

TABLE OF CONTENTS

I-VI	Table of Contents
VII	Specifications
VIII	Cell List
IX	Line Code Information
X	Seed Files, Symbol Type, File Naming Conventions
XI	Consultant Project Setup and A.T. Files
1-1 to 9-1	Cell Chart

BARRIERS	Page	V8 Level	Weight	Color	Line Code	Cell
Barricade	1-1	MANMD STRU INP	0	251		PBCD
Guard Post		MAMMDSTRU INP	0	251		GP
Cable Guardrail		GDRL INP	0	251	GR	
Plate Beam Guardrail		GDRL INP	0	251	GRP	
Fence Chain Link	1-2	MANMD STRU INP	0	251	CLF	
Fence Wooden		MANMD STRU INP	0	251	WF	
Fence Woven Wire		MANMD STRU INP	0	251	WWF	
Fence Barb Wire		MANMD STRU INP	0	251	BWF	
Freestanding Wall	1-3	MANMD STRU INP	0	251	0	
Traffic J-Barrier		MANMD STRU INP	0	251	BAR	
Unknown Linear Feature		MANMD STRU INP	0	0	MB	
Retaining Wall		MANMD STRU INP	0	251	WALL	
Noise Wall	1-4	MANMD STRU INP	0	251	NWALL	

DRAINAGE	Page	V8 Level	Weight	Color	Line Code	Cell	
Mound (Septic Mound Boundary)	1-4	SAN LIN INP	0	152	3	CBC CB UMH	
Catch Basin On Road (curb)	2-1	DRN STRU INP	1	6			
Catch Basin Off Road (no curb)		DRN STRU INP	1	6			
Manhole		MANMD STRU INP	0	0			
Drain Tile		DRAIN PIPE INP	2	28			
Culvert	2-2	MANMD STRU INP	0	0			DT
Culvert End		MANMD STRU INP	0	0			CUL
Flume		DRN PIPE INP	2	7	CUL FL		
Box Culvert & Cattle Pass	2-3	DRN PIPE INP	2	0	0	SS	
Waterline		HYD INP	2	5	WTR		
Swamp		HYD INP	2	156	SB		
Drainage Ditch	2-4	HYD INP	2	199	DD		
Earthen Dam		MANMD STRU INP	2	0	MB		
Dike		MANMD STRU INP	2	0	MB		
Lock		MANMD STRU INP	2	0	MB		
Spillway	2-5	MANMD STRU INP	2	0	MB		
Utility Vent		SAN PT INP	0	152		VEN	

VEGETATION	Page	V8 Level	Weight	Color	Line Code	Cell
Evergreen Tree	3-1	VEG INP	2	182	TL HDG	EVG TREE
Deciduous tree		VEG INP	2	182		
Tree Line		VEG INP	2	182		
Hedge Line		VEG INP	2	182		

SIGNS	Page	V8 Level	Weight	Color	Line Code	Cell
Billboard Post	4-1	MANMD STRU INP	0	251	0	BBP BBP RRCX UNA
Billboard Edge		MANMD STRU INP	2	251		
Billboard Post		MANMD STRU INP	0	251		
Railroad Crossing Signal		RR INP	0	251		
Unknown Feature		MANMD STRU INP	0	0		

STRUCTURES	Page	V8 Level	Weight	Color	Line Code	Cell
Silo	5-1	MANMD STRU INP	0	4	MB	SILO
Bin & Foundation		MANMD STRU INP	2	0		
L.P. TANK		GAS PT INP	0	3		
Gas Pump Island		RD INP	2	0		
Swimming Pool & Tennis Court	5-2	MANMD STRU INP	2	0	MB	LPT (COLOR DEPENDS ON MATERIAL)
Buildings, Ruins, Sheds		BLDG INP	2	4		
Concrete Pad, Patio		SWALK INP	2	11		
Deck	5-3	MANMD STRU INP	2	0	MB	AUC
Pier		MANMD STRU INP	2	0		
Area Under Construction		MANMD STRU INP	2-0	0		
Stock Piles	5-4	MANMD STRU INP	2-0	0	MB	STOCK
Pit & Quarry		MANMD STRU INP	2-0	0		
Sidewalk		SWALK INP	2	11		
Pedestrian Bridge		MANMD STRU INP	2	11		

UTILITIES	Page	V8 Level	Weight	Color	Line Code	Cell
Fire Hydrant	6-1	WATER PT INP	0	124	CLF	HYD
Satellite Dish		COMM PT INP	0	67		SAT
Pole & Pole Anchor	6-2	MANMD STRU INP	0	0 - 4		P, ANC
Water Tower		WTR PT INP	0	124		WTNK
Communication Tower		MANMD STRU INP	0	0		TOW
Power Tower	6-3	MANMD STRU INP	0	0		TOW
Substation		MANMD STRU INP	0	251		WMIL
Wind Generator		MANMD STRU INP	0	4		PED
Communication Pedestal	6-4	MANMD STRU INP	0	0		PED
Power Pedestal		MANMD STRU INP	0	0		PED
Traffic Signal		PWR PT INP	0	251		SGL
Light Pole	6-4	MANMD STRU INP	0	0		P, ANC
Power Pole		MANMD STRU INP	0	0	P, ANC	
Flag Pole		MANMD STRU INP	0	4	FLAGPOLE	

TRANSPORTATION	Page	V8 Level	Weight	Color	Line Code	Cell
Paved Road Two Lane	7-1	EDG TRVL LN INP	2	4	0	BAR
		RD INP	2	2	0	
		RD INP	2	3	0	
		SHLD PI INP	2	6	UNS	
		MANMD STRU INP	0	251		
Paved Road Divided Highway	7-2	EDG TRVL LN INP	2	4	0	
		RD INP	2	2	0	
		RD INP	2	3	0	
Road Intersections	7-3	EDG TRVL LN INP	2	4	0	
		RD INP	2	2	0	
		RD INP	2	3	0	
		SHLD PI INP	2	6	UNS	
		MANMD STRU INP	0	251	BAR, WALL	
Entrances	7-4	EDG TRVL LN INP	2	4	0	
		RD INP	2	2	0	
		RD INP	2	3	0	
Parking Lots	7-5	SHLD PI INP	2	6	UNS	
		RD INP	2	2	0	
		RD INP	2	3	0	
Pedestrian/Bicycle Trail	7-6	SHLD PI INP	2	6	UNS	
		RD INP	2	2	0	
		RD INP	2	3	0	
Trail (Undeveloped)	7-7	SHLD PI INP	2	6	TRAIL	
		RD INP	2	12	TRAIL	
		RD INP	2	11	0	
Road Bridge & Slope Paving	7-8	RD INP	2	71	0	

Concrete Median Noses	7-9	SWALK INP OR BIT	2	11	0	
			2	3	0	
		EDG TRVL LN INP	2	4	0	
		RD INP	2	2	0	
		RD INP	2	3	0	
		SHLD PI INP	2	6	UNS	
		SWALK INP	2	11	0	
Railroad	7-10	ALI RR INP	2	58	RRTRACK	
Trestle		ALI RR INP	2	58	0	
Abandoned Railroad		RD INP	2	12	TRAIL	
Roadway Surface Collection	7-11	EDG TRVL LN INP	2	4	0	
		RD INP	2	2	0	
		RD INP	2	3	0	
		SHLD PI INP	2	6	UNS	
	7-12	EDG TRVL LN INP	2	4	0	
		RD INP	2	2	0	
		RD INP	2	3	0	
		SHLD PI INP	2	6	UNS	
	7-13	EDG TRVL LN INP	2	4	0	
		RD INP	2	2	0	
		RD INP	2	3	0	
	7-14	EDG TRVL LN INP	2	4	0	
		RD INP	2	2	0	
		RD INP	2	3	0	
	7-15	EDG TRVL LN INP	2	4	0	
		RD INP	2	3	0	
		SHLD PI INP	2	6	UNS	

DIGITAL TERRAIN MODEL	Page	V8 Level	Weight	Color	Line Code	Cell
Breakline Locations	8-1	BRKLN	0	3	0	
Ground Elevation Breaklines	8-2	BRKLN	0	3	0	
Void Breakline		VOID	0	2	5	
Island Breakline	8-3	VOID	0	2	0	
Boundary Breakline		DTM BDY	4	0	0	
Spot Shots	8-4	SPOT	4	0	4	

MANUSCRIPT DATA	Page	V8 Level	Weight	Color	Line Code	Notes:
Mapping Limit for plan files	9-1	PLAN BDRY	4	0	0	Do not use DTM boundary breakline.

SPECIFICATIONS

CELLS: All cells, except as noted, shall be placed at an active angle (AA) defined by the main corridor or flight line in accordance with the stationing direction (when no highway are on the photos). Linear pattern shall have left origins. Graphic (normal) cells are used only (no point cells). All cells should be placed at (AS) active scale for a mapping scale (1"=50'= AS of 50) (1"=100'=AS of 100').

COORDINATE SYSTEM: When a state project covers more than one coordinate system a separate set of files for each coordinate system must be made available to the photogrammetric unit.

DIGITIZING: All digitized features that interchange between line string and curve string shall change at common coordinates. All linear features shall be digitized in point-to-point mode.

GLOBAL ORIGIN: Global origin for 2D design files shall be 0,0 (GO=0,0). Monument for global origin shall be 0,0 (XY=0,0).
Global origin for 3D design files shall be 0,0,0 (GO=0,0,0). Monument for global origin shall be 0,0,0 (XY=0,0,0).

V8 LEVEL NAME: All features, except as noted, shall have a line code of 0 (LC=0). Features comprised of several elements (e.g. lines and curves) shall be created as connected strings. A connected string is a complex element comprised of single elements that change at common coordinates. All linear features shall have a line style scale the same as the active scale.

SCALE: Mapping delivery scales are 1"=50' and 1"=100'.

TEXT: All label text shall be placed at an active angle (AA) defined by the trunk highway or the photo flight line and according with the stationing direction. All text shall be specified with font 1 (FT=1). The text justification point shall be placed close to the feature. Label text shall be placed on the same level as the feature. Label text shall be 1/8" high at mapping scale (TX=6 at 1"=50 and TX=12 at 1"=100') or (TX=1.6 at 1:500 and TX=3.2 at 1:1000). All text, except as noted, shall be placed at a weight of 2 (WT=2).

WORKING UNITS: For Intergraph design files shall be 1FT: 1FT: 1000.

Depending upon the scale of the mapping, all features that are visible and identifiable will be digitized. When the finished planimetric map is to be compiled at 1"=100', the depiction of some of the features only causes clutter and as such will not be digitized (i.e. sidewalks around houses, shrubs, patios, small retaining walls).

CELLS LIST
 FILES: \\ad\co\public\LM\PHOTO\ARC\CONSULTANT

LM04.CEL

NAME	DESCRIPTION	NAME	DESCRIPTION
ANC	POLE ANCHOR	SILO	FARM SILO
AUC	AREA UNDER CONSTRUCTION	SS	SWAMP SYMBOL
BBP	BILLBOARD POST	STP	STOCK PILE
CB	CATCH BASIN CTR ORGIN	TREE	TREE LEAF BEARING
CBC	CATCH BASIN SIDE ORGIN	UNA	UNKNOWN FEATURE
PED	COMMUNICATION PEDISTAL	WTANK	WATER TOWER OR TANK
TOW	COMMUNICATION TOWER	LPT	L.P. TANK
EVG	EVERGREEN TREE	PIT	PIT & QUARRY
GP	GUARD POST	PED	POWER PEDISTAL
HYD	HYDRANT	TOW	POWER TOWER
P	LIGHT POLE	RRCX	RAILROAD CROSSING SIGNAL
UMH	MANHOLE	SAT	SATELLITE DISH
P	GENERIC POLE	SGL	TRAFFIC SIGNAL LIGHT
VEN	UTILITY VENT		

LINE CODE INFORMATION

NAME	DESCRIPTION	NAME	DESCRIPTION
BAR	TRAFFIC BARRICADE	NWALL	NOISE WALL
BWF	BARB WIRE FENCE	MB	UNKNOWN FEATURE
CLF	CHAIN LINK FENCE	RRTRACK	RAILROAD TRACK
CLV	GENERIC CULVERT	SB	SWAMP BOUNDARY
DT	DRAIN TILE	TL	TREE LINE
DD	DRAINAGE DITCH	TRAIL	RECREATIONAL
FL	FLUME	UNS	RD INP ROAD-GRAVEL
GR	CABLE-GUARDRAIL	WALL	RETAINING WALL
GRP	PLATEBEAM- GUARDRAIL	WF	WOOD FENCE
HDG	HEDGE	WTR	WATER LINE
MB	MISCELLANEOUS BOUNDARY	WWF	WOVEN WIRE FENCE

SEED FILES

Seed File For Two Dimensional English 50 Scale Seed File Is PHOTO502Dseed04.dgn
 Seed File For Two Dimensional English 100 Scale Seed File Is PHOTO1002Dseed04.dgn
 Seed File For Three Dimensional English 50 Scale Seed File Is PHOTO503Dseed04.dgn
 Seed File For Three Dimensional English 100 Scale Seed File Is PHOTO1003Dseed04.dgn

SYMBOL TYPE

A	Arc By Edge	LP	Linear Pattern
C	Circle	LS	Line String
CE	Cell	O	Orthogonal Shape
CS	Curve String	R	Rotated Block
CLS	Custom Line Style	S	Shape
L	Line		

SCALE: Map Symbols Cell Chart Scale Is Approximately 1"=100'.

NAMING CONVENTIONS FOR MICROSTATION V8 FILES:

Files produced by Photogrammetric Office	Plan file	PH(SP NUMBER) (ALPHA)_(ALPHA), XXPLN.DGN	EX. PH1000-001A_01PLN.DGN
	3DPlan file	PH(SP NUMBER) (ALPHA)_(ALPHA), XX3DP.DGN	EX. PH1000-001A_013DP.DGN
	DTM file	PH(SP NUMBER) (ALPHA)_(ALPHA), XXDTM.DGN	EX. PH1000-001A_01DTM.DGN
	TIN file	PH(SP NUMBER) (ALPHA)_(ALPHA), XX.TIN	EX. PH1000-001A_01.TIN

The first alpha character is related to the SP number, and may not always be present, the second alpha character is the sequence of files that make up a file type and the number after the second alpha character lists the files that make up the file type, 01, 02, 03..... The XX is the number of files _01, _02, _03.

Files produced by Consultant Companies	Plan file	CPH(SP NUMBER), (ALPHA)_(ALPHA), XXPLN.DGN	EX. CPH1000-001A_01PLN.DGN
	3DPlan file	CPH(SP NUMBER), (ALPHA)_(ALPHA), XX3DP.DGN	EX. CPH1000-001A_013DP.DGN
	DTM file	CPH(SP NUMBER), (ALPHA)_(ALPHA), XXDTM.DGN	EX. CPH1000-001A_01DTM.DGN
	TIN file	CPH(SP NUMBER), (ALPHA)_(ALPHA), XX.TIN	EX. CPH1000-001A_01.TIN

NAMING CONVENTIONS FOR ORTHO MOSAIC FILES:

Files produced by Photogrammetric Office:	PH(SP NUMBER)_ASP(XXX-XX)_01.TIF	EX. PH1000-001_10S-05_01.TIF
	PH(SP NUMBER)_ASP(XXX-XX)_01.TFW	EX. PH1000-001_10S-05_01.TFW
	PH(SP NUMBER)INDEX.DGN	EX. PH1000-001INDEX.DGN

Files produced by Consultant Companies	CPH(SP NUMBER)_ASP(XX-XX)_01.TIF	EX. CPH1000-001_10S-05_01.TIF
	CPH(SP NUMBER)_ASP(XX-XX)_01.TFW	(FILE #2 WOULD BE CPH1000-001_10S-05_02.TIF) EX. CPH1000-001_10S-05_01.TFW
	CPH(SP NUMBER)INDEX.DGN	EX. CPH1000-001_INDEX.DGN

The Ortho Mosaic index.dgn will be CO= 4, LC= 0, WT= 4.

Consultant “Set Up”

“Set up” is defined as verifying there is enough ground control to map the project within the map accuracy specifications. If it’s felt there isn’t enough ground control image points will need to be selected and a request sent to your MnDOT Project Manager. The request should include an image with the point marked, and a description of the point. The image can be electronic, or the contact print marked and sent back. The set up process may have been done by MnDOT before the project was sent to the consultant, but even if it has been the consultant should still determine if they are comfortable with the amount, and location of the ground control to meet the map accuracy specifications. If a ground control point was misidentified on a contact print, it should be “X”ed out and the correct location of the point should be marked.


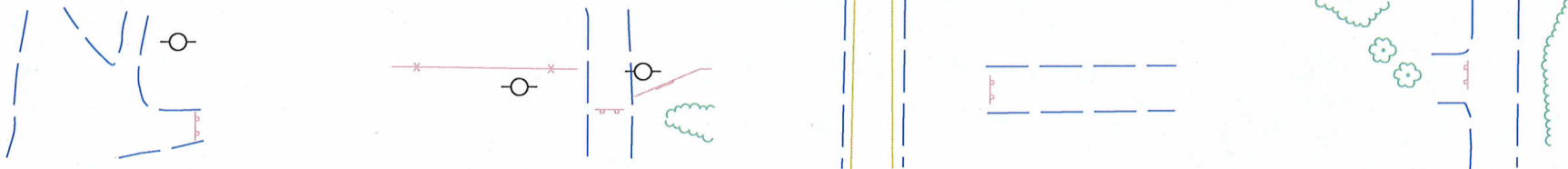



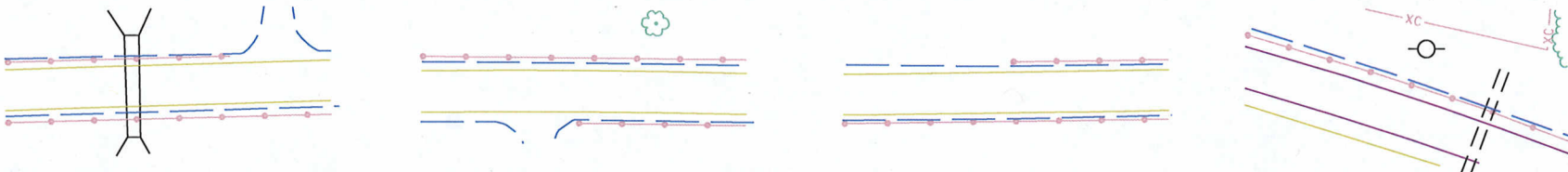

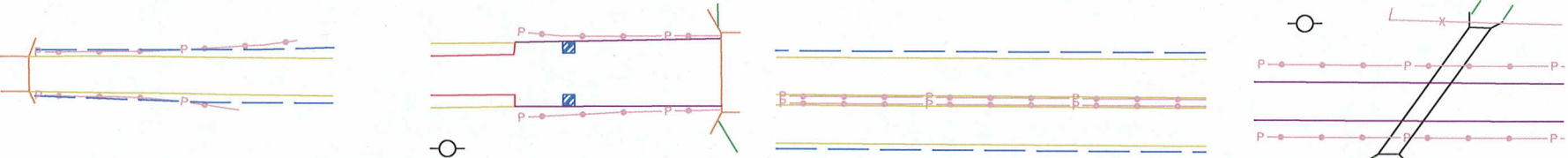
Another function of “Set Up” includes marking the ground control on the photo index containing the mapping limits, if it hasn’t already been marked with the control. This can be an image made from your A.T. process. A circle, triangle, or square needs to be marked in the correct location with the control point number next to it. The purpose of this is to have an overview of the entire project to determine where we have control, thus indicating if we have holes in the control that we need to plugged or shored up. This index is stored for future reference if additional mapping extensions are requested.

