Walking Box Ranch Planning and Design Quarterly Progress Report: Period ending July 10, 2009

Margaret N. Rees
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Executive Summary

- UNLV participated in the 100% Design Concept Plan meeting, June 10-12, 2009 at the BLM Las Vegas Field Office and Walking Box Ranch (WBR), and provided comments toward proposed concepts for the museum and field, research, and training center at Walking Box Ranch.
- A request for funding for road construction and repair at WBR was submitted to NDOT (6/24/09).
- UNLV participated in the following meetings related to the search for renewable energy funding for the ranch: ARRA Implementation Workshop sponsored by Senator Reid (4/16); UNLV Stimulus Funding Workshop (4/17), Renewable energy meeting with UNLV engineering faculty (4/21), Harry Reid Center meeting on energy (5/7), Renewable Grant Workshop sponsored by Senator Ensign (6/29).
- UNLV visited the Zzyzx research center, Baker, CA to further learn about research center operations and facilities.
- Rex Bell revised his rights to the WBR brand to share that brand with UNLV.
- UNLV has nearly completed a request for “Visitor Services Feasibility, Compatibility, Market Study, and Business Plan” which will be submitted to Dornbusch during the next quarter.
- UNLV is working with Viceroy Mining on obtaining mine rock for building stone.
- UNLV is continuing to work with the Architectural Resources Group (ARG) under our SAT grant, to complete Master and Preservation Plans that will guide the SNPLMA-funded museum and field station projects now underway.
Summary of Attachments

- Request for funding for highway construction and repair submitted to NDOT (includes request plus attachments)
- 100% Design Concept Plan Meeting Agenda (6/10-12/09)
- 80% Design Concept Interpretation Plan from Condit
- Jean Cline’s 100% Design meeting notes
- Workshop materials from the 50% Design Concept meeting, from EDAW (50% DCP Presentation Final)
- J Cline notes from visit to Zzyzx research station in Baker, CA
- WBR Registered Brand Certificate

Planning and Design, and Construction Phase Items:

1. Provide BLM with consultation and advise to assist the BLM in defining the scope of work for the design of this project. The UNLV shall coordinate with the University departments and schools and act as the academic focal point for information relative to the design of the Science and Training Center for arid land studies.

   - Jean Cline and Peg Rees met with colleagues in the Hotel College in preparing a request for a “Visitor Services Feasibility, Compatibility, Market Study, and Business Plan,” which will describe the scope of work to be requested of Dornbusch. We anticipate completing an agreement with Dornbusch to undertake this project during the next quarter.
   - A request for funding for road construction and repair at WBR was submitted to NDOT 6/24/09. This request followed a meeting between Peg Rees (UNLV) and Dennis Taylor (NDOT) in Reno in early June. The request is for funding for NDOT to add left turn lanes to State Highway 164 at the turnoff to WBR, and to also repair the unmaintained state road leading to the ranch. See attachments.
   - J Cline met with Alan Personius in the IT department to begin detailed discussions on IT needs for the ranch and research center.

2. Participate in all phases of scoping and planning meetings and meetings with the BLM’s planners, architects, and contractors for the design and development of the Walking Box Ranch as a Science, Research, and Training Center and Museum for the study of arid lands and development of the Headquarters as a Museum and interpretive center. The UNLV’s participation is to provide input to the BLM relevant to the specific educational and research goals of the project.

   - UNLV participated in a three-day 100% Design Concept Plan meeting (agenda attached) June 10-12, 2009 with BLM and the architectural and
engineering team headed by EDAW. During this meeting EDAW and subcontractors presented 100% design concepts, which were then discussed by all participants. The first two days of the meeting were held at BLM’s Las Vegas Field Office and the final day was held at Walking Box Ranch to ground truth proposed building locations, evaluate current plans for restoration, and to search for the old well. During the meeting the group discussed all proposed project elements and generally agreed with proposed concepts. Final discussions centered on project costs and funding. By cutting some project components it appears that funding for the project is adequate, though not sufficient to cover the renewable energy components we wish to feature at the ranch, including photo voltaics to provide electricity, and geoxchange to providing heating and cooling. We will continue to search for funding for these features. Attachments include: the meeting agenda and Jean Cline’s meeting notes. Minutes from this meeting have not yet been distributed and will be included in the next report. Workshop materials from the 50% Design Concept meeting, held in February, are also attached.

- J. Cline and M. Rees visited the Zzyzx research station south of Baker, CA and met with director Bill Presch to discuss Zzyzx management and operations, and to visit the buildings comprising the facility. Presch outlined funding and described how he manages the property, which is owned by NPS and run by him as a component of the Cal State Fullerton campus. See attachments.

- UNLV participated in numerous meetings to identify potential sources of funding for renewable energy to provide electricity, and heat and cooling for the property including: ARRA Implementation Workshop sponsored by Senator Reid (4/16); UNLV Stimulus Funding Workshop (4/17), Renewable energy meeting with UNLV engineering faculty (4/21), Harry Reid Center meeting on energy (5/7), Renewable Grant Workshop sponsored by Senator Ensign (6/29). We are currently waiting for response from DOE, BLM, and Senator Reid’s office on several questions.

- UNLV is working with Viceroy Mining on obtaining mine rock for building stone. Mick Lynch from Viceroy anticipates visiting Las Vegas during July and J. Cline and Lynch will visit the mine at that time to determine locations that rock can be removed from. They will further discuss logistics of removing the rock to the WBR property.

- UNLV continues to work with ARG to complete the comprehensive Preservation and Master Plans, funded by a Saving America’s Treasures grant to UNLV. These documents have been reviewed and approved by NPS and NV SHPO, and have also incorporated comments from BLM. They form the basis for the architecture and engineering components of the project now underway.

3. **Assist BLM in developing the environmental assessment by providing technical input and review of the draft environmental assessment.**

- No NEPA activities occurred during this quarter.
4. **Provide technical and academic advice to BLM in the development of the museum facilities, by conducting research into the historic records of the ranch and providing recommendations about the appropriate interpretive and environmental education programs that may be presented at the ranch.**

- Jean Cline met with Rex Bell Jr. to further discuss future donations to the property. Bell has officially shared rights to the WBR brand with UNLV so that it can be used for construction and interpretation at the museum and research center. (See attachment).
- See first activity under item 2 above.
- UNLV is continuing to work with ARG in completing the WBR Master and Preservation Plan, which guides the design phase now in progress for the property.

5. **Contribute technical and educational-based assistance to the BLM for the BLM’s consideration during construction development for the Science and Training Center and Museum as it relates to the future operations of these facilities as education centers.**

- The project is not under construction at this time.

6. **Provide input and feedback to the BLM during the construction of the Field Research and Training Center and the Museum.**

- The project is not under construction at this time.

**Phase 1 Deliverables:**

1. **Provide a Facility and Future Needs Alignment Report that will identify the types of future research and training programs that will be conducted at Walking Box Ranch Field Research and Training Center and Museum. The report will also include a matrix that aligns predicted future activities with facility, construction, furnishing, and equipment needs.**

- This report will be prepared during 2009-2010 in conjunction with a contracted business plan, that will contribute to identifying future activities and equipment needs.

2. **Assist the BLM in developing a Preservation Plan for Existing Structures on the Headquarters Parcel of the Walking Box Ranch.**

- UNLV is currently working with project architects and engineers to determine how best to preserve the historic buildings.
3. Provide a Business Plan detailing anticipated future research, training, and other use goals and a financial plan for reaching those goals. The Business Plan should also describe income and operations and maintenance costs.

- BLM and UNLV have agreed that UNLV will take the lead in contracting with Dornbusch to provide a business plan that will be developed during 2009. Jean Cline and Peg Rees met with colleagues in the Hotel College in preparing a “scope of work document” to be requested of Dornbusch. We anticipate completing an agreement with Dornbusch to undertake this project during the next quarter.

Phase 2 Deliverables:

1. Prepare a Project Development Plan that reflects UNLV’s Business Plan. The Project Development Plan should refine the anticipated research, residential training activities, and Museum use; identify recommended new facilities and renovations; outline construction; and plan center management (print and PDF).

- The project development plan will be completed following receipt of the business plan, which is anticipated in 2009.

2. Assist the BLM in creating a detailed Work Plans for each aspect of project development such as, but not limited to, existing building use, new construction, interpretive programs, and center management, based upon the Comprehensive Master Plan and Preservation Plan.

- Work plans will be created when the Comprehensive Master Plan and Preservation Plan are completed by ARG.

Phase 3 Deliverables:

1. Assist in the development of Facilities Design Drawings according to the recommendations of the Comprehensive Master Plan generated by the SAT project, in conformance with existing significant architectural features and historical attributes of the property, in a fashion responsive to LEED goals to the extent funding permits, and to meet all property easements.

- Although the master and preservation plans are not yet complete, we are assisting in the development of design drawings. See activities described under items 1 and 2 above.

2. Assist in the development of Facilities Design Drawings for the preservation of facilities according to the recommendations of the Comprehensive Master Plan and Preservation Plan in conformance with historical and architectural attributes of the buildings and property, and to meet all property easements.
• Although the master and preservation plans are not yet complete, we are assisting in the development of design drawings for preservation of facilities. See activity described under the Planning, Design and Construction Phase, items 1 and 2.

Phase 4 Deliverables (During Construction):

1. *Provide the BLM consultation and advice during construction to help the BLM ensure the construction meets the goals of the project.*

   • The project is not under construction at this time.

2. *Provide the BLM consultation and advice as needed during renovation of preserved facilities, to help the BLM ensure that the renovation meets goals of projects and is in accordance with historical restoration requirements and according to approved designs.*

   • The project is not under construction at this time.

Phase 5 Deliverables:

1. *Assess and identify furnishings and equipment based upon facility needs; provide the BLM information related to furnishings and equipment for new and preserved facilities so that the BLM can procure these items, within project funding under this Cooperative Assistance Agreement. The UNLV may provide additional furnishings and equipment outside of this Agreement at the UNLV’s sole discretion.*

   • While we are not acquiring furnishings at this time, we have had and we continue to have discussions with Rex Bell Jr. about his desire to see original ranch furnishings now in his possession returned to the ranch.
## SUMMARY OF PROJECT PLAN

### Walking Box Ranch – Planning and Design

<table>
<thead>
<tr>
<th>Year One Deliverables</th>
<th>Percent Complete as January 10, 2009</th>
<th>Plan for Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Planning and Design:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Provide BLM with consultation and advice in defining the scope of the design of the Science and Training Center.</td>
<td>15%</td>
<td>Continue to consult and advise BLM in the scope of design of the training center.</td>
</tr>
<tr>
<td>2. Participate in all phases of scoping and planning team meetings for the design and development of WBR as a Science, Research, and Training Center and Museum.</td>
<td>15%</td>
<td>Continue to participate in scoping and planning of the Museum and the training center.</td>
</tr>
<tr>
<td>3. Assist BLM in developing the environmental assessment process with technical input and review of drafts.</td>
<td>60%</td>
<td>Continue to work with EDAW and BLM on the Environmental Assessment process, scheduled to be complete later summer/early fall 2009.</td>
</tr>
<tr>
<td>4. Provide technical and academic advice to BLM in development of the museum facilities with recommendations of interpretive and environmental programs for presentation at the Ranch.</td>
<td>15%</td>
<td>Continue to provide technical and academic advice for interpretive and environmental programs.</td>
</tr>
<tr>
<td>5. Contribute technical and educational-based assistance to the BLM for the BLM’s consideration during construction development for the Science and Training Center and Museum as it relates to the future operations of these facilities as education centers.</td>
<td>15%</td>
<td>Continue to contribute technical and educational-based assistance to the BLM for the Science and Training Center and Museum.</td>
</tr>
<tr>
<td>6. Provide input and feedback to BLM during the construction of Field Research and Training Center and the Museum.</td>
<td>0%</td>
<td>Project is not under construction.</td>
</tr>
<tr>
<td><strong>Phase 1 Deliverables:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Provide a Facility and Future Needs Alignment Report that will identify the types of future research and training programs that will be conducted at Walking Box.</td>
<td>0%</td>
<td>Work with faculty at UNLV to identify future research and training programs and incorporate in report. This will be completed in 2009 in conjunction with a</td>
</tr>
<tr>
<td>Phase 2 Deliverables:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------</td>
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<td></td>
</tr>
<tr>
<td>1. Prepare a Project Development Plan that reflects UNLV’s Business Plan. The Project Development Plan should refine the anticipated research, residential training activities, and Museum use.</td>
<td>0%</td>
<td>This will begin after a business plan is developed.</td>
</tr>
<tr>
<td>2. Assist the BLM in creating a detailed Work Plans for each aspect of project development based upon the comprehensive master plan and preservation plan.</td>
<td>0%</td>
<td>This will begin after the Master and Preservation Plans are completed and approved by NPS and NV SHPO.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Phase 3 Deliverables:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Assist in the development of Facilities Design Drawings according to recommendations of the comprehensive master plan generated by the SAT projects.</td>
<td>15%</td>
</tr>
<tr>
<td>2. Assist in the development of facilities design drawings for the preservation of facilities according to the recommendations of the Comprehensive Master Plan and Preservation Plan.</td>
<td>15%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Phase 4 Deliverables (During Construction):</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Provide the BLM consultation and advice during construction to help the BLM ensure the construction meets the goals of the project.</td>
<td>0%</td>
</tr>
</tbody>
</table>
2. Provide the BLM consultation and advice as needed during renovation of preserved facilities, to meet goals of the project.  

<table>
<thead>
<tr>
<th>Phase 5 Deliverables:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Assess and identify furnishings and equipment based upon facility needs; provide the BLM information related to furnishings and equipment for new and preserved facilities so that the BLM can procure these items, within project funding under this Cooperative Assistance Agreement.</td>
</tr>
</tbody>
</table>
ATTACHMENTS
Walking Box Ranch is labeled YKL Ranch on the Map
Arrows point to the intersection that needs left turn lanes and the county road from the State Highway 164 to Walking Box Ranch
June 29, 2009

Susan Martinovich
State of Nevada, Department of Transportation
1263 S. Stewart St.
Carson City, NV  89712

Dear Ms. Martinovich:

At the suggestion of Dennis Taylor, I am forwarding to you a transportation system project request to be considered for recovery act funding or any other money that may be available. The road for which funding is being requested is State Highway 164, approximately seven miles west of the town of Searchlight, Nevada. We request that left turn lanes be constructed to reduce accidents and handle anticipated visitorship to Walking Box Ranch, as that property is developed into a museum and a desert research center within the next 3 years.

Attached are an application form plus six attachments that provide additional information about the project.

Should you have any questions regarding this request, please feel free to contact me (email:  jean.cline@unlv.edu; office:  702 895 1091; cell:  702 208 6529).

Sincerely,
Jean Cline

Professor
Director, Walking Box Ranch Project

Cc:  Dennis Taylor
     Sandi Stanio
     Peg Rees
     Rochelle Athey
<table>
<thead>
<tr>
<th>1. Requesting Entity:</th>
<th>University of Nevada Las Vegas</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Contact Person/Title:</td>
<td>Jean S Cline/Dr.</td>
</tr>
</tbody>
</table>
| 3. Address: | 4505 Maryland Parkway, Box 454010  
Las Vegas, NV  89154-4010 |
| 4. Phone Number: | P:  702 895 1091  
F:  702 895 4064 |
| 5. E-Mail: | Jean.Cline@unlv.edu |
| 6. Project Name: | Walking Box Ranch Highway and Access Road Improvement Project |
| 7. What is the primary reason the Project is needed? | Check One:  
_____ Capacity  
_____ Bridge Replacement  
_____ Safety  
_____ Maintenance  
_____ Economic Development  
_____ Other, Please Describe ______________________________  
____________________________ |
| 8. Is the Project located in: | Check One  
_____ Urban (over 50,000 in population)  
_____ Small Urban (under 50,000 in population)  
_____ Rural (under 5,000 in population)  
_____ Indian Reservation  
_____ Other, please describe ______________________________ |
<table>
<thead>
<tr>
<th>9. Is the Project located on or adjacent to:</th>
<th>Check One</th>
</tr>
</thead>
<tbody>
<tr>
<td>____ Interstate Highway</td>
<td>____ U. S. Highway</td>
</tr>
<tr>
<td>____ State Highway</td>
<td>____ County Road</td>
</tr>
<tr>
<td>____ City Road</td>
<td>____ Indian Reservation Road</td>
</tr>
<tr>
<td>____ Other, please describe</td>
<td>________________________________</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>10. For Roadway Projects:</th>
<th>Roadway Number: <strong>State Highway 164, approximately 7 miles west of the city of Searchlight, NV</strong> (Attachment A, Highway map).</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Where is the Roadway actually located?</td>
<td>From __________ To __________</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B. Is the Roadway paved and what is the number of lanes?</th>
<th><strong>X</strong> Paved two-lane</th>
</tr>
</thead>
<tbody>
<tr>
<td>____ Paved four-lane</td>
<td>____ Paved more then four lanes</td>
</tr>
<tr>
<td>____ Not paved - Gravel/dirt</td>
<td>____ Other ___________________________</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>C. If known, what is the Roadway’s functional classification?</th>
<th>____ Interstate Highway</th>
<th>____ Urban Minor Collector</th>
</tr>
</thead>
<tbody>
<tr>
<td>____ Principal Arterial</td>
<td>____ Rural Minor Collector</td>
<td></td>
</tr>
<tr>
<td>____ Minor Arterial</td>
<td></td>
<td></td>
</tr>
<tr>
<td>____ Urban Major Collector</td>
<td></td>
<td></td>
</tr>
<tr>
<td>____ Rural Major Collector</td>
<td></td>
<td></td>
</tr>
<tr>
<td>__X_Primary State Route</td>
<td></td>
<td></td>
</tr>
<tr>
<td>____ Don’t Know</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| 11. Project Scope: | Currently two-lane State Highway 164 extends west from Searchlight, Nevada to the Nevada-California border and on to Interstate Highway 15. The historic Walking Box Ranch is located about 7 miles west of Searchlight, on the south side of Highway 164, and ~3800 feet back from the highway. Traffic along Highway 164 is now minimal but is expected to increase as the ranch is developed as a museum and research center. An unpaved county road that heads south from Highway 164 provides access to the ranch and continues south into California. This road is in poor condition and has high berms on both sides that capture water during storms. A map showing State Highway 164 and county road that leads to the ranch is attached (Attachment A, Highway map). |
| Briefly describe the existing conditions, and what elements are involved. | [Attach additional sheets if necessary] |
We request: 1) that turn lanes providing access to and from Walking Box Ranch be added to State Highway 164, and 2) that the county road be improved from Highway 164 to the entrances to Walking Box Ranch. The Bureau of Land Management, the owner of the Walking Box Ranch, is in the process of designing a Museum and a Desert Research Center that will be built at the ranch within three years. During construction and when this property opens to the public, traffic is expected to increase significantly on the state highway and also on the county road leading to the ranch. Numerous vehicles traveling west from Searchlight will be making left turns onto the county road to reach the ranch property and turning lanes are requested to accommodate the expected traffic increase and to minimize accidents that will otherwise result from vehicles entering and exiting the property. Road improvements for the county road are also requested. If completed, the project will improve the safety of State Highway 164 through the addition of turning lanes, and will produce an adequate access road to Walking Box Ranch for passenger car travel. The completed Walking Box Ranch project will benefit the economy of the Searchlight area by bringing visitors to the area, and also benefit Clark County residents and visitors by providing a high value historic, cultural, and science research center where they can learn about the history and value of the southern Nevada desert.

Preliminary documents showing possible designs are attached (Attachments B1 and B2, Road designs).

Amount

_____ Preliminary Engineering
_____ Right-of-Way
_____ Construction
$1,008,500 Total Estimate

_____ Don’t Know

If known, attach calculations. Estimates are attached (Attachment C, Road Construction Estimates). This total includes “Highway 164 Improvements” ($293,580) and Site Entry Road Improvements” ($714,761).
## B. What is the source(s) of funding for the Project?

Check all that apply:

- Federal
- Private Developer
- State
- In Kind
- County
- Other, please list _______________
- City
- Don’t Know

## C. Is the funding already identified or potentially available?

- Funding is Identified
- Funding is Potentially Available
- Don’t Know

If Identified or Potentially Available, attach commitment letter from funding agency.

### 14. Right-of-Way

<table>
<thead>
<tr>
<th>A. Will right-of-way have to be purchased for the project?</th>
</tr>
</thead>
<tbody>
<tr>
<td>___ Yes  <em>X</em>_ No  ___ Don’t Know</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B. Is right-of-way needed for staging, parking or material sites?</th>
</tr>
</thead>
<tbody>
<tr>
<td>___ Yes  ___ No  <em>X</em>_ Don’t Know</td>
</tr>
</tbody>
</table>

### 15. Relocation of Utilities

In order to complete the project are any major fuel, gas, energy lines or fiber optics lines impacted?

- Yes  _X__ No  ___ Don’t Know

If Yes, will your agency assist in the relocation?

- Yes  ___ No  ___ Don’t Know

### 16. Drainage

<table>
<thead>
<tr>
<th>A. Is drainage an issue with this project?</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>X</em>_ Yes  ___ No  ___ Don’t Know</td>
</tr>
</tbody>
</table>

Yes, for country road improvement, but not for the State Highway.

<table>
<thead>
<tr>
<th>B. Could drainage become an issue during construction of the project?</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>X</em>_ Yes  ___ No  ___ Don’t Know</td>
</tr>
</tbody>
</table>

Yes, for country road improvement, but not for the State Highway.
<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>17. Will the project impact any railroad crossings?</td>
<td>____ Yes  <em>X</em> No  ____ Don’t Know</td>
</tr>
<tr>
<td>18. Does the Project involve bike/pedestrian issues?</td>
<td>____ Yes  <em>X</em> No  ____ Don’t Know  ____ Not Applicable</td>
</tr>
</tbody>
</table>
| 19. What environmental issues were considered during the development of the project? | Considered  
  Air Quality Impacts  ____ Yes  ____ No  _X_  N/A  
  Water Quality Impacts  ____ Yes  ____ No  _X_  N/A  
  Cultural/Historical Impacts  ____ Yes  ____ No  _X_  N/A  
  Noise Impacts  ____ Yes  ____ No  _X_  N/A  
  Social/Economic Impacts  ____ Yes  ____ No  _X_  N/A  
  Wetlands/Waters of the US  ____ Yes  ____ No  _X_  N/A  
  Threatened/Endangered Species  ____ Yes  ____ No  _X_  N/A  
  Hazardous Materials/Waste Impacts  ____ Yes  ____ No  _X_  N/A  
  | If Yes, attach supporting documentation.                                | WBR including the access road is now going through an Environmental Assessment process under the direction of BLM |
| 20. Does the Project involve multiple jurisdictions - federal, tribal, state, local? | _X_  Yes  ____ No  ____ Don’t Know                                         |
| If Yes, list the jurisdictions involved:                                | State (Highway 164) and Clark County (an unmaintained road)               |
| 21. Is the Project consistent with local plans, and/or the community’s or tribal Master Plan? | _X_  Yes  ____ No  ____ Don’t Know                                         |
| If Yes, attach a copy of the section describing the Project.            | See attached Searchlight Town Board meeting notes (Attachment D, Searchlight Meeting Notes). |
22. Was the Project approved by the County Commission, City Council and/or Tribal Council

| _X__ Yes | ____ No | ____ Don’t Know |

If Yes, attach a copy of the minutes of the meeting or approval letter.

Walking Box Ranch project managers met with County representatives early during the planning process. The representatives indicated their support for the project but no formal action was taken (Attachment E, County stakeholder meeting notes).

23. Did development of the project include Public Participation?

| _X__ Yes | ____ No | ____ Don’t Know |

If Yes, list how:

- ____ Public Notice
- ____ Public Meeting
- ____ Advisory Group
- _X__ Other, please explain

Yes. The WBR project began with stakeholder meetings with the Searchlight community, Clark County officials, The Nature Conservancy, the Great Basin Conservation Ecosystem Study Unit, a representative from Senator Reid’s office, UNLV faculty, and BLM.

24. Has the proposed Project encountered, or is likely to encounter, any significant opposition or other obstacle?

| ____ Yes | _X__ No | ____ Don’t Know |

If Yes, describe the significant opposition or other obstacle:

We have not encountered any opposition in any of our stakeholder meetings.

If you have any questions, or need more information please call:

(775) 888-7122
ENTRY ROAD

Minor Drainage Channel
- Minor to nuisance flows during major storm events
- Minimal depth to drainage swale
- Minimal silt build up
- Al-grade concrete road crossings to convey flows

Major Drainage Channel
- Deeper and wider flows during major storm events
- Drainage swales are deeper
- High silt build up after storm event
- Potential need for culverts to convey flows

Swale/Drainage Crossings

Existing OHV Designated Route
Existing Fence
Existing Road with Side Berms
PARKING AND ENTRY

- Asphalt Parking
  - 37 Standard Stalls (10'x20')
  - 6 Large Vehicle/Bus Stalls (12'x60')
  - 3 ADA Stalls (10'x20')
- Overflow Corral Parking
  - Approx. 80 Vehicles
  - Water Tank Access
  - Existing Corral Fence Type
- Existing Non-Potable Water Tank

ACCESSIBLE INTERPRETIVE TRAIL - SEE OVERALL PLAN
- Natural Surface Trail - See Overall Plan
- Proposed Fence Type

INTEGRAL COLORED DECORATIVE PAVING
- Integral Colored Accessible Concrete

INFORMATION/INTERPRETIVE KIOSK
- Information/Interpretive Kiosk
- Historic Restored Ice House
- Alternate Entrance Gate
- Existing Corral Fence Type

HISTORIC RESTORED BARN
- Historic Restored Barn

ALTERTATE ENTRANCE GATE
- Alternate Entrance Gateway

AMPHITHEATER STAGE
- Blacksmith Shop (Proposed)
- Accessible Route to Blacksmith Shop
- Native Surface Service Access
- Native Restoration Planting Type
- Native Surface Connection to Historic Entry

EXISTING JOSHUA TREE TYPE
- Native Planting Seating Area
- Historical Restored Barn
- Native Tree Type

EXISTING CORRALS
- Existing Corral Parking
- Existing Corral Fence Type
- Existing Non-Potable Water Tank
- Overflow Corral Parking
- Approx. 80 Vehicles
- Water Tank Access
- Existing Corral Fence Type

PROPOSED NATIVE TREE TYPE
- Proposed Native Tree Type

HISTORIC RESTORED ICE HOUSE
- Existing Ice House
- Special Events Space

ACCESSIBLE ROUTE TO BLACKSMITH SHOP
- Existing Ice House
- Special Events Space

INFORMATION KIOSK/INTERPRETIVE EXHIBIT
- Bench and Interpretive Panel Type
- Native Planting Seating Area
- Ranch Entry Plaza/Events Area

EDAW | ALCOM

WALKING BOX RANCH

DESIGN CONCEPT PLAN

June 2009
## HIGHWAY 164 IMPROVEMENTS TO RIGHT OF WAY

### Phase 1

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UNIT</th>
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<th>QTY.</th>
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### SITE ENTRY ROAD IMPROVEMENTS (ROW to the south of the 40 Acre Site)

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<td><strong>CATEGORY SUBTOTAL</strong></td>
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<td><strong>SUBTOTAL</strong></td>
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<tr>
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<tr>
<td>Contractor’s General Conditions and Profit</td>
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<tr>
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<td>7%</td>
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<tr>
<td>Escalation (to Spring 2010)</td>
<td>3%</td>
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<td><strong>GRAND TOTAL CONCEPT DESIGN ESTIMATE</strong></td>
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</table>

**Plan Date:** 6/8/2009

**Prepared By:** PEH, GO

**Checked By:** PEH, SS

**Prepared By:** EDAW, Inc.

**Date:** June 16, 2009

**Checked By:** EDAW, Inc.
# Development Concept Plan Estimate of Probable Cost

**Plan Date:** 6/8/2009  
**Prepared by:** PEH, GO  
**Checked by:** PEH, SS  
**June 16, 2009**

## Public Parking Lot

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit</th>
<th>Cost</th>
<th>Qty.</th>
<th>Extended Cost</th>
<th>Notes</th>
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<td><strong>Demolition</strong></td>
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<tr>
<td>Clear and Grub Site</td>
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<td>$5,000</td>
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<td>Tennis paving, misc. removal</td>
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<td>$10,000</td>
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<td>4&quot; Thick, integral color</td>
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**Public Parking Lot Total Project Cost:**

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<th>Qty.</th>
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### RESEARCH CAMPUS ROAD AND PARKING

#### Phase 1

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<td>Tennis paving, misc. removal</td>
</tr>
<tr>
<td>Miscellaneous Demolition</td>
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<td>$0</td>
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<td>Tennis paving, misc. removal</td>
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<td>$7,500</td>
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<tr>
<td><strong>EARTHWORK AND STORM DRAINAGE</strong></td>
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<tr>
<td>Erosion Control Plan</td>
<td>Allow</td>
<td>$10,000.00</td>
<td>1</td>
<td>$10,000</td>
<td>0</td>
<td>$0</td>
<td>0</td>
<td>$0</td>
<td>$10,000</td>
<td>prepare plan and update during construction</td>
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<tr>
<td>Storm Drainage - ponds</td>
<td>Allow</td>
<td>$10,000.00</td>
<td>1</td>
<td>$10,000</td>
<td>0</td>
<td>$0</td>
<td>0</td>
<td>$0</td>
<td>$10,000</td>
<td>construct new detention pond(s)</td>
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<tr>
<td>Storm Water Culverts / Road Crossings</td>
<td>EA</td>
<td>$3,500.00</td>
<td>3</td>
<td>$10,500</td>
<td>0</td>
<td>$0</td>
<td>0</td>
<td>$0</td>
<td>$10,500</td>
<td>Culvert at road crossings</td>
</tr>
<tr>
<td>Storm Water Low Flow Crossings</td>
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<td>0</td>
<td>$0</td>
<td>0</td>
<td>$0</td>
<td>$3,500</td>
<td>Concrete roadway low flow crossings</td>
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<tr>
<td>Excavate / Fill / Grade Parking Lots</td>
<td>CY</td>
<td>$4.00</td>
<td>3,000</td>
<td>$12,000</td>
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<td>$0</td>
<td>0</td>
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<td>$12,000</td>
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<td>CY</td>
<td>$4.00</td>
<td>1,850</td>
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<td><strong>ROADS AND PARKING</strong></td>
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<td>Aggregate Base Course Site (campus) Road Paving</td>
<td>S.F.</td>
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<td>40,495</td>
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<td>0</td>
<td>$0</td>
<td>0</td>
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<td>24' roadway with 18'' shoulder</td>
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<td>Tn</td>
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<tr>
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<td>S.F.</td>
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<td>10,000</td>
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<td>S.F.</td>
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<td>10,000</td>
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<td>0</td>
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<td>S.F.</td>
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<td>10,000</td>
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<td>Pavement Marking</td>
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<td>0</td>
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<td>$0</td>
<td>$2,500</td>
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<td>Vertical Curb - Parking</td>
<td>L.F.</td>
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<td>2,870</td>
<td>$28,700</td>
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<td>$28,700</td>
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<td>Accessible Ramp</td>
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<td></td>
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<td>$204,745</td>
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<td><strong>SITE WORK PAVEMENT</strong></td>
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<td>8' Concrete Walks - Parking</td>
<td>SF</td>
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<td>$0</td>
<td>0</td>
<td>$0</td>
<td>$18,000</td>
<td>4' Thick, integral color</td>
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<td></td>
<td></td>
<td>$18,000</td>
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<td><strong>PLANTING</strong></td>
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<td>Native Restoration</td>
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<td>$0.20</td>
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<td>$8,712</td>
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<td>$0</td>
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<td>$3,000</td>
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<td>$0</td>
<td>$3,000</td>
<td>restored areas</td>
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<tr>
<td><strong>CATEGORY SUBTOTAL</strong></td>
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<td>$11,712</td>
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<td><strong>SUBTOTAL</strong></td>
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<td>Schematic Design Contingency</td>
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<td>Contractor's General Conditions and Profit</td>
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<td>$0</td>
<td>0</td>
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<td>$24,817</td>
<td>bonds, insurance, permits, etc.</td>
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<tr>
<td>Contractor's Bonds, Permits, Etc.</td>
<td>2%</td>
<td>$6,204</td>
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<td>contractor's bonds</td>
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<td>Contractor's Overhead and Profit</td>
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<td>$21,715</td>
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<td>Escalation (to Spring 2010)</td>
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<td>$9,306</td>
<td>Phase 1 and Future year Escalation - 3 percent per year</td>
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<td><strong>GRAND TOTAL CONCEPT DESIGN ESTIMATE</strong></td>
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<td>$418,788</td>
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<td>1. This is an order of magnitude estimate and is based on work completed to date. The quantities shown are approximate.</td>
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<td>2. Construction Costs do not include costs incurred for phased project development.</td>
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<td>3. Contingency percentages are included in the estimate. The schematic design contingency accounts for the many details and associated costs that are yet unknown. Within master planning and schematic design phases, 15 to 20 percent is the accepted norm. The owners construction contingency is included as a budget percentage that should be carried through the construction on the project. This contingency amount allows for change orders and unforeseen conditions and/or costs that may be encountered during the construction phase.</td>
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<tr>
<td>4. Costs given assume that all improvements will be made under contract with a qualified contractor. No adjustments have been made for volunteer labor and/or donated materials.</td>
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<td>5. Rough project phasing has been included in the form of “Add Estimates.” Construction priorities within these columns are to be determined.</td>
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<td>6. Design and/or Special Studies Fees are not included.</td>
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MINUTES
SPECIAL PUBLIC MEETING
A STAKEHOLDERS MEETING
ATTENDED BY THE SEARCHLIGHT TOWN ADVISORY BOARD

THURSDAY, JUNE 01, 2006

9:00 A.M.
SEARCHLIGHT COMMUNITY CENTER
200 MICHAEL WENDELL WAY, SEARCHLIGHT, NV 89046

MEMBERS PRESENT: Michael Romero, Chairman
Robert Shawn, Vice Chairman
Bill Bodkin
Verlie Doing
Saundra Durgin

ABSENT:

OTHERS PRESENT: Approximately 32 Persons

1. CALL TO ORDER
A. This meeting was legally noticed and posted in conformance with the Nevada Open Meeting Law.
B. Michael Romero, Chairman, called this meeting to order at 9:10 p.m. The Pledge of Allegiance was recited.

2. COMMUNITY PROJECTS AND CONCERNS
A. Receive information from the University of Nevada, Las Vegas (UNLV) and Bureau of Land Management (BLM) staff regarding the Walking Box Ranch and take any action deemed appropriate, including offering input on an individual basis, to assist the
Bureau of Land Management, the owner of the Walking Box Ranch, in determining future uses of the Ranch.

Jean Cline, Professor of Geology from UNLV, for the last year to year and a half had been involved with what is being called "The Walking Box Ranch Project." Senator Harry Reid met with Carol Hater, President of UNLV, and said that he would like to see the Walking Box Ranch preserved. It has a special meaning to him as he was there often as a child, and he feels that it has a special meaning to the history of Nevada, especially Southern Nevada. Ms. Hater said that UNLV would work towards that goal, and for the last year and a half had been doing Maintenance, repairs and improvements. BLM owns the ranch, UNLV manages the ranch and the Nature Conservancy safe guards the preservation of the ranch.

The BLM, UNLV and Nature Conservancy are meeting with the main stakeholders for input and a vision for the future of the Walking Box Ranch. Searchlight is a major stakeholder with a lot of its history connected to the Walking Box Ranch.

With the help of Senator Harry Reid UNLV received a Saving America Treasures grant in the amount of half a million dollars. UNLV had to come up with matching money so found that as a state grant. The Parks service is managing the monies.

The Park Service wisely decided that the best way to manage the money and get the most use out of it was to hire a restoration architect team consisting of a historian, archeologist, geologist. The ALG architectural group was hired from San Francisco to determine what the best plans would be for the future use of the Walking Box Ranch. The team consists of: Cathleen Malmstrom, Project Manager with ART Group; Bruce Judd, Preservation architect with ART Group, Philip Hendricks, Landscape Architect, with EDAW INC.; Dewy Livingston,
Historian with ART Group; and Katie Wollan, Architectural Historian. With ART Group. Together the team will study the ranch house and determine what needs to be restored to be as close to the original as possible. A complete study of the ranch land will be done to determine what will be the best use for the land for now and the future. They will put a map together of the property and decide if there should be something built on the land, and if so, what would be the best item(s) to build in that certain spot.

Jean Cline introduced Ms. Malmstrom who in turn introduced the rest of the team. She said that she didn’t expect this to be a structured meeting and really wanted input from the public and Board members as to their vision for the future of the Walking Box Ranch. She invited the public to ask questions, one at a time, and to give their ideas and input for the ranch.
There will be many agencies will need to be involved, or who now are involved with this project. Biologists, photographers, EPA, Museum components, interpretative components. Environmental approval will be needed through each phase of the project.

Mike Romero opened the meeting up for questions and comments from the public.

Joyce Nowlin asked how Searchlight could be connected to the Walking Box Ranch with hiking trails, bike trails, etc.?

Stan Colton asked what their vision is for the ranch? Ms. Molstrom said that she wouldn’t presume to have a vision for the ranch as yet as Searchlight citizens knows far more about the ranch than she does. Mr. Colton said that he doesn’t want them to fence it in, not letting the people in to view and enjoy the ranch. Ms. Molstrom said that there was a requirement for the public to visit the ranch.

Jane Overy agrees with Stan Colton that the ranch should be open to the public. Ms. Overy is concerned with the aquifer that is on the ranch. Ms. Overy said that if BLM and Nature Conservatory are putting all these requirements and restrictions on the land out there how would that effect the aquifer for the future needs of the area? The last time Searchlight needed a well they had to go 41/2 miles out of Searchlight in that aquifer and had to spend 11/2 million to go through the Tortes Habitat How much more would they have to spend to go through that 167 acres to study the land? She feels that the Southern Nevada Water Authority should be included in the study of the ranch.

Cark Weikel said that there is a good water well on the ranch. The reason it is shut down is that years ago the pump was dropped down the well, so a new well would have to be dug right next to the old one, but there is plenty of water. The Walking Box Ranch is the center section for the old ADH and Rock Springs. There is the OX to the south and the Partials to the north and the Flying KL. If you are going to develop
this ranch, it should include the cultural resources for the whole area.

There are three different CCC projects out there, too. You have Six mile well, ten mile well and Tiffenback. Ms. Molstrom asked if any of her team knew about these. They said no.

Saundra Durgin said that she agreed with Stan Colton in that the ranch should be open to the public, school children, guilds and clubs. She would like to see the whole history be included, not just the Clara Bow/Rex Bell part of the ranch. Ms. Durgin asked just how many restrictions would be out there?

Philip Hendricks said that they the first thing that they had to do is biological surveys of the property to see what is out there that they might have to protect. There might be recommendations for reconstructions. They will come back to the Board occasionally to give up-dates on what is going on

Saundra Durgin said that there was signage already in place for the Walking Box Ranch to be included on the Highway 95 widening when it goes
through Searchlight, and said that the Board knows that Bob Shawn would keep a close eye on that as that is important for Searchlight.

Jane Overy said that to expand on the history of the Walking Box Ranch, years ago we had cattle running throughout the area. Because of the tortles being endangered and the area being turned into a tortles habitat there are no longer cattle. It would be nice if the cattle could be reintroduced back into the ranch.

Caryn Hollingsworth said that the Walking Box Ranch was once a working ranch with cattle, horses, etc. and would like to bring some of that back. To bring back the horse back riding, epically to ride in the mountains and see some of the beautiful sites there which are only available on horseback or hiking. Ms. Hollingsworth would also like to see an architected study done, epically around the springs. The Walking Box Ranch was a significant part of her childhood, also, probably more so of hers then of Senator Reid's and she would like to see it restored and preserved for future generations to visit and learn from.

Art Fraijo said that Tanners Canyon has a lot of historical things he would be willing to part with. He gave his phone number and asked that they call him for more information.

Carl Weikel said that one of the biggest things that he could suggest to UNLV is that they had better hurry gathering stories and past event memories as some of the old timers are getting long in the tooth. him included.

Jane Overy said that, Ò being founder of the Searchlight Museum, which is part of the Clark County Heritage museum, she was wondering what type of museum they might be thinking of putting out there? Would it be a western museum with all that is associated with the ranch itself? Ò Ms. Molstrom said that they don't have a plan for that as yet. This is
a meeting to see what the people would like so they don’t have plans as of yet. That is one of the visions they are looking for.

Saundra Durgin said that she would like to see them use the original buildings, tools, etc. just as it was when it was a working ranch.

Jane Overy said that she would like to see the same; also signage telling what the tools and buildings were used for and to tell the public what the different plants are.

Joan Mesenbrink asked if there would be an information center? Asked also if there would be a fee for children and seniors?

Jean Cline said that was a great idea and they would work on it.

Stan Colton said that maybe they could do some of the things that were done on Sonora.

Saundra Durgin said that the ranch is a treasurer and we need to have it taken care of.

4
Deborah Murray said that a fee isn’t enough. There might be a concession area needed. There could be a kayak rental, sell water, etc.

Jane Overy said that the Museum Guild raised funds by having a group at the ranch and they had a BBQ. The ranch could hold a Western night and have a big catered BBQ for the public. Have some activities that would keep with the theme.

Joan Mesenbrink asked if it would be possible to hold weddings out there?

Mary Culman asked if it could be a corporate meeting retreat? And livestock would be great out there.

Joyce Nowlin asked what exactly is UNLV going to do to allow, or not allow, these things to happen?

Ms. Moltran said that it will depend on the environmental impact and study to see just what can be done without hurting anything.

Bruch Judd said that they need to see what the easement would allow.

Mike Romero said that the 1880s was when the ranch was started. He would like to see the livestock put back on the ranch and have it the was it was originally.

Kim Bosnos would like to know what their funding is now?

Jean Cline said that they just have the half million dollars. At present there is no money for up keep or maintenance. Funding is an issue. There are two SNPLMA grants out there for building things worth
$13 million, that will possibly go into the restoration. Senator Reid requested all of this and Dr. Hardy agreed. UNLV agreed to help Senator Reid do this.

Bill Bodkin said that July 1st was mentioned but it sounds like the whole scope could change.

Jean Cline said that this is a band-aid. Right now it is in the red because if anyone comes out to fix anything it costs extra.

Joyce Nowlin said that with all that said, she still would like to make it a working ranch. Students could pay UNLV to learn how to do something concerning the ranch, such as raise cows, roping horses, shoeing them, caring for the animals, the crops, the buildings themselves.

Saundra Durgin said that she believes that there are other grants that can be obtained to help with this project.

Bruce Judd said that they are still studying the grant issues.

Saundra Durgin ask what, as Board/community members, they could do to help put this forward? It is part of Nevada history, not just Southern
Nevada.

Bruce Judd said that to continue to give ideas and information and give to UNLV group for a platform for help getting the needed money.

Jane Overy said that we should focus on the first 25 acres.

Carl Weikel asked if someone wanted to give money towards this project how would they go about doing so?

Deborah Murray said that Senator Harry Reid had a non profit fund which money for this project could be ear marked for and money donated into.

Saundra Durgin said she believed that that should be looked into.

Jane Overy said she that she would look into that.

Joan Miesenbrink mentioned the parking problem. She thinks that it would be a good idea to have the parking area out away from the ranch and have a trolley transport people back and forth.

Mr. Judd asked what type of help Searchlight could give, such as parking catering?

Joyce Nowlin having a railroad from town to the ranch.

Deborah Murray told how the people at Groom Creek Horse Camp handled the problem. They had a paid a fee to park the cars, horse trailers, etc.
and do the trail ride. The camp personal furnished food, etc with the people bringing their own bottles of water and horses. UNLV student could use the passes. Hostess could make sure that the rules were followed and trash was picked up, etc.

A question asked: Can we ride horses out there?

Jane Overy said that there was still a concern about the tortes habitat and about water.

Saundra Durgin said that she felt it could all come together and that the community will help.

It was asked about staging events?

Jane Overy said that the Searchlight Museum Guild was putting on the Searchlight’s 108-birthday party on October 7th at the Community Center. Nelson has mine tours; Searchlight has the Grand Prix in the end of October/first of November. The Guild would be more then interested in working with the project team.

Saundra Durgin said that she was sure that there were more things the Community could do.

Stan Colton asked when and where the easements were put in.
Jean Cline asked what to change? How much to change? Is it too much or not enough?

Kim Bosnos said that she would like to have a BLM person and a Nature Conservatory person at the meetings. She would also like to have the meeting here in Searchlight. There will be a meeting on June 14, 2006. The meeting will be open to the public and will be an all day meeting. The Searchlight Town Advisory Board is invited.

4. NEXT MEETING DATE: The next regular meeting will be June 13, 2006. All agenda items must be in by June 06, 2006

5. ADJOURNMENT: The meeting adjourned at approximately 11:00am. Bill Bodkin made a motion that the meeting be adjourned. Saundra Durgin seconded the motion. The motion carried.

Respectfully Submitted Sandra J. Walters, Secretary
Participants: Daniel Sinagra, Clark County Comprehensive Planning
        Lewis Wallenmeyer, Clark County Air Quality
        Mark Ryzdynski, Clark County Museum
        Mark Hall-Patton, Howard Cannon Aviation Museum
        David Frommer, Jean Cline, Elizabeth Fraterrigo, UNLV
        Bruce Judd, Cathleen Malmstrom, ARG
        Phil Hendricks, EDAW;

Project: Walking Box Ranch

ARG Project No.: 06018
Meeting Location: PLI Conference Room, UNLV
Meeting Date: June 2, 2006
Date of Dist.: June 19, 2006

Purpose of meeting was to update Clark County (CC) representatives regarding the project and solicit their input as stakeholders.

