

**Vegetative Restoration of
Mandan Park
A Grant request to the BNRDC**

December 1, 2014

For an amount of \$ 100,000.00

**Submitted by:
Landscapes of Montana
Norman DeNeal
2001 Porter Avenue
Butte, Montana 59701-6243
(406) 723-6656
normanjdeneal@gmail.com**

Prototype Restoration of Mine Waste Cover for the BA&P Walking Trail

Submitted by:
Landscapes of Montana
Norman DeNeal
2001 Porter Avenue
Butte, Montana 59701-6243
(406) 723-6656
normanjdenal@gmail.com

The idea: An revegetative enhancement using aspen trees and native flowering plants on this BRES Site to further control erosion over the long term and give greater diversity to the grass planting in the park.

Location: Mandan Park is on the east side of North Wyoming between the Anaconda Rd. and Clear Grit Terrace.

Project type: Waste cap second generation of plant growth improvement, soil retention improvement, storm water control, and possible later recreation, and historic interpretation. This would be an 8 year project .

Project benefits: (More details on page 4)

1. Butte-Silver Bow would provide 67 cu yds of soil for the project, and the needed additional water to establish the trees, flowers and shrubs.
2. Restoration of the native landscape that existed before mining in Butte
3. A refuge for browsing animals that move through the corridor from the Pilot of Butte Mine through to Montana Resources (presently there are deer, moose and fox that travel this corridor, most poached, though a few legally hunted)
4. This is a prototype of how other mines covers could be further vegetated at less than 10% of the cost of other planting schemes on the Butte Mining Hill.
5. When established the landscape would eventually provide better water retention and less runoff than the present (though largely successful) grass cover.
6. Ensured success in that plantings would be done over a 3 year period. The experience of restoration at the Cellar Dirt Dump shows a guaranteed success on this site.
7. This location could possibly later be used to interpret the ethnic legacy of Butte's Corktown, an Irish ethnic community which was in this exact area.
8. Though this is proposed as an 6 year project with the use of city water, at the end of the 6 years the additional water will not be needed. The landscape would be self sustaining as is the native landscape north of Walkerville

Matching money: There is a 48.5% matching funds for this project.

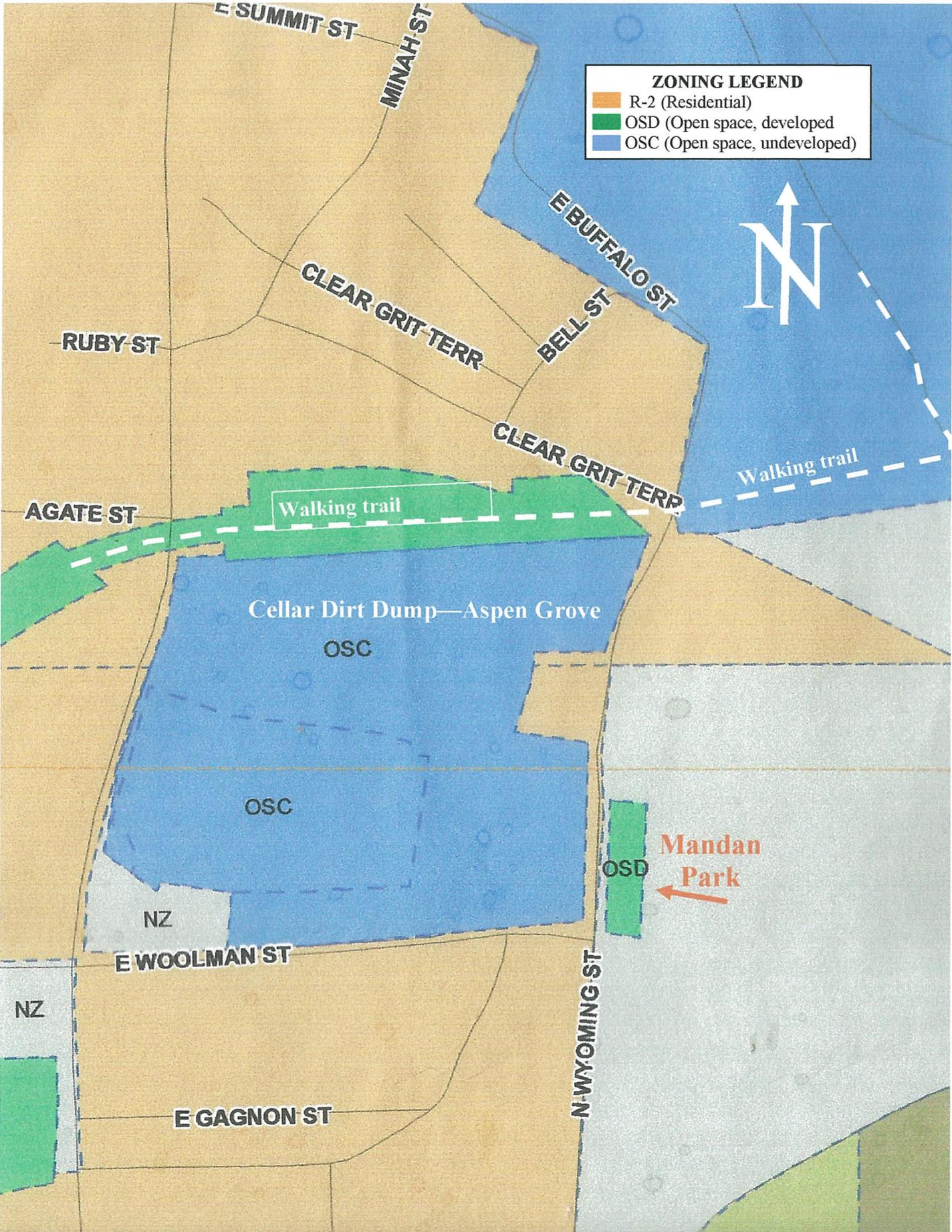
Estimated cost: \$ 6,564 of which \$4,420 is the requested amount from the BNDR Council.

BUDGET
MANDAN PARK REVEGETATION PROJECT 2015-2020

Category	Cost
1 Topsoil	1,139
2 Soil prep and amendments	0
3 Tree stock and plant material	200
4 Temporary irrigation system	600
5 Supplies, materials & rental equipment	220
6 Labor	2,100
7 Deer fence	1300
8 Evaluation	0
9 Irrigation water	1,005
TOTAL	6,564

PROJECT TIMETABLE
SHIELDS STREET RECLAMATION PROJECT 2015-2020

Task	Time period
1 Moving new soils	Apr-May 2015
2 Install temp. irrigation system	June - July 2015
3 Deer fence installation	June - July 2015
4 Tree, shrub, flower planting	Apr-May 2016
5 Remove deer fence	June 30 2019
6 Remove Temp irrigation system	October 31 2020



Mandan Park



2011 Aerial Photography
0 40 80 Feet

GIS Server: \\FS-03\GeoM\arc_2014\41414_MandanPark.mxd Printout Date: 1/30/2014