The attached document was submitted to the Washoe County Board of Commissioners during the meeting held on September 18, 2018, by WC School District for Agenda Item No. 10 and included here pursuant to NRS 241.020(8).
Dear Mr. Etchart,

Per your request, this letter is to confirm that the Forest Service is finalizing our decision to approve conveyance of National Forest System lands adjacent to Arrowcreek Parkway to the Washoe County School District that have been requested under the Education Land Grant Act for school facilities. This decision will be published in the very near future.

In the interim I understand that the school district is applying for a special use permit from Washoe County to authorize grading of the subject lands. The Forest Service has no objection to Washoe County approving this permit as long as conditions stipulating that no ground disturbance may occur until transfer of the lands to the school district have been formally approved are included in the permit.

Please let me know if you need more information. I can be reached directly at 775-355-5310.

Sincerely,

WILLIAM A. DUNKELBERGER
Forest Supervisor

cc: Marsha Berkbigler, Bob Lucey, Washoe County Board of Commissioners
September 17, 2018

Adam T. Searcy, P.E.
Chief Facilities Management Officer
Washoe County School District
425 E. Ninth Street
Reno, NV 89512

Re: Response to Thiel Engineering Letter to the Washoe County Board of Commissioners

Dear Adam,

The following discussion is a response to the Thiel Engineering analysis (dated August 25, 2018) regarding the Arrow Creek Middle School civil improvement plans and the associated preliminary hydrologic analysis conducted by Odyssey Engineering, Inc.

In an attempt to address the relevant points made in the Thiel Engineering analysis, the responses follow each claim (in quotes) and are in bold text.

If you have any questions, please call me at 775-359-3303.

Sincerely,

Frank Bidart, P.E.
Odyssey Engineering, Inc.

cc: Charles Dettling, P.E. – Odyssey Engineering
Thiel Analysis Response

Just to be fair, the Thiel Analysis was based on information provided by Odyssey Engineering, Inc. (Odyssey). Odyssey provided a conceptual analysis based on the Rational Method. However, a short time after the meeting with Mr. Meckley and Mr. Thiel, Washoe County Engineering requested that Odyssey use the U.S. Army Corp of Engineer’s Hydrologic Engineering Center (HEC) HEC-1 Flood Hydrograph Package to determine both the 5-year and 100-year peak flow events for both existing and proposed conditions. Therefore, there are discrepancies in the data presented in this analysis.

Routing, conceptual design of the detention facilities, and interception of sheet flows from various water shed to a concentrated flow to the Meckley property are the issues addressed in the “Thiel Engineering analysis” by Thiel engineering. As stated on page 1, “Of concern to the Meckley's is the routing, conceptual design of the detention facilities, and interception of sheet flows from various water sheds to a concentrated flow to their property. Of consideration are the method of discharge and the lack of routing to drainage easements that have been recorded per the final map of record in Washoe County.”

The Preliminary Hydrologic Analysis for Arrow Creek Middle School utilized approved analysis methods from the Truckee Meadows Regional Drainage Manual to determine the minor (5-year) and major (100-year) peak flow events. An industry standard method was employed, the U.S. Army Corp of Engineer’s Hydrologic Engineering Center (HEC) HEC-1 Flood Hydrograph Package to determine both the 5-year and 100-year peak flow events for both existing and proposed conditions. The proposed conditions are not concentrated to the Meckley property, the flows are concentrated at the proposed detention facility, which provides an engineered peak flow release less than the existing conditions. In the existing conditions, the Meckley property receives estimated peak flows of 8.7 cfs in the 5-year and 26.8 cfs in the 100-year peak flow events. During 5-year and 100-year peak flow events, the proposed detention facility will receive 29.2 cfs and 67.7 cfs, respectively, and will discharge 4.7 cfs in the 5-year event and 11.3 cfs in the 100-year event. Thereby, reducing the flows directed towards the Meckley property by 4.0 cfs in the 5-year event and 15.5 cfs in the 100-year event.

According to the existing topographic data, the existing ephemeral drainage that convey flows to the Meckley property does not directly discharge into the existing drainage easement, approximately 175 feet upstream from the drainage easement the ephemeral drainage begins to fan out and the flow spreads out as it travels towards the Meckley property.

As stated in the Thiel Analysis, Section 303.1 “The "Reasonable Use Rule" is defined for drainage planning purposes as permitting the use of an economic and hydraulically efficient drainage system which is demonstrated not to adversely impact adjacent and downstream properties within reason. This "Reasonable Use of Drainage" therefore allows development to occur while preserving the rights of adjacent property owners.

