Tricks and Treats



Not-So-Scary

Roadsoft Tips

Jeanette Huang and Carla Schubert





Treasure Maps Using External Map Layers

Stormy C's

Repurposing the Culvert Module

Mysterious Masks

Using Memo Data Field Masks

Haunting Hyperlinks

Adding Hyperlinked Word Docs

















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	Pattern	Solid	-	L L
Style Solid Width 2		Solid		
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Point Pavement Markings





Identifying FACILITIES and COMMUNITY IMPACTS on Roads



	~
Unique Values:	O Range Values:
limited to 1st 25 vals Airport Runway / Airfield Boat Ramp / Dock Campground Cemetery College / University Commercial or Retail Facility County Government Facility County Government Facility Court House	 ▲ Auto Add Ranges Minimum Value: Maximum Value:
C Add Selected	I Unique Value(s)
Query	E Feature
FCUDE = House of Worship	Pattern Solid
FCODE = Faik	Outline Outline
FCODE = Museum	Outline Pattern Solid
FCODE = Library FCODE = Fire Station / EMS Station	OutlineStyle Solid OutlineWidth 1
FCODE = Law Enforcement	
-	

Field: NAME Field: NAME Font: Image: Arial B	
Text Color: Fill C Rendering Labels Legend Label Position Outline Alignment: Left Justify (multi-line)	
Label Position Outline Alignment: Left Justify (multi-line) ✓	
Alignment: Left Justify (multi-line)	_
Position: FacilitySite Layer Properties	
[Rendering Labels Legend	
Style/Color: Solid VIII/	
Fill Pattern/Color: Solid	

FROM THIS...



TO THIS!!!



 Roadsoft: v2017.8 : Elkhart (County) File Asset Management Safety Analysis Reporting LI Map Layers Map Eayers Point Layers Intersection Sign 		ADDING I	MAP LAY	ERS	
File Asset Management Safety Analysis Reporting LI Map Layers \$ \$ \$ \$ \$ \$ O Intersection \$ \$ \$ \$ Sign \$ \$ \$ \$ \$	【 Roa	adsoft: v2017.8 : Elkha	rt (County)		
Map Layers ↓ × Image: Sign	File	Asset Management	Safety Analysis	Reporting	LD
 O O Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø Ø	Map L	ayers		ą	×
Point Layers ▲ Intersection ▲ Sign ■	· 🕄	😑 <table-row> 🕌 🎫 -</table-row>			
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Guardrail Guardrail Guardrail C Road Driveway Linear Pavement Marking







Point Layers			
Intersection			
] Sign	Road Layer Properties		
Addresses	Rendering Labels Legend		
Culvert	Pattern	Solid	^
] Point Pavemen	Width	1	
] Traffic Count	Outline Color Outline Pattern	Solid	
] Crash	OutlineStyle OutlineWidth	Solid 1	
Line Layers	 Selection Selection Color Selection Operative 	90	
2014 Chip and	Selection Width	00	
2015 Chip and	Sets the width of the outline or overlap Layer Display Name:	for the selection (between 0 and 5)	
2017 Chip and	Road		
] Railroads			😋 Apply
2016 Chin and 9	Real		





Static *vs*. Dynamic

Roadsoft + Map Layers







This is to *CHECK* to see if you were paying attention: In Roadsoft, how do you make a map layer visible?



In the Map Layers window pane, put a check in the box immediately in front of that map layer. I've SELECTED this next question just for you! How do you make a map layer (NAMELY, the one that you CLICKED to make visible,) the active map layer?

Map Layers
i 😼 😋 🖨 🖊 🎫 -
Point Layers
Intersection

Select that map layer by clicking on its name in the Map Layers window pane.

STORMY C'S

Using the CULVERT MODULE

to collect
STORM DRAIN DATA



Bridge Inventory ID = B-123







Storm Drain Inventory ID = SD-567
STORMY C'S STRATEGY

✓ WHICH DATA FIELDS SHOULD BE USED?

✓ HOW SHOULD THOSE DATA FIELDS BE USED?

