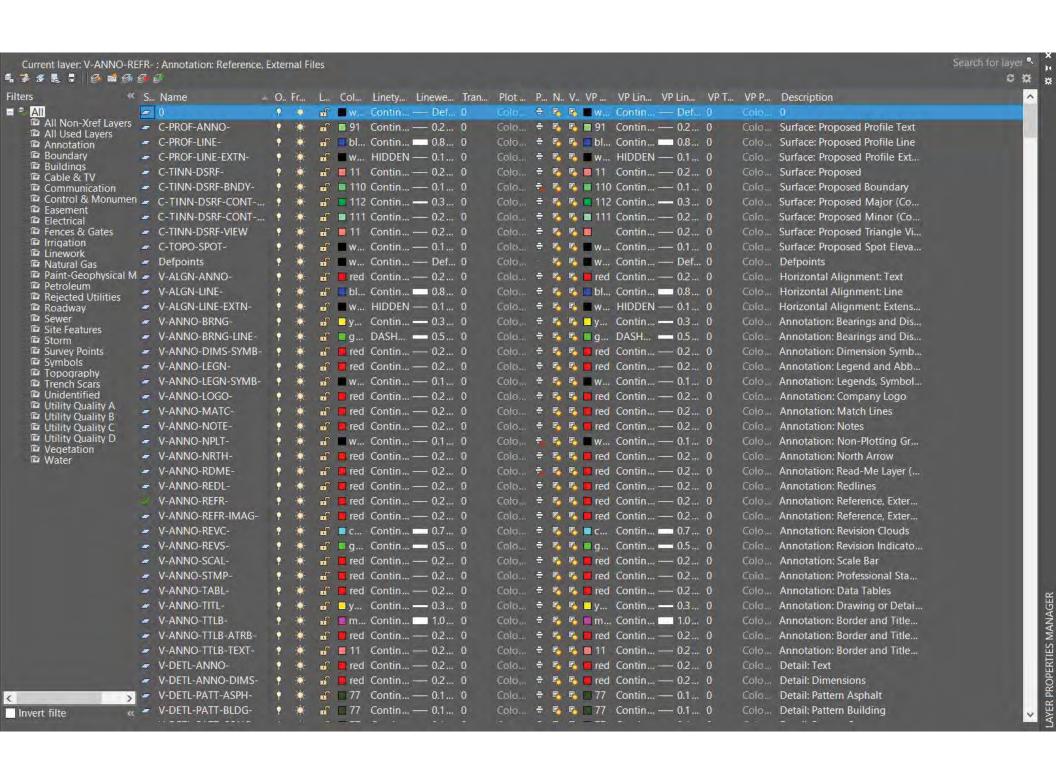


SPS Civil 3D Linework Code Set



SPS Civil 3D Figure Prefix Library





SPS Civil 3D Figure Commands Guide



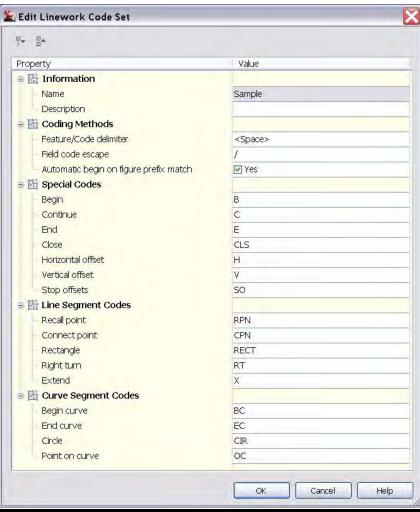
All line work features should be collected with the figure commands below to allow automated processing upon import to Civil 3D through the Survey Tab of the Toolspace. There are a few simple rules that should be followed at all times to ensure intent of the field surveyor.

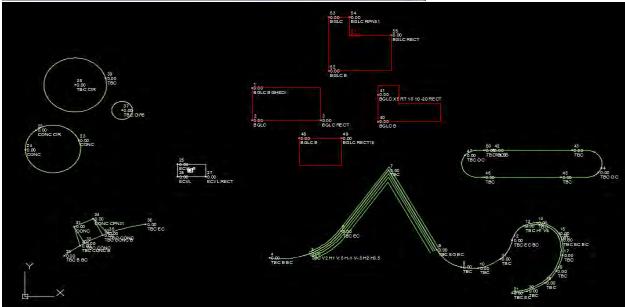
- All Figure Commands should be entered after the Feature Code with a space in between them (e.g. TBC B).
- Always collect feature codes with symbols as a separate point.
- Collect line feature points with multiple codes in sequence (e.g. TBC B SWK B).
- Collect all curves with at least three points. The beginning point of the curve will have the BC figure command and the last point will have the EC figure command. Figures can also begin or end on a curve by using the B and E commands together with BC and EC (e.g. TBC B BC or TBC EC E).

