

Rehabilitation of Date Street 100 and 200 Buildings

Draft Environmental Assessment LC-11-16

Lower Colorado Region, Boulder City, Nevada





U.S. Department of the Interior Bureau of Reclamation Lower Colorado Region Boulder City, Nevada

Draft Environmental Assessment

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Prepared by:
United States Department of the Interior
Bureau of Reclamation
Lower Colorado Region
Boulder City, Nevada

Mission Statements

The mission of the Department of the Interior is to protect and provide access to our Nation's natural and cultural heritage and honor our trust responsibilities to Indian Tribes and our commitments to island communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

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Contents

Purpose of and Need for the Action

Introduction

This Environmental Assessment (EA) was prepared in compliance with the National Environmental Policy Act (NEPA) and the Council on Environmental Quality Regulations for Implementing the Procedural Provisions of NEPA. The purpose of this EA is to evaluate the potential impacts of the proposed project and its alternative on the physical and human environment and determine if the impacts would be significant warranting the preparation of an Environmental Impact Statement.

The Bureau of Reclamation (Reclamation) is proposing to rehabilitate the Date Street 100 and Date Street 200 Buildings (Buildings) on Reclamation administered lands at the Date Street Campus (DSC) for office, storage, training, and conference uses. The DSC is located within the NE1/4NE1/4 of Section 8 in Township 23 South, Range 64 East, MDM, Clark County, Nevada. The Buildings are located in the southeast corner of the DSC, along Date Street in Boulder City (Figure 1).

Background to the Purpose and Need

The DSC was formerly the site of a U.S. Bureau of Mines (BOM) Electrometallurgical Experimental Station or Metallurgy Research Laboratory (MRL). The BOM obtained the property in 1936. The MRL operated actively from 1941 to 1983 and performed a variety of research activities related to the refining of metals from ores. The newly constructed Hoover Dam provided an ample supply of electricity to the MRL for ore-refining research utilizing such tools as electric arc furnaces and electrolytic cells.

The Date 200 Building was constructed in 1931 by Six Companies, Inc. (Six Companies), the primary contractor for Hoover Dam, as a garage for vehicle maintenance. The Date 200 Building was purchased by the BOM in 1936. The Date 100 Building was constructed in 1941 by the BOM.

In 1984 Reclamation assumed management responsibility for the property. In 1999-2000, six of the remaining buildings were demolished and one was transferred off the site. Four modular buildings for maintenance and laboratory spaces were erected in 2006 and one modular building for office space was erected in 2008. Reclamation began construction of a new office building the "Green Building" at the site in 2010.

Four of the original BOM Buildings remain at the DSC; the Date 100, Date 200, Date 700, and Date 800 Buildings. The Date 100 and Date 200 Buildings are included in the Boulder City Historic District (Historic District) and are contributing properties to the Historic District. The Historic District is significant because of its association with the construction of Hoover Dam and as the first constructed planned community in the nation.

Seismic deficiencies, lead-based paint, and asbestos have been identified in the Date 100 Building. The roof, interior walls and interior facilities of the Date 100 Building were removed in 2007 in anticipation of repairs. Prior to this, the building was in use as office space. The repairs were postponed until the present time pending a design and funding for appropriate use of

the building. The Date 200 Building is used as a machine shop for Reclamation's Facilities Management Office but does not house any employees.

Purpose and Need

The purpose of the proposed action is to use Reclamation owned historic structures located on the DSC for present day agency needs. This action permits Reclamation to advance the policy outlined in Executive Order 13287 "Preserve America". This order establishes federal policy to provide leadership in preserving America's heritage by actively advancing the protection, enhancement, and contemporary use of the historic properties owned by the federal government. The Order states: "The Federal Government shall recognize and manage the historic properties in its ownership as assets that can support department and agency missions while contributing to the vitality and economic well-being of the Nation's communities." The location of the Buildings presents a prime opportunity to utilize the buildings for Reclamation's needs through rehabilitating them to a condition consistent with the Historic District in which they are located.

Use of these structures will provide training, conference, office, and records management spaces for Reclamation employees. Reclamation currently does not have an appropriate training/conference facility that can accommodate the majority of the Lower Colorado Regional Office employees. The Date 100 Building would fill this need as well as provide a conference room that could be accessed by the public without entering through a gate. The Date 200 Building would provide needed records storage space as well as office space for Security staff. This will include a credentialing center with an entrance located outside of the gated DSC, where Department of the Interior (DOI) employees located in Southern Nevada and contractors could obtain their security clearance documents.

The Buildings are in need of rehabilitation to remove contaminants, prevent deterioration, and improve their appearance. The lead-based paint, asbestos, and seismic deficiencies of the Date 100 Building create a safety and environmental hazard. The proposed project will incorporate the proper treatment of the lead-based paint and asbestos and restore the structural integrity of the Date 100 Building. Use of the Buildings would be convenient and cost effective because of their central location in Boulder City, proximity to other Reclamation buildings, and ability to be easily accessed by the public.

