Project Name: **West Prairieview Drive Stormwater Management**

Location Information: North of Bear Creek, just east of Creasy Springs Road

Structure Flooding	0
Erosion	0
Yard Flooding	180
Street Flooding	30
Strutural Stability	30
Watershed Effects	0
Regulatory Influence	0

Total Score   **254**   Total from the following worksheets. Include "Age Score" from below in total from other worksheets.

CIP Project #

MUNIS Project #   Not every project will have these numbers. But if they do, it helps to put the project in context and to look up records about it, so include if available.

Utilities Project #

1992 Ballot # No   What was the priority number given to the project? (i.e. 1.10, 3.03...?)

2015 Ballot ? No   What was the range of years in which the project was listed?

Council Ward   2

Immediate Watershed Un-named Tributary to Bear Creek

Year Project Identified   2010

Age Score   14   One point per year since identified? Not a big effect on most scores but might be a tie-breaker.

Latest Estimate   Year of Estimate

Street Flooding

	Points/ Street Locations	Street Locations	Frequency Multiplier	Score	Comments Re: Interpretation
Local Residential Flooding < 7in	5	2	3	30	
Local Residential Flooding $\geq$ 7in	10			0	
Local Nonresidential < 7in	10			0	
Local Nonresidential $\geq$ 7in	40			0	
Only Access Road $\geq$ 7in	100			0	
Neighborhood Collector < 7in	15			0	
Neighborhood Collector $\geq$ 7in	50			0	
Major Collector < 7in	20			0	
Major Collector $\geq$ 7in	60			0	
Arterial /freeway/expressway< 7in	25			0	
Arterial /freeway/expressway$\geq$ 7in	70			0	
Car can be swept from road	100			0	
Depth in Road > 1.5ft	100			0	
Ice Forms in Roadway	50	N/A		0	Use this when someone complains of the ice or staff has personally viewed it happening.
No Street Flooding					
Total				30	

Frequency Multiplier Guidance

Event never occurs	0
Event occurs once every 100 years (100-year flood or less frequent)	1
Event occurs once every ten to fifty years or more years (5- to 50-yr flood)	2
Event one or more times per two years (2-yr flood or more frequent)	3

Note: Known flooding events as well as modeled frequency can be used in the frequency multiplier. For instance, if modeling suggests a garage will flood in a

Structure Flooding

	Points/ Address	# of Addresses Affected	Frequency Multiplier	Score	Comments Re: Interpretation
Seeping Basement	2		N/A	0	
Sanitary Sewer Back-up	6		N/A	0	
Garage Flooding	20			0	
House or Business Flooding through door or window.	75		0	0	
Crawlspace Flooding	10			0	
None					
Total				0	

Frequency Multiplier Guidance

Event never occurs	0
Event occurs once every 100 years (100-year flood or less frequent: 1% Annual Chance)	1
Event occurs once every ten to fifty years or more years (10- to 50-yr flood: 2%-10% annual chance)	2
Event one or more times per two years (2-yr flood or more frequent: 50% or higher annual chance)	3

Note: Known flooding events as well as modeled frequency can be used in the frequency multiplier.

Erosion

	Points/ Address or lot	# of Addresses Affected	Score	Comments Re: Interpretation
Gullies or Rills	5		0	One instance per property with rills or gullies or per 80 linear feet width of eroded area. If it's a large non-residential lot, the numbers of 80 foot widths may come in to play.
Cut Banks ≥ 4ft	20		0	Even tall cut banks are not always a problem. Look to see if it's actively eroding or moving. If there is bark on protruding roots, it could mean that the movement is pretty slow. If it's taller than 4 feet, though, the ability of trees and other vegetation to halt it is greatly diminished.
Threatens Infrastructure	40		0	i.e. Power poles, sewer mains or manholes, streets or sidewalks, or houses.
None				
Total			0	

Yard or Open Area Flooding

	Points/ Address or Lot	# of Addresses	Frequency Multiplier	Score	Comments Re: Interpretation
Nuisance Flooding	1		3	0	Flooding of a yard that is worrisome to property owners but not very damaging. Stays wet long enough to make mowing difficult. Small points awarded per number of lots affected.
Threatens Home, Garage, or Business	10	4	2	80	If it gets within a few feet horizontally and/or a few inches vertically of entering a structure, especially if overflow can clog and cause flooding. Award points per number of strucutures threatened.
Threatens Infrastructure (other than streets)	30			0	Flooding around a pad mount transformer, for instance. Not sure what else this would apply to that isn't covered by other categories/worksheets. Hinkson at the substation?
Deep and/or swift water near a place where pedestrians can be expected.	50	1	2	100	Relatively high velocity and/or deep water (product of velocity and depth ~9sf/s) leading to a stormwater conveyance like a culvert that be particularly difficult to escape.
No Yard Flooding					
Total				180	

Whether to score this depends on factors like the following:
-It is not possible to "see daylight" from one end of the culvert to the other.
-The culvert is less than 42 inches in diameter.
-Conditions within the culvert (bends, obstructions such as water lines or prodruding pipes, vertical drops) or at the outlet are likely to trap or injure a person.

