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SECTION 1 PROJECT DESCRIPTION

1.1 LOCATION

The area covered by the Mortensen et. al. Development Standards Handbook (MDSH) is located within the western limits of the city of Reno within portions of sections 4, 9, 16, 17, 20, and 29 of Township 19 North, Range 18 East, M.D.B. & M. The MDSH encompasses approximately 2,723.9 acres owned by four property owners as outlined in Table 1-1. The project site is in the City of Reno and covers an area extending both north and south of I-80 in Verdi. The project site and surrounding area are shown on Figure 1-1.

FIGURE 1-1 VICINITY MAP
1.2 OWNERSHIP

Table 1-1 defines the ownership and parcels included in the MDSH. The Middagh parcel (APN 038-100-21) and a portion of APN 038-100-27 (6.51 acres) were included in the Settlement Agreement and annexed to the City of Reno but are not a part of the MDSH. Zoning for these parcels will be addressed at a later date by the property owner in accordance with the Settlement Agreement (section 9 of the Settlement Agreement).

**Table 1-1 Owner/Parcel Data**

<table>
<thead>
<tr>
<th>Property Owner</th>
<th>APN's</th>
<th>Total Acreage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boomtown</td>
<td>038-090-34</td>
<td>±563.29 ac</td>
</tr>
<tr>
<td></td>
<td>038-090-61</td>
<td></td>
</tr>
<tr>
<td></td>
<td>038-100-12</td>
<td></td>
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<tr>
<td></td>
<td>038-100-19</td>
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<td></td>
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<td></td>
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<tr>
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</tr>
<tr>
<td></td>
<td>038-430-28</td>
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</tr>
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<td>Quilici</td>
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</tr>
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<td></td>
<td>038-260-15</td>
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<td>Mortensen</td>
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</tr>
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<td>038-830-02</td>
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</tr>
<tr>
<td>Santerra LLC</td>
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<td>±669.23 ac</td>
</tr>
<tr>
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<td>038-120-04</td>
<td></td>
</tr>
<tr>
<td></td>
<td>038-190-37</td>
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</tr>
</tbody>
</table>

1.3 BACKGROUND

The subject properties were annexed to the City of Reno effective July 24, 2001. Washoe County filed District Court Case No. CV01-03867. This lawsuit resulted in a Settlement Agreement (see appendix) that defines a maximum density and density distribution for the properties. It also established criteria to be used in the determination of the appropriate density and density distribution for the properties identified in Table 1-1.
The maximum density allowed by the Settlement Agreement is defined as:

- Existing 124 acres of commercial along the I-80 corridor;
- Up to an additional 176 acres of commercial along the I-80 corridor or railroad track; and
- Up to 3,000 residential units, including non-residential equivalents, on the remainder of the properties which limitation does not include the 124 acres and 176 acres noted above.

In addition to defining the maximum density that is permissible, the Settlement Agreement set out criteria to be used in preparing a land plan for the properties. These criteria include:

- Any natural constraints in slopes and wetlands
- The ability to obtain sewer and wastewater service and the likelihood that said service will be in place at certificate of occupancy or final inspection
- The availability of water resources and water delivery systems and the likelihood that said service and system will be in place at certificate of occupancy or final inspection
- Any impacts of traffic, level of service and level of congestion on the existing Verdi community
- The delivery of services, including fire, law enforcement, water, sewer and road maintenance, and how the provision of services affects, if at all, existing and neighboring communities
- The impact of future development in the requested densities on adjacent communities
- The requirements of Policy 1.2.16 of the 2002 Regional Plan unless inconsistent with the foregoing.

Policy 1.2.16 of the 2002 Truckee Meadows Regional Plan reads as follows:

“The Regional Plan designates the following general areas for emerging employment centers: the southeast Truckee Meadows, Stead, east and north Sparks, the Patrick interchange of the east Truckee River Canyon, and the Boomtown area.

To conform with the Regional Plan, Local Government and Affected Entity Master Plans must maintain and improve the viability of these areas as major employment centers with the following master plan provisions:

1) Provide adequate non-residential land supply;
2) Provide convenient access to major roads and/or freeways;
3) Require pedestrian connections throughout the areas and to nearby residential areas;
4) Plan for transit service;
5) Provide adequate residential land supply in the surrounding area to house the anticipated number of employees;
6) Require design and intensity standards to maintain the character of nearby residential areas; and,
7) Promote reverse commute and trip reduction strategies.”