Consultant Aero-Triangulation (A.T.)

All images must be named with the strip number followed by an underscore then the image number. The strip and image number must correlate with the strip and image number on the photo index.

An A.T. report must be included with the delivered files. The A.T. report must include a narrative about the project describing who provided the control, what duties were preformed, if any of the control was not used and why, and what was done to resolve the control issue. Problems or unusual situations that occur during the A.T. process and what was done to overcome them must be noted. Included in the narrative should be a list of the control points and their residuals. The delivery must include a separate camera station parameter file containing one line for each image. The line must contain the Image number, X,Y,Z, coordinate of the Camera station along with the omega, phi, and kappa orientation angles in degrees. The angles must be carried out to 5 decimal places. All other files, reports and logs produced from the A.T. should be included in the delivery. It is recommended that prior to the start of compilation that MnDOT reviews the A.T. results.

Users are instructed to contact the Minnesota Department of Transportation by email to resolve

FEATURE	SYMBOL	V8 LEVEL NAME	LINE WEIGHT	CELL OR LINE CODE	SYMBOL TYPE	COLOR	NOTES
BARRIERS							
BARRICADE		MANMD STRU INP	0	PBCD	CE	251	DIGITIZE CENTER, AT ACTIVE ANGLE. SYMBOL CELL NOT TO SCALE.
							
GUARD POST		MANMD STRU INP	0	GP	CE	251	DIGITIZE CLOSELY SPACED GUARD POSTS AT 1" = 100' AS CABLE GUARDRAIL. SYMBOL CELL NOT TO SCALE.
							
GUARDRAIL CABLE		GDRL INP	0	GR	CS LS CLS	251	DEMO LINE CODE NOT TO SCALE. SYMBOL CELL NOT TO SCALE.
							
GUARDRAIL PLATEBEAM		GDRL INP	0	GRP	CS LS CLS	251	SYMBOL LINE CODE NOT TO SCALE.
							


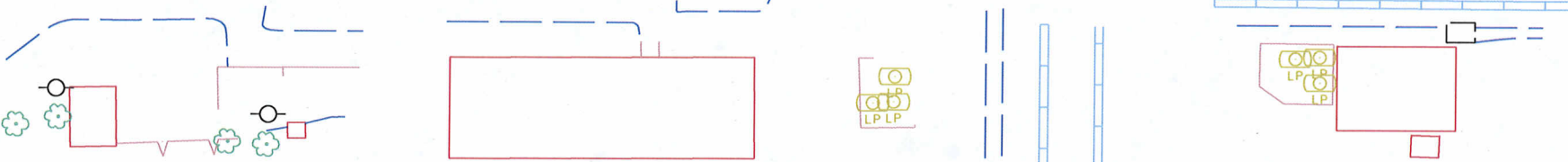

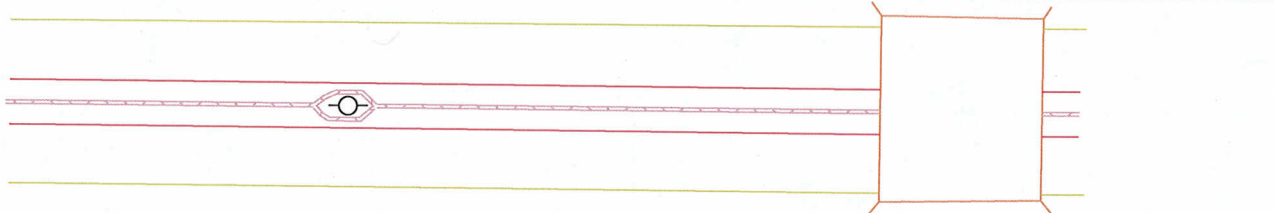



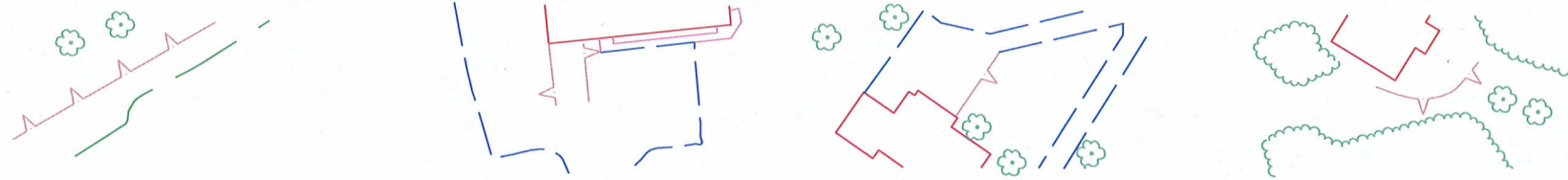
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FEATURE	SYMBOL	VB LEVEL NAME	LINE WEIGHT	CELL OR LINE CODE	SYMBOL TYPE	COLOR	NOTES
BARRIERS							
CHAIN LINK FENCE		MANMD STRU INP	0	CLF	CS LS CLS	25I	FENCE PATTERN SHOULD ALWAYS READ FROM LEFT TO RIGHT FOLLOWING THE DIRECTION OF THE PROJECT. SHOW GATE AS PART OF FENCE. SYMBOL LINE CODE NOT TO SCALE.
WOODEN FENCE		MANMD STRU INP	0	WF	CS LS CLS	25I	SYMBOL LINE CODE NOT TO SCALE.
WOVEN WIRE FENCE		MANMD STRU INP	0	WWF	CS LS CLS	25I	FENCE PATTERN SHOULD ALWAYS READ FROM LEFT TO RIGHT FOLLOWING THE DIRECTION OF THE PROJECT. SYMBOL LINE CODE NOT TO SCALE.
BARB WIRE FENCE		MANMD STRU INP	0	BWF	CS LS CLS	25I	SYMBOL LINE CODE NOT TO SCALE. IF FENCE TYPE CANNOT BE DETERMINED USE BWF.


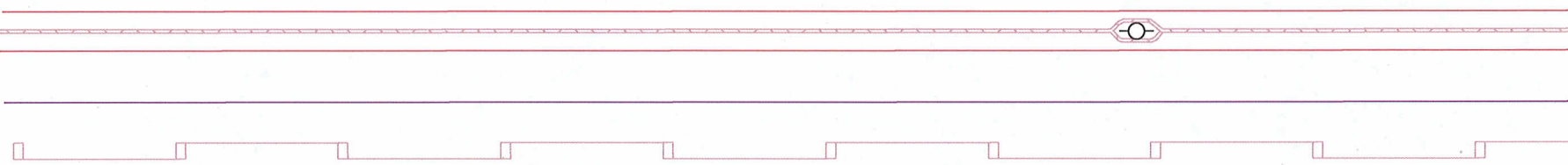

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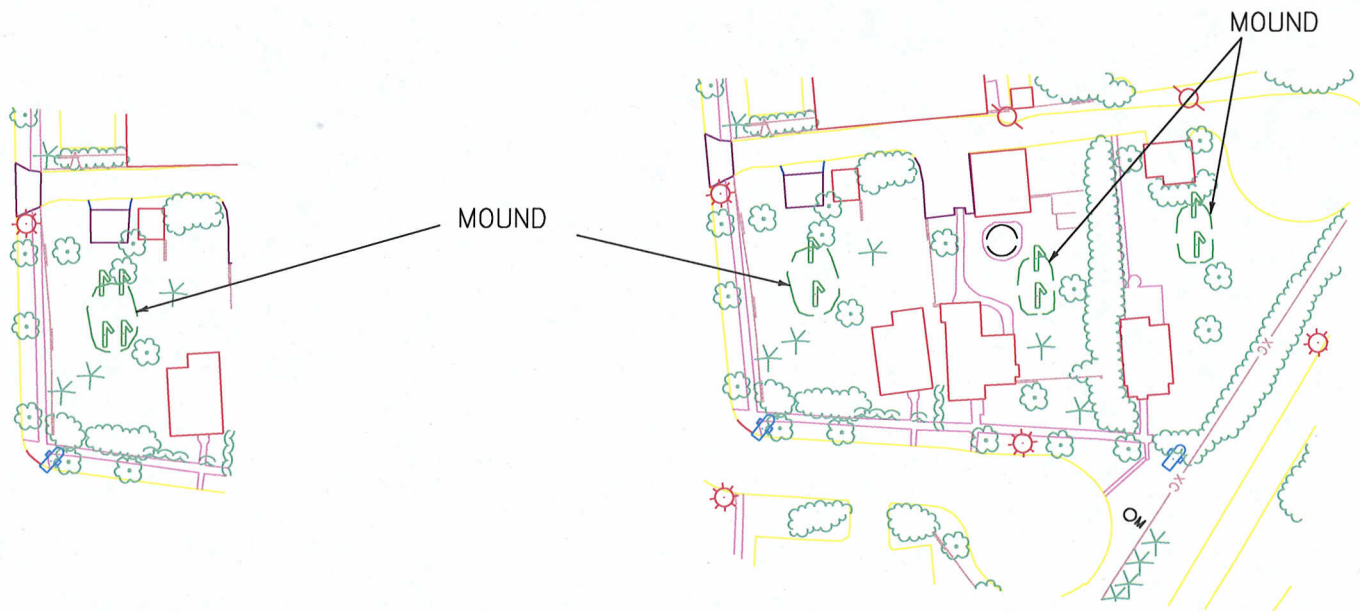
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FEATURE	SYMBOL	V8 LEVEL NAME	LINE WEIGHT	CELL OR LINE CODE	SYMBOL TYPE	COLOR	NOTES
BARRIERS							
FREESTANDING WALL		MANMD STRU INP	0	LINE CODE=0	LS CS	25I	DIGITIZE DOWN THE CENTER AND ALONG THE TOP. NO TEXT.
							
TRAFIC J-BARRIER		MANMD STRU INP	0	BAR	LS CS CLS	25I	SHOW J-BARRIER AT THE TOP OF THE BARRIER SHOWING THE FLAIR IF THERE IS ONE. NOTE: SEE PAGE 7-1
							
UNKNOWN LINEAR FEATURE		MANMD STRU INP	0	MB	CS LS CLS	0	UNIDENTIFIABLE LINEAR FEATURE. DO NOT COLLECT TEMPORARY EROSION CONTROL FENCES. POSSIBLE OLD FENCE LINE.
							
RETAINING WALL		MANMD STRU INP	0	WALL	CS LS CLS	25I	DIGITIZE CLOCKWISE AROUND RETAINED GROUND. V POINTS INTO HILL. SHOW SMALL RETAINING WALLS AT 50 SCALE ONLY.
							

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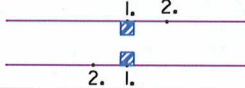
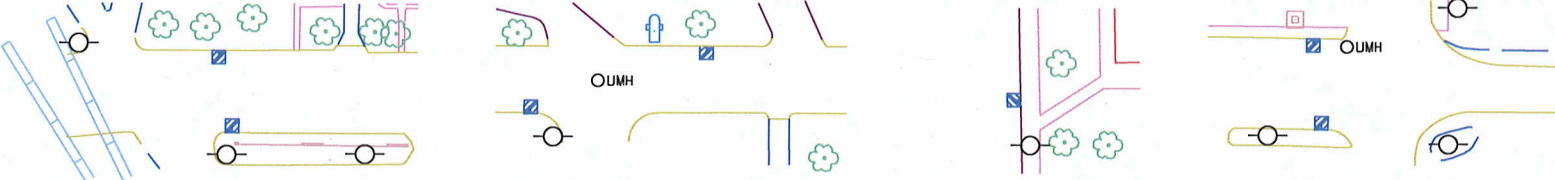

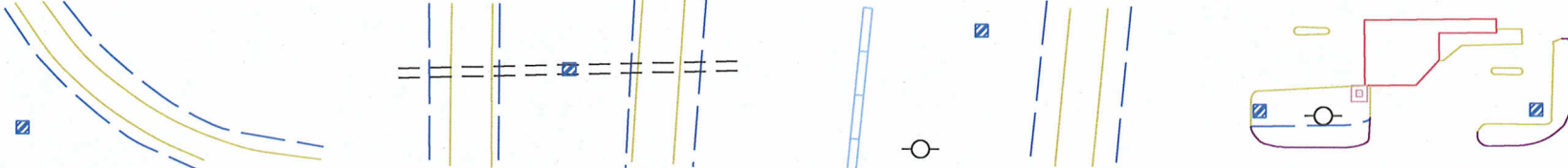

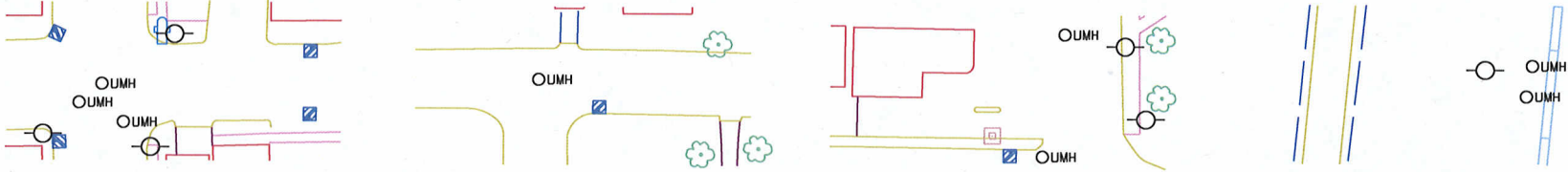


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FEATURE	SYMBOL	V8 LEVEL NAME	LINE WEIGHT	CELL OR LINE CODE	SYMBOL TYPE	COLOR	NOTES
BARRIERS							
NOISE WALL		MANMD STRU INP	0	NWALL	LS CS	251	DIGITIZE DOWN THE CENTER AND ALONG THE TOP. NO TEXT. SYMBOL LINE CODE NOT TO SCALE.
							
MOUND		SAN LIN INP	0	LC= 3	LS CS	152	USED TO DEPICT SEPTIC MOUND BOUNDARY. DIGITIZE ALONG PERIMETER OF MOUND AT BASE. SYMBOL LINE CODE NOT TO SCALE.



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FEATURE	SYMBOL	VB LEVEL NAME	LINE WEIGHT	CELL OR LINE CODE	SYMBOL TYPE	COLOR	NOTES
DRAINAGE							
CATCH BASIN AT CURB		DRN STRU INP	1	CBC	CE	6	CELL IS PLACED AT CURB, ACTIVE ANGLE DEFINED BY ROAD. DIGITIZE PER DIAGRAM FIRST DATA POINT CENTER OF C.B. AT FLOW LINE. THE SECOND DATA POINT ALONG CURB AT FLOW LINE.
							
CATCH BASIN NO CURB		DRN STRU INP	1	CB	CE	6	CELL IS PLACED BY CENTER ORIGIN. SYMBOL NOT TO SCALE.
							
MANHOLE		MANMD STRU INP	0	UMH	CE	0	DO NOT DIGITIZE HAND HOLES OR INSPECTION COVERS. SYMBOL NOT TO SCALE.
							
DRAIN TILE		DRN PIPE INP	2	DT	LS CLS	28	DIGITIZE THE DRAINAGE TILE ENDS PLACE DRAIN TILE TO SHOW DIRECTION OF WATER FLOW.
							

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FEATURE	SYMBOL	V8 LEVEL NAME	LINE WEIGHT	CELL OR LINE CODE	SYMBOL TYPE	COLOR	NOTES
DRAINAGE							
CULVERT	=====	MANMD STRU INP	0	CUL	LS CLS	0	DIGITIZE THE CULVERT ENDS
CULVERT END	====	MANMD STRU INP	0	CUL	LS CLS	0	FIRST DATA POINT AT THE VISABLE END, SECOND DATA POINT IN APROX. DIRECTION OF CULVERT, APPROXIMATELY 10 FT. FROM VISBLE END.
FLUME	-----	DRN PIPE INP	2	FL	R CLS	7	CONCRETE OR BITUMINOUS FEATURE TO PREVENT EROSION. NOTE: THE COLOR 7 HAS BEEN MODIFIED FOR PRINTING TO RED= 252, GREEN=0, BLUE=255
BOX CULVERT & CATTLE PASS		DRN PIPE INP	2	LINE CODE=0	LS CLS	0	SHOW THE WING WALLS WHEN PRESENT. WINGWALLS ARE THE SAME LEVEL, WEIGHT, AND COLOR

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FEATURE	SYMBOL	VB LEVEL NAME	LINE WEIGHT	CELL OR LINE CODE	SYMBOL TYPE	COLOR	NOTES
DRAINAGE							
WATERLINE		HYD INP	2	WTR	CS LS CLS	5	DIGITIZE INTERMITTENT DRAINAGE AS SINGLE WATERLINE.
SWAMP		HYD INP	2	SB SS (CELL)	CS LS CLS CE	156	WATER LINE TAKES PRECEDENCE OVER SWAMP LINE. ADD SWAMP SYMBOLS SPARINGLY. TO KEEP SWAMP SYMBOLS POINTED IN THE SAME DIRECTION, BREAK LINE CODE.
DRAINAGE DITCH		HYD INP	2	DD	CS LS CLS	199	DIGITIZE TOP OF DITCH SIDES. DIGITIZE WATERLINE(S) AS USUAL
EARTHEN DAM		MANMD STRU INP	2	MB	CS LS CLS	0	DIGITIZE DOWN THE CENTER AND ALONG THE TOP OF THE BERM.