Related Laws, Policies, and Planning Documents

This EA complies with all applicable environmental, natural resource, and cultural resource statutes, regulations, and guidelines. These additional statutes, regulations, and guidelines may require permits, approvals, consultations with outside agencies, or implementation of mitigation measures. These considerations when applicable are included in the analysis presented in this EA.

The following federal, state, and local statutes and regulations are relevant to the proposed project.

- National Environmental Policy Act of 1969
- Department of the Interior Secretarial Order 3226: Evaluating Climate Change Impacts in Management Planning

- Executive Order (EO) 11514: Protection and Enhancement of Environmental Quality
- Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations
- Executive Order 13423: Strengthening Federal Environmental, Energy, and Transportation Management
- Executive Order 13287 Preserve America
- Clean Air Act of 1970 and amendments of 1977 and 1990
- Clean Water Act of 1970 and National Pollution Discharge Elimination System, as amended
- Chapter 445B of Nevada Administrative Code- State of Nevada's air pollution regulations
- National Historic Preservation Act of 1966, as amended
- Archaeological Resources Protection Act of 1979
- Native American Graves Protection and Repatriation Act of 1990
- Noise Control Act of 1972
- Comprehensive Environmental Response, Compensation, and Liability Act of 1980
- Resource Conservation Recovery Act of 1976, as amended
- Clark County Air Quality Regulations
- Americans with Disabilities Act of 1990, as amended
- Toxic Substance Control Act of 1976

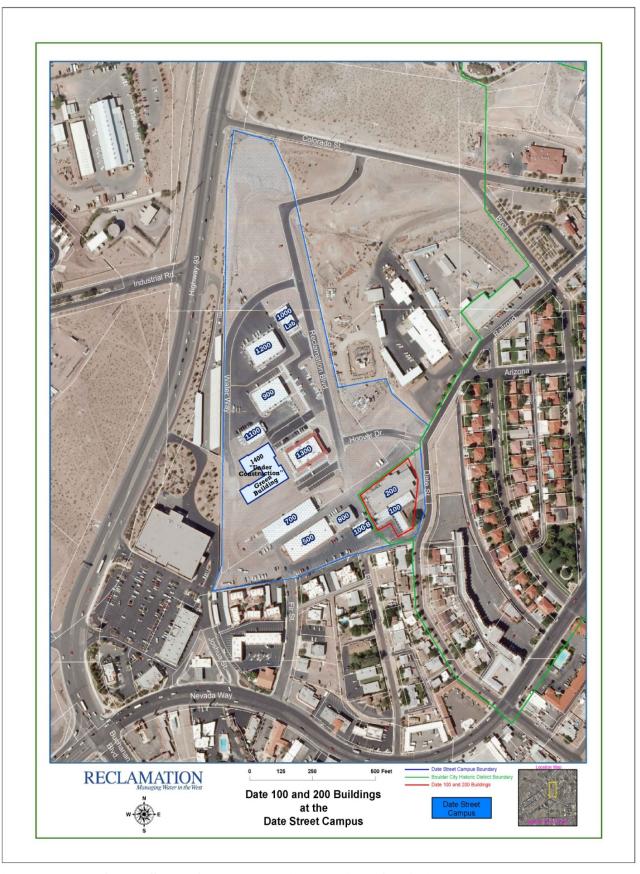


Figure 1- Map of Date Street Campus showing location of Buildings

Description of Alternatives

No Action Alternative

Under the no action alternative, both Buildings would remain in their existing condition. They would not be rehabilitated or upgraded. Routine maintenance of the Buildings and grounds would continue, as would corrective actions to address any health or safety issues.

Proposed Action Alternative

Under this alternative, both Buildings would be rehabilitated, operated, and maintained. If funding is limited, rehabilitation of one of the Buildings may be deferred until funding becomes available. The Proposed Action includes four primary components: design, construction, operation and maintenance, and mitigation measures. Each component is described below.

Design

Reclamation intends to rehabilitate the Buildings through a "Design and Build" contract. Detailed criteria for the rehabilitation would be provided to the selected contractor; who would design and construct the rehabilitations in accordance with the criteria and subject to Reclamations' approval. The design for the rehabilitations would include the following elements:

- ➤ Compatibility with the "Section 110 Programmatic Agreement among the Bureau of Reclamation, the Nevada State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding the Management of Historic Bureau of Reclamation Properties in Boulder City, Nevada" (PA) (Appendix A).
- ➤ Compatibility with the nearby Historic District in appearance.
- ➤ Compliance with the "Secretary of the Interior's Standards for the Treatment of Historic Properties, 1992, and with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings, 2005".
- Compliance with the "Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings, 2008" (Guiding Principles). These Guiding Principles are as follows: 1) employ integrated design principles; 2) optimize energy performance; 3) protect and conserve water; 4) enhance indoor environmental quality; and 5) reduce environmental impact of materials.
- ➤ Compliance with the "Americans with Disabilities Act/Architectural Barriers Act and Accessibility Guidelines".
- ➤ The Buildings and related systems would be designed, constructed, and commissioned to achieve at minimum a Leadership in Energy and Environmental Design (LEED) "Silver" rating as described by the "United States Green Building Council LEED Rating System for New Construction and Major Renovations, Version 3.0 (2009)".