Specific subject matters to be included in the development standards handbook were also identified. These are:

- Hillside development standards consistent with W CDC 110.424 as of the date of the settlement agreement;
- Hydrologic resources standards consistent with W CDC 110.418 as of the date of the settlement agreement;
- Edge matching in a manner that new development adjacent to the existing developments of Blue Heron, Verdi Bluffs and Canyon Ranch Estates subdivisions provides and edge density and lot size for edge lots equal to or less dense than the above-referenced subdivisions, or provides an open space buffer equal to at least one lot depth of the above-referenced subdivisions. This standard in no event requires an edge lot size or buffer in excess of 1 acre in size;
- Exterior lighting standards or design features to serve the needs of development but in a manner to minimize illumination of the night skies for the rest of the Verdi community;
- A traffic design, both interior and exterior to any development, minimizing traffic impacts on the rest of the Verdi community;
- A storm water and flood control management plan;
- Community design standards to complement the character of the rest of the Verdi community;
- Procedures and criteria to amend the DSH; and,
- Except as provided in paragraph 9 amendments to the DSH not inconsistent with this agreement will not be subject to cooperative planning.
1.4 ENTITLEMENT REQUESTS

The subject properties are currently zoned HC (Hotel/Casino) and SPD (Specific Plan District). The existing SPD designation has no details on land use densities or design standards. The MDSH includes an application for a Zoning Map Amendment to create standard city zoning category designations for the property and Text Amendment to establish an overlay zone to create development standards applicable to the properties as contemplated in the Settlement Agreement.

It is envisioned that the MDSH will be the development standards applicable to the properties and be adopted by reference as a part of Reno Municipal Code (Overlay Districts). Reno Municipal Code will apply where matters are not specifically addressed by the MDSH. In the event of a conflict between the MDSH and Reno Municipal Code, the MDSH shall apply. Updates to the RMC as may occur over the life of the development of the property shall apply only to the extent that they do not conflict with the MDSH or serve to deny the development of the properties as envisioned in the MDSH.
SECTION 2. PHYSICAL CHARACTERISTICS

2.1 SURROUNDING LAND USE / DESIGNATIONS

To the north of the project area is undeveloped privately held land that has a land use designation of General Rural (one dwelling unit per 40 acres). To the north of the Boomtown property is the River Oaks subdivision. This development, consisting of single family homes with lot sizes ranging from 3,600 to 8,400 square feet, is separated from Boomtown’s property by the Union Pacific Railroad tracks and the Truckee River. This subdivision is designated Low Density Urban (10 dwelling units per acre for single family and 14 dwelling units per acre for multi-family).

To the south of the project area is undeveloped U.S. Forest Service land designated Open Space.

The majority of the developed land adjacent to the project area lies to the east and west.

To the east of the project area is a combination of existing and planned residential land uses and an existing industrial park (i.e. Verdi Business Park). Immediately east and abutting the Mortensen property is the planned Somersett Development consisting of an Active Adult Retirement Community with lots less than 6,000 square feet in size and one acre custom lots with a PUD (Planned Unit Development) zoning designation. The southeast boundary of the Mortensen property is adjacent to vacant land that has been annexed to the City of Reno and has a zoning of LLR-1 (one dwelling unit per acre). East of the southern Boomtown holdings is the Blue Heron subdivision. This subdivision has a land use designation of LDS (one dwelling unit per acre) and is developed with single family homes on lots ranging in size from 0.96 to 1.6 acres.

To the west of the project area are existing and planned residential subdivisions. Adjacent to the southwest portion of the Mortensen property is the planned Canyon Ranch Estates subdivision. This development is zoned LLR-1 (one acre) and SF15 (15,000 square feet) and is in the City of Reno. It is planned for single family lots of approximately 0.5 acre in size. Immediately to the west of Boomtown property is the Verdi Bluff neighborhood. This area is designated LDS (one dwelling unit per acre) and developed with lots ranging from one acre to 1.6 acres in size. To the west of the Quilici Ranch is land designated Industrial and several existing dwelling units with land use designations of MDS (three dwelling units per acre) and GR (one dwelling unit per 40 acres). Across the railroad tracks and to the west of the proposed Business Park on the Quilici Ranch is an existing residence and four (4) vacant two and one-half (2.5) acre lots. This property is owned by one of the applicants (i.e. Quilici).

2.2 EXISTING DEVELOPMENT PATTERN

The historic development pattern of Verdi resulted in a variety of land uses including hotel/casinos, residential, commercial, recreational vehicle and mobile home parks, small and large lot residential. Figures 2-1 through 2-4 depict elements of this development pattern found in Verdi.
PHYSICAL CHARACTERISTICS

FIGURE 2-1 EXISTING HOTEL AND CASINO DEVELOPMENTS IN VERDI
Figure 2-2 Existing Industrial Developments in Verdi
Figure 2-3  Existing Commercial Developments in Verdi
Figure 2-4  Existing Residential Developments in Verdi
Verdi contains a substantial non-residential land use component consisting of two casinos, (Boomtown and Gold Ranch), and business parks, (the Wells/Viking complex and the Verdi Business Park). Additionally, there is an industrial complex to the west of the railroad tracks south of Interstate 80 and a core commercial area at the traditional town center at Highway 40 and Bridge Street.

Residential land patterns have varied from RV and mobile home parks, to 3,000 to 6,000 square foot lot subdivisions (First and Second Streets, Glen Meadows Village/River Oaks), to one third (1/3) acre subdivisions (Verdi Lake Estates), to large estate lot subdivisions (Belli Ranch Estates and Riverdale). The more recent development pattern of one (1) acre lots was undoubtedly been influenced by County policy and Health Department regulations that limited individual wells and septic systems to lots of one (1) acre or larger in size. This development pattern is no longer viable since recent Health Department regulations and Regional Plan policies require a minimum lot size of five (5) acres for individual wells and septic systems.