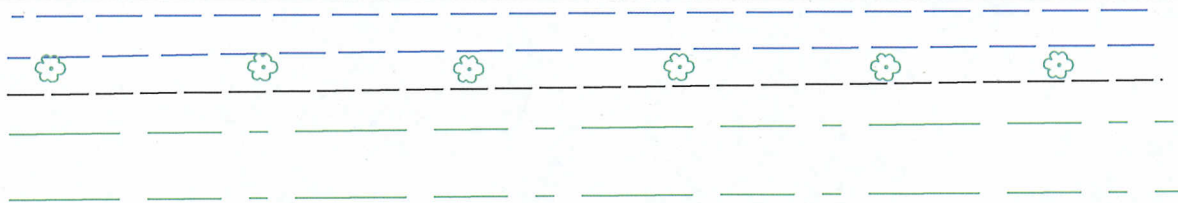
questions and receive clarification pertaining to the content of this document

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FEATURE	SYMBOL	VB LEVEL NAME	LINE WEIGHT	CELL OR LINE CODE	SYMBOL TYPE	COLOR	NOTES
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DRAINAGE

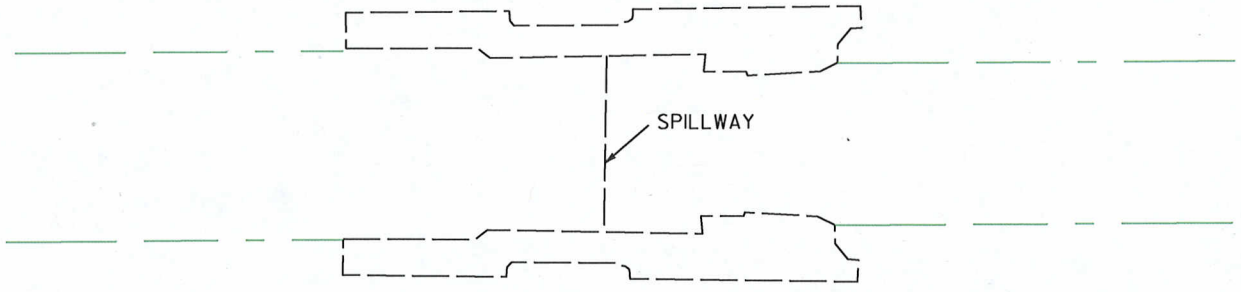
DIKE	-----	MANMD STRU INP	2	MB	CS LS CLS	0	DIGITIZE TOP CENTER OF BERM.
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LOCK	-----	MANMD STRU INP	2	MB	CS LS CLS	0	DIGITIZE TOP OF GATE. DIGITIZE REMAINDER OF STRUCTURE WITH MISCELLANEOUS BOUNDARY.
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SPILLWAY	-----	MANMD STRU INP	2	MB	CS LS CLS	0	DIGITIZE TOP OF SPILLWAY. DIGITIZE REMAINDER OF STRUCTURE WITH MISCELLANEOUS BOUNDARY.
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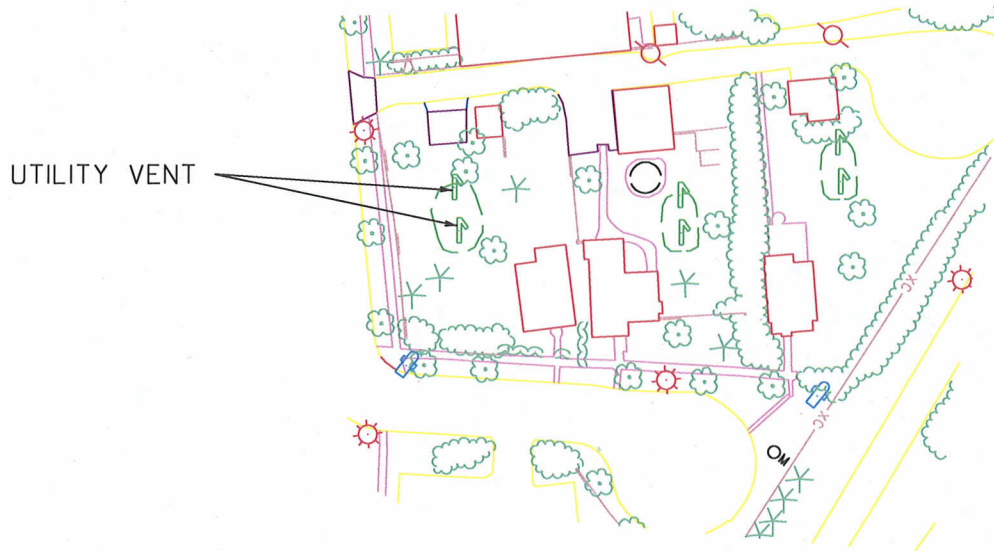
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FEATURE	SYMBOL	V8 LEVEL NAME	LINE WEIGHT	CELL OR LINE CODE	SYMBOL TYPE	COLOR	NOTES
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DRAINAGE




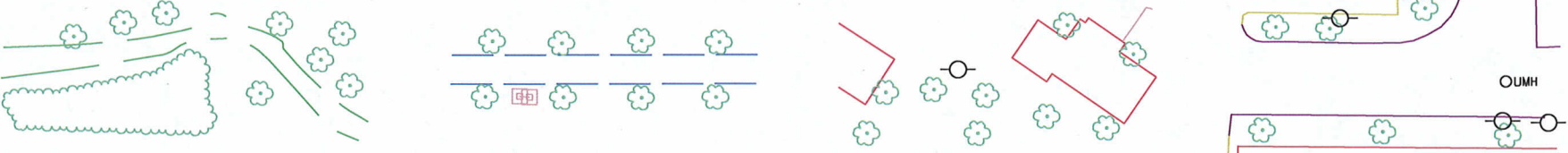

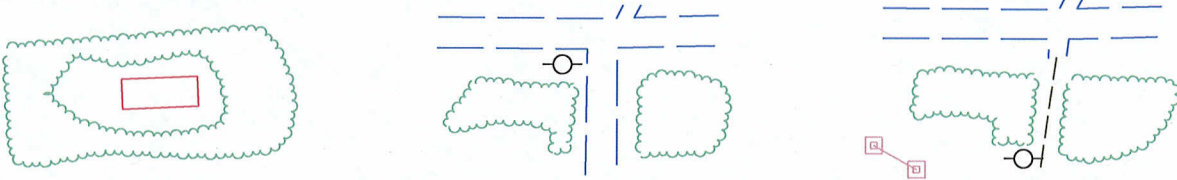

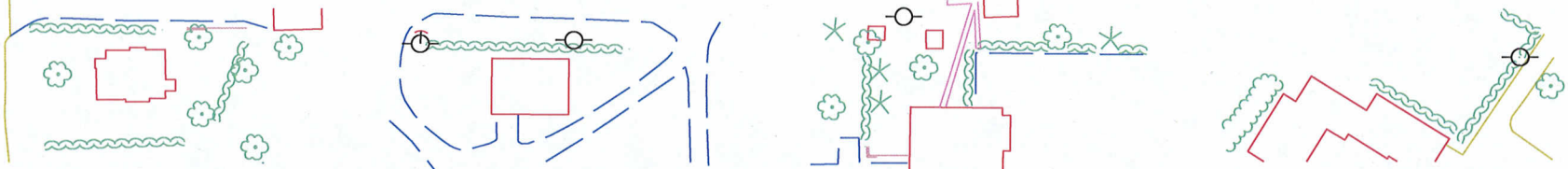
UTILITY VENT		SAN PT INP	0	VEN	CELL	152	CELL PLACED ON/AROUND SEPTIC MOUND BOUNDARY. SYMBOL NOT TO SCALE.
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FEATURE	SYMBOL	V8 LEVEL NAME	LINE WEIGHT	CELL OR LINE CODE	SYMBOL TYPE	COLOR	NOTES
VEGETATION							
EVERGREEN TREE		VEG INP	0	EVG	CE	182	DIGITIZE THE BASE OF TREE. SHOW AS TREE LINE WHERE SEVERAL SYMBOLS ARE TOUCHING. SYMBOL NOT TO SCALE.
							
DECIDUOUS TREE		VEG INP	0	TREE	CE	182	DIGITIZE THE BASE OF TREE. SHOW AS TREE LINE WHERE SEVERAL SYMBOLS ARE TOUCHING. SYMBOL NOT TO SCALE.
							
TREELINE		VEG INP	2	TL	CS CLS	182	DEFINE LIMITS BY THE BASE OF THE TREES NOT THE CROWN. IF SEVERAL TREE CELLS TOUCH USE TREE LINE. DIGITIZE CLOCKWISE TO ENCIRCLE A TREE GROUP. DIGITIZE COUNTERCLOCKWISE TO DEPICT AN OPENING WITHIN THE TREE GROUP. SYMBOL LINE CODE NOT TO SCALE.
							
HEDGE LINE		VEG INP	2	HDG	CS CLS	182	NOT TO BE USED AS A BOUNDARY FOR SHRUBS. SHOW HEDGE AT 50 SCALE ONLY. SYMBOL LINE CODE NOT TO SCALE.
							

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FEATURE	SYMBOL	VB LEVEL NAME	LINE WEIGHT	CELL OR LINE CODE	SYMBOL TYPE	COLOR	NOTES
SIGNS							
BILLBOARD BILLBOARD EDGE		MANMD STRU INP	0 2	BBP LINE CODE=0	L CE	251	DIGITIZE THE ENDS OF SIGN, NOT THE POSTS CELL BBP WT=0, LINE WT=5 SYMBOL NOT TO SCALE.
BILLBOARD POST		MANMD STRU INP	0	BBP	CE	251	SINGLE AND DOUBLE LEG OVERHEAD FREEWAY SIGNS. SINGLE LEG COMMERCIAL SIGNS. SYMBOL NOT TO SCALE.
RAILROAD CROSSING SIGNAL		RR INP MANMD STRU INP	0	RRCX UNA	CE	251 0	SIGNAL INCLUDES ALL RAILROAD MECHANICAL DEVICES AT RAILROAD CROSSINGS. DO NOT DIGITIZE WOODEN RAILROAD SIGN. ALL OTHER MECHANICAL RAILROAD DEVICES USE UNKNOWN FEATURE. SYMBOL NOT TO SCALE.
UNKNOWN FEATURE		MANMD STRU INP	0	UNA	CE	0	USE TO DEPICT UNKNOWN FEATURE. USE SPARINGLY, SHOW ONLY ITEMS THOUGHT TO BE OF CONSEQUENCE. NO CLOTHES POLES, FIRE RINGS, SOLAR YARD LIGHTS ETC.


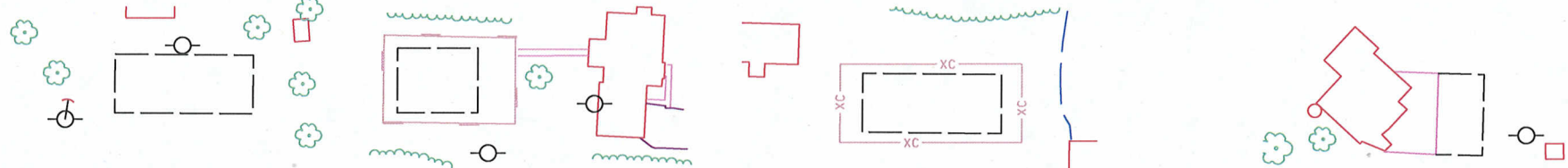

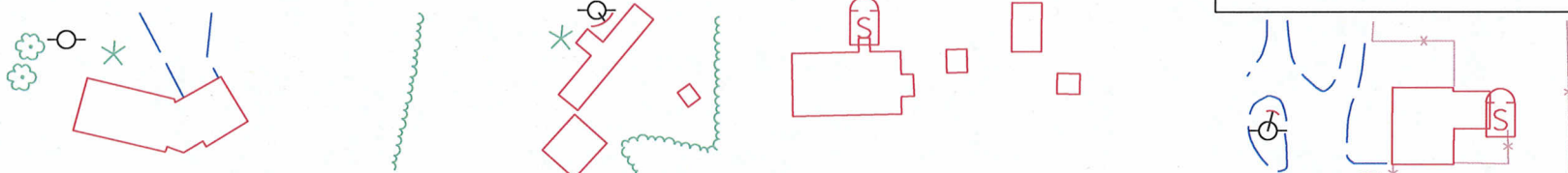

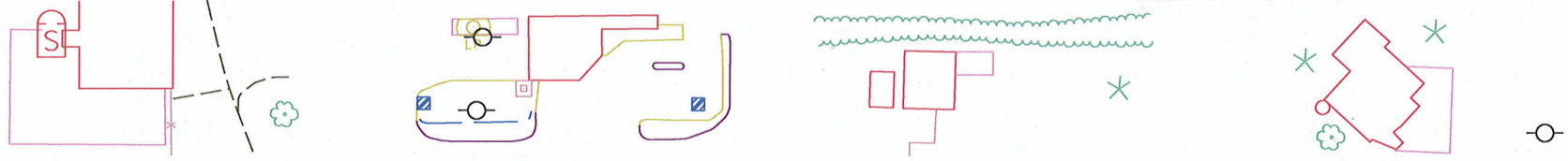
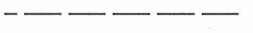

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FEATURE	SYMBOL	VB LEVEL NAME	LINE WEIGHT	CELL OR LINE CODE	SYMBOL TYPE	COLOR	NOTES
STRUCTURES							
SILO		MANMD STRU INP	0	SILO	CE	4	SILO HAS A TOP AND SOLID SIDES DIGITIZE CENTER OF SILO
BIN & FOUNDATION		MANMD STRU INP	2	MB	LS C CLS	0	BIN MAY OR MAYNOT HAVE A TOP AND HAS NON-SOLID SIDES
L.P. TANK		GAS PT INP	0	LPT	CE	3	DIGITIZE CENTER OF TANK SYMBOL NOT TO SCALE.
GAS PUMP ISLAND		RD INP	2	LINE CODE=0	LS C CLS	DEPENDS ON MATERIAL	DIGITIZE PER DIAGRAM. 2 ARCS BY EDGE & 2 LINES NO TEXT. DON'T DIGITIZE GAS TANK FILLER COVERS.

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FEATURE	SYMBOL	VB LEVEL NAME	LINE WEIGHT	CELL OR LINE CODE	SYMBOL TYPE	COLOR	NOTES
STRUCTURES							
SWIMMING POOL TENNIS COURT		MANMD STRU INP	2	MB	C/R/O CLS	0	
							
BUILDING RUINS, SHED		BLDG INP	2	LINE CODE=0	0 R	4	BUILDINGS MUST BE CLOSED SHAPES, EXCEPT WHERE A SMALL PORTION OF A LARGE BUILDING FALLS WITHIN THE MAPPING LIMITS.
							
CONCRETE PAD PATIO		SWALK INP	2	LINE CODE=0	LS CS 0 R	11	DIGITIZE OUTER EDGES EXCEPT WHERE BOUNDED BY BUILDING. WHEN DEFINING THE SAME BOUNDARY AS 'UNS', 'UNS' TAKES PRECEDENCE. SHOW PATIO AT 50 SCALE ONLY.
							
DECK		MANMD STRU INP	2	MB	LS CS CLS	0	SHOW DECKS AT 50 SCALE ONLY.
							

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FEATURE	SYMBOL	V8 LEVEL NAME	LINE WEIGHT	CELL OR LINE CODE	SYMBOL TYPE	COLOR	NOTES
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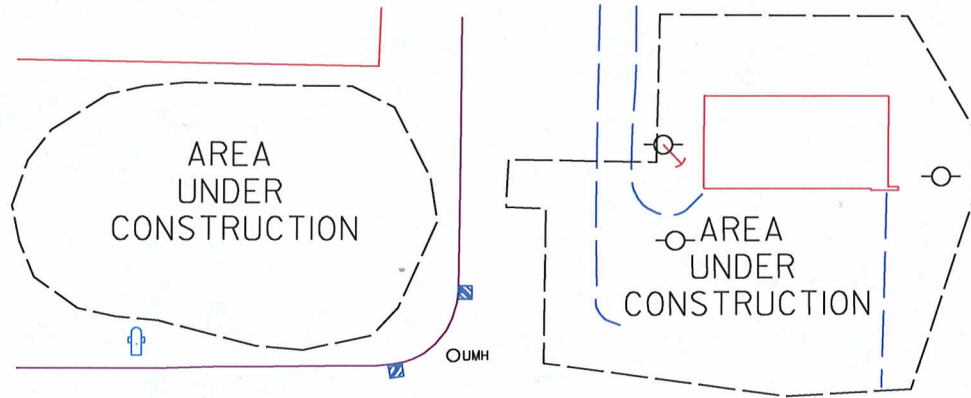
STRUCTURES

PIER	-----	MANMD STRU INP	2	MB	LS CLS	0	PERMANENT STRUCTURE, AS IN A MARINA. DO NOT SHOW PRIVATE DOCKS. MISCELLANEOUS BOUNDARY DEFINES LIMITS
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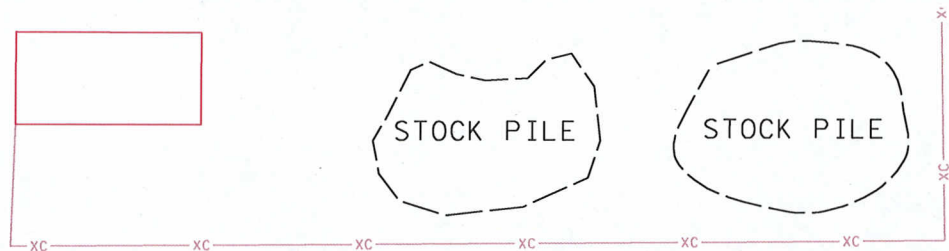
AREA UNDER CONSTRUCTION	-----	MANMD STRU INP	2	MB	LS CS CLS	0	MISCELLANEOUS BOUNDARY DEFINES LIMITS CELL *AUC* IS TEXT FOR LABELING AREA.
			0	AUC	CE	0	

AREA UNDER CONSTRUCTION



STOCK PILES	-----	MANMD STRU INP	2	MB	LS CS CLS	0	MISCELLANEOUS BOUNDARY DEFINES LIMITS CELL *STOCK* IS TEXT FOR LABELING AREA.
			0	STOCK	CE	0	

STOCK PILE



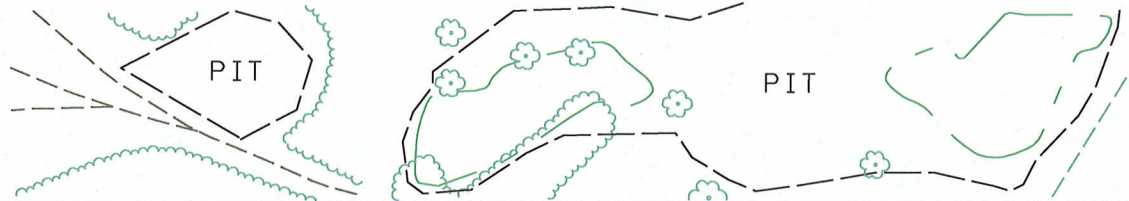
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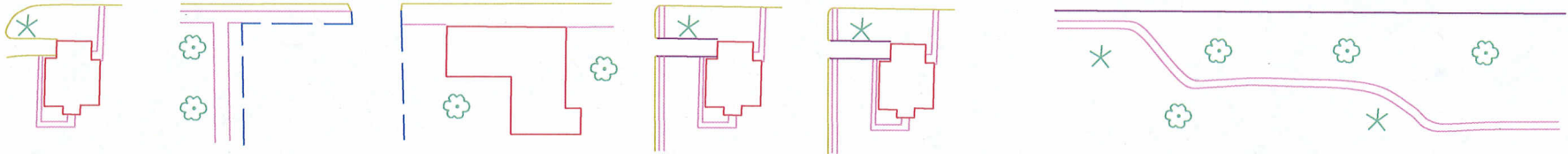
FEATURE	SYMBOL	V8 LEVEL NAME	LINE WEIGHT	CELL OR LINE CODE	SYMBOL TYPE	COLOR	NOTES
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STRUCTURES