В	Begin Figure	Begin a figure with the name of the preceding feature code
С	Continue	Continue a figure with the name of the preceding feature code
E	End Figure	End a figure with the name of the preceding feature code
ВС	Begin Curve	Beginning of curve, all points to end curve will be included
EC	End Curve	End of curve, all points from begin curve will be included
CLS	Close Figure	Closes a figure to the first point from current location
/note/		Used to enter notes within a feature code, NO SPACES AT BEGINNING OR END OF NOTE
CIR	Circles	1, 2 or 3 point circles can be collected
H or V	Horizontal or Vertical	Horizontal and vertical offset information is input as H# and V#
	Offset	(positive # is right/up, negative # is left/down)
OC	Point on Curve	Use 2 tangent shots before and after a curve with a point on
		the curve to automatically create a figure with 2 tangent lines
		and a curve between with calculated PC and PT points
RECT	Rectangle	Closes figure by turning 90 deg from FIRST and LAST line
		segments, also used to offset current segment by specified
		amount
CPN	Connect Point Number	Creates a new figure from current point to a specified point
		number
RPN	Recall Point Number	Connect active figure with a segment from the last point in a
		figure to the specified point number
RT	Right Turn	Used with a line segment code to insert additional vertices
		perpendicular to the figure
SO	Stop Offset	Stops the H and V offsets and continues with the primary figure
Х	Extend	Extend the current segment ahead with a positive number and
		back with a negative number a specified distance from the
		current point

SPS Civil 3D Figure Commands Guide







Pens, Text & Linetypes - SPS B&W-Color.ctb



TEXT STYLE NAME	HEIGHT	FONT	<u>APPLICATION</u>
NCS	0.0983	ARIAL	NCS STANDARD FONT
NCS1	0.0983	ARIAL	NCS STANDARD FONT
30 6 (NCS2) (0.0	0983)☆Ф☆☆	(WINGDINGS)	グラグ A T D P P P P P P P P P P P P P P P P P P
NCS3	0.0983	CONSOLOAS	NCS STANDARD FONT
NCS4	0.0983	TECHNICLITE	NCS STANDARD FONT
SPS-BOLD	0.15	BOLD	TITLE BLOCK, MAP NUMBERS, BORDER BOOK AND PAGE
SPS-BOUNDARY	0.115	SIMPLEX	BOUNDARY BEARINGS AND DISTANCES
SPS-DASHED	0.45	[]/(SHE][)	PARCEL NUMBERS, ADJACENT OWNERS, SUBDIVISION NAMES
SPS-PARCELS	0.100	SIMPLEX	LOT AND EASEMENT BEARINGS AND DISTANCES
SPS-ROMANC	0.15	ROMANC	STREETS, WATERWAYS, LOT NUMBERS AND NAMES
ี่ อนุล-ลุทุงกฤ <i>พ</i>	77.3	สมหอดพ	tyrget unmsera, ydtygenl omnera, ansolnialon nymea
SPS-TOPO NOTES	0.10	HANDI	TOPO NOTES AND TEXT
STANDARD	0.0	ARIAL	DEFAULT AUTOCAD STYLE

	SUE	RVEY LEGEND			CIV	VIL LEGEND	
<u>DESCRIPTION</u>	COLOR	LINETYPE	PLOT EXAMPLE	DESCRIPTION	COLOR	LINETYPE	PLOT EXAMPLE
BOUNDARY SUBDIVISION LINE	5	CONTINUOUS	-				
BOUNDARY PARCEL LINE	52	CONTINUOUS					
STREET CENTERLINE	51	CENTER					
EASEMENT LINES	121	HIDDEN2					
RIGHT-OF-WAY LINE	213	PHANTOM2					
FENCE LINE	1	FENCE	xx				
UNDERGROUND CABLE TV LINE	40	CABLETV	TV				
OVERHEAD CABLE TV LINE	40	OVERHEADCABLE	OTV				
QUALITY D CABLE TV LINE	40	CABLETV-QLD					
COMMUNICATION LINE	10	COMMUNICATION	СОМ				
FIBER OPTIC LINE	10	FIBEROPTIC	FO				
OVERHEAD COMMUNICATION LINE	10	OVERHEADCOMM	oc				
QUALITY D COMMUNICATION LINE	10	COMMUNICATION-QLD					
ELECTRIC LINE	10	ELECTRIC	Е				
OVERHEAD ELECTRIC LINE	10	OVERHEADELECTRIC	OE				
QUALITY D ELECTRIC LINE	10	ELECTRIC-QLD	EEE				
IRRIGATION LINE	160	IRRIGATION	IR				
QUALITY D IRRIGATION LINE	160	IRRIGATION-QLD					
NATURAL GAS LINE	50	GAS	G				
QUALITY D NATURAL GAS LINE	50	GAS-QLD	G G G G				
PETROLEUM LINE	50	PETROLEUM	PET——				
QUALITY D PETROLEUM LINE	50	PETROLEUM-QLD					
SEWER LINE	90	SEWER	ss				
FORCED SEWER LINE	90	SEWERFORCED	SF				
QUALITY D SEWER LINE	90	SEWER-QLD					
STORM DRAIN LINE	210	STORMDRAIN	SD				
QUALITY D STORM DRAIN LINE	210	STORMDRAIN-QLD	——————————————————————————————————————				
UNIDENTIFIED OVERHEAD LINE	WHITE	UNIDENTIFIEDOVERHEAD	UOH				
UNIDENTIFIED UNDERGROUND LINE	WHITE	UNIDENTIFIEDUNDERGROUND	UUL				
QUALITY D UNIDENTIFIED LINE	WHITE	UNIDENTIFIED-QLD	UUL UUL				
WATER LINE	140	WATER					
QUALITY D WATER LINE	140	WATER-QLD	w w w				