In addition to depth and velocity, chances of being swept into a culvert depend on factors such as:
-Approachability of channel. For example channels with groomed sides near areas where people walk or recreate are more likely to be hazardous.
-Dropoff to culvert opening next to walking surface, i.e. walk, trail or road shoulder.
-Flood water covers the culvert and sudden dropoffs or uneven footing near the entrance to the culvert.

Frequency Multiplier Guidance

Event never occurs		0
Event occurs once every 100 years (100-year flood or less frequent)		1
Event occurs once every ten to fifty years or more years (10- to 50-yr flood)		2
Event one or more times per two years (2-yr flood or more frequent)		3

Note: Known flooding events as well as modeled frequency can be used in the frequency multiplier. For instance, if modeling suggests a

Structural Stability

	Points/ Instance	Instances	Multiplier	Score	Comments Re: Interpretation
Flowline of CMP >50% rusted through	30	1	1	30	For instance, the troughs between the ribs of CMP rusted through. Each pipe run between structures is one instance.
Deformation Present in Conveyance Structure or Pipe	50		2	0	Pipe folding up after flowline rusted through, or top or bottom of RCB heaving, for instance.
Deformation Present in Inlet or Junction	20			0	
Structural Failure Present	50		2	0	Not sure what would differentiate this from the "Deformation". If failure is present, it might have to be an emergency fix and CIP is moot.
Holes Forming in Ground Above Structure	60		1	0	

Total				30	

Multipliers for Consequences of Failure

Low Consequences of Failure			1		For instance, a small pipe (18" Dia or less) under a low volume road where speeds are low. Failure of the pipe is unlikely to be catastrophic and the consequence of failure is likely to be a shallow trough that can be navigated by a car with little likelyhood of damage or injury.
Medium Safety Risk			2		A relatively large pipe (21"-30") under a low volume/low spead road where a resulting vailure is likely to result in pavement settlement that could cause an accident that is still unlikely to be threatening to life or limb.
High Safety Risk			3		A large pipe where a section of the pipe could collapse catastrophically under a high volume and/or high speed road where the resulting hole may be large or difficult to see and serious injury or death is likely.

Watershed Effects

	Points/ Instance	Instance	Multiplier	Score	Comments Re: Interpretation
Improves Watershed Health, per BMP installed	50			0	Water quality projects, for instance, or channel protection.
Beneficial Effect on Impaired Water Body, per BMP installed	100			0	Hinkson Creek, for instance, which is subject to a TMDL, addressed by a Collaborative Adaptive Management process. The BMP needs to address the impairment somehow. For instance if the stream is listed for chloride impairment, most BMPs will not address that and should not count.
Aids or removes Critical Downstream Location(s)	160		N/A	0	Mostly counts for actually removing a CDL by replacing an undersized pipe, for instance. If something is done upstream the makes it significantly easier to address the CDL, by installing detention, for instance, then the project might qualify for aiding a CDL.
Significantly Relieves Downstream Flooding	100		N/A	0	Some flooding doesn't occur where there are Critical Downstream Locations. Also removing a CDL doesn't have a beneficial effect on downstream flooding. This category gets fewer points in order to prioritize CDLs first, but the same structure in awarding the points. Percentage of watershed detained * 100.
Promotes Ecological Diversity.	50			0	This is meant to reflect the benefits of working habitat into projects. A good size riparian project, with ~1.5ac of restoration would score 50 * 1 = 50 points, in addition to the 1*100 points for Beneficial Effect on Impaired Water Body.
Total				0	

Multipliers for Improves Watershed Health and Promotes Ecological Diversity

Treats < 1 acre	0.5
Treats 1 - 10 acres	1
Treats 11-100 acres	2
Treats >100 acres	3

MS4 / Other City Goals

	Points/ Instance	Instances	Score	Comments Re: Interpretation
Helps Meet MS4 Education and Outreach Goals	20		0	Signage added to a demonstration project, for instance, or a project specifically located to allow for tours.
Satisfies City Ordinance or Ballot Issue	30		0	If the project was pressented as part of a ballot initiative, for instance, or promised as part of an annexation, etc.
Helps Meet Other Goals such as from the Climate Action and Adaptation Plan (CAAP) or Integrated Management Plan (IMP). There may be other goals such as specific neighborhood plans.	30			This is meant to reflect things in other City goals that are not already represented in the workbook. For instance, the IMP has a goal of reducing areas of known flooding. That goal is inherent in other parts of this workbood and therefore should not count here.
Total			0	