This analysis of existing development pattern clearly shows that Verdi has developed as a mixed use community with a wide variety of land use types and densities.

2.3 Topography/Slopes

The MDSH encompasses approximately ±2,723.9 acres. Figure 2-5 is a topographic map of the existing, undisturbed project site with contours shown at 25 foot intervals. The terrain controls the extent and location of potential development in the project area.

Figure 2-6 is a slope map for the properties included in the MDSH. Slopes are defined in ranges of 0-15%, 15-30%, and 30% or greater. Washoe County Development Code (WCDC) Section 110.424, Hillside Development, establishes that areas considered less suitable for development include slopes greater than 30%. The majority of the areas within the MDSH that are 30% or greater are at the extreme north and south edges of the project. These areas will be preserved as open space. Additionally, the 30% slopes on the west edge of the project in the Quilici Ranch and adjacent to I-80 on the south portion of the Boomtown property will also be retained as open space.

Approximately ±1,908 acres of the property has slopes of 30% or less (70%). This compares to approximately ±1,380 acres of the project area that is proposed for development.

Individual tentative maps and special use permits will be subject to a determination of compliance with the Hillside Development Standards section of this development standards handbook.
Figure 2-6  Slope Map

- 0 TO 15: 43.01%  1171.6 AC.
- 15 TO 30: 26.79%  729.7 AC.
- 30 TO INF: 30.20%  822.6 AC.
- TOTALS: 100%  2723.9 AC.
2.4  Wetlands

Preliminary wetland delineations for the properties included in the MDSH have been prepared by JBR Environmental Consultants, Inc., and Huffman and Associates, Inc. These studies have been included in Supporting Studies Book 2. Figure 2-7 depicts the general location and extent of wetlands and Waters of the U.S. within the project boundaries.

Each tentative map, parcel map and special use permit must show the wetlands and waters of the U.S. Wetlands within the project will be protected and mitigated according to RMC, Wetlands and Stream Environments. Wetlands will be avoided and retained as open space unless the location of the wetland and or the physical characteristics of the site necessitate modification of a wetland. In this instance, the wetland must be replaced at a minimum 2:1 ratio or as required by the US Army Corps of Engineers, whichever is more restrictive.
**Figure 2-7  Wetlands Map**

**Physical Characteristics**

**Potentially Jurisdictional Waters of the U.S.**

**Off-Site Channels**

**Potential Wetlands**

**Project Boundary**

**Sources:**
SECTION 3. DEVELOPMENT PLAN

3.1 LAND USE PLAN

Figure 3-1 represents the development plan for the properties included in the MDSH. This plan was prepared based on the studies included in the Supporting Studies Books 1 and 2 to address the criteria included in the Settlement Agreement.

The development potential established in the MDSH is allocated to the four property owners included in the MDSH. Table 3-1 defines the amount and type of development allocated to each property owner. Adjustments to the total numbers and types of development allocated to each owner may only be made as allowed in Section 6, Administration/Amendments of the MDSH. Adjustments between property owners must be accompanied by a notarized authorization from the donor property owner before they may be considered by the City of Reno.

TABLE 3-1 DEVELOPMENT POTENTIAL BY PROPERTY OWNER

<table>
<thead>
<tr>
<th>Owner</th>
<th>Acreage/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mortensen</td>
<td>680 dwelling units</td>
</tr>
<tr>
<td>Boomtown</td>
<td>753 dwelling units, HC ±85 acres, AC ±48 acres, IC ±75 acres</td>
</tr>
<tr>
<td>Santerra, LLC</td>
<td>1,180 dwelling units, NC ±15 acres, IC ±12 acres</td>
</tr>
<tr>
<td>Quilici</td>
<td>387 dwelling units, IC ±65 acres</td>
</tr>
</tbody>
</table>

Table 3-2 establishes the zoning districts for the property as identified on Figure 3-1. Exact locations of zoning boundary lines will be defined with subsequent tentative maps, special use permits or parcel maps consistent with Figure 3-1, with the exception of the buffer areas adjacent to Belli Ranch, Verdi Bluff and South Verdi Road. These areas shall be defined by legal descriptions and implemented with the adoption of this handbook. Table 3-3 establishes the potential residential development by Planning Area as identified on Figure 3-1.
Figure 3-1 Land Use Plan
### Table 3-2 Development Potential by Land Use Designation