The methodology used for the proposed civil improvement follows the Reasonable Use Rule explicitly. The proposed Arrow Creek civil improvements limit the proposed rate of flow to less than half of the existing condition flow rates. The proposed detention outlet will discharge the proposed flows onto the existing alluvial fan that is located upstream from the Meckley property. According the HEC-1 analysis, all of the existing drainage patterns remain, however, all of the peak flows are decreased at
the Points of Discharge. The flows are discharged towards the existing ephemeral drainages and existing civil improvements. There are four existing points of discharge (POD) north of Arrowcreek Parkway, one west of Companion Court (POD-01), one southwest of Companion Court (POD-02), and one south of Companion Court (POD-03). In the existing condition, the 5-year and 100-year peak discharge events are listed below (Table 1) for each POD (Figures 3 and 4, attached). The same PODs were used to determine the proposed peak flow events and are listed in Table 1 below:

<table>
<thead>
<tr>
<th>Point of Discharge</th>
<th>5-Year Event (Existing)</th>
<th>100-Year Event (Existing)</th>
<th>5-Year Event (Proposed)</th>
<th>100-Year Event (Proposed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>POD-01</td>
<td>11.9 cfs</td>
<td>39.3 cfs</td>
<td>9.2 cfs</td>
<td>28.1 cfs</td>
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<tr>
<td>POD-02</td>
<td>10.2 cfs</td>
<td>36.2 cfs</td>
<td>0.7 cfs</td>
<td>4.3 cfs</td>
</tr>
<tr>
<td>POD-03</td>
<td>15.6 cfs</td>
<td>43.9 cfs</td>
<td>5.7 cfs</td>
<td>11.3 cfs</td>
</tr>
<tr>
<td>POD-04</td>
<td>7.3 cfs</td>
<td>21.7 cfs</td>
<td>7.0 cfs</td>
<td>20.7 cfs</td>
</tr>
<tr>
<td>POD-05</td>
<td>8.7 cfs</td>
<td>21.7 cfs</td>
<td>8.7 cfs</td>
<td>21.7 cfs</td>
</tr>
</tbody>
</table>

All of the PODs discharging towards the Companion Court have reduced flows in the proposed conditions. This detention facility is considered to be a local detention facility and will provide reduced peak flows to any downstream regional facilities.

As stated in the Thiel Analysis, Section 303.5 - “Drainage Planning Submittal and Review"

The proposed Arrow Creek Middle School Civil improvements will be submitted for review to the appropriate jurisdictional entity and will need to be approved prior to issuance of a permit.

As stated in the Thiel Analysis, Section 303.6 - “Floodplain Management"

The proposed Arrow Creek Middle School Civil improvements will be subject to all appropriate local and regional guidelines and requirements for development.

As stated in the Thiel Analysis, Section 202.7 - “Storm Runoff Detention"

The proposed Arrow Creek Middle School detention facility has been designed to limit the peak flows in the 5-year and the 100-year peak flow events to less than the existing condition for the same peak events. As stated earlier in the response, in the existing conditions, the Meckley property receives estimated peak flows of 8.7 cfs in the 5-year and 26.8 cfs in the 100-year peak flow events. During 5-year and 100-year peak flow events, the proposed detention facility will receive 29.2 cfs and 67.7 cfs, respectively, and will discharge 4.7 cfs in the 5-year event and 11.3 cfs in the 100-year event. Thereby, reducing the flows directed towards the Meckley property by 4.0 cfs in the 5-year event and 15.5 cfs in the 100-year event. The reduced flow will benefit any downstream properties, downstream storm drain, and downstream regional facilities.
As Stated in the Thiel Analysis “Section 400 – Drainage Law”

Odyssey will leave that to the lawyers.

As Stated in the Thiel Analysis “Section 502 – Required Drainage Report Submittals”

A Conceptual Drainage Report will be submitted and once the final improvement plans are completed, a Technical Drainage Report will be submitted as well.

As stated in the Thiel Analysis on page 10, “The following exhibit analyzes the pre-development condition, etc....”

We have no data to substantiate these claims only statements by Mr. Meckley.