- ➤ The Buildings would be updated to meet modern seismic requirements as part of the rehabilitation. The seismic rehabilitation would not affect the exterior appearance.
- ➤ Lead paint on the Date 100 Building walls would be encapsulated or otherwise abated, the asbestos treated, and the windows repaired. The outside appearance and the roof would be rehabilitated to the original look prior to major renovation in the 1980's.
- ➤ The Date 100 Building would have five to six office spaces for the training group and six to seven conference rooms which can accommodate up to 200 people.
- ➤ The Date 200 Building would have eight to twelve office spaces, one to two conference rooms, and one large high density record storage room.
- ➤ The preliminary cost estimate for the Date 100 Building rehabilitation is \$3.8 million dollars. The preliminary cost estimate for the Date 200 Building rehabilitation is \$2.7 million dollars.

Construction

Prior to the start of construction a staging area for storage of construction equipment and materials of approximately of 50,000 square feet would be designated within the DSC. A location for construction trailers would also be established. It is anticipated that construction vehicles would enter the DSC at the south end of the Date 100 Building with traffic entering and exiting Date Street.

At this time the construction period is estimated to be approximately 7 months. The following is a summary of the types of equipment that will be used and the duration of use: two dump trucks for 10% of the construction time, two cement trucks for 20% of the construction time, two backhoes for 20% of the construction time and five delivery trucks for 5% of the construction time. These percentages may vary based on the final design.

The maximum construction area expected for this project is approximately 175,000 square feet; however much of this area is occupied by the Buildings.

Potential ground disturbance surrounding the Buildings may include but not be limited to soil testing, trenching for utilities, removal of any storage tanks or pipelines located prior to construction, installation of walkways, parking lots and related features; and installation of landscaping. There is also potential for excavation for addition or reinforcement of structural elements.

The required utilities would be electric, telephone, cable, data, sewer, gas, and water lines. These utilities are currently located within the DSC. Any utility lines not currently present would be routed from the current access points within the DSC to the Buildings. Police, fire, and garbage services are already available at the DSC. The utilities metering system at the Date 200 Building would be relocated from the east side of the building to the location less or not visible from the Historic District neighborhood.

The two additions to the north and south sides of the Date 200 Building may be removed to restore the 1940 appearance of the Building. The existing interior structures of the Building

would be removed and reconstructed based on the final design. The roof may be removed and reconstructed.

Construction is anticipated to begin at the end of December 2011 and be completed by July 2012.

Operations and Maintenance

Operations and maintenance of the rehabilitated Buildings would include the following activities:

- ➤ Construction, maintenance, replacement, and removal of facilities including but not limited to interior furnishings, windows, siding, roof, roads, curbs, walls, gates, fence, signs, paths, sidewalks, rock, and drainage structures.
- Installation of utilities and maintenance of new and existing utilities including electrical, water, sewer, fiber optics, gas, and other utilities as determined necessary. Installation of landscaping and maintenance of new and existing landscaping and grounds.

Mitigation Measures

The following measures would be implemented as part of the proposed action to reduce or eliminate impacts to resources:

Biological Resources

To ensure compliance with the Migratory Bird Treaty Act: if disturbance of vegetation is proposed between the dates of March 15 and August 31 the area will be surveyed for active bird nests prior to being disturbed. If an active nest is discovered vegetation clearing activities will not be allowed to proceed. No activities shall occur within an appropriate buffered distance from active nests until after the young birds have fledged from the nest.

Human Health

An Environmental Building Screen and Assessment will be conducted for both Buildings to determine any potential environmental problems. Testing will be done for organo-chloride pesticides, asbestos containing materials, lead based paint, and other hazardous materials. Ground penetrating radar will used to locate any unknown buried storage tanks or pipes. If contaminants are found, appropriate measures to contain or remove contaminants will be incorporated into the overall design and construction.

Air Quality

The Clark County Department of Air Quality and Environmental Management (DAQEM) requires "dust permits" for all construction activities in which greater than 0.25 acres of land are disturbed, or whenever greater than 100 feet of trenching is planned.

The DAQEM will be notified of any asbestos abatement or demolition as required by the National Emission Standards for Hazardous Air Pollutants (NESHAP).

Dust containment during construction would be managed as required by the approved Stormwater Pollution Prevention Plan and the approved Clark County Dust Control Permit for Construction.

Cultural Resources

Work being undertaken at the Buildings is, in part, guided by the PA. In conjunction with this agreement, project specific consultations are being undertaken with the Nevada State Historic Preservation Office (NV SHPO) and concurring parties of the PA. This process will continue throughout the design/build process and the results of this consultation will be incorporated into the final look and appearance of the historic structures.

Operations and maintenance activities shall be reviewed by a Reclamation archaeologist to ensure compliance with the PA.

In the event that an unanticipated discovery is made during any aspect of the construction/design process, all operations in the area of the discovery will cease and a Reclamation archaeologist contacted. "Discovery" means the encounter of any previously unidentified or incorrectly identified cultural resource including, but not limited to, archaeological deposits such as human remains, artifacts, and/or places reported to be associated with the Native American religion beliefs and practices.