<table>
<thead>
<tr>
<th>Item</th>
<th>Action By</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sinagra: Public meetings &amp; community involvement important; also, important to get media involved. He will be pleased to be a County contact and offer support to the project team. He will make CC GIS data (Arcinfo) available to EDAW. A Preservation Element will be coming out next year; a Land Use component for South County should also be done next year.</td>
<td>Hendricks</td>
</tr>
<tr>
<td>2. Wallenmeyer: believes WBR easements were purchased on behalf of CC, mainly to eliminate grazing. The Nature Conservancy has approached CC to take over the easements; CC response was lukewarm, due to staffing issues, but the door is not shut. He will follow up on this. CC has a good relationship with TNC; manages properties for them. At time of WBR easements, CC also acquired some ranches &amp; land outright; and many water rights. CC very concerned about maintaining tortoise habitat and in changing grazing water rights to wildlife. Bushelman(?) is inventorying water rights. Wallenmeyer can investigate this issue.</td>
<td>Wallenmeyer</td>
</tr>
<tr>
<td>3. Entitlement question as to whether CC use permit will be required for the project if BLM owns the land.</td>
<td>Sinagra</td>
</tr>
<tr>
<td>4. Wallenmeyer recommended contacting Brad Hardenbrook, NV Div of Wildlife biologist; Phil Medica, USGS (was Fish &amp; Wildlife); and Todd Esque, USGS ecologist (fire ecology). He will send contact info.</td>
<td>Wallenmeyer</td>
</tr>
<tr>
<td>5. Ryzdynski agreed that it is important to involve Searchlight; also SHPO. Recommended getting SHPO’s endorsement before taking any proposed plan to The Nature Conservancy. Recommended: Walt Lombardo of “Nevada Mineral &amp; Book” (resource on mining); Knight &amp; Lovett: good firm for groundwork; Museum of Northern Arizona, a beautiful model of combining museum &amp; research. CC Museum has relationship with other small regional facilities; conduct CC</td>
<td></td>
</tr>
</tbody>
</table>
Museum-based tours to these museums & sites. WBR could fit into this model

6. Hall-Patton is writing Historic Preservation Ordinance for Clark County.

Suggestions for interpretation at WBR: ties to “gentlemen ranchers”, to Hollywood’s escape to desert, and perhaps to ghost towns (Crescent & Juan) in the area; WBR’s context & question of “why was it built THERE?” Talk to Greg Corbin at Boulder Museum about Hollywood connection

There should be on-going public access (tours, open days, etc.); extent will be dependent on funding

County Museum has records of some early surveyors. He can make these available to historians.

Any more than 500-1,000 visitors a month is an unrealistic expectation.

7. Additional suggestions: “Ranch Days”, Cowboy Poetry Festival, early Western films

8. A Friends group is essential because it can raise money and spend it with fewer restrictions; good to have as a fiscal agent. Relationship with the Searchlight Guild could be of mutual benefit; stage events at Searchlight community Center to go to WBR.


Consider scholarships for school excursions: catch kids early & develop their interest in their historical roots.

10. Hall-Patton: If people stay in the ranch house, it will lose its historic context; wear and tear; use other buildings on property, if needed for overnight visitors or meetings. Sees house as primarily a museum; one room could be an interpretive area; could have meetings, if done with great care. Maybe have meetings/show films in barn. Don’t put up barriers within museum. Recommends keeping the ranch house closed except when open for museum visitation (frequency to be determined: weekends? School groups a day or two a week?)

“What is the over-arching use? If it’s not as a house-museum, then don’t restore it.”

11. Ryzdynski concurred: preserve house as it is; restore it; not for meetings; separate interpretive space; believes that there do need to be ropes/barriers to control visitors within the house.

12. Sinagra and Wallenmeyer also supported this view.

13. Easement issue: if easements were used by previous owner to decrease the appraised value of the property at time of sale, no amendment to the easements will be possible. Peg Rees will look into records on file.

14. Frommer suggested that CC could assist UNLV in working with TNC and BLM to interpret the easement for the most appropriate development of WBR. UNLV will continue to foster these relationships.

These notes were prepared by Architectural Resources Group as a record of the substance of this meeting. These are notes only and are not to be construed as altering contractual agreements between parties. Please forward all comments and/or changes to the originator within two weeks.

By: Cathleen Malmstrom

CC: participants, Dewey Livingston
TO: BLM and Workshop Participants
FROM: Phil Hendricks, Jr. ASLA
DATE: May 20, 2009
CC: EDAW Team

SUBJECT: Walking Box Ranch Development Concept Plan (DCP)
Draft Final DCP Review Workshop Agenda

Workshop Introduction

The draft final Development Concept Plan (DCP), will be presented, reviewed, and discussed at a 3-day workshop (2-days at the BLM, 1-day at the site). This workshop should be attended by the same broad cross-section of personnel that attended the programming workshop. The site visit will also be included to field truth the work completed to date. The main goal of this workshop is to present, discuss and receive initial comments on the final draft DCP. A public presentation of the Plan will also be made at the Searchlight Town Board meeting.

The workshops will be held at the BLM - Red Rock/Sloan Canyon NCA Field Office 4701 N. Torrey Pines Drive, Las Vegas, NV 89130

Scheduled Attendees:

<table>
<thead>
<tr>
<th>Representing</th>
<th>Representative</th>
<th>Attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLM – Denver</td>
<td>Tom Busch</td>
<td>X X X</td>
</tr>
<tr>
<td>BLM - Las Vegas</td>
<td>Bob Taylor, Nancy Christ</td>
<td>X X X X</td>
</tr>
<tr>
<td>UNLV</td>
<td>Jean Cline, Jennifer Johnson, Cathy Willey, Peg Rees</td>
<td>X X X</td>
</tr>
<tr>
<td>EDAW</td>
<td>Phil Hendricks, Jr. ASLA, Greg Oakes</td>
<td>X X X</td>
</tr>
<tr>
<td>Architectural Resources Group (ARG)</td>
<td>Cathleen Malmstrom, AIA</td>
<td>X X X X</td>
</tr>
<tr>
<td>Condit Exhibits</td>
<td>Sandy Treece Harnois, Rich Smith</td>
<td>X</td>
</tr>
<tr>
<td>Robert Peccia + Associates</td>
<td>Bob Morton</td>
<td>X X</td>
</tr>
<tr>
<td>RMH Group</td>
<td>Fred Denton</td>
<td>X X</td>
</tr>
</tbody>
</table>
## Agenda

<table>
<thead>
<tr>
<th>Task</th>
<th>Location</th>
<th>Time</th>
<th>Discussion Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tuesday – June 9, 2009</strong></td>
<td></td>
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</tr>
<tr>
<td>1</td>
<td>Searchlight Town Board Presentation</td>
<td>Town of Searchlight</td>
<td>7:00 PM – 8:00 PM (to be confirmed)</td>
</tr>
<tr>
<td><strong>Wednesday June 10, 2009</strong></td>
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<tr>
<td><strong>Thursday June 11, 2009</strong></td>
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<tr>
<td><strong>Friday June 12, 2009</strong></td>
<td></td>
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</tr>
<tr>
<td>4</td>
<td>Site Visit</td>
<td>Walking Box Ranch (WBR)</td>
<td>9:00 AM – 2:00 PM (with lunch break)</td>
</tr>
</tbody>
</table>
A 2-day workshop was held at the UNLV Public Lands Institute (PLI) conference room (RAJ Building) on Wednesday March 25, 2009 to Thursday March 26, 2009. This workshop was attended by the same broad cross-section of personnel that attended the programming workshop.

The 100% Interpretive Plan / Concept Design submittal summarizes the planning and design work completed to date with the inclusion and consideration of all comments received by the personnel that reviewed the 50% and 80% submittals as well as attended the 2-day workshop in March, 2009. Comments are welcome; upon receipt they will be assembled and incorporated into the final 100% Interpretive Plan/Concept Design Submittal.
### Glossary

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ADA</strong></td>
<td>The Americans with Disabilities Act. This 1990 federal civil rights law sets standards for making facilities, exhibits and programs available to all visitors. The goal of ADA is to remove physical, communication, policy and procedural barriers.</td>
</tr>
<tr>
<td><strong>Audio Element</strong></td>
<td>A means of using recorded sound to enhance interpretation, for example, an audio recording on an interpretive sign that is visitor-activated by a push button or triggered by a motion sensor.</td>
</tr>
<tr>
<td><strong>The desert</strong></td>
<td>That part of the 40-acres between the developed WBR complex and the perimeter fence, particularly along the east fence line in the northwest corner of the property.</td>
</tr>
<tr>
<td><strong>Design/Content Development</strong></td>
<td>The phase of an exhibits project that follows the interpretive plan and conceptual design phase. The design/content development phase includes fully developing concept designs into fabrication-ready documents, writing text, identifying and acquiring all graphics, and preparing production files of all exhibits.</td>
</tr>
<tr>
<td><strong>Interactive Exhibit</strong></td>
<td>An interpretive exhibit that requires the viewer’s physical involvement and interaction. Examples include pushing buttons to reveal additional information, operating a computer touch-screen, or donning period clothing. Interactives enhance learning by involving the viewer in an activity, are especially important for children, and can help meet ADA guidelines.</td>
</tr>
<tr>
<td><strong>Interpretive Amenity</strong></td>
<td>A feature that enhances the visitor’s understanding and appreciation for an interpretive topic or site, including kiosks, waysides, signs, trails, visitor centers, etc.</td>
</tr>
<tr>
<td><strong>Interpretive Sign</strong></td>
<td>A sign containing interpretive information. In this plan, interpretive signs are described as small (max. 36’’ x 24’’) and large (up to 42’’ x 60’’).</td>
</tr>
<tr>
<td><strong>Interpretive Panel</strong></td>
<td>A large (greater than 48’’ tall) interpretive sign that is mounted to the wall or anchored to the floor. The panel may constitute an exhibit in its entirety or be part of a larger exhibit.</td>
</tr>
<tr>
<td><strong>Interpretive Site</strong></td>
<td>A location where some aspect of the WBR story will be told (e.g., the barn).</td>
</tr>
<tr>
<td><strong>Multi-panel Kiosk</strong></td>
<td>An outdoor structure supporting more than one interpretive panel. WBR kiosks are designed to hold four large interpretive signs. The kiosks have been designed to reflect the character of the ranch.</td>
</tr>
<tr>
<td><strong>Natural Area</strong></td>
<td>The relatively undisturbed northwest corner of the ranch.</td>
</tr>
<tr>
<td><strong>Perimeter Trail</strong></td>
<td>The section of the self-guided nature trail that skirts the ranch’s east fence line, then heads north into the Natural Area.</td>
</tr>
<tr>
<td><strong>Ranchstead</strong></td>
<td>That part of the historic ranch that is north of the ranch house. The ranchstead includes the barn, ice house, and bunkhouse.</td>
</tr>
<tr>
<td><strong>Reader Rail</strong></td>
<td>A sloped surface that contains is associated with another part of an exhibit, such as a research center.</td>
</tr>
<tr>
<td><strong>Research Center</strong></td>
<td>A sign containing interpretive information. In this plan, interpretive signs are described as small (max. 36’’ x 24’’) and large (up to 42’’ x 60’’).</td>
</tr>
<tr>
<td><strong>Self-guided Interpretive Trail</strong></td>
<td>A trail that takes the visitor to sites that are key to understanding and appreciating WBR. The trail contains multi-panel kiosks and single panel waysides that interpret site-specific topics. The trail contains the perimeter trail section and the research center interior trail section.</td>
</tr>
<tr>
<td><strong>Sidebar</strong></td>
<td>A design feature on an interpretive sign for highlighting and focusing on a particular topic. Usually a common design element used on all signs in a set, sidebars are often a column of variable width on the left or right side of the sign.</td>
</tr>
<tr>
<td><strong>Static Exhibit</strong></td>
<td>An exhibit that does not require physical involvement or interaction with the exhibit to obtain information. For example, a series of wall panels and reader rails.</td>
</tr>
<tr>
<td><strong>Wayside</strong></td>
<td>A site along an interpretive trail that is designed to allow visitors to stop safely off the trail and read an interpretive sign. At WBR, waysides contain a pad for standing and a single, small interpretive sign in a base. The base has been designed to reflect the character of the ranch and the multi-panel kiosk.</td>
</tr>
</tbody>
</table>
INTERPRETIVE GOALS

Several interpretive goals have been established for WBR. The goals listed here are for the development of the ranch and its first few years of operation. These goals should be re-evaluated after five years based on visitation numbers, audience demographics, funding, staffing and docent levels, partner agency priorities, and other factors. Current interpretive goals include:

1. Develop WBR as a center for public education and academic research.
2. Develop interpretive strategies and amenities that reflect the mission and activities of the three primary partners, BLM, UNLV, and TNC.
3. Provide opportunities for potential visitors to obtain information about the ranch prior to visiting.
4. Provide a diversity of interpretive opportunities so that visitors can experience the ranch whether it is staffed or not. (Throughout this plan, “staff” and “staffed” are used to mean attended by either paid staff or docents.)
5. Develop interpretive media that are site-appropriate (low environmental impact, consistent with the historic character of the ranch, appropriate to the desert environment, etc.).
6. Educate visitors about ranching in the desert southwest and about WBR’s unique history and operations.
7. Educate visitors about the general ecology of the Mojave Desert, on-site desert restoration, and the need for the stewardship of desert resources.
8. Educate visitors about the sustainable design and green building features throughout the ranch and research center.
9. Develop interpretive strategies and amenities that are consistent with the multiple-use nature of the ranch, for example, the ranch house and garage also serve as meeting spaces.
10. Develop interpretive amenities at WBR that are compatible with both the existing historic ranch structures and the research center to be constructed at the ranch.
11. Due to budget, staffing, and logistical considerations, develop interpretive strategies and amenities that emphasize non-personal interpretation (exhibits, signs, publications) over personal interpretation (guided walks).
12. To the extent practical given the environmental conditions and historic character of the ranch, develop interpretive amenities that are consistent with ADA and accessibility best practices.
13. To the extent practical and possible, integrate this interpretive plan with other regional plans, including the Interagency Strategic Plan for Clark County and the UNLV Environmental Education and Interpretation Standards.
THE INTERPRETIVE AUDIENCE

Although a comprehensive audience profile has not been completed for WBR, information on potential visitors and priority audiences has been gleaned from discussions with the 2009 project working group, from the Walking Box Ranch Interpretive Visioning Report and Prospectus and from the WBR Market Demand Analysis (Dornbusch Associates, June, 2008). In the absence of a detailed audience profile, the following general audience information was considered when developing this interpretive plan.

- Drop-in visitors are projected to be the primary audience during the initial years of WBR development and marketing. Drop-in visitors may include tourists based in Las Vegas and elsewhere, as well as residents of Las Vegas, Henderson, Searchlight and other towns in the region. Drop-in visitation will undoubtedly increase as WBR is marketed and as highway and airport construction increases traffic volume in the vicinity of the ranch. A proposed trail connecting WBR and Searchlight is also likely to increase drop-in visitation by equestrians and other outdoor recreationists.
- Scientists, researchers, and college students constitute an important audience both at the research center and throughout WBR. The families of scientists, researchers, and college students will also be an occasional audience.
- People renting/utilizing the ranch house for corporate retreats, meetings, and other activities constitute an occasional audience.
- People using the Web to research WBR prior to visiting or otherwise looking for information on the ranch, research center, sustainability in the desert, and other topics are an anticipated audience.
- Elementary and secondary school students will also be an occasional audience.
- Commercial tours and tour buses, particularly those originating in Las Vegas, are not anticipated to be a significant audience unless such groups are specifically targeted for marketing and contracts with tour operators are negotiated. Spanish will be the primary language of an unknown percentage of visitors. The need for interpretive media to be available in additional languages will be determined based on visitor demographics.

Completing a detailed audience profile and/or a business/marketing plan for the ranch will help identify and target specific audiences, (e.g., heritage tourists, visitors interested in sustainable design, bus tours) and help ranch managers anticipate and manage use at Walking Box. In addition to the sources cited in the WBR Market Demand Analysis, the following data sources might shed light on drop-in visitors and visitation levels:

- Area or regional tourism data and information collected by UNLV (e.g., studies completed by R.K. Schwer from 1995 to 2005)
- Census data (www.census.gov) for local communities and the larger region
- Other local, county, regional, or state tourism, recreation, or visitation data and information.

If it is deemed necessary to update the information found in the WBR Market Demand Analysis, the following questions should be addressed concerning researchers, scientists, and students at the research center:

- Will the research center showcase scholarly research in a way that will invite other institutions or other scholars to participate?
- What is the capacity (offices, meeting space, library, and laboratory) for staff in the research center?
- To whom will scholarship conducted at this facility be targeted and how will it be disseminated?
- Similarly, the working group and other stakeholders can be queried to assess the interest in and audiences for special events. Stakeholders in this discussion may include various local non-profit or civic organizations, Chambers of Commerce, history or film societies, outdoor recreation providers or clubs, and youth clubs or organizations.
- What is the capacity (offices, meeting space, library, and laboratory) for staff in the research center?
- To whom will scholarship conducted at this facility be targeted and how will it be disseminated?

Similarly, the working group and other stakeholders can be queried to assess the interest in and audiences for special events. Stakeholders in this discussion may include various local non-profit or civic organizations, Chambers of Commerce, history or film societies, outdoor recreation providers or clubs, and youth clubs or organizations.
TYPES OF VISITOR EXPERIENCES

The interpretive strategies and amenities outlined in this plan are intended to provide visitors with several experience options depending upon whether the ranch is staffed or not. (The barn and the ranch house will only be open to the public when staffed.) The visitor experience and length of stay will also be influenced by the weather, particularly during periods of extreme temperatures.

<table>
<thead>
<tr>
<th>WBR Operating Status</th>
<th>Experience</th>
<th>Available to Visitors</th>
<th>Anticipated Length of Visitor Stay</th>
</tr>
</thead>
<tbody>
<tr>
<td>Closed</td>
<td>Remote access</td>
<td>• Web site(s)</td>
<td>0 minutes</td>
</tr>
<tr>
<td>Open but not staffed</td>
<td>Self-guided</td>
<td>• Multi-panel kiosks at the main parking area and the research center</td>
<td>20-30 minutes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Self-guided interpretive trail and waysides</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Contemplative bench</td>
<td></td>
</tr>
<tr>
<td>Open and staffed</td>
<td>Enhanced</td>
<td>• Multi-panel kiosks at the parking area and research center</td>
<td>45-90 minutes depending on the timing of tours and other staffed activities.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Self-guided interpretive trail and waysides</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Contemplative bench</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Interior of the barn</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Ranch house garage</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Selected rooms on the ground floor of the ranch house (as part of a guided tour).</td>
<td></td>
</tr>
</tbody>
</table>
The interpretive theme states the fundamental thing that visitors should know or understand about Walking Box Ranch. The theme does not express all the main topics and stories to be addressed, but rather, encapsulates them in a single statement. An interpretive theme is generally “for internal use only” and is not conveyed verbatim to the public. For this reason, it is more important for a theme to capture the interpretive focus and priorities rather than serve as a marketing tag line. All interpretive exhibits, topics, stories, information, and strategies must reflect and support the theme. Adhering to the theme in this manner:

• assures that interpretation focuses on key topics
• contributes to consistency in messaging and branding
• results in interpretation that is engaging and comprehensive, yet concise
• enhances the visitor experience by organizing information in a meaningful way

The December, 2008 working group felt that the interpretive theme needed to convey that from the past to the present, people have had a strong, sometimes passionate connection to the Mojave Desert. For some, that connection is made through ranching and working and living on the land. For others, it is made through the biodiversity of the region or the rejuvenating power of the desert.

The working group also felt that the ranch provides the opportunity to see both backward and forward in time, and learn from the evolution of ranching in the desert. While learning from the past, WBR is also looking to the future by becoming a model of sustainable design and a leading Mojave Desert research center. The following interpretive theme was developed to reflect the sentiments of the December, 2008 working group and was endorsed in March, 2009 by the reconvened working group:

At Walking Box Ranch, the past, present, and future of the human connection to the desert is explored and responsible stewardship of desert landscapes is fostered.

The above theme serves as a springboard to all the main interpretive topics, including

• Ranching in the desert, including:
  • The history and evolution of ranching in the desert, particularly on public lands.
  • The influence of the desert environment on ranching
  • The evolution of best practices over time
  • The history, management, and operations of WBR
  • The importance of water to ranching and domestic life
  • WBR Hollywood association and ranch domestic life
  • The desert ecosystem and its restoration and stewardship
  • Sustainability and adapting to the desert environment, including
    • The adaptive reuse of locally available materials
    • Adaptations to the desert environment throughout the historic ranch
    • Sustainable design and green building features at the research center and throughout WBR
    • Research at the research center
INTERPRETIVE TOPICS

Interpretive topics are the primary information areas or subjects to be interpreted at the ranch. Topics can be diverse as long as they reflect and support the interpretive theme. Topics are interpreted using specific information such as facts, data, anecdotes, stories, oral histories, graphics, etc. The 2008 working group identified a variety of interpretive topics which were subsequently revised and prioritized by the 2009 working group.

While there is agreement on most of the interpretive topics, there is still some minor disagreement between BLM and UNLV on the priority of some interpretive topics. For example, UNLV ranks sustainability high while BLM ranks it medium. These discrepancies, noted in the tables on the following pages, are not great enough to impede the development of this interpretive plan. The discrepancies are merely a matter of degrees and currently there is enough agreement on interpretive topics to allow for exhibit conceptual design and the completion of the plan. Any remaining disagreement about topic priorities will be resolved during the design/content development phase of the project, when the final stories and graphics are selected; the text is written; the final priority and weight of topics is determined; and the messages are honed, all within the context of the interpretive theme and the available space and budget.

At this stage of the ranch’s development and marketing, history will be the primary draw for most drop-in visitors. However, even visitors drawn to the ranch for its history or for the Clara Bowl/Rex Bell story will be exposed to the numerous other topics identified and prioritized by the working group. Interpretive topics and subtopics were prioritized using the following classifications:

High Priority
The topic, story or information is critical to the visitor’s understanding of the ranch and the interpretive theme, therefore, a relatively high percentage of the available resources will be devoted to interpreting the topic/story/information. For example, an entire exhibit may be dedicated to the topic or a high percentage of the content of a broader exhibit may be devoted to the topic.

Medium Priority
The topic, story or information enhances the visitor’s understanding of the ranch, the interpretive theme, or a high priority topic. Correspondingly, a moderate amount of exhibit space and/or exhibit content is dedicated to the topic, story or information. For example, one interpretive panel of a four-panel exhibit on the hardships of ranching in the desert (a high priority topic) may be dedicated to the medium priority topic, water use in ranch operations.

Low Priority
Due to limited resources such as space and budget, a relatively small percentage of interpretive resources is dedicated to the topic, story or information. For example, the role of Viceroy Mining Company in preserving and furnishing the ranch house may be conveyed in a single paragraph within a broader exhibit interpreting the house’s history, architecture, and furnishings.

A list of prioritized interpretive topics/information/stories follows. The locations at which these topics will be interpreted and the strategies/media to be used is covered in the Interpretive Landscape section of this plan.
INTERPRETIVE TOPICS

Topic 1: Ranching in the Desert
Overall Priority: High

<table>
<thead>
<tr>
<th>Information, story, etc.</th>
<th>Priority within topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>The history, significance, and use of existing and lost buildings and structures including the corrals, barn, icehouse, blacksmith shop, and shop strip.</td>
<td>High</td>
</tr>
<tr>
<td>An overview of ranch operations.</td>
<td>High</td>
</tr>
<tr>
<td>The importance and use of water in ranch operations (non-domestic use).</td>
<td>Medium</td>
</tr>
<tr>
<td>The adaptive reuse of local materials including railroad ties, tin, and other materials.</td>
<td>Medium</td>
</tr>
<tr>
<td>Other sustainability topics to be woven throughout interpretation at the ranch.</td>
<td>High (UNLV) Medium (BLM)</td>
</tr>
<tr>
<td>The role of public land in the history and evolution of desert ranching.</td>
<td>Medium (BLM) Low (UNLV)</td>
</tr>
<tr>
<td>The ownership history of the ranch (Walking Box Ranch, YKL, Viceroy).</td>
<td>Low</td>
</tr>
</tbody>
</table>

Topic 2: Ranch Domestic Life
Overall Priority: High

<table>
<thead>
<tr>
<th>Information, story, etc.</th>
<th>Priority within topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Clara Bow/Rex Bell story, including • Their life at Walking Box Ranch (high priority) • An overview of their Hollywood careers (low priority) • The desert as a refuge and place of rejuvenation (low priority) • An overview of their post-WBR lives (low priority)</td>
<td>High</td>
</tr>
<tr>
<td>The realities and hardships of ranch domestic life.</td>
<td>High</td>
</tr>
<tr>
<td>The unique architecture of the ranch house, including ways in which the house was adapted to desert living.</td>
<td>Medium</td>
</tr>
<tr>
<td>The importance and use of water domestically.</td>
<td>Medium</td>
</tr>
<tr>
<td>Powering the ranch, from human and animal power to electricity to solar power</td>
<td>Low</td>
</tr>
</tbody>
</table>

Topic 3: Desert Conservation, Protection, Restoration, and Stewardship
Overall Priority: High

<table>
<thead>
<tr>
<th>Information, story, etc.</th>
<th>Priority within topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local flora and fauna, including key plant and animal species, particularly those that illustrate adaptations to desert life.</td>
<td>Medium</td>
</tr>
<tr>
<td>The conservation, protection, restoration, and stewardship of the desert</td>
<td>High</td>
</tr>
<tr>
<td>An overview of the desert landscape and ecosystem</td>
<td>Low</td>
</tr>
</tbody>
</table>

Topic 4: Research at WBR
Overall Priority: Medium

<table>
<thead>
<tr>
<th>Information, story, etc.</th>
<th>Priority within topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overview of the research center, its mission and activities.</td>
<td>High</td>
</tr>
<tr>
<td>Significant past, ongoing, and future research, including projects and the application of research findings.</td>
<td>Medium</td>
</tr>
<tr>
<td>Sustainable living in the desert environment</td>
<td>High (UNLV) Medium (BLM)</td>
</tr>
<tr>
<td>Opportunities for the public to get involved with the research center</td>
<td>Low</td>
</tr>
</tbody>
</table>
MAJOR INTERPRETIVE AREAS

For interpretive purposes, WBR can be considered to contain five distinct areas. Allocating specific goals and strategies to specific areas on the ranch will increase interpretive and educational effectiveness while using the WBR landscape to full advantage, for example, by interpreting ranch operations on the ranchstead and ranch domestic life at the ranch house. Similarly, sustainability is primarily interpreted at the research center, and desert ecology in the desert areas of the ranch. While each of the major interpretive areas has an interpretive focus, all areas will be integrated thematically, and a message of stewardship will be woven throughout the property, exhibits, and signs.

<table>
<thead>
<tr>
<th>Location</th>
<th>Interpretive Goals</th>
<th>Strategies/Media</th>
</tr>
</thead>
</table>
| Parking Area | • Welcome visitors to the ranch  
• Provide wayfinding, orientation, and administrative information  
• Introduce visitors to the interpretive theme and topics  
• Serve as a terminus of the interpretive trail | Multi-panel kiosk and the start of the self-guided interpretive trail with waysides |
| The Ranchstead | • Provide secure facilities for exhibits and artifacts  
• Provide a safe location for visitors to interact with staff and volunteers  
• Provide restrooms and water for visitors  
• Interpret the history and realities of ranching in the desert  
• Provide information on the history and ranching operations of WBR  
• Provide information on the stewardship of desert resources  
• Provide retail space for WBR items and memorabilia  
• Provide information on the history and ranching operations of WBR  
• Provide a space to showcase and support local communities and their related resources (e.g., Searchlight History Museum) | Static and interactive exhibits located in the barn  
An interactive activity (calf-roping) in a corral  
Static exhibits and a demonstration area in a reconstructed blacksmith shop  
Large interpretive signs mounted to exterior walls of the bunkhouse  
Small interpretive signs in the bunkhouse that highlight water conservation features  
Reception counter and staff located in the barn  
Restrooms and water located at the bunkhouse  
Self-guided interpretive trail with waysides  
Retail space located in the barn  
Changeable, community-based exhibits located at the bunkhouse |
| The Ranch House | • Personalize and humanize the WBR story  
• Interpret the Clara Bow/Rex Bell/Hollywood story  
• Interpret ranch domestic life  
• Provide information on the ranch house and adapting to desert life | Self-guided interpretive trail with waysides  
Wall mounted interpretive signs in the garage  
A moveable, six-panel exhibit in the garage  
Static and interactive exhibits located in the house  
Artifacts located in the garage and house |
| The Desert | • Interpret desert flora and fauna, particularly their adaptations to the environment to relate to sustainability and green design principles  
• Provide a contemplative area | Self-guided interpretive trail with waysides  
Contemplative bench |
| (The desert areas within the 40 acre parcel) | • Provide information on the sensitivity of the desert and on the restoration occurring at WBR  
• Interpret desert flora and fauna, particularly their adaptations to the environment to relate to sustainability and green design principles  
• Provide a contemplative area | Multi-panel kiosk  
Small interpretive signs or waysides at key locations that showcase sustainable design features  
Small interpretive signs or waysides at research plots and other relevant landscape features  
Small interpretive signs or waysides at key locations that interpret the research being conducted at the center  
A sponsor/donor wall recognizing companies, organizations, and individuals who have contributed to the research center |
| The Research Center | • Provide wayfinding information  
• Provide information on the research center and its affiliation with UNLV  
• Provide information on adapting to the desert environment through sustainable design concepts and practices  
• Interpret the adaptive/sustainable design features utilized at the research center (buildings and grounds)  
• Provide information on the research being conducted at the center |
INTERPRETIVE AMENITIES AND MEDIA

WBR lends itself to using a variety of locations, strategies, amenities, and media to interpret the ranch and the research center, and to provide visitors with a variety of experience options ranging from self-guided to docent-led. The interpretive amenities and media proposed for WBR and detailed in this section are:

- A self-guided interpretive trail featuring interpretive signs on multi-panel kiosks and single-sign waysides. Selected waysides will contain solar powered audio recordings or remote access information.
- Exhibits at key facilities (barn, bunkhouse, blacksmith shop, ranch house, research center).
- Small interpretive signs at key sustainable design features throughout the ranch (including bunkhouse restrooms) and the research center.
- Web site information and linkages.
- Personal interpretive services provided by staff and/or docents.

SELF-GUIDED INTERPRETIVE TRAIL

A self-guided interpretive trail will wind through the property, bringing visitors to sites that are key to understanding and appreciating the past, present, and future of WBR. This trail is potentially the most important interpretive amenity at the ranch because, unlike the barn and ranch house, it will be available to visitors when the ranch is not staffed. For this reason, it is likely to experience a higher level of visitation than either the barn or house.

Because the trail will be the only interpretive amenity routinely available to the public, all the major interpretive topics should be interpreted along the trail. The trail will, therefore, provide visitors with an overview of the interpretive topics, while the facilities (barn, ranch house, research center) will provide information in greater detail and depth, creating a variety of visitor experiences. (The trail includes three waysides on the grounds of the research center.

These waysides will be accessible to research center users but will only be accessible to the public when the research center and grounds are open to the public or when visitors are on a guided tour. Waysides should not be numbered because of the discontinuity in numbering caused by research center waysides being inaccessible to the public at times.

To the extent practical, the trail should meet ADA accessibility guidelines. These guidelines will be most easily met on the trail segment extending from the main parking area to the research center. The trail segment around the perimeter of the property may or may not be accessible based on terrain, budget, and the threat to the desert ecosystem from the higher level of development accessibility requires.

The trail will be anchored by multi-panel interpretive kiosks, one at the parking area and one at the gate separating the ranch house from the research center. The trail will also feature wayside signs mounted in low profile bases. Kiosks and bases have been designed to reflect the character of the ranch, employing rough-hewn heavy wooden timbers and the WBR logo. Kiosk interpretive signs should measure approximately 36” (horizontal) x 48” (tall). Wayside interpretive signs should be no larger than 36” (horizontal) x 24” (tall). Smaller wayside signs should be considered if it is determined that 36” x 24” signs are too intrusive in the desert landscape.

Selected waysides will include a push button-activated audio unit that plays part of a relevant oral history. These recordings should not be longer than 60 seconds. Consistent with the goal of showcasing adaptations to the desert environment and practicing sustainability, audio units will be solar powered. The specific technology and components used to power audio units will be determined in the design/content development phase of the project.

Selected waysides will also display a telephone number that visitors can call to listen to a recording (not to exceed two minutes containing more detailed information on the wayside’s interpretive topic. (Note: Multi-panel kiosks will not feature audio units or remote access information.)

If warranted based on visitor demographics, target audiences, and budget, interpretive signs, audio recordings, and remote access recordings should include Spanish language translations. The need for additional languages should be determined based on visitation.

Throughout the interpretive planning process, attention was given to meeting the needs of visitors with disabilities while also preserving the historic character of the ranch and protecting the sensitive desert environment. The interpretive strategies and media proposed in this plan that address ADA include:

- The hard surfacing of sections of the self-guided interpretive trail.
- The use of audio recordings and ambient sound at selected waysides.
- The use of remote access phone messages.
- The displaying of artifacts and the use of large format graphics.
- The use of touch screen computer kiosks.
- The availability of staff and docents, included guided tours.

In addition, ADA guidelines will be considered during the design/content development phase of the project, assuring that exhibits and signs meet ADA guidelines. The tables in this section detail the topics and information to be interpreted along the interpretive trail and whether audio or remote access will be employed.
WAYSIDE TOPICS AND DETAILS

Wayside 1: Parking Area Multi-panel Kiosk

The main parking area provides parking and an area for visitors to stage, prepare to enter the ranch, and obtain basic orientation, administrative, and interpretive information about the ranch. While the multi-panel interpretive kiosk at this location is valuable for all visitors, it is especially beneficial to people visiting the ranch when it is not staffed.

<table>
<thead>
<tr>
<th>Sign 1</th>
<th>Topics/Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welcome to WBR</td>
<td></td>
</tr>
<tr>
<td>Wayfinding map of the WBR complex</td>
<td></td>
</tr>
<tr>
<td>Hours of operation, the self-guided tour option, guided tour information, website(s) information</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sign 2</th>
<th>Topics/Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>The partners associated with the ranch, their missions, and a brief overview of their activities on the ranch:</td>
<td></td>
</tr>
<tr>
<td>BLM</td>
<td></td>
</tr>
<tr>
<td>UNLV</td>
<td></td>
</tr>
<tr>
<td>TNC</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sign 3</th>
<th>Topics/Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overview of the history of the ranch including the Bowl/Bell story</td>
<td></td>
</tr>
<tr>
<td>A brief description of the ranch’s major areas and the opportunities available to visitors at each:</td>
<td></td>
</tr>
<tr>
<td>The ranchstead</td>
<td></td>
</tr>
<tr>
<td>The ranch house</td>
<td></td>
</tr>
<tr>
<td>The research center</td>
<td></td>
</tr>
<tr>
<td>The conservation area</td>
<td></td>
</tr>
<tr>
<td>The interpretive trail</td>
<td></td>
</tr>
<tr>
<td>The natural area</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sign 4</th>
<th>Topics/Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brief orientation to the Mojave Desert and an overview of the adaptations to the desert environment that can be found on the ranch:</td>
<td></td>
</tr>
<tr>
<td>Adapted and reused materials</td>
<td></td>
</tr>
<tr>
<td>Building siting/location</td>
<td></td>
</tr>
<tr>
<td>Ranch house adaptations/design</td>
<td></td>
</tr>
<tr>
<td>Research center adaptations/design</td>
<td></td>
</tr>
<tr>
<td>Other examples on the grounds and in selected buildings</td>
<td></td>
</tr>
</tbody>
</table>

Wayside 2: Barn

<table>
<thead>
<tr>
<th>Topics/Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>The history and use of the barn</td>
</tr>
<tr>
<td>The use of railroad ties, tin, and other adapted materials in the barn</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Audio or Remote Access</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Topics/Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signs displaying the days/times the barn will be open can be posted on the barn doors.</td>
</tr>
</tbody>
</table>

Wayside 3: Corrals

<table>
<thead>
<tr>
<th>Topics/Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>The historic use of the corrals</td>
</tr>
<tr>
<td>The use of railroad ties and other adapted materials in corrals and fences</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Audio or Remote Access</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audio: Corral-related parts of the Carl Weikel interview</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Topics/Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>A ‘calf’ roping exhibit/activity that allows visitors to try to toss a lariat (provided by WBR) over a faux calf head/body should be installed in one of the corrals in proximity to the barn entrance.</td>
</tr>
<tr>
<td>A solar powered audio unit that plays a recording of ranch activity centered around the corrals (branding, etc.), triggered by a motion detector, could also be used at this location.</td>
</tr>
</tbody>
</table>

Wayside 4: Shop Strip

<table>
<thead>
<tr>
<th>Topics/Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ranch operations buildings that have been moved or that are no longer present:</td>
</tr>
<tr>
<td>Icehouse</td>
</tr>
<tr>
<td>Shop strip</td>
</tr>
<tr>
<td>Blacksmith shop</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Audio or Remote Access</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remote Access: Parts of the Rex Bell Jr. and/or Carl Weikel interviews related to the ice house</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Topics/Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>This assumes the ice house will be moved to this location. The icehouse can be opened when the barn is staffed, allowing visitors to see the inside of the house, which can be outfitted with faux ice and a hanging side of beef or other appropriate item.</td>
</tr>
<tr>
<td>The blacksmith shop may be mentioned as having once been located in the general vicinity, however, it should be interpreted in detail elsewhere.</td>
</tr>
<tr>
<td>A recording of ranch activity centered around the shop strip, triggered by a motion detector, could also be used at this location.</td>
</tr>
</tbody>
</table>
WAYSIDE TOPICS AND DETAILS

Wayside 5: Historic Ranch Gate

<table>
<thead>
<tr>
<th>Topics/Information</th>
<th>Audio or Remote Access</th>
<th>Topics/Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The historic ranch gate and the separation of ranch operations from ranch domestic life</td>
<td>Audio: Parts of the Rex Bell Jr. and/or Carl Weikel interviews related to the guest house</td>
<td></td>
</tr>
<tr>
<td>• The former guest house and significant guests who stayed there</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Wayside 6: Ranch House – Northwest Corner

<table>
<thead>
<tr>
<th>Topics/Information</th>
<th>Audio or Remote Access</th>
<th>Topics/Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Architecture of the ranch house</td>
<td>Remote Access: Parts of the Rex Bell Jr. interview related to the ranch house</td>
<td>Locating this wayside slightly northwest of the two buggy wheels currently on site should be considered. This location affords an aesthetically pleasing view of the wheels and house. (If appropriate, sightlines to the house can be improved by removing some Joshua trees and vegetation)</td>
</tr>
<tr>
<td>• Floor plan and house interior, including the upstairs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Wayside 7: Ranch House – Northeast Corner

<table>
<thead>
<tr>
<th>Topics/Information</th>
<th>Audio or Remote Access</th>
<th>Topics/Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Structural adaptations to desert living including sitting, materials, etc.</td>
<td>Remote access: Information on sustainable design in the desert.</td>
<td></td>
</tr>
<tr>
<td>• Stewardship of desert resources</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Wayside 8: Ranch House – Southeast Corner

<table>
<thead>
<tr>
<th>Topics/Information</th>
<th>Audio or Remote Access</th>
<th>Topics/Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Ranch domestic life, particularly growing up and playing on the ranch</td>
<td>Audio: Parts of the Rex Bell Jr. interview dealing with playing on the ranch and using the swimming pool.</td>
<td></td>
</tr>
<tr>
<td>• The pool and rock garden historically</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Wayside 9: Research Center Multi-panel Kiosk

This kiosk provides interpretive information and allows visitors to re-orient to ranch, buildings, and trail system. The kiosk is perhaps the most important location for visitors to receive an overview of the research center, as the center will typically be closed to the public.

<table>
<thead>
<tr>
<th>Sign 1</th>
<th>Sign 2</th>
<th>Sign 3</th>
<th>Sign 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topics/Information</td>
<td>Topics/Information</td>
<td>Topics/Information</td>
<td>Topics/Information</td>
</tr>
<tr>
<td>• Orientation and wayfinding, including a map of the research center and the entire WBR property.</td>
<td>• Explanation and description of the research center, its mission, and its affiliations and partners.</td>
<td>• Overview of the desert conditions faced in designing the center’s buildings and the sustainable design principles employed to address them.</td>
<td>• Overview of the center’s grounds and the design principles employed to address the desert conditions.</td>
</tr>
</tbody>
</table>

Wayside 10: Research Center Interior Trail

<table>
<thead>
<tr>
<th>Topics/Information</th>
<th>Audio or Remote Access</th>
<th>Topics/Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>• A topic related to research at the center, e.g., a key sustainable design feature, adaptive use example, etc.</td>
<td>To be determined based on the topic.</td>
<td>Accessible to research center users at all times, this sign is only accessible to the public when the research center and grounds are open to the public or when visitors are on a guided tour.</td>
</tr>
</tbody>
</table>

Wayside 11: Research Center Interior Trail

<table>
<thead>
<tr>
<th>Topics/Information</th>
<th>Audio or Remote Access</th>
<th>Topics/Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>• A topic related to research at the center, e.g., a key sustainable design feature or an adaptive use example.</td>
<td>To be determined based on the topic.</td>
<td>Accessible to research center users at all times, this sign is only accessible to the public when the research center and grounds are open to the public or when visitors are on a guided tour.</td>
</tr>
</tbody>
</table>

Wayside 12: Research Center Interior Trail

<table>
<thead>
<tr>
<th>Topics/Information</th>
<th>Audio or Remote Access</th>
<th>Topics/Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>• A topic related to research at the center, e.g., a key sustainable design feature or an adaptive use example.</td>
<td>To be determined based on the topic.</td>
<td>Accessible to research center users at all times, this sign is only accessible to the public when the research center and grounds are open to the public or when visitors are on a guided tour.</td>
</tr>
</tbody>
</table>
Wayside 13: Perimeter Trail – Tortoise Conservation

- Tortoise conservation and the Area of Critical Environmental Concern
- Sensitivity of desert natural resources

Audio or Remote Access: Information on desert restoration and appropriate plantings for the region

Wayside 14: Perimeter Trail – Desert Restoration

- The desert restoration occurring at WBR
- Sensitivity of desert natural resources
- Stewardship of desert resources

Remote Access: Information on desert restoration and appropriate plantings for the region

Wayside 15: Perimeter Trail – Evolving Landscape

- An overview of how the desert landscape visible from this location has changed over time due to human activities
- Stewardship of desert resources

Audio and remote access are not recommended for this wayside due to a desire to keep the more “natural” areas of the ranch free from high-tech features and to encourage visitors to establish a more personal and direct connection with the desert.

Wayside 16: Perimeter Trail – Natural Area

- The complexity and sensitivity of the desert ecosystem as demonstrated by interpreting selected flora and fauna.
- Adaptations of flora and fauna, particularly those that relate to sustainability and green design.
- Stewardship of desert resources

Audio and remote access are not recommended for this wayside due to a desire to keep the more “natural” areas of the ranch free from high-tech features and to encourage visitors to establish a more personal and direct connection with the desert.

Wayside 17: Perimeter Trail – Natural Area

- The complexity and sensitivity of the desert ecosystem as demonstrated by interpreting selected flora and fauna.
- Adaptations of flora and fauna, particularly those that relate to sustainability and green design.
- Stewardship of desert resources

Audio and remote access are not recommended for this wayside due to a desire to keep the more “natural” areas of the ranch free from high-tech features and to encourage visitors to establish a more personal and direct connection with the desert.

Wayside 18: Perimeter Trail – Contemplative Area

- The desert as a retreat and a source of rejuvenation for people
- Stewardship of desert resources

One or more benches should be placed here to allow people to rest or sit in contemplation. Audio and remote access are not recommended for this wayside due to a desire to keep the more “natural” areas of the ranch free from high-tech features and to encourage visitors to establish a more personal and direct connection with the desert.
**INTERPRETIVE TRAIL SUMMARY**

<table>
<thead>
<tr>
<th>Number of Waysides</th>
<th>Number of Large Signs (Approx. 36” x 48”)</th>
<th>Number of Small Signs (Max. 36” x 24”)</th>
<th>Number of Waysides with Audio</th>
<th>Number of Waysides with Remote Access Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>8</td>
<td>16</td>
<td>3-6 (depending on research center wayside topics)</td>
<td>4-7 (depending on research center wayside topics)</td>
</tr>
</tbody>
</table>

**Wayside Sign Description**

Wayside signs will contain attractive and informative graphics, concise and engaging text, and a sidebar containing information on adapting to the desert and desert stewardship. The sidebar may be about adaptations in ranching, water use, plants and wildlife, green design, or any number of topics that reinforce the concepts of adaptations to the desert, adaptive management, sustainability, and stewardship.

All outdoor interpretive signs should be made of a material that will withstand the harsh environmental conditions of the desert, including high UV exposure and temperature extremes. The sign material should be vandal-resistant and come with a minimum 10-year warranty. The sign material will be determined during the design/content development phase of this project.