Name	On	Freeze	Lock	* Color	Linetype	Lineweight	Transparency PlotStyle	Plot	Description
0	Υ	N	Ν	■ white	Continuous	Default	90 Color_7	Υ	
C-PROF-ANNO-	Υ	N	Ν	9 1	Continuous	0.25mm	0 Color_91	Υ	Surface: Proposed Profile Text
C-PROF-LINE-	Υ	N	Ν	blue	Continuous	0.80mm	0 Color_5	Υ	Surface: Proposed Profile Line
C-PROF-LINE-EXTN-	Υ	N	Ν	■ white	HIDDEN	0.13mm	0 Color_7	Υ	Surface: Proposed Profile Extension
C-TINN-DSRF-	Υ	N	Ν	1 1	Continuous	0.25mm	0 Color_11	Υ	Surface: Proposed
C-TINN-DSRF-BNDY-	Υ	N	Ν	110	Continuous	0.15mm	0 Color_110	N	Surface: Proposed Boundary
C-TINN-DSRF-CONT-MAJR-	Υ	N	Ν	112	Continuous	0.35mm	0 Color_112	Υ	Surface: Proposed Major (Contours)
C-TINN-DSRF-CONT-MINR-	Υ	N	Ν	111	Continuous	0.25mm	0 Color_111	Υ	Surface: Proposed Minor (Contours)
C-TINN-DSRF-VIEW	Υ	N	Ν	1 1	Continuous	0.25mm	0 Color_11	Υ	Surface: Proposed Triangle View
C-TOPO-SPOT-	Υ	N	Ν	■ white	Continuous	0.13mm	0 Color_7	Υ	Surface: Proposed Spot Elevations
Defpoints	Υ	N	Ν	■ white	Continuous	Default	90 Color_7	Ν	
V-ALGN-ANNO-	Υ	N	Ν	red	Continuous	0.25mm	0 Color_1	Υ	Horizontal Alignment: Text
V-ALGN-LINE-	Υ	N	Ν	blue	Continuous	0.80mm	0 Color_5	Υ	Horizontal Alignment: Line
V-ALGN-LINE-EXTN-	Υ	N	Ν	■ white	HIDDEN	0.13mm	0 Color_7	Υ	Horizontal Alignment: Extension Line
V-ANNO-BRNG-	Υ	N	Ν	yellow	Continuous	0.35mm	0 Color_2	Υ	Annotation: Bearings and Distance Labels
V-ANNO-BRNG-LINE-	Υ	N	Ν	green	DASHED	0.50mm	0 Color_3	Υ	Annotation: Bearings and Distance Tie Line
V-ANNO-DIMS-SYMB-	Υ	N	Ν	red	Continuous	0.25mm	0 Color_1	Υ	Annotation: Dimension Symbol
V-ANNO-LEGN-	Υ	N	Ν	red	Continuous	0.25mm	0 Color_1	Υ	Annotation: Legend and Abbreviation Text
V-ANNO-LEGN-SYMB-	Υ	N	Ν	■ white	Continuous	0.13mm	0 Color_7	Υ	Annotation: Legends, Symbol Keys
V-ANNO-LOGO-	Υ	N	Ν	red	Continuous	0.25mm	0 Color_1	Υ	Annotation: Company Logo
V-ANNO-MATC-	Υ	N	Ν	red	Continuous	0.25mm	0 Color_1	Υ	Annotation: Match Lines
V-ANNO-NOTE-	Υ	N	Ν	red	Continuous	0.25mm	0 Color_1	Υ	Annotation: Notes
V-ANNO-NPLT-	Υ	N	Ν	white	Continuous	0.13mm	0 Color_7	Ν	Annotation: Non-Plotting Graphic Information
V-ANNO-NRTH-	Υ	N	Ν	red	Continuous	0.25mm	0 Color_1	Υ	Annotation: North Arrow
V-ANNO-RDME-	Υ	N	Ν	red	Continuous	0.25mm	0 Color_1	Ν	Annotation: Read-Me Layer (Not Plotted)
V-ANNO-REDL-	Υ	N	Ν	red	Continuous	0.25mm	0 Color_1	Υ	Annotation: Redlines
V-ANNO-REFR-	Υ	N	Ν	red	Continuous	0.25mm	0 Color_1	Υ	Annotation: Reference, External Files
V-ANNO-REFR-IMAG-	Υ	N	Ν	red	Continuous	0.25mm	0 Color_1	Υ	Annotation: Reference, External Images
V-ANNO-REVC-	Υ	N	Ν	cyan	Continuous	0.70mm	0 Color_4	Υ	Annotation: Revision Clouds
V-ANNO-REVS-	Υ	N	Ν	green	Continuous	0.50mm	0 Color_3	Υ	Annotation: Revision Indicators And Text
V-ANNO-SCAL-	Υ	N	Ν	red	Continuous	0.25mm	0 Color_1	Υ	Annotation: Scale Bar
V-ANNO-STMP-	Υ	N	Ν	red	Continuous	0.25mm	0 Color_1	Υ	Annotation: Professional Stamps
V-ANNO-TABL-	Υ	N	Ν	red	Continuous	0.25mm	0 Color_1	Υ	Annotation: Data Tables
V-ANNO-TITL-	Υ	N	Ν	yellow	Continuous	0.35mm	0 Color_2	Υ	Annotation: Drawing or Detail Titles
V-ANNO-TTLB-	Υ	N	Ν	magenta	Continuous	1.00mm	0 Color_6	Υ	Annotation: Border and Title Block
V-ANNO-TTLB-ATRB-	Υ	N	Ν	red	Continuous	0.25mm	0 Color_1	Υ	Annotation: Border and Title Block Attributes
V-ANNO-TTLB-TEXT-	Υ	N	Ν	11	Continuous	0.25mm	0 Color_11	Υ	Annotation: Border and Title Block Text
VB-BNDY-CALC-	Υ	N	Ν	yellow	Continuous	0.35mm	0 Color_2	Υ	Boundary: Calculations
VB-BNDY-LOTN-ANNO-	Υ	N	Ν	red	Continuous	0.25mm	0 Color_1	Υ	Boundary: Lot Number Text
VB-BNDY-PRCL-ANNO-	Υ	N	Ν	red	Continuous	0.25mm	0 Color_1	Υ	Boundary: Parcel Text
VB-BNDY-PRCL-ANNO-E-	Υ	N	N	71	Continuous	0.25mm	0 Color_71	Υ	Boundary: Parcel Text Existing
VB-BNDY-PRCL-LINE-	Υ	N	N	52	Continuous	0.35mm	0 Color_52	Υ	Boundary: Parcel Line
VB-BNDY-PRCL-LINE-E-	Υ	N	N	71	Continuous	0.25mm	0 Color_71	Υ	Boundary: Parcel Line Existing
VB-BNDY-RECD-ANNO-	Υ	N	N	1 1	Continuous	0.25mm	0 Color_11	Υ	Boundary: Record Text
VB-BNDY-SECT-ANNO-	Υ	Ν	N	1 2	Continuous	0.35mm	0 Color_12	Υ	Boundary: Section Text