<table>
<thead>
<tr>
<th>Designation</th>
<th>Abbreviation</th>
<th>Acreage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large Lot Residential</td>
<td>LLR-1</td>
<td>±31</td>
</tr>
<tr>
<td>Single Family Residential (9,000 sq. ft.)</td>
<td>SF9</td>
<td>±499</td>
</tr>
<tr>
<td>Single Family Residential (6,000 sq. ft.)</td>
<td>SF6</td>
<td>±523</td>
</tr>
<tr>
<td>Multi-Family (14 units per acre)</td>
<td>MF14</td>
<td>±13</td>
</tr>
<tr>
<td>Industrial Commercial</td>
<td>IC</td>
<td>±152</td>
</tr>
<tr>
<td>Public Facility</td>
<td>PF</td>
<td>±14</td>
</tr>
<tr>
<td>Hotel Casino</td>
<td>HC</td>
<td>±85</td>
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<tr>
<td>Arterial Commercial</td>
<td>AC</td>
<td>±48</td>
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<td>Neighborhood Commercial</td>
<td>NC</td>
<td>±15</td>
</tr>
<tr>
<td>Open Space</td>
<td>OS</td>
<td>±1,344</td>
</tr>
</tbody>
</table>

### Table 3-3 Residential Development Potential by Planning Area

<table>
<thead>
<tr>
<th>Planning Area</th>
<th>Residential Land Use Designation</th>
<th>Dwelling Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning Area 1</td>
<td>Single Family (SF6)</td>
<td>676 units</td>
</tr>
<tr>
<td>Planning Area 2</td>
<td>Single Family (LLR1)</td>
<td>13 units</td>
</tr>
<tr>
<td></td>
<td>Single Family (SF6)</td>
<td>270 units</td>
</tr>
<tr>
<td></td>
<td>Multi-Family (MF14)</td>
<td>242 units</td>
</tr>
<tr>
<td>Planning Area 3</td>
<td>Single Family (LLR1)</td>
<td>14 units</td>
</tr>
<tr>
<td></td>
<td>Single Family (SF9)</td>
<td>1,019 units</td>
</tr>
<tr>
<td></td>
<td>Single Family (SF6)</td>
<td>594 units</td>
</tr>
<tr>
<td></td>
<td>Multi-Family (MF14)</td>
<td>172 units</td>
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</tbody>
</table>

#### 3.2 Traffic, Circulation and Access

The land plan proposed with the MDSH was evaluated by Solaegui Engineers, Ltd. The traffic analysis for this zoning map amendment is included in Supporting Studies Book 2, submitted with this document.

Figure 3-2 depicts the proposed circulation plan for the MDSH.
Two criteria for assessing the impacts of traffic were established by the Settlement Agreement. These include:

- Any impacts to traffic, level of service and level of congestion on the existing Verdi community; and,

- A traffic design, both interior and exterior to any development, minimizing traffic impacts on the rest of the Verdi community.

The properties included in the MDSH are ideally located for the proposed development intended. They have access to two major roadways - Interstate 80 and US Highway 40. With the exception of the extension of roads through the Canyon Ranch Estates project and the extension of a frontage road to connect to S. Verdi Road, the proposed roadway system does not create traffic through existing neighborhoods in Verdi. It should be noted that the Canyon Ranch Estates development, which is in the City of Reno, is planned for two collector streets which will accommodate the traffic generated from this project. Additionally, the extension of a frontage road west to connect to S. Verdi Road will provide the opportunity to divert traffic from the narrow existing S. Verdi Road immediately north of Boomtown.

In order to assess the impacts of traffic from the project on existing Verdi residents, an objective calculation of level of service was prepared by Solaegui Engineers Ltd. The land use and transportation element of the Washoe County Comprehensive Plan establishes a level of service C as the minimum acceptable level of service for roadways for which the County is responsible. Even though the roadways included in the MDSH will be the responsibility of the City of Reno, the traffic analysis and mitigations proposed have been designed to maintain a level of service C. Implementation of the proposed roadway system and mitigations will assure that traffic impacts from the project do not unduly burden roadways or create an unacceptable level of congestion.

A series of improvements will be provided with the development of the properties. These include:

- Traffic signals will be constructed at the Garson Road intersections with the I-80 westbound ramps, the Boomtown Access Road, the I-80 eastbound ramps and Warrior Lane when warranted and that the signals will be interconnected to provide arterial progression on Garson Road.

- The Garson Road/I-80 Westbound Ramp intersection be constructed to include a minimum of one left turn lane and a shared through-right turn lane at the north and east approaches and one left turn lane, one through lane and a right turn lane at the west and south approaches. It is recommended that a minimum of 425 feet of left turn storage length be provided at the south approach and a minimum of 200 feet at the east, west and north approaches.

- The Garson Road/Boomtown Access Road intersection be improved to include a minimum of one left turn lane and a shared through-right turn lane at the north approach, one left turn lane, one through lane and an exclusive right turn lane at the south and east approaches and one left turn
lane and a shared through-right turn lane at the north approach, one left turn lane, one through lane and a free right turn lane at the west approach. It is recommended that a minimum of 150 feet of left turn storage length be provided at the north, south, east and west approaches.