1. Parking Area multi-panel kiosk
2. Barn wayside
3. Corrals wayside
4. Shop strip wayside
5. Historic gate wayside
6. Ranch house northwest corner wayside
7. Ranch house northeast corner wayside
8. Ranch house southeast corner wayside
9. Research center multi-panel kiosk
10. Research center wayside
11. Research center wayside
12. Research center wayside
13. Perimeter trail – tortoise conservation wayside
14. Perimeter trail – restoration wayside
15. Perimeter trail – evolving landscape wayside
16. Perimeter trail – natural area wayside
17. Perimeter trail – natural area wayside
18. Perimeter trail – contemplative area wayside
INTERPRETIVE EXHIBITS

Most of the exhibits recommended in this plan have been designed to be static or low-tech interactive exhibits in recognition of the extreme environmental conditions at the ranch and to reflect the rustic character of the ranch. Exhibits will be housed in the following facilities:

1. The barn
2. The bunkhouse
3. The blacksmith shop
4. The ranch house
5. The research center.

This section contains descriptions and conceptual designs of major exhibits. All exhibit titles, text, and other content are intended merely to convey the concept of the exhibit and are not proposed as actual content. Titles, text, graphics, and other content will be developed during the design/content development phase of this project.

THE BARN

Open only when staffed, the barn will be the focal point of interpretation in the ranchstead area, housing exhibits, a retail area, and staff. The barn is the primary location for interpreting ranching in the desert and the ranching operations at WBR. Towards this end, five main exhibit areas have been created within and at the barn, with each area focusing on separate but related topics.
THE BARN ENTRY

interpretive amenities and media
RECEPTION AND RETAIL AREA

This area will contain the reception counter and retail merchandise, allowing visitors to interact with staff and purchase ranch-related items. No interpretation will occur in this area, although movie posters of Clara Bow and Rex Bell films may be displayed and a WBR activities and events board should be posted near the west doors.

- Possible retail area items include:
  - WBR caps, t-shirts, and other apparel
  - Clara Bow and Rex Bell films and posters
  - Books on WBR and ranching in the southwest in general
  - Journals such as East Mojave Diary
  - Books on Mojave Desert flora, fauna, and ecology
  - Books on xeriscaping, solar power, water conservation and other sustainability topics
  - An “Adopt-A-Tortoise” program
  - A donation box
RANCHING IN THE DESERT EXHIBIT AREA

These exhibits are intended to educate visitors about the realities and hardships of desert ranching. Exhibits also inform visitors about the evolution of desert ranching and the stewardship of public lands. The exhibits are designed to provide visitors with enough information about the desert and desert ranching that they are able to make responsible decisions as a ranch manager in one of the final exhibits in this exhibit area. Major exhibits in this area include:

• An exhibit consisting of wall panels and reader rails that interpret the hardships of desert ranching (availability of fodder and water, extreme temperatures, remoteness).
• An exhibit consisting of wall panels and reader rails that provide an overview of the history and evolution of ranching and the stewardship of public lands in the southwest, including an orientation to BLM land in the region. This exhibit should also contain information on ranching and Areas of Critical Environmental Concern, and specifically, the desert tortoise Area at WBR.
RANCHING IN THE DESERT EXHIBIT AREA

An interactive exhibit that allow visitors to play the role of ranch manager and make decisions that affect the ranch and the desert environment. This exhibit will allow visitors to apply the knowledge they acquired from the previous two exhibits by asking management questions based on the conditions interpreted in the exhibit on ranching hardships: lack of fodder and water and extreme temperatures. Visitors will be asked to decide how best to address a ranching situation posed to them on the exhibit. They will choose a management option from among several provided and then discover the broad implications and possible consequences of their decision on the ranch and the desert. For some options, it may be possible to include corroborating statements from the available oral histories and from Mojave Desert ranching journals.

An example of a ranch management situation to be addressed by visitors follows:

The well that provides water to 300 head of livestock has run dry.

Option 1: Since livestock usually return to their water source, truck water to the site of the well.

• Engaging the exhibit’s interactive component (e.g., a lift door) will reveal possible consequences of choosing this option, for example, damage to the desert from trucking in water and the cost (water, gas, labor) of the operation.

Option 2: Develop another well out on the range.

• Engaging the exhibit’s interactive component will reveal possible consequences of choosing this option, for example, the time and cost involved, the number of holes likely to be drilled before striking water, and damage to the desert.

Option 3: Move the livestock to the corrals where they can be given water from the ranch’s fire protection water tank.

• Engaging the exhibit’s interactive component will reveal possible consequences of choosing this option, for example, corral capacity, stress on and injury to the livestock from overcrowding, loss of fire protection.
RANCHING IN THE DESERT EXHIBIT AREA

With this exhibit, visitors will be able to have their picture taken in front of one of several projected backgrounds they can select from a computer program. For example,

- A photo of Clara Bow and Rex Bell
- A photo of a group of celebrities at the ranch
- A saddled and bridled horse
- Historic photos of ranch operations, such as branding
- The blacksmith shop diorama
- A desert landscape
- A large Joshua tree
- A tortoise or with researchers in the field

Props, such as cowboy hats, lariats, a branding iron, and other ranch-related items can also be available for visitors to use in their photo. The photo can then be printed or sent as an electronic postcard, providing the visitor and the postcard recipients with a souvenir of the ranch. This activity not only has inherent value as an interpretive activity and visitor experience, it serves as a marketing tool, since the photo will promote the ranch to the recipients.

The computer kiosk that is the focal point of this exhibit will be sensitive to temperature extremes and should be stored in a climate controlled room in the barn when the barn is closed to the public. The kiosk will be designed to be portable so that it can be moved into and out of storage by a single person.
RANCHING IN THE DESERT EXHIBIT AREA

Evolution of Mojave Desert Ranching Exhibit or Blacksmith Shop Exhibit
If the blacksmith shop exhibit is located elsewhere on the ranch, the “Create-A-Postcard” exhibit should be relocated to the “Blacksmith Shop” exhibit space (barn southeast corner) and the “Evolution of Mojave Desert Ranching” exhibit should be installed in the former “Create-A-Postcard” exhibit space (barn northeast corner). The Evolution of Mojave Desert Ranching exhibit is described below.

The Evolution of Mojave Desert Ranching Exhibit
This exhibit interprets how desert ranching has evolved over the decades, as environmental conditions, ranching goals and practices, the economy, best management practices, and our understanding of desert ecology have evolved. The exhibit should consist of large, wall panels graphically depicting a timeline of ranching under the working title, “Always a New Frontier.” A literal timeline may also accompany the exhibit, along with reader rails and two or three small artifact display cases. The primary topics to be interpreted in this exhibit are:
• How desert ranching goals and practices have changed over the decades.
• Ranch management in the future, particularly in terms of alternative energy use, water conservation, and other sustainability/green features, new best practices, etc.?
• New technology and high-tech tools used in ranching (e.g., satellites, computers, weather forecasts, GPS). This aspect of the exhibit provides a link to the adjacent interactive exhibit, where visitors guess the use of a historic ranch tool or implement.
• Trends in ranch business planning, including converting ranches to dude ranches, spas, and bed and breakfast ranches where visitors actually work on the ranch.

It is important that this exhibit be objective, balanced and non-accusatory towards any of the stakeholders with different opinions regarding ranching on desert public lands. The purpose of this exhibit is to show how ranching, desert use, and management have evolved and will continue to change as conditions change and best management practices evolve.

If the blacksmith exhibit is located in this location, the key points of the Ranching in the Future exhibit will be integrated into other exhibits in the barn.
WALKING BOX RANCH EXHIBIT AREA

Exhibits in this area will interpret the operations of the ranch. Exhibits will include:

- Wall panels providing an overview of WBR operations and activities.
- A wall panel and display case interpreting “A Day in the Life” of a cowboy at WBR.
- A two-sided floor panel interpreting the adaptive reuse of materials on the ranch on one side, and other adaptations to the desert on the other side (siting buildings relative to the sun, etc.).
- An exhibit on the importance and use of horses on the ranch, including wall panels, a view into a reconstructed tack room with key items labeled, and a saddle that visitors can mount.
- An interactive exhibit allowing visitors to guess the function and use of various ranch tools and implements.
- A blacksmith shop exhibit or the post card exhibit.
WALKING BOX RANCH EXHIBIT AREA

Exhibits in this area will interpret the operations of the ranch. Exhibits will include:

- Wall panels providing an overview and explanation of the ranching activities that occurred at WBR.
- A two-sided floor panel interpreting the adaptive reuse of materials on the ranch on one side, and other adaptations to the desert on the other side (siting buildings relative to the sun, etc.).
WALKING BOX RANCH EXHIBIT AREA

Blacksmith Shop Exhibit or Evolution of Mojave Desert Ranching Exhibit

If the blacksmith shop exhibit is located elsewhere on the ranch, the “Create-A-Postcard” exhibit should be relocated to the “Blacksmith Shop” exhibit space (barn southeast corner) and the “Evolution of Mojave Desert Ranching” exhibit should be installed in the former “Create-A-Postcard” exhibit space (barn northeast corner). The Evolution of Mojave Desert Ranching exhibit is described on page 21.

Blacksmith Shop Exhibit

This exhibit is a recreation of the interior of a blacksmith shop containing tools and artifacts from Rex Bell Jr.’s shop. (Due to location, space, and the availability of tools, this exhibit will not be a replica of the WBR blacksmith shop.) The use of a figurative sculpture brings the human element to the exhibit and the ranch. Shop tools and artifacts are accompanied by small interpretive signs containing the item’s name and use, thereby linking to the interactive exhibit in the barn that allows visitors to guess the use of ranch artifacts and implements. Reader rails containing small interpretive signs provide a barrier between the exhibit and visitors. The blacksmith shop should also contain a demonstration area where docents and guest specialists can demonstrate various smithing skills and activities. A secure storage area may also have to be contained in the shop for demonstration-related items.
Several outdoor demonstration and activity areas are proposed for the ranch. These include:

- A temporary “amphitheater” featuring portable benches or straw bales that can be installed in one of the corrals for special events.
- A calf-roping activity in the corral closest to the barn.
- A demonstration area at the blacksmith shop.
- Several areas outside the ranch house garage and around the courtyard to be used for special events, particularly involving catering.
Because the bunkhouse will contain restrooms and water, it is an important location for interpreting water-related topics. Bunkhouse exhibits should include large interpretive signs on exterior walls interpreting water use and how visitors can conserve water, and small interpretive signs identifying and interpreting water-conserving features in the restrooms.

The bunkhouse will also contain space that can be used by local communities and organizations for temporary exhibits and displays. Such displays not only strengthen ties to and partnerships with local communities and organizations, they provide new and diverse exhibits to draw repeat visitors to the ranch. Examples of potential temporary exhibits include:

- A display of items from the collection of the Searchlight Historic Museum
- A display of photos from a desert photography contest
- Artifacts related to an upcoming silent film festival
- A display of items from the Boulder City Museum
THE RANCH HOUSE

When open to the public, the garage and the first floor of the house will be focal points for interpreting the ranch house, ranch domestic life, and the Clara Bow/Rex Bell story. Interpretive strategies and media in the garage and house have been designed to reflect the fact that the house is a multi-purpose facility that will be used as a meeting space, retreat center, and special events space. Accordingly, interpretation will be effective and engaging while not interfering with the multi-purpose functioning of the house and garage.

The Garage

The garage has been designed to serve primarily as a meeting space that can also function in an interpretive capacity. Exhibits and amenities in the garage include:

- An audio-visual system and large video monitor for viewing the WBR orientation video and other videos
- A cabinet containing the audio-visual equipment
- A wall mounted dry erase board and bulletin board system for use during meetings and events
THE RANCH HOUSE

The Garage

- A moveable, six-panel display that can be anchored in the middle of the room when the garage is functioning as an interpretive space, or during special events. Topics for these panels include the Clara Bow/Rex Bell story, the ranch as a retreat from Hollywood, the realities and hardships of ranch domestic life, domestic water use, and mining as it relates to the preservation and furnishing of the ranch house. Copies of these panels can also be produced on a roll-up screen or other light-weight material for use at outreach activities and events off-ranch. They can also be loaned to libraries, schools, museums, and other groups.
- Storage space to house the moveable, multi-panel display when not in use
- A celebrity “Wall of Fame” featuring photos of those who visited WBR
- Storage space for chairs
- Display cases for Hollywood-related artifacts
THE RANCH HOUSE

The Ranch House Interior

Interpretation inside the ranch house will rely heavily on docents leading tours. In addition to the personal interpretation provided by docents, non-personal interpretive media will also be used in the house. A single photo (or photo collage) showing the room during the Bow/Bell period will be used as the primary interpretive feature in the kitchen, great room, bar area, and boys’ bedroom. The photo(s), framed to appear to be an everyday item in the house rather than an interpretive sign, will provide a historic view of the room as well as text on the room’s use during the ranch’s heyday. To the extent possible, each of these rooms should be refurnished to reflect the Clara Bow/Rex Bell period of the ranch.
THE RANCH HOUSE - SECOND BEDROOM

The Ranch House Interior

The second bedroom on the ground floor will not be restored or furnished so that it can serve as the primary exhibit and interpretive space in the house. Wall mounted panels, large and small display cases, and a touch screen computer kiosk will be used to interpret and bring the ranch house to life. For example, the touch screen can display a floor plan of the house (including the second floor). When visitors touch a particular room, historic photos of the room appear on screen along with the option of listening to an oral history related to the room and ranch life. Topics to be interpreted in the second bedroom include:

- The significant rooms in the house, including rooms on the second floor.
- The celebrity life of the house.
- The realities and hardships of ranch domestic life.
- The importance and use of water domestically.
- House adaptations to the desert environment.
- The patio and pool area.
THE RESEARCH CENTER

Interpretation at the research center will target two main audiences, the public visiting the facility under a guided tour and students and scientists working at or visiting the facility. Interpretation will focus on:

- The research center and its affiliation with UNLV.
- Adapting to the desert environment through sustainable design concepts and practices.
- The adaptive/sustainable design features utilized at the research center (buildings and grounds).
- Research being conducted at the center.

Although the research center is the primary area for interpreting the above topics, adaptive design and sustainability will be integrated throughout the exhibits and waysides at the ranch. Interpretation at the research center will occur through interpretive signs, the final locations and sizes of which will be determined once the architecture of the facilities and the landscape plan for the grounds are completed. At this stage of the planning process, recommended interpretive locations and media include:

- A 4-panel kiosk at the fence/gate separating the ranch house area from the research center. Topics to be interpreted here include:
  - Small interpretive signs at key sustainable design features such as:
    - Wall cutouts that expose straw bale construction and other sustainable design features
    - Salvaged wood floors and other examples of the adaptive reuse of materials
    - Exterior walls of rhyolite salvaged from a nearby mine
    - Window shutters, the sleeping porch, and other features demonstrating adaptations to the desert environment.
  - Wayside signs at research plots and other relevant landscape features. These signs will extend the self-guided interpretive trail into and through the research center grounds.
  - Small interpretive signs in restrooms and the kitchen identifying water and energy conserving features such as low flow toilets and showers and energy efficient appliances.
  - A sponsor/donor wall recognizing companies, organizations, and individuals who have contributed to the research center.
  - A computer touch screen kiosk that allows visitors to “pull up” information on sustainable design features (architectural, structural, landscaping) employed throughout the ranch and research center.

<table>
<thead>
<tr>
<th>Sign 1</th>
<th>Sign 2</th>
<th>Sign 3</th>
<th>Sign 4</th>
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<tbody>
<tr>
<td>• Wayfinding, including a map of the research center and the entire WBR property.</td>
<td>• Explanation and description of the research center, its mission, and its affiliations/partners.</td>
<td>• Overview of the desert conditions faced in designing the center’s buildings and the sustainable design principles employed to address them.</td>
<td>• Overview of the center’s grounds and the design principles employed to address the desert conditions.</td>
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<tr>
<td></td>
<td></td>
<td>• Overview of research plots on the grounds.</td>
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</table>
PERSONAL INTERPRETATION

Although it is anticipated that most visitors will take a self-guided tour of the ranch, guided tours and other personal interpretation are critical for visitors gaining access to the ranch’s major facilities and exhibits, and to gaining a deeper understanding of the theme and topics being interpreted at the ranch. Personal interpretation is also important because it adds the human dimension to learning about and enjoying the ranch, since visitors are able to interact with a person. Trained, knowledgeable staff and docents will also be key to the success of many of the ranch’s special events and programs. At this point, many aspects of the ranch’s personal interpretive services have yet to be defined, such as:

- the days and times the ranch will be staffed
- the number of staff and docents needed
- how staff and docents will be recruited, trained and supervised
- fees for tours and other personal interpretive services

To assure the quality and consistency of guided tours, a standardized tour should be developed and staff/docents should be trained in its content and delivery. In addition, docents and staff should receive general hospitality training and training in leading tours. If possible and practical, staff/docents should meet the interpretation training standards adopted by UNLV and Clark County. They should also be knowledgeable about the entire WBR complex including:

- hours of operation and the public access allowed to certain parts of the complex
- the research center and the conservation area
- WBR partners (BLM, UNLV, TNC), their mission, and their involvement with the ranch
- Answers to anticipated frequently asked questions.
REMOTE ACCESS AND THE WEB

As described elsewhere in this plan, it is recommended that selected interpretive signs contain a phone number that visitors can call to receive more detailed information on the sign topic via a recorded message. This type of remote access is relatively inexpensive and easily updated, and serves the ranch’s primary interpretive audience: drop-in visitors, many of whom are likely to have a cell phone. Phone messages (as well as the audio recordings of oral histories and ambient ranch sounds proposed for selected signs) are also a way to provide information to the visually impaired, thereby meeting ADA guidelines.

A web presence will be important to the long-term viability of WBR, therefore, it is recommended that BLM and UNLV add WBR-related information, pages and links to their existing websites. A Walking Box Ranch website (e.g., www.walkingboxranch.com) should also be developed and maintained. In addition, WBR should consider creating a Facebook or My Space presence. Studies indicate that vacationers and travelers rely heavily on the web for travel information and planning (second only to friends and family), a trend that will likely increase in the future. A web presence will allow prospective and actual visitors to obtain valuable information about the ranch and possibly, print or download it to bring with them when they visit. A web presence can also supplement a visit by providing information that is beyond the scope of WBR exhibits. The WBR website should provide the items and services listed below.

- Directions, hours of operation, fees
- Information on the history and significance of WBR, including its listing on the National Register of Historic Places
- Information on the managing entity and partners and their activities on the ranch
- An overview of the amenities and opportunities available at the ranch
- A mechanism to become a “Friend of WBR” or make a donation to the ranch
- Downloadable podcasts or RSS feeds of an audio/visual tour of site
- Downloadable podcasts or RSS feeds of key interpretive amenities, including the self-guided trail
- Downloadable podcasts or RSS feeds regarding research center facilities and activities
- An interactive site map including pop-up boxes with information and photos
- Frequently Asked Questions
- Related sites of interest in the region
- Links to related sites, such as BLM, UNLV, TNC, desert ranching, sustainability, tortoise conservation, etc.
- Local services and amenities (hotels, restaurants, etc.) with links to their websites and downloadable coupons for discounts
- A mechanism for making online reservations for WBR special events

In addition, webcam feeds and video footage of WBR special events and activities can be uploaded to various sites to promote and market the ranch, including heritage tourism sites, travel sites, Las Vegas activities sites, etc.

The specific technology and equipment to be used to provide remote and web access will be determined in the design/content development phase of the project.
To the extent practical, interpretive signs and exhibits should be evaluated for their effectiveness at several stages of their development. Evaluation is not only helpful in fine tuning interpretive exhibits and signs, it may be a requirement of certain grants.

Front End Evaluation
Front-end evaluation is conducted at the on-set of a project and is focused on understanding actual and potential audiences so that appropriate strategies and media can be developed. This project’s front end evaluation has already been completed, resulting in the audiences, theme, topics, strategies, and exhibit designs found in this plan.

Formative Evaluation
Formative evaluation is conducted during the design/content development stages of interpretive media production. Formative evaluation can include assessment of draft media by a visitor studies or interpretive specialist; assessment by stakeholders or selected groups; and exhibit prototype testing. For WBR, prototype testing is recommended for selected interpretive signs and exhibits to assure that the messages and information are clear, understandable, engaging, and effective. It is recommended that staff work with a professional evaluator to design and implement the first prototype evaluation process.

Summative Evaluation
Summative evaluation is conducted once the interpretive media are completed and the site is open for visitation. The major question that drives a summative evaluation is whether or not and to what extent the overall interpretive goals have been achieved. This might involve tracking:

- actual visitation compared to the anticipated number of visitors
- what visitors do, think, or feel as a result of their experience
- what visitors learn
- the benefits of interpretation to visitors, the working group, and stakeholders.

Tracking and Monitoring Visitor Use
Since Walking Box will be a new interpretive facility, a tracking and monitoring program is recommended to capture actual use, to monitor visitor reactions, and to identify interpretive and logistical issues that may need to be addressed. At a minimum, tracking program should include logging the number of visitors, recording visitor reactions of the ranch, and determining how people learned about the ranch and their reasons for visiting. Comment cards, observation studies, questionnaires, and exit interviews can be used to understand the visitor experience and to inform decisions about making adjustments or improvements to interpretive media.
### SUMMARY OF STRATEGIES / MEDIA

<table>
<thead>
<tr>
<th>Strategy/Media</th>
<th>Location</th>
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<tbody>
<tr>
<td>Static and interactive exhibits</td>
<td>• The barn&lt;br&gt;• The corrals&lt;br&gt;• The bunkhouse&lt;br&gt;• The blacksmith shop&lt;br&gt;• The ranch house garage&lt;br&gt;• The ranch house ground floor bedroom</td>
</tr>
<tr>
<td>Large and medium interpretive signs (some containing audio or remote access information)</td>
<td>• Multi-panel kiosk at main parking area&lt;br&gt;• Multi-panel kiosk at research center/ranch house gate&lt;br&gt;• Self-guided interpretive trail waysides&lt;br&gt;• Bunkhouse exterior walls&lt;br&gt;• At selected locations on the ranch and research center grounds&lt;br&gt;• At sustainability features in and on ranch and research center buildings</td>
</tr>
<tr>
<td>Small interpretive signs</td>
<td>• At water conservation features in the bunkhouse restrooms&lt;br&gt;• At selected locations on the research center grounds&lt;br&gt;• At sustainability features on ranch and research center buildings</td>
</tr>
<tr>
<td>Photos with minimal interpretive text</td>
<td>• Ranch house garage&lt;br&gt;• Ranch house kitchen, great room, bar, bedroom</td>
</tr>
<tr>
<td>Artifacts</td>
<td>• Barn&lt;br&gt;• Blacksmith shop&lt;br&gt;• Ranch house garage&lt;br&gt;• Ranch house ground floor rooms</td>
</tr>
<tr>
<td>Contemplative bench</td>
<td>• Wayside in the natural area</td>
</tr>
<tr>
<td>Donation box</td>
<td>• Barn reception/retail area</td>
</tr>
<tr>
<td>Sponsors plaque</td>
<td>• Research center</td>
</tr>
<tr>
<td>Web presence</td>
<td>• Multiple sites and links</td>
</tr>
<tr>
<td>Remote access</td>
<td>• Several wayside signs</td>
</tr>
<tr>
<td>Personal interpretive services</td>
<td>• Barn reception area&lt;br&gt;• Guided tours&lt;br&gt;• Research center&lt;br&gt;• Special events</td>
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</table>
Meeting Minutes

Project Name: Walking Box Ranch Design
Meeting Date: June 10-11, 2009
Project Number: 04030051.09

In Attendance: See Below

BT- Bob Taylor-BLM
TB- Tom Busch-BLM
NC- Nancy Christ-BLM
PR- Peg Rees-UNLV
PG- Paula Garrett-UNLV
JC- Jean Cline-UNLV
JJ- Jennifer Johnson-UNLV
DL- Donald Land-UNLV
CM- Cathleen Malmstrom-ARG
Phil (PEH) - Phil Hendricks-EDAW
GO- Greg Oakes-EDAW
MC- Molly Cobbs Lozon-EDAW (not in attendance)
RM- Robert Morton-RPA
FD- Fred Denton-RMH

June 10, 2009

1. Phil started the meeting with introductions and reviewed the schedule.
   - BT There is a new system for Environmental Assessments (EA)
   - BLM to coordinate new NEPA process.
   - MC will review the new EA process with the BLM.
   - MC intends to have live review of the EA with the BLM
   - EA Schedule – is on track for 4/11.
   - Construction services (NC) – 18 months?
   - There may be a bid package for construction and another for restoration.
   - JC question regarding Design Development (DD). Are DD meetings similar to the DCP process?
   - Phil explained DD (Design Development) to CD (Construction Document) process – very detailed workshops.
   - BT explained the DD process to the team.
• TB explained the DD process to the team, i.e., finishes, outlets, fixtures, etc.
• There are no real “big” changes to location of buildings, features, etc.
• BT – there should be No “big” changes at 50% DD level.
• Phil: BLM coordinates a lot of the DD process.
• BLM explained other projects with regard to DD.
• Phil: Overview of changes to the site plan.

2. **Entry Overview**

- PR: Is there stimulus money for highway improvements into WBR?
- BT: Can work with DOT with BLM support
- PR: Could be a great opportunity for development of highway improvements
- BT: It’s logical to go after stimulus
- NC: Will get necessary information
- BT: Needs to check with his supervisor
- PR: Use older entry concept with cost: deadline 6/23 for stimulus submittal
- Solar for entry light (sign). Stone base can accommodate battery storage; up light gate base as well.
- Phil: Asked if there were any thoughts on options.
  - PR: Can wood be used in this environment?
  - UNLV does not like it
  - Too much maintenance
  - PR: Likes it
- Jen: UNLV maintaining it is too much.
- CM: Corten for entry is OK.
- PR: Corten works better with other environments.
- TB: Likes stone base.
  - If we use wood needs to be big heavy timber – nothing small
- JJ: Shadow Lane Corten Steel problems.
- TB: Orient sign to use for solar application.
- Is vandalism an issue with use of solar?
- Will be double-sided entry sign.
- BT: DOT – May need to push back sign w/ stone base.
- DOT: Will want breakaway for signs within ROW.
- BT: Walking Box Ranch should be unique. Like Option A – no stone base.
- BLM Sign A and B – stone base with wood, vertical posts and beam.
- Corten will separate old from new ranch, yet still fit into the vernacular of the ranch.

3. **Fencing**

- Concrete post (colored)
- Corten rails?
- Concrete fabricated fence?
- Railroad tie-post with Corten rails (preferred?)
4. Site Entry Road
- NC: Can we use stimulus funding for entry road improvements?
- PR: NDOT supportive; could consider all the way back to WBR property; $ available; wants to apply for 6/24: BLM must submit application
- NC: SNPLMA funding may or may not be available for road improvements
- NC: Will check into available funding
- BT: BLM leaning towards a green approach for the project; could sacrifice things in the project to phase in later.
- Current estimate has stabilized base, not paving
- TB: can phase paving; or add alternate
- Research Campus Drive. Secure access to campus during special events.
- PR: Will there be a sign for the research facility?
  - PEH: Yes

5. Site
- Maintain visual connection to ranch house from barn
- CM: carefully locate any new trees in historic corridor
- Utilize existing mesquite: prune for shade
- Potentially move north-south path to the west
- PR: No fire ring – leave no trace.
- PR: Security feedback is that no one (public) should be on site when it is closed
- PH: recommend curbs at parking; concrete best
- No potable water at barn or ‘after-hours’ entrance area
- Amphitheater – change name to festival space; don’t call this area ‘historic core’
- FD: Need conductivity test to determine size for ground source field: $5000 or so
- FD: Location for field is flexible; will require one-time supply of about 5,000 gal.
- 100% DCP needs to be given to TNC
- Events: special events rarely up to 250 persons
- BT: can have weddings, etc., but need to be BLM permitted; BLM programmatic review needed for all expected types of events.

6. Rock Gardens
- PG: Add existing rose bush (Clara’s) by pool into plan
- Consider alternatives for ranch house courtyard ramp
7. **Group Camping**
   - Add a few more single pads; be sensitive to view shed from ranch house
   - TB: this is a form of housing, not a campground

8. **Restoration Planting**
   - Is the area proposed for restoration enough, or do we need the whole 40 acres?
   - BT: Needs to get seeds and start planting now; may miss the growing season
   - PG: Collect seed close to area for restoration; WBR could work with Master Gardeners
   - BLM: Use CSN for seed collection or GBI (Great Basin Institute)?
   - NDOT as source for Joshua tree relocation program
   - NDOT may be able to salvage small shrubs
   - BLM prefers quick couplers to hose bibs for irrigation
   - PG: Some plants may be obtainable from ongoing well projects, also maybe from NDOT; possibly some larger Joshua trees.
   - If plants are available too soon, could plant them ahead of time on site w/temp irrig/water truck, etc. Could put them in a corral with shade cloth. 50% success would be good.
   - PG will work with BT and BLM botanist to get this started

9. **Viceroy Mine Rhyolite**
   - JC: Viceroy property will transfer to NPS within about a year; Need to coordinate getting stone to Walking Box Ranch. JC will coordinate a site visit w/Viceroy.
   - Contract to a construction company to sift and get stone from mine?
   - Team to quantify approximate amount for the project.

10. **Architecture**
    - Conditioned vs. nonconditioned space in ranch house.
    - BLM suggested to sprinkle the ranch house.ARG to add into estimate
      - Parametrix has costed already
    - Change second floor room designation to ‘Clara’s Bedroom’
    - Rex Bell may possibly give original kitchen stove
    - PG: People love ice house for interpretive use
    - FD: consider a Coolerado unit in barn for office/storage space
    - Use insulated cabinets in unconditioned AV storage room at new blacksmith shop
    - Bunkhouse: add lockers in changing room.
    - Planting in front of manager’s office. Has glazed door for visual purposes of ranch. Need to keep open.
    - Need janitor’s closet on second floor of bunkhouse
    - Separate toilets and showers? Consider a second single occupancy toilet on second floor
    - Kitchen
      - Code requirements for chef service vs self-cooking
      - Need health code requirements from county (ARG)
      - May have to have professional kitchen for project
      - Maintenance storage on second story of bunkhouse (ARG)
Unisex toilets for maintenance lab and classroom
Extend flat roof for experiments over carport as well
JJ: may need a larger room for security and IT, with caged separation; will need to track this as design proceeds.
BT: BLM and UNLV security systems need to be separate: BLM cannot include a wireless system in package; can do all prep work. UNLV then buys equipment, etc.
Can add security consultant to team; BLM to determine if required
UNLV will want card access to some areas.
Reorganize labs and expand fenced yard space

June 11, 2009

1. Phil started the meeting with introductions and reviewed the schedule.
   • Introduced Don Land, UNLV Mechanical Engineer

2. Architecture (continued)
   • Camp building
     – Need more toilets
     – DL recommends Reflectx (Mylar membrane that cuts down on reflective UV rays) on all roofs and south-facing walls
     – DL: use automatic, touch-free, single lever fixtures; make all fixtures ADA
     – DL: UNLV does not really like waterless urinals
     – Use architecturally sustainable materials
     – SIPS – structural insulated panels
     – Hardi Plank for siding: Australia case studies for Hardi Plank produced positive results
     – TB: Government is required to buy American
     – BT: 100-mile travel radius for LEED
     – First aid: at labs, in docent room in bunkhouse, in new bunkhouse

3. Architectural Program (CM)
   • A lot of outdoor space – covered and sheltered
     – Outdoor space is 50% of occupied space – historical building
     – JC: Does outdoor space include porches? CM: No
   • CM: TNC limited footprint size
     – BT: TNC has not given square footage size
     – Build in floor safe, probably in (e) bunkhouse office
     – TB: Should there be an infirmary on site? Research area, bunkhouse, or docent space?
     – CM: can accommodate small area in old bunkhouse docent space
     – First aid stations in lab, (e) and new bunkhouses

4. Utilities
   • BM: Well pump test
   • BT: USGS is doing the pump test
• Need to verify water samples – arsenic
• Have agreement to continue testing
  – BM: Need to pick the proper treatment
• TB: There are different treatment for different users
• BM: Different uses for fire, irrigation, potential point of use treatment, i.e., sinks, etc.
  – Maintenance intensive and more expensive
  – RPA looks at both point of use and central system
  – Overall, different systems for different uses is not the way to go
• Minimum backwash measures
  – Reverse osmosis wastes water, but can it be used for irrigation?
  – UNLV: Do we need potable water for public if vending is available?
  – BLM wants to provide potable
  – EPA has strict standards for arsenic
  – PE: Tests are being done ½-mile away on adjacent BLM land; RPA would like that information
• Old well
  – Use for ground source heat?
  – Do not want to cross-contaminate different aquifers – existing is a dedicated aquifer
  – Use to help with history of wells
  – FD use existing holes for conductivity test
  – DL: UNLV – air-cooled chillers have best payback
• Water to all the ranch is not currently treated
  – All water comes from existing pump house
  – Probably need a whole new system and building for pump house – may use existing slab
• Centralize mechanical systems in same location
• Main fire storage is in 40K tank
• Can design system for normal operation scenario, i.e., UNLV maintenance schedule
• BT: How much wastewater in system? Pool could be for grey water and back flush water from the system.
• Four types of water:
  – Fire – need 55 psi
  – Irrigation – need 75 psi
  – Potable – need? psi
  – Grey – need? psi
• There are different pressures for different uses.
• Add water right application to Scope of Work.
• USGS and DOE (Department of Energy) to review and look at existing well
• An alternative is to have a separate leach field for ranch and bunkhouse
• Wastewater – conservation, efficiency and quality
• Added cost to develop sustainable utility/wastewater system.
• Propane?
• Water at barn? No
- Blacksmith Shop to have nonpotable water off irrigation line with spigot
- No sprinklers for camp building.
- ??: advise against gas ranges
- CM: maybe misters in barn; JJ will check: may be illegal in Clark County
- Add data, telecommunications and grey water to utility matrix

5. **Site Lighting**
   - Overflow parking lights?
   - CM: No permanent lights in overflow lot
   - JC: Minimize lighting, but have some security lighting in the event of need.
   - PR: Security off weather station?
   - TB: Street lights in research area, pedestrian or bollard lights.
   - BT: Photovoltaic and timer for parking lights.
   - BT: All night lights on site? Restroom facility when being used and that’s all that is needed
   - JJ: UNLV – level of lights dictated by type of security system installed.

6. **Sustainable Design Opportunities**
   - Off-gasing of tailings – use tailings for outdoor applications only.
   - May need a batch plant on site?
   - Continue to develop group campground as off the grid as possible.
   - Get numbers to Jean for NDOT – entry and road plans.

7. Send all presentation materials to BLM, UNLV, and anyone else who would like to receive.

8. **Miscellaneous**
   - Interpretation
     - Three levels of visitorship
       - After hours: short visit; gates closed
       - Open but not docent-staffed; self-guided tours only
       - Open with docent-led tours
   - Moving ice house to location of shop string; use to interpret that area
   - Barn: ‘Big Ass Fan’ for cooling
   - American made merchandise
   - Postcard kiosk will need to go in conditioned storage when barn is closed.
   - Ranching evolution exhibit – connect to applications of sustainable features
   - Barn plan: open up viewing opening into tack room (on our plan)
   - Dutch doors for blacksmith shop, rather than fence inside?
   - Ranch house garage: in addition to monitor, add a larger pull-down screen?
   - Comfortable seating to watch videos
   - For final report:
     - Maybe add locator for each building plan (as with interp plan for barn.)
     - Bob T: BLM Public affairs in DC has to sign off on 50% DCP; supposed to have comments in 2 weeks.
WALKING BOX RANCH
50% Design Concept Plan

Prepared for Bureau of Land Management
Prepared by EDAW, Inc.
April 2009
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION</td>
<td>1-1</td>
</tr>
<tr>
<td>SITE PLANS</td>
<td>2-1</td>
</tr>
<tr>
<td>UTILITY PLANS</td>
<td>3-1</td>
</tr>
<tr>
<td>ARCHITECTURE</td>
<td>4-1</td>
</tr>
<tr>
<td>INTERPRETIVE PLAN</td>
<td>5-1</td>
</tr>
<tr>
<td>COST ESTIMATE</td>
<td>6-1</td>
</tr>
<tr>
<td>MEETING MINUTES</td>
<td>7-1</td>
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</table>
INTRODUCTION

A 2-day workshop was held at the UNLV Public Lands Institute (PLI) conference room (RAJ Building) on Wednesday March 25, 2009 to Thursday March 26, 2009. This workshop was attended by the same broad cross-section of personnel that attended the programming workshop. A site visit was conducted on Friday March 27, 2009 with the design team as well as UNLV, PLI and members from the BLM. The site visit was intended to field truth the Design Concept Plans as well as review any issues brought about from the workshop.

The 50% Design Concept Plan Report summarizes the planning and design work completed to date and what was presented during the workshop as well as meeting minutes, schedules, attendees, documented conversations, and any project decisions. Comments are welcome; upon receipt they will be assembled and incorporated into the final Development Concept Plan.
TO: BLM and Workshop Participants
FROM: Phil Hendricks, Jr. ASLA
DATE: March 16, 2009

SUBJECT: Walking Box Ranch Development Concept Plan (DCP) 50 % DCP Review Workshop Agenda
March 25 – 27, 2009

Workshop Introduction
The 50% draft development concept plan, including alternatives, will be presented, reviewed, and discussed at a 3-day workshop (2-days at UNLV, 1-day at the site). This workshop should be attended by the same broad cross-section of personnel that attended the programming workshop. The site visit will also be included to field truth the work completed to date. The main goal of this workshop is to develop a preferred plan and project approach that will be carried forth into the final draft DCP.

Scheduled Attendees:

<table>
<thead>
<tr>
<th>Representing</th>
<th>Representative</th>
<th>W.</th>
<th>Th.</th>
<th>Fr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLM – Denver</td>
<td>Tom Busch</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>BLM – Las Vegas</td>
<td>Bob Taylor, Nancy Christ</td>
<td>X</td>
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<tr>
<td>UNLV</td>
<td>Jean Cline, Jennifer Johnson, Cathy Willey, Peg Rees</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>EDAW</td>
<td>Phil Hendricks, Jr. ASLA, Greg Oakes, Mitch Peters P.E.</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Architectural Resources Group (ARG)</td>
<td>Cathleen Malmstrom, AIA, Adria Oswald</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Condit Exhibits</td>
<td>Sandy Treece Haramis, Rich Smith</td>
<td>X</td>
<td>X</td>
<td></td>
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<tr>
<td>SDG, Inc.</td>
<td>Gene Schaefer</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Robert Peccia + Associates</td>
<td>Bob Morton</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>RMH Group</td>
<td>Fred Denton</td>
<td>X</td>
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Workshop Agenda

**Wednesday March 25, 2009**
1. 50% DCP Presentation and Discussion
   - Location: UNLV Public Lands Institute (PLI) conference room (RAJ Building)
   - Time: 9:00 AM – 5:00 PM (with lunch break)
   - Discussion Topics: Presentation and review of:
     1. Project Program
     2. Architectural Concepts
     3. Site Development Concept Plans and Details

**Thursday March 26, 2009**
2. 50% DCP Presentation and Discussion (continued)
   - Location: UNLV Public Lands Institute (PLI) conference room (RAJ Building)
   - Time: 9:00 AM – 3:30 PM (with lunch break)
   - Continued from above and:
     5. Building and Site Utility Systems Concepts
     6. Concept Plan Cost Estimate
     7. Interpretation Program

3. Stakeholders Presentation
   - Location: PLI Conference Room
   - Time: 4:00 PM – 5:30 PM
   - Presentation of work to date for the second tier of project stakeholders (TNC, SHPO, NPS, Rex Bell - invitees TBD)

**Friday March 27, 2009**
4. Site Visit Walking Box Ranch (WBR)
   - Time: 9:00 AM – 2:00 PM (with lunch break)
   - Site visit to field review the DCP
SITE PLANS
**OVERALL SITE PLAN**

- **New Ranch Entry Gate (Alternate Location)**
- **Existing Ranch Gate and Sign**
- **To Entry and Hwy. 164**

**Site Features**

- **Barn (Historic)**
  - Interpretation and exhibits
  - Special event areas
- **Ice House (Historic)**
  - Interpretive exhibit or storage
- **Bunkhouse (Existing)**
  - Fuel oil storage
  - Public use
  - Vending machines
  - Kitchen for catering
  - Multi-use room
- **Bunkhouse (Proposed)**
  - Accommodates approx. 25 guests
- **Camper Services Building (Proposed)**
  - Covered cooking area
  - Accessible restrooms/showers
- **Guest Cottages Duplex (Proposed)**
  - Faculty/MF Lodging
- **Caretaker’s Residence (Proposed)**
- **Manager’s Residence (Proposed)**
- **Public Parking**
  - 25 standard stalls
  - 5 RV/Bus parking stalls
  - 3 van accessible spaces
  - Drop-off area
- **Visitor/Interpretive Area**
  - Information Kiosk
  - Interpretation
  - Interpretive Trail
  - Accessible
- **Gathering area/events area**
- **Amphitheater**
  - Informal movable seating
  - Stage
  - Group Fire Ring
- **Gathering Space**
  - Interpretation and exhibits
  - Special event areas
  - Picnic area
  - Informal amphitheater/fire ring
- **Water Storage Tank (Existing)**
  - Non-potable storage
  - Potable storage
- **Corrals (Existing)**
  - Special event parking
  - Approximately 80 vehicle spaces
- **Group Campsite (Proposed)**
  - Accommodates 25-30 people
  - Accessible camp pad
- **RV Campsite (Proposed)**
  - Research use only
  - 3 full hook up sites
ENTRY/PARKING ALTERNATIVES

Alternative B

Asphalt Parking
- 37 Standard Stalls (10’x20’)
- 6 Large Vehicle/Bus (12’x60’)
- 3 ADA Stalls (10’x20’)

Existing Corrals
- Temporary Interpretation and Exhibits
- Special Events Space

Historic Restored Ice House

Historic Restored Barn

AV Screen

Stabilized Natural Surface

Moveable Benches

Accessible Route To Amphitheater Area

Amphitheater Stage

Existing Joshua Tree Typ.

Existing Corrals

Proposed Native Tree Typ.

Native Surfaced Service Access

Overflow Corral Parking
- Approx. 80 Vehicles
- Water Tank Access
- Existing Corral Fence Typ.

Closure Gate Typ.

Existing Non-Potable Water Tank

Native Restoration Planting Typ.

Native Surface Connection to Historic Entry

Natural Surface Trail - See Overall Plan

Proposed Fence Typ.

Accessible Interpretive Trail - See Overall Plan

Bench and Interpretive Panel Typ.

Integral Colored Decorative Paving

Pedestrian Crossing

Information Kiosk

Historic Restoration planting Typ.

Native Planting Seating Area

Ranch Entry Plaza/Events Area

infrared/interpretive kiosk

integral Colored Decorative paving

integral Colored Accessible Concrete

Moveable Benches

stabilized Natural surface

AV screen

Historic Restored Barn

Existing Joshua Tree Typ.

Proposed Native Tree Typ.

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Closure Gate Typ.
PEDESTRIAN CORRIDOR

[Diagram showing various elements of a pedestrian corridor with labels for native shade trees, native shrub planting, existing historic ranch house, interpretive panel, and integral colored accessible concrete path.]