VD ECNAT CTDNA LINE	.,			- 424	LUDDENIA	0.25	0.6-1424	.,	Farance & Channelline
VB-ESMT-STRM-LINE-	Y	N	N	121	HIDDEN2	0.25mm	0 Color_121	Y	Easement: Storm Line
VB-ESMT-TRAL-ANNO-	Y	N	N	121	Continuous	0.25mm	0 Color_121	Y	Easement: Trail Text
VB-ESMT-TRAL-LINE-	Y	N	N	121	HIDDEN2	0.25mm	0 Color_121	Y	Easement: Trail Line
VB-ESMT-UTIL-ANNO-	Υ	N	N	121	Continuous	0.25mm	0 Color_121	Υ	Easement: Utility Text
VB-ESMT-UTIL-LINE-	Υ	N	N	121	HIDDEN2	0.25mm	0 Color_121	Υ	Easement: Utility Line
VB-ESMT-WATR-ANNO-	Υ	N	N	121	Continuous	0.25mm	0 Color_121	Υ	Easement: Water Text
VB-ESMT-WATR-LINE-	Υ	N	N	121	HIDDEN2	0.25mm	0 Color_121	Υ	Easement: Water Line
VB-RWAY-ANNO-	Υ	N	N	yellow	Continuous	0.35mm	0 Color_2	Υ	Right-Of-Way: Text
VB-RWAY-ANNO-E-	Υ	N	N	232	Continuous	0.35mm	0 Color_232	Υ	Right-Of-Way: Text Existing
VB-RWAY-CNTR-ANNO-	Υ	N	N	51	Continuous	0.25mm	0 Color_51	Υ	,
VB-RWAY-CNTR-ANNO-E-	Υ	N	N	171	Continuous	0.25mm	0 Color_171	Υ	Right-Of-Way: Centerline Text Existing
VB-RWAY-CNTR-LINE-	Υ	N	N	1 1	CENTER	0.25mm	0 Color_11	Υ	Right-Of-Way: Centerline Line
VB-RWAY-CNTR-LINE-E-	Υ	N	N	171	CENTER	0.25mm	0 Color_171	Υ	Right-Of-Way: Centerline Line Existing
VB-RWAY-LINE-	Υ	N	N	213	PHANTOM2	0.50mm	0 Color_213	Υ	Right-Of-Way: Line
VB-RWAY-LINE-E-	Υ	N	Ν	231	PHANTOM2	0.25mm	0 Color_231	Υ	Right-Of-Way: Line Existing
V-DETL-ANNO-	Υ	N	Ν	red	Continuous	0.25mm	0 Color_1	Υ	Detail: Text
V-DETL-ANNO-DIMS-	Υ	N	Ν	red	Continuous	0.25mm	0 Color_1	Υ	Detail: Dimensions
V-DETL-PATT-ASPH-	Υ	N	Ν	77	Continuous	0.13mm	0 Color_77	Υ	Detail: Pattern Asphalt
V-DETL-PATT-BLDG-	Υ	N	Ν	7 7	Continuous	0.13mm	0 Color_77	Υ	Detail: Pattern Building
V-DETL-PATT-CONC-	Υ	N	Ν	7 7	Continuous	0.13mm	0 Color_77	Υ	Detail: Pattern Concrete
V-DETL-PATT-DIRT-	Υ	N	Ν	7 7	Continuous	0.13mm	0 Color_77	Υ	Detail: Pattern Dirt
V-DETL-PATT-GRVL-	Υ	N	Ν	77	Continuous	0.13mm	0 Color_77	Υ	Detail: Pattern Gravel
V-DETL-PATT-MISC-	Υ	N	Ν	77	Continuous	0.13mm	0 Color_77	Υ	Detail: Pattern Misc.
V-DETL-SYMB-MASK-	Υ	N	Ν	253	Continuous	Default	90 Color_253	Υ	Detail: Symbol Masking
V-DETL-VMAP-	Υ	N	Ν	<pre>red</pre>	Continuous	0.25mm	0 Color_1	Υ	Detail: Vicinity Map
V-DETL-VMAP-ANNO-	Υ	N	Ν	<pre>red</pre>	Continuous	0.25mm	0 Color_1	Υ	Detail: Vicinity Map Text
V-DETL-VMAP-HTCH-	Υ	N	Ν	253	Continuous	0.25mm	0 Color_253	Υ	Detail: Vicinity Map Hatch
V-DETL-VMAP-LINE-	Υ	N	Ν	red	Continuous	0.25mm	0 Color_1	Υ	Detail: Vicinity Map Line
V-DETL-VPRT-NPLT-	Υ	N	Ν	■ white	Continuous	0.13mm	0 Color_7	Ν	Detail: View Port (Non-Plotting)
V-DETL-VPRT-PLOT-	Υ	N	Ν	■ white	Continuous	0.13mm	0 Color_7	Υ	Detail: View Port (Plotting)
VF-BLDG-AWNG-LINE-	Υ	N	Ν	red	DASHED2	0.25mm	0 Color_1	Υ	Building: Awning Line
VF-BLDG-DECK-LINE-	Υ	N	Ν	red	DASHED2	0.25mm	0 Color_1	Υ	Building: Deck Line (Attached, No Roof Overhead)
VF-BLDG-HRAL-LINE-	Υ	N	Ν	■ white	Continuous	0.13mm	0 Color_7	Υ	Building: Handrail Line
VF-BLDG-LINE-	Υ	N	N	red	Continuous	0.25mm	0 Color_1	Υ	Building: Face Line
VF-BLDG-OVHD-LINE-	Υ	N	N	red	DASHED2	0.25mm	0 Color 1	Υ	Building: Overhead Eave Line
VF-BLDG-PRCH-LINE-	Υ	N	N	red	DASHED2	0.25mm	0 Color 1	Υ	Building: Porch Line (Attached, Roof Overhead)
VF-BLDG-TEXT-	Υ	N	N	■ red	Continuous	0.25mm	0 Color 1	Υ	Building: Text
VF-BRDG-ABUT-LINE-	Υ	N	N	9 1	Continuous	0.25mm	0 Color 91	Υ	Bridge: Abutment Line
VF-BRDG-CTLJ-LINE-	Υ	N	N	9 1	Continuous	0.25mm	0 Color_91	Υ	Bridge: Control Joint Line
VF-BRDG-DECK-LINE-	Υ	N	N	9 1	Continuous	0.25mm	0 Color_91	Υ	Bridge: Deck Line
VF-BRDG-GRAL-LINE-	Υ	N	N	9 1	Continuous	0.25mm	0 Color_91	Υ	Bridge: Guardrail Line
VF-BRDG-TEXT-	Y	N	N	91	Continuous	0.25mm	0 Color_91	Y	Bridge: Text
VF-CATV-BOX~-LINE-	Y	N	N	■ white	Continuous	0.13mm	0 Color_7	Y	Cable TV: Box Line
VF-CATV-CABN-LINE-	Y	N	N	■ white	Continuous	0.13mm	0 Color 7	Y	Cable TV: Cabinet Line
VF-CATV-CNDT-LINE-	Y	N	N	40	CABLETV	0.15mm	0 Color 40	Y	Cable TV: Conduit Line
VF-CATV-GEOP-LINE-QLB-	Y	N	N	4 0	CABLETV	0.15mm	0 Color_40	Υ	
SALL GEOL ENTE GED	•	. •		5	JANUEL I V	0.15//////	2 60101_40		cases . T. Geophysical Harking Quality D Life