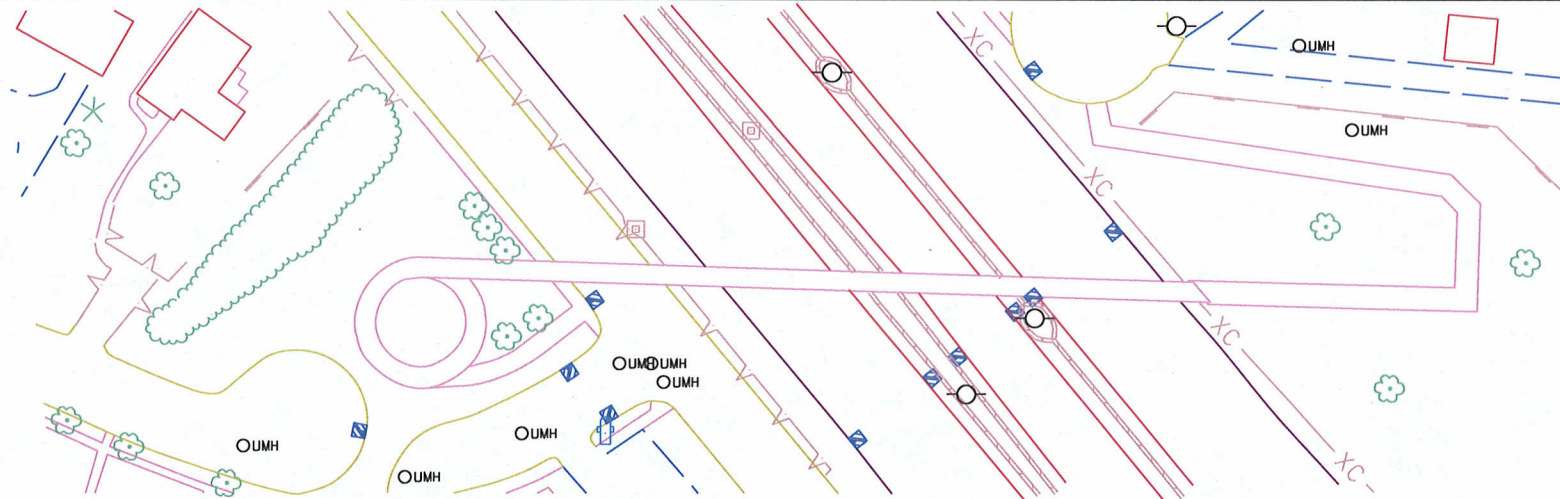
PIT & QUARRY	----- PIT	MANMD STRU	2	MB	LS CS	0	MISCELLANEOUS BOUNDARY DEFINES ILIMTS CELL *PIT* IS TEXT FOR LABELING AREA.
		INP	0	PIT	CE	0	



SIDEWALK CONC. PAVED REC. TRAIL	-----	SWALK INP	2	LINE CODE=0	LS CS	11	DEPICT PAVED RECREATIONAL TRAILS AND WALKWAYS. IF SIDEWALK AND DRIVE ARE OF THE SAME MATERIAL DO NOT SHOW CROSSING THE DRIVE. SHOW SIDEWALK AROUND HOUSES AT 50 SCALE ONLY.
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PEDESTRIAN BRIDGE	-----	MANMD STRU	2	LINE CODE=0	LS CS	11	SHOW THE WING WALLS WHEN PRESENT. WINGWALLS ARE THE SAME LEVEL, WEIGHT, AND COLOR
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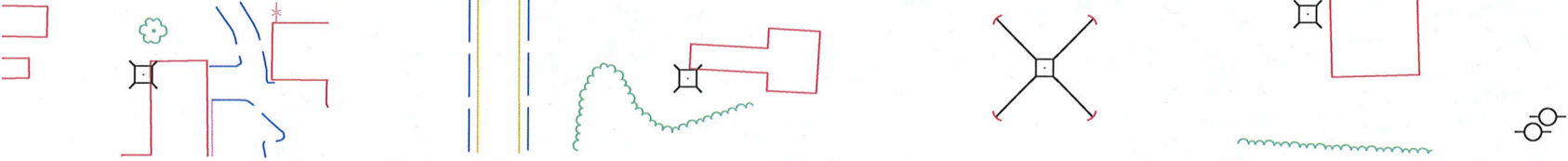

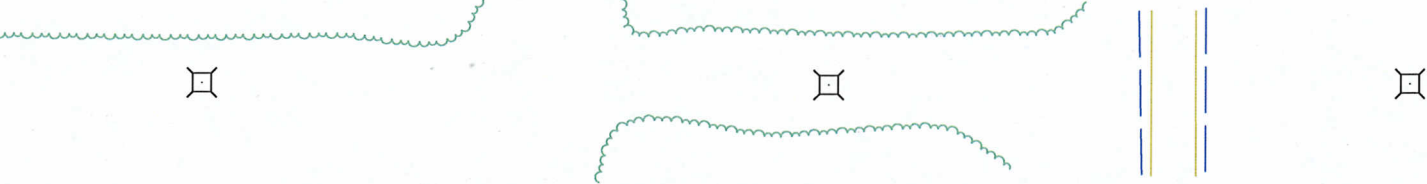

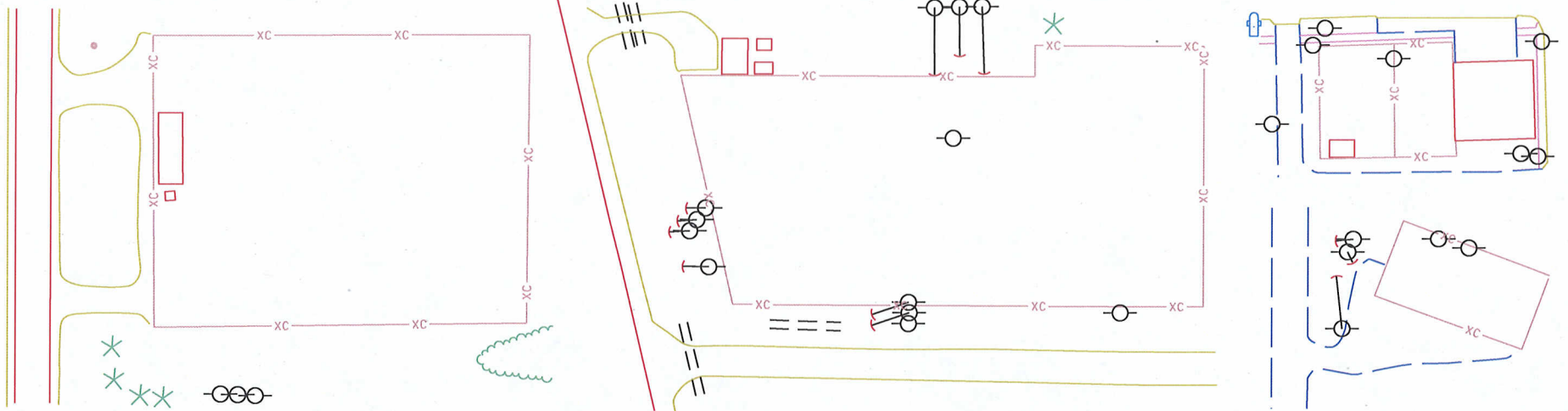
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FEATURE	SYMBOL	V8 LEVEL NAME	LINE WEIGHT	CELL OR LINE CODE	SYMBOL TYPE	COLOR	NOTES
UTILITIES							
HYDRANT		WATER PT INP	0	HYD	CE	124	HYDRANT WILL BE PLACED AT AN ACTIVE ANGLE DEFINED BY THE TRUNK HIGHWAY OR THE PHOTO FLIGHT LINE. SYMBOL NOT TO SCALE.
							
SATELLITE DISH		COMM PT INP	0	SAT	CE	67	LARGE SATELLITE DISHES ONLY. SYMBOL NOT TO SCALE.
							
POLE (POLE ANCHOR)		MANMD STRU INP	0	P ANC	CE L CE	0 0 4	DIGITIZE POLE AND POLE ANCHOR(S) WHEN PRESENT. POLE PLACED AT ACTIVE ANGLE SYMBOL NOT TO SCALE.
							
WATER TOWER		WTR PT INP	0	WTANK	CE	124	SYMBOL NOT TO SCALE.
							


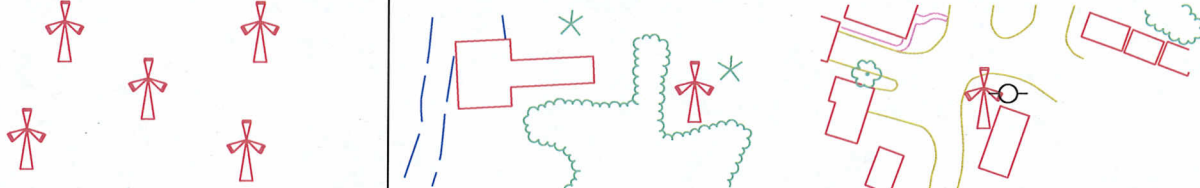

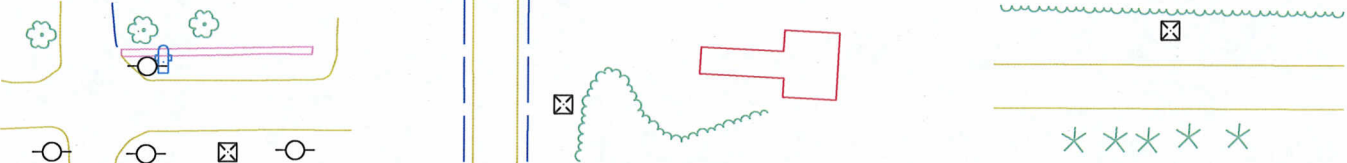



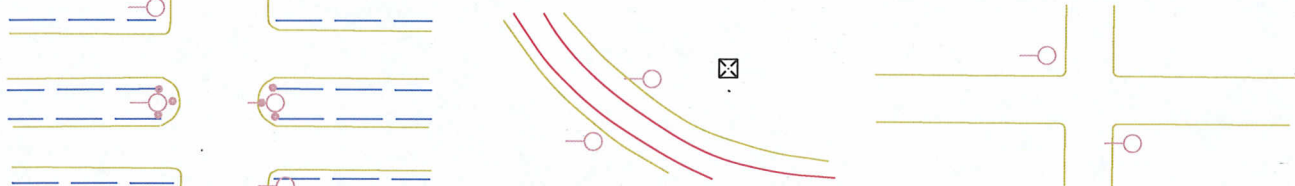
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FEATURE	SYMBOL	V8 LEVEL NAME	LINE WEIGHT	CELL OR LINE CODE	SYMBOL TYPE	COLOR	NOTES
UTILITIES							
COMMUNICATION TOWER		MANMD STRU INP	0	TWO	CE	0	ALL TOWERS PUT IN AS GENERIC TOWER (TWO) DIGITIZE CENTER DIGITIZE POLE ANCHOR(S) WHEN PRESENT.
							
POWER TOWER		MANMD STRU INP	0	TWO	CE	0	ALL TOWERS PUT IN AS GENERIC TOWER (TWO) DIGITIZE CENTER DIGITIZE POLE ANCHOR(S) WHEN PRESENT.
							
SUBSTATION		MANMD STRU INP	0	CLF	LS CLS	251	UTILITIES ELECTRICAL OR NATURAL GAS BOUNDARY DEFINED BY FENCE SYMBOL LINE CODE NOT TO SCALE.
							

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FEATURE	SYMBOL	V8 LEVEL NAME	LINE WEIGHT	CELL OR LINE CODE	SYMBOL TYPE	COLOR	NOTES
UTILITIES							
WIND GENERATOR		MANMD STRU INP	0	WMIL	CE	4	DEPICTS WINDMILLS FOR PUMPING WATER OR GENERATING ELECTRICITY.
							
COMMUNICATION PEDESTAL		MANMD STRU INP	0	PED	CE	0	ALL PEDESTALS PUT IN AS GENERIC PESDESTAL (PED) SYMBOL NOT TO SCALE.
							
POWER PEDESTAL		MANMD STRU INP	0	PED	CE	0	ALL PEDESTALS PUT IN AS GENERIC PESDESTAL (PED) SYMBOL NOT TO SCALE.
							
TRAFFIC SIGNAL		PWR PT INP	0	SGL	CE	25I	ALL PEDESTALS PUT IN AS GENERIC PESDESTAL (PED) SYMBOL NOT TO SCALE.
							

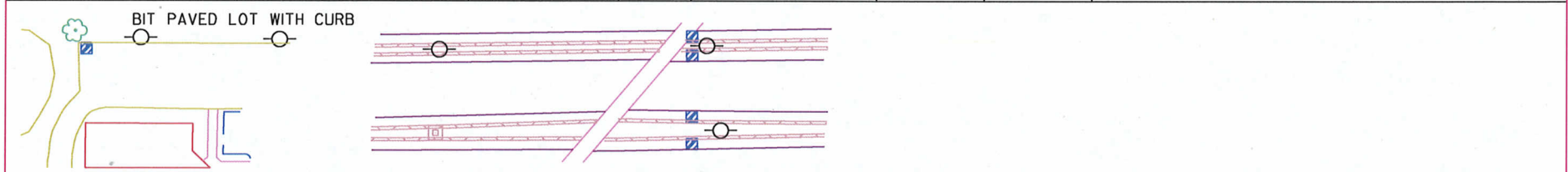
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FEATURE	SYMBOL	V8 LEVEL NAME	LINE WEIGHT	CELL OR LINE CODE	SYMBOL TYPE	COLOR	NOTES
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STRUCTURES

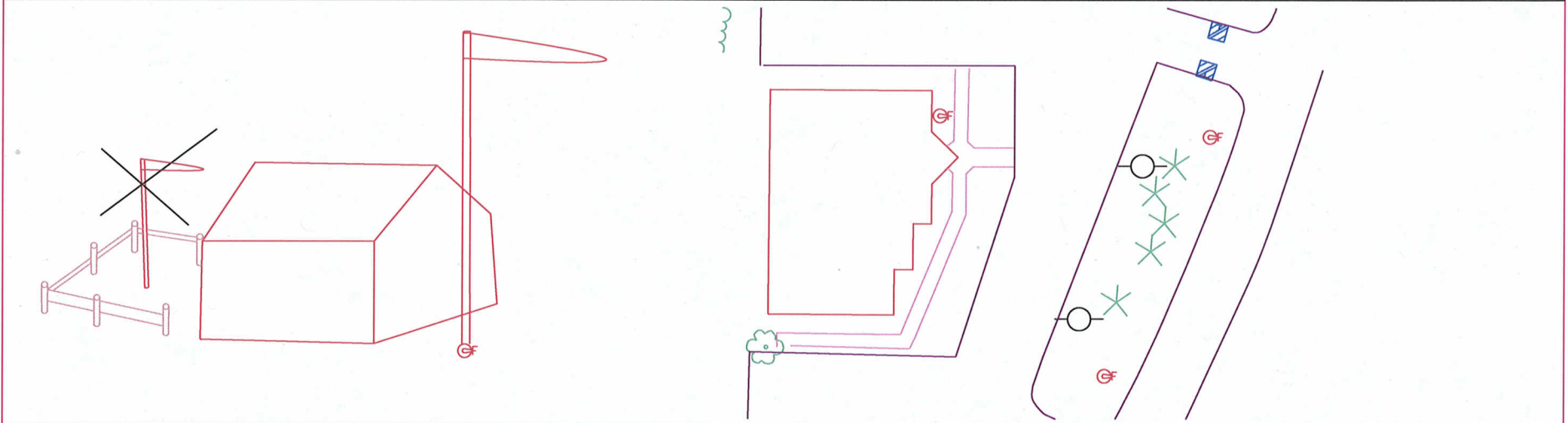
LIGHT POLE		MANMD STRU INP	0	P ANC	CE	0	ALL POLES PUT IN AS GENERIC POLE (P). SYMBOL NOT TO SCALE.
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POWER POLE (POLE ANCHOR)		MANMD STRU INP	0	P ANC	CELL CE	0 0 4	ALL POLES PUT IN AS GENERIC POLE (P). DIGITIZE POLE AND POLE ANCHOR(S) WHEN PRESENT. SYMBOL NOT TO SCALE.
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FLAG POLE		MANMD STRU INP	0	FLAGPOLE	CE	4	LARGE FLAG POLES ONLY. SYMBOL NOT TO SCALE.
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questions and receive clarification pertaining to the content of this document

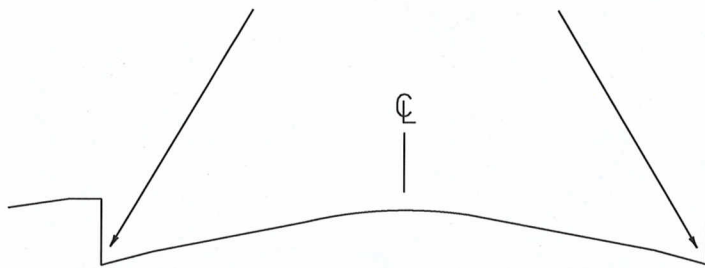
Users are instructed to contact the Minnesota Department of Transportation by email to resolve

FEATURE	SYMBOL	V8 LEVEL NAME	LINE WEIGHT	CELL OR LINE CODE	SYMBOL TYPE	COLOR	NOTES
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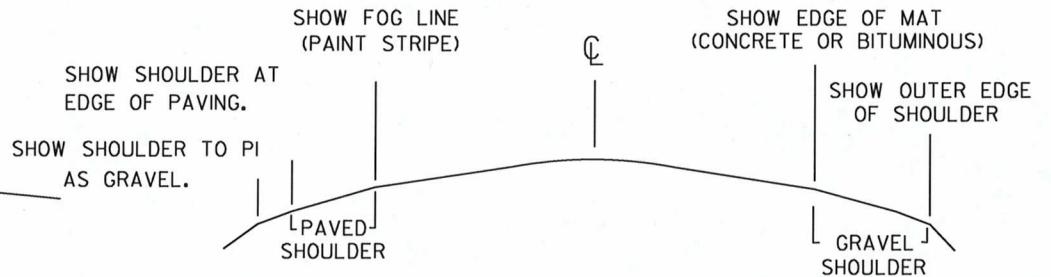
TRANSPORTATION