Section A-A

Existing Landscape

Varieties

5'-15' +/

New Native Planting

Existing Corridor - Width Varies

Plan: Typical Pedestrian Corridor

Not to Scale

WALKING BOX RANCH

DESIGN CONCEPT PLAN
MAIN ENTRY PLAN

Alternative A

Alternative B

WALkiNG BOx RANCH
DEsiGN CONCEpT pLAN
March 25, 2009
ENTRY ROAD

Minor Drainage Channel
- Minor to nuisance flows during major storm events
- Minimal depth to drainage swale
- Minimal silt build up
- At-grade concrete road crossings to convey flows

Major Drainage Channel
- Deeper and wider flows during major storm events
- Drainage swales are deeper
- High silt build up after storm event
- Potential need for culverts to convey flows

Swale/Drainage Crossings

Existing OHV Designated Route

Existing Fence

Existing Road with Side Berms

March 25, 2009

WALKING BOX RANCH
DESIgn CONCEPT PLAN

2-10
Legend

- Existing Drainages
- Drainage Conveyance
- Relocated Drainages
- Drainage Swales Removed (Cut or Filled)

Research Campus Conceptual Grading Plan

Existing 1' Contours

Proposed 1' Contours

Parking Lot Option A Conceptual Grading Plan

site plans
<table>
<thead>
<tr>
<th>Common Name</th>
<th>Botanical Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acacia</td>
<td><em>Acacia gregii</em></td>
</tr>
<tr>
<td>Desert willow**</td>
<td><em>Chilopsis linearis</em></td>
</tr>
<tr>
<td>Mesquite</td>
<td><em>Prosopis glandulosa</em></td>
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<tr>
<td>Joshua tree</td>
<td><em>Yucca brevifolia</em></td>
</tr>
</tbody>
</table>

**Shrubs**

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Botanical Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blackbrush</td>
<td><em>Coleogyne ramossissima</em></td>
</tr>
<tr>
<td>Bladderpod</td>
<td><em>Encelia farinosa</em></td>
</tr>
<tr>
<td>Brittlebush</td>
<td><em>Encelia salicifolia</em></td>
</tr>
<tr>
<td>Bur sage</td>
<td><em>Bursaria discolor</em></td>
</tr>
<tr>
<td>California buckwheat</td>
<td><em>Illicium floridanum</em></td>
</tr>
<tr>
<td>Desert ceanothus</td>
<td><em>Ceanothus greggii</em></td>
</tr>
<tr>
<td>Mexican bladdergoose</td>
<td><em>Salvia mexicana</em></td>
</tr>
<tr>
<td>Mojave yucca</td>
<td><em>Yucca brevifolia</em></td>
</tr>
<tr>
<td>Paperflower</td>
<td><em>Paulownia tomentosa</em></td>
</tr>
<tr>
<td>Saltbush</td>
<td><em>Hymenoclea salsola</em></td>
</tr>
<tr>
<td>Spiny horsebrush</td>
<td><em>Purshia mexicana var. stansburyana</em></td>
</tr>
<tr>
<td>Spliny Skeletonweed</td>
<td><em>Stephanomeria spinosa</em></td>
</tr>
<tr>
<td>Stenbury’s antelope brush</td>
<td><em>Purshia mexicana var. stansburyana</em></td>
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</table>

**Perennials**

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Botanical Name</th>
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</thead>
<tbody>
<tr>
<td>California primrose</td>
<td><em>Oenothera californica</em></td>
</tr>
<tr>
<td>Desert tobacco</td>
<td><em>Nicotiana obtusiflora</em></td>
</tr>
<tr>
<td>Desert four o’clock</td>
<td><em>Mirabilis multiflora var. pubescens</em></td>
</tr>
<tr>
<td>Eyebright</td>
<td><em>Eupatorium palustre var. palustre</em></td>
</tr>
<tr>
<td>Hardy goldenaster</td>
<td><em>Heterotheca villosa</em></td>
</tr>
<tr>
<td>Mojave aster</td>
<td><em>Xylorhiza tortilis var. tortilis</em></td>
</tr>
<tr>
<td>Prickly’s phlox</td>
<td><em>Stevia pinnata</em></td>
</tr>
<tr>
<td>Desert marigold</td>
<td><em>Baileya multiradiata</em></td>
</tr>
<tr>
<td>Wolly marigold</td>
<td><em>B. pluriradiata</em></td>
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**Annuals**

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Botanical Name</th>
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</thead>
<tbody>
<tr>
<td>Baby blue eyes</td>
<td><em>Nemophila menziesii</em></td>
</tr>
<tr>
<td>Bigelow’s coreopsis</td>
<td><em>Coreopsis bigelovii</em></td>
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<tr>
<td>Chia</td>
<td><em>Salvia columbariae</em></td>
</tr>
<tr>
<td>Coyote gourd</td>
<td><em>Girardinia pubescens</em></td>
</tr>
<tr>
<td>Desert pincushion</td>
<td><em>Anacyclus xerophyta</em></td>
</tr>
<tr>
<td>Fremont’s phlox</td>
<td><em>Phlox fremontii</em></td>
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<tr>
<td>Satureja</td>
<td><em>Satureja socotrina</em></td>
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**Cacti**

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Botanical Name</th>
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<tbody>
<tr>
<td>Barrelo cactus</td>
<td><em>Ferocactus cylindraceus</em></td>
</tr>
<tr>
<td>Beaver tail cactus</td>
<td><em>Ferocactus recurvirostris</em></td>
</tr>
<tr>
<td>Cholla</td>
<td><em>Cylindropuntia spinosissima</em></td>
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<tr>
<td>Mojave prickly-pear</td>
<td><em>Opuntia engelmannii</em></td>
</tr>
<tr>
<td>Engelmann’s hedgehog cactus</td>
<td><em>Echinocereus engelmannii</em></td>
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**Grasses**

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<th>Common Name</th>
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<tbody>
<tr>
<td>Desert hays</td>
<td><em>Stipa americanensis</em></td>
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<tr>
<td>Desert pepper grass</td>
<td><em>Eragrostis cilianensis</em></td>
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<tr>
<td>Big galleta grass</td>
<td><em>Pleuraphis rigida</em></td>
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<tr>
<td>Indian ricegrass</td>
<td><em>Achnatherum hymenoides</em></td>
</tr>
<tr>
<td>Purple three awn</td>
<td><em>Aristida purpurea</em></td>
</tr>
</tbody>
</table>

** will need supplemental water after establishment.

Penstemon species were left off because of the potential for intergrading with native rare species.
The following section is the PowerPoint presentation summarizing the existing and proposed utility infrastructure. This information will be developed further and utilized in the Development Concept Plan Utilities plans.
On Site Utilities
## Water Demand

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Peak Potable Water Demand (GPD)</th>
<th>Wastewater Normal Potable Water Demand (GPD)</th>
<th>Normal Potable Water Demand (GPD)</th>
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<tbody>
<tr>
<td>Ranch House</td>
<td>840</td>
<td>672</td>
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<tr>
<td>Bunkhouse</td>
<td>360</td>
<td>288</td>
<td>120</td>
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<tr>
<td>New Bunkhouse</td>
<td>1,500</td>
<td>1,200</td>
<td>720</td>
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<tr>
<td>New Research Facility</td>
<td>124</td>
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<td>10</td>
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<tr>
<td>New Manager’s Residence</td>
<td>240</td>
<td>192</td>
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<tr>
<td>New Caretaker’s Residence</td>
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<td>192</td>
<td>60</td>
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<tr>
<td>New Maintenance Building</td>
<td>1,000</td>
<td>200</td>
<td>1,000</td>
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<tr>
<td>Icehouse</td>
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<tr>
<td>New Guest Cottages</td>
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<td>192</td>
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<tr>
<td>Barn</td>
<td>1,000</td>
<td>200</td>
<td>1,000</td>
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<tr>
<td><strong>Sub Totals</strong></td>
<td><strong>5,544</strong></td>
<td><strong>3,235</strong></td>
<td><strong>2,910</strong></td>
</tr>
</tbody>
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### 3,000 to 5,500 gpd

### 5,900 gpd landscape

### 7 gpm = 10,000 gpd

---

**PROJECT DATA**

- **Annual Evapotranspiration:**
  - 3,000 to 5,500 gpd
  - 5,900 gpd landscape

- **Source Utilization Efficiency:** 70% percent

**LANDSCAPE DATA**

- **Peak Season Demand (GPM):** Flow required to accomplish the irrigation according to the operating schedule indicated

<table>
<thead>
<tr>
<th>Area Description</th>
<th>Plant Type</th>
<th>Irrigated Area (acres)</th>
<th>System Utilization</th>
<th>Crop Coefficient</th>
<th>Total Water Req. (IN)</th>
<th>Annual Water Req. (GAL)</th>
<th>Peak Season Demand (GPM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revegetated Areas</td>
<td>Native Plants</td>
<td>0.30</td>
<td>1.14</td>
<td>0.30</td>
<td>0.64</td>
<td>20,96</td>
<td>1,143,710</td>
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<tr>
<td>Building landscaping</td>
<td>Native Plants</td>
<td>0.09</td>
<td>0.33</td>
<td>0.33</td>
<td>0.64</td>
<td>20,96</td>
<td>1,143,710</td>
</tr>
</tbody>
</table>

**Total Annual Water Use (Gallons):** 1,233,710

**Peak Season Demand (GPM):** 12

---

*Source:* Walking Box Ranch Design Concept Plan
Wastewater

- 3,200 gpd WW
- Two 3,500 gallon tanks
- 4,500 sf leach field
- Treat and store for irrig?
Drainage
Drainage Basin

- 2,500 acres
- $Q_{100} \approx 500$ cfs
Drainage

County Planning Drainage Regulations

- 18” above street CI or top of Curb
- 18” above 100-yr flood

- Divert water around site development
- Stem Walls (18” above flood)
- Local grading
Fire Suppression Clark County Fire District

• Sprinklers -
  • Buildings over 10,000 must be sprinkled (250 gpm for 90 minutes = 22,500 gallons)
  • Automatic

• Hydrants -
  • Type 5 buildings need 1,500 to 2,000 gpm (size dependent) for 2 hours = 180,000 to 240,000 gal

• Raw water -

• Fire Protection Plan
  • Alternate Means and Methods
Fire Suppression

40,000 gallons
Swimming Pool Storage

20,000 gallons

20,000 gallons
Potable Water

4,500 gallons storage

2,500 gallons treated water storage
Swimming Pool Storage

20,000 gallons
Weather station **SEARCHLIGHT, CLARK COUNTY** is at about 35.46°N 114.91°W. Height about 1079m / 3540 feet above sea level.

**Average Rainfall**

<table>
<thead>
<tr>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>mm</td>
<td>21.4</td>
<td>22.2</td>
<td>21.6</td>
<td>9.7</td>
<td>5.4</td>
<td>2.6</td>
<td>24.6</td>
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<td>inches</td>
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<td>0.8</td>
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<td>0.1</td>
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<td>0.7</td>
<td>0.5</td>
<td>0.5</td>
<td>0.9</td>
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Source: **SEARCHLIGHT, CLARK COUNTY** data derived from NCDC Cooperative Stations. 57 complete years between 1931 and 1995

**ET (inches)**

<table>
<thead>
<tr>
<th></th>
<th></th>
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<tbody>
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<td>3.03</td>
<td>1.39</td>
<td>3.25</td>
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<td>5.52</td>
<td>3.86</td>
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<td>10.21</td>
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**Storm Recurrence 24 hr rainfall**

<table>
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<tr>
<th>Storm Recurrence</th>
<th>24 hr rainfall</th>
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<td>2 yr</td>
<td>1.6&quot;</td>
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<tr>
<td>5 yr</td>
<td>2.0&quot;</td>
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<tr>
<td>10 yr</td>
<td>2.4&quot;</td>
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<tr>
<td>26 yr</td>
<td>2.8&quot;</td>
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**Percentage Difference from Average**

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<th>94</th>
<th>95</th>
<th>96</th>
<th>97</th>
<th>98</th>
<th>99</th>
<th>2000</th>
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<tbody>
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<td>-58%</td>
<td>19%</td>
<td>-46%</td>
<td>28%</td>
<td>-8%</td>
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<td>13%</td>
</tr>
<tr>
<td>February</td>
<td>-50%</td>
<td>-7%</td>
<td>5%</td>
<td>14%</td>
<td>18%</td>
<td>-12%</td>
<td>20%</td>
<td>12%</td>
</tr>
<tr>
<td>March</td>
<td>-23%</td>
<td>6%</td>
<td>-18%</td>
<td>12%</td>
<td>1%</td>
<td>-2%</td>
<td>20%</td>
<td>5%</td>
</tr>
<tr>
<td>April</td>
<td>5%</td>
<td>-1%</td>
<td>-1%</td>
<td>9%</td>
<td>-13%</td>
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<td>20%</td>
</tr>
<tr>
<td>May</td>
<td>-4%</td>
<td>-5%</td>
<td>-22%</td>
<td>0%</td>
<td>-1%</td>
<td>4%</td>
<td>7%</td>
<td>21%</td>
</tr>
<tr>
<td>June</td>
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<tr>
<td>August</td>
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<td>-1%</td>
<td>6%</td>
<td>-8%</td>
<td>7%</td>
<td>-1%</td>
<td>-1%</td>
</tr>
<tr>
<td>September</td>
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<tr>
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<td>-8%</td>
<td>7%</td>
<td>19%</td>
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<tr>
<td>November</td>
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<td>-6%</td>
<td>-10%</td>
<td>1%</td>
<td>13%</td>
<td>4%</td>
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<td>-6%</td>
<td>2%</td>
<td>7%</td>
<td>11%</td>
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</tbody>
</table>

* Data provided by the weather station located at Freedom Park & administered by the City of Las Vegas
Weather station **SEARCHLIGHT, CLARK COUNTY** is at about 35.46°N 114.91°W. Height about 1079m / 3540 feet above sea level.

### Average Maximum Temperature

<table>
<thead>
<tr>
<th></th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Year</th>
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</thead>
<tbody>
<tr>
<td>°C</td>
<td>12.1</td>
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<td>18.1</td>
<td>22.8</td>
<td>28.1</td>
<td>33.8</td>
<td>36.6</td>
<td>35.2</td>
<td>31.2</td>
<td>25.1</td>
<td>17.3</td>
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<tr>
<td>°F</td>
<td>53.8</td>
<td>59.2</td>
<td>64.6</td>
<td>73</td>
<td>82.6</td>
<td>92.8</td>
<td>97.9</td>
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</table>

*Source: SEARCHLIGHT, CLARK COUNTY data derived from NCDC TD 9641 Clim 81 1961-1990 Normals. 30 years between 1961 and 1990*

### 24-hr Average Temperature

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<thead>
<tr>
<th></th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Year</th>
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</thead>
<tbody>
<tr>
<td>°C</td>
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<td>9.2</td>
<td>11.5</td>
<td>15.6</td>
<td>20.6</td>
<td>26.1</td>
<td>29.1</td>
<td>28</td>
<td>24.1</td>
<td>18.5</td>
<td>11.4</td>
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<tr>
<td>°F</td>
<td>44.4</td>
<td>48.6</td>
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<td>60.1</td>
<td>69.1</td>
<td>79</td>
<td>84.4</td>
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<td>75.4</td>
<td>65.3</td>
<td>52.5</td>
<td>44.8</td>
<td>63.1</td>
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</table>

*Source: SEARCHLIGHT, CLARK COUNTY data derived from NCDC TD 9641 Clim 81 1961-1990 Normals. 30 years between 1961 and 1990*

### Cooling Degree Days

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<tr>
<th></th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>°C</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>36</td>
<td>93</td>
<td>233</td>
<td>336</td>
<td>301</td>
<td>176</td>
<td>68</td>
<td>3</td>
<td>0</td>
<td>1255</td>
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<tr>
<td>°F</td>
<td>0</td>
<td>0</td>
<td>11</td>
<td>65</td>
<td>167</td>
<td>419</td>
<td>605</td>
<td>542</td>
<td>317</td>
<td>122</td>
<td>5</td>
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<td>2259</td>
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</table>

*Source: SEARCHLIGHT, CLARK COUNTY data derived from NCDC TD 9641 Clim 81 1961-1990 Normals. 30 years between 1961 and 1990*
There are three options for providing flood control to the new buildings:

1) Determine 100-year runoff water surface and build 1.5’ above.

2) Provide stem walls to guide stormwater away from new buildings (stem walls should be 18” over 100-year flow line).

3) Create berms (possibly surrounding the developed areas) to train water away (probably south then east) from building areas.

If we decide to build below grade, we can apply for a Finished Floor Waiver.

Paved legal access to the site (if we pave the entrance road) would require velocity x depth to be less than 6 (i.e., if 100-year flow depth is 1’, then velocity must be below 6’ per second).

We spoke about hydrants vs. sprinklers. Hydrants will require a minimum of 1,500 to 2,000 gpm for 2 hours, which is more water storage than we have on site. Sprinklers will be a better solution for several other reasons:

1) Sprinklers provide an automated response to fire threat. Response time to the site may be lengthy enough that fire fighters have no real potential to protect property, whereas sprinklers can contain and eliminate fires.

2) Lower storage volume (possibly we can utilize the large storage tank for fire suppression volume) is required for sprinklers than hydrants.

3) Using raw water (not potable) for fire suppression with County fire trucks and personnel may require decontamination of vehicles. Clark County Fire Department (CCFD) has concerns about staff exposure to raw water in a fire fighting sense.

The County would like to see some protection of existing structures in the Fire Protection Plan (but may not have jurisdiction to require it).

Our unique application will probably require an “Alternate Means and Methods” approach. We need to involve a Fire Protection Engineer (RMH has staff FPEs) to develop a Fire Protection Plan. This plan will be presented to CCFD for approval.
Phone Notes

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Walking Box Ranch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phone Note Dates:</td>
<td>Various</td>
</tr>
<tr>
<td>Project Number:</td>
<td>04030051.09</td>
</tr>
<tr>
<td>March 12, 2008</td>
<td></td>
</tr>
<tr>
<td>Nevada State Fire Marshall</td>
<td>Patricia Milton (Fire Protection Engineering Administrative Assistant III)</td>
</tr>
<tr>
<td>Office Phone:</td>
<td>(775) 684-7510</td>
</tr>
<tr>
<td>Office Fax:</td>
<td>(775) 684-7518</td>
</tr>
</tbody>
</table>

March 13, 2008, 3:00 pm
I called Daniel Sinagra, Senior Planner for Clark County South Planning Division (702-455-5673). Left a message for him to call me regarding fire code suppression regulations and ideas.

March 17, 2008, 3:00 pm
I called Patsy again.

Historic Buildings
25,000 gallon tank
Hydrants
Sprinkling

Regulations
- Time
- Flow
- Pressure

3-22
WALKING BOX RANCH
DESIGN CONCEPT PLAN
Phone Notes

Project Name: Walking Box Ranch  
Phone Note Dates: Various  
Project Number: 04030051.09

March 12, 2008  
Nevada State Fire Marshall  
Patricia Milton (Fire Protection Engineering Administrative Assistant III)

I called Patricia at 12:00 on 3/12/08; left a message for her to call me back.

This office is located in Carson City  
Office Phone: (775) 684-7510; Office Fax: (775) 684-7518  
Near Searchlight, NV  
Historic Buildings

25,000 gallon tank

Hydrants  
Sprinkling

• Time  
• Flow  
• Pressure

March 13, 2008, 3:00 pm

I called Daniel Sinagra, Senior Planner for Clark County South Planning Division (702-455-5673). Left a message for him to call me regarding fire code suppression regulations and ideas.

March 17, 2008, 3:00 pm

I called Patsy again.

Chuck

• International Fire Code: Hydrants, separation, fire sprinkler systems, then more specific documents for design of system
• NFPA-24 underground fire lines
• NFPA-13 sprinkler systems
• NFPA-14 standpipe systems
• Flow rates, minimum pipe size requirements, and hydraulic calculations
• Storage tank – Office type use NFPA code calls it light hazard occupancy 1/10 gal per min per sf over 1,500 sq ft
• Add 20% to 150 = 180 gpm, + 100 gpm hose stream (for outside) then 30 minute duration.
• Check reliaablesprinkler.com
Ken

There is not enough information here to be of much service to Mitch. However, I will make a few recommendations as follows:

1. Contact the Clark County Fire Prevention Bureau @ (702) 455-7316 and ask for the Fire Plans Checking Division. Searchlight would be in their jurisdiction.
2. Existing buildings would not require any new fire flow (i.e., water main/fire hydrant system) or fire sprinkler protection.
3. New construction could require a water main/fire hydrant system and/or fire sprinkler protection.
4. The Clark County Fire Department (CCFD) adopted the 2000 Uniform Fire Code (UFC) with their amendments incorporated into it and they call it their Clark County Fire Code. I do not have their code, but the 2000 Uniform Fire Code (UFC), Section 903.2 (page 28) would be the section that would require fire flow for fire protection for new construction. Note! The 2000 Uniform Fire Code is what CCFD started with before making their amendments.
5. The UFC, Appendix III-A, Section 5 (page 307) gives the requirements for how much fire flow is required. You can usually reduce the fire flow by 50% when you provide an approved fire sprinkler system. The minimum fire flow for one and two family dwellings is 1,000 gallons per minute at 20 PSI residual pressure.
6. The UFC, Appendix III-B, page 309 gives the requirements for fire hydrant locations and distribution.
7. The National Fire Protection Association’s NFPA 13 D is a fire sprinkler design for one and two family dwellings. It is a 2 head design, with 25 gallon per minute design, with a 20 minute water supply (I think, but don’t quote me as we do not have any systems not tied into our City water mains). There are companies that sell the fire pump and tank as a complete unit for rural areas. Note! If you are changing the occupancy class or use of the farm from residential to something else, you will have to use a different standard such as NFPA 13 and the minimum fire flow would be based on Table III-A on page 308 (minimum fire flow would be 1,500 GPM @ 20 PSI).
8. NFPA 24 is a Standard for the Installation of Private Fire Service Mains and their Appurtenances.
9. The Clark County Fire Dept. may be able to give some slack to the adopted regulations for new construction in rural areas (I think they have something amended in their code to allow them to do this)

As I already stated, I do not have the Clark County Fire Code so I cannot give advice based on their amendments. I hope this helps a little bit. Mitch will have to provide more information to them, such as what is triggering the need or concern and is it new construction or is it existing buildings that you want to protect.

Please feel free to give me call (including Mitch) if you have any other questions that I might be able to answer.

Thanks, Jim.

Jim Madden, Fire Marshal
City of Henderson, Building & Fire Safety Department
Office (702) 267-3634
Cell (702) 210-4610
Fax (702) 267-3605
Office Hours Mon.-Thur. 7:30 AM to 5:30 PM
Jim.Madden@cityofhenderson.com

March 27, 2008

I called Daniel Sinagra (he’s the wrong guy). He’ll send me to the 1st floor (some kind of planning?)

702-455-4314 – Department of Comprehensive Planning

I need:
• Drainage Requirements
• Fire Suppression Requirements
• Septic

Civil Engineering – Drainage, 702-455-4600 (Rick)
• FFE elevations to be provided
• Do a Drainage Study as per Clark County Drainage Manual 18” above 100-yr flood levels

Wade Gerstenkorn (702-455-4899) does reviews for Searchlight
5-acre area of improvement.
Rick 455-6433
Jake 455-0581
Parcel# APN: 242-00-002-007
3-4 acres in the SE corner
April 1, 2008
I called Jake to ask about Drainage Study, Clark County Dev Services CE Drainage. Left a message 4/1 at 9:45 am.

March 28, 2008
Code check called me back
jr@co.clark.nv.us
- Fire Control 10,000 sf or greater sprinkled is required
- If not required, we can use sprinklers as an option to fire hydrants
- NFPA-13 sprinkler systems

90 minutes in rural areas for sprinklers

Whichever building has greatest demand rules (don’t design for all 5 buildings and add up)

Hydrant ->1500 gpm minimum for 2 hours – 180.00 gallon tank
Sprinkler has smaller tank

Hazard 2 (ordinary hazard) is 90 minutes inside and outside hose at 250 gpm (combined total)

March 28, 2008
Cathleen
- Mechanical Engineer told her it would be expensive to install sprinklers in the existing building.
- Cost estimating is unnecessary. We’re not paid for that.

Ideas for Report

Water
- Exterior tank on the pump house will require a little arithmetic on your part and the dimensions are approximate.
- Diameter is 79”, based on the dimension of the structure roof to top of tank approximately 12’
- Building height 8’6”
- Do you remember if the tank went all the way down to the ground inside the pump house? If so, the tank would be roughly 20.5’H

V = PI x R^2 x H = 5655 ft^3 = 42,000 gallons. If it only fills to 2’ from top: 37,600 gal

R = 10’ (2x PI x R = 63)
D = 7’9”
V = 967 ft^3 = 7,200 gal use 7,500 as estimated before.

**Add pumping and chemical charts/figs see comments from email:

I’m looking at the well data right now. It seems like sustainable yield may be somewhere in the 7-8 gpm range. If that’s the case we should have plenty of water for the limited irrigation that will be necessary to re-establish moved plants and reclaimed areas and for irrigation around the main buildings. We should also have enough water for domestic needs for the staff working on site.

Fire water can also be pumped and stored. I’m checking on fire requirements and suppression needs – tank size will be based on meeting those requirements. We can fill the existing fire tank or a larger one slowly while we are not using water for irrigation or to fill the potable water storage tank – we should have plenty of well water to supply the fire storage tank.

Water quality issues include exceeding the state limits of arsenic and fluoride (and pH is a little high). It sounds like the water quality from the potable water supply system (post treatment) is in compliance with the requirements. So while the well water is not within the limits for arsenic, fluoride, and pH, once it is treated it should be fine.

Irrigation
- Assume irrigate daily
- 15% of green area
- Plus reveg for 2-3 years
- Peak irrigation rate is 5,900 gpd
- (reveg is 5,460 gpd)
- Assume well produces 7 gpm = 10,800 gpd
- Add Jpg version of Ryan’s irrigation estimate

Fire Protection
- Existing tank is: 37

---

>>> “Katie Wollan” <katie@arg-la.com> 6/21/2006 10:59 AM >>>

Hi Phil.

Main Water Tank
- 17’11” H x 63’ circumference

SO:
R = 10’ (2x PI x R = 63)
V = PI x R^2 x H = 5655 ft^3 = 42,000 gallons. If it only fills to 2’ from top: 37,600 gal

Bldgs over 10,000 sf must be sprinkled, bldgs < 10,000 can be sprinkled

Hydrant requires 1,500 gpm for 2 hrs, sprinklers 250 gpm for 90 minutes

Fire protection req’s will be 250 gpm for 90 minutes for sprinkled bldgs = 22,500 gallons which fits w/in our existing tank.

Old buildings would/could be sprinkled as per client preference.

(OR CHEMICAL SPRINKLING – probably not)

Energy
- Solar?
- Electric Demand Figure
**Drainage**
- FFE 100 yr FP + 18”
- Show flowpaths with new program on top of them.

**Wastewater**
- Septic – cost from Alliance?
- Cost for Chromoglass?
- Chromaglass CA-50 can treat 5,000 gallons per day of wastewater.

**Telecom?** - if time permits

April 1, 2008
I left a message with the Bureau of health protection services at 9:30 am Tuesday April 1, 2008 – maybe they can tell me about septic and leach field regs:

- In for Nebraska it’s 500’ from domestic municipal water supply well, 50 feet from surface waters, not w/in 100 yr floodplain.
- Single family dwellings Nevada State health division $498
- Commercial is different more than one unit on one system.
- Ranch employees, watchman’s quarters, etc is non

Fixture unit count is how we size the tanks

Alex Lanza – commercial septic NDEP
775-687-9468
PE to design system and submit plans w/ review fees to Alex.

Southern Nevada Health District (702-759-0502) handles all of Clark County. May have translated commercial to NDEP?
Are they permitting commercial? She will fax me over information on design and permitting.

Drainage 4/1/08
Jake 702-455-0581
Parcel# APN:242-00-002-007
NOFAZ

March 17, 2009
Kevin Eubanks 2:30 3/17/09

Try for anytime Tues afternoon
5 acre area of improvement.
Parcel# APN:242-00-002-007
7 mi West of Searchlight on Nipton Rd Hwy 164.

Kevin – The Flood Control District deals with planning major flood control facilities in Searchlight only, this more remote location would be the jurisdiction of Clark County Development Services. Our improvements will be within the property that we own and control.

Located on an alluvial fan, could be subject to some hazard. Whatever improvements that we do we want to make sure that they don’t cause an impact on other adjacent properties (first and foremost).

As far as our prop- if it’s real sheet flow do standard hydrology to show that our bligs are 1.5’ above the 100 yr flood level.

*be careful about apex flow rate (flow 2D model or standard FEMA – maybe Dowdy method).

We may or may not have to pull county permits. IF we do go through Clark County Development Services, develop a drainage study that shows how much flow causes a drainage hazard and how the property will safe and how the public will be safe and how adjacent facilities will not be affected.

Their floodplain management ordinance is at:
http://acequia.ccrfcd.org/FileLibrary2/FileLibrary.aspx

complete drainage manual:
http://acequia.ccrfcd.org/FileLibrary2/FileLibrary.aspx

Will we pull a permit?
March 18, 2009

Drainage
Layne Weber, Clark County Development Services (702-455-4856)

Would he review a project at walking box (7 miles east of Searchlight on Nipton Rd- Hwy 164)?
Could we meet next Tues or Wed?
Sample Drainage Report?

March 19, 2009

I left a message at Layne Weber’s office (and gave him the parcel number).
I need to schedule an appointment to meet with him Tues (after 9:30) or Wed (anytime) next week.

Fire Code Check
Rural Fire Code

Thank you,
Mitch Peters
EDAW
I called the fire plans checking division 12:00
Meet w/ plans checker this week

702 455 7311

Joanne Robinson reviews sprinkler plans jhr@co.clark.nv.us
Steve White plan checker who reviews civil plans (hydrants, etc) sww@co.clark.nv.us
ARCHITECTURE
## PROGRAM AREA SUMMARY

<table>
<thead>
<tr>
<th>Building / Space</th>
<th>Occupants / Calculation Notes</th>
<th>MP Area</th>
<th>Net Area</th>
<th>Enclosed Area (gross SF)</th>
<th>Outdoor Space (gross SF)</th>
<th>Site Footprint (gross SF)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>REHABILITATED BARN</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interpretive Displays</td>
<td>Locate in main barn space (Room 100) and Tack Room 101. Also interpret Tack Room 102 if not needed for storage, mechanical, or IT purposes.</td>
<td>1730</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information Desk &amp; Retail</td>
<td>Freestanding desk/kiosk in the main barn space; amount of retail space should be informed by a business plan.</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Retail Storage</td>
<td>Locate in Storage 103 at north side of barn (140 sf) or in the remodeled bunkhouse.</td>
<td>140</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equipment</td>
<td>If necessary, locate in Tack Room 102 or Storage 103.</td>
<td>120</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Covered outdoor spaces</td>
<td>porches: 280</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>2100</td>
<td>1990</td>
<td>2100</td>
<td>260</td>
<td>2360</td>
</tr>
<tr>
<td><strong>REMODELED BUNKHOUSE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men's Room</td>
<td>2 wcs, 1 urinal, and 2 lavs</td>
<td>200</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women's Room</td>
<td>3 wcs and 2 lavs</td>
<td>200</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family Restroom</td>
<td>1 wc and 1 lav</td>
<td>70</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Manager's Office</td>
<td>For docent staff; also includes small kitchen with sink, refrigerator, and microwave.</td>
<td>150</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee Area</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Changing Room</td>
<td>For docents / interpreters</td>
<td>75</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Secure Storage</td>
<td>For cash drawer from barn, etc.</td>
<td>55</td>
<td></td>
<td></td>
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<tr>
<td>Exhibit Prep Area</td>
<td></td>
<td>220</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Custodial Room / Mechanical</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Circulation Space</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Covered outdoor spaces</td>
<td>(Option 1) east porch: 342, west porch: 416, breezeway: 75</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>1550</td>
<td>1175</td>
<td>1101</td>
<td>833</td>
<td>1934</td>
</tr>
<tr>
<td><strong>REHABILITATED RANCH HOUSE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interpretive Exhibits</td>
<td>Locate in Great Room 100, Game Room 101, Guest Bedroom 102, Boys' Bedroom 106, and Kitchen 108.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multipurpose Room</td>
<td>Locate in Garage. Provide storage space for chairs. Also provide unisex accessible toilet in vicinity (to be used when rest of ranch house is not open).</td>
<td>675</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Catering Prep Area</td>
<td>Garage to also be used for &quot;Ranch Life Museum,&quot; which can be open when docent-led tours of the house are unavailable.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friends' Office</td>
<td>Locate in Maid's Room</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exhibit Preparation Space</td>
<td>In existing bunkhouse, if required</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Custodial Room / Storage</td>
<td>Locate in closet 111A. If additional space is required, demolish Bathroom 112 and gain 50 sf.</td>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unprogrammed Space</td>
<td>Bedroom 104 - Use as meeting or storage space</td>
<td>185</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanical</td>
<td>Second Floor - Use as meeting, work, or office space. Bathrooms and dressing rooms are character-defining features and must remain.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Covered outdoor spaces</td>
<td>Porches: 97', pool patio: 2127</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Final space allocations to be developed</td>
<td>5082</td>
<td>5082</td>
<td>3098</td>
<td>7106</td>
<td></td>
</tr>
<tr>
<td>TOTAL: REHABILITATION</td>
<td></td>
<td>8283</td>
<td>4191</td>
<td>11400</td>
<td></td>
<td></td>
</tr>
</tbody>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>NEW BUNKHOUSE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group Lodging, including bedrooms,</td>
<td>25 people = 2 x the existing bunkhouse capacity (1550 sq ft)</td>
<td>3100</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>bathrooms, and common space</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commons Building</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bedroom/Bathroom Buildings</td>
<td>main level: 2 bunkhouse buildings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bedroom/Bathroom Buildings</td>
<td>upper level: 2 bunkhouse buildings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laundry Room and Storage</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Custodial Room</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanical Room</td>
<td>Upper level only - Mechanical room at main level included in Commons Building GSF</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower Level covered outdoor spaces</td>
<td>Circulation/Porches/Stairs. Stairs = 288 GSF</td>
<td>2428</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper Level Sleeping Porch</td>
<td>Includes both covered and open area</td>
<td>894</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper Level covered trellis balconies</td>
<td></td>
<td>684</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>3740</td>
<td>5549</td>
<td>2428</td>
<td>6069</td>
<td>3641</td>
</tr>
<tr>
<td><strong>NEW GUEST COTTAGE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private Lodging Rooms, with unit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>kitchen and bathrooms</td>
<td>(2) units at 430 sq ft each</td>
<td>860</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Covered outdoor spaces</td>
<td></td>
<td>272</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>372</td>
<td>1134</td>
<td>272</td>
<td>839</td>
<td></td>
</tr>
<tr>
<td><strong>NEW CAMPGROUND AMENITIES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Restrooms and Shower</td>
<td>Provide (2) wcs, lavs, and showers for both men and women; these are code-mandated minimums;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>may desire more fixtures</td>
<td>230</td>
<td>374</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Covered outdoor spaces</td>
<td>Shade structure over eating area</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>400</td>
<td>374</td>
<td>1728</td>
<td>2102</td>
<td></td>
</tr>
<tr>
<td><strong>NEW RESEARCH BUILDING</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classroom / Studio Space</td>
<td>50 people at 15 sq ft per person min / divisible into smaller classrooms</td>
<td>750</td>
<td>720</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classroom Furniture Storage</td>
<td>program: 100SF</td>
<td>100</td>
<td>200</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lab</td>
<td>&quot;Clean&quot; lab</td>
<td>600</td>
<td>600</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lab Support/Storage</td>
<td>50% of total lab area</td>
<td>300</td>
<td>285</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lab</td>
<td>&quot;Dirty&quot; lab</td>
<td>600</td>
<td>600</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lab Support/Storage</td>
<td>50% of total lab area</td>
<td>300</td>
<td>285</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty Offices</td>
<td>(2) at 110 sq ft each</td>
<td>240</td>
<td>220</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Restrooms</td>
<td>(1) each, men's and women's accessible, single-occupancy restrooms</td>
<td>150</td>
<td>144</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IT Equipment / Support</td>
<td></td>
<td>100</td>
<td>94</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Custodial Room</td>
<td></td>
<td>100</td>
<td>44</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanical / Support</td>
<td>10% of program area</td>
<td>234</td>
<td>216</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outdoor Classroom</td>
<td>Includes walkways (1050 GSF) and exterior stair (66 GSF)</td>
<td>3474</td>
<td>3410</td>
<td>4660</td>
<td>1506</td>
<td>6166</td>
</tr>
<tr>
<td></td>
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</tbody>
</table>

- NEW BUNKHOUSE
- NEW GUEST COTTAGE
- NEW CAMPGROUND AMENITIES
- NEW RESEARCH BUILDING

**NEW MAINTENANCE BUILDING**

**NEW CARETAKER'S RESIDENCE**

**NEW MANAGER'S RESIDENCE**

**TOTAL: NEW CONSTRUCTION**

**TOTAL: REHABILITATION & NEW CONSTRUCTION**
<table>
<thead>
<tr>
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<th>Site Footprint (gross SF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEW MANAGER'S RESIDENCE</td>
<td>Residence, including living room, bedroom, kitchen, and bath</td>
<td>780</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>porch: 138, carport: 180</td>
<td>800</td>
<td>950</td>
<td>318</td>
<td>1268</td>
<td></td>
</tr>
<tr>
<td>NEW CARETAKER'S RESIDENCE</td>
<td>Residence, including living room, bedroom, kitchen, and bath</td>
<td>780</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Covered outdoor space</td>
<td>porch: 138, carport: 180</td>
<td>800</td>
<td>950</td>
<td>318</td>
<td>1268</td>
<td></td>
</tr>
<tr>
<td>NEW MAINTENANCE BUILDING</td>
<td>Workshop</td>
<td>Approximately the same size as a small two-car garage</td>
<td>350</td>
<td>340</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Building Maintenance Room</td>
<td>UNLV standard</td>
<td>150</td>
<td>154</td>
<td></td>
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<tr>
<td></td>
<td>Storage</td>
<td></td>
<td>100</td>
<td>112</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Covered outdoor space</td>
<td>Carport: 630, trash area: 100</td>
<td>750</td>
<td>730</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
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<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>1500</td>
</tr>
<tr>
<td>YARD</td>
<td></td>
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<td></td>
<td>900</td>
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<td>TOTAL: NEW CONSTRUCTION</td>
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<td></td>
<td></td>
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<td>14387</td>
</tr>
<tr>
<td>TOTAL: REHABILITATION &amp; NEW CONSTRUCTION</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>22670</td>
</tr>
</tbody>
</table>

**NEW RESEARCH BUILDING**

**NEW BUNKHOUSE**

**NEW GUEST COTTAGE**

**NEW CAMPGROUND AMENITIES**
RESEARCH CAMPUS: SUSTAINABLE DESIGN FEATURES

Sheltered Outdoor Classroom
Open Air Circulation via Covered Porches
Broad Overhangs on South & West Facing Facades
Photovoltaic Arrays on South and Southwest Facing Roofs
Breezeway
Sliding Window Shutters at West facing Facades Breezeways
Cross Ventilation in all Occupied Spaces
RESEARCH CAMPUS: SUSTAINABLE DESIGN FEATURES

- Sheltered Outdoor Classroom
- Open Air Circulation via Covered Porches
- Broad Overhangs on South & West Facing Facades
- Photovoltaic Arrays on South and Southwest Facing Roofs
- Breezeway
- Sheltered Outdoor Classroom
- Cross Ventilation in all Occupied Spaces

Sliding Window Shutters at West facing Facades

Breezeways
EXISTING BUNKHOUSE

HISTORIC BARN

4-8

WALKING BOX RANCH

DESIGN CONCEPT PLAN
EXISTING BUNK HOUSE

HISTORIC BARN
architecture

WALKING BOX RANCH
DESIGN CONCEPT PLAN
South Elevation

- Photovoltaic Array on south-facing Roof
- Native Rhyolite Masonry Wall
- Outdoor Classroom
- Outdoor Circulation via Covered Porch

- Enclosed Trash Area
- Maintenance Bldg & Gated Yard
- Labs
- Classroom
- Offices
CARETAKERS & MANAGERS RESIDENCE

South Elevation

Sunshades with interior light shelves

Large Front Porch facing views to mtns.

South Elevation

Architecture

4-15 WALKING BOX RANCH DESIGN CONCEPT PLAN

Carport

Mech

Bath

Kitchen

Bedroom

Living/Dining

Bedroom

Porch

N

0 0 0 16
GUEST COTTAGE

Deep porches facing Views South & East to New York & Plute Mtns

Shades on East Facade

Shared Storage

Ramp to Accessible Unit

Lower Level Unit (ADA Accessible)

Upper Level Unit

Views to New York & Plute Mtns.
CAMPGROUND PAVILLION

Rastra Block Restroom/Storage Building

Lightweight Shade Structure with Photovoltaic Roof

Shaded Cooking & Dining Area

Shade structure above

North

ADA Toilet

Food Stor.

Cooking Area

Covered Dining Area

ADA Shower

Toilet

Mech.
Important Characteristics
- Appropriate for the Desert
- Appropriate for the Historic Site
- Reasonable First Cost
- Low Maintenance
- Sustainable
- Design Excellence
Important Characteristics

- Appropriate for the Desert
- Appropriate for the Historic Site
- Reasonable First Cost
- Low Maintenance
- Sustainable
- Design Excellence
BUILDING MATERIALS & SYSTEMS

Native Rhyolite Masonry

Rastra Block Walls at Campground Pavilion

Salvaged Wood Floor

Photovoltaics on South facing Roofs

Photovoltaics on Ranch house Roof

Polished Concrete Floor

Exposed Trusses in Commons & Classroom

Interior of Plastered Straw Bales
Table of Contents

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13 The Barn Exhibit Concepts

23 The Bunkhouse Concepts

24 The Ranch House Concepts

33 Design Development
Introduction

This interpretive plan is the culmination of a multi-year, multi-agency planning process. The initial planning process yielded the document, Walking Box Ranch Interpretive Visioning Report and Prospectus (October 3, 2006). The WBR Interpretive Visioning Report and Prospectus served as a starting point for the development of this interpretive plan, providing initial insights into interpretive resources, interpretive theme and topics, and the interpretive audience. Individuals and organizations involved in the initial planning process are acknowledged below.

**BLM:**
- Kathy August
- Mark Boatwright
- Michael Reiland

**UNLV:**
- Jean Cline
- Vickie DeWitt
- Elizabeth Fraterrigo
- David Frommer
- Susan Jones
- Michelle Lettieri
- Daryl Privott
- Barb Roth
- Claude N. Warren

**Other Agencies:**
- Mauricia Baca (TNC)
- Betty Burton (YKL Ranch)
- Mary Cluvura (WBR)
- Mark Hall-Patton (Clark County Cannon Museum)
- Jane Bunker Overy (Searchlight Historian)

**Consultants:**
- Phil Hendricks (EDAW)
- Sara Lardinois (ARG)
- Dewey Livingston (ARG)
- Cathleen Malmstrom (ARG)
- Greg Oakes (EDAW)
- Robert Shaur (TAB)
- Sandy Treece Harnois (Condit Exhibits)

In early December, 2008 a project working group was assembled and met to continue planning for the development of WBR into an interpretive site and research center. Attendees at these planning sessions are listed below.

**BLM:**
- Bob Taylor
- Tom Busch
- Nancy Christ
- Melissa Perez
- Mark Boatwright

**Other Agencies:**
- Mauricia Baca (TNC)

**Consultants:**
- Phil Hendricks (EDAW)
- Mitch Peters (EDAW)
- Molly Cobbs-Lazon (EDAW)
- Cathleen Malmstrom (ARG)
- Sara Lardinois (ARG)
- Fred Denton (RMH)
- Ron Graves (RMH)
- Elaine Adams (RMI)
- Kathleen Luttrell (RMI)
- Gene Schafer (SDG)
- Frank Holliday (CTL Thompson)
- Sandy Treece Harnois (Condit Exhibits)
- Rich Smith (Condit Exhibits)
Working group members are generally in agreement regarding the significance of Walking Box Ranch and the unprecedented opportunities for interpretation, education, and research that exist there. However, BLM and UNLV do not yet share a common vision of some aspects of interpretation at WBR. Issues that remain somewhat unresolved at this point include:

1. The interpretive priority for Walking Box Ranch.
BLM feels that history should be the priority interpretive topic at the ranch since the ranch was acquired by BLM as a historic property and was recently listed on the National Register of Historic Places. UNLV's interpretive priorities for the ranch relate to the beauty and ecology of the desert, the human connection to the desert, and the sustainable management and stewardship of desert resources.

These two interpretive priorities are distinct but they are not mutually exclusive. For example, the beauty and restorative power of the desert can be included in the Clara Bow story, which is an integral part of the ranch's history. By overlapping and connecting stories and by interpreting different stories at different depths, a variety of seemingly disparate topics can be interpreted for visitors.

Throughout this interpretive plan, an effort has been made to link stories to create a comprehensive view of the ranch, express the human dimension, and engage visitors while making the ranch's history the primary interpretive priority. Linking stories, expressing the human dimension, and captivating and engaging visitors will be of paramount importance in the content development phase of the project.

2. The interpretive audience.
A detailed profile of the interpretive audience for WBR has not been developed yet, primarily due to the fact that a business plan has not been developed for the ranch. A business plan will further define traveler/audience demographics, assess the feasibility of tour companies and schools utilizing WBR, identify potential revenue sources, and address other matters that influence the visitor profile. Despite the absence of detailed visitor demographics, a general audience profile has been developed and is found in the Interpretive Audience section of this plan.
Interpretive Theme

The interpretive theme states the fundamental thing that visitors should know or understand about Walking Box Ranch. The theme does not express all the main topics and stories to be addressed, but rather, encapsulates them in a single statement. An interpretive theme is generally “for internal use only” and is not conveyed verbatim to the public. For this reason, it is more important for a theme to capture the interpretive focus rather than serve as an attractive marketing tag line. All interpretive exhibits, topics, stories, information, and strategies must reflect and support the theme. Adhering to the theme in this manner:

• Assures that interpretation focuses on key topics
• Contributes to consistency in messaging and branding
• Results in interpretation that is engaging and comprehensive, yet concise
• Enhances the visitor experience by organizing information in a meaningful way

The December, 2008 working group felt that the interpretive theme needed to convey that from the past to the present, people have had a strong, sometimes passionate connection to the Mojave desert. For some, that connection is made through ranching. For others, it is made through the biodiversity of the region or the rejuvenating power of the desert. The working group also felt that the ranch provides the opportunity to see both backward and forward in time, and learn from the evolution of ranching in the desert. While learning from the past, WBR is also looking to the future by becoming a model of sustainable design and a leading Mojave Desert research center. The following interpretive theme was developed to reflect the sentiments expressed during the December, 2008 workshop.

At Walking Box Ranch, the past, present, and future of the human connection to the desert is explored and responsible stewardship of desert landscapes is fostered.

In January, 2009, WBR was placed on the National Register of Historic Places. This, and a reassessment of interpretive priorities by BLM, contributed to BLM suggesting that the interpretive theme and topics focus primarily on the ranch’s history. Towards this end, the proposed interpretive theme has been revised to the following:

Walking Box Ranch’s unique history spans from Hollywood to the Mojave Desert and provides lessons in ranching, desert living, and humans in the desert.

The above theme reflects the importance of the ranch’s history, while also serving as a springboard to all the main interpretive topics identified by the working group, including the influence of the desert environment on ranching, local flora and fauna, the importance of water to ranching and domestic life, and the adaptive reuse of locally available materials. The proposed theme also reflects the fact that at this stage of the ranch’s development and marketing, history will be the primary draw for most visitors. However, even visitors drawn to the ranch for its history or for the Clara Bowl/Rex Bell story will be exposed to the numerous other topics identified and prioritized by the working group.
Interpretive Topics

Interpretive topics are the primary information areas or subjects to be interpreted at the Ranch. Topics can be diverse as long as they relate to and illustrate the interpretive theme. Topics are interpreted using specific information such as facts, data, anecdotes, stories, oral histories, graphics, etc. In December, 2008, a variety of interpretive topics were identified and prioritized by the project working group. For interpretive and logistical purposes, these topics were clustered into four main super-topics:

- Ranching in the desert
- WBR domestic life
- Ecosystem management
- Research at WBR

Subsequent to the December, 2008 workshop, BLM suggested that the history of WBR be the top interpretive priority. Consequently, slight modifications have been made to the interpretive topics and stories that were developed and prioritized by the working group. Each main topic as well as the stories/information within each topic, have been prioritized using the following categories:

High Priority: The topic, story or information is critical to the visitor’s understanding of the ranch and the interpretive theme, therefore, a relatively high percentage of the available resources will be devoted to interpreting the topic/story/information. For example, an entire exhibit may be dedicated to the topic or a high percentage of the content of a broader exhibit may be devoted to the topic/story/information.