• The Garson Road/I-80 Eastbound Ramp intersection will be improved to include dual left turn lanes and two through lanes at the north approach, a shared through-right turn lane and an exclusive right turn lane at the south approach and a shared left turn-through lane and an exclusive right turn lane at the west approach. It is recommended that a minimum of 300 feet of storage length be provided for each left turn lane at the north approach.

• The Garson Road/Warrior Lane/Project Access intersection will be constructed to include a minimum of one left turn lane, one through lane and an exclusive right turn lane at the north approach, one left turn lane and a shared through-right turn lane at the south and east approaches and dual left turn lanes and a shared through-right turn lane at the west approach. It is recommended that a minimum of 175 feet of left turn storage length be provided for each left turn lane at the west approach and a minimum of 150 feet at the north, south and east approaches.

• The Garson Road Extension/Garson Road North intersection will be improved to include a minimum of one left turn lane and a shared through-right turn lane at the north and south Garson Road Extension approaches and one left turn lane, one through lane and a right turn lane at the east Garson Road North approach and the west convenience market approach. It is recommended that a minimum of 150 feet of left turn storage length be provided at the north, south, east and west approaches.

• The U.S. 40/Summerset Drive/West Project Access intersection will be improved to include one left turn lane, one through lane and a right turn lane at the east approach, one left turn lane and a shared through-right turn lane at the west approach and single lanes at the north and south approaches. It is recommended that a minimum of 300 feet of left turn storage/deceleration length be provided at the east and west approaches. It is recommended that the right turn lane at the east approach contain a minimum of 220 feet of deceleration length.

• The U.S. 40/East Project Access intersection will be improved to include one left turn lane and one through lane at the west approach, one through lane and a right turn lane at the east approach and a single lane at the north approach. It is recommended that a minimum of 300 feet of left turn storage/deceleration length be provided at the west approach. It is recommended that the right turn lane at the east approach contain a minimum of 220 feet of deceleration length.

• The I-80 westbound off-ramp and eastbound on-ramp at the Garson interchange each will be improved to include two lanes.

• The Garson Road overpass will be widened to contain two southbound through lanes and one northbound through lane between the Boomtown Access Road and I-80 eastbound ramps with a single northbound left turn lane at the Boomtown Access Road intersection and dual southbound left turn lanes at the I-80 eastbound ramp intersection.
- Garson Road will be constructed to contain two through lanes in each direction between the I-80 eastbound ramps and Warrior Lane with a single southbound left turn lane at the Warrior Lane intersection.

- Garson Road will be constructed to contain one lane in each direction between the Boomtown Access Road and South Verdi Road with left turn pockets provided at the key intersections and project driveways.

- South Verdi Road between the I-80 westbound off-ramp and the project access road be improved as a two-lane City of Reno residential collector street.

Each development application will include a traffic analysis identifying the roadway improvements necessitated by that particular development. This will assure that improvements are planned to coincide with the need to maintain level of service C.

**Trip Reduction**

In order to facilitate trip reduction, a park and ride Facility will be provided when determined feasible by the City of Reno and Regional Transportation Commission (RTC). Such a facility will be placed at the southern end of the employment center located south of I-80. RTC has indicated fifty (50) parking spaces will be adequate for this facility. An area of approximately 6,000 square feet should accommodate this facility. A temporary parking area will be provided prior to construction of the fire station at this location. With construction of the fire station, a permanent parking area will be provided if warranted.

**3.3 Water**

Capital Engineering has prepared a preliminary water plan for the MDSH (see Supporting Studies Book 2). This water plan has been developed to outline a community water system that assures the availability of water resources and water delivery to the proposed MDSH development project.

The preliminary plan incorporates the existing Boomtown water system and couples it with the extension of Truckee Meadows Water Authority (TMWA) facilities to the MDSH properties from the Mogul area. The preliminary planning includes the estimated water demands and supply, water transmission and distribution, storage requirements and water rights discussion. General system components and a preliminary layout are provided in the plan.

Water rights are required for the development of the MDSH development project. The amount of water rights required are based on TMWA’s Rule 17. Rule 17 outlines a schedule of assumed demands based on land usage including lot sizes. Most developments within the TMWA water
service area purchase water rights from TMWA based on final demand determination. In the case of the MDSH project, a significant amount of water rights are owned and are available to be dedicated for the project water system. The remainder of rights required will be either purchased from TMWA or will be purchased from private parties on the open market. The following represents the amount of water rights available for dedication supporting the MDSH development project:

- **Groundwater rights:**
  - Boomtown: 880 acre feet

- **Surface water rights:**
  - Boomtown: 700 acre feet
  - Quilici: 330 acre feet
  - Mortensen: 43 acre feet

**Total Rights:** 1,953 acre feet

This is a significant amount of water rights and will allow for a large percentage of the development to occur prior to requiring water right purchase from TMWA or private parties. In general, the ownership of water rights by the MDSH participants provides a significant step in the delivery of water resources to the project.

The MDSH Preliminary Water Plan provides an outline of improvements required to assure that adequate water resources and water delivery can be provided for the successful development of the proposed MDSH project. By proposing Truckee Meadows Water Authority (TMWA) as the water purveyor for the project, an extension of TMWA’s facilities to the project coupled with the transfer of the existing Boomtown water system to TMWA provides a good guarantee of an adequate water system for the development.

