

CAPITAL IMPROVEMENT PROGRAM
City of Missoula CIP Project Request Form FY 2017-2021

Program Category:	Project Title:	15 Project #	16 Project #	17 Project #
Public Safety	Trench/Confined Space Rescue Training Prop			PS_05

Description and justification of project and funding sources:

Construct trench and confined space rescue prop at Fire Station 4 training grounds. MFD currently lacks access to safe and reliable trench training facility. This facility may be used for training firefighters and contractors throughout the area/region.

Since the inception of the Trench Rescue discipline, we have struggled with providing consistent and safe training for the department. In the beginning we were able to utilize the training grounds at station 4. This lasted approximately 3 years, until the soils became so unstable we were not able to dig a safe trench. We then developed a relationship with L.S. Jensen Company and for several years were able to train out at their facility on Mullan Road. Overall, this was very good training. However, a great deal of time was spent coordinating the digging of a trench with Jensen personnel. The ability to keep an open trench, during Jensen's day to day operations and coordinating all of our shifts and crews rotating out to the site was a task. There were many times that the trench had to be filled, then another trench had to be dug because of the gap in training or circumstances at the Jensen site. Most of the training had to occur during the months of April and May. This is a time when the frost is coming out of the ground and L. S. Jensen is starting to gear up for construction season, making it difficult to coordinate training times. There was a time that MFD went 3 years without the ability to train in a live trench. Weather (rain and soil conditions) caused the trench to continually collapse, creating unsafe training conditions. Because of the amount of effort to facilitate training with L.S. Jensen and the fact that the facility is located out of town we have not trained at the facility for the last couple of years. Lately, we have been utilizing the City's gravel pit to train in a live trench. There will always be a need to train in a live trench, but having a separate on-site training station has numerous benefits.

Having a concrete Trench/Confined space training station would allow for a safe and readily available environment to conduct training at all levels. Rookie and single engine crews would be able to accomplish familiarization training. One and two engine company drills could be conducted, as well as full scale scenarios. The Trench prop design also has two unique features, a corner and a tee trench. Because of the complexity and the risks associated with digging a corner or a tee trench we have seldom been able to train for these hazardous situations. It has been over a decade since MFD had the opportunity to train on a corner or a tee trench. Also incorporated in the prop is a confine space component. There will be a 1,000 gallon tank set at the end of the trench that connects with a 30" tunnel. This extension will allow for vertical and horizontal rigging for confined space training. Having the training prop located at station #4 also keeps our response times down compared to being outside of the city.

Is this equipment prioritized on an equipment replacement schedule?

Yes

No

NA

x

Is there ongoing Operating and/or Maintenance costs upon completion of project?

Yes

No

NA

x

Are there any site requirements:

N/A

How is this project going to be funded:

Funding Source	Accounting Code	FY17	FY18	FY19	FY20	FY21	Funded in Prior Years
General Fund		15,000					
		15,000	-	-	-	-	-

How is this project going to be spent:

Budgeted Funds	Accounting Code	FY17	FY18	FY19	FY20	FY21	Spent in Prior Years
A. Land Cost B. Construction Cost C. Contingencies (10% of B) D. Design & Engineering (15% of B) E. Percent for Art (1% of B) F. Equipment Costs G. Other		15,000					279
		15,000	-	-	-	-	279

Does this project have any additional impact on the operating budget:

Expense Object	Accounting Code	FY17	FY18	FY19	FY20	FY21	Spent in Prior Years
Personnel Supplies Purchased Services Fixed Charges Capital Outlay Debt Service							
		-	-	-	-	-	-

Description of additional operating budget impact:

Responsible Person:	Responsible Department:	Date Submitted to Finance	Today's Date and Time	Preparer's Initials	Total Score
Jason Diehl	Fire		4/20/2016 13:24	CS	47

CAPITAL IMPROVEMENT PROGRAM					
Project Rating					
(See C.I.P. Instructions For Explanation of Criteria)					
Program Category:	Project Title:			10 Project #	
Public Safety	Trench/Confined Space Rescue Training Prop			PS_05	
Qualitative Analysis		Yes	No	Comments	
1. Is the project necessary to meet federal, state, or local legal requirements? This criterion includes projects mandated by Court Order to meet requirements of law or other requirements. Of special concern is that the project be accessible to the handicapped.		<input checked="" type="checkbox"/>	<input type="checkbox"/>	Project would meet safety and training best practices for trench and confined space rescue.	
2. Is the project necessary to fulfill a contractual requirement? This criterion includes Federal or State grants which require local participation. Indicate the Grant name and number in the comment column.		<input type="checkbox"/>	<input checked="" type="checkbox"/>		
3. Is this project urgently required? Will delay result in curtailment of an essential service? This statement should be checked "Yes" only if an emergency is clearly indicated; otherwise, answer "No". If "Yes", be sure to give full justification.		<input type="checkbox"/>	<input checked="" type="checkbox"/>		
4. Does the project provide for and/or improve public health and/or public safety? This criterion should be answered "No" unless public health and/or safety can be shown to be an urgent or critical factor.		<input checked="" type="checkbox"/>	<input type="checkbox"/>	Project would improve firefighter and public safety through the training of firefighters and contractors on proper methods of operating and performing rescues in trench and confined space situations.	
Quantitative Analysis		Raw Score Range	Comments		Total Score
5. Does the project result in maximum benefit to the community from the investment dollar?		(0-3) <input checked="" type="checkbox"/> 2	The project can be completed at relatively low cost and would result in a community and possibly a regional benefit.		5
6. Does the project require speedy implementation in order to assure its maximum effectiveness?		(0-3) <input checked="" type="checkbox"/> 2	Timely implementation would contribute to the project's maximum effectiveness		4
7. Does the project conserve energy, cultural or natural resources, or reduce pollution?		(0-3) <input checked="" type="checkbox"/> 3	Yes. An on-site prop keeps engines at station and does not require use of backhoe to excavate trench for training.		3
8. Does the project improve or expand upon essential City services where such services are recognized and accepted as being necessary and effective?		(0-2) <input checked="" type="checkbox"/> 2	Yes. The project improves upon and expands upon essential services. It provides for a readily accessible training area and also allows for us to provide essential training to other fire agencies and local contractors.		4
9. Does the project specifically relate to the City's strategic planning priorities or other plans?		(0-3) <input checked="" type="checkbox"/> 3	Yes. This project promotes employee and public safety, and resource conservation.		4
Total Score					47

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PS_05	Trench/Confined Space Rescue Training Prop

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COST BREAK DOWN FOR TRENCH/CONFINED SPACE STATION

PLANS/PERMITS

BEAUDETTE CONSULTING	500
CITY PERMIT	400

EXCAVATOR RENTAL (2-DAYS +DELIVERY/PICK-UP) 1500

TRENCH DRAINAGE

CONCRETE SUMP	728
PVC PIPE	70
FABRIC	60
BALLAST	200

FOOTINGS

FORMS	324
REBAR + WIRE TIES	110
CONCRETE	813
J-BARS	235

WALLS

FORM RENTAL	1950
REBAR + WIRE TIES	375
CONCRETE	4250
PLATE AND PIPE SUPPORT	225

PUMP TRUCK

3 HOUR MIN. + 2 YDS CONCRETE	400
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SEPTIC TANK + 12" RISER 850

12FT X 30" CULVERT 280

COMPACT RENTAL 100

COVER FOR TRENCH 1100

FENCE RELOCATION COST 100

TOTAL COST FOR PROJECT 14570