WHAT NEW FIELD
VALUES ARE NEEDED
FOR THE DATA FIELDS?







STAGGER THE LOCATIONS OF OPPOSING STORM DRAINS





MAPS WORKSHEETS



AERIAL MAP OF STORM DRAINS FOR CONTRACTOR

🛼 Export Culv	vert To CSV				×
Q Find field	×	(V Saved Filte	rs 🗹 Use Current Filter 📄 Export Only Selected	Items
	Available Fields to Export			Fields to Export	
Field Name	Field Description		Field Name	Field Description	Sort
DateBuilt	Date Built		RdCityTwp	R0AD: City/Township ownership	
DnsInvElev	Downstream Culvert Invert Elevation		Memo	Memo	
DnsRSfElev	Downstream Road Surface Elevation		UserCvrtNo	User Culvert Number	1
InLkesAct	Inland Lakes Act		PRName	PR Name	
ChnnlRatng	Latest Channel Rating		Descript	Description	
Rating	Latest Culvert Rating		Туре	Туре	
WatrwayRtg	Latest Waterway Rating	Add	EntrStruct	Entrance Structure	
Milepoint	Milepoint		Latitude	Latitude	
RefMiles	Reference Miles		DepCovr	Depth of Cover	
Rise	Rise		IntName	Intersection Name	
NumCulvs	Number of Culverts	Remove	Longitude	Longitude	
SkewAngle	Skew Angle		ExitStruct	Exit Structure	
Span	Span		Length	Length	
ApprchLenL	Strm Cross-Approach Length Left		Width	Width	
AprSlopeL	Strm Cross-Approach Slope Left		HeightDiam	Height or Diameter	
ApprchLenR	Strm Cross-Approach Length Right		PRNo	PR Number	
AprSlopeR	Strm Cross-Approach Slope Right		Shape	Shape	
AdjLandown	Strm Cross-Adjacent Landowner				
BackWtr	Strm Cross-Backwatered				
BackWtrCmt	Strm Cross-Backwatered Comment				
CalcPass	Strm Cross-Calculated Passabilitu				I.
Export Type:	CSV - Comma-Separated Values file \sim				
Export Path:	S:\Engineering\ROADSOFT\CULVERT MODULE\SPECIAL REPO	RTS\201	7		~ 🞽
File Name:	Culvert				
Current Filter	Concord #6 - Pine Crest			🔀 Export 🔞 C	ancel

In EXCEL, sort the CSV file by: 1.ROAD NAME 2.INVENTORY ID NUMBER

Sort						?	×
* <u>A</u> ↓ <u>A</u> dd	Level X Delete Level	Copy Level	▲ ▼ Optio	ns	🗹 Myda	ta has <u>k</u>	<u>n</u> eaders
Column		Sort On		Order			
Sort by	ROAD NAME	Values	~	A to Z			\sim
Then by	INVENTORY ID NUMB	Values	~	A to Z			\sim
					ОК	Car	ncel
					U.		icci .



STORM DRAIN MAINTENANCE DATA COLLECTION Township:

Concord

Subdivision:

Subdivision #66: Concord Grandview

Storm Drain Details

Inventory ID Number	Road Name	Location Description	Entrance Structure	Type (Catch Basin, Dry Well, Inlet, Manhole, Other - Specify)	Gallons of Water Removed	Debris Removed	Maintenance Date	Comments
SD-2016-1728	Grandview Ct	West side of road	Curb Grate	Please Specify:				
SD-2016-1729	Grandview Ct	East side of road	Curb Grate	Please Specify:				
SD-2016-1730	Grandview Ct	West side of road	Curb Grate	Inlet				
SD-2016-1731	Grandview Ct	East side of road	Curb Grate	Please Specify:				
SD-2016-1732	Grandview Ct	West side of road	Curb Grate	Please Specify:				
SD-2016-1733	Grandview Ct	East side of road	Curb Grate	Inlet				
SD-2016-1734	Grandview Ct	West side of road	Curb Grate	Please Specify:				
SD-2016-1735	Grandview Ct	East side of road	Curb Grate	Please Specify:				
SD-2016-1721	Walton Dr	East side of road	Curb Grate	Please Specify:				
SD-2016-1722	Walton Dr	West side of road	Curb Grate	Please Specify:				
SD-2016-1723	Walton Dr	East side of road	Curb Grate	Inlet				
SD-2016-1724	Walton Dr	West side of road	Curb Grate	Please Specify:				
SD-2016-1725	Walton Dr	East side of road	Curb Grate	Inlet				
SD-2016-1736	Walton Dr	West side of road	Curb Grate	Inlet				
SD-2016-1726	Walton Dr S	North side of road	Curb Grate	Please Specify:				
SD-2016-1727	Walton Dr S	South side of road	Curb Grate	Please Specify:				
Maintenanc	e Details (please speci	ify):	Cleaning Services	Inspe	ction	Data C	ollection	
Signatur	re(s)	<i>,,</i> ·					Date	

Gallons of Water Removed	Debris Removed	Maintenance Date	Comments
100ga)	lice yrd	8/3	4'6" gleep 3'wice
100ga	1/6 yra	8/3	4'6 deep 3' wide
100gal	1/16 yid	8/3	41'le deep 3'wide
100001	116 yrd	8/3	414 deep 3 wide
- in gai	3.0	(>	

Gallons of water removed Debris removed Maintenance Date Depth of Storm Drain Diameter of Storm Drain

MAINTENANCE and RATING RECORDS

7/20/2017	
Activity	Vactor/Jet Cleaned
Activity Type	Maintenance
Authorization	Engineering Department
Memo	National Industrial Maintenance, Inc. Debris removed: 1 yard Water removed: 200 gallons

8/7/2017	
Culvert Rating	8 - Generally Good
Channel Rating	10 - Excellent
Waterway Rating	9 - Good
Memo	

	WAY	STORI MAINTEN COLL	M DRAIN ANCE DATA ECTION	Township:	Washington	ubdivision:	Subdivision #31: Br	ridlewood	
form Drain	Ostalla								
Investory ID	Details								
Number	Latitude	Road Name	Location Description	Entrance Structure	Type (Catch Basin, Dry Well,	Gallons of Wat	er Debris	Come	
50-2015-1521	(41.70280208) (-85.80772031)	Colonial Ridge Dr	West side of road	Curb Grate	Please Specify:	Removed 4f+Dia	Removed	4-17-17	800 AM
SD-2015-1522	(41.70279603) (-85.80771022)	Colonial Ridge Dr	East side of road	Curb Grate	Inlet Bash	Lesstron IPt 2ft Dia	Lesthen	1	-
SD-2015-1523	3 (41.70253137) (-85.80728913)	Colonial Ridge Dr	Southwest side of road	Curb Grate	Inlet	2ft Dic	Ift dirt	1	-
SD-2015-1524	4 (41.70253360) (-85.80729611)	Colonial Ridge Dr	Northeast side of road	Curb Grate	Inlet	2tt Dia	It lessten	-	
SD-2015-1525	5 (41.69965129)	Colonial Ridge Dr	East side of road	Curb Grate	Inlet	24Din	Leisthen		
SD-2015-1526	6 (41.69963338)	Colonial Ridge Dr	West side of road	Curb Grate	Catch Basin	2A Din	Lestlen +	Carlo Tre	
SD-2015-1530	2 (41.69614802)	Colonial Ridge Dr	West side of road	Curb Grate	Inlet	2A Dic	Lesthen		1712.003
SD-2015-1531	\$ (41.69615454)	Colonial Ridge Dr	East side of road	Curb Grate	Inlet	2ft Oin	Lesthan	1 1 1 1 1	
SD-2017-613	9 (41.70292333)	Colonial Ridge Dr	West side of road	Lid	Manhole	40+016	Lessthan	-	
SD-2017-614 /	0 (41.69580000)	Colonial Ridge Dr	East side of road	Lid	Manhole	4PTDie	Lessthent		
SD-2015-1527	((41.69862798)	Valentine Ct	North side of road	Curb Grate	Inlet	2ftDia	Lessthen		
SD-2015-1528	2(41.69862451)	Valentine Ct	South side of road	Curb Grate	Catch Basin	off Dia	Lessthan		
D-2015-1529	(41.69855570) (-85.80228490)	Valentine Ct	East side of road	Curb Grate	Iniet		ar ar	Car Ported	1:00
inference i	Dotaile (plaz	se specify):	Cleaning Serv	ices	Inspection	Data	Collection		
Signature((s)	se speenij).					Date		

