Materials Use and Co Category	st Material Description	Charge Units	Quantity
Aggregate/Earthwork	Select Granular Borrow	Ton	
Aggregate/Earthwork	Aggregate, All classes	Ton	
Aggregate/Earthwork	Millings, Bituminous	Ton	
Aggregate/Earthwork	Topsoil Borrow	Cubic Yard	
Aggregate/Earthwork	Common Borrow – Loose Volume	Cubic Yard	
Apron – Aluminized	4:1 6:1 Diameter/Span:"	Each	
Safety	Safety Apron includes grate and coupling band	Lacii	
Apron – Aluminized Steel Flared	Flared Apron includes coupling band Diameter/Span:"	Each	
Apron – Concrete	Flared Apron Safety Apron 4:1 6:1 Diameter/Span:	Each	
Apron – Poly	Polyethylene (HDPE) Apron Diameter:	Each	
Apron – Steel Flared	Flared Apron includes coupling band Diameter/Span:"	Each	
Apron – Steel Safety	4:1 6:1 Diameter/Span:" Safety Apron includes grate and coupling band	Each	
Cement and Grout	Concrete, Ready Mix \$150 CY Use for Concrete Pavement	Cubic Yard	
Cement and Grout	Foam, 2 Part Expanding, Tot Gals Part A and Part B	Gallon	
Cement and Grout	Cement Grout	Cubic Yard	
Cement and Grout	Cement, Portland, 94 lb Bag	Bag	
Cement and Grout	Cement, Mortar Spec Mix, 50 lb Bag	Bag	
Erosion Control	Seed Mix	Pound	
Erosion Control	Fiber Blanket:	Sq Yard	
Erosion Control	Bioroll Diameter: 6" 9" 12"	Linear Foot	
Erosion Control	Silt Fence	Linear Foot	
Erosion Control	Floating Silt Curtain	Linear Foot	
Erosion Control	Rip Rap (all classes)	Ton	
Erosion Control	Geotextile Fabric	Sq Foot	
Grate	Apron Safety/Trash Grates Diameter/Span:"  Cost: \$	\$100 Lot	
Internal Band	Internal Pipe Joint Sealing Band Diameter:	Each	
Pavement	Bituminous Pavement – All Classes	Ton	
Pipe – Aluminized Steel	Round Arch Inside Diameter/Span:"	Linear Foot	
Pipe - Concrete	Round Arch Gasketed Inside Diameter/Span: "	Linear Foot	
Pipe - Concrete	Pipe Ties	Each	
Pipe – Corrugated Steel	Round Arch Inside Diameter/Span: "	Linear Foot	
Pipe – HDPE Liner	Press-On Joint Threaded Joint Outside Diameter:"	Linear Foot	
Pipe – Poly Dual Wall	Polyethylene Dual Wall Pipe (HDPE) Inside	Linear Foot	
Pipe – Polymeric Coated Steel	Round Arch Inside Diameter/Span:	Linear Foot	
Pipe - Polypropylene	Inside Diameter:"	Linear Foot	
	Smooth Tapered Metal Pipe Sleeve Diameter:"		
Pipe – Tapered Sleeve	Steel Aluminum	Each	
Pipe Coupling Band	External Coupling Band 12" Wide 24" Wide Dia./Span:"  Steel Aluminized Steel Polymeric Coated	Each	
Category	Material Description and Units Fill in description and units and describe in comments	Quantity	Total Direct Cos
Additional Material		-	
Additional Material			
Additional Material			

## Culvert Cost – Maintenance Data Collection Form – January 2018

Repair ID:		
HydInfra ID:		
Full Name:		
Date Started:		
Date Completed:		
Repair Status:	Pending	Complete
nepan Status.	remaining	Complete
Comment:		
District		
District:		
Repair Made:	Trench New	Pipe Slipline Replace Aprons Reset Extension Joint Repair Hole Repair
		Fill Voids Cleaning Ditch Cleaning Ice Removal Beavers Abandon Only
		Other: None
		<del></del>
<b>RCA Work Order</b>	#:	<del></del>
Culvert Type:		Median Ramp/Loop Collector/Distribut
		County Road City Road Township Road Frontage
	Entrance	
	Storm Drain	Flume Drain Tile Other:
1	l \.	(after mensio)
		(after repair)
Inside Height (inc	cnes):	(after repair)
Pre-repair Condit	tion: 1-Like I	lew 2-Fair 3-Poor 4-Very Poor 0-Unknown
Tre repair conditi	ilon. I like i	2 Tuli 3 Tool Tvely Fool o olimiowii
Fill over Pipe (fee	et):	
Repaired Shape:	Round	Arch Box Elliptical Other Unknown
<b>Repaired Materia</b>	al (Inside of Pi	e after Repair):
	Concrete (	org. Steel (CSP) Aluminized Steel Corg. Plastic (HDPE) PVC Polypropylene
	SRPE Othe	Pipe Liner PVC Liner HDPE Liner Metal Liner Cured-in-Place Liner Other
	(6. )	
Repaired Length		
Total Length (ft.):	:	
Panaired Canditi	<b>on</b> : 1 liko l	low 2 Egir 2 Book 4 Vary Book O Unknown
Repaired Condition	on: 1-Like i	lew 2-Fair 3-Poor 4-Very Poor 0-Unknown
Route System &	Number <sup>.</sup>	
Route Reference		
Left or Right (Side		
reit of vigit (3106	E CUIVEIT LOCA	ionj. L K
Clean Done:	Major (more	than 4 hours Labor) Minor (4 hours or less Labor) None