PAVED ROAD TWO LANE		EDG TRVL LN INP	2	LINE CODE=0	LS CS	4	USE LINE STRING FOR TANGENTS AND CURVE STRING FOR CURVES. LINE STRINGS AND CURVE STRINGS SHOULD BE JOINED TOGETHER TO FORM COMPLEX ELEMENTS.
		RD INP		2			
		RD INP		3			
		SHLD PI INP		6			

WHEN CURB AND GUTTER IS PRESENT
SHOW EDGE OF ROADWAY AT THE FLOWLINE

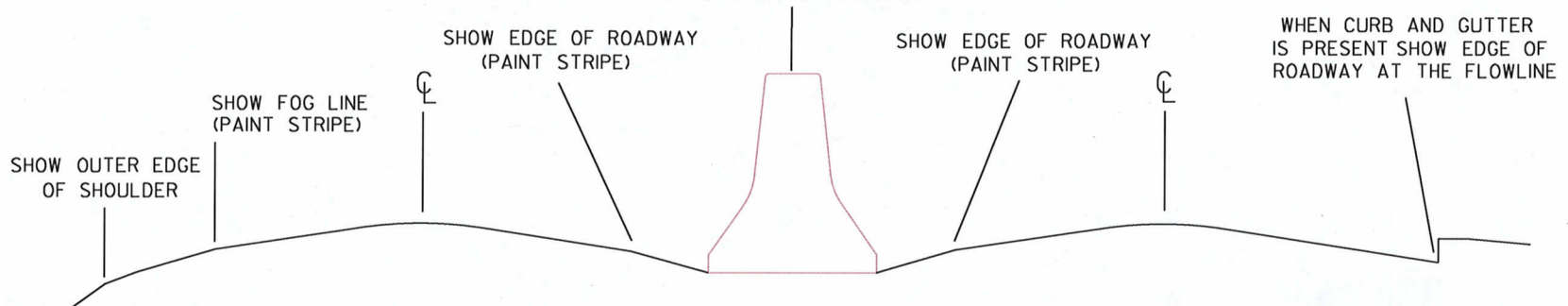


WHEN CURB AND GUTTER IS NOT PRESENT



TRAFFIC J-BARRIER		MANMD STRU INP	0	BAR	LS CS CLS	25I	SYMBOL NOT TO SCALE.
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SHOW BARRIER AT
TOP CENTER OF J-BARRIER






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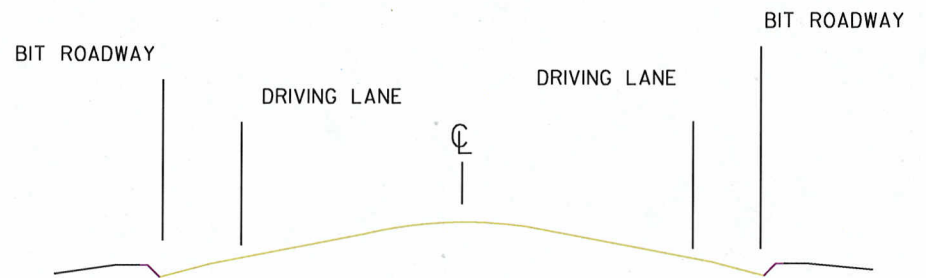
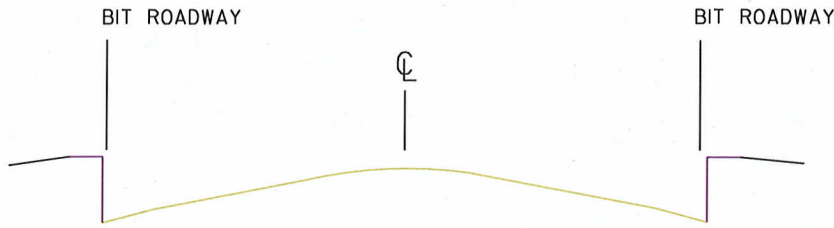
FEATURE	SYMBOL	V8 LEVEL NAME	LINE WEIGHT	CELL OR LINE CODE	SYMBOL TYPE	COLOR	NOTES
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TRANSPORTATION

PAVED ROAD TWO LANE		EDG TRVL LN INP	2	LINE CODE=0	LS CS	4	USE LINE STRING FOR TANGENTS AND CURVE STRING FOR CURVES.
		RD INP		LINE CODE=UNS		2	LINE STRINGS AND CURVE STRINGS SHOULD BE JOINED TOGETHER TO FORM COMPLEX ELEMENTS.
		RD INP				3	

BIT ROADWAY
WHEN CURB AND GUTTER IS PRESENT
SHOW EDGE OF ROADWAY AT THE FLOWLINE

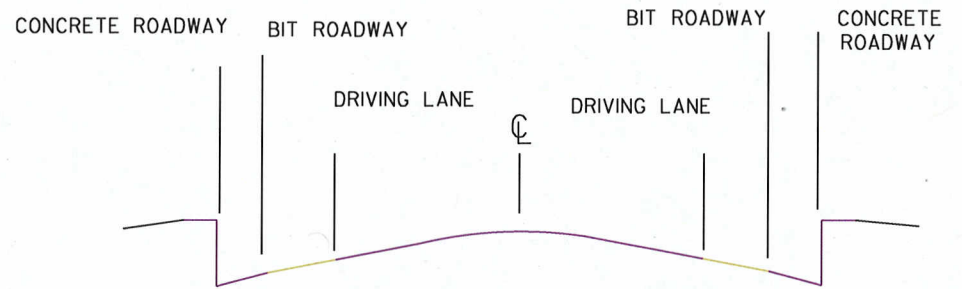
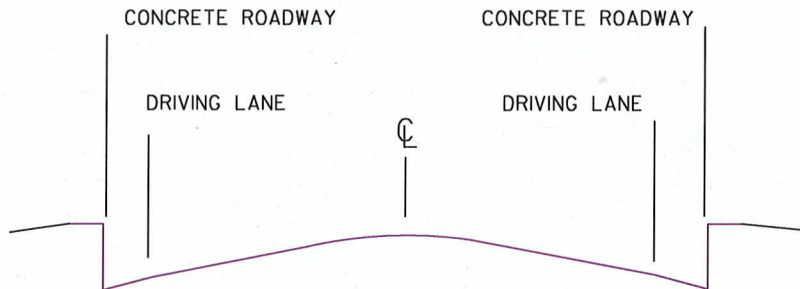
BIT ROADWAY
WHEN CURB AND GUTTER IS PRESENT
SHOW EDGE OF ROADWAY AT THE FLOWLINE



SYMBOL NOT TO SCALE.

CONCRETE ROADWAY
WHEN CURB AND GUTTER IS PRESENT
SHOW EDGE OF ROADWAY AT THE FLOWLINE

CONCRETE ROADWAY
WHEN CURB AND GUTTER IS PRESENT
SHOW EDGE OF ROADWAY AT THE FLOWLINE







IF CURB AND GUTTER GREATER THAN 2.5 FT.
SHOW EDGE OF BIT AT GUTTER EDGE NOT AT FLOW LINE.

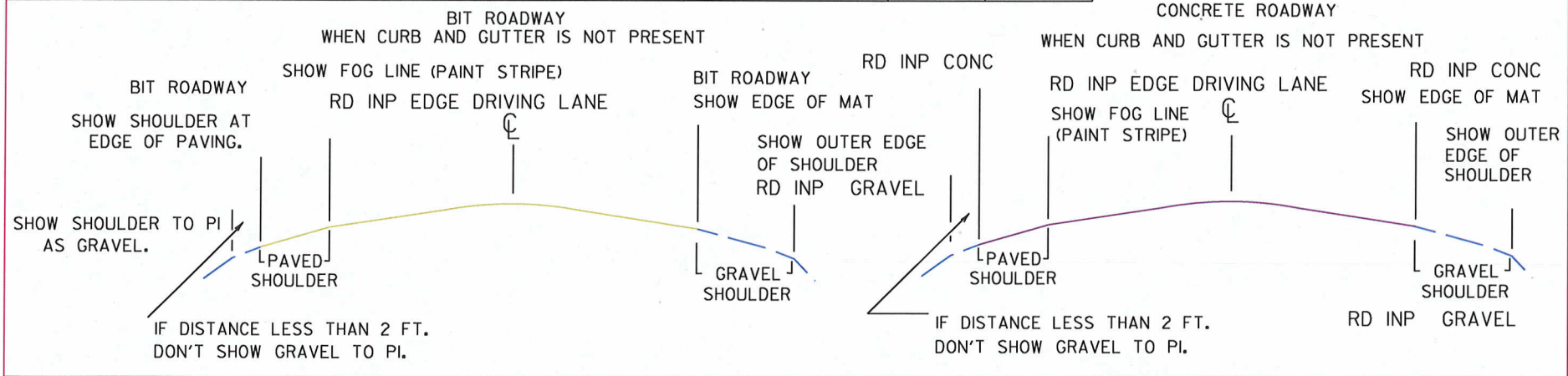
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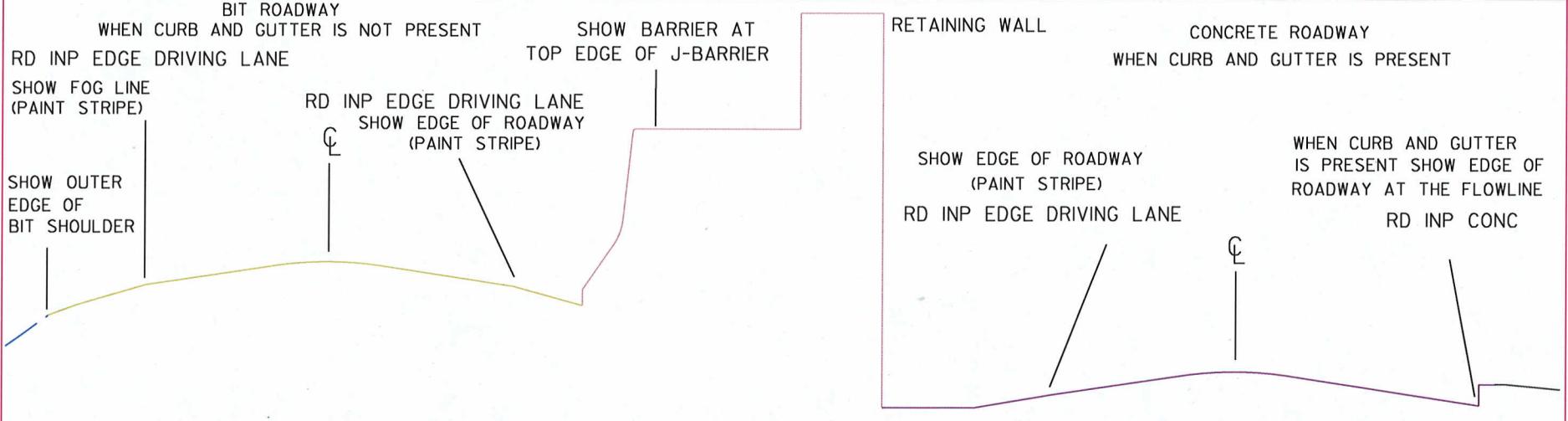
FEATURE	SYMBOL	V8 LEVEL NAME	LINE WEIGHT	CELL OR LINE CODE	SYMBOL TYPE	COLOR	NOTES
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TRANSPORTATION

PAVED ROAD		EDG TRVL LN INP	2	LINE CODE=0	LS CS	4	USE LINE STRING FOR TANGENTS AND CURVE STRING FOR CURVES.
		RD INP		LINE CODE=UNS			
DIVIDED HIGHWAY		RD INP	2	LINE CODE=UNS	LS CS	3	LINE STRINGS AND CURVE STRINGS SHOULD BE JOINED TOGETHER TO FORM COMPLEX ELEMENTS.
		SHLD PI INP					



TRAFFIC J-BARRIER		MANMD STRU INP	0	BAR	LS CS	25I	RD INP CONC TAKES PRECEDENCE OVER RD INP EDGE DRIVING LANE AS DOES RD INP BIT EDGE. SYMBOL NOT TO SCALE.
RETAINING WALL			0	WALL	CLS	25I	







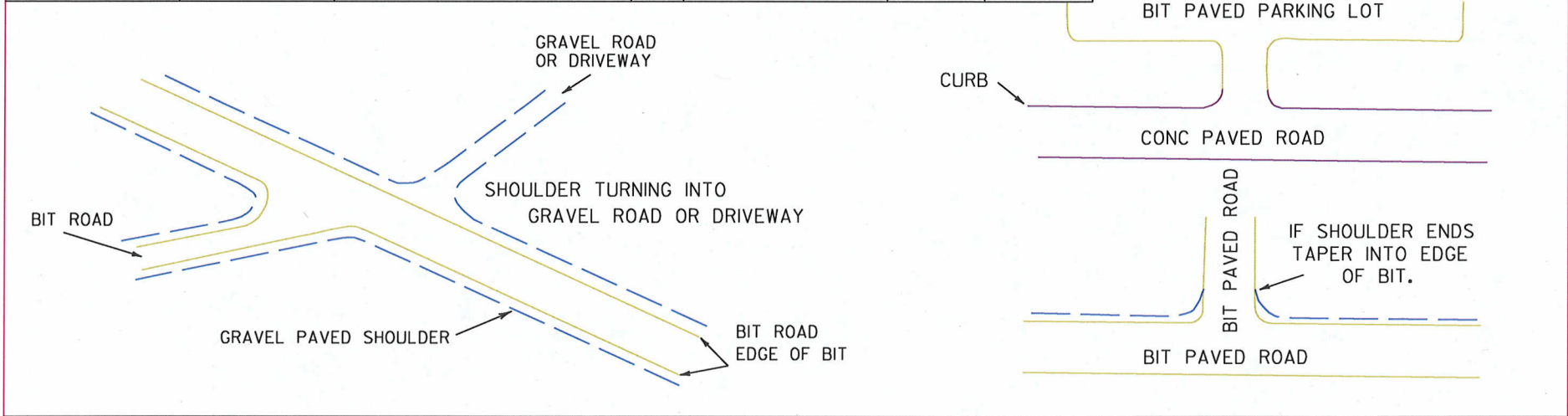
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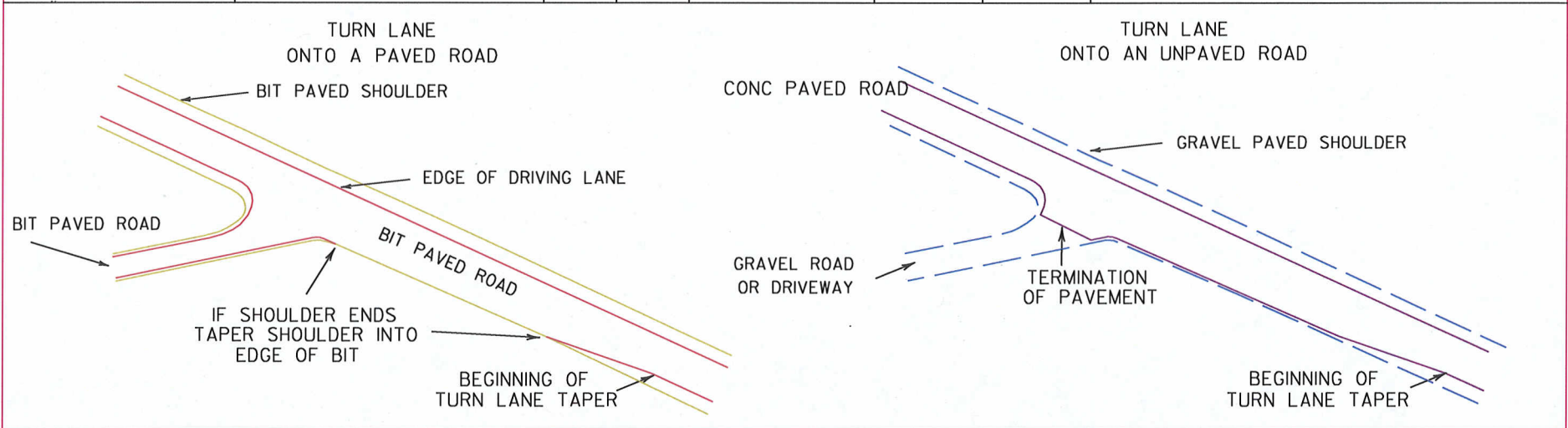
FEATURE	SYMBOL	V8 LEVEL NAME	LINE WEIGHT	CELL OR LINE CODE	SYMBOL TYPE	COLOR	NOTES
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TRANSPORTATION

ROAD INTERSECTIONS		EDG TRVL LN INP	2	LINE CODE=0	LS CS	4	USE LINE STRING FOR TANGENTS AND CURVE STRING FOR CURVES. LINE STRINGS AND CURVE STRINGS SHOULD BE JOINED TOGETHER TO FORM COMPLEX ELEMENTS.
		RD INP		2			
		RD INP		3			
		SHLD PIINP		6			



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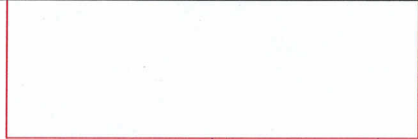
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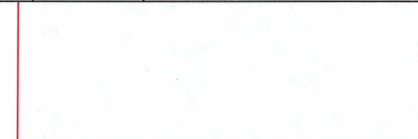
FEATURE	SYMBOL	V8 LEVEL NAME	LINE WEIGHT	CELL OR LINE CODE	SYMBOL TYPE	COLOR	NOTES
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TRANSPORTATION

ENTRANCES		RD INP RD INP SHLD PI INP	2	LINE CODE=0 LINE CODE=UNS	LS CS	2 3 6	ALL DRIVEWAY ENTRANCES OPEN. ENTRANCE WITH AND WITHOUT CURB. EXAMPLES NOT TO SCALE. DIGITIZE STARTING AT ROAD.
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BIT ROAD CONC DRIVE, IF APRON IS PRESENT
SHOW THE RADIUS.



BIT ROAD AND CONC DRIVE ENTRANCE WITHOUT APRON.
SHOW END OF CURB THEN BEGIN DRIVEWAY.



BIT ROAD GRAVEL DRIVE ENTRANCE WITHOUT CURB
AND WITHOUT SHOULDER.






BIT ROAD GRAVEL DRIVE ENTRANCE WITH GRAVEL SHOULDER.