Medium Priority: The topic, story or information enhances the visitor’s understanding of the ranch, the interpretive theme, or a high priority topic. Correspondingly, a moderate amount of exhibit space and/or exhibit content is dedicated to the topic, story or information. For example, one interpretive panel of a four-panel exhibit on the hardships of ranching in the desert (a high priority topic) may be dedicated to the medium priority topic, water use in ranch operation.

Low Priority: Due to limited resources, such as space and budget, a relatively small percentage of interpretive resources is dedicated to the topic, story or information. For example, the role of Viceroy Mining Company in preserving and furnishing the ranch house may be conveyed in a single paragraph within a broader exhibit interpreting the house’s history, architecture, and furnishings.

A revised list of prioritized interpretive topics/information/stories follows.

**Topic 1: Ranching in the Desert**

<table>
<thead>
<tr>
<th>Information, story, etc.</th>
<th>Priority within topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>The history, significance, and use of existing and lost buildings and structures including the corrals, barn, icehouse, blacksmith shop, and shop strip.</td>
<td>High</td>
</tr>
<tr>
<td>An overview of ranch operations.</td>
<td>High</td>
</tr>
<tr>
<td>The importance and use of water in ranch operations (non-domestic use).</td>
<td>Medium</td>
</tr>
<tr>
<td>The adaptive reuse of local materials including railroad ties, tin, and other materials.</td>
<td>Medium</td>
</tr>
<tr>
<td>Other sustainability topics to be woven throughout interpretation at the ranch.</td>
<td>Medium</td>
</tr>
<tr>
<td>The role of public land in the history and evolution of desert ranching.</td>
<td>Low</td>
</tr>
</tbody>
</table>


### Interpretive Topics continued

<table>
<thead>
<tr>
<th>Information, story, etc.</th>
<th>Priority within topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>The ownership history of the ranch (Walking Box Ranch, YKL, Viceroy)</td>
<td>Low</td>
</tr>
<tr>
<td>Partnerships involved with the Ranch (BLM-Viceroy-TNC, BLM-UNLV-TNC)</td>
<td>Low</td>
</tr>
<tr>
<td>The role of the railroad in the history and evolution of the Ranch</td>
<td>Low</td>
</tr>
<tr>
<td>The role of mining in preserving and furnishing the ranch house</td>
<td>Low</td>
</tr>
</tbody>
</table>

**Topic 2: Ranch Domestic Life**  
**Overall Priority: High**

<table>
<thead>
<tr>
<th>Information, story, etc.</th>
<th>Priority within topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Clara Bow/Rex Bell story, including:</td>
<td>High</td>
</tr>
<tr>
<td>- Their life at Walking Box Ranch (high priority)</td>
<td></td>
</tr>
<tr>
<td>- The desert as a refuge and place of rejuvenation (low)</td>
<td></td>
</tr>
<tr>
<td>- An overview of their post-WBR lives (low priority)</td>
<td></td>
</tr>
<tr>
<td>The realities and hardships of ranch domestic life.</td>
<td>High</td>
</tr>
<tr>
<td>The unique architecture of the ranch house, including ways in which the house was adapted to desert living.</td>
<td>Medium</td>
</tr>
<tr>
<td>The importance and use of water domestically.</td>
<td>Medium</td>
</tr>
<tr>
<td>Powering the ranch, from human and animal power to electricity to solar power</td>
<td>Low</td>
</tr>
</tbody>
</table>

### Topic 3: Ecosystem Management  
**Overall Priority: Medium**

<table>
<thead>
<tr>
<th>Information, story, etc.</th>
<th>Priority within topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local flora and fauna, including key plant and animal species, particularly those that illustrate adaptations to desert life.</td>
<td>Medium</td>
</tr>
<tr>
<td>The conservation, protection, and restoration of the desert</td>
<td>Low</td>
</tr>
<tr>
<td>An overview of the desert landscape and ecosystem, including basic climate and geology</td>
<td>Low</td>
</tr>
</tbody>
</table>

### Topic 4: Research at WBR  
**Overall Priority: Medium**

<table>
<thead>
<tr>
<th>Information, story, etc.</th>
<th>Priority within topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overview of the research center, its mission and activities.</td>
<td>High</td>
</tr>
<tr>
<td>Significant past, ongoing, and future research, including projects and the application of research findings.</td>
<td>Medium</td>
</tr>
<tr>
<td>Sustainable living in the desert environment</td>
<td>Medium</td>
</tr>
<tr>
<td>Opportunities for the public to get involved with the research center</td>
<td>Low</td>
</tr>
</tbody>
</table>
Although a comprehensive audience profile has not been completed for WBR, information on potential visitors and priority audiences has been gleaned from Walking Box Ranch Interpretive Visioning Report and Prospectus and from discussions with the project working group. In the absence of a business or marketing plan that identifies and targets the primary interpretive audience(s), the following general audience information was considered when developing this interpretive plan.

- **Drop-in visitors** are the primary audience during the initial years of WBR development and marketing. Drop-in visitors may include tourists based in Las Vegas and elsewhere, as well as residents of Las Vegas, Henderson, Searchlight and other towns in the region. Drop-in visitation will undoubtedly increase as WBR is marketed and as highway and airport construction increases traffic volume in the vicinity of the ranch. A proposed trail connecting WBR and Searchlight is also likely to increase drop-in visitation by equestrians and other outdoor recreationists.

- **Scientists, researchers, and college students** constitute an important audience both at the research facility and throughout WBR.

- **People renting/utilizing the ranch house for corporate retreats, meetings, and other activities** constitute an occasional audience.

- **Elementary and secondary school students** are not anticipated to be a significant audience.

- **Commercial tours and tour buses, particularly those originating in Las Vegas, are not anticipated to be a significant audience until/unless a business plan identifies tours as a viable market.**

Visitor access to exhibit areas and the overall visitor experience will depend on staffing. Unless the barn and the ranch house can be staffed they should not be open to the public.

<table>
<thead>
<tr>
<th>WBR Operating Status</th>
<th>Experience</th>
<th>Available to Visitors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Closed</td>
<td>Self-guided</td>
<td>Multi-panel kiosks at parking area and research center</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Interpretive trail and waysides</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Contemplative bench</td>
</tr>
<tr>
<td>Open but not staffed</td>
<td>Enhanced</td>
<td>Multi-panel kiosks at parking area and research center</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Interpretive trail and waysides</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Contemplative bench</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Interior of the barn</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ranch house garage</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Selected rooms on the ground floor of the ranch house (as part of a guided tour)</td>
</tr>
</tbody>
</table>
WBR lends itself to using a variety of locations, strategies, and media to interpret the ranch and the research center. A self-guided interpretive trail and exhibits housed in the ranch’s major buildings (barn, bunkhouse, ranch house) will provide visitors with comprehensive information on the ranch and will also provide a diversity of experience types ranging from self-guided to docent-led.

The main interpretive goals and strategies for five major areas of the ranch are outlined below.

<table>
<thead>
<tr>
<th>Landscape Location</th>
<th>Interpretive Goals</th>
<th>Strategies/Media</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parking area</td>
<td>• Welcome visitors to the ranch. • Provide wayfinding, orientation, administrative and regulatory information. • Introduce visitors to the interpretive theme and topics. • Serve as a terminus of the interpretive trail.</td>
<td>• Multi-panel kiosk • Start of self-guided interpretive trail with waysides</td>
</tr>
<tr>
<td>The Natural Area (northwest of the current entrance road) and perimeter trail</td>
<td>• Provide information on local flora, fauna, and the desert ecosystem. • Provide a contemplative area. • Provide information on the landscape restoration occurring at WBR.</td>
<td></td>
</tr>
<tr>
<td>The Ranchstead (The area north of the ranch house, including the ice house, corral, bunkhouse, and the site of the shop strip.)</td>
<td>• Interpret the history and hardships of ranching in the desert. • Provide information on the ranching operations of WBR. • Provide a secure facility for artifacts and exhibits. • Provide a location for visitors to interact with staff and volunteers. • Provide retail space for WBR items and memorabilia. • Provide restrooms and water for visitors. • Showcase and support local communities.</td>
<td>• Self-guided interpretive trail with waysides • Static and interactive exhibits located in the barn • Artifacts located in the barn • Reception counter and retail space located in the barn • Restrooms and water located at the bunkhouse • Changeable, community-based exhibits located at the bunkhouse.</td>
</tr>
<tr>
<td>The Research Center</td>
<td>• Provide information on sustainability and adapting to the desert environment. • Provide wayfinding information.</td>
<td>• Multi-panel kiosk</td>
</tr>
</tbody>
</table>
The Interpretive Trail Concepts

The Interpretive Trail
An accessible, self-guided interpretive trail will wind through the property, bringing visitors to sites that are key to understanding and appreciating WBR. The trail will be anchored by multi-panel kiosks, one at the parking area and one at the gate separating the ranch house from the research center.

The trail will feature wayside panels mounted in low profile bases. Each wayside will bear the WBR brand and a wayside #. Selected waysides will include a push button-activated audio unit that plays part of a relevant oral history or other recording. Consistent with the ranch’s goals of showcasing adaptations to the desert environment and practicing sustainability, audio units will be solar powered. Waysides will also display a telephone number that visitors can call to listen to a recording containing more detailed information on the wayside’s interpretive topic. This type of remote access is relatively inexpensive and easily updated, and serves the ranch’s primary interpretive audience – drop-in visitors who are likely to have a cell phone.

The following general interpretive trail layout, including kiosks and waysides is proposed. The layout roughly flows from the parking area, through the ranchstead to the ranch house, to the research center border, and into the property perimeter. Specific sites for some interpretive trail wayside signs will be selected and site-specific topics will be identified in the next draft of this document.

1. Parking area multi-panel kiosk
2. Icehouse wayside
3. Barn wayside
4. Corrals wayside
5. Shop strip and blacksmith shop wayside
6. Historic gate/guest house wayside
7. Ranch house wayside
8. Ranch house wayside
9. Ranch house wayside
10. Research center multi-panel kiosk
11. Perimeter trail wayside
12. Perimeter trail wayside
13. Perimeter trail wayside
14. Perimeter trail wayside
15. Perimeter trail wayside
16. Perimeter trail wayside
17. Perimeter trail wayside with a contemplative bench
# Kiosk and Wayside Concepts

<table>
<thead>
<tr>
<th>Kiosk or Wayside Location</th>
<th>Topic(s)</th>
</tr>
</thead>
</table>
| Parking Area Multi-panel Kiosk | - Welcome to WBR  
- Wayfinding and map of the WBR complex  
- Hours of operation, self-guided tour, guided tours, phone numbers, web site(s)  
- Explanation of WBR: Ranchstead Ranch house Research center Conservation area  
- Overview of the Partners: BLM, UNLV, TNC  
- Overview of the Bow/Bell and Hollywood story |
| Coral                     | Topic related to ranch operations                                         |
| Outside the ice house     | - Ice house use  
- Adapting to desert life                                                  |
| Outside the barn          | - The barn in ranch operations  
- Adaptive reuse of materials                                                |
| Former location of the shop strip | Topic related to ranch operations                                      |
| Site of the historic ranch gate north of the ranch house | - The guest house and historic gate  
- Topic related to ranch operations and ranch domestic life |
| Outside the ranch house (2-3 waysides) | - Architecture of the ranch house  
- Adaptations to desert living                                               |
| Research Center Multi-panel Kiosk | - Wayfinding; map of the WBR complex  
- Explanation/description of the research center  
- Overview of research at the Center  
- Tortoise conservation including partnerships  
- Changeable panel |
| Locations along property perimeter to be determined (3-4 waysides) | Conservation, protection, restoration of the desert  
To be determined  
To be determined  
To be determined |
| Locations in the Natural Area to be determined (4-5 waysides) | Local flora and fauna  
Local flora and fauna  
Conservation, protection, restoration of the desert  
Desert as rejuvenator, restorer |
Kiosk and Wayside Concepts
The Barn Exhibit Concepts

THE BARN
Open only when staffed, the barn will be the focal point of interpretation in the ranchstead area. Exhibits, merchandise, and the availability of staff all make the barn a key location. The barn is the primary area for interpreting ranching in the desert and the ranching operations at WBR. Towards this end, four main exhibit areas have been created within the barn, with each area focusing on separate but related topics and functions.

- Reception and retail area
- Ranching in the desert exhibit area
- Walking Box Ranch exhibit area
- “Create a Postcard” area

![Diagram of the barn exhibit concepts](image-url)
The Barn Exhibit Concepts

BARN ENTRY VIEW
The Barn Exhibit Concepts

RECEPTION AND RETAIL AREA
This area will contain the reception counter and retail merchandise. Minimal interpretation will occur in the area, perhaps being limited to wall-mounted movie posters of Clara Bow and Rex Bell films.
**The Barn Exhibit Concepts**

**RANCHING IN THE DESERT EXHIBIT AREA**

Major exhibits in this area include:

- The hardships of desert ranching (availability of fodder and water, extreme temperatures, remoteness).
- An overview of the history and evolution of ranching in the desert, including an orientation to BLM land in the desert southwest.
The Barn Exhibit Concepts

RANCHING IN THE DESERT EXHIBIT AREA
Major exhibits in this area include:

- An interactive exhibit allowing visitors to play the role of ranch foreman and make decisions that affect the viability of the ranch. This exhibit will allow visitors to apply the knowledge they acquired from the previous two exhibits and make decisions regarding ranch operations. By taking certain actions, visitors will see the consequences of their decisions on the herd, the ranch, and the desert. For example, the consequences of putting a herd on winter range without supplying supplemental feed can be revealed. Or visitors may learn that a certain amount of water is needed daily to support a herd of a certain size. By making choices on how to manage the ranch, visitors will not only learn about ranch operations they will also learn about ranching sustainably in the desert.
The Barn Exhibit Concepts

WALKING BOX RANCH EXHIBIT AREA
This major exhibit area will interpret the operations of the ranch. Exhibit will include:
- An overview and explanation of the ranching activities that occurred at WBR.
- "A Day in the Life" of a cowboy at WBR
- The adaptive reuse of materials on the ranch
- The ranch tack room
- An interactive exhibit allowing visitors to mount a saddle
- An interactive exhibit allowing visitors to guess the function and use of various ranch tools and implements
- A blacksmithing exhibit
The Bunkhouse Concepts

WALKING BOX RANCH EXHIBIT AREA

Area 3 is the proposed location for a blacksmithing exhibit containing tools and artifacts from Rex Bell Jr’s blacksmith shop. Several locations were considered for this exhibit, and reconstructing the blacksmith shop on-site was also considered. The barn was selected as the optimum location for this exhibit for the following reasons.

- Thematically, the topic of blacksmithing fits most appropriately in the barn, where ranch operations is interpreted
- The barn is a relatively secure location for tools and items because it will be locked when closed and staffed when open
- Reconstructing the blacksmith shop on site would create another building requiring staffing or would require tools and items be displayed in secure, museum-like cases or otherwise secured in place resulting in an “unnatural” looking exhibit. By using the barn, a more dynamic and realistic exhibit can be created to showcase the items
- Using the barn eliminates the need to make a reconstructed blacksmith shop ADA accessible and compliant with building and safety codes. This also eliminates the costs associated with compliance
- Reconstructing the blacksmith shop would increase the building footprint at WBR possibly resulting in the loss or reduction in size of another building.
- The number of high quality tools and items does not warrant being housed in an entire building. It will be more powerful and effective to concentrate the items in one section of the barn than to have them dispersed in a larger space (the blacksmith shop)
- The shop building itself is not integral to understanding blacksmithing. Displaying the items in a visually engaging exhibit in the barn focuses the visitor’s attention on the items rather than on the shop building
- The proposed blacksmithing exhibit creates a dramatic visual focal point in the barn and the use of a figurative sculpture in the exhibit brings the human element to the exhibit
- Placing the blacksmith tools and items in the barn provides a link to the adjacent, interactive exhibit on other ranch tools and their use
The Barn Exhibit Concepts

WALKING BOX RANCH EXHIBIT AREA
A “view” of the interior of a blacksmith shop
The Barn Exhibit Concepts

“CREATE A POSTCARD” AREA
In this area, visitors will be able to have their picture taken in front of one of several backgrounds they can select from a computer program. Props, such as cowboy hats, lariats, a branding iron, and other ranch-related items can also be available for visitors to use in their photo. The photo can then be converted to and sent as an electronic postcard, providing the visitor and the postcard recipients with a souvenir of the ranch. This activity not only has inherent value as an interpretive activity and visitor experience, it serves as a marketing tool, since the photo will promote the ranch to the recipients. Possible postcard backgrounds into which the visitor can insert themselves include:

- A photo of Clara Bow and Rex Bell
- A photo of a group of celebrities at the ranch
- A saddled and bridled horse
- Historic photos of ranch operations, such as branding
- A desert landscape
- A large Joshua tree
- A tortoise or with researchers in the field

The computer kiosk that is the focal point of this exhibit will be sensitive to temperature extremes and should be stored in the climate controlled room in the barn when the barn is closed to the public. The kiosk will be designed to be portable so that it can be moved into and out of storage by a single person.
The Barn Exhibit Concepts

"CREATE A POSTCARD" AREA
The Bunkhouse Concepts

THE BUNKHOUSE
The bunkhouse will not be a focal point for interpretation, however, some interpretive exhibits should be placed there for the benefit of visitors using the restroom, getting water, seeking shade, or otherwise spending time in the ranchstead area. Since architectural plans for the bunkhouse are not yet completed, interpretive planning for this building is subject to change. At this point in the planning process, the bunkhouse is seen as the location for changeable exhibit space that can be used by local communities and organizations or for special activities. Examples include:

- A display of items from the collection of the Searchlight Historic Museum
- A display of photos from a desert photography contest
- Artifacts related to an upcoming silent film festival
- A display of items from the Boulder City Museum

The changeable exhibits proposed for the bunkhouse will not only strengthen ties to and partnerships with local communities and organizations, they will provide fresh new exhibits, supplied by local partners, to draw repeat visitors to the ranch.
The Ranch House Concepts

THE RANCH HOUSE
When open to the public, the garage and the first floor of the house will be focal points for interpreting ranch domestic life and the Clara Bow/Rex Bell story. Interpretive strategies and media in the garage and house have been designed to reflect the fact that the house will be used as a meeting space, retreat center, and focal point for special events and activities on the ranch. Accordingly, interpretation will be effective and engaging while not interfering with the functioning of the house and garage.

THE GARAGE
The garage will contain a large video monitor; a wall mounted dry erase board and bulletin board; wall-mounted exhibits; a moveable, multi-panel display; and display cases for Hollywood-related artifacts. Topics to be interpreted include:

- The Clara Bow/Rex Bell story
- The Hollywood story, including a celebrity “wall of fame”
- The realities and hardships of ranch domestic life
- Mining as it relates to the preservation and furnishing of the ranch house
The Ranch House Concepts

**GARAGE VIDEO WALL** (write on wipe off storage walls)
The Ranch House Concepts

GARAGE WALL OF FAME
The Ranch House Concepts

GARAGE FREE STANDING EXHIBIT
The Ranch House Concepts

THE RANCH HOUSE INTERIOR

Interpretation inside the ranch house will rely heavily on docents leading tours. To assure tour quality and consistency, a standardized tour should be developed and docents should be trained in its content and delivery. In addition, docents should receive training in interpretation, leading tours, and hospitality. If possible and practical, docents should meet the interpretation training standards adopted by UNLV and Clark County.

In addition to the personal interpretation provided by docents, non-personal interpretive media will also be used in the house. Small wall plaques in the kitchen, great room, bar area, and boys’ bedroom will provide a historic view of the room as well as information on the room’s use during the ranch’s heyday. To the extent possible, each of these rooms should be refurnished to reflect the Clara Bow/Rex Bell period of the ranch.

The second bedroom on the ground floor will not be furnished so that it can serve as the primary exhibit and interpretive space in the house. Wall mounted panels, large and small display cases, and a touch screen computer kiosk will be used to interpret and bring the ranch house to life. For example, the touch screen can display a floor plan of the house (including the second floor). When visitors touch a particular room, historic photos of the room appear on screen along with the option of listening to an oral history related to the room and ranch life. Topics to be interpreted in the second bedroom include:

- The significant rooms in the house, including rooms on the second floor
- The celebrity life of the house
- The realities and hardships of ranch domestic life
- The importance and use of water domestically
- House adaptations to the desert environment
- The patio and pool area
The Ranch House Concepts

THE RANCH HOUSE INTERIOR
Interpretation inside the ranch house will rely heavily on docents leading tours. To assure tour quality and consistency, a standardized tour should be developed and docents should be trained in its content and delivery. In addition, docents should receive training in interpretation, leading tours, and hospitality. If possible and practical, docents should meet the interpretation training standards adopted by UNLV and Clark County.

GREAT ROOM
The Ranch House Concepts

THE RANCH HOUSE INTERIOR
In addition to the personal interpretation provided by docents, non-personal interpretive media will also be used in the house. Small wall plaques in the kitchen, great room, bar area, and boys’ bedroom will provide a historic view of the room as well as information on the room’s use during the ranch’s heyday. To the extent possible, each of these rooms should be refurnished to reflect the Clara Bow/Rex Bell period of the ranch.

KITCHEN
The Ranch House Concepts

THE RANCH HOUSE INTERIOR
The second bedroom on the ground floor will not be furnished so that it can serve as the primary exhibit and interpretive space in the house. Wall mounted panels, large and small display cases, and a touch screen computer kiosk will be used to interpret and bring the ranch house to life. For example, the touch screen can display a floor plan of the house (including the second floor). When visitors touch a particular room, historic photos of the room appear on screen along with the option of listening to an oral history related to the room and ranch life. Topics to be interpreted in the second bedroom include:

- The significant rooms in the house, including rooms on the second floor
- The celebrity life of the house
- The realities and hardships of ranch domestic life
- The importance and use of water domestically
- House adaptations to the desert environment
- The patio and pool area
SECOND BEDROOM
Design Development Phase 2

The Design Development for Walking Box Ranch is not included under the current contract. However we feel it is important to detail the next steps in the Interpretive Design Development Process.

The longest and often the most interesting phase of a project is the Design Development phase. Concept realization and careful planning in this phase will bring the project to completion successfully and on time. Drawings will be generated, reviewed and revised to complete this phase. Coordinating with the interpretive researcher/writer, updating schedules, meeting weekly and bi-weekly via conference calls, sketching, fabrication discussions, prototyping, and mock-ups – all are necessary and important aspects of Design Development.

All exhibits will be designed and produced for easy maintenance and durability. All interactive components will be engineered and produced with adults, children, and ADA compliance in mind. Materials will be selected to withstand extremely diverse temperatures and heavy visitor pressure.

Throughout all phases of this project, labor and material costs will be closely tracked utilizing MAS 90 accounting software. This enables access to job cost details at any point in the project. All team members will be coded so all costs can be tracked at all times.

We believe it is important to keep an open line of communication with your team. We have found that it benefits both parties if we discuss the changes before committing to the final design concepts. This often entails faxing rough sketches back and forth to confirm that we have a complete understanding of your ideas and are illustrating them in a comprehensive manner that is agreed upon by both parties.

Final Exhibit Design and Engineering

In this phase the interpretive team expects no surprises, but maintains a reserve of contingency time to allow for adequate review and revisions of the final documents based on findings. Feedback from the team’s engineers will carefully factor into our refinement of the design. At this point all of the precise relationships between the building, the exhibits, and the exhibit’s operation come smoothly together.

The interpretive team will complete the design development documents and finish written specifications for exhibit operation.

Condit Exhibits will complete the construction documents and finish written specifications for exhibit operation, performance, warranty, etc. All construction drawings will be created in AutoCAD 2000.

Each AutoCAD construction drawing, electrical and lighting plan, base building modification plan, and graphic layout will require written approval prior to proceeding to the bid document phase.

Final graphic files will be submitted for approval and modification. Exhibit descriptions, prototypes, treatments, storyboards, sources and equipment lists will go through final reviews and approvals. Full size panels will be used for informative evaluation prior to moving to the next phase.

The materials and equipment to be furnished will conform to applicable provisions of standards published by Underwriters’ Laboratories, Inc. (UL), National Electrical Manufacturer’s Association (NEMA), American National Standards (ANSI), and the National Electrical Code (NEC). The entire installation will need to conform to the latest applicable local, state, and national codes and regulations.
Design Development Phase 2

A interim design development submittal will include but not be limited to the following:

60% Design Development Submittal

Package to include:

- Exhibit Floor Plans
  - Will be created based on the information in the Final Concept Interpretive Plan
- Exhibit Theme Plans
  - Will be revised based on the information in the Final Concept Interpretive Plan
- Exhibit Media and Sound Plan
  - Will be created based on the information in the Final Concept Interpretive Plan
- Revised Exhibit Outlines
  - Detailed descriptions of Exhibits – break down of all components within the exhibits and how they function. Any Dioramas will have complete list of all items i.e. sculptures, artifacts, ground covers etc.
  - Relationship to Central Themes
  - Draft Interpretive Text
  - Primary bibliographic source
- Detailed Colored Renderings for each Exhibit Component and Elevation
  - Each exhibit component will be illustrated organized by themes
  - Perspective views for each theme
  - Will incorporate all input from the WBR team
- Draft Graphic Design

- Material, Color, and Finish Samples
- Electrical and Lighting Plans
  - Based on comments from the Final Concept Interpretive Plan
- Production Cost Estimate
  - Detailed Cost Estimate for the approved exhibits direction. Estimate to be broken down by individual exhibits, transportation and installation
  - All designs and estimates should fall within the production cost identified in the interpretive planning phase
  - Any deviations from the original budget will be reviewed and approved before proceeding
### BLM WALKING BOX RANCH
### MASTER PLAN DESIGN ESTIMATE OF PROBABLE COST - DRAFT FOR REVIEW ONLY
### EDAW, INC.

**PLAN DATE:** 3/26/2009
**PREPARED BY:** PEH, GO
**CHECKED BY:** PEH, SS

#### Site Demolition

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<th>Item Description</th>
<th>Unit Cost</th>
<th>Unit</th>
<th>QTY.</th>
<th>Cost</th>
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**Total Project Cost:** $46,000

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**Total Project Cost:** $241,480

#### Highway Entry Improvements

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**Total Project Cost:** $261,480

#### Future Phase Maintenance Projects

**Total Project Cost:** $133,099

### Concept Design Estimate

Confidential

1 of 6
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Concept Design Estimate Confidential 2 of 6

6-2 WALKING BOX RANCH

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**Concept Design Estimate Confidential** 3 of 6
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<tr>
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### Phase 1

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### Total Project Cost

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<td>$150.00</td>
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<td>Allow</td>
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<td>Allow</td>
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<td>The Ranch House - Interpretive Exhibits</td>
<td>Allow</td>
<td>$21,833.00</td>
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<td>The Garage - Interpretive Exhibits</td>
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### Notes:
1. This is an order of magnitude estimate and is based on work completed to date. The quantities shown are approximate.
2. Construction Costs do not include costs incurred for phased project development.
3. Contingency percentages are included in the estimate. The schematic design contingency accounts for the many details and associated costs that are yet unknown. Within master planning and schematic design phases, 15 to 20 percent is the accepted norm. The owners construction contingency is included as a budget percentage that should be carried through the construction on the project. This contingency amount allows for change orders and unforeseen conditions and/or costs that may be encountered during the construction phase.
4. Costs given assume that all improvements will be made under contract with a qualified contractor. No adjustments have been made for volunteer labor and/or donated materials.
5. Rough project phasing has been included in the form of "Add Estimates." Construction priorities within these columns are to be determined.
**CLARK COUNTY, NEVADA**

**WALKING BOX RANCH**

**MASTERCATEGORY**

50% Conceptual Construction Cost Estimate

March 25, 2009

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**REMODEL BUNKHOUSE (OPTION 2)** CREDIT ($10,265)

NOTES:
- Costs are for Construction only.
- Costs are for Buildings Only and Do Not Include Site Improvements.
- Costs are Based on a Traditional Open Competitive Bid Basis.
- Costs are Based on a Construction Start of Spring 2010.

Parametrix, Inc.     (801) 733-5900
### CLARK COUNTY, NEVADA

#### WALKING BOX RANCH

### MASTER SUMMARY

#### NEW BUNKHOUSE

**Costs are for Construction only.**

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**Notes:** Costs are for Construction only. Costs are based on a Traditional Open Competitive Bid Basis. Costs are based on the Construction start of Spring 2010.
### Cost Summary

**Costs are for Construction only.**

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<tr>
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<td>995 GSF</td>
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<tr>
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<td></td>
<td>10.0% $27,168</td>
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<tr>
<td><strong>Contractor Bond</strong></td>
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<td>2.0% $4,644</td>
</tr>
<tr>
<td><strong>Contractor General Conditions</strong></td>
<td>8.0%</td>
<td>$18,576</td>
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<td><strong>Sub-Total (Construction)</strong></td>
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<td>32.33</td>
<td>$32,173</td>
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<td><strong>Specialties</strong></td>
<td>4.62</td>
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<tr>
<td><strong>Finishes</strong></td>
<td>12.37</td>
<td>$12,307</td>
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<tr>
<td><strong>Doors and Windows</strong></td>
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<tr>
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<td><strong>Concrete</strong></td>
<td>21.09</td>
<td>$20,982</td>
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<tr>
<td><strong>Site Work (Building Related)</strong></td>
<td>2.91</td>
<td>$2,898</td>
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<tr>
<td><strong>Sub-Total (Electrical, Specialty, Finishes, etc)</strong></td>
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<td>$51,160</td>
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**Notes:**
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- Costs are Based on a Traditional Open Competitive Bid Basis.

**Inflation to Spring 2010, Allow for 4.0%**

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- Costs are Based on a Traditional Open Competitive Bid Basis.
# Walking Box Ranch

## New Guest Cottage

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### New Guest Pavilion

### New Construction Cost Estimate

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### New Bunkhouse

### New Construction Cost Estimate

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### New Camp Bathroom

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### Notes

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- Costs are for building only and do not include site improvements.
- Costs are based on a construction start of Spring 2010.
## 02 SITE WORK (Building Related)

### Excavation & Backfill, Foundation
- **Unit:** 50 CY
- **Unit Cost:** $32.20
- **Total Cost:** $1,610

**SUB-TOTAL (SITE WORK):** $1,610

### CONCRETE
- **Concrete Specialties:** 2 CY
- **Unit Cost:** $7.90
- **Total Cost:** $16,240

**SUB-TOTAL (CONCRETE):** $16,240

### 03 FRONDS
- **Floor & Ceiling Fossils:** 4 CY
- **Unit Cost:** $4.00
- **Total Cost:** $16,000

**SUB-TOTAL (FRONDS):** $16,000

### 07 THERMAL AND MOISTURE PROTECTION
- **Clay Tile Roofing, Flashings & Batt Insulation:** 424 SF
- **Unit Cost:** $20.70
- **Total Cost:** $8,777

**SUB-TOTAL (THERMAL AND MOISTURE PROTECTION):** $8,777

### 06 WOOD AND PLASTICS
- **Concrete Spread Footings, Reinf:** 2 CY
- **Unit Cost:** $534.75
- **Total Cost:** $1,070

**SUB-TOTAL (WOOD AND PLASTICS):** $1,070

### 10 SPECIALTIES
- **Exterior & Interior Windows:** 124 SF
- **Unit Cost:** $46.00
- **Total Cost:** $5,704

**SUB-TOTAL (SPECIALTIES):** $5,704

### 09 FINISHES
- **Floor & Ceiling Finishes:** 4,856 GSF
- **Unit Cost:** $10.35
- **Total Cost:** $50,260

**SUB-TOTAL (FINISHES):** $50,260

### 08 DOORS AND WINDOWS
- **Exterior & Interior Doors:** 12 LEAF
- **Unit Cost:** $4,830
- **Total Cost:** $58,340

**SUB-TOTAL (DOORS AND WINDOWS):** $58,340

### 15 MECHANICAL
- **Mechanical Distributions:** 4,856 GSF
- **Unit Cost:** $11.75
- **Total Cost:** $57,140

**SUB-TOTAL (MECHANICAL):** $57,140

### 14 ELECTRICAL
- **Electrical Distributions:** 4,856 GSF
- **Unit Cost:** $9.75
- **Total Cost:** $47,125

**SUB-TOTAL (ELECTRICAL):** $47,125

### DESIGN CONCEPT PLAN

**TOTAL (Construction):** $766,026

**NOTES:** Costs are for Construction only.

**OPTION:**

- **Total:** $157,756

**NOTES:**

- Costs are for Construction only.

**OPTION:**

- **Total:** $67,195

**NOTES:**

- Costs are for Construction only.

**OPTION:**

- **Total:** $11,486

**NOTES:**

- Costs are for Construction only.
### WALKing BOX RANCH

**SUmmary Remodel Barn**

50% Conceptual Construction Cost Estimate
March 25, 2009

<table>
<thead>
<tr>
<th>SECTION</th>
<th>UNIT UOM</th>
<th>UNIT COST</th>
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<tr>
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**Building Materials**

- Wood Structure, Columns
- Wood Railroad Ties, Replace
- Wood Sheathing & Roof Structure, Gyp Board
- Base / Upper Cabinets
- Exterior & Interior Doors
- Barn Door w/ Cladding

**Electrical**

- Power & Distribution
- Lighting & Devices
- Electrical Panels & Switches
- Selective Demolition, Building

**Mechanical**

- HVAC Demolition
- HVAC Installation & Planning (or renovation)

### WALKING BOX RANCH

**Remodel Ic House**

50% Conceptual Construction Cost Estimate
March 25, 2009

<table>
<thead>
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<th>SECTION</th>
<th>UNIT UOM</th>
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<tr>
<td>01 ELECTRICAL</td>
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<tr>
<td>Electrical Fixtures</td>
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</tr>
<tr>
<td>Mechanical Fixtures</td>
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**Building Materials**

- Concrete Spread Footings, Reinf
- Exterior & Interior Doors
- Wood Sheathing & Roof Structure, Gyp Board
- Base / Upper Cabinets
- Exterior & Interior Doors
- Barn Door w/ Cladding

**Electrical**

- Power & Distribution
- Lighting & Devices
- Electrical Panels & Switches
- Selective Demolition, Building

**Mechanical**

- HVAC Demolition
- HVAC Installation & Planning (or renovation)

### Design Concept Plan

**CLARK COUNTY, NEVADA**

**Walking Box Ranch**

**Remodel Barn**

50% Conceptual Construction Cost Estimate
March 25, 2009

<table>
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**Building Materials**

- Concrete Spread Footings, Reinf
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- Wood Sheathing & Roof Structure, Gyp Board
- Base / Upper Cabinets
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- Barn Door w/ Cladding

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- HVAC Installation & Planning (or renovation)
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<th>UOM</th>
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NOTES:
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- Costs are based on a Traditional Open Competitive Bid Basis.
- Costs are based on a Construction Start of Spring 2010.

**SUMMARY**

**REMODEL BUNKHOUSE (OPTION 2)**

March 25, 2009

<table>
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<td>CONTRACTOR OVERHEAD AND PROFIT</td>
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<tr>
<td>DESIGN CONTINUITY, ALLOW</td>
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<tr>
<td>IMPACT TO SPRING 2016, ALLOW</td>
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- Costs are based on a Construction Start of Spring 2010.
Meeting Minutes

**Project Name:** BLM Walking Box Ranch Development Concept Plan

**Meeting Subject:** 50% Design Concept Plan Meeting Minutes

**Meeting Date:** March 25-27, 2009

**Date:** April 14, 2009

**Project Number:** 04030051.09

**File:** P:\2004\04030051_09_Walking Box Ranch_Design\PROJ_MANAGEMENT\Meetings\50%_DCP_3-25-3-27-2009

Introduction

These are compiled summarized meeting minutes and associated project meeting information/products from the Design Concept Plan Workshop held at the UNLV Public Lands Institute (PLI) conference room (RAJ Building). An agenda is attached. The minutes are a summary of the workshop; more detailed minutes are attached (refer to ARG/Condit Exhibits documents). Please send any modifications or comments to EDAW.

In Attendance

See attached meeting sign-up sheets.

Minutes/Workshop Detailed Agenda

<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>ACTION</th>
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<tbody>
<tr>
<td>1.0</td>
<td>Project Introduction (Wednesday 3/25/09)</td>
<td>• A project introduction. The project schedule was discussed. See attached schedule for reference. Workshop agenda was discussed. See attached agenda for reference.</td>
<td></td>
</tr>
<tr>
<td>2.0</td>
<td>Design Concept Plan Presentation</td>
<td>• Site Development Concept Plans and Details-EDAW • Architectural Concepts- ARG • Sustainable Design concepts were discussed throughout the entire presentations • EDAW will develop a draft 50% Design Concept Plan report summarizing the workshop and submit when complete</td>
<td>• EDAW/ARG – Drawings were distributed to meeting attendees • EDAW: Submit 50% DCP Report to the BLM and UNLV.</td>
</tr>
<tr>
<td>3.0</td>
<td>Interpretive Plan (Thursday 3/26/09)</td>
<td>• Condit Exhibits presented Interpretive Plan.</td>
<td>• Condit Exhibits distributed draft Interpretive Plan to meeting attendees.</td>
</tr>
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</table>

Enclosures:

1. Agenda
2. Sign-up Sheets.
3. Project Schedule
4. Design Concept Plan Workshop Agenda
6. Workshop Meeting Notes (EDAW/ARG/Condit Exhibits)

4.0 Building and Site Utility Systems

- EDAW and RPA presented existing and proposed alternatives to the site utilities.
- EDAW conducted interviews with Clark County Development Services and the Clark County Fire Department. See Utility Plans Section.

5.0 Design Concept Plan Cost Estimate

- Detailed discussion of the draft Design Concept Plan Cost Estimate.
- Alternatives were discussed as well as potential phasing for future development.

6.0 Stakeholder presentation

- An abbreviated version of the Design Concept Plan was presented to the attending stakeholders. See attached sign in sign-in sheets for reference.
- Shannon Rayborn – (Director of Senator Harry Reid’s LV Office) requested all materials from presentation in both hard copies and on CD.

- EDAW Team – Submit draft cost estimate to BLM.
- EDAW to deliver 4/09
MEETING MINUTES

Participants:
Tom Bush, BLM, Denver (TB)
Bob Taylor, BLM, Las Vegas (BT)
Jean Cline, UNLV (JC)
Peg Rees, UNLV (PeG)
Jennifer Johnson, UNLV
Paula Garrett, Harry Reid Center (PaG)
Phil Hendricks Jr. ASLA, EDAW/AECOM (PH)
Greg Oakes, EDAW/AECOM
Mitch Peters, P.E., EDAW/AECOM
Cathleen Malmstrom, AIA, ARG
Adria Oswald, ARG
Sandy Treece Harinois, Condit Exhibits
Rich Smith, Condit Exhibits
Gene Schaefer, SDG Inc.
Bob Morton, Robert Peccia + Associates
Fred Denton, RMH Group
Dr. Jef Jaeger, PLI (JJ)
Dr. Scott Abella, PLI (SB)
Daphne Sewing, PLI

Project:
Walking Box Ranch
ARG Project No. 08155
UNLV
03.25-26.09
03.30.09

San Francisco
94111
fax 415.421.0127
415.421.1080

Day One, Wednesday 03.25.09

Task Schedule – March 30th to May 15th Final Development Concept Plan
EDAW to Distribute PP presentation with Meeting Minutes
TB – Possible to combine draft EA meeting with DCP meeting on schedule?

PART I – SITE

EDAW – a Traffic analysis and survey will be required to develop entrance from highway to ranch parking area.

BT - Highway 164 will be upgraded to 4 lane for airport, entrance budget maybe $1 mil. out of budget – visitation may not support need. How will airport impact visitation? County has claim on road as well. NC – SNPLMA is not enthusiastic about funding roads

Is road work required? TB – maybe a later phase? BT – on-site work is priority, signage for now, more work as $ allows.

BT – current ROW for WBR road is 24'

Need to understand how to involve DOT – BT to contact

Use anticipated signage on the road as a first step. Work with DOT re way finding signage in Searchlight.

Will Rex Bell transfer or give permission for use of WBR brand – who will be responsible for following up on this?

BT - Trex preferred over wood for site furnishings. Higher front end cost preferred to save on maintenance costs.

BT – site lighting, need to consider Dark Skies initiative – low energy use, simple switch to turn off everything when it is not needed. No need to light signage – solar battery system.

JC & BT – name of UNLV research campus? Mojave Arid Land Center? Need to develop further.

BT & TB – BLM logo may change….move to combine NPS, US Fish and Wildlife, Forest Service

BT - looking at effects of paving palliatives (?) on tortoises: probably prefer a more permanent solution. Tortoise fencing w/tunnels? Probably not now.
TB – prefers gravel for entrance road, for maintenance would be paved w/swales. Could have concrete drainage swales w/gravel roads.

TB - 2.5 passengers per vehicle ratio for day use

BT – parking for docents and volunteers? Where to locate – near E bunkhouse. PH – park in overflow corral parking area? CM – use parking in entrance circle. Caretaker will probably be responsible for closing up the site so having the docents park in the circle is an option.

EDAW to remove gate at circle for preferred alt B plan.

PH - Polymer surface on DG doesn’t hold up well. Pavement preferred; adjacent natural surfacing at level of paved surface.

Paula Garrett – Harry Reed Center and PLI, replacing Cathy Wiley doing coordination between both.

PaG – planting will be available for use from BLM well development site nearby. Work has been delayed on the project and it will begin this summer.

BT – wants 2 2-1/2" hydrants from E water tank at entrance circle

Emergency access would probably be through north existing road. FD would have gate key.

TB – develop trails as an add alternate in bidding. Easier to develop as alternates for funding in bidding. Need to accept adds in order of prioritizing in how it is originally set up. Assume we have to work down but Contracting Officer may negate need to follow order. PeG – maybe build trails first to develop interest in project?

CM – should be fewer shade trees on main historic access corridor to ranch house

EDAW to connect service access road in paved surface near Maintenance Bldg. for entire route

BT - Septic leach fields – need to locate and determine extent

PeG – walk-in site for camping segregated from main sites – access off from trails

PH - Chip seal asphalt so it is not dark. 3/8" chips rolled into asphalt, looks like exposed aggregate.

TB – location of small interpretation areas for small outbuildings – locate on site plan for future consideration as to being rebuilt. Replicating blacksmith shop or shop string. Conceptual reconstructions are given more leeway with BLM than with the NPS.

Alternate locations for blacksmith shop – maybe in corral; back-up to AV screen area. CM – needs to talk to Dewey Livingston re other examples of blacksmith shops to use as examples.

PART II – ARCHITECTURE

Existing Buildings

Ranch house –

Barn – PeG use of space for selling goods – comfort of gift shop?

TB – add a window for security control from conditioned storage room

E Bunkhouse – use a full front porch

New Buildings

PeG -Durability of wood board and batten? ARG to research.

PH – Hardie board (plank) makes wood board and batten – look into use.

NC – maintenance of photovoltaic’s if they cover entire roof area?

Clean lab – mechanical requirements? Probably need a fume hood? Is a Snorkel adequate?

Equipment that produces heat like computers, microscopes, refrigerators…RMH requires information to calculate loads.

Rooftop experiment area should have 360 degree access – PeG to confirm.

Add door into classroom from office

Combine IT and Storage room so no exterior entrance.

Change wood screen at covered parking to metal for maintenance

3 railroad boxcars full of rhyolite cores - ARG to explore use of material (post-meeting note: not available for use, have been sent to landfill)

Add gate at north end of yard for service access. PeG needs option to have secure storage

Hydrogen cell generation development on site – reflect light into bldgs, solar tracking system that directs light internally. On larger buildings this would make sense – ARG to coordinate further w/involved parties.

Enlarge car port for managers and caretakers – may need to park cushman
Camping pavilion food storage area should be conditioned.

Add exterior sinks and showers at camping building. Use solar heated water showers.

Need to provide screens at eating area?

More fixtures for 25 people. 3 toilets. Another sink in shower area?

Usage of Hardie plank in desert area? ARG to research project examples in Nevada.

UNLV is not into painted surfaces or high maintenance materials.

COR-TEN Steel is not popular with UNLV due to past issues.

Entrance sequence @ lab and commons– small stone seat wall at porch or use stone bases for porch posts. Extend porch @ bunkhouse commons to wrap around to west façade to make elevation more welcoming.

Potential to use tailings for concrete aggregate or for paving materials. ARG to explore an inventory of what is available for use on site.

Use of stone as a vernacular - would there historically be a lot of stone?

Day Two, Thursday 03.26.09

PART I - INTERPRETATION

Barn
BT – multi-lingual option for solar powered audio signs. Using internet to download info to ipod prior to visiting site. What about maintenance?

BT – concern that architecture, site elements and interpretation work together

TB – Volunteer to use tools of blacksmith actively? Perhaps part of special events…..

BT – Place to sit, perhaps hay bales. Highlight the point that barns were historically used to store hay

Post-meeting notes:
*existing door at postcard station needs to be retained – not indicated on Condit rendering
*existing door at tack room to remain – not indicated on Condit rendering

E Bunkhouse
Extend front porch for full length and use wall for interp.

ARG to use double doors at exhibit space

PaG – possible to extend wall at porch to enlarge exhibit space?