Noise

The contractor will take appropriate measures to reduce noise to the fullest extent practicable in the performance of the construction work on the DSC. Between the hours of 7:00 PM and 7:00 AM the contractor would not use, except with the express written permission of Reclamation or in case of an emergency, any tool, appliance or equipment producing noise of sufficient volume to disturb the sleep or repose of occupants of the neighboring properties.

Soils/Hydrology

Prior to construction, a Stormwater Pollution Prevention Plan (SWPPP) will be prepared addressing construction activities, measures such as drainage channels and rip rap protection, and other stormwater best management practices (BMPs).

Soils in portions of the DSC were contaminated from metals resulting from mineral processing of ores when the MRL was in operation. Remediation of these soils was completed in 2006. Prior to initiating any activities that may breach the clean soil barrier on the DSC all environmental and safety precautions will be in place on the DSC and the proper authorities will be notified of Reclamation's activities.

The concrete cap which isolates contamination from an organo-chloride pesticide, dichlorodiphenyltrichloroethane (DDT), in the basement of the Date 100 Building will be inspected annually to ensure that it remains effective.

Alternatives Considered but Not Evaluated in Detail

Reclamation considered demolishing the Date 100 Building and replacing it with a new building at the same location. This building would have designed to be consistent with the historic Date 100 Building. However, it would not meet the purpose of the proposed action which is using historic structures for present day needs.

The cost of this demolition and replacement was estimated to be approximately equal to the cost of rehabilitation. The foundation and walls of the building are structurally sound, making

rehabilitation possible. It has been found to be feasible and cost effective to use the existing building and rehabilitate it for the desired uses, so this alternative was not considered further.

Affected Environment and Environmental Consequences

The following section presents a description of the existing condition for the selected resource areas being reviewed as well as an analysis of the direct, indirect, and cumulative impacts of the Proposed Action on those resources.

Resources not Discussed in Detail

The following resources were considered but are not further addressed in this document because they would not be impacted by the Proposed Action.

- Recreation The Buildings are located within the gated DSC. The area is not used for any recreational purposes.
- Biological Resources The Buildings are located on a previously altered site within an urban area that has no native vegetation. There is no habitat on the site for any Threatened or Endangered species. The proposed action contains a mitigation measure to prevent impacts to migratory birds.
- Indian Trust Assets (ITA) There are no ITAs in or adjacent to the DSC is proposed to be constructed.
- Indian Sacred Sites- There are no Indian Sacred Sites identified within the DSC.
- Human Health- A portion of the DSC has undergone remediation for contaminated soils associated with the operation of the MRL. This remediation is addressed under "Soils/Hydrology". The remediation did not include the location of the Buildings, as no contamination from the MRL was identified at that location. Lead-based paint and asbestos have been found in the Date 100 Building. Residue from an organo-chloride pesticide, dichlorodiphenyltrichloroethane (DDT), has been found in the building basement. A concrete cap was placed over the contaminated area. Potential impacts from asbestos and lead-based paint are addressed under "Air Quality"; impacts from DDT under "Soils/Hydrology". Design criteria and mitigation measures are identified in the proposed action to avoid breaching the clean soil barrier in the remediated area of the DSC and to identify, remove, and contain any lead-based paint, asbestos, DDT, or any other contamination found in association with the Buildings.
- Floodplains and Wetlands-There are no floodplains or wetlands located within or adjacent to the DSC.

Resources Discussed in Detail

The following topics are discussed below

- Air Quality/Greenhouse Gases/Climate Change
- Cultural Resources
- Traffic Circulation
- Noise
- Environmental Justice
- Soils/Hydrology

• Visual Resources

Air Quality/Greenhouse Gases/Climate Change

Affected Environment

The Environmental Protection Agency (EPA) establishes National Ambient Air Quality Standards (NAAQS) for the following common air pollutants: ozone (O3), nitrogen dioxide (NO2), carbon monoxide (CO), sulfur dioxide (SO2), particulates less than less than 2.5 microns and less than 10 microns (PM2.5, PM10), and lead (Pb). They have developed primary and secondary NAAQS for these air pollutants to protect human health and prevent environmental and property damage.

Areas of the country that are currently in violation of NAAQS are classified as non-attainment areas; new sources to be located in or near these areas are typically subject to more stringent air permitting requirements than similar sources in attainment areas. The DAQEM implements and enforces the air pollution program in Clark County. Hydrographic areas are used to define air quality regions in Clark County. Much of Boulder City is within the Eldorado Valley hydrographic area (area 167). In recent years this area has been included within a non-attainment area for O3. The nearby Las Vegas Valley, which is in hydrographic area 212, is a non-attainment area for PM10, CO, and until recently, O3. These two area's current status related to O3 will be determined pending a new EPA classification. Based on recent year's data the Las Vegas Valley may be re-designated as attainment for PM10 and CO (DAQEM, 2010).

On the DSC, the sources producing these pollutants are primarily passenger vehicles accessing the office and warehouse buildings. Other sources are occasional construction vehicles and delivery vehicles. The peak times of day for vehicle emissions are at the start and end of the workday, when employees are entering and leaving the DSC.