VF-FUEL-LQPG-PIPE-WALL-LINE-	Υ	N	N	5 0	HIDDEN2	0.15mm	0 Color_50	Υ	Petroleum: Pipe Wall Line
VF-FUEL-LQPG-TEXT-	Y	N	N	<u>51</u>	Continuous	0.25mm	0 Color 51	Υ	Petroleum: Text
VF-FUEL-LQPG-UNDR-LINE-QLD-	Y	N	N	<u>50</u>	PETROLEUM-QLD	0.15mm	0 Color 50	Υ	Petroleum: Underground Pipe Quality D Line
VF-GATE-LINE-	Y	N	N	■ white	Continuous	0.13mm	0 Color 7	Y	Gate: Line
VF-IRRG-BOX~-LINE-	Y	N	N	■ white	Continuous	0.13mm	0 Color_7	Υ	Irrigation: Box Line
VF-IRRG-GEOP-LINE-QLB-	Y	N	N	1 60	IRRIGATION	0.15mm	0 Color_160	Υ	Irrigation: Geophysical Marking Quality B Line
VF-IRRG-MRKG-LINE-QLC-	Y	N	N	1 60	IRRIGATION	0.15mm	0 Color_160	Y	Irrigation: Marking Quality C Line
VF-IRRG-MRKG-LINE-RJCT-	Y	Υ	N	■ white	IRRIGATION	0.13mm	0 Color 7	N	Irrigation: Marking Rejected Line
VF-IRRG-PIPE-LINE-QLA-	Y	N	N	1 60	IRRIGATION	0.15mm	0 Color 160	Υ	Irrigation: Exposed Pipe Quality A Line
VF-IRRG-UNDR-LINE-QLD-	Υ	N	N	1 60	IRRIGATION-QLD	0.15mm	0 Color_160	Υ	Irrigation: Underground Quality D Line
VF-NGAS-GEOP-LINE-QLB-	Υ	N	N	5 0	GAS	0.15mm	0 Color_50	Υ	Natural Gas: Geophysical Marking Quality B Line
VF-NGAS-MISC-LINE-	Υ	N	N	<u> </u>	Continuous	0.15mm	0 Color_50	Υ	Natural Gas: Misc. Line
VF-NGAS-MRKG-LINE-QLC-	Y	N	N	5 0	GAS	0.15mm	0 Color_50	Υ	Natural Gas: Marking Quality C Line
VF-NGAS-MRKG-LINE-RJCT-	Υ	Υ	N	■ white	GAS	0.13mm	0 Color_7	N	Natural Gas: Marking Rejected Line
VF-NGAS-PIPE-LINE-QLA-	Υ	N	N	5 0	GAS	0.15mm	0 Color_50	Υ	Natural Gas: Exposed Pipe Quality A Line
VF-NGAS-PIPE-WALL-LINE-	Υ	N	N	5 0	HIDDEN2	0.15mm	0 Color_50	Υ	Natural Gas: Pipe Wall Line
VF-NGAS-TANK-LINE-	Y	N	N	<u> </u>	Continuous	0.13mm	0 Color 50	Υ	Natural Gas: Tank Line
VF-NGAS-TEXT-	Y	N	N	51	Continuous	0.25mm	0 Color_51	Υ	Natural Gas: Text
VF-NGAS-TRNC-LINE-	Y	N	N	■ white	Continuous	0.13mm	0 Color_7	Υ	Natural Gas: Trench Scar Line
VF-NGAS-UNDR-LINE-QLA-	Y	N	N	<u>50</u>	GAS	0.15mm	0 Color_50	Υ	Natural Gas: Underground Pipe Quality A Line
VF-NGAS-UNDR-LINE-QLD-	Υ	N	N	5 0	GAS-QLD	0.15mm	0 Color_50	Υ	Natural Gas: Underground Pipe Quality D Line