As stated in the Thiel Analysis on page 12, “The Post Development Plan will pick up drainage areas P-05 (X-05), P-06 (X-06), P-02 (X-02), P-03 (X-03-overflow), and discharge the concentrated flow to the Meckley’s back property boundary. The area of runoff contributing flow to the Meckley parcel has now increased the water shed boundary from 13.52 acres of sage brush, sandy loam, plant understory) to approximately 58 acres (mostly impervious) of concentrated discharge to the Meckley property. From the drawing supplied by the applicant, a drainage swale intercepts drainage area basins P-03, P-02, and P-05, P-06 (mostly the impervious area) discharges to the detention basin. The post development flows that contribute to the property; P-03 3.0 cfs (Q5)-19.2 cfs (Q100), P-02 3.1 cfs (Q5)-15.5 (Q100,) P-05 2.8 cfs (Q5)-17.2 cfs (Q100), P-06 20 cfs(Q5)-63.3 cfs (Q100) for a total of 28.9 cfs (Q5) and 115.2 cfs (Q100), for perspective the total flow is equal to 12,926.59 GPM (QS) and 51,706 GPM (Q100).”

As of receipt of the Thiel Analysis report, the proposed grading has changed slightly so some of the areas that are referenced in the analysis have changed and the data that was given to Mr. Thiel is the Rational Method. The basins contributing to the proposed detention facility are basins P-02, P-05, P-06, and P-08 and the associated areas are 8.75 acres, 7.61 acres, 22.44 acres, and 3.65 acres, respectively. The total acreage that will contribute to the proposed detention facility is 42.45 acres. As stated in the Thiel Analysis “The area of runoff contributing flow to the Meckley parcel has now increased the water shed boundary from 13.52 acres of sagebrush, sandy loam, plant under story) to approximately 58 acres (mostly impervious) of concentrated discharge to the Meckley property.” This is incorrect, just to clarify, Basin P-02 and P-05 will remain unchanged and P-08 will consist of native areas and graded and re-vegetated slopes. Basin P-06 which is the basin where the proposed school will be constructed will have 10.40 acres of landscaping and Low Impact Development (Pervious) and 12.04 acres of developed (Impervious) asphalts, concrete, and buildings. An overall analysis of the Pervious/Impervious areas concluded that approximately 72% of the basins contributing to the detention basin will be pervious compared to 28% being impervious. As stated earlier, these flows are conveyed to the proposed detention facility and are greatly reduced.

As Stated in the Thiel Analysis, “Earthquake Hazard-Mount Rose Fault”:

Odyssey will work with staff to determine the potential hazards. There are several approved and constructed detention facilities around Reno, Sparks, the Truckee Meadows, and Washoe County.
Findings:

1. “The injurious flow of water is reasonably necessary for drainage;”

“As provided in this review of the Preliminary Drainage Report provided by the School Districts engineer it was found that the grading plan alters the water shed to discharge all pre and post development flows to the south boundary of the Meckley parcel. This is an unreasonable condition and is not mitigated by the proposed grading or the suggested improvements. The construction of the drainage swale intercepts flows that were not contributing to runoff onto the subject property. Storm water discharges from the School District site is not routed to existing county easements and rights of way, nor to natural drainage courses.”

This statement is not true, the proposed conditions are not concentrated to the Meckley property, the flows are concentrated at the proposed detention facility, which provides an engineered peak flow release less than in the existing conditions. In the existing conditions, the Meckley property receives estimated peak flows of 8.7 cfs in the 5-year and 26.8 cfs in the 100-year peak flow events. During 5-year and 100-year peak flow events, the proposed detention facility will receive 29.2 cfs and 67.7 cfs, respectively, and will discharge 4.7 cfs in the 5-year event and 11.3 cfs in the 100-year event. Thereby, reducing the flows directed towards the Meckley property by 4.0 cfs in the 5-year event and 15.5 cfs in the 100-year event.

2. “Reasonable care is taken to avoid unnecessary injury;”

“By concentrating the flow to the Meckley residence, the district has disregarded the potential property damage and injury created by the premature grading plan and request for a Special Use Permit by requesting, without a detailed analysis, the impacts caused by consolidating the post development water sheds which creates an unreasonable solution to the proposed school site development. The development of the property, without properly analyzing the site hydrology, will cause severe property damage, potential injury or death to the Meckleys. The construction of the levee on a fault of recent activity and with potential for shaking and displacement of physical features is a hazard to the construction of the levee and the containment of water. Any seismic activity may cause structural defects in the levee and should a rupture of the levee occur when full of water, the destruction of downstream properties and the potential loss of life would be significant.”

As stated earlier, Odyssey will work with staff to determine the potential hazards. There are several approved and constructed detention facilities around Reno, Sparks, the Truckee Meadows, and Washoe County.