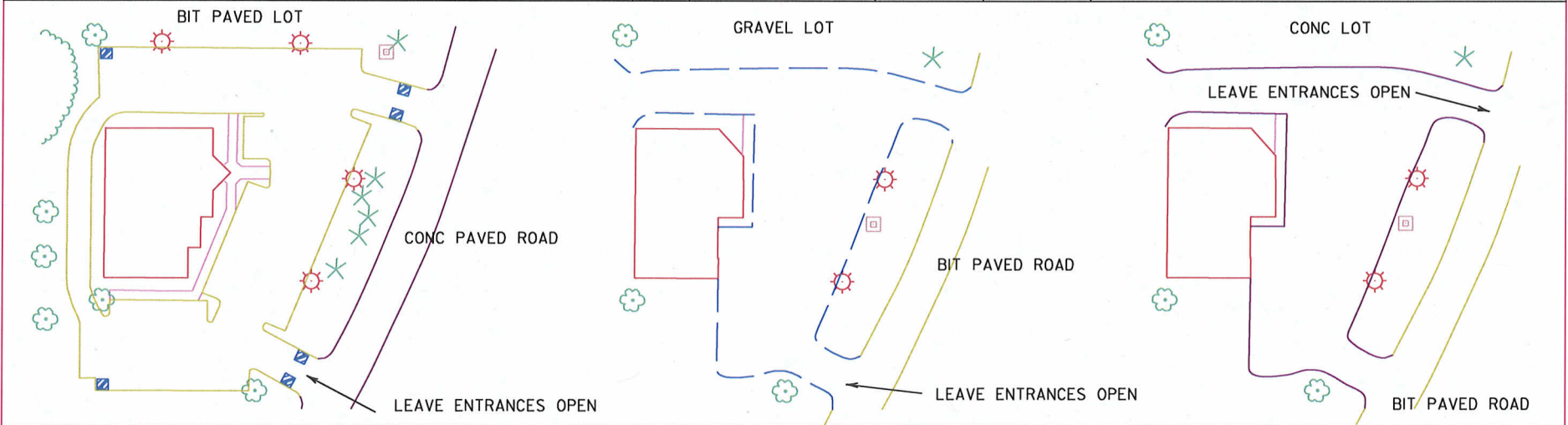
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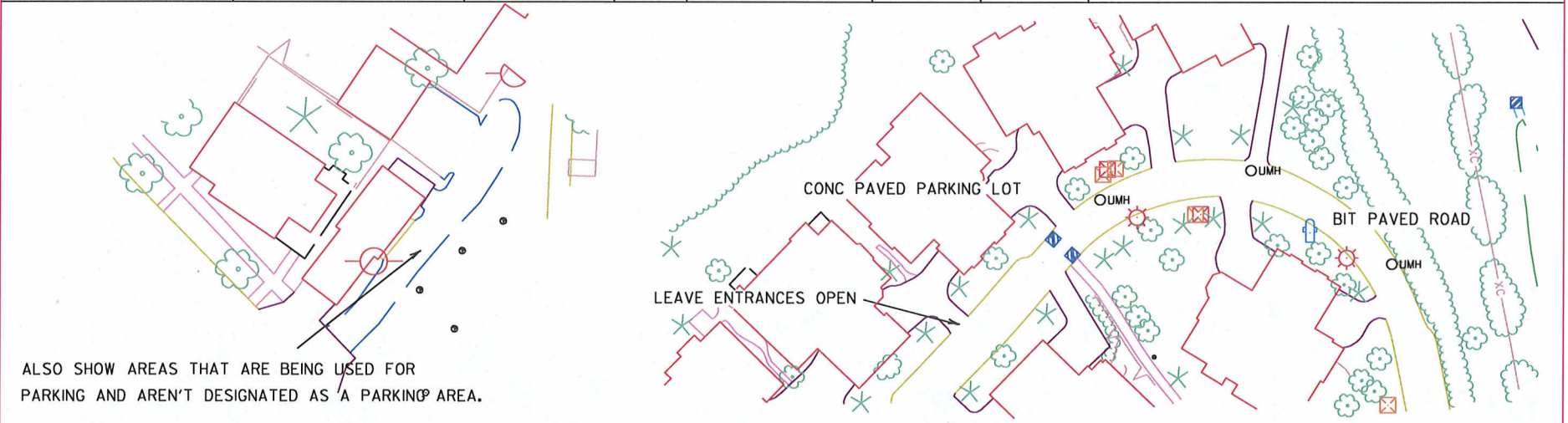
FEATURE	SYMBOL	V8 LEVEL NAME	LINE WEIGHT	CELL OR LINE CODE	SYMBOL TYPE	COLOR	NOTES
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TRANSPORTATION

PARKING LOTS		RD INP	2	0	CLS	2	LEAVE ALL PARKING LOT ENTRANCES OPEN. DON'T CLOSE OFF BOUNDARY BETWEEN DIFFERENT MATERIAL TYPES.	
		RD INP		0	LS CS			3
		SHLD PIINP		UNS	LS CS			6



PARKING LOT ENTRANCES LEFT OPEN WHEN DRIVING LANE NOT SHOWN.

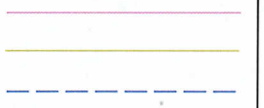


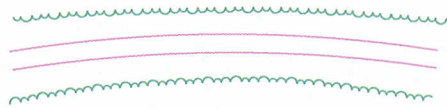
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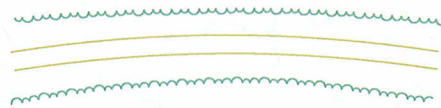
FEATURE	SYMBOL	V8 LEVEL NAME	LINE WEIGHT	CELL OR LINE CODE	SYMBOL TYPE	COLOR	NOTES
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TRANSPORTATION

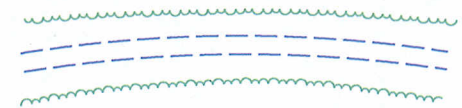
PEDESTRIAN/ BICYCLE TRIAL		SWALK INP RD INP SHLD PIINP	2	0 0 TRAIL	CLS LS CS	11 3 12	DIGITIZE BOTH SIDES OF TRAIL.
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CONCRETE PAVED PEDESTRIAN/BIKE TRAIL

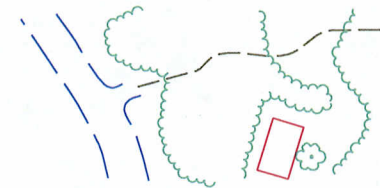
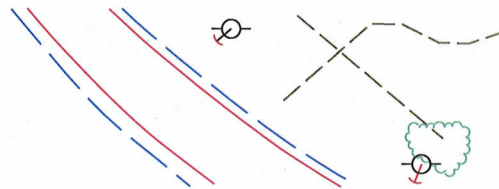
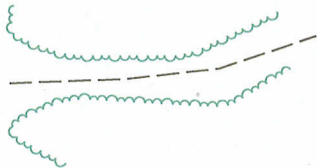


BIT PAVED PEDESTRIAN/BIKE TRAIL



UNPAVED GRAVEL PEDESTRIAN/BIKE TRAIL

TRAIL		RD INP	2	TRAIL	CLS LS CS	12	FEATURE DEPICTS UNDEVELOPED TRAIL, DIGITIZE ALONG CENTER OF TRAIL. COLOR 52 MODIFIED FOR PLOTTING PURPOSES.
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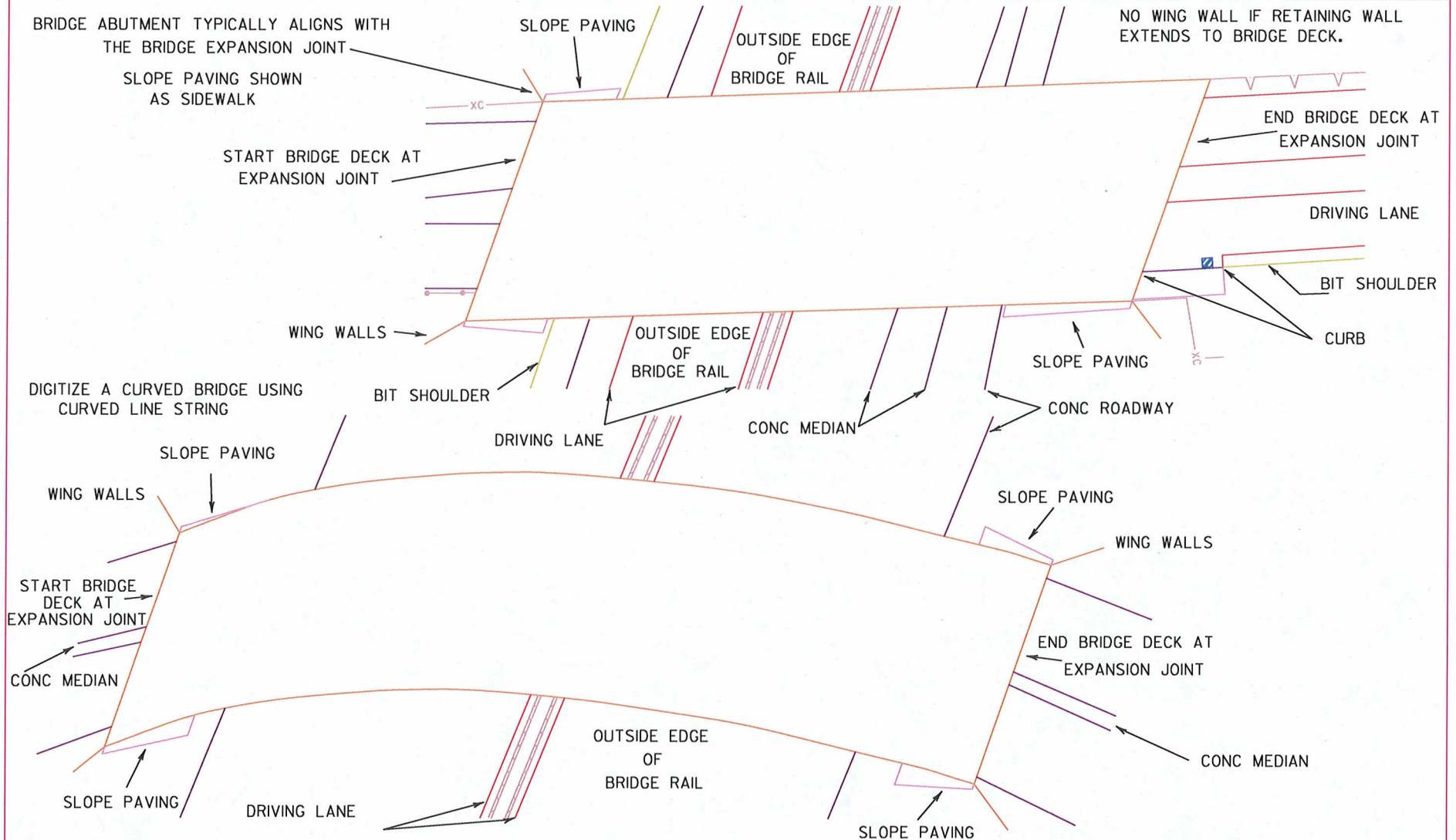
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TRANSPORTATION

BRIDGE & SLOPE PAVING		RD INP SWALK INP OR BIT	2 2	LINE CODE=0	LS CS	71 11	DIGITIZE BRIDGE DECK AT EXPANSION JOINTS, NOT AT APPROACH PANEL JOINT. BRIDGE TO BE SHAPE OR COMPLEX SHAPE. SHOW THE WING WALLS WHEN PRESENT. WING WALLS ARE THE SAME LEVEL, WEIGHT, AND COLOR
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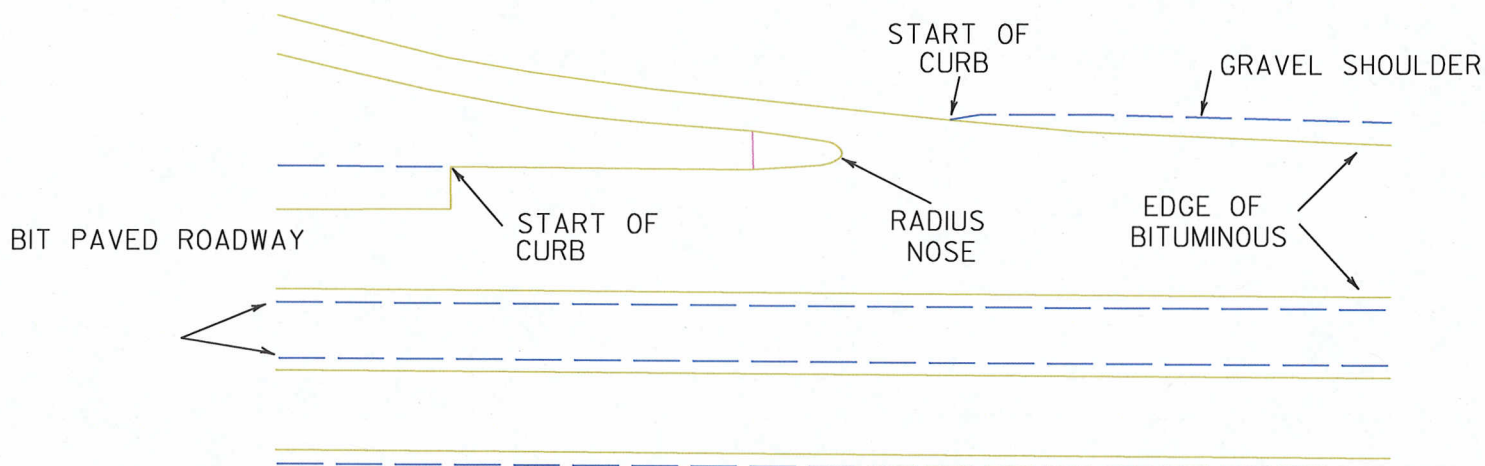
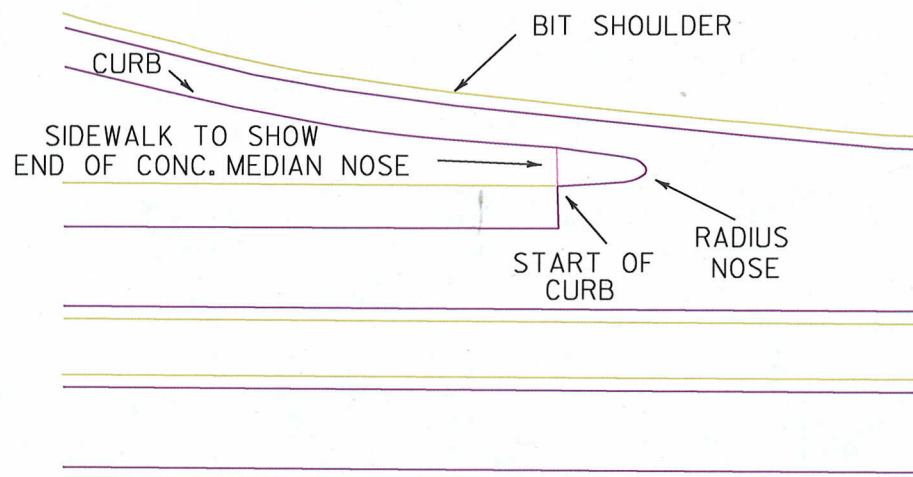
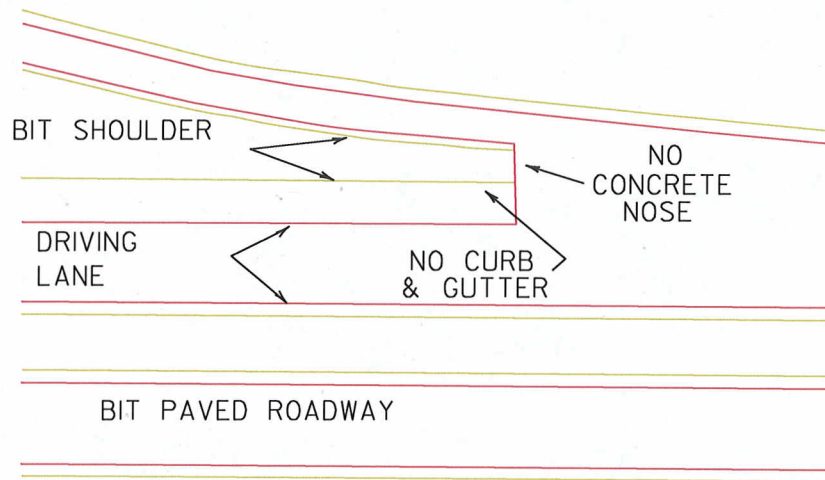
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TRANSPORTATION

CONCRETE MEDIAN NOSES		EDG TRVL LN INP				4	EXAMPLES OF CONCRETE MEDIAN NOSES.
		RD INP	2	LINE CODE=0	LS CS	2	
		RD INP		UNS		3	
		SHLD PIINP		LINE CODE=0		6	
		SWALK INP				11	



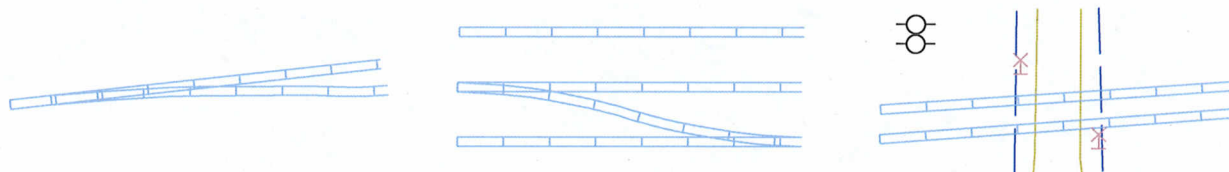
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FEATURE	SYMBOL	V8 LEVEL NAME	LINE WEIGHT	CELL OR LINE CODE	SYMBOL TYPE	COLOR	NOTES
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TRANSPORTATION

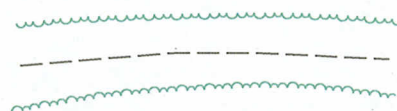
RAILROAD		ALIRR INP	2	RRTRACK	CLS LS CS	58	DIGITIZE BETWEEN RAILS. BEGIN AND OR END MERGING LINES AT END OF SWITCH. SYMBOL LINE CODE NOT TO SCALE.
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TRESTLE		ALIRR INP	2	LINE CODE=0	LS CS	58	SHOW THE WING WALLS WHEN PRESENT. WINGWALLS ARE THE SAME LEVEL, WEIGHT, AND COLOR TRESTLE TO BE SHAPE OR COMPLEX SHAPE.
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ABANDONED RAILROAD		RD INP	2	TRAIL	CLS LS CS	12	FEATURE DEPICTS ABANDONED RAILROAD, DIGITIZE ALONG CENTER OF TRAIL.
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UNUSED ABANDONED