Several of the pollutants identified above are referred to as Greenhouse Gases (GHGs). The primary GHGs are carbon dioxide (CO2), methane, NO2, and fluorinated gases. A large number of scientific studies support the theory that change in the levels of GHG induce climate changes (IPPC, 2007). DOI Secretarial Order 3226 requires that DOI agencies consider how their activities may influence climate change.

Clark County, like much of the surrounding Mojave Desert, is prone to strong winds. Winds over 50 mph are infrequent but can occur with some of the stronger storms. Wind events often generate widespread areas of blowing dust and sand (particulates). On the DSC, this can result in blowing dust from unpaved areas. The ground surfaces surrounding the Buildings are either paved or landscaped; therefore they likely contribute very little particulates during high winds.

Asbestos which has been identified in the Date 100 Building and may be detected in the Date 200 Building could impact air quality within that building. Asbestos is regulated by the EPA under NESHAP. Asbestos is a mineral fiber that has been commonly used in building construction. When asbestos-containing materials are damaged or disturbed by repair, remodeling, or demolition activities, microscopic fibers become airborne and can be inhaled into the lungs, where they can cause significant health problems (USEPA, 2011b).

Lead-based paint has been identified in the Date 100 Building. Lead is a toxic metal that was used in paint prior to 1978. Chips or dust from deteriorating lead-based paint can cause serious health problems (USEPA, 2011c).

Environmental Consequences

No Action Alternative

The No Action Alternative is not expected to change the amount of emissions or particulates released to the air. The Date 100 Building is not in use, so vehicle traffic there would be low or non-existent. The volume of vehicle traffic to the Date 200 Building would not change.

The lead-based paint and asbestos in the Date 100 Building would not be treated under this alternative.

Proposed Action Alternative

During construction, there would be direct impacts from vehicle emissions from construction equipment and additional passenger vehicles on the site. Since the individual pieces of equipment are expected to be in operation 20% or less of the total construction time these impacts would be short term and minor. Minor detrimental impacts to air quality may occur from the wind causing particulates to become airborne. This is expected to be minor because the ground surfaces around the Buildings are paved or landscaped. Mitigation measures imposed by the dust permit would reduce most construction related air quality impacts.

After construction there may be a slight increase in emissions from passenger vehicles accessing the Buildings. However, the total number of passenger vehicles at the DSC is not expected to change greatly, rather their distribution will change as the location of offices and conference rooms shifts to the rehabilitated Buildings.

The amount of greenhouse gases that would be produced from construction activities was calculated based on the percentage of the estimated 7 month construction period that equipment would be in use. An average 30 day month was used to calculate a total of 210 days of construction. This was multiplied by an 8 hour day to determine a total of 1,680 hours of construction. These hours were multiplied by the percentages given in the Construction section of the description of the Proposed Action Alternative. An average of 6 gallons per hour was used for all equipment.

A total of 12,600 gallons of fuel use was calculated. This is the equivalent of 112 metric tons of CO2 (USEPA, 2011b). For comparison, this is equivalent to the CO2 emissions from the electricity use of 13.6 homes for one year. Table 1 shows the types of construction equipment and estimated fuel use.

Greenhouse gas emissions are also expected from vehicles accessing the Buildings when they are occupied. Those emissions were not quantified because they are expected to be very close to current greenhouse gas emissions at the DSC.

Table 1- Equipment and Estimated Fuel Use

Equipment Type	Hours in operation	Gallons (Gal) per Hour	Estimated Fuel Use (Gal)
Dump truck	168	6	1,008
Dump truck	168	6	1,008
Cement truck	336	6	2,016
Cement truck	336	6	2,016
Back hoe	336	6	2,016
Back hoe	336	6	2,016
Delivery truck	84	6	504
Delivery truck	84	6	504
Delivery truck	84	6	504
Delivery truck	84	6	504
Delivery truck	84	6	504
Total Estimated Fuel Use (Gal)			

The design criteria and mitigation measures designated for Human Health would prevent impacts from lead-based paint and asbestos.

The cumulative impact of this action added to the impacts of the Green Building was considered. No cumulative impacts from the construction activities are expected, because the construction on the Green Building is scheduled to be completed before the rehabilitation of the Buildings begins.

The Green Building will house approximately 169 employees. Approximately 59 of these employees are currently located off the DSC on Colorado Street. The remaining employees are currently in other buildings adjacent to the DSC. The addition of vehicle emissions from vehicles accessing the Buildings is not expected to impact the air quality of hydrographic areas 167 or 212, or Clark County as a whole, because these vehicles are already traveling to other locations on the DSC or nearby in Boulder City.

The design of both the Green Building and the Buildings is intended to reduce energy consumption. Ultimately, this reduces the GHG emitted. This is a positive cumulative impact in that these buildings will meet office space needs while reducing GHG.

Cultural Resources

Affected Environment

Section 106 of the National Historic Preservation Act of 1966 directs federal agencies, prior to the approval of the expenditure of funds on an undertaking, to "take into account the effect of the undertaking on any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register." The Buildings are contributing elements to the Historic District, but are not individually listed.