3. “The benefit to the drained land outweighs the gravity of harm inflicted on the flooded land;”

“The School District should be required to move without significant harm to the Meckley property, the School District has the ability to develop a solution that will ameliorate the concerns of adjacent property owners by completing the proper infrastructure in the proper easements to perpetuate historic points of discharge through easements to County properties for flood control purposes. Based upon
common practices this School District must be required to complete discharge infrastructure to protect the public health, safety and welfare. The mitigation to drainage impacts must be constructed in conformance with the natural pre-existing water sheds to discharge areas through other properties or discharged to County Roadways and drainage facilities.”

According to the existing topographic data, the existing ephemeral drainage that convey flows to the Meckley property does not directly discharge into the existing drainage easement, approximately 175 feet upstream from the drainage easement the ephemeral drainage begins to fan out and the flow spreads out as it travels towards the Meckley property. The proposed detention outlet facilities will discharge the peak flows at the fan apex.

4. “The drainage is accompanied, where practicable, by the reasonable improvement and aiding of normal and natural systems of drainage in accordance with their reasonable carrying capacity; and;”

“Involved in the findings provided in the analysis of the Preliminary Hydrology report and by investigating existing easements the county has the ability to provide reasonable improvements to the construction of the drainage infrastructure including piping, the construction of on-site detention and perpetuating the natural drainage courses through easements created for the express purposes of perpetuating discharges from the adjacent properties, the school district must not be allowed to discharge all of the surface waters to the Meckley property.”

Once again, not all of the flows are discharged towards the Meckley property. The basins contributing to the proposed detention facility are basins P-02, P-05, P-06, and P-08 and the associated areas are 8.75 acres, 7.61 acres, 22.44 acres, and 3.65 acres, respectively.

5. “Where no natural system of drainage are available, the drainage is accompanied by the use of reasonable, artificial system of drainage.”

“Based upon the foresight of the County to require drainage easements for the Thomas Creek Estates Unit 2-8, infrastructure may be constructed by the School District to route flood waters along the existing lot lines of the community. This condition must be met and is reasonable considering the potential harm to the community.”

See response to “Findings #3” for existing drainage easement issue posed by Thiel Engineering. Additionally, Based on Standard Engineering Practices (HEC-1 modeling) and the TMRDM, the existing conditions, the Meckley property receives estimated peak flows of 8.7 cfs in the 5-year and 26.8 cfs in the 100-year peak flow events. During 5-year and 100-year peak flow events, the proposed detention facility will receive 29.2 cfs and 67.7 cfs, respectively, and will discharge 4.7 cfs in the 5-year event and 11.3 cfs in the 100-year event. Thereby, reducing the flows directed towards the Meckley property by 4.0 cfs in the 5-year event and 15.5 cfs in the 100-year event.
In conclusion, the Thiel Analysis continued to state that all of the proposed flows were directed to the Meckley property and claims that the basins are mostly impervious, both of which are not true. Additionally, the previous responses demonstrate that the proposed civil improvements will not only discharge the proposed peak flows at flow rates equal to existing conditions but in actuality, the proposed peak flows will be approximately one-half of the existing condition peak flows. In our opinion, Washoe County School District is going above and beyond what is required based on jurisdictional requirements.
The attached document was submitted to the Washoe County Board of Commissioners during the meeting held on 9.18.18 by Angela Fuss - Lums & Assoc for Agenda Item No. 10 and included here pursuant to NRS 241.020(8).
Every Child, By Name and Face, To Graduation

Middle School at Arrowcreek Special Use Permit
September 18, 2018
Direction from August 28th BCC Hearing

- Timing of WCSD parcel ownership
- Meeting with the neighbors
- Provide new graphics of the detention basin
- Address traffic mitigation improvements
Land Acquisition

• **USFS – Education Land Grant Act**
  - WCSD has been pursuing this site on and off since 2004
  - This site was shown as a potential location during the WC-1 initiative

• Environmental Assessment process
• Public input process
  - 3 community meetings
• USFS has completed their review and appeal process, and are moving forward with final transfer
• Recommend adding **Condition of Approval** tied to the building permit
# Community Meetings