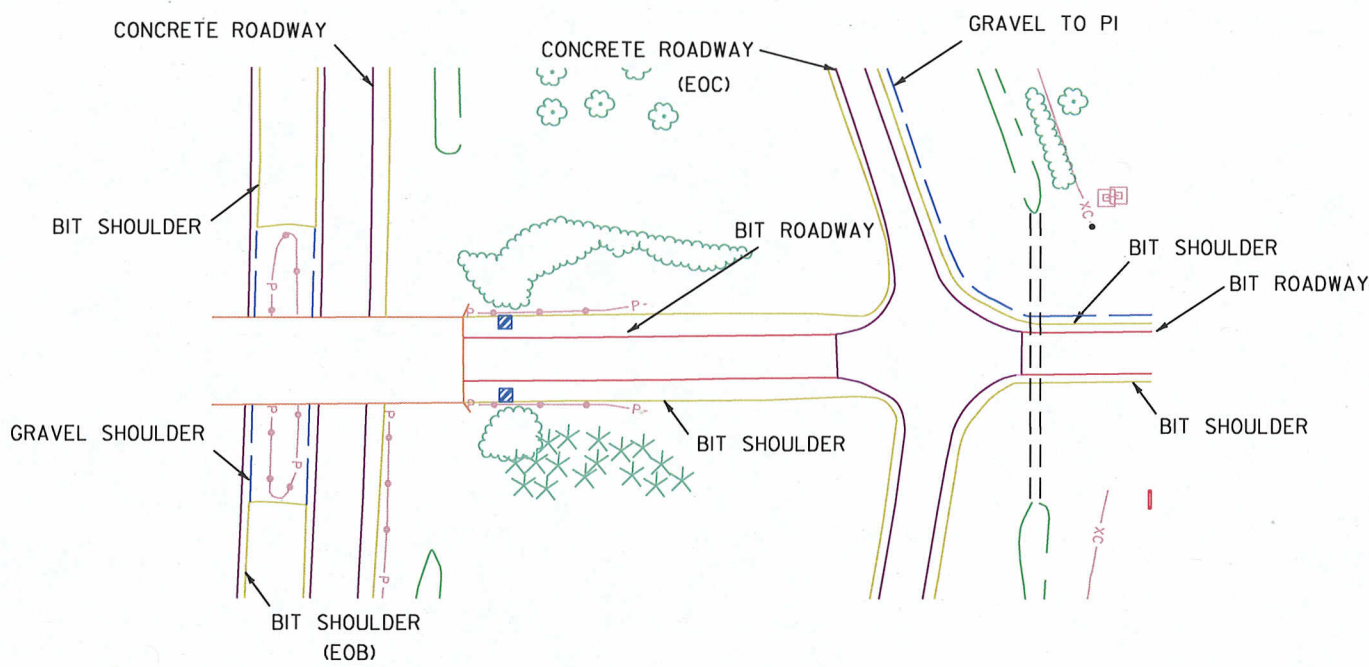
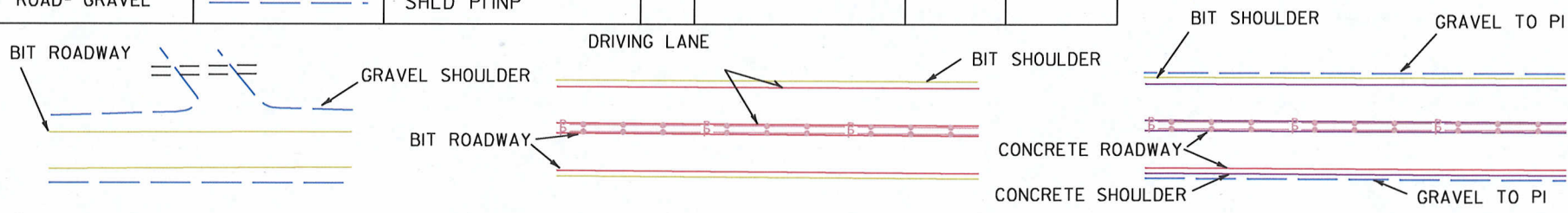
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FEATURE	SYMBOL	VB LEVEL NAME	LINE WEIGHT	CELL OR LINE CODE	SYMBOL TYPE	COLOR	NOTES
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TRANSPORTATION

ROAD- FOG LINE		EDG TRVL LN INP		LINE CODE=0	LS CS	4	USE LINE STRING FOR TANGENTS AND CURVE STRING FOR CURVES. LINE STRINGS AND CURVE STRINGS SHOULD BE JOINED TOGETHER TO FORM COMPLEX ELEMENTS.
ROAD- CONCRETE		RD INP	2	LINE CODE=0		2	
ROAD- BIT		RD INP		LINE CODE=UNS		3	
ROAD- GRAVEL		SHLD PI INP				6	







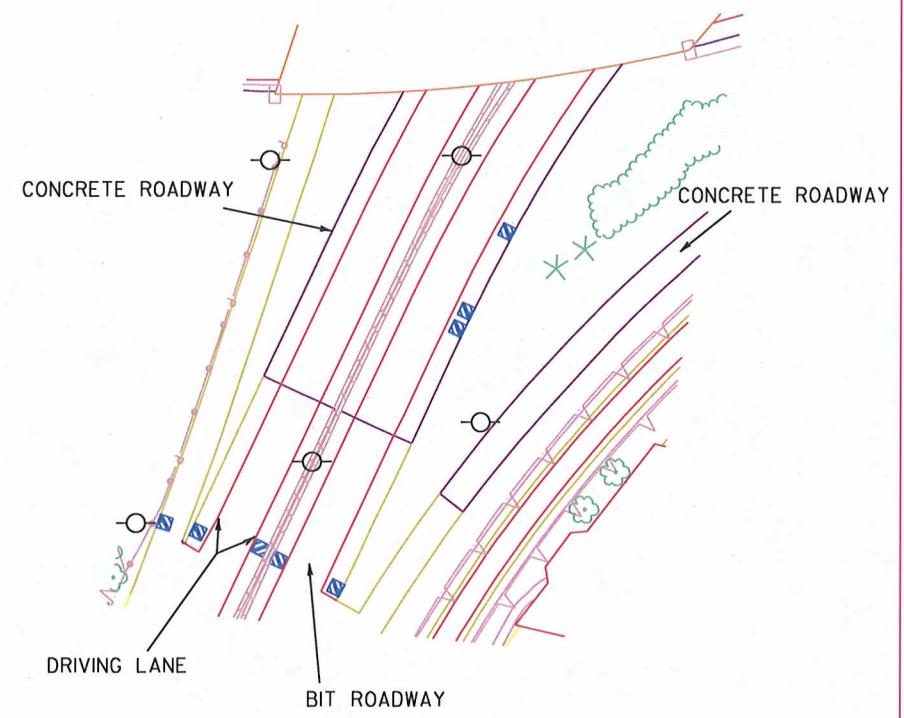
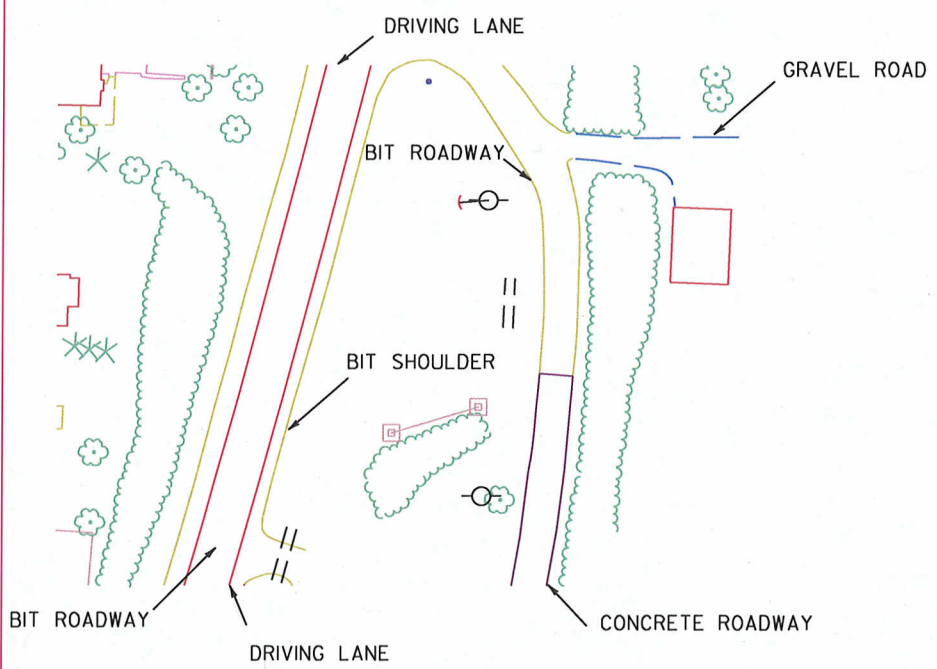
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FEATURE	SYMBOL	VB LEVEL NAME	LINE WEIGHT	CELL OR LINE CODE	SYMBOL TYPE	COLOR	NOTES
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TRANSPORTATION

ROADWAY		EDG TRVL LN INP	2	LINE CODE=0	LS CS	4	USE LINE STRING FOR TANGENTS AND CURVE STRING FOR CURVES. LINE STRINGS AND CURVE STRINGS SHOULD BE JOINED TOGETHER TO FORM COMPLEX ELEMENTS. COLOR 4 HAS BEEN MODIFIED FOR PRINTING, R=245 G=39 B=2. COLOR 3 HAS BEEN MODIFIED FOR PRINTING, R=161 G=145 B=26. COLOR 2 HAS BEEN MODIFIED FOR PRINTING, R=74 G=0 B=74.
		RD INP		2			
		RD INP		3			
		SHLD PI INP		6			






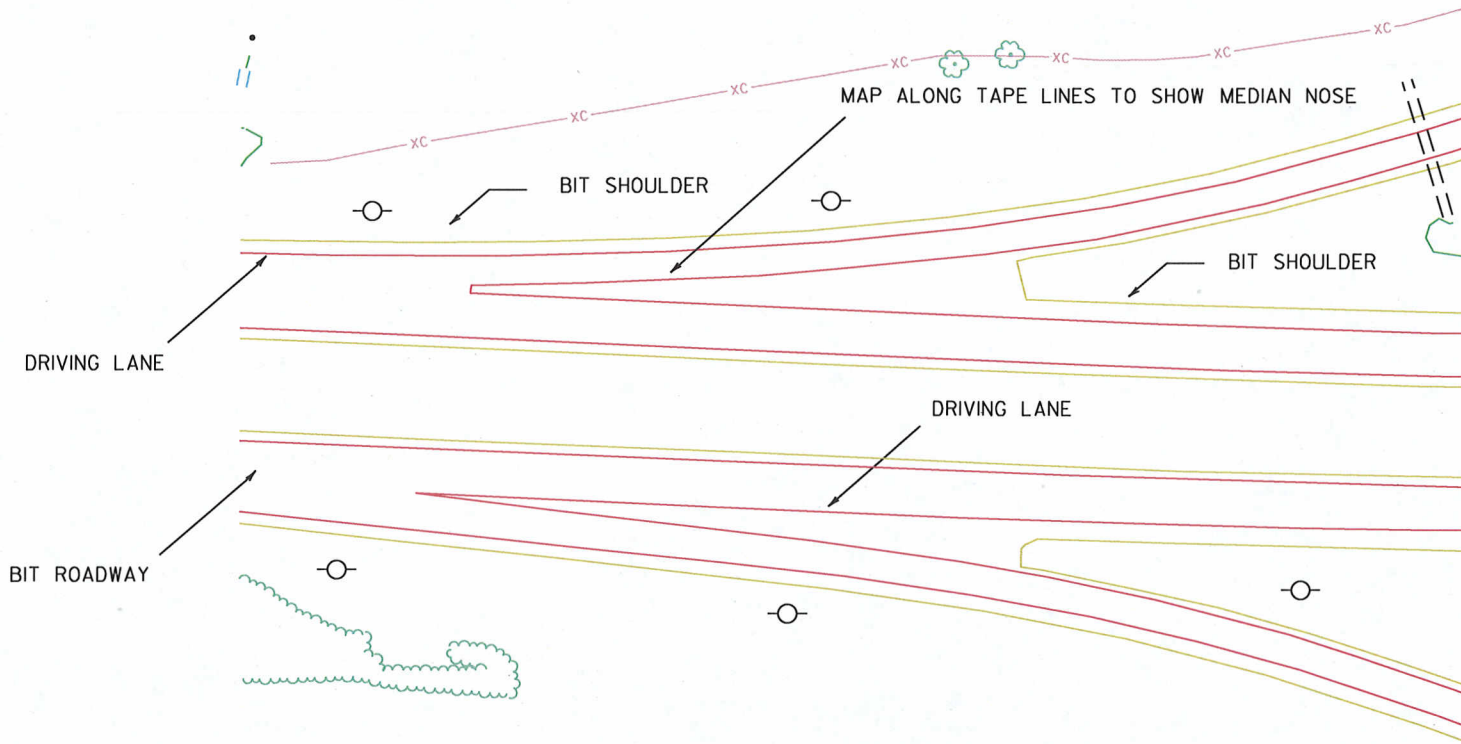
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FEATURE	SYMBOL	V8 LEVEL NAME	LINE WEIGHT	CELL OR LINE CODE	SYMBOL TYPE	COLOR	NOTES
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TRANSPORTATION

ROADWAY		EDG TRVL LN INP RD INP RD INP	2	LINE CODE=0	LS CS	4	DIGITIZE BIT ROADWAY AND BIT SHOULDER AS RD INP BIT LINE STYLE = 0, CONCRETE PAVEMENT AS RD INP CONC CO = 2, WT = 2.
					CLS	2	
						3	
						6	






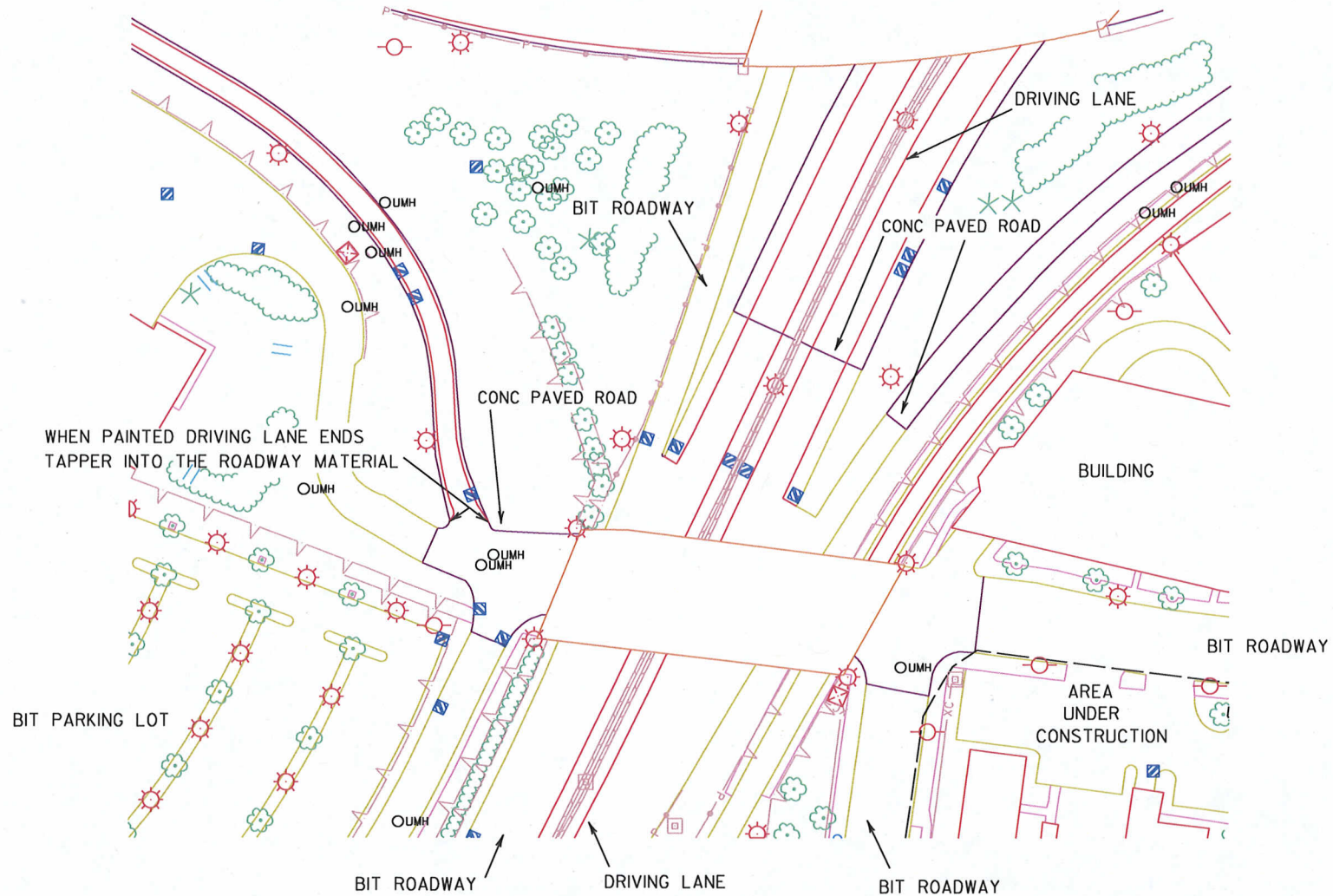
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TRANSPORTATION

ROADWAY		EDG TRVL LN INP	2	LINE CODE=0	LS CS	4	COLORS 4, 3, 2 HAVE BEEN MODIFIED FOR PLOTTING PURPOSES.	
		RD INP						2
		RD INP						3