## **Resource and Cost Data**

Labor Hours by Classification	Sum hours	
Labor Classification	for Class	
Laborer TA TG TGS TOS1 TOS2 TOS3 TOS4	Yes No	
Laborer TA TG TGS TOS1 TOS2 TOS3 TOS4	Yes No	
Laborer TA TG TGS TOS1 TOS2 TOS3 TOS4	Yes No	
Laborer TA TG TGS TOS1 TOS2 TOS3 TOS4	Yes No	
Laborer TA TG TGS TOS1 TOS2 TOS3 TOS4	Yes No	
Laborer TA TG TGS TOS1 TOS2 TOS3 TOS4	Yes No	
Laborer TA TG TGS TOS1 TOS2 TOS3 TOS4	Yes No	
Laborer TA TG TGS TOS1 TOS2 TOS3 TOS4	Yes No	
Laborer TA TG TGS TOS1 TOS2 TOS3 TOS4	Yes No	
Laborer TA TG TGS TOS1 TOS2 TOS3 TOS4	Yes No	
Additional Labor Description	Quantity	Total Direct
Fill in description below and describe in comments	If applicable	Cost

Equipment Use		Charge	
Category	Equipment Charge Class & Description	Units	Quantity
Air Compressors	436 Air Comp <50 CFM MTD	Hour	
Air Compressors	437 Air Comp 50-150 CFM MTD	Hour	
Brooms	970 Self-Propelled Lull	Hour	
Brooms	980 Pickup Sweeper	Hour	
Brooms	982 Pickup Sweeper-Truck Mounted	Hour	
Loaders-Shovels	760 4 Wheel Drive Loader-Hough, Pettibone	Hour	
Loaders-Shovels	770 Shovels 1/2 C.Y or 3/4 C.Y.	Hour	
Miscellaneous	646 Mudjack	Hour	
Road Side Planting & Care	618 Hydro Seeder	Hour	
Road Side Planting & Care	619 Brush Chipper	Hour	
Road Side Planting & Care	620 Motor Grader Over 70 HP All	Hour	
Rollers	465 Self- Propelled Pneumatic	Hour	
Rollers	466 Self-Propelled 5-8 Ton Roller	Hour	
Rollers	467 Self-Propelled 3-6Ton	Hour	
Rollers	468 Roller, Articulated, 3-6 ton	Hour	
Steam Boilers & Heaters	438 Steam Boilers	Hour	
Steam Boilers & Heaters	439 Portable Steam Thawer	Hour	
Steam Boilers & Heaters	441 Booster,Cleaver-Brooks, Bros	Hour	
Tractor-Loaders	710 Cat. RD7 and D7 With Angle Dozer	Hour	
Tractor-Loaders	721 Tractor-Loader-Backhoe 4WD	Hour	
Tractor-Loaders	723 Loader-Mower-Tractor 70HP or Less	Hour	

Equipment Use		Charge	
Category	Equipment Charge Class & Description	Units	Quantity
Tractor-Loaders	725 Bi-Directional Tractor W/Attach Over 100HP Versatile	Hour	
Tractor-Loaders	726 Tractor -Loader-Backhoe 2 WD	Hour	
Tractor-Loaders	727 Skid Steer Loader 30HP	Hour	
Tractor-Loaders	750 Crawler Tractor Loaders	Hour	
Trailer-Trailer Houses	480 Semi Type TRLR 20-50T LowBoy ET	Hour	
Trailer-Trailer Houses	481 Belly Dump End or Live Floor	Hour	
Trailer-Trailer Houses	482 Pull type Trailer 10-25 ton	Hour	
Trailer-Trailer Houses	483 Trailer 6-9Ton	Hour	
Trucks	160 Truck, SUV, Full-Size, 2 Wheel Drive	Mile	
Trucks	161 Truck, SUV, Full-Size, 4 Wheel Drive	Mile	
Trucks	171 Truck, SUV, Mid-Size, 4 Wheel Drive	Mile	
Trucks	180 Pickup ½ Ton	Mile	
Trucks	182 Pickup ½ Ton 4 Wheel drive	Mile	
Trucks	183 Pickup ½ Ton Extended Cab	Mile	
Trucks	184 Pickup ½ Ton Extended Cab W/4 WD	Mile	
Trucks	190 Pickup ¾ Ton	Mile	
Trucks	191 Pickup ¾ Ton 4 Wheel Drive	Mile	
Trucks	200 Pickup Compact	Mile	
Trucks	250 Truck 1 Ton Dump	Mile	
Trucks	254 Truck 1 Ton Utility	Mile	
Trucks	255 Truck 1 Ton 4 Wheel Drive	Mile	
Trucks	280 1-1/2 Ton Truck With Aerial Ladder	Mile	
Trucks	300 1-1/2 Ton-2 Ton Truck	Mile	
Trucks	310 1-1/2 Ton 2 Ton Dump Truck	Mile	
Trucks	320 1-1/2 Ton 3 Ton with Special Equipment (Sign Truck etc)	Mile	
Trucks	330 2-1/2 Ton- 3 Ton Dump	Mile	
Trucks	332 2-1/2 Ton -3 Ton Stake	Mile	
Trucks	350 57M LB Chassis Cab Tandem Axle Truck	Mile	
Trucks	352 Tandem Axle Truck T	Mile	
Trucks	354 Tandem Diesel Truck With Log Loader	Mile	
Trucks	391 Large Culvert & Sewer Cleaner	Mile	
	Equipment Description and Units*		Total
Category	Fill in description and units and describe in comments	Quantity	Direct Cost
Additional Equipment			

<sup>\*</sup> If MnDOT Equipment is not listed, enter Unit ID and look up Equipment Charge Class to match.

Find this form "Culvert Cost Paper Collection Form.pdf" on the Culvert Cost webpage – search IHUB for "Culvert"