Ranch House
PeG - Portable roll-up panels for easier transportation and use in the classrooms?

Use of docents for greatest extent possible to keep house less cluttered – general consensus.

Does Rex Bell have family videos that can be used?

*use of wall panels at research campus? Focus on Mojave Desert, more regional concept, bigger than 40 acres of ranch. Water issues, sustainability, alternative energy….(used ex of Desert Springs learning center)


Issues of security of allowing general public into Research Campus. Info provided at parking lot describing when there are tours available at the Research Campus.

BT - ruin at northeast corner should have informational signage at fence


PeG – hay bale in corrals w/rope for people to use to try and lasso.

CM - @ E Bunkhouse use location to discuss water usage in depth. Expand discussion to include impact of water usage in Mohave desert and impact into baja…. Potentially move water vending machines.

NC – use good news as well. No eco-guilt!

PaG – interpretation of energy systems

STEWARDSHIP – instead of sustainable

It appears that the original interpretive theme is now acceptable but needs final sign-off

PART II – SITE UTILITY SUMMARY
BT - Capturing rainwater for storage and supplemental irrigation.  
Need to look at volume of gray water to rain water. Usage of facilities will dictate.  
Potential to combine pole-mtd transformers, place on ground and conceal w/fences.  
EDAW to research Change of use for water systems from agricultural to semi-commercial. May be additional req’ments for conversion. Elevated arsenic levels.  
Waste water treatment options. Treat and store for irrigation?  
Compost wastewater systems are high maintenance.  
EDAW would like to see +18” above finish grade for all the new buildings. Grading plan they provided does not meet these requirements? Needs additional coordination.  
Fire department – guidelines are over 10,000 sf must be sprinklered. For hydrants type V buildings need 2,000 gpm for 2 hours. Sprinklers are recommended. Potentially use the swimming pool for storage tank. Would apply to existing buildings.  
Consider generator for fire protection system if power is lost.  
What kind of pump is req’d for system? Size will be determined by access. Will pump house of be required? Searchlight has volunteer fire department that WBR would fall under this jurisdiction.

PART III – ESTIMATE REVIEW  
Sustainability – possible additional funding  
Highway – BT first preferred deduct would be these improvements  
Separate funding – drawing set-up for different funding sources how does this impact total cost and printing sets – additional coordination with different drawing sets?  

PART IV – STAKEHOLDER PRESENTATION  
Daphne Sewing, Dr. Jef Jeager, and Dr. Scott Abella - PLI  
Shannon Rayborn – (Director of Senator Harry Reid’s LV Office) – needs a hard copy of everything and a copy on disk.  
JJ - Bump up facilities to accommodate a class size group for campground? Standard Mammalogy class size is 30(?) what are impacts on easements? EDAW to determine if expansion is possible. Lab w/out a fame hood is not very useful. Need a Sink. Killing animals inside building would need a fume hood? (Why?)  
BT - Cannot bring in outside organisms due to TNC easements.  
JJ - Bodega marine labs used as example – plant research, soil research that cause some level of disturbance. Researchers are attracted to areas that do not have public access. Keep lab flexible. Non-public designated area for additional experimentation.

SB – portable greenhouse? Lathe house? Designate areas for future expansion use. BT believes that locating these areas w/in the corral area so that it is visually screened and does not have public access. Can be accommodated yet need to keep in mind that these structures can remain on site and cause future clutter.  

CM – An area can be designated on site for temporary ongoing research

These notes were prepared by Architectural Resources Group as a record of the substance of this meeting. These are notes only and are not to be construed as altering contractual agreements between parties. Please forward all comments and/or changes to the originator within two weeks.

By: Cathleen Malmstrom and Adria Oswald  
CC: meeting minutes
Walking Box Ranch 50% Interpretive Plan Presentation Meeting Notes
March 26, 2009

The following are intermittent notes taken during the Presentation for the 50% Interpretive Plan and Exhibit Concepts

Discussed the possibility of having a cell phone tour, call in or internet guided download. Also discussed a virtual visitor center on the web site with a fly through of the visitor experience.

Question of who designed the Gate sign for “Walking Box Ranch” and if we can use the brand “mark” legally

Discussed that the story within the Ranching in the Mojave should talk to adaptive reuse, then and now – and how it will be dealt with in the future.

Blacksmith Exhibit – know that the location is questionable, need to determine what will work for both the exhibits and Rex Bell Jr.

- If placed outside of the barn it provides living history and special events opportunities
- Exact location to be determined

Need to incorporate seating areas within the barn – possibly treated Hay bales

- Determine if rodents would be a problem
- Will show possible locations in the next draft of the plan

Ranching in the Desert Exhibit Area:

- Map of the Mojave Desert
  - Can handle a of other interpretation
    - Show that the ranch is sitting the middle of wilderness
    - What impact ranching has had
    - How are we changing to try and reverse the impact ranching had on the desert
  - Possibly illustrate how ranching is changing gears on the website

Bunkhouse:

- Could be an area for Community exhibits and exhibitions
- Special Events
- Possibly enlarge the front porch – great opportunity for interpretation, good place to focus on the water issue and usages (I like the idea of focusing on water at the bunkhouse)
  - Waterless urinal
  - Interpretation in the bathrooms?
  - Share good news – overall interpretation
  - Graph showing usages
  - Engage the visitor to part of the solution
  - Show different alternative – energy (will be flushed out in next submittal – may need to take place in a different location)

Determined that the average visitor would stay approximately 45 minutes

- Acceptations would be people picnicking
- Special events, live interpretation
- Docent run tours – if they tour the Research Campus

Parking lot Kiosk:

- Need to give overview of the site with minimal overlap of the site interpretation
- Will talk about the 40 acres/visitors not to go beyond the boundaries
- Talk to things the visitor can do to make a difference - energy (will be flushed out in next submittal - may need to take place in a different location)
- Give information for links to the site and other pertinent websites to share more information.
- Want people to walk away with a better understanding of how much water the plants need in this environment - take home the message (they may well be over watering their plants)
- Vending Machines to have water only

Corrals:
- Great place for interactive - possibly for the self guided tours
  - Roping a calf - one idea, others to be flushed out for next submittal

Discussed the site map and the placement of the waysides and how they lead to the Ranch House.

Garage:
- Possibly create portable "Roll Ups" with the same graphics used on the tri fold exhibit proposed for use off-site at schools, civic meetings, etc.

Ranch House:
- Need to look into recreating the nursery rhyme decorations on the wood casework in the "Boys" room as referred on page 23 of the Master Plan and Preservation Plan
- House details - everyone liked the subtle approach that does not compromise the integrity of the house interior
- Possibly create a docent lead scavenger Hunt or brochure that folks can pick up at the start of the house tour
- Second Bedroom - dedicated to interpretation
  - Possibly incorporate a touch screen video element that highlights unique and historic features in the house - could have old home movie looping until the visitor touches the screen - will be flushed out further in the next submittal

Determined that the average visitor would stay approximately 45 minutes
- Acceptations would be people picnicking
- Special events, live interpretation
- Docent run tours - if they tour the Research Campus

Parking lot Kiosk:
- Need to give overview of the site with minimal overlap of the site interpretation
- Will talk about the 40 acres/visitors not to go beyond the boundaries

Interpretive Tail Signage:
- Expand the waysides to include a self guided tour of the research campus for the researchers which doubles as a docent guided tour when available for the public
- Self guided loop that discusses the sustainable features of the site
  - Use the area to the east of the bunkhouse and north of the house
- Have waysides up to the fence to talk about TNC – the ruin – undisturbed landscape etc.

Theme Discussion:
Bring them in with the history then let the entire story unfold
It was determined during the meeting that the original theme created as a result of the December 2008 workshop better reflected the understanding of the site rather than the one presented in the 50% Interpretive Plan:

At Walking Box ranch, the past, present, and future of the human connection to the desert is explored and responsible stewardship of desert landscapes is fostered.

Condit to prepare an addendum for the Research Center Interpretation and provide to Peg the week of March 30th for fundraising purposes (was provided April 2, 2009)

It was determined that the BLM and UNLV will share all comments to the interpretation with one another via email. Consolidated comments will be compiled and be sent to the team for review prior to Condit making additions and/or changes to the Interpretive Plan and Exhibit Concept Plan for the interim submittal.
<table>
<thead>
<tr>
<th>Task</th>
<th>Working Days (5/wk)</th>
<th>Begin Date</th>
<th>End Date</th>
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<td>3 days</td>
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<td>1.6</td>
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<td>1 day</td>
<td>December 4, 2008</td>
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<td>1.7</td>
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Meeting Sign In

Project: BLM Walking Box Ranch 50% DCP Workshops
Date: March 25-27, 2009

<table>
<thead>
<tr>
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<th>Contact</th>
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**Walking Box Ranch**

**Design Concept Plan**
WBR 100% Concept Design Meeting  
BLM LVFO  
Wed, 6/10/09

Phil: detailed draft report after the meeting and after review comments back  
NEPA draft EA to BLM in next few weeks  
Still on for spg (~Mar) 2011 for move in and opening – still on schedule; allowing 18 mos for construction based on similar projects; design devel and construction docs, 12 most, 9/09-9/10 3-4 submittals during DD and Cd; talk to IT about plugs, lighting and Av – detailed workshops; at 50% we are pretty locked in for many things; working on details of doorknobs etc

Entryway: smaller design now; Bob and Nancy will go after stimulus funds for highway improvement and entryway; get previous drawing showing left turn lanes; Deadline is June 23. Will talk to NDOT sometime about easement along highway on how to do entry in detail. Also go through NDOT for signs about ½ mile out on both sides of road.

Incorporate rhy rock into entry gate; use corral fence design for gates, benches; wood versus rock? Wood needs painting every 1-2 years; Jennifer: concrete formed with wood grain? Can do picket fences out of cast concrete, real cheap

Decisions:
Bob: NDOT would prefer wood sign; go w/ two posts on left and vertical log with hanging corten sign; go w/ design that will be carried through ranch; different from other parks; since near road needs to have “break away” point if hit by car. right of way is 200’ either side of center line of highway; will use Corten for this, pre-oxidized so not a lot of drainage and staining; wood look fences out of other material/some corten; poss RR ties for posts w/ corten verticals;

Entry Road: 5 major drainage crossings; prob put in large rolling dip; knock graded berm on side of road down. Don’t pave and use road base; a bit of widening needed to 22 or 23’; crown road with base core; put stabilizers in base to reduce dust. Tom: can phase to help with costs.

Nancy: include in stimulus package? Is two agencies – NDOT and county. Nancy: road construction/etc not part of SNPLMA so need to get other funds for this; probably can’t be part of budget

Parking area: overflow parking; Fred has calculated geoexchange – need to use all of this parking area; drill wells and use heat from ground; need to test soil/dirt for doing this and see if economics work. Drill holes and cover up; not a fast process, one day to drill two wells and prob need about 100, so would take time to do this where buildings go. Water system, pumped into ground; about 6’ down is about 55C; in winter such heat out – in winter put heat in; use glycol or mild alcohol mix; recycle water – closed system. This is not in budget now. System about 5000 gal, 15% is an additive; Upfront costs and minimal later. Need heat pump for each zone so fairly simple. Good rural systems and
lots of contractors do this. Payback is not great bc cost a lot to put in; need rebate from
govt or utility or don’t payback for about 15 years. If utility rates climb payback is
quicker. Also get leed points; We’re not burning heat, we are moving heat around; move
w/ pumps working off photovoltaic; very green and ethical payback. Very sustainable.

Tom: BLM has gotten stimulus funds but already committed. Need to put together plan
and have it ready for next stimulus package need to have design ready. Now design what
is appropriate, may go as additive alternate; have ready to go; transparent and

Fred: if we go with geoexchange we don’t do anything else; if we don’t then we look at a
number of other options and it gets complicated

Cathleen: come up with basic system that meets basic budget and then need to think
about what else we design for;

Fred: need to have system in mind going into DD, which is next step; start with gas
systems (propane?), progression is heat pump/geoexchange as step up.
If colorado unit then how heat? Need another heat source and way to introduce or
radiant floor, boiler, etc – something that marries w/ colorado; if geoexchange, then
heat and cool; needs working with cost estimator to see where we are.

Ranch house windows will not change so RH will not really be a museum; not highly
conditioned.

Entry when property closed; access is circular parking and area from there to barn;
fences keep people out; NW loop trail open.

Phil: recommends paving parking lot with curbs to keep parking area from growing; if
we run water there there is a code issue bc can’t dump water on the ground

Big discussion about trees in central corridor; general agreement to take them out and
keep area open.

Bob: 250 people tops at one time is probably reasonable

Outdoor room: first is behind current BH so not in core area; temporary tents; second
area if really large in corrals; this keeps largest crowds closest to parking area

TNC: Bob, from last conversation, feeling they got is they have a lot of flexibility on
property and can do paved trails. Biggest thing they didn’t want to see was new
buildings. TNC admitted that conservation easements on 40 acres have almost no teeth.
They have more concern about 120 acres.

Bob: have to do one programmatic EA to cover all events such as photography, special
events, etc..
WED PM
Redo rock garden outside kitchen door and in patio

Pool: blue glass; don’t need water storage. Can collect water off roof into pool and pump out; prob don’t get enough rainfall to do the cost necessary to do this; still examining, probably deck but leave so can get into.

Pump house building will be rebuilt and with new tanks; more space is needed for treatment; As issues in water so new water treatment system will be put in

Big discussion about tent site; Jean urges a few further out; Phil wants go keep area close in; need to add 3-4 addit single tent spots so if most people 1 person/tent will be able to accomodate

Plan for reestablish new plants/pink; New plants in hashured areas; sprinkler system to stay to established and maintain when very dry; could leave some bare and do restoration research; NEED TO MAKE SURE WE DO NOT DEPART GREATLY FROM WHAT WAS PROMISED TO TNC: plants from where? Start working now with master gardeners to collect seed; Bob estimate need 8000-9000 plants, many small; Possibly CSN to do contract to grow plants if possible now; BLM has restoration funds; Viceroy reseeding effort may have been done by CA BLM people; talk to Mark Chatterton here to see if he knows who to talk to; Peg: how do we prioritize what is essential, what’s phase 2 and phase 3? Paula: SNWA will give us plants in about spring 2010 and they were trying to get plants for us from NDO areas to begin with and use as nursery; can put in corrals in pots and shade and mist; and relocate later; get locals involved now;

Drainages, plant willows in drainages; yellow boxes where trails cross drainages, need box culverts and ways to get wheel chairs across; walkway over top. Blue wide spots are areas that need to have drainages moved;

Overhead utility lines will stay; will try to combine the two poles into one and clean up some

ARCHITECTURE, Cathleen
Existing buildings: RH: Main entrance on so end front porch. Patio, either restore rock garden, or have ramp area and “interpretive” garden/rock garden. CM leaning toward restoring to the way it was. Do not have to sprinkler building; Tom: this is the resource and we don’t want to lose it; take a look at numbers but protect; Fred: will be pricey. Current cost is $35K; Bob – this is a good investment. Lighting will be added to courtyard; Maid’s room and SE Bedroom are unassigned so can be kitchen prep, exhibit prep, etc; Bob, must keep Clara’s bedroom; CM: must have safe railing; so can be open for interpretation and open to those who choose to go. PV also planned for So facing roof and can go on tile roof.
Barn: structure: add slab, SW is storage/mechanical equipment; ceiling fans; some evap cooling; will condition secure storage place – small cube on north. Retail in NW corner. Localized heat. Doors: install panels inside of original doors, are glass. Fred: good place for a coolerado unit as could cool efficiently, or less expensively by evap cooling.

Current BH: extend porch fully on W. Same as previous plan. Manager’s office about 10 x 14’, about dining room. Add lockers to changing room.

Blacksmith shop: back is AV storage; poss barn doors on tracks for BS shop. Lg roof so lg shaded area. Porch on AV side could be raised and act as small stage. Metal roof and hardplank? Uninsulated, electricity. Use insulated cabinets and works elsewhere.

Research campus: Solar options: Talk to Suresh about his tracking equipment; will there be a donation? If yes, can’t advertise company; can be donation to UNLV for research project; need to figure out if flat roofs or not;

BH: changes in kitchen need to finalize; added second ada toilet for commons; still need janitor’s closet on second floor

Fred: have only discussed heat pump. Other option is combination heating/cooling, electric, makes noise. Least expensive.

Need to separate toilets from showers so more people can access toilets quickly

Maintenance: carport area – 2 trucks and 2 carts;

Bob: they can’t do wireless so they can put in hardware and UNLV do wireless; peg – this is security issue

Thursday, June 11, 2009
Cathleen, finishing with camping structure
Don Land: membrane on wall gave Greenspun bldg Leed gold, REFLECTX; very inexpensive, ~32c/ft2; kills radiation load; Low maintenance: plumbing automatic, touch free, single lever on everything, do everything handicapped.

CM: green materials, straw bale for classroom and lab, SIPS struc insulated panels; finish outside as we want; hardiplank not wood; have done research on this, Australian product, but holds up well there since the 70’s, 110F and very dry; now manufactured in CA, Denver, etc. Sheet metal roofs but not walls, though can do and paint. Probably plaster over straw bales; most roofs gabled design, trusses wood or steel. Will be frame w/ straw bales.

Will use mine rock for one wall and fireplace and chimney, possibly benches, etc. rastra block, light weight block. Foam block w/ rebar and concrete core, hang siding on it on
stucko, drywall inside. Need to cover it or could carve name into it. Will use this somewhere. Hope to use PV. Concrete floors in most buildings, poss salvaged wood for second floor of BH. Exposed trusses in commons in BH.

Table, arch program, areas of each bldg. circulation largely outdoors. Buildings have grown a little or a lot, bc we learned more about what we want and need, so bigger footprint. Site footprint: enclosed: 24000, outdoor: 13700, total site footprint 32200. This does not include parking areas or pathways.

UTILITIES
Phil: table of proposed utilities: will develop all new on site; new water. New from well head out; 7 gal/minute acceptable but not excessive (Bob the engineer)

As variability – what is it? Need to do samples, unique suite of elements in water (BTEngi…) some samples have elevated F. Looking at different treatment potable vs gray vs ? So point of use treatment devises, filters under sinks. Requires relying on person to do this, more expensive than large centralized system, but only treat amount water used to drink for example. Possibly also visitor center, not worry quite as much b/c visitors not drink regularly; in other projects, really don’t want to have to tell users they are not really drinking the best water…. As treatment methods can be economical but depends on water quality. ~3 methods work well. Concerns: well doesn’t produce excess water, RO wastes a lot of water to treat water, but can use backwash for irrigation, but need another treatment method b/c now high salt in backwash, so need to sort this out. Red flag at this point is As. Hardness is not a problem. When EPA set standards, A previously 50, then 25, now 10 ppb and have greater effect on younger children, etc, so part of consideration in setting standard. Existing well is just west of pumphouse; old abandoned well just north of RH:

Fred: if we do geoxchange would be good to do conductivity test on existing hole somewhere.

Don Land: Really like air cooled chillers. For certain applications have best payback. Incorporate air side economizer?…. Fred - only one building large enough to benefit from this. Don: can buy down to small units now. Fred: Problem is heating…. If tied to air cooled chiller there is site impact plus….

Fred: one system that works for all buildings is geoxchange. If chiller system, then need heating system…. Still have to have back-up system.

Don: each room on strip has one ton air cooled chiller and each puts out tons of water each day….

Bob: matrix chart, loop water line around whole property; Fred, can piggy back geoxchange system with water pipes. Potable water, water now pumped into tank, separate old system does some treatment, permanganate, doesn’t work now; shot off now;
CHECK W/ CATHY ON WHAT IS DONE AT CARETAKERS TRAILER; NO TREATMENT OF BH WATER NOW

HAVE ROCHELLE ADD VERBIAGE TO FORM ABOUT PEOPLE MAY WANT TO BRING THEIR OWN BOTTLED WATER TO THE RANCH, THOUGH WATER IS DRINKABLE

System will be all new, prob reuse slab. Make sure enough room. Possibly incorporate centralized mechanical here. 40,000 gal fire storage, won’t be treated like potable, but needs to at least be disinfected with red usual so stays disinfected in tank, no bacteria grows. Possibly inject Cl, dump chlorox in from top. System will probably be looked at once/month. Need maintenance person to do this. Ideally want fire and irrigation water on same system and potable on another system. Don’t want too high Cl for adverse effect on vegetation. Possibly flush out fire tank once/year or twice/year.

Bob: possibly pump waste/gray/backflush water into pool; reuse if not too salty;

Fred: 4 types of water: fire, irrigation, potable, and flushing. Treat potable, and other 3 as one, recycling second as flushing regularly.

Will need pressure tanks for water pressure. Will need pump house with generator near fire tank. Or could do in existing pump house area and use pressurized line to fire tank

There is concern about high vegetation needs same time as high visitation need, could exceed well capacity

Bob the eng: wants to pursue reopening the old well; can potentially increase productivity of newer well; also points out that water use officially may still be on old well

At campus, will investigate gravity flow, pull off gray water; or separate lift systems for buildings…. Leach field and septic E of BH; separate septic system for RH and old BH. May need separate septic for current BH as capacity will increase.

Different levels: cheapest, septic and leachfield; if more treatment – conservation or increase treatment effectiveness? Concern about nearby surface water – don’t adversely affect, don’t have this here to justify expending extra $; can do for sustainability can do other things

Do we have propane at all – and need for gas or all electric?

FIRST AID: where does this exist/happen? Prob at old BH and at campus; Kitchen and lab; sofa in docents room in old BH: find space for this in old and new BH’s

Add columns to list for security and possibly IT?
Lighting: street lights at parking areas and loop road outdoor pedestrian fixtures; lights at kiosks; events light pedestals. No lights now along corral parking lot; could rent or may be in day. ADD IN LIGHT THAT COULD BE SECURITY LIGHT TO FLOOD AREA.

Go through CM’s list of sustainable design opportunities:

DOE money for vertical maglev wind turbine, from Elaine, CM will get specifics from her

Composting toilets, Bob the eng, boils down to maintenance system hand turn or mechanically turn material over; if intermittent use toilets b/c problematic, more maintenance; work well though

Thurs pm: Interpretation
If closed, visitor’s can access NW trail, circular parking area, first kiosk, area N of northern fence

Ice house, moved to old strip shop area? Reduces clutter to north; placement is pending

Interpretive materials, what will they be? Not decided yet. Phil: going to Corten so this may be appropriate

Sidebar on each sign with “stewardship” component.

Barn: adding benches/haybales in interior third. Retail area most conditioned.

Bob the eng: bring in issues of invasive species/related problems

Blacksmith shop, Dutch doors – look in but not go in

Remodeled BH: space adjacent to office for exhibits/exhibit prep; this could be more conditioned space

RH: garage: multipurpose, storage, monitor and pull down screen
Kitchen: keep more as is with frame showing images from past
Bedroom changed to exhibit room; Peg – add comfortable chairs; Conditioned cases but not room

MONEY
Demo: note – UNLV owns trailers; GBI (Grt Bas Inst) can do demo
Earth work and storm drainage
Roads and Parking
(all asphalt paving costs now in future phase, ie not in budget)
Site work pavement
Site Furnishings and Fence
Site Signage
Site Entry
Planting
Utilities
Water
Site lighting/electrical/security
Irrigation
Maintenance facility (fencing and gate)
Rock Gardens
Ranch House remodel - $550K (based on Section 16 requirements)

Costs: PV is easy add-on; If PV integrated w/ HVAC – more challenging. Simplest, have HVAC not related to PV except by heat input.

Geoexchange: ~100K for well field + $25K for pipes + ..... total: $300-400K.....$0.5M; yields heating and cooling. PV: $1M, yields electricity. Both for $1.5M, then have heating/cooling and electricity

HVAC w/ nothing special $750K doesn’t include piping…almost $1M
We need about $1.5M to $2.0M

Exercise to cut budget and were able to cut costs to about $9.6M by cutting out a lot of ground work/road surfacing, etc
Zzyzx Desert Studies Center (DSC) notes, April 23-25, 09

Tour by director Bill Presch, whose office is on the Cal State Fullerton campus, but who visits Zzyzx at least twice/month and spends a few days there

**Personnel**
Director, full-time position, office on CSF campus
Additional personnel include Jason, site steward who lives on site in an 850 sq ft house; Eric, chef, who stays on site when needed; a site manager who lives in a ~1500 sq ft 3 bedroom trailer; a full-time maintenance person/mechanic
Norma on the Cal State Fullerton campus does all scheduling

**Ownership/Management**
Owned by NPS, but managed by Cal State Fullerton campus for Cal State system
Successful because property is considered part of Fullerton campus and is fully supported by the system
By-laws needed;
CA Desert Protection Act says Zzyzx runs center; NPS provided ok to d education
Board of 18-20 individuals from each campus, NPS, VP Academic Affairs, 2 geologists, 2 biologists, Deans, etc, 3 meetings/yr
Bill (director) reports to chair of Board and NPS; discusses purchases on >$20K with them
The Board position is that if users pay some amount they will feel related to center, but they are reluctant to have a high fee rate

**Funding**
Line-item in Chancellors office for salaries, covers day-to-day management; the director reports to the Chancellor
Big items come from trust fund based on income from user fees; now at $0.5M; the caterer is funded in part on trust fund
Other employees funded by complex funding sources of CSF campus, other CS campuses and the Chancellor’s office
CSF physical plant people manage property/buildings
Foundation: Non-profit book store
Cal State visitors pay $8/night (includes internet, classroom, bed, etc); other visitors pay $16/night; covers all facilities
There is no charge to visit site during day, but no real draw for casual visitors

**Electricity**
The site is powered by solar, wind power, and generator
Lights out at about 10 or 11 pm
Lights on motion sensor in the single large bath house
In 1 year they will be all solar; they are building a new array that was included as a component of a Fullerton campus solar array being built over parking areas;
Will be 40-50 kw system, run n-s, will track sun,
Batteries will be buried – big killer of batteries is heat, burying will fix this
Solar array will be above batteries and will add shade
Nearby building will house computers, etc
Will still have windmill bc is fundamental part of DSC
Windmill powers fleet of golf carts and one large old vehicle/power wagon
Limited power and water led to removing bathrooms from rooms and there is a single
large bathhouse
The philosophy is “indoor camping”

Buildings
Maximum use – 65 persons
The main meeting building has 2 classroom/multipurpose rooms (there is a classroom in
the lab building also). When good weather people eat outside (two areas); when hot
or cold eat inside
Guests housed in dormitories, hotel rooms, and small cabins
Library room in main building; used by researchers, now putting on web
Small battery building for carts that are charged by wind generated power
Lab building, ~1500 sq ft, large trailer, lecture rooms, cabinets for scientific
materials/equipment,
Tool shop/building
Research trailer for long-term fish researchers

Kitchen
They used to have multiple stations that the public used, but a health permit was required
(by the county?) for each group. Too cumbersome so they have discontinued this and
now have a caterer who comes when there are 10 or more people in a group. If less
than 10 the guests go to Baker or bring food, but do not have access to kitchen. Note
– there is an outdoor BBQ available to guests.
Costs:  BF - $10/person, L - $8/person, D - $15-20/person, plus user fee
A caterer needs a professional stove with 2 ovens and 10-12 burners, multiple
refrigerators
Kitchen needs a central room drain, wire moveable shelves and drying racks, lots of tile,
metal sinks
Have doors that push open to outside
Separate dish and hand sinks
Kitchen must be degreased once/year
They use paper products because no dishwashers owing to limited electricity

Visitors
NASA comes here to do studies related to Mars w/ high school teachers and students
Mars rovers came here before going to Mars

Other:
Weather station for Aeolian sand studies, gathers sand transport information, transferred
by computer; part of major study
Great bathroom, see photos
Joshua Tree study at Covington Flats, Mohave Desert (so edge of park)
Ppn here about 12”/yr
Studied 100m x 100m plot (~3.5 acres); 10 sites
Area with biggest known JT (in Mohave?) and many large JTs
So presumably most favorable area for JTs
Studied for 20 yrs
JT is only tree in Mohave Desert
Growth about 4”/yr
Lost of 5 trees in plot (16%); any new lost in draught during that time
Produce inflorescence then branch
Classified as enlarging, stable, and declining
JTs in area in general are declining
Bunch grass has given away to shrubs – conclusion that it is getting hotter and drier here
Trend observed elsewhere – trend indicates they will be gone in 150-300 yrs
Decrease in rainfall seems to correlate with loss/decline
Hypothesis: have found seeds in dung of giant ground sloth; now that sloth gone, no big animal to transport seeds north fast enough to save trees and contribute to migration in response to climate change

Lunch: Jeff Knott Cal State Fullerton
Geo 101 discussion, lecture rooms of >115 up to 200+; work to get rooms; easiest science;
fT w/ DSC as first night; lave tube near by
1 credit class; 3 wkends in field; take best 101 students and attract as majors;
Nevada Registered Brand Certificate

Brand No. T-15739

Exp. Date: 12/31/2011

Rex & Dorothy Bell &
University Of Nevada Las Vegas
Joint Tenants W R O S
1231 Shadow Lane
Las Vegas, NV 89102

Location

LR Left
LT Right

Walking Box

Cattle Horses Clark County, Statewide

Other:

Nevada Brand Recorder: Billie Bruneal
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introduction

50% Design Concept Workshop at UNLV 3/25 - 3/26 2009

Walking Box Ranch site Visit 3/27/2009

50% Design Concept Workshop at UNLV 3/25 - 3/26 2009

Walking Box Ranch site Visit 3/27/2009

To Be Developed
II. EXISTING CONDITIONS
Walking Box Ranch remains an excellent example of the home ranch in Clark County and the Mojave region. In January 2009, it was placed on the National Register of Historic Places. One element of its significance is its architectural merit as it embodies the distinctive characteristics of a type, period, region, and method of construction. The design of the main house is characteristic of the Spanish Colonial Revival Style and representative of its era. The property also exhibits a distinctive regional method of railroad tie construction in the barn and the corrals. It typifies the western home ranch property type in the southern Nevada desert, retaining many large components (both in terms of size and function) critical to the function of a working cattle ranch. The extant historic buildings and surrounding landscape retain a fair to high degree of individual integrity; and thus, they are able to convey their original uses, intent, and historic and architectural significance. The relationship between these various contributing resources in the district is substantially unchanged since the Bell period.

Three original buildings remain: the ranch house (constructed in 1931-32), the barn, and the ice house. The remaining original ranch outbuildings, including the blacksmith shop, original bunkhouse, guest house, carpenter’s house, and carpenter’s shop, have been demolished.

Several non-historic buildings and structures were constructed during the early 1990s, including a storage trailer and tennis court, and a one-story bunkhouse.

ARCHITECTURE

Ranch House

Both the exterior and interior of the ranch house are in good condition. A substantial amount of renovation was done by the Viceroy Gold Corporation in 1990; some of this was historically appropriate, some was not. The original tile roof was replaced at that time. The linoleum floors throughout the house were replaced with quarry tile. Both of these major changes convey a different appearance from the original materials, but replacement is not being proposed.

The ranch house has been well maintained. The exterior stucco finish is in good condition. Some exterior wood members are deteriorated, which will require repair and some replacement. Windows and doors and the concrete porches also need rehabilitation. The south façade has suffered the most deterioration due to sun exposure.

The interior has been well cared for. Most finishes are in very good condition. Rooms facing south have had some damage due to water infiltration. Some original light fixtures and plumbing fixtures remain in serviceable condition. The ranch house is not disabled-accessible.

Some structural work is required. The ranch house foundation will require some repair, and a tunnel running below the main living space needs to be infilled or reinforced. The stone chimney requires seismic bracing.

The mechanical and electrical systems are functional but require upgrades to meet code and the requirements of the program and users. Sprinklers, security and fire alarms, and data systems are also required.

Barn

The barn is in poor to fair condition. The framing elements are warped and deteriorated due to insufficient structural connections, termite infestation, and sun and water damage. As is to be expected of a working ranch building, the barn has been subject to haphazard repairs (using any materials available on the remote site) and multiple alterations to accommodate new ranching practices. Most of the barn has a dirt floor and the walls sit directly on grade; animals and birds easily enter the building. Every element of its construction is substandard. A complete upgrade of the structure, including a new foundation and slab, is required. Most of the
existing conditions

exterior cladding is not weatherproof and needs to be replaced in kind. Some of the railroad ties are deteriorated; because of their historic value, these will be repaired where possible and replaced with matching ties if required. The wood and sheet metal doors all require extensive repair or replacement to match.

There is minimal electrical service and no mechanical system in the barn. Complete new electrical and mechanical systems are required, as well as sprinklers, security and fire alarms, and data systems.

Ice House
The ice house is a very solidly constructed little building. However, it has no foundation and its wood floor rests directly on grade. As a result, the structure is sagging. Its exterior sheet metal cladding is in fair to poor condition. If the building is to be used for secure storage, it will need to be made weathertight. Some cladding, and possibly the underlying wood structure, will need to be replaced. Wood doors and hardware require rehabilitation. Original refrigeration equipment and tools remain in the ice house and can be utilized for interpretation.

Bunkhouse
The bunkhouse was constructed in c. 1990 by Viceroy to replace the earlier, dilapidated bunkhouse. Because it is used as lodging for visitors to the site, it has been well maintained. Both its exterior and interior appear to be in good condition, with only some basic wear and tear. It is neither disabled-accessible nor sprinklered. Depending on the program, systems and code-mandated upgrades may be required.
III. SITE CONCEPT PLAN
To Be Developed
**WALKING BOX RANCH**

**DESIGN CONCEPT PLAN**

**ENTRY ROAD - WHOLE SITE**

- [Image: Minor Drainage Channel]
  - Minor to nuisance flows during major storm events
  - Minimal depth to drainage swale
  - Minimal silt buildup
  - Al-grade concrete road crossings to convey flows

- [Image: Major Drainage Channel]
  - Deeper and wider flows during major storm events
  - Drainage swales are deeper
  - High silt buildup after storm event
  - Potential need for culverts to convey flows

**Existing OHV Designated Route**

**Existing Fence**

**Existing Road with Side Berms**

**Swale/Drainage Crossings**

- [Image: Enlarged Plan]

**June 2009**

**The site concept plan includes details on existing drainage and road design considerations, focusing on the differentiation between minor and major drainage channels, as well as the impact on silt buildup and the necessity of culverts for effective stormwater management.**
OVERALL SITE PLAN - 40 ACRES

- Barn (Historic)
  - Interpretation and exhibits
  - Special event areas

- Ice House (Historic)
  - Interpretive exhibit or storage

- Bunkhouse (Existing)
  - Public use
  - Vending machines
  - Kitchen for catering
  - Multi-use room

- Ranch House (Historic)
  - Restored historic house
  - Museum staff offices
  - Restored rock gardens

- Pump House (Proposed)
  - Potable water purification
  - Potable water storage

- Maintenance (Proposed)
  - Workshop, storage, and yard

- Research Facility (Proposed)
  - Offices
  - Labs
  - Classroom
  - Research interpretation for public

- Bunkhouse (Proposed)
  - Accommodates approx. 25 guests

- Camper Services Building (Proposed)
  - Covered cooking area
  - Accessible restrooms/showers

- Guest Cottages Duplex (Proposed)
  - Faculty/VIP lodging

- Caretaker’s Residence (Proposed)
  - Manager’s Residence (Proposed)

- Public Parking
  - 25 standard stalls
  - 5 RV/bus parking stalls
  - 3 van accessible spaces
  - Drop-off area

- Entry/Interpretive Area
  - Information kiosk
  - Interpretation

- Interpretive Trail
  - Accessible

- Gathering Area/Events Area
  - Blacksmith Shop (Proposed)
    - Interpretation and exhibits
    - Stage/AV presentation area
    - Blacksmith equipment storage

- Gathering Space
  - Interpretation and exhibits
  - Special event areas
  - Picnic area, group fire ring
  - Informal amphitheater/fire ring

- Water Storage Tank (Existing)
  - Non-potable storage
  - Potable storage

- Corrals (Existing)
  - Special event parking
  - Approximately 60 vehicle spaces

- Group Camping (Proposed)
  - Accommodates 35-40 people
  - Accessible camp pad

- RV Camping (Proposed)
  - Research use only
  - 3 full hookup sites

- Research Facility Parking (Proposed)
  - 12 standard stalls - 2 ADA
PARKING AND SITE ENTRY PLAZA AREA CONCEPT

- **Integral Colored Decorative Paving**
- **Integral Colored Accessible Concrete**
- **Bench and Interpretive Panel Typ.**
- **Information/Interpretive Kiosk**
- **Pedestrian Crossing**
- **Existing Cattle Chute**
- **Native Planting Seating Area**
- **Ranch Entry Plaza/Events Area**
- **Historic Restored Barn**
- **Historic Restored Ice House**
- **Alternate Entrance Gate**
- **Accessible Route to Blacksmith Shop**
- **Amphitheater Stage**
- **Native Restoration Planting Typ.**
- **Native Surface Connection to Historic Entry**
- **Closure Gate Typ.**
- **Overflow Corral Parking**
- **Approx. 80 Vehicles**
- **Water Tank Access**
- **Existing Corral Fence Typ.**

- **Asphalt Parking**
  - 37 Standard Stalls (10'x20')
  - 6 Large Vehicle/Bus Stalls (12'x60')
  - 3 ADA Stalls (10'x20')
- **Existing Corrals**
- **Temporary Interpretation and Exhibits**
- **Special Events Space**
- **Proposed Native Tree Typ.**
- **Native Surface Service Access**

- **Proposed Fence Typ.**
- **Natural Surface Trail - See Overall Plan**
- **Accessible Interpretive Trail - See Overall Plan**

- **Existing Non-Potable Water Tank**
- **Water Tank Access**
- **Existing Corral Fence Typ.**

- **Infiltration and Interpretive Kiosk**
- **Interpretive Exhibit**
- **Proposed Native Tree Typ.**
- **Proposed Native Tree Typ.**
Walking Box Ranch

Design Concept Plan

June 2009

Amphitheater - Festival Space

Native Shade Tree

Bermed Landscape

Amphitheater

Seating

Existing Bunkhouse

Fire Ring

Moveable Benches

Festival/Vendor Tents (10’x10’)

Natural Surface

Seat Wall

Integral Colored Accessible Concrete

Perspective - A

Plan

20 Feet

8

Perspective - A Plan

0 5 10 20 Feet
Accessible Route to Restrooms at the Existing Bunkhouse

Wayfinding/Interpretive Signage

Blacksmith Shop

40'x40' Tent
Can Accommodate Approx. 50-60 People Per Tent

Existing Corral Fence Typ.

Overflow Parking

Portable Toilets and Sinks
20'x20' Tent
Can Accommodate Approx. 20-30 People

Accessible Concrete Path to Overflow Parking

Natural Surface Service Access
Notes

1. Presumed rock garden designs based on available historic photos.
2. West Rock Garden is shown prior to 1934 addition.
3. Courtyard Rock Garden most likely extended into courtyard where pool was later constructed, but no documentation was found to indicate its design.
Proposed reconstruction / interpretation of the historic rock gardens that were present on the property during the time Rex Bell and Clara Bow lived at Walking Box Ranch. The proposed reconstructions are based on historic photographs of the gardens prior to the 1934 addition to the house.

COURTYARD ROCK GARDEN
The Courtyard Rock Garden is reinterpreted to fit a smaller space while incorporating a handicap accessible ramp along the edge of the existing porch. Existing Joshua trees are retained in the garden design, which closely interprets the geometric “carpet” design in colored native stone. An accessible ramp provides access into the ranch house along the south portion of the courtyard.

EAST ROCK GARDEN
The original rock garden on the east side of the ranch house was modified by the 1934 addition. The proposed design for this space is an interpretation of the rock garden with soft surface paths, stone rings around the existing Joshua trees, and a minimalist planting design with various cacti. An accessible ramp provides access into the ranch house along the south edge of the garden.

ENTRY ROCK GARDEN
The original primary entrance to the ranch house on the north side of the house had a circular rock garden with a stylized steer head depicted in stone that greeted visitors as they approached. The rock garden was tilted to better show the geometric patterns with a simple planting of cacti at the borders encircled by a stone edge. This rock garden is recreated on the north side of the ranch house. Various colors of stone define the design, which is accented by native cacti.
Walking Box Ranch

Design Concept Plan

- Accessible Concrete Path
- Bench Type
- Rock Border
- Gravel Mulch
- Native Surface
- Rock Rings
- Rock Mulch
- Aggregate Base Course
- Accessible Ramp
- Existing Swimming Pool with tile coping and surface with recycled glass chips

June 2009

Rock Gardens Interpretation

1" = 5'
RESEARCH CAMPUS PLAN

Service Access with Closure Gate

Research Facility Parking
• 10 Standard Stalls (10'x20')
• 2 ADA Stalls (10'x20')

Maintenance Facility

Research Facility Courtyard

Research Facility Entry Feature

RV Camping Sites (3 Total) - See Enlarged Plan

Additional Vehicle Parking - 4 Vehicles

Bermed Landscape Island for Screening

Manager's Residence

New Asphalt Entry Road

Corral Fence for Screening

RV/Camper Space

Additional Vehicle Parking Space

Utility Hookup Pedestal
• Electric
• Potable Water
• Sanitary Sewer

Shade Structure (Optional)

Aggregate Surface

Tent Space

Natural Surface

9' x 9' Tent Pad Type

6' Border

Native Stone Type

9' x 9' Tent Pad

4' - 0" Typ.

6" Border

31'-0"

17'-0"

44'-0"

44'-0"

31'-0"

9'-0"

6" Border

31'-0"

9'-0"

6" Border

31'-0"

9'-0"

6" Border

31'-0"

9'-0"

6" Border

31'-0"

9'-0"

6" Border

31'-0"

9'-0"

6" Border

31'-0"

9'-0"

6" Border

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6" Border

31'-0"

9'-0"
THEMATIC DEVELOPMENT DETAILS

Ranch Entry Gate Elevation - Stone Median Base

Ornamental Fence and Bollard - A

3" Thick Steel Mounting Base

Existing Ranch House

Fabricated Steel Brackets

Walking Box Rail Brackets

Rough Cut Timber Typ.

Existing Landscape

Ornamental Fence

10' O.C. Typ.

14'-6" Outbound Lane

15'-0" Median

14'-0" Inbound Lane

Existing Ranch House

Steel Cap

Engraved/Branded Walking Box Logo

Walking Box Logo

Fabricated Steel Walking Box Logo

Roadway

10' O.C. Typ.

13'-0" Median

14'-0" Inbound Lane

14'-6" Outbound Lane

18'-0"

Ranch Entry Gate Elevation - Stone Median Base

Moveable Benches

Fabricated Steel Bench Base - Walking Box Logo

Rough Cut Wood

Bench Concepts

Oxidental Fence and Bollard - B

Walking Box Logo Engraved/Branded Walking Box Logo

1" Thick Steel Mounting Base

Steel Mounting Base

Fabricated Steel Walking Box Logo

Rough Cut Timber Typ.
IV. ARCHITECTURAL CONCEPT
Architecturally, there are three types of structures at Walking Box Ranch: historically significant (the ranch house, barn, ice house), existing but not significant (the bunkhouse), and new (all remaining buildings). Treatment of the historic buildings is based on the recommendations in The Secretary of the Interior’s Standards for the Treatment of Historic Properties. The program specifically sought to define appropriate functions for all historic spaces. This way, the buildings will be rehabilitated, according to the Standards, to satisfy program requirements with the minimum intervention and alterations. The historic character of the ranch will be preserved, both outside and in its significant interiors.

The non-historic bunkhouse and the new blacksmith shop are within the historic ranchstead area. The objective for both of these is to complement but not imitate the historic buildings by using similar materials with simple contemporary detailing.

The research campus has been intentionally located south of the ranch house, placing it out of the view of the casual visitor to the site and also out of the view corridor from the ranch’s historic spaces. In spite of this somewhat separated location, the campus buildings are being designed in a vernacular style using materials similar to those found on ranches and farms throughout the region, with some changes for improved sustainability. The scale of the campus functions has allowed the new buildings to, likewise, be similar in scale to the historic structures. The buildings have been sited to maximize both passive and active ‘green’ features, exploit views, and create a variety of outdoor spaces. Most of the year is, in fact, very pleasant at Walking Box Ranch. The campus includes an outdoor classroom and sleeping porches; interior circulation spaces have been all but eliminated.

All of the buildings, including the historic structures, will be designed to incorporate sustainable features, from simple elements such as wide overhangs to innovative solutions including solar co-generation. The project as a whole has LEED Gold or Platinum as a goal; the extent to which sustainable features will be incorporated into the design will depend, in part, on funding.

The information gathered in the workshops, conducted as part of the master planning process, was used as the basis of the design team’s initial programmatic studies. This data was further developed using knowledge garnered from past similar projects, building code requirements, the space available in the existing buildings, and the carrying capacity of the site for new construction.

In the table that follows, the original program areas from the Master Plan are shown for reference. The table then lists (for each building) the net area of occupied spaces, the gross areas for both the enclosed spaces and the covered outdoor spaces. (Gross area includes both the usable floor space and the area occupied by structural elements, such as walls and columns, with an additional 10% of the area to allow for mechanical and service space.) Finally, the table shows the site footprint for each building, the total amount of land covered by both the enclosed and the open air spaces.

The program summarized here illustrates Master Plan Alternative 4A. It reflects the following decisions:

- Physical separation of the proposed public and interpretive functions from the academic and research functions.
- Location of the proposed public and interpretive functions within the existing historic and non-historic buildings on the site, allowing the historic buildings and site features to serve as an integral part of the interpretive program. These uses require fewer alterations to the historic buildings than the new laboratories and classrooms proposed for the academic and research functions.
- New construction is located on previously disturbed land, outside of the primary historic view corridors on the site.
- The combined area of the existing and new buildings strikes a balance between satisfying the programmatic needs of BLM and UNLV and controlling impacts – both environmental and cultural – on the site.