CULVERT RATING: SURROUNDING PAVEMENT AREA



CHANNEL RATING: CONDITION OF THE INTERNAL CHANNEL



WATERWAY RATING: CONDITION OF THE GRATE STRUCTURE



CURB TURNOUT INVENTORY ID = CT-







If a specific field is not available in Roadsoft, other than the MEMO field, what field(s) might be available in some modules for a *USER* to use and *DEFINE* for his/her needs?

User Defined						
User Defined Fields						
Support	Support					
🙂 User Defined 1	Undefined					
🗄 User Defined 2	Undefined					
🙂 User Defined 3	Undefined					
🗄 User Defined 4	Undefined					
🗆 Sign						
🗄 Ordinance Number	80-132					
🗄 User Defined 2	Undefined					
🗄 User Defined 3	Undefined					
🗉 User Defined 4	Undefined					

USER DEFINED FIELDS!

Name a type of *FILE* format in which Roadsoft data (no matter what *SHAPE* the data may be in) can be exported.



- KML Google Earth Keyhole Markup Language File
- CSV Comma-Separated Values File
- TXT Tab-Delimited Text File
- DBF Database File

XML – Extensible Markup Language File



Phone Number	
111-111-1111	
Cell Number	
(222) 222-2222	FORM
Birth Date	
33/33/3333	

Phone Number: 111-111-1111

Cell Number: (222) 222-2222

Birth Date: 33/33/333



To be counted in 2020 CR 31 between CR 34 and CR 36 2017 ACTUAL COUNT *** *** 67th Percentile: 44.7 85th Percentile: 48.4 **Upper Pace Speed: 47.5** Peak AM Hour: 11:45 AM Peak AM Count: 72.0 Peak PM Hour: 3:00 PM Peak PM Count: 167.0 **Northbound Percentage: 54.1% Southbound Percentage: 45.9%**

FILTER TO FIND ALL TRAFFIC COUNT STATIONS TO BE COUNTED IN 2018

				Х
💕 Open 🔚 Save 😑 Delete 🛛 🖉 Clear				
Station Information \sim				
C Find field X	Operator:	Value:		
Field	Like Not Like	To be counted in 2018	0	٨dd
Memo	Empty		Grou	p:
Percent Commercial	NOT Empty		1	-
User Station ID				
Group Field Operator Value(s)			 	_
1 Memo Like To be counted in 2018				
Mama Lika "Ta ha		ntad in 2010"		
		iiteu ili zuto		

EXCEL Concatenation Formula

=CONCATENATE

- ("67th Percentile: ",R24,
- ", 85th Percentile: ",R26,
- ", Upper Pace Speed: ", R28,
- ", Peak AM Hour: ",Q1,
- ", Peak AM Count: ",01,
- ", Peak PM Hour: ",Q2,
- ", Peak PM Count: ",O2,
- ", Northbound Percentage: ",014,
- ", Southbound Percentage: ",017)



Railroad ID Number: 536361 M Train Volume: 6 Train Speed: 60 Number of Train Tracks: 1 Railroad Crossing Guard: Automated Signal

DO NO

STOP

ON

TRACKS



Subdivision 1: Elkhart East – Area "D" – Phase One Subdivision 2: Elkhart East – Area "D" – Phase Two Plat 1: 1806 Plat 2: 2042 END OF PLAT INFORMATION

