

**CAPITAL IMPROVEMENT PROGRAM**  
**City of Missoula CIP Project Request Form FY 2013-2017**

| Program Category:                | Project Title:    |  | 11 Project # | 12 Project # | 13 Project # |
|----------------------------------|-------------------|--|--------------|--------------|--------------|
| Parks, Recreation and Open Space | Rattlesnake Trail |  |              | PR-14        |              |

**Description and justification of project and funding sources:**

This project has been brought to the City through a request from the Upper Rattlesnake Neighborhood Council. Parks & Rec has agreed to be the project's sponsor. The Nbhd. secured a Nbhd Grant to fund a feasibility study that investigated 3 options for routing of the trail. Territorial Landworks was hired to do the feasibility study in 2010. The \$3,000 Neighborhood Grant is accounted for on this sheet under funded in prior years

The project proposes to create a 10' wide asphalt trail along Rattlesnake Dr. from Creek Crossing Rd. to Tamarack Dr. The preferred route, Option A, for the trail places it in the borrow ditch on the west side of Rattlesnake Dr. This option also includes a spur trail connection between the trail and the alley on School District land. This project will require a coordinated effort between the City, the School District and the Neighborhood. See TLI's report "10-2572 Rattlesnake Trail Feasibility Study" in Support for more details.

Total estimated cost for Option A in 2010 is \$198,438.09 (this includes costs for the trail spur and additional crossing signage not shown in the attached estimate)

**Is this equipment prioritized on an equipment replacement schedule?**

Yes

No

NA

x

**Are there any site requirements:**

| How is this project going to be funded: |                                |                 |      |      |      |      | Funded in Prior Years |        |
|---|--------------------------------|-----------------|------|------|------|------|-----------------------|--------|
|   | Funding Source                 | Accounting Code | FY13 | FY14 | FY15 | FY16 | FY17                  |        |
| REVENUE                                 | Impact Fees (Cornerstone Sub.) |                 |      |      |      |      |                       | 27,413 |
|   | Neighborhood Grant             |                 |      |      |      |      |                       | 3,000  |
|   | TBD                            |                 |      |      |      |      | 171,025               |        |
|   |                                |                 | -    | -    | -    | -    | 171,025               | 30,413 |

**How is this project going to be spent:**

| How is this project going to be spent: |                                    |                 |      |      |      |      | Spent in Prior Years |       |
|--|------------------------------------|-----------------|------|------|------|------|----------------------|-------|
|  | Budgeted Funds                     | Accounting Code | FY13 | FY14 | FY15 | FY16 | FY17                 |       |
| EXPENSE                                | 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                           |                 |      |      |      |      |                      |       |
|  |                                    |                 | -    | -    | -    | -    | 198,438              | 3,000 |

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

| Does this project have any additional impact on the operating budget: |                    |                 |       |       |       |       | Spent in Prior Years |   |
|---|--------------------|-----------------|-------|-------|-------|-------|----------------------|---|
|   | Expense Object     | Accounting Code | FY13  | FY14  | FY15  | FY16  | FY17                 |   |
| OPERATING BUDGET COSTS  | Personnel          |                 | 2,157 | 2,265 | 2,378 | 2,497 | 2,622                |   |
|   | Supplies           |                 | 481   | 563   | 658   | 770   | 901                  |   |
|   | Purchased Services |                 | 549   | 642   | 752   | 879   | 1,029                |   |
|   | Fixed Charges      |                 |       |       |       |       |                      |   |
|   | Capital Outlay     |                 |       |       |       |       |                      |   |
|   | Debt Service       |                 |       |       |       |       |                      |   |
|   |                    |                 | 3,187 | 3,470 | 3,788 | 4,147 | 4,552                | - |

Description of additional operating budget impact:

| Responsible Person: | Responsible Department: | Date Submitted to Finance | Today's Date and Time | Preparer's Initials | Total Score |
|---------------------|-------------------------|---------------------------|-----------------------|---------------------|-------------|
| Dave Shaw           | Parks                   |                           | 4/20/2012 14:04       | DS                  | -           |