The water plan provides the system’s preliminary planning outlining the components required for successful delivery of water to the project. These components include upgrading of the existing TMWA system in the area of U.S. 40 and Mae Anne Drive, extension of existing TMWA transmission facilities from the Mogul area to Verdi, incorporation of the existing Boomtown water system, and development of transmission, distribution, and storage systems accommodating the various development areas proposed for the project.

As the project proceeds into final design, the water planning will be upgraded to include hydraulic modeling of the specific design elements including pipe sizes, specific line locations and elevations, pump sizing, pressure regulator locations, looping concepts, final storage requirements, and system redundancy/reliability. The water plan outlined herein provides a tool for incorporation of water design into the tentative and final specific project development plans.

In summary, the proposed MDSH development project can be successfully served with a community water system constructed by the project developers and owned and maintained by the Truckee Meadows Water Authority.

In order to address the concerns of existing domestic well owners regarding the potential impacts to groundwater resources, the “Draft Implementation Plan for Groundwater Resource Data Center and Well Mitigation Program” (January 21, 2004), has been added to the MDSH as Appendix C. This program should be used by any water purveyor who uses municipal wells in the Verdi area to serve the properties included in the MDSH.
3.4 Sewer

With the exception of the River Oaks Subdivision and Boomtown, all existing development in Verdi use septic systems for wastewater discharge. The Verdi Meadows Utility Company operates a treatment plant that serves the River Oaks Subdivision. Boomtown operates its own treatment plant to serve the hotel/casino, service station, truck stop and RV park.

Since the Verdi area eventually drains to the Truckee River, the region's major source of drinking water, it has long been recognized that community sewer service should be extended to the area. In fact, Washoe County's Verdi Area Plan calls for the extension of the Lawton Verdi Interceptor to prevent unacceptable nitrate loadings into the Truckee River.

To address potential water quality concerns in the Verdi area, the City of Reno has authorized the extension of the Lawton Verdi Interceptor to Boomtown. The first phase of the interceptor extension is currently under design and anticipated to be in place by late 2004. This phase will extend the sewer line to Boomtown.

All development proposed within the MDSH is intended to be served through the Lawton Verdi Interceptor to the Truckee Meadows Water Reclamation Facility (TMWRF).

To address the potential impacts of the project in terms of wastewater and to identify the availability of wastewater service for the MDSH, a preliminary sanitary sewer report was prepared by Summit Engineering Corporation (see Supporting Studies Book 2). This report provides an estimate of the sewage to be generated onsite and identifies the basic backbone system to convey wastewater flows. The study uses the City of Reno Public Works Design Manual and actual measured peak flows from Boomtown's system to calculate estimated flows.

This sanitary sewer report concludes that the total development anticipated with the MDSH will generate a peak flow of 3.41 million gallons per day (MGD). The project will generate 2.90 MGD at the Garson Road Interceptor. The design flow of the Garson Road Interceptor is 2.90 MGD. The Lawton Verdi Interceptor east of the Garson Road point of connection has a design flow of 5.10 MGD. An estimated ultimate flow of 2.0 MGD is anticipated from points west of this connection, thus providing more than adequate capacity for the Garson Road Interceptor flows.

TMWRF is currently operating at 31-32 MGD. It is scheduled to be expanded to 46.5 MGD starting in spring of 2004.

It should also be noted that the project will be subject to sewer connection fees which will be used for plant capacity expansion as needed.
Figure 3-3 Public Facilities

- Fire Station (Existing)
- Fire Station (Proposed)
- Elementary School (Existing)
- Elementary School (Proposed)
- Project Boundary
3.5 Public Services

Figure 3-3 defines the major existing and proposed public service facilities within the MDSH planning area.

FIRE

There are currently two fire stations in the Verdi area, these include the Nevada Division of Forestry (NDF) station at the south end of the Boomtown/Garson Rd./I-80 interchange and the Verdi Volunteer Fire Department at Bridge Street. Two additional fire facilities, to be built and maintained by the City of Reno, include a proposed station in the western end of the Somersett development and a new site within the MDSH at the I-80/Garson Road Interchange.

Additional fire service demands created by development will be funded by the increased property tax, sales tax and fees generated by the development of the subject properties. These services will add to, and not detract from, the services being provided to the existing residents of Verdi.

LAW ENFORCEMENT

The area is currently served by the Washoe County Sheriffs Department. Additional police services will be provided by the City of Reno Police Department and funded by the increased property tax, sales tax and fees generated by the development proposed in the MDSH. Additionally, the 3± acre fire station site located at the Garson Rd./I-80 interchange is large enough to allow for a substation if determined necessary by the law enforcement agency. This site will be dedicated, at no cost, to the City when determined necessary by the City. It should also be noted that Boomtown currently has, and will maintain, its own security force.