As discussed under "Background to the Purpose and Need", the Buildings were part of the BOM research facilities. The experimental station tested methods of recovery and processing of low-grade minerals, such as manganese and titanium for use in military equipment, in support of World War II efforts. After the war, research continued in support of the aeronautical industry and on the development of methods for commercial uses. Techniques developed at the experimental station were expanded upon for production elsewhere across the United States.

Boulder City originated as a government community built in the early 1930s for Hoover Dam workers. The Historic District was listed on the National Register of Historic Places (NRHP) on August 19, 1983 (NPS, 1983). The District is significant because of its association with the construction of Hoover Dam and as the first constructed planned community in the nation. Two phases of development are identified in the nomination: a construction phase and an operation phase. The western District boundary runs along Date Street and includes the Buildings as contributing properties.

Six Companies, the primary contractor for the Boulder Canyon Project, constructed the Date 200 Building in 1931 as a garage for vehicle maintenance. After Hoover Dam and its attached facilities were completed in 1935, Six Companies demobilized its workforce and equipment in Boulder City. In 1936 the BOM purchased the Six Companies garage for \$10,000; they converted the building into office space, an analytical laboratory, machine shop, electrolytic bench, ore dressing section, and an area for electric furnaces.

In 2000-2001, due to hazardous and unsafe conditions, Reclamation demolished six BOM buildings. These were Buildings 300, 400, 500, 600, 900, and Pump House, and moved the Scales House to the Clark County Museum in Henderson, Nevada.

To manage historic properties on the DSC, Reclamation has consulted with the NV SHPO and the Advisory Council on Historic Preservation under Section 110 of the National Historic Preservation Act (NHPA), resulting in the execution of a *Memorandum of Agreement Among the Bureau of Reclamation and Nevada State Historic Preservation Officer Regarding Mitigation Requirements arising from the Demolition of Bureau of Mines Buildings at the Date Street Facility and the Construction of a New Modular Building*, dated May 2, 2001. On June 28, 2010 Reclamation entered into the PA for the management of historic properties owned and managed by the agency within Boulder City. The PA includes the historic properties within the DSC.

Table 2- Construction Dates and Other Information on the Buildings

Building Number	Year Built	Original Function	Building Description	
100	1941/1945	Offices and laboratory	Single story, T-shape/concrete block, low-pitch roof	
200	200 1931 Maintenance garage		Steel-frame rectangular, 1½ stories high, low pitch roof	

Environmental Consequences

The no action alternative would have a negative impact on the Buildings as their appearance and condition would continue to be inconsistent with the Historic District.

Proposed Action Alternative

The proposed action would have a positive impact to the Buildings through rehabilitating them to a condition consistent with the Historic District in which they are located. The design for rehabilitation would emphasize restoring the look of the Building exteriors to their historic period of importance. Compliance with the PA would assure proper treatment of the Buildings as contributing elements to the Historic District.

The cumulative impact of the proposed action added to listing of the Historic District on the NRHP was considered. This impact would be positive, as rehabilitation and use of the Buildings would support the purposes for which the Historic District was established.

Traffic Circulation

Affected Environment

The primary streets in the vicinity of the Buildings are Fir Street, Railroad Avenue, and Date Street. These streets have both residential and business traffic. The business traffic includes approximately 95 Reclamation employees who currently use the entrances located on Fir Street, Date Street, or Colorado Street to enter the DSC. Approximately 55 additional Reclamation employees work in close proximity to the Building at 400 Railroad Avenue, adjacent to the DSC. These 55 employees plus 59 Reclamation employees who are currently housed in a building on Colorado Street will relocate to the Green Building when it is complete. This will result in a total of 209 Reclamation employees accessing the DSC.

Traffic from these employees is greatest at the start and end of the workday. There is also traffic when Reclamation employees located in buildings off the DSC are attending training in at the DSC. This traffic will be reduced when the Green Building is complete, as those 110 employees will already be parked on the DSC.

Reclamation completed a traffic study in 2009 (USBR, 2009) as a means of planning for employee access to the Green Building. The study addressed four intersections in Boulder City: Highway 93/Nevada Way/Buchanan Boulevard, Highway 93/Colorado Street, Nevada Way/Fir Street and Nevada Way/Date Street. At these intersections they recorded: the type of intersection and flow of traffic; the amount of time cars wait to cross the intersection; collisions; and the volume of traffic at peak times of day. This was done for a variety of possible situations: existing traffic; existing traffic plus growth; existing traffic plus growth and the Green Building; and existing traffic plus growth, the Green Building, and potential future projects. The study also identified at public transportation and bicycle and pedestrian routes to the Date Street Campus. The conclusion from the study was that the Green Building would not have negative impacts to traffic operations or transportation facilities.

Reclamation is using the information gathered through the study to develop opportunities to provide employee access to the Date Street Campus while minimizing impacts the surrounding neighborhood.

Environmental Consequences

No Action Alternative

The No-Action alternative would not change traffic circulation at the Buildings or the DSC.

Proposed Action Alternative

Traffic from construction vehicles will be present during the construction period. Since this traffic would not be continuous, and much of it would only be present for a small percentage of the construction period, it is not expected to disrupt traffic in the vicinity of the Buildings.