VF-NGAS-VALT-LINE-	Υ	N	N	■ white	Continuous	0.13mm	0 Color 7	Υ	Natural Gas: Vault Line
VF-PLNT-BOX~-LINE-	Υ	N	N	■ white	Continuous	0.13mm	0 Color 7	Υ	Plant: Box Line
VF-PLNT-BUSH-LINE-	Υ	N	N	■ white	Continuous	0.13mm	0 Color 7	Υ	Plant: Bush Line
VF-PLNT-CTNR-LINE-	Υ	N	N	■ white	Continuous	0.13mm	0 Color_7	Υ	Plant: Container Line
VF-PLNT-GCVR-LINE-	Υ	N	N	■ white	Continuous	0.13mm	0 Color_7	Υ	Plant: Ground Cover Line
VF-PLNT-LSSP-LINE-	Υ	N	N	■ white	Continuous	0.13mm	0 Color_7	Υ	Plant: Slope Protection Line
VF-PLNT-TURF-LINE-	Υ	N	N	■ white	Continuous	0.13mm	0 Color 7	Υ	Plant: Lawn-Turf Line
VF-PVMT-DIKE-LINE-	Υ	N	N	5 2	Continuous	0.35mm	0 Color_52	Υ	Pavement: Dike Line
VF-PVMT-EDGE-LINE-	Υ	N	N	5 2	EDGEOFPAVEMENT	0.35mm	0 Color 52	Υ	Pavement: Edge Line
VF-PVMT-SPOT-LINE-	Υ	N	N	■ white	Continuous	0.13mm	0 Color 7	Υ	Pavement: Spot Elevation Line
VF-RAIL-CNTR-LINE-	Υ	N	N	■ white	TRACKS	0.13mm	0 Color_7	Υ	Railroad: Centerline Line
VF-RAIL-TEXT-	Υ	N	Ν	red	Continuous	0.25mm	0 Color_1	Υ	Railroad: Text
VF-RAIL-TRAK-LINE-	Υ	N	N	■ white	Continuous	0.13mm	0 Color_7	Υ	Railroad: Track Line
VF-ROAD-ACCE-LINE-	Υ	N	Ν	211	Continuous	0.25mm	0 Color_211	Υ	Road: Access Line
VF-ROAD-ACCE-TEXT-	Υ	N	Ν	211	Continuous	0.25mm	0 Color_211	Υ	Road: Access Text
VF-ROAD-ANNO-	Υ	N	Ν	11	Continuous	0.25mm	0 Color_11	Υ	Road: Name Text
VF-ROAD-BARR-LINE-	Υ	N	Ν	■ white	Continuous	0.13mm	0 Color_7	Υ	Road: Barricade Line
VF-ROAD-CRWN-LINE-	Υ	N	Ν	21	Continuous	0.25mm	0 Color_21	Υ	Road: Crown Line
VF-ROAD-DIRT-LINE-	Υ	N	Ν	11	EDGEOFDIRTROAD	0.25mm	0 Color_11	Υ	Road: Dirt Line
VF-ROAD-DRIV-LINE-	Υ	N	Ν	52	Continuous	0.35mm	0 Color_52	Υ	Road: Driveway Line
VF-ROAD-GRVL-LINE-	Υ	N	Ν	5 2	EDGEOFGRAVELRO	A 0.35mm	0 Color_52	Υ	Road: Gravel Line
VF-ROAD-KRAL-LINE-	Υ	N	Ν	■ white	Continuous	0.13mm	0 Color_7	Υ	Road: K-Rail Line
VF-ROAD-RAIL-LINE-	Υ	N	Ν	red	Continuous	0.25mm	0 Color_1	Υ	Road: Guardrail Line
VF-ROAD-SHLD-LINE-	Υ	N	Ν	41	Continuous	0.25mm	0 Color_41	Υ	Road: Shoulder Line
VF-ROAD-STRP-BIKE-LINE-	Υ	N	Ν	171	Continuous	0.25mm	0 Color_171	Υ	Road: Bike Lane Line
							_		