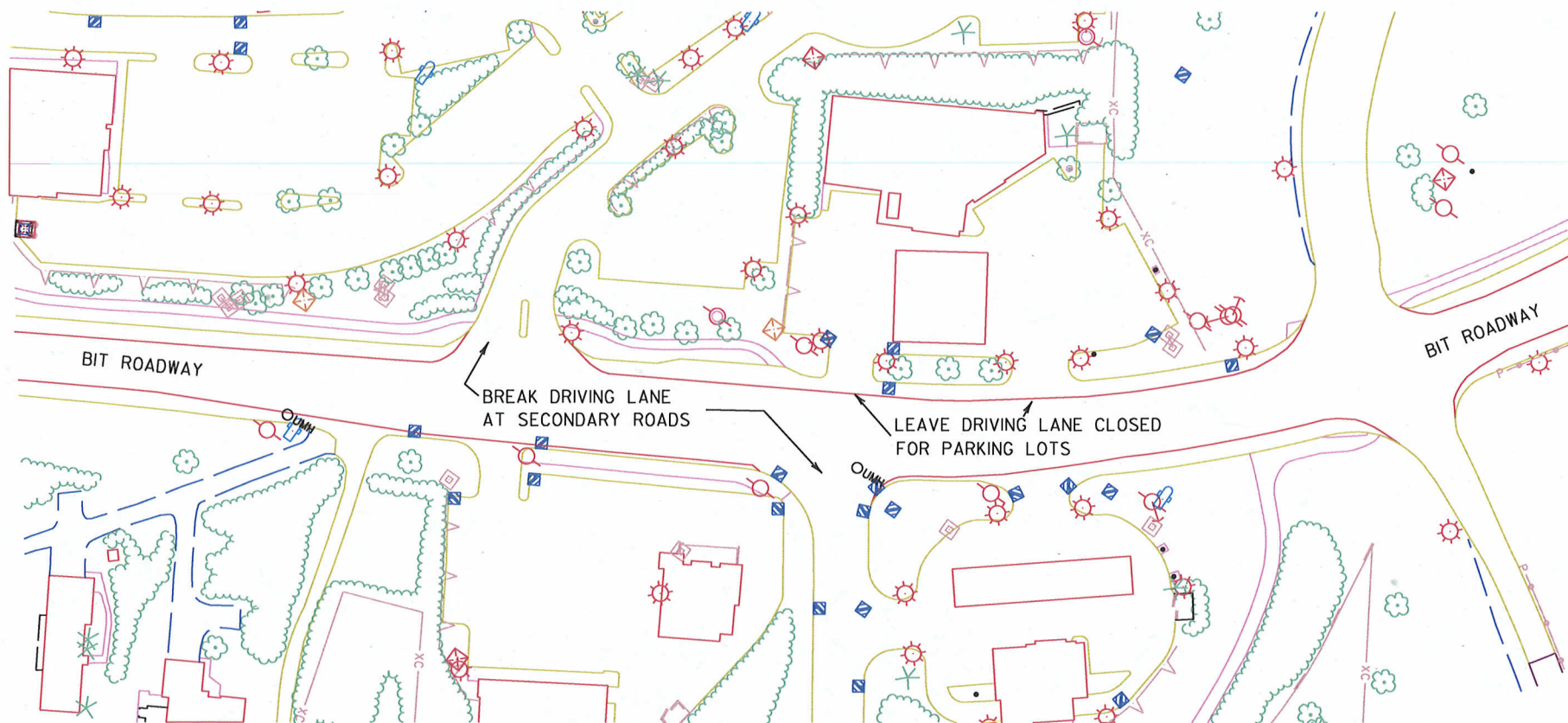
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TRANSPORTATION

ROADWAY		EDG TRVL LN INP	2	LINE CODE=0	LS CS CLS	4 3 6	DRIVING LANE BREAKS AND TAPERS INTO SECONDARY ROADWAY. DRIVING LANE CONTINUES THROUGH PARKING LOT ENTRANCES.
		RD INP		UNS			
		SHLD PI INP					




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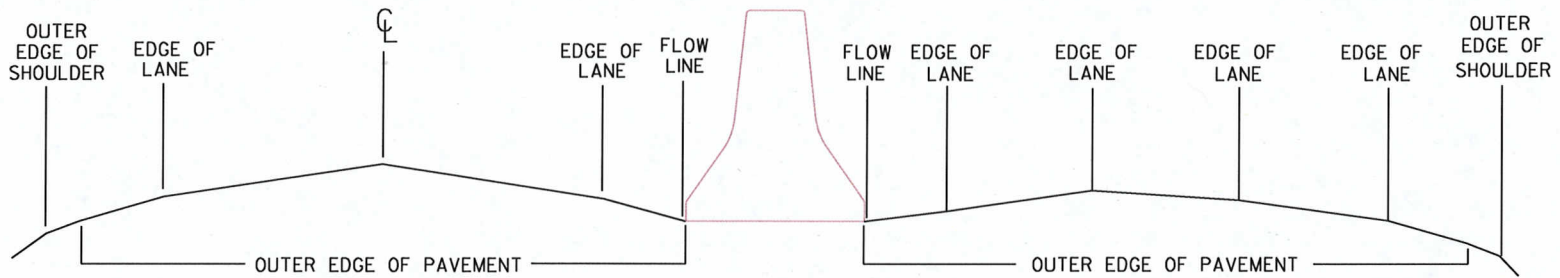
FEATURE	SYMBOL	V8 LEVEL NAME	LINE WEIGHT	CELL OR LINE CODE	SYMBOL TYPE	COLOR	NOTES
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DIGITAL TERAIN MODEL

BREAKLINE LOCATIONS		BRKLN	0	LINE CODE=0	LS	3	DIGITIZE DTM FEATURES IN 3D FILES. DIGITIZE BREAKLINES AT THESE LOCATIONS. THE STANDARD DISTANCE IS 25' OR 8(M).
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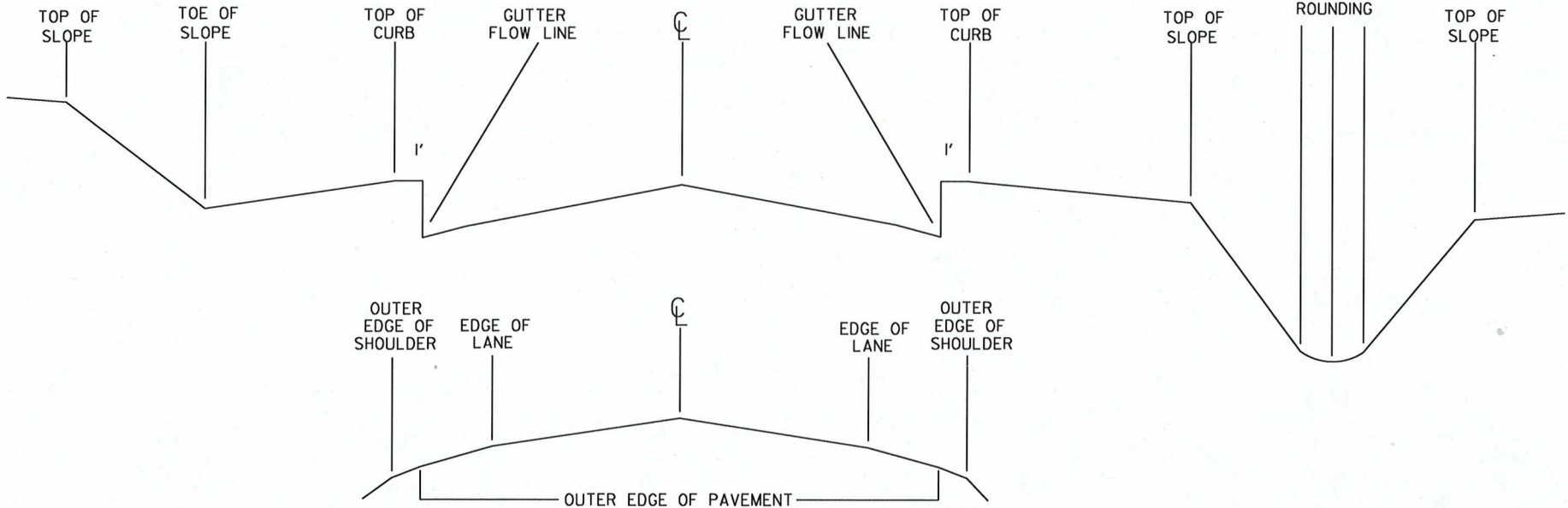
J-BARRIER

NO BREAKLINE AT TOP OF BARRIER.



AT LEAST THREE BREAKLINES TO SHOW DITCH BOTTOM

DITCH ROUNDING



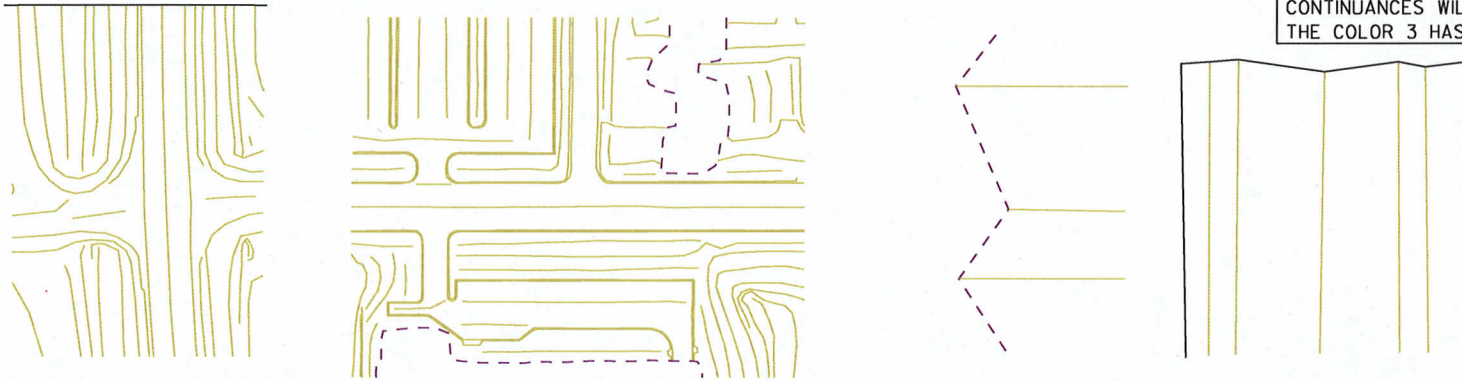
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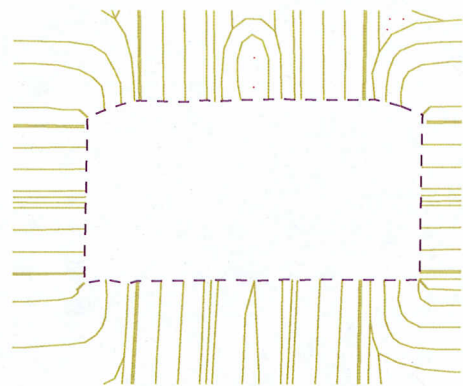
FEATURE	SYMBOL	V8 LEVEL NAME	LINE WEIGHT	CELL OR LINE CODE	SYMBOL TYPE	COLOR	NOTES
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DIGITAL TERAIN MODEL

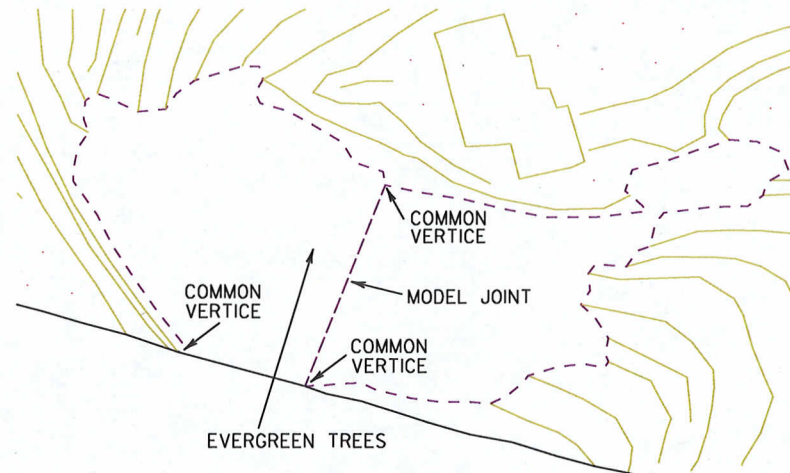
GROUND ELEVATION BREAKLINE		BRKLN	0	LINE CODE=0	LS	3	BREAKLINES MUST NOT CROSS OTHER BREAKLINES, VOID SHAPES, OR BOUNDARY SHAPE. BREAKLINES AND VOIDS MUST HAVE COMMON VERTICES. BREAKLINES AND BOUNDARY MUST HAVE COMMON VERTICES. BREAKLINES DO NOT STOP SHORT OF VOIDS OR BOUNDARIES. CONTINUANCES WILL HAVE COMMON VERTICES. THE COLOR 3 HAS BEEN MODIFIED FOR PRINTING.
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VOID BREAKLINE		VOID	0	LINE CODE=5	LS	2	VOID BREAKLINES MUST CLOSED SHAPES. VOIDS AND BOUNDARY MUST HAVE COMMON VERTICES. ADJACENT VOIDS MUST HAVE COMMON VERTICES. NO MAXIMUM DISTANCE BETWEEN VERTICES WHEN COMMON WITH OTHER VOIDS OR A BOUNDARY.
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BRIDGE



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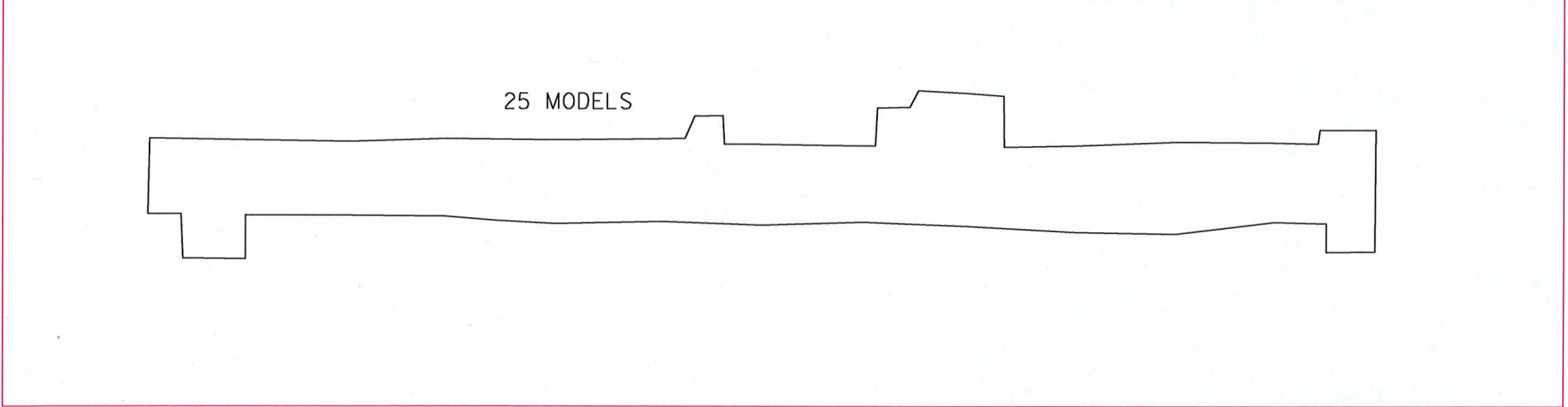
FEATURE	SYMBOL	V8 LEVEL NAME	LINE WEIGHT	CELL OR LINE CODE	SYMBOL TYPE	COLOR	NOTES
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DIGITAL TERAIN MODEL

ISLAND BREAKLINE		VOID	0	LINE CODE=0	S	2	ISLAND BREAKLINES DEFINE AREAS TOTALLY WITHIN VOIDS. ISLAND BREAKLINES MUST BE CLOSED SHAPES. ISLANDS AND BREAKLINES MUST HAVE COMMON VERTICES. THE COLOR 3 HAS BEEN MODIFIED FOR PRINTING.
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BOUNDARY BREAKLINE		DTM BDRY	4	LINE CODE=0	S, CS	0	DIGITIZE GROUND PROFILE ALONG MAPPING LIMITS AT TOP AND BOTTOM OF EACH MODEL FILE ALSO AT THE ENDS OF THE PROJECT LIMITS. THE BOUNDARY BREAKLINES MUST BE CHAINED TOGETHER TO FORM A CLOSED SHAPE.
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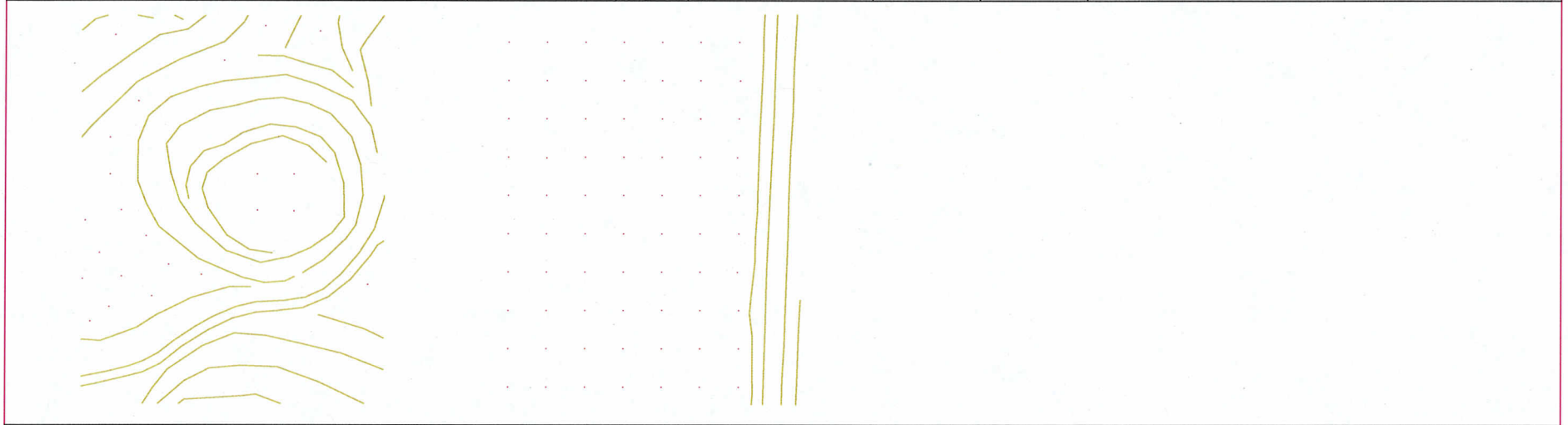
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DIGITAL TERAIRN MODEL

SPOT SHOTS		SPOT	4	LINE CODE=0	L	4	MAXIMUM HORIZONTAL DISTANCE BETWEEN SHOTS IS 25'. SPOT SHOT WEIGHT CHANGED FOR PLOTTING PURPOSES.
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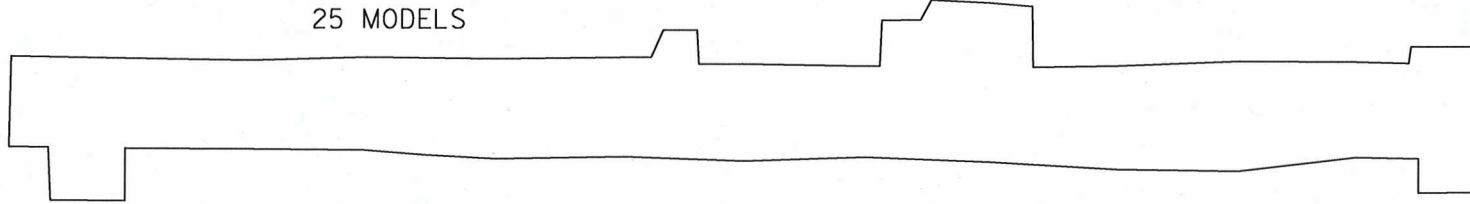
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MANUSCRIPT DATA

MAPPING LIMIT PLAN	—————	PLAN BDRY	4	LINE CODE=0	S, CS	0	DIGITIZE AROUND MERGED FILES (ABOUT 20-30 MEG.) ONLY. MUST BE CLOSED SHAPE.
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