The Date 100 Building would house 5-6 employees. These employees are currently located in Building 800 on the DSC. The Date 200 Building would house 8-12 employees. Approximately one-half of these employees would be relocated from Reclamation facilities outside of the DSC; the rest are already located on the DSC. The rehabilitation of the Buildings would result in a net addition of approximately 5 people to the DSC.

Changes to traffic circulation from vehicles entering the DSC after rehabilitation of the Buildings are expected to be minor. There would be an increase of approximately 5 vehicles from employees who would be relocated to the Buildings from outside the DSC. The location of training on the DSC would shift to the 100 Building, but employees are likely to use the same entrances they are currently using.

There will be several parking spaces located outside of the DSC in front of the Date 100 Building on Date Street. These parking spaces would be designated for visitor use only. There would be a slight increase in traffic along Date Street when visitors are accessing the Buildings.

The cumulative impact of the proposed action added to the traffic impacts of the "Green Building" was considered. No cumulative impacts from construction traffic are expected, because the construction on the Green Building is scheduled to be completed before the rehabilitation of the Buildings begins. Cumulative impacts from employee traffic accessing the Buildings are not anticipated, since the majority of the employees who would use the Buildings are already located on the DSC.

Noise

Affected Environment

Ambient noise levels in the vicinity of the DSC have not been formally measured, but are most likely around 60-55 dBA. This is a typical noise level for a quiet urban neighborhood or office area during daytime hours (USEPA, 1974). The primary sources of this noise are vehicle traffic and residential and commercial activities. A Boulder City noise ordinance requires that construction activities be confined to the hours of 7:00 AM to 7:00 PM.

Environmental Consequences

No Action Alternative

The No-Action alternative would not change ambient noise levels at the Buildings or the DSC.

Proposed Action Alternative

During construction there will be a temporary, periodic, increase in daytime noise from the use of construction equipment at the site. Ambient noise from construction equipment would average approximately 80 dBA when heard 50 feet from the Buildings (FHA, 2011). This would decrease further away from the Buildings. Noise levels at night would remain at current levels.

There may be a slight increase in traffic noise when visitors use the parking spaces in front of the Date 100 Building.

The cumulative impact of the proposed action added to the noise impacts of the "Green Building" was considered. No cumulative impacts from construction noise are expected, because the construction on the Green Building is scheduled to be completed before the rehabilitation of the Buildings begins. Cumulative impacts from noise from employee traffic accessing the Buildings are not anticipated, since the majority of the employees who would use the Buildings are already located on the DSC.

Environmental Justice

Affected Environment

Executive Order 12898 "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" directs federal agencies to determine whether their programs, policies, and activities have disproportionately high and adverse human health or environmental effects on minority and low-income populations. Under the Executive Order, low-income populations are defined as those living below the poverty level. Minorities are defined as members of the following population groups: American Indian or Alaskan Native: Asian or Pacific Islander; Black, not of Hispanic origin; or Hispanic.

Population and income data for the general proposed project area were obtained from the U.S. Department of Commerce-Bureau of the 2000 Census at the census tract level. Data were used from the 2000 census of the population as the 2010 data were not yet available. The three census tracts that were analyzed were 55.01, 55.02, and 55.03. These census tracts are adjacent to the DSC.

Although minority populations occur in these census tracts, the demographic profile of the populations within each census tract is predominantly white. Median household income data is taken from a subset of the 2000 census data, one out of every 6 households was surveyed for this data and the data was subsequently extrapolated out by the Census Bureau to the entire population within the census tracts. The population and income data is shown in Table 3.

Table 3- Population, Minorities, and Poverty Level by Census Tract

Census Tract or Area	Total population	Percent white	Percent minority	Median Income	Percent of households below poverty level
55.01	4,365	95.4	4.6	\$47,083	6.4
55.02	4,091	94.4	5.6	\$60,787	5.1
55.03	3,043	93.6	6.4	\$38,875	8.1

Environmental Consequences

No Action Alternative

The no-action alternative would not result in disproportionately high and adverse human health or environmental effects on minority and low-income populations.

Proposed Action Alternative

There are minor negative impacts identified to air quality and from noise and traffic circulation. These impacts would be mainly short-term during construction activities. These impacts would not be greater for low income or minority populations. Therefore, rehabilitation of the Buildings would not result in disproportionately high and adverse human health or environmental effects on minority and low-income populations. There are no cumulative impacts identified for environmental justice.

Soils/Hydrology

Affected Environment

Metals which resulted from mineral processing of ores when the MRL was in operation contaminated soils at locations within the DSC. The principal toxic metals existing above natural background levels were lead, cadmium, chromium, antimony, and arsenic. Of these, inorganic arsenic is considered the most toxic to humans and presented the greatest challenges to clean up to acceptable limits. Other hazardous substances were encountered during the DSC restoration. Among these were acids and caustics, polychlorinated biphenyls (PCBs), petroleum hydrocarbons, and pesticides.

Contaminated areas were remediated through a Nevada Division of Environmental Protection (NDEP) approved risk based voluntary Corrective Action Plan through removal and/or isolation of contaminated soils (Zenitech, 2005a). Remediation began in 2004 and was completed in 2006 and approved by NDEP.