**PROGRAM AREA SUMMARY**
<table>
<thead>
<tr>
<th>Building / Space</th>
<th>Occupants / Calculation Notes</th>
<th>MP Area</th>
<th>Net Area</th>
<th>Enclosed Area (gross SF)</th>
<th>Outdoor Space (gross SF)</th>
<th>Site Footprint (gross SF)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>REHABILITATED BARN</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interpretive Displays</td>
<td>Locate in main barn space (Room 100) and Tack Room 101</td>
<td></td>
<td>1730</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information Desk &amp; Retail</td>
<td>Freestanding desk/kiosk in the main barn space, amount of retail space should be informed by a business plan.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retail Storage</td>
<td>Locate in Storage 103 at north side of barn (140 sf) or in the remodeled bunkhouse.</td>
<td></td>
<td>140</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equipment</td>
<td>Locate in Tack Room 102</td>
<td></td>
<td>120</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Covered outdoor spaces</td>
<td>Locate: 260</td>
<td>2100</td>
<td>1990</td>
<td>2100</td>
<td>260</td>
<td>2360</td>
</tr>
<tr>
<td><strong>EXISTING ICEHOUSE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Storage</td>
<td>possible interpretive use</td>
<td></td>
<td>104</td>
<td>126</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>REMODELED BUNKHOUSE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men's Room</td>
<td>2 wcs, 1 urinal, and 2 lavs</td>
<td></td>
<td>200</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women's Room</td>
<td>3 wcs and 2 lavs</td>
<td></td>
<td>200</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family Restroom</td>
<td>1 wc and 1 lav</td>
<td></td>
<td>70</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manager's Office</td>
<td>For docent staff, also includes small kitchen with sink, refrigerator, and microwave.</td>
<td></td>
<td>150</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee Area</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Changing Room</td>
<td>For docents/interpreters</td>
<td></td>
<td>55</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secure Storage</td>
<td>For cash drawer from barn, etc.</td>
<td></td>
<td>55</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exhibit Space</td>
<td></td>
<td></td>
<td>220</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Custodial Room / Mechanical</td>
<td></td>
<td></td>
<td>75</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Circulation Space</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Covered outdoor spaces (Option 1)</td>
<td>east porch: 342, west porch: 520, breezeway: 75 = 937 SF</td>
<td>1550</td>
<td>1175</td>
<td>1101</td>
<td>937</td>
<td>2038</td>
</tr>
<tr>
<td><strong>REHABILITATED RANCH HOUSE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interpretive Exhibits</td>
<td>Locate in Great Room 100, Game Room 101, Guest Bedroom 102, Boys' Bedroom 106, and Kitchen 108.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multipurpose Room</td>
<td>Locate in Garage. Provide storage space for chairs. Also provide unisex accessible toilet in vicinity (to be used when rest of ranch house is not open).</td>
<td></td>
<td>675</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Catering Prep Area</td>
<td>Locate in Maid's Room</td>
<td></td>
<td>70</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exhibit Prep Area</td>
<td>In Ranch house</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friends' Office</td>
<td>In Ranch house</td>
<td></td>
<td>75</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Custodial Room / Storage</td>
<td>Locate in existing bunkhouse, if required</td>
<td></td>
<td>70</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unprogrammed Space</td>
<td>Bedroom 104 - Use as meeting or storage space</td>
<td></td>
<td>185</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanical</td>
<td>Locate in basement and existing Mechanical Room 100. If additional space is required, reuse existing closets on the first and second floors.</td>
<td></td>
<td>1171</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Covered outdoor spaces &amp; pool</td>
<td>Porches: 971, pool patio: 2127</td>
<td>5082</td>
<td>5082</td>
<td>3096</td>
<td>7106</td>
<td>11504</td>
</tr>
<tr>
<td><strong>TOTAL: REHABILITATION</strong></td>
<td></td>
<td>8283</td>
<td>4295</td>
<td>11504</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building / Space</td>
<td>Occupants / Calculation Notes</td>
<td>MP Area</td>
<td>Net Area</td>
<td>Enclosed Area (gross SF)</td>
<td>Outdoor Space (gross SF)</td>
<td>Site Footprint (gross SF)</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------</td>
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</tr>
<tr>
<td><strong>NEW BUNKHOUSE</strong></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Group Lodging, including bedrooms,</td>
<td>25 people = 2 x the existing bunkhouse capacity (1550 sq ft)</td>
<td>3100</td>
<td>1382</td>
<td>1571</td>
<td></td>
<td></td>
</tr>
<tr>
<td>bathrooms, and common space</td>
<td>Commons Building</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Main floor and 150 SF balcony</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bedroom/Bathroom Buildings</td>
<td>main level: 2 bunkhouse buildings</td>
<td>1392</td>
<td>2070</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bedroom/Bathroom Buildings</td>
<td>upper level: 2 bunkhouse buildings</td>
<td>1380</td>
<td>1908</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laundry Room and Storage</td>
<td></td>
<td>272</td>
<td>272</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Custodial Room</td>
<td>Upper level only - Mechanical room at main level included in Commons Building GSF</td>
<td>90</td>
<td>90</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanical Room</td>
<td>Circulation, porches &amp; stairs</td>
<td>128</td>
<td>1382</td>
<td>2428</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower Level covered outdoor spaces</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper Level Sleeping Porch</td>
<td>Includes both covered and open area</td>
<td>894</td>
<td>894</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper Level covered trellis balconies</td>
<td></td>
<td>684</td>
<td>684</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>3740</td>
<td>4644</td>
<td>5540</td>
<td>4006</td>
<td>6069</td>
</tr>
<tr>
<td><strong>Footprint w/o outdoor spaces = 3641</strong></td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td><strong>NEW GUEST COTTAGE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private Lodging Rooms, with unit</td>
<td>Two story w/(2) units at 430 sq ft each</td>
<td>860</td>
<td>860</td>
<td>1134</td>
<td>581</td>
<td>938</td>
</tr>
<tr>
<td>kitchens and bathrooms</td>
<td>Ramp, stairs &amp; porches</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Covered outdoor spaces</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>860</td>
<td>860</td>
<td>1134</td>
<td>581</td>
<td>938</td>
</tr>
<tr>
<td><strong>NEW CAMPGROUND AMENITIES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Restrooms and Shower</td>
<td>ADA shower &amp; restroom; additional WC, 3 outdoor lavs &amp; 2 outdoor showers</td>
<td>210</td>
<td>210</td>
<td>289</td>
<td>1763</td>
<td>2052</td>
</tr>
<tr>
<td>Covered outdoor spaces</td>
<td>Shade structure over shower bldg &amp; cooking / eating area</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>400</td>
<td>210</td>
<td>289</td>
<td>1763</td>
<td>2052</td>
</tr>
<tr>
<td><strong>NEW BLACKSMITH SHOP / AV STRUCTURE</strong></td>
<td>Single space for interpretive use; AV closet &amp; screen on back exterior wall</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blacksmith Shop Display</td>
<td></td>
<td>116</td>
<td>116</td>
<td>112</td>
<td></td>
<td>236</td>
</tr>
<tr>
<td>Covered outdoor spaces</td>
<td>Porch</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>116</td>
<td>116</td>
<td>112</td>
<td></td>
<td>236</td>
</tr>
<tr>
<td><strong>NEW RESEARCH BUILDING</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classroom / Studio Space</td>
<td>classrooms</td>
<td>750</td>
<td>720</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classroom Furniture Storage</td>
<td>program: 100SF</td>
<td>100</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lab</td>
<td>“Clean” lab</td>
<td>600</td>
<td>600</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lab Support/Storage</td>
<td>approx. 50% of total lab area</td>
<td>300</td>
<td>240</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lab</td>
<td>“Dirty” lab</td>
<td>600</td>
<td>600</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lab Support/Storage</td>
<td>approx. 50% of total lab area</td>
<td>300</td>
<td>240</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty Offices</td>
<td>(2) at 110 sq ft each</td>
<td>240</td>
<td>240</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Restrooms</td>
<td>men’s and women’s accessible restrooms. Men: 2 lavs, WC &amp; urinal; women: 2 lavs, 2 WCs</td>
<td>150</td>
<td>260</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IT Equipment / Support</td>
<td></td>
<td>100</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Custodial Room</td>
<td></td>
<td>100</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanical / Support</td>
<td></td>
<td>234</td>
<td>260</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Covered Exterior Circulation</td>
<td>Includes walkways (1050 GSF) and exterior stair (50 GSF)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1106</td>
</tr>
<tr>
<td>Outdoor Classroom</td>
<td>30 people at 15 sq ft per person min (screened porch adjacent to classroom)</td>
<td>400</td>
<td>400</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>3474</td>
<td>3490</td>
<td>4660</td>
<td>1095</td>
<td>6186</td>
</tr>
<tr>
<td>Building / Space</td>
<td>Occupants / Calculation Notes</td>
<td>MP Area</td>
<td>Net Area</td>
<td>Enclosed Area (gross SF)</td>
<td>Outdoor Space (gross SF)</td>
<td>Site Footprint (gross SF)</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>---------------------------------------------------</td>
<td>---------</td>
<td>----------</td>
<td>--------------------------</td>
<td>--------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td><strong>NEW MANAGER'S RESIDENCE</strong></td>
<td>Residence, including living room, 2 bedrooms, kitchen, and bath</td>
<td></td>
<td></td>
<td>1194</td>
<td>338</td>
<td>1738</td>
</tr>
<tr>
<td>Covered Outdoor Space</td>
<td>porch: 138, garage: 200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>800</td>
<td>1400</td>
<td>338</td>
<td>1738</td>
<td></td>
</tr>
<tr>
<td><strong>NEW CARETAKER'S RESIDENCE</strong></td>
<td>Residence, including living room, 2 bedrooms, kitchen, and bath</td>
<td></td>
<td></td>
<td>1194</td>
<td>338</td>
<td>1738</td>
</tr>
<tr>
<td>Covered outdoor space</td>
<td>porch: 138, garage: 200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>800</td>
<td>1400</td>
<td>338</td>
<td>1738</td>
<td></td>
</tr>
<tr>
<td><strong>NEW MAINTENANCE BUILDING</strong></td>
<td>Workshop Approximately the same size as a small three-car garage</td>
<td>350</td>
<td>540</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building Maintenance / Storeroom</td>
<td>UNLV standard</td>
<td>150</td>
<td>300</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Covered outdoor space</td>
<td>Carport: 630, trash area: 100</td>
<td>750</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>990</td>
<td>730</td>
<td>1720</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yard</td>
<td></td>
<td>300</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL: NEW CONSTRUCTION</strong></td>
<td></td>
<td>15566</td>
<td>9374</td>
<td>20677</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL: REHABILITATION &amp; NEW CONSTRUCTION</strong></td>
<td></td>
<td>23840</td>
<td>13669</td>
<td>32181</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
HISTORIC RANCH CORE

Ranch House
The ranch house is the centerpiece of the site. Its historic exterior will be repaired and rehabilitated but will not be altered, except for disabled accessibility. One entrance door will be widened and the courtyard will be regraded, with a ramp to allow disabled access between the house and the large patio. The original garage doors, still in place, will be made operable to allow the former garage (future multi-purpose room) to be opened up in good weather. The south side of the garage (previously altered) will have folding doors that will open it up completely to the courtyard and pool patio. For safety and sustainability, the pool itself will be retained as a covered cistern; the cover will be designed to suggest the pool's original aquatic appearance. The barbeque area south of the courtyard will provide a staging area for catering outdoor events.

The primary historic spaces – the Great Room, Game Room, Guest Bedroom, Boys’ Bedroom, and Kitchen – will be preserved and used primarily for interpretive purposes. Secondary spaces will be adapted for appropriate support functions: a friend’s office, catering prep area, and storage. The second floor rooms, which are also historic, are not accessible and, thus, cannot be used for any public or interpretive functions. These spaces are unassigned; they may be used later for additional office or meeting space. The former garage, converted in the 1990s to guest rooms, will be reconfigured to its historic single space for interpretive use (exhibits, films, etc.) and for classes and meetings. This room will open on both its north and south walls for use during events on the site or in the courtyard.

Barn
Located at the northwest corner of the site, the historic barn is well situated to become the ranch’s Visitor Center. Its poor condition will require a significant amount of reconstruction; this will be done by matching the historic materials in their original rather than current, deteriorated state. The building will be seismically stabilized, including a new foundation. A floor slab will be constructed to provide a safe, level, and disabled accessible walking surface. In order to retain the character of the interior, the barn will remain uninsulated and will not be air-conditioned. Passive and low-tech methods, such as ceiling fans (for summer cooling) and stacked straw bales (for winter insulation), will be used to mitigate the extreme temperatures. The large barn doors on the east and west sides of the building will be open during visitor hours. Inside these doors will be new glazed folding doors that can be either kept closed for wind and some heat protection, or opened entirely in temperate weather.

The barn will house interpretive exhibits, a retail area and information desk, and related storage and equipment space. Because of the ‘natural’ conditioning of the barn, activities that require the public to remain indoors, such as a video presentation or special interactive exhibit, will occur elsewhere. There will be supplemental heat and cooling for staff working in the information retail area.

Existing Bunkhouse
The present bunkhouse will be completely remodeled to serve a number of support functions: public restrooms, vending area (primarily for bottled water), a manager’s office, a break room for docents and volunteers, and a small exhibit space. The office and break room are strategically located to provide a view of most of the public areas of the site.

There will be only one change to the bunkhouse exterior: a new porch will be constructed along the west side of the building. This will provide sheltered outdoor interpretive space. A passage will be opened up through the center of the building, connecting to the existing east-facing porch, which will be a sheltered area for those using the picnic area to the east.

Ice House
The tiny ice house will be rehabilitated with the addition of a foundation, but its appearance will be unaltered. It may be relocated but will remain near the barn. It will be used either for interpretation (it retains its original refrigerant equipment and tools) or for storage.

Blacksmith Shop
Historically, the blacksmith shop stood southeast of the barn. It can be seen in a single aerial photo, but there is no other physical documentation of its appearance. Based on Rex Bell, Jr.’s narrative description of the blacksmith shop and to house his collection of tools used in the original shop, a new structure will be constructed. Because of the lack of documentation, it will not be located in the center of the ranchstead, where it appears to have been historically, but along the edge of the corral, south of the barn. Here it can serve two functions: as an outbuilding to display and interpret the blacksmith’s craft and as a backdrop for the small ‘amphitheatre’ in the corral. The building will clearly be a new structure, but will be constructed of materials similar to the barn: wood structure, sheet metal roof, board and batten siding. It will be about 12 x 16 feet, with a covered porch on both the east and west sides. Large doors on the east side will open up the shop and the porch will provide an area for demonstrations. Similar doors on the east side will enclose a storage room for AV equipment and, when open, a large pull-down screen for videos and films. The porch on this side will be raised to act as an informal stage.
MULTIPURPOSE ROOM (FORMER GARAGE)

Catering Prep
ADA Toilet
Credenza/Chair Storage
Multi-purpose Room
Restore Garage Doors
Folding Doors
Sunscreen Awning
Storage

SCALE: 1" = 1'-0"
Historic Barn Plan

New concrete slab w/ appearance of soil for entire surface

Secure Storage Exhibit

HISTORIC BARN PLAN
SCALE: 1/8" = 1'-0"
Existing Bunkhouse

EXISTING BUNKHOUSE PLAN
SCALE: 1/8" = 1'-0"
RESEARCH CAMPUS

Classroom & Lab Buildings
The classroom building is the closest structure to the historic part of the site. It is where the public will occasionally interface with students and researchers. It will be about the size of the historic barn, with plastered straw bale exterior walls, wood or steel framing, and sheet metal roofing. It will have a single large classroom, divisible into three smaller spaces, each with a large pair of doors. The building will also house two offices for use by visiting faculty, an IT room, storage and mechanical space, and restrooms. The classrooms, offices, and restrooms will all be accessible from the covered porch. The porch will also connect these spaces with an outdoor classroom (a small roofed pavilion) and the adjacent lab building. The building will sit of the north side of a landscaped yard. The laboratory building construction will match that of the classroom, with one exception: its south wall will be built of masonry, using rhyolite rubble from the Viceroy Mine site. A modestly outfitted clean lab, with workbenches and a fume hood, will open onto the circulation porch and the outdoor classroom. Two storage rooms and a corridor will connect it to the dirty lab, also accessible from the maintenance yard.

Maintenance
With the lab building, the maintenance building will create an enclosed yard for maintenance activities and for delivery of specimens. The building will consist of a shop on the north end and a storage room on the south, with a roofed parking area for two cars or small trucks and two electric vehicles in between. There will be a charging station for the electric vehicles. The building will have a concrete slab floor, a wood or steel frame, and SIPs for the exterior walls. Exterior finishes will be composite board and batten siding, and sheet metal for the gable roof over the shop and parking. The roof of the storage space will be flat, accessed via an outdoor stair at the south end of the building. With a parapet wall around it, the rooftop will provide space for ongoing outdoor UNLV experiments.

At this location, these activities will be out of the line of sight from the historic public area of the ranch. A gated fence will enclose both ends of the maintenance yard.

New Bunkhouse
The largest new structure will be the bunkhouse, actually three buildings connected by open porches. It will be oriented to maximize views from the porches toward the Spirit Mountains. With its front porch facing the classroom building, the bunkhouse ‘commons’ will be the social center of the campus. The commons will be a tall, one-story building containing a large dining room, a smaller sitting room, and a kitchen. The kitchen will be outfitted for group cooking, with a large pantry and individual storage lockers. Alternatively, it may be operated as a commercial kitchen with a paid staff; this has yet to be decided. The commons will have an exposed truss roof structure, a balcony accessed from the upper level sleeping porch, and a large fireplace constructed of Viceroy Mine rhyolite. The main living and dining space will open on its south side to a large covered porch and landscaped courtyard.

Forming an ell around the courtyard will be the two-bunkhouse dormitory structures. Each of these will be two stories, with outdoor corridors at both levels connecting all rooms back to the commons. The lower level of one building will include a handicapped accessible room and bath, as well as a second accessible restroom and laundry, janitor, and storage rooms. On its upper level, it will have one double occupancy room, shared bathrooms, and additional storage space. The second dorm building will have five double occupancy rooms and shared bathrooms on each level.

The bunkhouse will have stained and polished concrete slab floors at ground level, wood floors on the upper level, and wood framing with SIPs for the exterior walls. Exterior finishes will be composite siding (board and batten and panelized) and sheet metal roofs. Porches and stairs will be constructed of wood and Trex-type materials. The chimney at the commons will be built of rhyolite.

Caretaker’s and Manager’s Residences
There will be two three-bedroom residences on the site – one for the resident caretaker and one for the ranch manager. Each house will have a one-car garage and porch oriented toward views. Construction will be the same ranch-style vernacular as the guest cottage and bunkhouse: wood framing, SIPs, metal roof.

Guest Cottage
There will be two two-story cottages containing two guest quarters for visiting faculty or guests. Construction will be the same ranch-style vernacular as the residences and bunkhouse: wood framing, SIPs, metal roof. Each guest suite will have a large porch oriented toward views to the south and east. The quarters will consist of a sitting room, bedroom, kitchenette, and bath. The lower level will be handicapped accessible.

Campground Pavilion
In the desert, a covered gathering area and temperature-controlled storage are necessities for a group campground. The pavilion for the 25-person group campground at Walking Box Ranch consists of a small rastra-block building to house restrooms and showers, including accessible ones, a cooking and cleanup area, and a secure storage and utility space. Some of the showers are in screened outdoor stalls; sinks are adjacent. Sheltering the building and the adjacent cooking and dining area is an open-air steel or wood-framed structure with a sheet metal roof.
Research Campus
1. Broad Overhangs on South & West Facing Facades
2. Sliding Window Shutters at West Facing Facades
3. Photovoltaic Arrays on South and Southwest Facing Roofs
4. Sheltered Outdoor Classroom
5. Open Air Circulation via Covered Porches
6. Breezeways
7. Breezeways
8. Cross Ventilation in all Occupied Spaces
9. Breezeways
Bunkhouse and Research Buildings

- Photovoltaic Roof
- Outdoor Circulation via covered porches
- Sleeping Porch
- Native Rhyolite Masonry Chimney
- Photovoltaic South-facing Roofs

NORTH ELEVATION
NOT TO SCALE
Caretaker’s and Manager’s Residences

Plan
SCALE: 1/8" = 1'-0"

East Elevation
SCALE: 1/8" = 1'-0"

South Elevation
SCALE: 1/8" = 1'-0"
Guest Cottage

Deep porches facing Views South & East to New York & Plute Mtns

Shades on East Facade

Shared Storage

Ramp to Accessible Unit

SOUTH ELEVATION
SCALE: 1/8" = 1'-0"

LOWER LEVEL
SCALE: 1/8" = 1'-0"

MECH
BEDROOM
ADA BATH
LIVING/DINING
KITCHEN
STOR
PORCH

EAST ELEVATION
SCALE: 1/8" = 1'-0"

UPPER LEVEL
SCALE: 1/8" = 1'-0"

MECH
BEDROOM
ADA BATH
LIVING/DINING
KITCHEN
DN
PORCH
Group Campground Pavilion

- Rastra Block Restroom/Storage Building
- Lightweight Shade Structure with Photovoltaic Roof
- Shaded Cooking & Dining Area

PLAN
SCALE: 1/8" = 1'-0"
Important Characteristics
• Appropriate for the Desert
• Appropriate for the Historic Site
• Reasonable First Cost
• Low Maintenance
• Sustainable
• Design Excellence
Building Materials and Systems

Sheet Metal Roofing

Straw Bale Walls with Plastered Exterior Finish

Sheet Metal Profiles

Structural Insulated Panels with ‘Trespa’ Exterior Cladding

Sheet Metal Wall Panels

SIPs Panels w/various finishes

Straw Bale & Wood Porch

Wood Board & Batten Siding
architectural concept

Native Rhyolite Masonry

Rastra Block Walls at Campground Pavilion

Salvaged Wood Floor

Photovoltaics on South facing Roofs

Photovoltaics on Ranch house Roof

Polished Concrete Floor

Exposed Trusses in Commons & Classroom

Interior of Plastered Straw Bales

Native Rhyolite Masonry

Rastra Block Walls at Campground Pavilion

Salvaged Wood Floor

Photovoltaics on South facing Roofs

Photovoltaics on Ranch house Roof

Polished Concrete Floor

Exposed Trusses in Commons & Classroom

Interior of Plastered Straw Bales
V. INTERPRETIVE PLAN
A 2-day workshop was held at the UNLV Public Lands Institute (PLI) conference room (RAJ Building) on Wednesday March 25, 2009 to Thursday March 26, 2009. This workshop was attended by the same broad cross-section of personnel that attended the programming workshop.

The 100% Interpretive Plan / Concept Design Submittal summarizes the planning and design work completed to date with the inclusion and consideration of all comments received by the personnel that reviewed the 50% and 80% submittals as well as attended the 2-day workshop in March, 2009. Comments are welcome; upon receipt they will be assembled and incorporated into the final 100% Interpretive Plan/Concept Design Submittal.
# Glossary

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADA</td>
<td>The Americans with Disabilities Act. This 1990 federal civil rights law sets standards for making facilities, exhibits and programs available to all visitors. The goal of ADA is to remove physical, communication, policy and procedural barriers.</td>
</tr>
<tr>
<td>Audio Element</td>
<td>A means of using recorded sound to enhance interpretation, for example, an audio recording on an interpretive sign that is visitor-activated by a push button or triggered by a motion sensor.</td>
</tr>
<tr>
<td>The desert</td>
<td>That part of the 40-acres between the developed WBR complex and the perimeter fence, particularly along the east fence line in the northwest corner of the property.</td>
</tr>
<tr>
<td>Design/Content</td>
<td>The phase of an exhibits project that follows the interpretive plan and conceptual design phase. The design/content development phase includes fully developing concept designs into fabrication-ready documents, writing text, identifying and acquiring all graphics, and preparing production files of all exhibits.</td>
</tr>
<tr>
<td>Development</td>
<td></td>
</tr>
<tr>
<td>Interactive Exhibit</td>
<td>An interpretive exhibit that requires the viewer’s physical involvement and interaction. Examples include pushing buttons to reveal additional information, operating a computer touch-screen, or donning period clothing. Interactives enhance learning by involving the viewer in an activity, and are especially important for children, and can help meet ADA guidelines.</td>
</tr>
<tr>
<td>Interpretive Amenity</td>
<td>A feature that enhances the visitor’s understanding and appreciation for an interpretive topic or site, including kiosks, waysides, signs, trails, visitor centers, etc.</td>
</tr>
<tr>
<td>Interpretive Sign</td>
<td>A sign containing interpretive information. In this plan, interpretive signs are described as small (max. 36” x 24&quot;) and large (up to 42” x 60&quot;).</td>
</tr>
<tr>
<td>Interpretive Panel</td>
<td>A large (greater than 48” tall) interpretive sign that is mounted to the wall or anchored to the floor. The panel may constitute an exhibit in its entirety or be part of a larger exhibit.</td>
</tr>
<tr>
<td>Interpretive Site</td>
<td>A location where some aspect of the WBR story will be told (e.g., the barn).</td>
</tr>
<tr>
<td>Multi-panel Kiosk</td>
<td>An outdoor structure supporting more than one interpretive panel. WBR kiosks are designed to hold four large interpretive signs. The kiosks have been designed to reflect the character of the ranch.</td>
</tr>
<tr>
<td>Natural Area</td>
<td>The relatively undisturbed northwest corner of the ranch.</td>
</tr>
<tr>
<td>Perimeter Trail</td>
<td>The section of the self-guided nature trail that skirts the ranch’s east fence line, then heads north into the Natural Area.</td>
</tr>
<tr>
<td>Ranchstead</td>
<td>That part of the historic ranch that is north of the ranch house. The ranchstead includes the barn, ice house, and bunkhouse.</td>
</tr>
<tr>
<td>Reader Rail</td>
<td>A sloped surface that contains is associated with another part of an exhibit, such as a reader rail.</td>
</tr>
<tr>
<td>Research Center</td>
<td>A sign containing interpretive information. In this plan, interpretive signs are described as small (max. 36” x 24&quot;) and large (up to 42” x 60&quot;).</td>
</tr>
<tr>
<td>Self-guided Interpretive Trail</td>
<td>A trail that takes the visitor to sites that are key to understanding and appreciating WBR. The trail contains multi-panel kiosks and single panel waysides that interpret site-specific topics. The trail contains the perimeter trail section and the research center interior trail section.</td>
</tr>
<tr>
<td>Sidebar</td>
<td>A design feature on an interpretive sign for highlighting and focusing on a particular topic. Usually a common design element used on all signs in a set, sidebars are often a column of variable width on the left or right side of the sign.</td>
</tr>
<tr>
<td>Static Exhibit</td>
<td>An exhibit that does not require physical involvement or interaction with the exhibit to obtain information. For example, a series of wall panels and reader rails.</td>
</tr>
<tr>
<td>Wayside</td>
<td>A site along an interpretive trail that is designed to allow visitors to stop safely off the trail and read an interpretive sign. At WBR, waysides contain a pad for standing and a single, small interpretive sign in a base. The base has been designed to reflect the character of the ranch and the multi-panel kiosk.</td>
</tr>
</tbody>
</table>
Several interpretive goals have been established for WBR. The goals listed here are for the development of the ranch and its first few years of operation. These goals should be re-evaluated after five years based on visitation numbers, audience demographics, funding, staffing and docent levels, partner agency priorities, and other factors. Current interpretive goals include:

1. Develop WBR as a center for public education and academic research.
2. Develop interpretive strategies and amenities that reflect the mission and activities of the three primary partners, BLM, UNLV, and TNC.
3. Provide opportunities for potential visitors to obtain information about the ranch prior to visiting.
4. Provide a diversity of interpretive opportunities so that visitors can experience the ranch whether it is staffed or not. (Throughout this plan, “staff” and “staffed” are used to mean attended by either paid staff or docents.)
5. Develop interpretive media that are site-appropriate (low environmental impact, consistent with the historic character of the ranch, appropriate to the desert environment, etc.).
6. Educate visitors about ranching in the desert southwest and about WBR’s unique history and operations.
7. Educate visitors about the general ecology of the Mojave Desert, on-site desert restoration, and the need for the stewardship of desert resources.
8. Educate visitors about the sustainable design and green building features throughout the ranch and research center.
9. Develop interpretive strategies and amenities that are consistent with the multiple-use nature of the ranch, for example, the ranch house and garage also serve as meeting spaces.
10. Develop interpretive amenities at WBR that are compatible with both the existing historic ranch structures and the research center to be constructed at the ranch.
11. Due to budget, staffing, and logistical considerations, develop interpretive strategies and amenities that emphasize non-personal interpretation (exhibits, signs, publications) over personal interpretation (guided walks).
12. To the extent practical given the environmental conditions and historic character of the ranch, develop interpretive amenities that are consistent with ADA and accessibility best practices.
13. To the extent practical and possible, integrate this interpretive plan with other regional plans, including the Interagency Strategic Plan for Clark County and the UNLV Environmental Education and Interpretation Standards.
Although a comprehensive audience profile has not been completed for WBR, information on potential visitors and priority audiences has been gleaned from discussions with the 2009 project working group, from the Walking Box Ranch Interpretive Visioning Report and Prospectus and from the WBR Market Demand Analysis (Dombusch Associates, June, 2008). In the absence of a detailed audience profile, the following general audience information was considered when developing this interpretive plan.

- **Drop-in visitors** are projected to be the primary audience during the initial years of WBR development and marketing. Drop-in visitors may include tourists based in Las Vegas and elsewhere, as well as residents of Las Vegas, Henderson, Searchlight and other towns in the region. Drop-in visitation will undoubtedly increase as WBR is marketed and as highway and airport construction increases traffic volume in the vicinity of the ranch. A proposed trail connecting WBR and Searchlight is also likely to increase drop-in visitation by equestrians and other outdoor recreationists.

- **Scientists, researchers, and college students** constitute an important audience both at the research center and throughout WBR. The families of scientists, researchers, and college students will also be an occasional audience.

- **People renting/utilizing the ranch house for corporate retreats, meetings, and other activities** constitute an occasional audience.

- **People using the Web to research WBR prior to visiting or otherwise looking for information on the ranch, research center, sustainability in the desert, and other topics** are an anticipated audience.

- **Elementary and secondary school students** are not anticipated to be a significant audience.

- **Commercial tours and tour buses**, particularly those originating in Las Vegas, are not anticipated to be a significant audience unless such groups are specifically targeted for marketing and contracts with tour operators are negotiated.

- **Spanish** will be the primary language of an unknown percentage of visitors. The need for interpretive media to be available in additional languages will be determined based on visitor demographics.

Completing a detailed audience profile and/or a business/marketing plan for the ranch will help identify and target specific audiences, (e.g., heritage tourists, visitors interested in sustainable design, bus tours) and help ranch managers anticipate and manage use at Walking Box. In addition to the sources cited in the WBR Market Demand Analysis, the following data sources might shed light on drop-in visitors and visitation levels:

- Area or regional tourism data and information collected by UNLV (e.g., studies completed by R.K. Schwer from 1995 to 2005)
- Convention and Visitor Center Bureau data and information for Searchlight, Needles, and other proximal communities, as well as Las Vegas and Clark County.
- Census data (www.census.gov) for local communities and the larger region
- Nevada State Comprehensive Outdoor Recreation Planning (SCORP) Data (www.parks.nv.gov/Scorp).
- Other local, county, regional, or state tourism, recreation, or visitation data and information.

If it is deemed necessary to update the information found in the WBR Market Demand Analysis, the following questions should be addressed concerning researchers, scientists, and students at the research center:

- Will the research center be used only by UNLV or will it be open to other academic institutions regionally or nationally?
- Will the research center showcase scholarly research in a way that will invite other institutions or other scholars to participate?
The interpretive strategies and amenities outlined in this plan are intended to provide visitors with several experience options depending upon whether the ranch is staffed or not. (The barn and the ranch house will only be open to the public when staffed.) The visitor experience and length of stay will also be influenced by the weather, particularly during periods of extreme temperatures.

<table>
<thead>
<tr>
<th>WBR Operating Status</th>
<th>Experience</th>
<th>Available to Visitors</th>
<th>Anticipated Length of Visitor Stay</th>
</tr>
</thead>
<tbody>
<tr>
<td>Closed</td>
<td>Remote access</td>
<td>• Web site(s)</td>
<td>0 minutes</td>
</tr>
<tr>
<td>Open but not staffed</td>
<td>Self-guided</td>
<td>• Multi-panel kiosks at the main parking area and the research center</td>
<td>20-30 minutes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Self-guided interpretive trail and waysides</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Contemplative bench</td>
<td></td>
</tr>
<tr>
<td>Open and staffed</td>
<td>Enhanced</td>
<td>• Multi-panel kiosks at the parking area and research center</td>
<td>45-60 minutes depending on the timing of tours and other staffed activities.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Self-guided interpretive trail and waysides</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Contemplative bench</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Interior of the barn</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Ranch house garage</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Selected rooms on the ground floor of the ranch house (as part of a guided tour).</td>
<td></td>
</tr>
</tbody>
</table>
THE INTERPRETIVE THEME

The interpretive theme states the fundamental thing that visitors should know or understand about Walking Box Ranch. The theme does not express all the main topics and stories to be addressed, but rather, encapsulates them in a single statement. An interpretive theme is generally “for internal use only” and is not conveyed verbatim to the public. For this reason, it is more important for a theme to capture the interpretive focus and priorities rather than serve as a marketing tag line. All interpretive exhibits, topics, stories, information, and strategies must reflect and support the theme. Adhering to the theme in this manner:

- assures that interpretation focuses on key topics
- contributes to consistency in messaging and branding
- results in interpretation that is engaging and comprehensive, yet concise
- enhances the visitor experience by organizing information in a meaningful way

The December, 2008 working group felt that the interpretive theme needed to convey that from the past to the present, people have had a strong, sometimes passionate connection to the Mojave Desert. For some, that connection is made through ranching and working and living on the land. For others, it is made through the biodiversity of the region or the rejuvenating power of the desert.

The working group also felt that the ranch provides the opportunity to see both backward and forward in time, and learn from the evolution of ranching in the desert. While learning from the past, WBR is also looking to the future by becoming a model of sustainable design and a leading Mojave Desert research center. The following interpretive theme was developed to reflect the sentiments of the December, 2008 working group and was endorsed in March, 2009 by the reconvened working group:

At Walking Box Ranch, the past, present, and future of the human connection to the desert is explored and responsible stewardship of desert landscapes is fostered.

The above theme serves as a springboard to all the main interpretive topics, including:

- Ranching in the desert, including:
  - The history and evolution of ranching in the desert, particularly on public lands.
  - The influence of the desert environment on ranching
  - The evolution of best practices over time
  - The history, management, and operations of WBR
  - The importance of water to ranching and domestic life
  - WBR Hollywood association and ranch domestic life
  - The desert ecosystem and its restoration and stewardship
  - Sustainability and adapting to the desert environment, including
    - The adaptive reuse of locally available materials
    - Adaptations to the desert environment throughout the historic ranch
    - Sustainable design and green building features at the research center and throughout WBR
    - Research at the research center
INTERPRETIVE TOPICS

Interpretive topics are the primary information areas or subjects to be interpreted at the ranch. Topics can be diverse as long as they reflect and support the interpretive theme. Topics are interpreted using specific information such as facts, data, anecdotes, stories, oral histories, graphics, etc. The 2008 working group identified a variety of interpretive topics which were subsequently revised and prioritized by the 2009 working group.

While there is agreement on most of the interpretive topics, there is still some minor disagreement between BLM and UNLV on the priority of some interpretive topics. For example, UNLV ranks sustainability high while BLM ranks it medium. These discrepancies, noted in the tables on the following pages, are not great enough to impede the development of this interpretive plan. The discrepancies are merely a matter of degrees and currently there is enough agreement on interpretive topics to allow for exhibit conceptual design and the completion of the plan. Any remaining disagreement about topic priorities will be resolved during the design/content development phase of the project, when the final stories and graphics are selected; the text is written; the final priority and weight of topics is determined; and the messages are honed, all within the context of the interpretive theme and the available space and budget.

At this stage of the ranch’s development and marketing, history will be the primary draw for most drop-in visitors. However, even visitors drawn to the ranch for its history or for the Clara Bowl/Rex Bell story will be exposed to the numerous other topics identified and prioritized by the working group. Interpretive topics and subtopics were prioritized using the following classifications:

<table>
<thead>
<tr>
<th>Priority Level</th>
<th>Description</th>
<th>Resource Devoted</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Priority</td>
<td>The topic, story or information is critical to the visitor’s understanding of the ranch and the interpretive theme, therefore, a relatively high percentage of the available resources will be devoted to interpreting the topic/story/information. For example, an entire exhibit may be dedicated to the topic or a high percentage of the content of a broader exhibit may be devoted to the topic.</td>
<td></td>
</tr>
<tr>
<td>Medium Priority</td>
<td>The topic, story or information enhances the visitor’s understanding of the ranch, the interpretive theme, or a high priority topic. Correspondingly, a moderate amount of exhibit space and/or exhibit content is dedicated to the topic, story or information. For example, one interpretive panel of a four-panel exhibit on the hardships of ranching in the desert (a high priority topic) may be dedicated to the medium priority topic, water use in ranch operations.</td>
<td></td>
</tr>
<tr>
<td>Low Priority</td>
<td>Due to limited resources such as space and budget, a relatively small percentage of interpretive resources is dedicated to the topic, story or information. For example, the role of Viceroy Mining Company in preserving and furnishing the ranch house may be conveyed in a single paragraph within a broader exhibit interpreting the house’s history, architecture, and furnishings.</td>
<td></td>
</tr>
</tbody>
</table>

A list of prioritized interpretive topics/information/stories follows. The locations at which these topics will be interpreted and the strategies/media to be used is covered in the Interpretive Landscape section of this plan.
### Topic 1: Ranching in the Desert
**Overall Priority: High**

<table>
<thead>
<tr>
<th>Information, story, etc.</th>
<th>Priority within topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>The history, significance, and use of existing and lost buildings and structures including the corrals, barn, icehouse, blacksmith shop, and shop strip.</td>
<td>High</td>
</tr>
<tr>
<td>An overview of ranch operations.</td>
<td>High</td>
</tr>
<tr>
<td>The importance and use of water in ranch operations (non-domestic use).</td>
<td>Medium</td>
</tr>
<tr>
<td>The adaptive reuse of local materials including railroad ties, tin, and other materials.</td>
<td>Medium</td>
</tr>
<tr>
<td>Other sustainability topics to be woven throughout interpretation at the ranch.</td>
<td>High (UNLV) Medium (BLM)</td>
</tr>
<tr>
<td>The role of public land in the history and evolution of desert ranching.</td>
<td>Medium (BLM) Low (UNLV)</td>
</tr>
<tr>
<td>The ownership history of the ranch (Walking Box Ranch, YKL, Viceroy).</td>
<td>Low</td>
</tr>
<tr>
<td>Partnerships involved with the Ranch (BLM-Viceroy-TNC, BLM-UNLV-TNC).</td>
<td>Low</td>
</tr>
<tr>
<td>The role of the railroad in the history and evolution of the Ranch.</td>
<td>Low</td>
</tr>
<tr>
<td>The role of mining in preserving and furnishing the ranch house.</td>
<td>Low</td>
</tr>
</tbody>
</table>

### Topic 2: Ranch Domestic Life
**Overall Priority: High**

<table>
<thead>
<tr>
<th>Information, story, etc.</th>
<th>Priority within topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Clara Bow/Rex Bell story, including</td>
<td>High</td>
</tr>
<tr>
<td>• Their life at Walking Box Ranch (high priority)</td>
<td></td>
</tr>
<tr>
<td>• An overview of their Hollywood careers (low priority)</td>
<td></td>
</tr>
<tr>
<td>• The desert as a refuge and place of rejuvenation (low priority)</td>
<td></td>
</tr>
<tr>
<td>• An overview of their post-WBR lives (low priority)</td>
<td></td>
</tr>
<tr>
<td>The realities and hardships of ranch domestic life.</td>
<td>High</td>
</tr>
<tr>
<td>The unique architecture of the ranch house, including ways in which the house was adapted to desert living.</td>
<td>Medium</td>
</tr>
<tr>
<td>The importance and use of water domestically.</td>
<td>Medium</td>
</tr>
<tr>
<td>Powering the ranch, from human and animal power to electricity to solar power</td>
<td>Low</td>
</tr>
</tbody>
</table>

### Topic 3: Desert Conservation, Protection, Restoration, and Stewardship
**Overall Priority: High**

<table>
<thead>
<tr>
<th>Information, story, etc.</th>
<th>Priority within topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local flora and fauna, including key plant and animal species, particularly those that illustrate adaptations to desert life.</td>
<td>Medium</td>
</tr>
<tr>
<td>The conservation, protection, restoration, and stewardship of the desert.</td>
<td>High</td>
</tr>
<tr>
<td>An overview of the desert landscape and ecosystem</td>
<td>Low</td>
</tr>
</tbody>
</table>

### Topic 4: Research at WBR
**Overall Priority: Medium**

<table>
<thead>
<tr>
<th>Information, story, etc.</th>
<th>Priority within topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overview of the research center, its mission and activities.</td>
<td>High</td>
</tr>
<tr>
<td>Significant past, ongoing, and future research, including projects and the application of research findings.</td>
<td>Medium</td>
</tr>
<tr>
<td>Sustainable living in the desert environment</td>
<td>High (UNLV) Medium (BLM)</td>
</tr>
<tr>
<td>Opportunities for the public to get involved with the research center</td>
<td>Low</td>
</tr>
</tbody>
</table>
### MAJOR INTERPRETIVE AREAS

For interpretive purposes, WBR can be considered to contain five distinct areas. Allocating specific goals and strategies to specific areas on the ranch will increase interpretive and educational effectiveness while using the WBR landscape to full advantage, for example, by interpreting ranch operations on the ranchstead and ranch domestic life at the ranch house. Similarly, sustainability is primarily interpreted at the research center, and desert ecology in the desert areas of the ranch. While each of the major interpretive areas has an interpretive focus, all areas will be integrated thematically, and a message of stewardship will be woven throughout the property, exhibits, and signs.

<table>
<thead>
<tr>
<th>Location</th>
<th>Interpretive Goals</th>
<th>Strategies/Media</th>
</tr>
</thead>
</table>
| Parking Area                  | Welcome visitors to the ranch  
Provide wayfinding, orientation, and administrative information  
Introduce visitors to the interpretive theme and topics  
Serve as a terminus of the interpretive trail  
Provide secure facilities for exhibits and artifacts  
Provide a safe location for visitors to interact with staff and volunteers  
Provide restrooms and water for visitors  
Interpret the history and realities of ranching in the desert  
Provide information on the history and ranching operations of WBR  
Provide information on the stewardship of desert resources  
Provide retail space for WBR items and memorabilia  
Provide a space to showcase and support local communities and their related resources (e.g., Searchlight History Museum) | Multi-panel kiosk and the start of the self-guided interpretive trail with waysides  
Static and interactive exhibits located in the barn  
An interactive activity (calf-roping) in a corral  
Static exhibits and a demonstration area in a reconstructed blacksmith shop  
Large interpretive signs mounted to exterior walls of the bunkhouse  
Small interpretive signs in the bunkhouse that highlight water conservation features  
Reception counter and staff located in the barn  
Restrooms and water located at the bunkhouse  
Self-guided interpretive trail with waysides  
Retail space located in the barn  
Changeable, community-based exhibits located at the bunkhouse |
| The Ranchstead  
The area north of the ranch house, including the barn, ice house, corrals, bunkhouse, blacksmith shop, and the site of the shop strip. | Provide security for exhibits and artifacts  
Provide a safe location for visitors to interact with staff and volunteers  
Provide restrooms and water for visitors  
Interpret the history and realities of ranching in the desert  
Provide information on the history and ranching operations of WBR  
Provide information on the stewardship of desert resources  
Provide retail space for WBR items and memorabilia  
Provide a space to showcase and support local communities and their related resources (e.g., Searchlight History Museum) | Multi-panel kiosk  
Static and interactive exhibits located in the barn  
An interactive activity (calf-roping) in a corral  
Static exhibits and a demonstration area in a reconstructed blacksmith shop  
Large interpretive signs mounted to exterior walls of the bunkhouse  
Small interpretive signs in the bunkhouse that highlight water conservation features  
Reception counter and staff located in the barn  
Restrooms and water located at the bunkhouse  
Self-guided interpretive trail with waysides  
Retail space located in the barn  
Changeable, community-based exhibits located at the bunkhouse |
| The Ranch House  
| Personalize and humanize the WBR story  
| Interpret ranch domestic life  
| Provide information on the ranch house and adapting to desert life | Self-guided interpretive trail with waysides  
Static mounted interpretive signs in the garage  
A moveable, six-panel exhibit in the garage  
Static and interactive exhibits located in the house  
Artifacts located in the garage and house |
| The Desert  
(The desert areas within the 40 acre parcel) | Provide information on the sensitivity of the desert and on the restoration occurring at WBR.  
Interpret desert flora and fauna, particularly their adaptations to the environment to relate to sustainability and green design principles  
Provide a contemplative area | Self-guided interpretive trail with waysides  
Contemplative bench |
| The Research Center | Provide wayfinding information  
Provide information on the research center and its affiliation with UNLV  
Provide information on adapting to the desert environment through sustainable design concepts and practices  
Interpret the adaptive/sustainable design features utilized at the research center (buildings and grounds)  
Provide information on the research being conducted at the center | Multi-panel kiosk  
Small interpretive signs or waysides at key locations that showcase sustainable design features  
Small interpretive signs or waysides at research plots and other relevant landscape features  
Small interpretive signs or waysides at key locations that interpret the research being conducted at the center  
A sponsor/donor wall recognizing companies, organizations, and individuals who have contributed to the research center |
**INTERPRETIVE AMENITIES AND MEDIA**

WBR lends itself to using a variety of locations, strategies, amenities, and media to interpret the ranch and the research center, and to provide visitors with a variety of experience options ranging from self-guided to docent-led. The interpretive amenities and media proposed for WBR and detailed in this section are:

- A self-guided interpretive trail featuring interpretive signs on multi-panel kiosks and single-sign waysides. Selected waysides will contain solar powered audio recordings or remote access information.
- Exhibits at/in key facilities (barn, bunkhouse, blacksmith shop, ranch house, research center).
- Small interpretive signs at key sustainable design features throughout the ranch (including bunkhouse restrooms) and the research center.
- Web site information and linkages.
- Personal interpretive services provided by staff and/or docents.