SEWER AND ROAD MAINTENANCE

Maintenance costs for the new sanitary sewer facilities generated by development of the properties will be funded by the user fees paid by the new uses within the MDSH. These costs will be solely borne by the proposed new development and will not impact any existing and neighboring communities.

New major roadways proposed within the MDSH which remain public will be maintained by the City of Reno with maintenance funded by increased gas tax, property tax, sales tax and fees generated by the proposed development. Future private roadways within the MDSH will be owned and maintained by a homeowners association. Even though these roadways will likely be used by residents and businesses in the existing neighboring communities, no additional costs should occur to them.
FISCAL IMPACT

In 2000, the Truckee Meadows Regional Planning Agency hired Economic and Planning Systems (EPS) to prepare a Truckee Meadows Fiscal Study. This study included all expenses incurred by Reno, Sparks and Washoe County. This included fire, law enforcement and road maintenance.

Based on the technical memorandum by EPS dated July 18, 2000, the development anticipated in the MDSH was estimated for its impact both on the City of Reno and Washoe County. This analysis shows that at year ten (10) with full buildout, the project is anticipated to create a surplus of $1.1 million to the City of Reno. In terms of impacts to Washoe County and unincorporated residents, this analysis shows that the project is estimated to provide Washoe County with a surplus of $1.4 million (see Appendix B).

3.6 STORM WATER

To address storm water impacts of the development proposed in the MDSH, a master hydrology study was prepared by Nimbus Engineers (see Supporting Studies Book 3). Nimbus prepared hydrologic models for existing and proposed conditions for the 5-year and 100-year storm events. Nimbus used the U.S. Army Corps of Engineers Flood Hydrographs HEC - HMS 2.1.2 (2002) program and the procedures in the Washoe County Hydrologic Criteria and Drainage Design Manual (1996) to develop watershed parameters.

Nimbus found that outside the vicinity of the Truckee River, the project is not within the 100-year regulatory flood plain. The study concluded that the increase in peak flow from the majority of the watersheds is minimal.

The storm water plan for the properties will consist of the following:

1. The master hydrology study will be used in specific project designs through the tentative map and special use permit process to define exact location and sizes of detention basins in accordance with Reno Municipal Code.

2. Major drainage courses will be maintained and used to perpetrate stormwater flows.

3. Roadway crossings of major drainage courses will be used to provide detention to maintain predevelopment stormwater flows.

4. Best management practices (BMP's) will be used during development to assure water quality is maintained. This will be administered through the NDEP Storm Water Pollution Prevention Plan (SW PPP).
Section 4. Development Standards

All development within the MDSH shall comply with the standards for each corresponding zoning district as set forth in the Reno Municipal Code Title 18, as shown on Figure 3-1, unless otherwise stated in this handbook. Any matters not specifically addressed in the handbook shall comply with applicable City of Reno Code requirements. Where there is a conflict between City Code and the MDSH, the handbook shall prevail.

4.1 Uses

Uses permitted within each zoning district shall be those identified in Reno Municipal Code with the exception of the following uses which shall be prohibited:

- Auto repair garage, paint and body shop (does not include quick lube or vehicle maintenance associated with service station);
- Single room occupancy;
- Adult business;
- Towing and impound yard;
- Blood plasma donor center
- Outdoor manufacturing, processing, assembly or fabrication;
- Outdoor storage;
- Salvage or reclamation products (indoors);
- Tattoo parlor, body painting and similar uses;
- Laundry, self service; or
- Theaters (in AC and IC only - allowed in HC).

4.2 Hillside Development

Purpose

The purpose of this article, Hillside Development, is to regulate hillsides in a manner different from regulation of flat terrain. This article established provisions for developing, preserving and protecting hillsides and ridgelines. The intent of these regulations is to protect the public health, safety and welfare by:

(a) Minimizing use of slopes subject to instability, erosion, landslide, flood hazards or drainage problems;
(b) Minimizing the careless alteration of and disruption to the natural topography and landscape;

(c) Providing safe and adequate vehicular and pedestrian access to and within hillside areas, including emergency access;

(d) Establishing stormwater runoff and erosion control techniques to minimize adverse water quality impacts resulting from non-point runoff;

(e) Encouraging innovative grading techniques and building design which respond to the hillside terrain and natural contours of the land;

(f) Minimizing impacts on existing trees and vegetation which reduce erosion, stabilize steep hillsides, enhance visual quality, protect water quality and preserve critical watershed recharge areas;

(g) Encouraging the transfer of density to avoid hazardous areas and to protect environmentally sensitive and open space areas; and

(h) Minimizing impacts on prominent ridgelines, significant viewsheds, canyons and visually prominent rock outcroppings which reflect the visual value and scenic character of hillside areas.