The isolation of material was accomplished by consolidating the higher-level hazardous substances in central portions of the site, capping them with a low permeability barrier system, and placing 3.5 to 10 feet of clean soil on top to achieve the final design elevations. Due to the depth of groundwater and the insolubility of the metals, groundwater deep beneath the site will not foreseeably become contaminated by the waste materials. The area receives only approximately four inches of rainfall per year, further reducing the likelihood of contaminants infiltrating through the native soils. Human health risk assessment methods were used to determine the target cleanup levels at the site. Final verification testing of soil concentrations of arsenic and lead showed that these levels have been achieved. The DSC drainage was redesigned with drainage channels, rip rap protection, and other stormwater best management practices.

The location of the Buildings was not included in the remediation, as contamination was not identified there. Inspections of the Date 100 Building identified contamination from an organochloride pesticide, dichlorodiphenyltrichloroethane (DDT), in the building basement. A concrete cap was placed over the contaminated area.

Environmental Consequences

No Action Alternative

The no-action alternative would not impact soils or hydrology in the vicinity of the Buildings.

Proposed Action Alternative

It is possible that the staging area or construction trailers for the proposed action would be located in the remediated area of the DSC. This would not impact isolated contaminated soils because no ground disturbance is planned for establishing the staging area or construction trailer site. If ground disturbance is needed, the mitigation measures included in the proposed action for soils and hydrology would prevent impacts.

If DDT or any other contaminants are identified in the vicinity of the Buildings as a result of the Environmental Building Screen and Assessment measures to contain or remove contaminants would prevent any impacts to soils or hydrology.

The cumulative impact of the proposed action added to the impacts of the 2004 remediation of the DSC was considered. Rehabilitation of the Buildings would include identification and remediation of any contaminants associated with the Buildings. This would be a positive cumulative impact as it will add to efforts to make the DSC a safe, environmentally sound, facility that is a benefit to the City of Boulder City.

Visual Resources

Affected Environment

The site on which the DSC is located was originally planned as an industrial area (NPS, 1983). Currently the DSC includes multiple office buildings and warehouse structures. The west side of the DSC is bordered by a commercial shopping center. The south side of the DSC is bordered by commercial business, apartments, and single family homes. The east side of the DSC is bordered by a maintenance yard and electric power substation owned by the City of Boulder City.

The Buildings are located in the south-east corner of the DSC, within the Historic District. They border an established residential area with apartment buildings, historic homes, and mature landscaping. The Date 200 Building retains an industrial look, with metal walls and roof. There have been alterations to the appearance of the building through the siding over of windows, the additions on the north and south side, and paint. The Date 100 Building's lack of roof and windows gives it an abandoned appearance which is not consistent with the adjacent neighborhood.

Environmental Consequences

No Action Alternative

Under the No Action Alternative the appearance of the Buildings would continue to be inconsistent with the visual character of the Historic District. The appearance of the Date 100 Building would continue to detract from the adjacent historic homes. The Date 200 Building would retain aspects which do not enhance its' appearance, such as few windows and the additions.

Proposed Action Alternative

The rehabilitations of the Buildings are intended to restore original architectural details and compatibility with the nearby Historic District as well as be in compliance with Department of Interior standards for treating historic properties. Landscaping for the Buildings would be designed to enhance the appearance of the Buildings and be compatible with the surrounding environment. These actions are expected to improve the view of the DSC from all adjacent neighborhoods and commercial areas.

The appearance of the DSC has altered over the years from an actively industrial site to a working campus with a mix of office buildings and warehouses. The proposed action is expected to have a positive cumulative impact to visual resources.

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Consultation and Coordination

Scoping Summary

In preparation for preparing an EA for the Buildings, Reclamation sponsored an open house on June 8, 2010. The open house was held in Building 800 on the DSC. The public was invited to the open house through a paid advertisement that was published in the Las Vegas Journal and the Boulder City Review for one week prior to the meeting. The advertisement was also featured in the Boulder City Chamber of Commerce newsletter and the Boulder City News, published by the Boulder City Department of Public Works. Flyers announcing the open house were posted at numerous locations throughout Boulder City. Announcements of the open house were sent to two individuals who attended a previous meeting on the Green Building. Information was also available on Reclamation's web site.

The open house featured displays on the NEPA and NHPA processes, alternative concepts for the Buildings, an update on the Green Building, information on the Traffic Study conducted by Reclamation, and historical information on the Buildings and the Date Street Campus. Reclamation staff were stationed at the displays to describe the proposal and answer questions.

Four members of the public attended and one written comment form was received. This individual favored Concept One for both the Date 100 Building and the Date 200 Building. They recommended that the Date 100 Building feature and interpretive display, and that this be open to the public.

Agencies and Individuals Consulted

Advisory Council on Historic Preservation
Nevada State Historic Preservation Officer
Preserve Nevada, Inc.
Boulder City, Nevada, Department of Community Development
Ms. Mimi Rodden, Historical Consultant
Boulder City, Nevada, Department of Public Works