**SELF-GUIDED INTERPRETIVE TRAIL**

A self-guided interpretive trail will wind through the property, bringing visitors to sites that are key to understanding and appreciating the past, present, and future of WBR. This trail is potentially the most important interpretive amenity at the ranch because, unlike the barn and ranch house, it will be available to visitors when the ranch is not staffed. For this reason, it is likely to experience a higher level of visitation than either the barn or house. Because the trail will be the only interpretive amenity routinely available to the public, all the major interpretive topics should be interpreted along the trail. The trail will, therefore, provide visitors with an overview of the interpretive topics, while the facilities (barn, ranch house, research center) will provide information in greater detail and depth, creating a variety of visitor experiences. (The trail includes three waysides on the grounds of the research center.

These waysides will be accessible to research center users but will only be accessible to the public when the research center and grounds are open to the public or when visitors are on a guided tour. Waysides should not be numbered because of the discontinuity in numbering caused by research center waysides being inaccessible to the public at times.)

To the extent practical, the trail should meet ADA accessibility guidelines. These guidelines will be most easily met on the trail segment extending from the main parking area to the research center. The trail segment around the perimeter of the property may or may not be accessible based on terrain, budget, and the threat to the desert ecosystem from the higher level of development accessibility requires.

The trail will be anchored by multi-panel interpretive kiosks, one at the parking area and one at the gate separating the ranch house from the research center. The trail will also feature wayside signs mounted in low profile bases. Kiosks and bases have been designed to reflect the character of the ranch, employing rough-hewn heavy wooden timbers and the WBR logo. Kiosk interpretive signs should measure approximately 36" (horizontal) x 48" (tall). Wayside interpretive signs should be no larger than 36" (horizontal) x 24" (tall). Smaller wayside signs should be considered if it is determined that 36" x 24" signs are too intrusive in the desert landscape.

Selected waysides will include a push button-activated audio unit that plays part of a relevant oral history. These recordings should not be longer than 60 seconds. Consistent with the goal of showcasing adaptations to the desert environment and practicing sustainability, audio units will be solar powered. The specific technology and components used to power audio units will be determined in the design/content development phase of the project.

Selected waysides will also display a telephone number that visitors can call to listen to a recording (not to exceed two minutes containing more detailed information on the wayside’s interpretive topic. (Note: Multi-panel kiosks will not feature audio units or remote access information.) If warranted based on visitor demographics, target audiences, and budget, interpretive signs, audio recordings, and remote access recordings should include Spanish language translations. The need for additional languages should be determined based on visitation.

Throughout the interpretive planning process, attention was given to meeting the needs of visitors with disabilities while also preserving the historic character of the ranch and protecting the sensitive desert environment. The interpretive strategies and media proposed in this plan that address ADA include:

- The hard surfacing of sections of the self-guided interpretive trail.
- The use of audio recordings and ambient sound at selected waysides.
- The use of remote access phone messages.
- The displaying of artifacts and the use of large format graphics.
- The use of touch screen computer kiosks.
- The availability of staff and docents, included guided tours.

In addition, ADA guidelines will be considered during the design/content development phase of the project, assuring that exhibits and signs meet ADA guidelines.

The tables in this section detail the topics and information to be interpreted along the interpretive trail and whether audio or remote access will be employed.
WAYSIDE TOPICS AND DETAILS

Wayside 1: Parking Area Multi-panel Kiosk
The main parking area provides parking and an area for visitors to stage, prepare to enter the ranch, and obtain basic orientation, administrative, and interpretive information about the ranch. While the multi-panel interpretive kiosk at this location is valuable for all visitors, it is especially beneficial to people visiting the ranch when it is not staffed.

<table>
<thead>
<tr>
<th>Sign 1</th>
<th>Sign 2</th>
<th>Sign 3</th>
<th>Sign 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topics/Information</td>
<td>Topics/Information</td>
<td>Topics/Information</td>
<td>Topics/Information</td>
</tr>
<tr>
<td>• Welcome to WBR</td>
<td>• The partners associated with the ranch, their missions, and a brief overview of their activities on the ranch:</td>
<td>• Overview of the history of the ranch including the Bow/Bell story</td>
<td>Brief orientation to the Mojave Desert and an overview of the adaptations to the desert environment that can be found on the ranch: Adapted and reused materials</td>
</tr>
<tr>
<td>• Wayfinding map of the WBR complex</td>
<td>BLM UNLV TNC</td>
<td>A brief description of the ranch’s major areas and the opportunities available to visitors at each:</td>
<td>Building siting/location Ranch house adaptations/design</td>
</tr>
<tr>
<td>• Hours of operation, the self-guided tour option, guided tour information, website(s) information</td>
<td>The ranchstead</td>
<td>The ranch house</td>
<td>Ranch house adaptations/design</td>
</tr>
<tr>
<td></td>
<td>The research center</td>
<td>The conservation area</td>
<td>Other examples on the grounds and in selected buildings</td>
</tr>
<tr>
<td></td>
<td>The interpretive trail</td>
<td>The natural area</td>
<td></td>
</tr>
</tbody>
</table>

Wayside 2: Barn

<table>
<thead>
<tr>
<th>Topics/Information</th>
<th>Audio or Remote Access</th>
<th>Topics/Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The history and use of the barn</td>
<td>None</td>
<td>Signs displaying the days/times the barn will be open can be posted on the barn doors.</td>
</tr>
<tr>
<td>• The use of railroad ties, tin, and other adapted materials in the barn</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Wayside 3: Corrals

<table>
<thead>
<tr>
<th>Topics/Information</th>
<th>Audio or Remote Access</th>
<th>Topics/Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The historic use of the corrals</td>
<td>Audio: Corral-related parts of the Carl Weikel interview</td>
<td>A ‘calf’ roping exhibit/activity that allows visitors to try to toss a lariat (provided by WBR) over a faux calf head/body should be installed in one of the corrals in proximity to the barn entrance. A solar powered audio unit that plays a recording of ranch activity centered around the corrals (branding, etc.), triggered by a motion detector, could also be used at this location.</td>
</tr>
<tr>
<td>• The use of railroad ties and other adapted materials in corrals and fences</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Wayside 4: Shop Strip

<table>
<thead>
<tr>
<th>Topics/Information</th>
<th>Audio or Remote Access</th>
<th>Topics/Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Ranch operations buildings that have been moved or that are no longer present: Icehouse Shop strip Blacksmith shop</td>
<td>Remote Access: Parts of the Rex Bell Jr. and/or Carl Weikel interviews related to the ice house</td>
<td>This assumes the ice house will be moved to this location. The icehouse can be opened when the barn is staffed, allowing visitors to see the inside of the house, which can be outfitted with faux ice and a hanging side of beef or other appropriate item. The blacksmith shop may be mentioned as having once been located in the general vicinity, however, it should be interpreted in detail elsewhere. A recording of ranch activity centered around the shop strip, triggered by a motion detector, could also be used at this location.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Topics/Information</th>
<th>Audio or Remote Access</th>
<th>Topics/Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The history and use of the shop</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>• The use of railroad ties, tin, and other adapted materials in the barn</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Wayside 5: Historic Ranch Gate

<table>
<thead>
<tr>
<th>Topics/Information</th>
<th>Audio or Remote Access</th>
<th>Topics/Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>The historic ranch gate and the separation of ranch operations from ranch domestic life.</td>
<td>Audio: Parts of the Rex Bell Jr. and/or Carl Weikel interviews related to the guest house</td>
<td></td>
</tr>
<tr>
<td>The former guest house and significant guests who stayed there</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Wayside 6: Ranch House – Northwest Corner

<table>
<thead>
<tr>
<th>Topics/Information</th>
<th>Audio or Remote Access</th>
<th>Topics/Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architecture of the ranch house</td>
<td>Remote Access: Parts of the Rex Bell Jr. interview related to the ranch house</td>
<td>Locating this wayside slightly northwest of the two buggy wheels currently on site should be considered. This location affords an aesthetically pleasing view of the wheels and house. (If appropriate, sightlines to the house can be improved by removing some Joshua trees and vegetation)</td>
</tr>
<tr>
<td>Floor plan and house interior, including the upstairs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Wayside 7: Ranch House – Northeast Corner

<table>
<thead>
<tr>
<th>Topics/Information</th>
<th>Audio or Remote Access</th>
<th>Topics/Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structural adaptations to desert living including sitting, materials, etc.</td>
<td>Remote access: Information on sustainable design in the desert.</td>
<td></td>
</tr>
<tr>
<td>Stewardship of desert resources</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Wayside 8: Ranch House – Southeast Corner

<table>
<thead>
<tr>
<th>Topics/Information</th>
<th>Audio or Remote Access</th>
<th>Topics/Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ranch domestic life, particularly growing up and playing on the ranch</td>
<td>Audio: Parts of the Rex Bell Jr. interview dealing with playing on the ranch and using the swimming pool.</td>
<td></td>
</tr>
<tr>
<td>The pool and rock garden historically</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Wayside 9: Research Center Multi-panel Kiosk

This kiosk provides interpretive information and allows visitors to re-orient to ranch, buildings, and trail system. The kiosk is perhaps the most important location for visitors to receive an overview of the research center, as the center will typically be closed to the public.

<table>
<thead>
<tr>
<th>Sign 1</th>
<th>Sign 2</th>
<th>Sign 3</th>
<th>Sign 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Topics/Information</strong></td>
<td><strong>Topics/Information</strong></td>
<td><strong>Topics/Information</strong></td>
<td><strong>Topics/Information</strong></td>
</tr>
<tr>
<td>Orientation and wayfinding, including a map of the research center and the entire WBR property.</td>
<td>Explanation and description of the research center, its mission, and its affiliations and partners.</td>
<td>Overview of the desert conditions faced in designing the center’s buildings and the sustainable design principles employed to address them.</td>
<td>Overview of the center’s grounds and the design principles employed to address the desert conditions. Overview of research plots on the grounds.</td>
</tr>
</tbody>
</table>

Wayside 10: Research Center Interior Trail

<table>
<thead>
<tr>
<th>Topics/Information</th>
<th>Audio or Remote Access</th>
<th>Topics/Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>A topic related to research at the center, e.g., a key sustainable design feature, adaptive use example, etc.</td>
<td>To be determined based on the topic.</td>
<td>Accessible to research center users at all times, this sign is only accessible to the public when the research center and grounds are open to the public or when visitors are on a guided tour.</td>
</tr>
</tbody>
</table>

Wayside 11: Research Center Interior Trail

<table>
<thead>
<tr>
<th>Topics/Information</th>
<th>Audio or Remote Access</th>
<th>Topics/Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>A topic related to research at the center, e.g., a key sustainable design feature or an adaptive use example.</td>
<td>To be determined based on the topic.</td>
<td>Accessible to research center users at all times, this sign is only accessible to the public when the research center and grounds are open to the public or when visitors are on a guided tour.</td>
</tr>
</tbody>
</table>

Wayside 12: Research Center Interior Trail

<table>
<thead>
<tr>
<th>Topics/Information</th>
<th>Audio or Remote Access</th>
<th>Topics/Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>A topic related to research at the center, e.g., a key sustainable design feature or an adaptive use example.</td>
<td>To be determined based on the topic.</td>
<td>Accessible to research center users at all times, this sign is only accessible to the public when the research center and grounds are open to the public or when visitors are on a guided tour.</td>
</tr>
</tbody>
</table>
### Wayside 13: Perimeter Trail – Desert Restoration

<table>
<thead>
<tr>
<th>Topics/Information</th>
<th>Audio or Remote Access</th>
<th>Topics/Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The desert restoration occurring at WBR</td>
<td>Remote Access: Information on desert restoration and appropriate plantings for the region</td>
<td></td>
</tr>
<tr>
<td>• Sensitivity of desert natural resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Stewardship of desert resources</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Wayside 14: Perimeter Trail – Tortoise Conservation

<table>
<thead>
<tr>
<th>Topics/Information</th>
<th>Audio or Remote Access</th>
<th>Topics/Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Tortoise conservation and the Area of Critical Environmental Concern</td>
<td>Remote Access: Information of tortoise conservation and the protection of desert resources</td>
<td></td>
</tr>
<tr>
<td>• Sensitivity of desert natural resources</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Wayside 15: Perimeter Trail – Evolving Landscape

<table>
<thead>
<tr>
<th>Topics/Information</th>
<th>Audio or Remote Access</th>
<th>Topics/Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>• An overview of how the desert landscape visible from this location has changed over time due to human activities</td>
<td>None</td>
<td>Audio and remote access are not recommended for this wayside due to a desire to keep the more “natural” areas of the ranch free from high-tech features and to encourage visitors to establish a more personal and direct connection with the desert.</td>
</tr>
<tr>
<td>• Stewardship of desert resources</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Wayside 16: Perimeter Trail – Natural Area

<table>
<thead>
<tr>
<th>Topics/Information</th>
<th>Audio or Remote Access</th>
<th>Topics/Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The complexity and sensitivity of the desert ecosystem as demonstrated by interpreting selected flora and fauna.</td>
<td>None</td>
<td>Audio and remote access are not recommended for this wayside due to a desire to keep the more “natural” areas of the ranch free from high-tech features and to encourage visitors to establish a more personal and direct connection with the desert.</td>
</tr>
<tr>
<td>• Adaptations of flora and fauna, particularly those that relate to sustainability and green design.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Stewardship of desert resources</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Wayside 17: Perimeter Trail – Natural Area

<table>
<thead>
<tr>
<th>Topics/Information</th>
<th>Audio or Remote Access</th>
<th>Topics/Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The complexity and sensitivity of the desert ecosystem as demonstrated by interpreting selected flora and fauna.</td>
<td>None</td>
<td>Audio and remote access are not recommended for this wayside due to a desire to keep the more “natural” areas of the ranch free from high-tech features and to encourage visitors to establish a more personal and direct connection with the desert.</td>
</tr>
<tr>
<td>• Adaptations of flora and fauna, particularly those that relate to sustainability and green design.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Stewardship of desert resources</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Wayside 18: Perimeter Trail – Contemplative Area

<table>
<thead>
<tr>
<th>Topics/Information</th>
<th>Audio or Remote Access</th>
<th>Topics/Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The desert as a retreat and a source of rejuvenation for people</td>
<td>None</td>
<td>One or more benches should be placed here to allow people to rest or sit in contemplation. Audio and remote access are not recommended for this wayside due to a desire to keep the more “natural” areas of the ranch free from high-tech features and to encourage visitors to establish a more personal and direct connection with the desert.</td>
</tr>
<tr>
<td>• Stewardship of desert resources</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
INTERPRETIVE TRAIL SUMMARY

Wayside signs will contain attractive and informative graphics, concise and engaging text, and a sidebar containing information on adapting to the desert and/or desert stewardship. The sidebar may be about adaptations in ranching, water use, plants and wildlife, green design, or any number of topics that reinforce the concepts of adaptations to the desert, adaptive management, sustainability, and stewardship.

All outdoor interpretive signs should be made of a material that will withstand the harsh environmental conditions of the desert, including high UV exposure and temperature extremes. The sign material should be vandal-resistant and come with a minimum 10-year warranty. The sign material will be determined during the design/content development phase of this project.

### Wayside Sign Description

<table>
<thead>
<tr>
<th>Number of Waysides</th>
<th>Number of Large Signs (Approx. 36” x 48&quot;)</th>
<th>Number of Small Signs (Max. 36” x 24&quot;)</th>
<th>Number of Waysides with Audio</th>
<th>Number of Waysides with Remote Access Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>8</td>
<td>16</td>
<td>3-6 (depending on research center wayside topics)</td>
<td>4-7 (depending on research center wayside topics)</td>
</tr>
</tbody>
</table>

1. Parking Area multi-panel kiosk
2. Barn wayside
3. Corrals wayside
4. Shop strip wayside
5. Historic gate wayside
6. Ranch house northwest corner wayside
7. Ranch house northeast corner wayside
8. Ranch house southeast corner wayside
9. Research center multi-panel kiosk
10. Research center wayside
11. Research center wayside
12. Research center wayside
13. Perimeter trail – tortoise conservation wayside
14. Perimeter trail – restoration wayside
15. Perimeter trail – evolving landscape wayside
16. Perimeter trail – natural area wayside
17. Perimeter trail – natural area wayside
18. Perimeter trail – contemplative area wayside
INTERPRETIVE EXHIBITS

Most of the exhibits recommended in this plan have been designed to be static or low-tech interactive exhibits in recognition of the extreme environmental conditions at the ranch and to reflect the rustic character of the ranch. Exhibits will be housed in the following facilities:

1. The barn
2. The bunkhouse
3. The blacksmith shop
4. The ranch house
5. The research center.

This section contains descriptions and conceptual designs of major exhibits. All exhibit titles, text, and other content are intended merely to convey the concept of the exhibit and are not proposed as actual content. Titles, text, graphics, and other content will be developed during the design/content development phase of this project.

The Barn

Open only when staffed, the barn will be the focal point of interpretation in the ranchstead area, housing exhibits, a retail area, and staff. The barn is the primary location for interpreting ranching in the desert and the ranching operations at WBR. Towards this end, five main exhibit areas have been created within and at the barn, with each area focusing on separate but related topics.
THE BARN ENTRY
RECEPTION AND RETAIL AREA

This area will contain the reception counter and retail merchandise, allowing visitors to interact with staff and purchase ranch-related items. No interpretation will occur in this area, although movie posters of Clara Bow and Rex Bell films may be displayed and a WBR activities and events board should be posted near the west doors.

- Possible retail area items include:
  - WBR caps, t-shirts, and other apparel
  - Clara Bow and Rex Bell films and posters
  - Books on WBR and ranching in the southwest in general
  - Journals such as East Mojave Diary
  - Books on Mojave Desert flora, fauna, and ecology
  - Books on xeriscaping, solar power, water conservation and other sustainability topics
  - An “Adopt-A-Tortoise” program
  - A donation box
RANCHING IN THE DESERT EXHIBIT AREA

These exhibits are intended to educate visitors about the realities and hardships of desert ranching. Exhibits also inform visitors about the evolution of desert ranching and the stewardship of public lands. The exhibits are designed to provide visitors with enough information about the desert and desert ranching that they are able to make responsible decisions as a ranch manager in one of the final exhibits in this exhibit area. Major exhibits in this area include:

- An exhibit consisting of wall panels and reader rails that interpret the hardships of desert ranching (availability of fodder and water, extreme temperatures, remoteness).
- An exhibit consisting of wall panels and reader rails that provide an overview of the history and evolution of ranching and the stewardship of public lands in the southwest, including an orientation to BLM land in the region. This exhibit should also contain information on ranching and Areas of Critical Environmental Concern, and specifically, the desert tortoise Area at WBR.
An interactive exhibit that allow visitors to play the role of ranch manager and make decisions that affect the ranch and the desert environment. This exhibit will allow visitors to apply the knowledge they acquired from the previous two exhibits by asking management questions based on the conditions interpreted in the exhibit on ranching hardships: lack of fodder and water and extreme temperatures. Visitors will be asked to decide how best to address a ranching situation posed to them on the exhibit. They will choose a management option from among several provided and then discover the broad implications and possible consequences of their decision on the ranch and the desert. For some options, it may be possible to include corroborating statements from the available oral histories and from Mojave Desert ranching journals.

An example of a ranch management situation to be addressed by visitors follows:

The well that provides water to 300 head of livestock has run dry.

Option 1: Since livestock usually return to their water source, truck water to the site of the well.
  • Engaging the exhibit’s interactive component (e.g., a lift door) will reveal possible consequences of choosing this option, for example, damage to the desert from trucking in water and the cost (water, gas, labor) of the operation.

Option 2: Develop another well out on the range.
  • Engaging the exhibit’s interactive component will reveal possible consequences of choosing this option, for example, the time and cost involved, the number of holes likely to be drilled before striking water, and damage to the desert.

Option 3: Move the livestock to the corrals where they can be given water from the ranch’s fire protection water tank.
  • Engaging the exhibit’s interactive component (e.g., a lift door) will reveal possible consequences of choosing this option, for example, corral capacity, stress on and injury to the livestock from overcrowding, loss of fire protection.)
With this exhibit, visitors will be able to have their picture taken in front of one of several projected backgrounds they can select from a computer program. For example,

- A photo of Clara Bow and Rex Bell
- A photo of a group of celebrities at the ranch
- A saddled and bridled horse
- Historic photos of ranch operations, such as branding
- The blacksmith shop diorama
- A desert landscape
- A large Joshua tree
- A tortoise or with researchers in the field

Props, such as cowboy hats, lariats, a branding iron, and other ranch-related items can also be available for visitors to use in their photo. The photo can then be printed or sent as an electronic postcard, providing the visitor and the postcard recipients with a souvenir of the ranch. This activity not only has inherent value as an interpretive activity and visitor experience, it serves as a marketing tool, since the photo will promote the ranch to the recipients.

The computer kiosk that is the focal point of this exhibit will be sensitive to temperature extremes and should be stored in a climate-controlled room in the barn when the barn is closed to the public. The kiosk will be designed to be portable so that it can be moved into and out of storage by a single person.
Evolution of Mojave Desert Ranching Exhibit or Blacksmith Shop Exhibit

If the blacksmith shop exhibit is located elsewhere on the ranch, the “Create-A-Postcard” exhibit should be relocated to the “Blacksmith Shop” exhibit space (barn southeast corner) and the “Evolution of Mojave Desert Ranching” exhibit should be installed in the former “Create-A-Postcard” exhibit space (barn northeast corner). The Evolution of Mojave Desert Ranching exhibit is described below.

The Evolution of Mojave Desert Ranching Exhibit

This exhibit interprets how desert ranching has evolved over the decades, as environmental conditions, ranching goals and practices, the economy, best management practices, and our understanding of desert ecology have evolved. The exhibit should consist of large, wall panels graphically depicting a timeline of ranching under the working title, “Always a New Frontier.” A literal timeline may also accompany the exhibit, along with reader rails and two or three small artifact display cases. The primary topics to be interpreted in this exhibit are:

• How desert ranching goals and practices have changed over the decades.
• Ranch management in the future, particularly in terms of alternative energy use, water conservation, and other sustainability/green features, new best practices, etc.?
• New technology and high-tech tools used in ranching (e.g., satellites, computers, weather forecasts, GPS). This aspect of the exhibit provides a link to the adjacent interactive exhibit, where visitors guess the use of a historic ranch tool or implement.
• Trends in ranch business planning, including converting ranches to dude ranches, spas, and bed and breakfast ranches where visitors actually work on the ranch.

It is important that this exhibit be objective, balanced and non-accusatory towards any of the stakeholders with different opinions regarding ranching on desert public lands. The purpose of this exhibit is to show how ranching, desert use, and management have evolved and will continue to change as conditions change and best management practices evolve.

If the blacksmith exhibit is located in this location, the key points of the Ranching in the Future exhibit will be integrated into other exhibits in the barn.
WALKING BOX RANCH EXHIBIT AREA

Exhibits in this area will interpret the operations of the ranch. Exhibits will include:

- Wall panels providing an overview of WBR operations and activities.
- A wall panel and display case interpreting “A Day in the Life” of a cowboy at WBR.
- A two-sided floor panel interpreting the adaptive reuse of materials on the ranch on one side, and other adaptations to the desert on the other side (siting buildings relative to the sun, etc.).
- An exhibit on the importance and use of horses on the ranch, including wall panels, a view into a reconstructed tack room with key items labeled, and a saddle that visitors can mount.
- An interactive exhibit allowing visitors to guess the function and use of various ranch tools and implements.
- A blacksmith shop exhibit or the post card exhibit.
Exhibits in this area will interpret the operations of the ranch. Exhibits will include:

- Wall panels providing an overview and explanation of the ranching activities that occurred at WBR.
- A two-sided floor panel interpreting the adaptive reuse of materials on the ranch on one side, and other adaptations to the desert on the other side (siting buildings relative to the sun, etc.).
Blacksmith Shop Exhibit or Evolution of Mojave Desert Ranching Exhibit

If the blacksmith shop exhibit is located elsewhere on the ranch, the “Create-A-Postcard” exhibit should be relocated to the “Blacksmith Shop” exhibit space (barn southeast corner) and the “Evolution of Mojave Desert Ranching” exhibit should be installed in the former “Create-A-Postcard” exhibit space (barn northeast corner). The Evolution of Mojave Desert Ranching exhibit is described on page 21.

Blacksmith Shop Exhibit

This exhibit is a recreation of the interior of a blacksmith shop containing tools and artifacts from Rex Bell Jr.’s shop. (Due to location, space, and the availability of tools, this exhibit will not be a replica of the WBR blacksmith shop.) The use of a figurative sculpture brings the human element to the exhibit and the ranch. Shop tools and artifacts are accompanied by small interpretive signs containing the item’s name and use, thereby linking to the interactive exhibit in the barn that allows visitors to guess the use of ranch artifacts and implements. Reader rails containing small interpretive signs provide a barrier between the exhibit and visitors. The blacksmith shop should also contain a demonstration area where docents and guest specialists can demonstrate various smithing skills and activities. A secure storage area may also have to be contained in the shop for demonstration-related items.
Several outdoor demonstration and activity areas are proposed for the ranch. These include:

- A temporary “amphitheater” featuring portable benches or straw bales that can be installed in one of the corrals for special events.
- A calf-roping activity in the corral closest to the barn.
- A demonstration area at the blacksmith shop.
- Several areas outside the ranch house garage and around the courtyard to be used for special events, particularly involving catering.
THE BUNK HOUSE

Because the bunkhouse will contain restrooms and water, it is an important location for interpreting water-related topics. Bunkhouse exhibits should include large interpretive signs on exterior walls interpreting water use and how visitors can conserve water, and small interpretive signs identifying and interpreting water-conserving features in the restrooms.

The bunkhouse will also contain space that can be used by local communities and organizations for temporary exhibits and displays. Such displays not only strengthen ties to and partnerships with local communities and organizations, they provide new and diverse exhibits to draw repeat visitors to the ranch. Examples of potential temporary exhibits include:

- A display of items from the collection of the Searchlight Historic Museum
- A display of photos from a desert photography contest
- Artifacts related to an upcoming silent film festival
- A display of items from the Boulder City Museum
THE RANCH HOUSE

When open to the public, the garage and the first floor of the house will be focal points for interpreting the ranch house, ranch domestic life, and the Clara Bow/Rex Bell story. Interpretive strategies and media in the garage and house have been designed to reflect the fact that the house is a multi-purpose facility that will be used as a meeting space, retreat center, and special events space. Accordingly, interpretation will be effective and engaging while not interfering with the multi-purpose functioning of the house and garage.

The Garage

The garage has been designed to serve primarily as a meeting space that can also function in an interpretive capacity. Exhibits and amenities in the garage include:

- An audio-visual system and large video monitor for viewing the WBR orientation video and other videos
- A cabinet containing the audio-visual equipment
- A wall mounted dry erase board and bulletin board system for use during meetings and events
The Garage

- A moveable, six-panel display that can be anchored in the middle of the room when the garage is functioning as an interpretive space, or during special events. Topics for these panels include the Clara Bowl/Rex Bell story, the ranch as a retreat from Hollywood, the realities and hardships of ranch domestic life, domestic water use, and mining as it relates to the preservation and furnishing of the ranch house. Copies of these panels can also be produced on a roll-up screen or other light-weight material for use at outreach activities and events off-ranch. They can also be loaned to libraries, schools, museums, and other groups.
- Storage space to house the moveable, multi-panel display when not in use
- A celebrity “Wall of Fame” featuring photos of those who visited WBR
- Storage space for chairs
- Display cases for Hollywood-related artifacts
The Ranch House Interior

Interpretation inside the ranch house will rely heavily on docents leading tours. In addition to the personal interpretation provided by docents, non-personal interpretive media will also be used in the house. A single photo (or photo collage) showing the room during the Bow/Bell period will be used as the primary interpretive feature in the kitchen, great room, bar area, and boys’ bedroom. The photo(s), framed to appear to be an everyday item in the house rather than an interpretive sign, will provide a historic view of the room as well as text on the room’s use during the ranch’s heyday. To the extent possible, each of these rooms should be refurnished to reflect the Clara Bow/Rex Bell period of the ranch.
THE RANCH HOUSE - SECOND BEDROOM

The Ranch House Interior

The second bedroom on the ground floor will not be restored or furnished so that it can serve as the primary exhibit and interpretive space in the house. Wall mounted panels, large and small display cases, and a touch screen computer kiosk will be used to interpret and bring the ranch house to life. For example, the touch screen can display a floor plan of the house (including the second floor). When visitors touch a particular room, historic photos of the room appear on screen along with the option of listening to an oral history related to the room and ranch life. Topics to be interpreted in the second bedroom include:

- The significant rooms in the house, including rooms on the second floor.
- The celebrity life of the house.
- The realities and hardships of ranch domestic life.
- The importance and use of water domestically.
- House adaptations to the desert environment.
- The patio and pool area.
THE RESEARCH CENTER

Interpretation at the research center will target two main audiences, the public visiting the facility under a guided tour and students and scientists working at or visiting the facility. Interpretation will focus on:

- The research center and its affiliation with UNLV.
- Adapting to the desert environment through sustainable design concepts and practices.
- The adaptive/sustainable design features utilized at the research center (buildings and grounds).
- Research being conducted at the center.

Although the research center is the primary area for interpreting the above topics, adaptive design and sustainability will be integrated throughout the exhibits and waysides at the ranch. Interpretation at the research center will occur through interpretive signs, the final locations and sizes of which will be determined once the architecture of the facilities and the landscape plan for the grounds are completed. At this stage of the planning process, recommended interpretive locations and media include:

- A 4-panel kiosk at the fence/gate separating the ranch house area from the research center. Topics to be interpreted here include:

<table>
<thead>
<tr>
<th>Sign 1</th>
<th>Sign 2</th>
<th>Sign 3</th>
<th>Sign 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wayfinding, including a map of the research center and the entire WBR property.</td>
<td>Explanation and description of the research center, its mission, and its affiliations/partners.</td>
<td>Overview of the desert conditions faced in designing the center’s buildings and the sustainable design principles employed to address them.</td>
<td>Overview of the center’s grounds and the design principles employed to address the desert conditions.</td>
</tr>
<tr>
<td>Wayside signs at research plots and other relevant landscape features. These signs will extend the self-guided interpretive trail into and through the research center grounds.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small interpretive signs at key sustainable design features such as:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>wall cutouts that expose straw bale construction and other sustainable design features</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>salvaged wood floors and other examples of the adaptive reuse of materials</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>exterior walls of rhyolite salvaged from a nearby mine</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>window shutters, the sleeping porch, and other features demonstrating adaptations to the desert environment.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wayside signs at research plots and other relevant landscape features. These signs will extend the self-guided interpretive trail into and through the research center grounds.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small interpretive signs in restrooms and the kitchen identifying water and energy conserving features such as low flow toilets and showers and energy efficient appliances.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A sponsor/donor wall recognizing companies, organizations, and individuals who have contributed to the research center.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A computer touch screen kiosk that allows visitors to &quot;pull up&quot; information on sustainable design features (architectural, structural, landscaping) employed throughout the ranch and research center.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
PERSONAL INTERPRETATION

Although it is anticipated that most visitors will take a self-guided tour of the ranch, guided tours and other personal interpretation are critical the visitors gaining access to the ranch’s major facilities and exhibits, and to gaining a deeper understanding of the theme and topics being interpreted at the ranch. Personal interpretation is also important because it adds the human dimension to learning about and enjoying the ranch, since visitors are able to interact with a person. Trained, knowledgeable staff and docents will also be key to the success of many of the ranch’s special events and programs. At this point, many aspects of the ranch’s personal interpretive services have yet to be defined, such as:

- the days and times the ranch will be staffed
- the number of staff and docents needed
- how staff and docents will be recruited, trained and supervised
- fees for tours and other personal interpretive services

To assure the quality and consistency of guided tours, a standardized tour should be developed and staff/docents should be trained in its content and delivery. In addition, docents and staff should receive general hospitality training and training in leading tours. If possible and practical, staff/docents should meet the interpretation training standards adopted by UNLV and Clark County. They should also be knowledgeable about the entire WBR complex including:

- hours of operation and the public access allowed to certain parts of the complex
- the research center and the conservation area
- WBR partners (BLM, UNLV, TNC), their mission, and their involvement with the ranch
- Answers to anticipated frequently asked questions.
REMOTE ACCESS AND THE WEB

As described elsewhere in this plan, it is recommended that selected interpretive signs contain a phone number that visitors can call to receive more detailed information on the sign topic via a recorded message. This type of remote access is relatively inexpensive and easily updated, and serves the ranch’s primary interpretive audience: drop-in visitors, many of whom are likely to have a cell phone. Phone messages (as well as the audio recordings of oral histories and ambient ranch sounds proposed for selected signs) are also a way to provide information to the visually impaired, thereby meeting ADA guidelines.

A web presence will be important to the long-term viability of WBR, therefore, it is recommended that BLM and UNLV add WBR-related information, pages and links to their existing websites. A Walking Box Ranch website (e.g., www.walkingboxranch.com) should also be developed and maintained. In addition, WBR should consider creating a Facebook or My Space presence. Studies indicate that vacationers and travelers rely heavily on the web for travel information and planning (second only to friends and family), a trend that will likely increase in the future. A web presence will allow prospective and actual visitors to obtain valuable information about the ranch and possibly, print or download it to bring with them when they visit. A web presence can also supplement a visit by providing information that is beyond the scope of WBR exhibits. The WBR website should provide the items and services listed below.

• Directions, hours of operation, fees
• Information on the history and significance of WBR, including its listing on the National Register of Historic Places
• Information on the managing entity and partners and their activities on the ranch
• An overview of the amenities and opportunities available at the ranch
• A mechanism to become a “Friend of WBR” or make a donation to the ranch

• Downloadable podcasts or RSS feeds of an audio/visual tour of site
• Downloadable podcasts or RSS feeds of key interpretive amenities, including the self-guided trail
• Downloadable podcasts or RSS feeds regarding research center facilities and activities
• An interactive site map including pop-up boxes with information and photos
• Frequently Asked Questions
• Related sites of interest in the region
• Links to related sites, such as BLM, UNLV, TNC, desert ranching, sustainability, tortoise conservation, etc.
• Local services and amenities (hotels, restaurants, etc.) with links to their websites and downloadable coupons for discounts
• A mechanism for making online reservations for WBR special events

In addition, webcam feeds and video footage of WBR special events and activities can be uploaded to various sites to promote and market the ranch, including heritage tourism sites, travel sites, Las Vegas activities sites, etc.

The specific technology and equipment to be used to provide remote and web access will be determined in the design/content development phase of the project.
EVALUATION

To the extent practical, interpretive signs and exhibits should be evaluated for their effectiveness at several stages of their development. Evaluation is not only helpful in fine tuning interpretive exhibits and signs, it may be a requirement of certain grants.

Front End Evaluation
Front-end evaluation is conducted at the on-set of a project and is focused on understanding actual and potential audiences so that appropriate strategies and media can be developed. This project’s front and evaluation has already been completed, resulting in the audiences, theme, topics, strategies, and exhibit designs found in this plan.

Formative Evaluation
Formative evaluation is conducted during the design/content development stages of interpretive media production. Formative evaluation can include assessment of draft media by a visitor studies or interpretive specialist; assessment by stakeholders or selected groups; and exhibit prototype testing. For WBR, prototype testing is recommended for selected interpretive signs and exhibits to assure that the messages and information are clear, understandable, engaging, and effective. It is recommended that staff work with a professional evaluator to design and implement the first prototype evaluation process.

Summative Evaluation
Summative evaluation is conducted once the interpretive media are completed and the site is open for visitation. The major question that drives a summative evaluation is whether or not and to what extent the overall interpretive goals have been achieved. This might involve tracking:
- actual visitation compared to the anticipated number of visitors
- what visitors do, think, or feel as a result of their experience
- what visitors learn
- the benefits of interpretation to visitors, the working group, and stakeholders.

Tracking and Monitoring Visitor Use
Since Walking Box will be a new interpretive facility, a tracking and monitoring program is recommended to capture actual use, to monitor visitor reactions, and to identify interpretive and logistical issues that may need to be addressed.

At a minimum, tracking program should include logging the number of visitors, recording visitor reactions of the ranch, and determining how people learned about the ranch and their reasons for visiting. Comment cards, observation studies, questionnaires, and exit interviews can be used to understand the visitor experience and to inform decisions about making adjustments or improvements to interpretive media.
### SUMMARY OF STRATEGIES / MEDIA

<table>
<thead>
<tr>
<th>Strategy/Media</th>
<th>Location</th>
</tr>
</thead>
</table>
| Static and interactive exhibits | • The barn  
• The corrals  
• The bunkhouse  
• The blacksmith shop  
• The ranch house garage  
• The ranch house ground floor bedroom |
| Large and medium interpretive signs  
(some containing audio or remote access information) | • Multi-panel kiosk at main parking area  
• Multi-panel kiosk at research center/ranch house gate  
• Self-guided interpretive trail waysides  
• Bunkhouse exterior walls  
• At selected locations on the ranch and research center grounds  
• At sustainability features in and on ranch and research center buildings |
| Small interpretive signs | • At water conservation features in the bunkhouse restrooms  
• At selected locations on the research center grounds  
• At sustainability features on ranch and research center buildings |
| Photos with minimal interpretive text | • Ranch house garage  
• Ranch house kitchen, great room, bar, bedroom |
| Artifacts | • Barn  
• Blacksmith shop  
• Ranch house garage  
• Ranch house ground floor rooms |
| Contemplative bench | • Wayside in the natural area |
| Donation box | • Barn reception/retail area |
| Sponsors plaque | • Research center |
| Web presence | • Multiple sites and links |
| Remote access | • Several wayside signs |
| Personal interpretive services | • Barn reception area  
• Guided tours  
• Research center  
• Special events |
VI. UTILITIES AND DRAINAGE
1. Underground utilities (potable water, sanitary sewer and electric) have not been located and/or surveyed.
2. Potable water is distributed to the Ranch House, Caretaker’s Residence and the Bunk House only.
3. Electric is distributed to the Ranch House, Caretaker’s Residence, Bunk House and the Storage Building only.
4. Sanitary sewer is collected from the Ranch House, Caretaker’s Residence and the Bunk House. Each has separate leach fields.
PROPOSED UTILITIES PLAN

Legend

- Proposed Potable Water Supply 4"
- Proposed Fire Water Supply 6"
- Proposed Sanitary Collection Line 6"
- Proposed Septic Tank and Leach Field

Proposed 3.5' FDC from large holding tank for use as fire water or irrigation as needed.

Existing well pump treatment system, pressure tanks and shed to be replaced with new pump treatment system, pressure tank, and structure.
SITE ELECTRICAL

Existing Site Electrical Conditions
The existing site power is served from an overhead 15 kV utility power line that runs generally east to west across the site. A pole mounted transformer provides 120/240V power to a pad mounted 600 amp switchboard (MDC), located adjacent to the pole, which is located between the ranch house and bunkhouse. There is a separate service from the same pole that appears to feed the well pump. Feeders run underground from the switchboard to the ranch house, bunkhouse, and storage building. The caretaker’s mobile home is fed from the ranch house, and the barn is fed from the bunkhouse.

New Site Electrical
We will request NV energy (Nevada Energy?) to provide two new power services to serve the new campus buildings. A new 120/208V, 3-phase service from a pad-mounted transformer located adjacent to the research building will feed a distribution panel (MDP1) in the building. Underground feeders from the distribution panel will serve the maintenance building and bunkhouse. The pumps for the ground source heat pump bore field will be connected to this service. A new 120/240V, single-phase service from a pad mounted transformer located adjacent to the caretaker or manager’s residence will feed a distribution panel (MDP2) on the exterior of the building. Underground feeders from the distribution panel will serve the guest cottage, camping pavilion, and RV hookups. Site lighting and site power pedestals will be fed from the nearest building. A stand-alone photovoltaic system shall be provided for the entry monument and sign lighting.

Modifications to Existing Electrical
The existing buildings on site will continue to be served from the existing switchboard MDC. It is expected that due to increased loads, the feeder to the barn will need to be replaced with a new, larger service fed directly from the MDC. The adequacy of the feeders to the other existing buildings will be evaluated as the design progresses and loads are known. It may become necessary to replace the existing MDC due to required capacity or the inability to add the necessary circuit breakers.

BUILDING ELECTRICAL SYSTEMS

Lighting - General
Linear fluorescent, compact fluorescent, and LED light sources shall be used. The use of incandescent lamps will be avoided unless absolutely necessary. All fluorescent ballasts shall be high efficiency, high power factor, with less than 10% total harmonic distortion. Where dimming ballasts are used for linear lamps, they shall be capable of dimming to 1% light output.

Lighting Controls - General
Rooms that would normally be occupied during the day, i.e., classroom, labs, offices, living/dining space, shop, employee area, and large restrooms, shall have a photocell in each room to dim or turn off lights when there is adequate daylight.

All rooms, except bedrooms and mechanical/electrical rooms, shall have motion sensors to turn off lights when the rooms are unoccupied. Offices, individual restrooms, and other small rooms will use a wall switch sensor. Larger rooms will use ceiling mounted motion sensors.

Exterior lighting shall be low wattage compact fluorescent or LED luminaires controlled by photocell, motion sensor, or local switch as appropriate. Exterior lighting circuits for each building shall be routed through a relay panel in each building. The relay panels will be networked together with a data cable to allow lighting on individual buildings or all buildings, to be turned on or off from a central location. This will allow the site to be easily blacked out for dark sky events, or turn on all lights for security purposes.
IT Systems
Telephone, data, and TV shall be distributed to all buildings on site from the IT room in the new classroom/lab building through underground conduits and pull boxes. It is anticipated that telephone/IT/TV service for the site will be provided by wireless means.

Photovoltaics
It is expected that photovoltaic panels will be installed on the south-facing roofs of all new buildings in the research campus. Power generated by the PV systems on individual buildings will feed back to the nearest utility service and will be connected to the utility as a grid tied system.

New Classroom/Laboratory Building
- A 600A distribution panel ("MDP1") will be located inside the building (preferred) or on the exterior of the building. If it is located inside, it will require a dedicated electrical room with direct exterior access. A 200A, 42-circuit panelboard shall be provided to serve the branch circuits in the building.
- Lighting in the classroom and labs shall be pendant mounted direct/indirect fluorescent luminaires with T8 lamps. Dimming ballasts and photocontrols will be provided for daylight harvesting.
- Offices shall be either pendant direct/indirect or recessed direct/indirect luminaires depending on the ceiling height and type. Dimming ballasts and photocells will be provided for daylight harvesting.
- Storage and utility rooms shall have fluorescent luminaires with wraparound acrylic lenses.
- Occupancy sensors shall be provided in all rooms, except mechanical and electrical, to turn off lights when rooms are unoccupied.

Shop/Maintenance Building
- The shop building shall be served by a 100A, 30-circuit panelboard fed from distribution panel MDP1.
- Lighting in the shop shall be fluorescent industrial luminaires with 10 to 20% up light. Dimming ballasts and photocells will be provided for daylight harvesting.
- Include charging stations for up to four electric maintenance vehicles.

New Bunkhouse
- The new bunkhouse shall be served by a 200A, 42-circuit panelboard fed from distribution panel MDP1.
- All lighting shall be energy efficient linear or compact fluorescent or LED sources.

Caretaker’s Residence and Manager’s Residence
- Each residence shall be served by a 100A, 24-circuit minimum panelboard fed from distribution panel MDP2.

Guest Cottage - Two Residences
- The guest cottage shall be served by a 100A, 24-circuit panelboard fed from distribution panel MDP2 located on the exterior of the building or in an electrical closet with exterior access.

Shower/Restroom/Cooking Pavilion
- The shower/restroom building shall be served by a 60A panelboard fed from distribution panel MDP2.

RV Sites
- Each of the three RV sites shall have a 100A, 120/240V, weatherproof, power pedestal. Each pedestal shall have a 50A 120/240V receptacle; a 30A, 120V receptacle; and a 20A, 120V GFI receptacle and associated circuit breakers for each receptacle. Pedestals shall be fed from distribution panel MDP2.

Existing Barn
- The existing panelboard will be replaced with a new 200A, 42-circuit panel.

Existing Bunkhouse
- The existing 200A feeder to the bunkhouse can remain in place unless it becomes necessary or desirable to relocate the existing panelboard on the exterior of the south wall.

Ranch House
- The existing 200A ranch house feeder can remain in place unless program needs dictate a larger service. A new subpanelboard, fed from the main exterior panel, will be added to serve the remodeled garage area.
- Existing wiring and panelboards in the ranch house should be inspected, and any deficiencies or code violations should be corrected. During the site visit on December 1, 2008, open wiring splices were observed in the attic space.
VII. SUSTAINABILITY
VIII. COST ESTIMATE
IX. ACKNOWLEDGEMENTS
X. RELATED DOCUMENTS
To Be Developed