

APPENDIX 1

**PERMANENT STRUCTRES AT
CROSS PARK TRAIL HEAD PROJECT
CASINTO ARCHITECTURE
September 4, 2009**



roof & wall insulation, and metal roofing. This space is fully heated, with ventilation per code. Access will be through the inside of the barn.

Scheme B: Structural stability Only; No Public Access

Under this scheme, there will be no immediate public access. The barn will be stabilized for limited wind & seismic resistance, to prevent any further structural decay. The following improvements/tasks will be included in the project scope:

Dairy Barn

- * Complete the demolition & removal of the existing Dairy Barn, including footings and foundation.

34ft x 50ft Structure

- Install limited structural improvements for wind & seismic resistance, including cross-braced frames at the inside corners.
- In-fill opening in south wall with wood-framing, plywood sheathing; paint.
- Secure existing slide door at north wall; new lock & hasp.
- Remove glazing from existing windows; install painted plywood panels on inside face of window frames to prevent vandalism.
- All other portions of the structure to remain as-is. Do not paint.

Scheme C: Pre-Fabricated Toilet Structure:

Prefabricated toilet structure basis of design: Concrete pre-cast construction, stainless steel plumbing fixtures, drinking fountain, stone-like wainscote, 6:12 roof pitch, electronic flush valve toilets, hand dryers. "Denali" unit by Concrete Buildings, Inc. or equivalent. Cost includes \$3,500.00 allowance for underground plumbing. Not included: Site preparation and grading.

Picnic Shelter:

Basis of design & cost is a steel column & frame structure, with a two-tier roof line, standing-seam roof, tongue & groove ceiling, concrete footings, and full installation & assembly. "Cheyenne" model, 24'-0" X 36'-0", as by Classic Recreation, Inc. or equivalent. Not included: electrical/lighting.

Comparable Costs:

DEA prepared the following Comparison of Barn Renovation Costs Summary which includes three Schemes. Scheme A includes limited renovation of the existing barn; toilet room and shed roof additions. Scheme B includes only structural stability of the existing barn with no public access. Scheme C includes demolition of the entire barn and construction of a 24'x36' shade structure in its place.



September 4, 2009

DRAFT

Narrative Scope

The trailhead site at Cross Park may include several permanent structures, including picnic shelters, pre-fabricated toilet structure, and an existing barn structure which may remain. As explained below, there are two options for improvements to the barn structure.

Barn Structure:

There are two existing barn structures, currently connected in an L-shape pattern. They are actually two separate structures. Reference the structural analysis report for "Cross Park-Mayflower Dairy Barn", by David Benson, P.E. dated December, 2006 for more information.

Pierce County Parks has requested that we address three possible alternatives for improvements to the existing barn, as follows:

Scheme A:

Gathering Place/Public Market, Limited Renovations

Under this scheme, the space will be utilized as a public gathering space, but will not be a heated space; ventilation will be satisfied by open window frames and doorways on days of use. The following improvements/tasks will be included in the project scope:

Dairy Barn

- Complete the demolition & removal of the existing Dairy Barn, including footings and foundation.

34ft x 50ft Structure

- Repairs to existing concrete slab and perimeter grade beam where necessary; over-pour concrete slab to achieve a smooth and uniformly flat surface.
- Existing horizontal wood siding to remain; infill & repair as necessary for a uniform appearance; prep. & paint to match; entire structure to be painted.
- Install limited structural improvements for wind & seismic resistance, including cross-braced frames at the inside corners. Remove the existing roof structural system, interior columns; replace with a new heavy-timber framed primary system, with 2X rafters, plywood sheathing, roof insulation and metal roofing.
- New heavy-timber trusses to utilize recycled timber members as much as possible.
- Inside surface of open stud walls to receive smooth-surface wainscote to 8'-0" elevation; paint all inside surfaces of the walls; do not paint roof structure.
- Construct a 576 square foot shed roof canopy along the east wall of the barn, with heavy-timber posts and knee-bracing; 2X rafters with plywood sheathing, metal roofing. Install concrete slab under this footprint.
- Construct clerestory along a portion of the east side of the roof, to allow for natural daylighting and ventilation; heavy timber framing; wood-frame windows without glazing.
- Install two pairs of mandors for emergency egress, with hardware. Install new wood-frame windows, with wood mullions; do not glaze; install insect screens only.
- Repair existing slide door on north wall; re-face wood siding; install new sliding door track, lock & hasp (not an egress door).

400 Square Foot Restroom Addition

- Construct a 400 square foot addition to the south endwall of the barn, for two public toilet rooms; conventional construction with concrete slab on grade, wood-stud wall framing, batt insulation, pre-fabricated roof trusses,



CASTINO ARCHITECTURE

**PERMANENT STRUCTURES
AT CROSS PARK TRAILHEAD PROJECT**