# CAPITAL IMPROVEMENT PROGRAM

## Project Rating

(See C.I.P. Instructions For Explanation of Criteria)

|   |                   |                          |   |          |              |             |
|---|-------------------|--------------------------|---|----------|--------------|-------------|
| Program Category:   | Project Title:    |                          |   |          | 10 Project # |             |
| Parks, Recreation and Open Space  | Rattlesnake Trail |                          |   |          |              |             |
| 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 type="checkbox"/> | <input checked="" type="checkbox"/> x   |          |              |             |
| 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"/> x   |          |              |             |
| 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"/> x   |          |              |             |
| 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 type="checkbox"/> | <input checked="" type="checkbox"/> x   |          |              |             |
| Quantitative Analysis   |                   | Raw Score Range          | Comments  |          | Weight       | Total Score |
| 5. Does the project result in maximum benefit to the community from the investment dollar?  |                   | (0-3)                    | Trails development costs a fraction of what typical road or highway construction costs on a per traveler basis. Trails can carry 5 to 10 times the number of people that a typical driving lane can. Other benefits to the community are indirect such as health benefits associated with more physical activity in one's daily routine.  |          | 5            | -           |
| 6. Does the project require speedy implementation in order to assure its maximum effectiveness?   |                   | (0-3)                    | Yes. Each year more development occurs along many potential trail corridors in the City, making establishment of a continuous trail system more problematic.  |          | 4            | -           |
| 7. Does the project conserve energy, cultural or natural resources, or reduce pollution?  |                   | (0-3)                    | Trips taken by biking and walking replace trips taken by car thus reducing traffic congestion and pollution. Trail projects conserve energy by requiring less energy consumption in their construction and by reducing the number of vehicles on the roads. Well connected bike/ped infrastructure encourages compact, mixed-use development which reduces urban sprawl that is destructive to the natural resources surrounding our community. |          | 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)                    | The project works in concert with plans to conserve open space. It encourages use of non-polluting non-motorized transportation mitigating air quality problems. It is an integral part of the City's TDM plan to reduce VMT 6%. The projects proposed here are designated as "commuter routes" as per the Non-Motorized Transportation Plan. These routes are heavily supported by the public.   |          | 4            | -           |
| 9. Does the project specifically relate to the City's strategic planning priorities or other plans?   |                   | (0-3)                    | The project contributes to strategic goal of liability by providing an inexpensive, convenient and safe means of travel and healthy recreation linking neighborhoods with community resources. It is supported by the goals in the Master Park Plan, the Missoula Active Transportation Plan, the Urban Transportation Plan Update, the Urban Fringe Development Area Plan, and local Neighborhood Infrastructure Plans.                        |          | 4            | -           |
| Total Score   |                   |                          |   |          |              |             |



November 17, 2010

Erin Scott  
Neighborhood Liaison  
435 Ryman  
Missoula, MT 59802

RE: 10-2572 Rattlesnake Trail Feasibility Study  
Project Deliverables

Dear Erin:

Thank you for allowing us to assist the Upper Rattlesnake Neighborhood Council in providing Engineering feasibilities of potential trail options for the upper Rattlesnake area. Enclosed with this letter are the project deliverables that include: Right-of-Way exhibit on a CD, exhibits of three (3) potential trail options, and three (3) Engineer's Preliminary Estimates for those options. The Right-of-Way CD provides visual evidence of available Right-of-Way identifying where a trail can fit and areas where additional Right-of-Way will be necessary to acquire. The trail exhibits detail what construction we believe will be necessary to accommodate pedestrian facilities within these areas. The Engineer's Preliminary Estimates detail the Construction Costs and Final Engineering/Construction Engineering Costs that would need to be required for the trail. The Engineering Costs are approximated at 30% of the Construction Costs as this is what we have typically seen with CTEP projects. A 15% contingency has also been included within the costs since the trail will most likely be designed and built in the future when costs are higher than they are presently. Below is a detailed description of the potential trail options.