**APPLICABILITY**

The provisions set forth in this article shall apply as follows:

(a) Hillside and Ridgeline Development. This article applies to all new development that requires tentative maps or special use permits by the City of Reno and meets the following criteria:

1. Properties containing slopes in excess of fifteen (15) percent or greater on 20 percent or more of the site.

**APPLICATION REQUIREMENTS AND PROCEDURES**

In place of the application requirements found in the Hillside Development section of Reno Development Code, the following submittals shall be required for all hillside development:

(a) Site Analysis. A site analysis, prepared by a qualified engineer, planner, landscape architect or architect shall be submitted. This analysis shall provide the basis for assessing the opportunities and constraints of the site for development and shall be in the form of a design standards handbook incorporating both textual and graphical representations of the requested action. At a minimum, a site analysis shall indicate:
(1) Major topographic conditions including ridgelines, ravines, canyons, and knolls;

(2) Preliminary geological conditions including major rock outcroppings, slide areas, and areas underlain with faults that have been active during the Holocene epoch of geological time;

(3) Preliminary soil conditions including soil type, expansiveness, slumping, erodibility, and permeability;

(4) Significant surface hydrological conditions including natural drainage courses, perennial streams, floodplains, wetlands, and ponding areas;

(5) The location and types of significant vegetation including known rare and endangered plant species and general plant communities;

(6) Habitat areas for rare or endangered animal species;

(7) Preliminary viewshed analysis including cross sections of views to and from the development site from all major roadways within one (1) mile of the project site, and from major focal points on the project site;

(8) How the development responds to the unique conditions of the hillside and;

(9) A slope analysis, submitted on a topographic map with contour intervals of at least five (5) feet for planning purposes. This analysis shall indicate the location and amount of land included within the following slope categories, tabulated in acres:
   (i) 0-15 percent;
   (ii) 15-20 percent;
   (iii) 20-25 percent;
   (iv) 25-30 percent; and
   (v) Greater than 30 percent.

(b) **Developable Area Map.** A developable area map, prepare pursuant to the following Section on Determination of Developable Area.

(c) **Constraint and Mitigation Analysis.** A detailed analysis of how the identified constraints will be mitigated and incorporated into the project’s design.

(d) **Detailed Contour Analysis.** A topographic map with more or less detailed contour intervals may be required by the Zoning Administrator for design purposes.
DETERMINATION OF DEVELOPABLE AREA

To determine the location and amount of land suitable to support development, a developable area analysis is required on a hillside property.

(a) **Purpose.** The purpose of identifying the developable area of a hillside is to designate those areas suited for development and construction as evidenced by soils, geotechnical, biological and hydrological investigations and studies. A developable area analysis is required to ensure that the proposed project complies with the intent, standards and requirements of this article.

(b) **Developable Area Map.** The developable area analysis shall be in the form of a developable area map; shall be drawn at a scale appropriate to the project; shall identify the location and amount of total land area suitable for development pursuant to Section (c) below; and shall be prepared by a qualified engineer, planner, landscape architect or architect.

(c) **Determination of Developable Area.** Areas considered less suitable for development include:

1. Slopes greater than thirty (30) percent, based on a slope analysis;
2. Areas of landslides or landslide potential;
3. Areas underlain with faults that have been active during the Holocene epoch of geological time;
4. Habitat areas of known rare or endangered plant or animal species; and
5. Significant streams, ravines and drainageways.

(d) **Exceptions.** Development shall be permitted within areas of a hillside property considered less suitable for development by the Zoning Administrator due to extenuating circumstances, provided the applicant can demonstrate that:

1. The purposes of this article will not be compromised;
2. Unstable slopes proposed for development will be sufficiently stabilized;
3. Areas of landslide or landslide potential proposed for development will be stabilized;
4. Earthquake resistant structures will be constructed on development sites proposed on potential earthquake areas;
(5) Areas of rare and endangered animal or plant habitat proposed for development will be relocated and mitigation measures adhered to; and

(6) Significant ridgelines, rock outcroppings, canyons and landforms will be protected to the greatest extent possible.

**Protected Open Space Areas**

Any portion of a hillside development which has been deemed unsuitable for development pursuant to this section shall be designated as permanent open space and shall be subject to the following provisions:

(a) **Permitted Uses.** Uses permitted within the permanent open space areas shall be those that are directly related to the open space function of the land, are necessary to provide community services, or are necessary for the health, safety or welfare of the public. The following uses and facilities shall be permitted in the permanent open space areas:

1. Paved and unpaved pedestrian, equestrian and bicycle paths and trails;
2. Outdoor recreational uses and facilities such as skiing, fishing, boating, swimming, horseback riding, nature observation, community parks and picnic areas;
3. Roads, bridges and culverts for vehicles, pedestrians, bicyclists or equestrians used to provide access to permitted open space uses or to developable areas;
4. Installations, maintenance and operation of typical utilities; and
5. Dams, swales, detention ponds and impoundment areas, wetlands and wetlands mitigation sites, and other structures necessary to prevent flooding and erosion, and to protect water quality.

(b) **Land Restriction.** A deed restriction, easement, offer of dedication, or other conveyance describing limitations placed on the permanent open space areas of the property shall be recorded concurrent with the issuance of a development permit. The restriction shall include provisions for the management and maintenance of the property. Where appropriate, open space shall be dedicated to a public agency.