\$ ATM	● BBQ BBQ		● RD Roof Drain	● BL Bollard	
BM Bench Mark	⊠ 629 calc*		Catch Basin		
^{ૂખ} ા [≪] Antenna	© Communication Box		C Communication Cabinet	© Communication Geophysical Mark	
© Communication Manhole	C Communication Marking Pos	st	C Communication Pin Flag	© Communication Paint Mark	
⊯ Communication Pole	© Communication Riser		C Communication Vault	<u>/</u> ▲ Control Horizontal-Vertical	
Tree Coniferous	● DD Down Drain		Drop Inlet	Tree Deciduous	
₩ Ph	ROGRAM SOLUTIONS LLC H: (970) 286-0053 PROGRAMSOLUTIONS.COM		Sheet 1 S Survey Rev.0 - Symbol Plot urvey Program Solutions LLC	DATE: 8/15/17 PAGE: 1 OF 7 O.5 (SCALE IN FEET)	

G Gas Manhole	G ↓ Gas Marking Post		G Gas Meter	PG Gas Pin Flag
G Gas Paint Mark	G Gas Riser	G Gas Tank	● GTS Gas Electric Test Station	
G ⊯ Gas Valve	G Gas Vault		GT. Gate	↓ Guy Wire
Guy Wire On Pole	IR Irrigation Box		⟨IR⟩ Irrigation Controller	(R) Irrigation Geophysical Mark
IR 承 Sprinkler	(IR) Irrigation Manhole		IR Irrigation Pin Flag	(ÎR) Irrigation Paint Mark
☐IRSP Irrigation Standpipe	IR ⊯≪ Irrigation Valve		Bush	LS <i>⊘</i> Landscape Light
₩ PH	ROGRAM SOLUTIONS LLC H: (970) 286-0053 PROGRAMSOLUTIONS.COM		Sheet 3 S Survey Rev.0 - Symbol Plot urvey Program Solutions LLC	0 0.5 1 PAGE: 3 OF 7 (SCALE IN FEET)