**Option A – Tamarack to Creek Crossing**

**Total Estimated Cost = \$186,638.09**

**Total Estimated Cost Per Lineal Foot of Path = \$49.23/Lineal Foot of Path**

Option A will begin at Tamarack and utilize a 10' wide asphalt trail that will follow along Rattlesnake Drive pinned to the edge of the borrow ditch until it reaches the access to the gas facility. Once the trail has reached that access it will transition into a 5' wide sidewalk with curb and gutter. On the gas facility side of the sidewalk, a dry stack retaining wall with a handrail will be constructed. This retaining wall and hand rail are needed since the slope from the road to the facility is too steep and would require a large amount of fill to construct an acceptable slope off of the sidewalk. The sidewalk will cross over Creek Crossing Rd. with the use of a cross walk. Truncated domes will be necessary on each side of the crossing to meet ADA requirements. Necessary signage is considered to be very minimal for this option and has been included within the Construction Estimate. During our field walk, Doug Harby informed us that the City is planning on completing the sidewalk on Rattlesnake Drive to Creek Crossing Rd. From this information, it was decided that Creek Crossing Rd. will be the end location of this option. This option is located entirely in available Right-of-Way.

**Option B – Tamarack to Lower Lincoln Hills**

**Total Estimated Cost = \$254,750.77**

**Total Estimated Cost Per Lineal Foot of Path = \$47.47/Lineal Foot of Path**

Option B will also begin at Tamarack and have a 10' wide asphalt trail that will run along the borrow ditch of Rattlesnake Drive, until Rattlesnake Drive makes a turn to the west. Rather than turning west and heading toward Creek Crossing Rd. as Option A does, the trail will cross Rattlesnake Drive using an enhanced crossing. An enhanced crossing will consist of a crosswalk, truncated domes, and pedestrian crossing warning signage. Once the trail has crossed over Rattlesnake Drive it will transition into an 8' wide asphalt trail that will run along the backside of the soccer fields. There is an existing easement that will allow for this. Once the trail has intersected with the soccer field parking lot it will turn into a 5'

sidewalk with curb and gutter that will head west toward along Lower Lincoln Hills. It was discussed that parking lot improvements for the soccer field are in future plans. The proposed sidewalk will run on the street side of the parking lot for the entire length of the parking lot. All the work to the end of the parking lot will be done within the Right-of-Way. Once the sidewalk has reached the end of the soccer field parking lot, there is not any available Right-of-Way for the sidewalk to continue on unless the entire road is shifted to the south or sidewalk easements are acquired from the residents on the north side of the road. From our field walk it was discussed that the cost to shift the road would be too extreme and the acquisition of easements would need to be the option to complete the sidewalk along Lower Lincoln Hills. Doug Harby believes that the City will propose to the property owners that the City will pay for the curb and sidewalk in that area if the property owners will grant an easement for the curb and sidewalk.

**Option C – Tamarack to Creek Crossing and soccer fields**

**Total Estimated Cost = \$223,929.08**

**Total Estimated Cost Per Lineal Foot of Path = \$42.23/Lineal Foot of Path**

Option C consists of a combination of Option A and B. This option is included because it will provide a route to Creek Crossing as well as a route to Lower Lincoln Hills via the backside of the soccer fields. It will utilize Option A's 10' asphalt trail route from Tamarack to Creek Crossing Rd. However, this route will also utilize the enhanced crossing of Option B that will have the 8' asphalt trail go along the backside of the soccer fields. This trail will end once it reaches the parking lot for the soccer fields. This option is located entirely in available Right-of-Way.

Again, I would like to thank you for the opportunity to provide the Upper Rattlesnake Neighborhood Council with a feasibility study for potential trail options. If you have any questions or need clarification on any items in this letter, please do not hesitate to give us a call at 721-0142.

Sincerely,  
**Territorial-Landworks, Inc.**



Cory Davis, E.I.T.

Enclosures: (2) CD containing Right-Of-Way Information & Exhibit  
(5) Trail Option A Exhibit  
(5) Trail Option B Exhibit  
(5) Trail Option C Exhibit  
(5) Trail Feasibility Details  
(5) Option A Engineer's Preliminary Cost Estimate  
(5) Option B Engineer's Preliminary Cost Estimate  
(5) Option C Engineer's Preliminary Cost Estimate

C. File (W/ Enclosures)

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