Culvert Memo



Inspection Schedule: 3 Years

Guardrail Inventory ID: G-079A, G-079B



✓ CONSISTENT, STRUCTURED DATA ✓ LIMITED RESPONSE OPTIONS

Driveway ID Number: DR17-12345 Date Issued: 06/02/2017 Zoning Number: BR-0333-12345 Township: Harrison Subdivision: Weaver Woods, Lot 12345 Location: South side on Basswood Dr, west of Weaver Woods Dr, south of CB 28, east of CR 15 Fee: \$45.00 Contact Person: K. McGuire, G. Builders Phone: 555-555-5555 Fax: n/a Email: kmcg@grbuilders.com Mailing Address: 12345 Eisenhower Dr N, Goshan, JM 46526 Note: This permit includes sidewalks and curb racines constructed within the right-of-way and are to be constructed in accordance with Figure 15 and ADA requirements (see attachments and tutorial for ADA Focused Construction Inspection web link at http://www.in.gov/dot/div/contracts/cutorial/CurbRampConstruction.pdf). Your plan to resolve the storm grate in front of the driveway has been approved by installing a "Roll Type Curb" grate or a flat grate with no curb box in the back as long as it matches the geometry of the curb per JAG on 5/25/17. See Figure 4 for foad patch details. Please notify us when the driveway, curb ramps, and sidewalks are complete. Inspection: 08/32/17 pre-inspection request from E.G with G.R. Builders to compare the new approved casing to the existing casting. Per T's observations reviewed with R.C., engineer, the current casting is the same as the approved casting and does not need to be replaced. Other observations concluded that the casting location was in the radii of the driveway that with post likely have low traffic when entering and exiting over the top of the casting.



Inspection Date: 10/03/2017 Inspection Results: Passed

ATTACHED DRIVEWAY DOCUMENT

Documents						
G Add File Apply to entire selection?						
Preview	File Name					
	DR08-1235.docx					




Name an OPERATOR word that would most *LIKELY* be used in the FILTER BUILDER for a MEMO field (instead of a mathematical symbol, such as =, > or <).



When available within a Roadsoft module, under which tab will you find a list of your attached *DOCUMENTS*?

Preview File Name DOC	CUMENTS
Pleasant Abode Plat Map.docx TAB	





#1: Attach each file directly to its asset.

PROS

 Select and open up a file directly from Roadsoft

<u>CONS</u>

- Size of database grows substantially
- Number of attachments
 per asset
 becomes
 cumbersome



DC16-082, April 2017, Inspection Measurements

DC16-082, April 2017, Inspection Photos (Page 11)

DC16-082, April 2017, Inspection Photos Pg 12

DC16-082, April 2017, Inspection Photos

GOPRO INSPECTION DATE AND TIME STAMP FOR PERMIT DC16-082





#2: Attach a hyperlinked WORD DOC for each of an asset's documents.

PROS

 Requires very little space on the database

CONS

- Requires timeconsuming hyperlinks to every file
- Inflexible to asset file changes

Documents Add File Preview File Name DC16-082.docx				
Name	Date modified	Туре	Size	
2017	10/6/2017 4:15 PM	File folder		
DC16-082.docx	10/6/2017 4:01 PM	Microsoft Word D		12 KB

#3: Attach only one hyperlinked WORD DOC for each asset's main folder.

<u>PROS</u>

- Requires only one hyperlink per asset
- No changes to hyperlink required if files are added, renamed or deleted
- Requires very little space on the database

<u>CONS</u>

Requires
 navigation or
 "drilling down"
 to specific file



KEEP CALM!

IT IS ONLY A QUIZ!

What color is typically used for HYPERLINK text?

BLUE!

Besides color, <u>what other</u> text property is typically used for HYPERLINKS?

UNDERLINE!

Use External Map Layers

Repurpose Fields and Modules

Use Memo Data Field Masks for Structured Data

> Add Attached Documents and Hyperlinked Word Docs for Expansive Comments



ADD NEW DATA VALUES

STRUCTURE MEMO FIELDS

REDEFINE FIELDS





What word (or one of its derivatives) has CONSISTENTLY been used throughout this presentation?







<section-header><section-header><section-header>