S	S	Sewer Pin Flag	(S)
Sewer Geophysical Mark	Sewer Manhole		Sewer Paint Mark
Sewer Tank	Arrow	<u>△</u> Control Vertical	① Traffic Signal Box
T	〔TC. ∮		T
Traffic Signal Cabinet	Traffic Signal Camera		Traffic Signal Detector Well
↑ ↑ Traffic Signal Electrolier	● PP	₩	T
	Pedestrian Pole	Traffic Signal	Traffic Signal Vault
(TV)	TV	TV	►TV
Cable TV Box	Cable TV Cabinet	Cable TV Geophysical Mark	Cable TV Pin Flag
(TV)	TV	TV	U
Cable TV Paint Mark	Cable TV Riser	Cable TV Vault	Unidentified Box
SURVEY PROGRAM SOLUTIONS LLC PH: (970) 286-0053 WWW.SURVEYPROGRAMSOLUTIONS.COM		Sheet 5 SPS Survey Rev.0 - Symbol Plot Survey Program Solutions LLC	0 0.5 1 PAGE: 5 OF 7 (SCALE IN FEET)

SPS Civil 3D Field-To-Finish Setup Guide



Purpose

The purpose of this work instruction is to outline the process of where to place the files provided in the SPS Civil 3D Field-To-Finish package and how to set up Civil 3D for the most efficiency.

Process Instructions

Legend:

Titles and File Names
COMMANDS AND BUTTONS

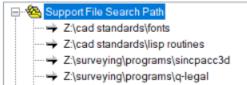
Folder Locations

References:

Xx

Process Instructions

- 1. Copy all files from the <u>2022_0 Field-To-Finish\Autodesk</u> folder to the designated standards folder on your server (i.e. <u>Z:\Autodesk</u> used herein)
- 2. Open Civil 3D to modify User Profile Options and set Survey User Settings
- 3. Modifying User Profile Options
 - a. Enter **OP** in the command line to open the Options dialog box
 - b. Select the Files tab at the top of the dialog box
 - c. Select **Support Files Search Path** from the tree and click the **ADD** button
 - i. Add the **Z:\Autodesk\Fonts** file path location
 - ii. Add support file path locations for other items such as hatch patterns, lisp routines and 3rd party software



- iii. Add the location of company logos used in CAD borders
- d. Expand *Printer Support File Path* from the tree
 - i. Select *Printer Configuration Search Path* and click the ADD button
 - 1. Add the **Z:\Autodesk\Plotting\Plotters** file path location
 - ii. Select *Printer Description File Search Path* and click the ADD button
 - 1. Add the **Z:\Autodesk\Plotting\Plot Styles\PMP Files** file path location
 - iii. Select Plot Style Table Search Path and click the ADD button
 - 1. Add the **Z:\Autodesk\Plotting\Plot Styles** file path location

SPS Trimble Field-To-Finish Setup Guide



Purpose

The purpose of this work instruction is to outline the process of where to place the files provided in the SPS Trimble Field-To-Finish package and how to set up Trimble Business Center (TBC) for the most efficiency.

Process Instructions

Legend:

Titles and File Names
COMMANDS AND BUTTONS

Folder Locations

Process Instructions

- Copy all files from the 2022_0 Field-To-Finish\Trimble\TBC folder to the designated standards folder on your server (i.e. Z:\Trimble used herein)
- 2. Open TBC to modify user Options
 - a. Select the OPTIONS button from the *Quick Access* toolbar at the top of the program screen <u>or</u> select the *File* tab and click the OPTIONS button



- c. Select *File Locations* from the tree and click the **ELIPSE** button at the end of the *Template folder:* selection box
 - i. Browse to the **Z:\Trimble\TBC\Templates** file path location



- iii. Select OK.
- d. Select Start a new project from the TBC Start Page
 - Select the SPS_Survey_2022_0 template and click the button at the bottom to SET AS DEFAULT