<table>
<thead>
<tr>
<th>Date</th>
<th>Lead</th>
<th>Location</th>
<th>Notice</th>
<th>Attendees</th>
<th>Summary</th>
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<tbody>
<tr>
<td>10/11/07</td>
<td>USFS</td>
<td>Hunsberger ES</td>
<td>public</td>
<td>150-200</td>
<td>USFS public mtg associated with ELGA process</td>
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<tr>
<td>Fall 2018</td>
<td>USFS</td>
<td>Washoe Tribe &amp; Reno-Sparks Colony</td>
<td>private</td>
<td>N/A</td>
<td>Tribal consultation in accordance with regulations</td>
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<td>12/7/18</td>
<td>WCSD</td>
<td>WCSD Brown Center</td>
<td>private</td>
<td>4</td>
<td>Jim Verner &amp; Dave Keyes with meeting with WCSD staff</td>
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<tr>
<td>Feb/March 2018</td>
<td>USFS</td>
<td>30 day public comment period</td>
<td>public</td>
<td>approx 350</td>
<td>Public comments requested and received online</td>
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<tr>
<td>2/22/18</td>
<td>USFS</td>
<td>South Valleys Library</td>
<td>public</td>
<td>75-100</td>
<td>USFS public mtg associated with ELGA process</td>
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<tr>
<td>Feb-May 2018</td>
<td>USFS</td>
<td>State Historical Preservation Office</td>
<td>semi-public</td>
<td>N/A</td>
<td>Pursuant to Section 106 of the National Historic Preservation Act, the Forest Service consulted with the Nevada State Historic Preservation Office (SHPO). A cultural survey report was completed and submitted to the SHPO on February 20, 2018, with the recommendation received from the SHPO on May 9, 2018, stating the parcel and subsequent construction of the school will have no adverse effects to historic properties resulting from the conveyance.</td>
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<td>3/29/18</td>
<td>WCSD</td>
<td>WCSD Administration Bldg</td>
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<td>Capital Funding Protection Committee mtg where project status discussed and public comment received on the record</td>
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<td>5/2/18</td>
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<td>3</td>
<td>Dave Keyes meeting with WCSD staff</td>
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<td>5/3/18</td>
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<td>South Valleys Library</td>
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<td>35-50</td>
<td>Citizen's Advisory Board</td>
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<td>6/14/18</td>
<td>WCSD</td>
<td>Adjacent Homeowner residence</td>
<td>private</td>
<td>10-May</td>
<td>Craig Meckley property site visit with George Thiel, County Staff, WCSD staff &amp; consultants</td>
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<tr>
<td>6/15/18</td>
<td>County</td>
<td>County Commission Chambers</td>
<td>public</td>
<td>25-35</td>
<td>Board of Adjustment - SUP Hearing</td>
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<tr>
<td>7/19/18</td>
<td>WCSD</td>
<td>WCSD Brown Center</td>
<td>private</td>
<td>5</td>
<td>Dave Keyes meeting with WCSD staff &amp; consultants</td>
</tr>
<tr>
<td>7/19/18</td>
<td>WCSD</td>
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<td>public</td>
<td>15-20</td>
<td>Capital Funding Protection Committee mtg where project status discussed and public comment received on the record</td>
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<td>Aug-18</td>
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<td>30 day public comment period</td>
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<td>8/14/18</td>
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<td>public</td>
<td>15-20</td>
<td>WCSD School Board mtg where project status discussed and public comments received on the record</td>
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<tr>
<td>8/17/18</td>
<td>WCSD</td>
<td>Adjacent Homeowner residence</td>
<td>private</td>
<td>5</td>
<td>Mary Love Family meeting with WCSD staff &amp; consultants</td>
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<td>8/22/18</td>
<td>County</td>
<td>County CSD</td>
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<td>6</td>
<td>Meeting with Craig Meckley, George Thiel, Dwayne Smith, Walt West, WCSD staff &amp; consultants</td>
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<td>8/28/18</td>
<td>County</td>
<td>County Commission Chambers</td>
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<td>BCC Appeal Hearing of Grading SUP</td>
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<td>9/5/18</td>
<td>WCSD</td>
<td>Sage Ridge School</td>
<td>private</td>
<td>3</td>
<td>Meeting with Tobin Bechtel, Pat Casey &amp; Adam Searcy</td>
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<td>9/12/18</td>
<td>County</td>
<td>County CSD</td>
<td>public</td>
<td>20-30</td>
<td>County initiated outreach meeting resulting from Commissioner comments on Aug 28</td>
</tr>
</tbody>
</table>
Landscape Design

Detention Basin
Rendering of Detention Basin
Example of Similar Detention Basin

Detention basin located off of Mt. Rose Highway
Traffic Considerations

- New turn pockets
- 15 mph school zone flashers
- New private two-way roadway
- 15 mph school zone flashers
- New turn pockets
- New traffic signal
Fire Station Considerations

- New traffic light
- "Do Not Block" striping in front of Fire Station #36
- Traffic preemption device
- Coordination with TMFPD
Conditions of Approval

New Conditions:

m. If any blasting is required during the project grading, a blasting mitigation plan will be submitted with
   the grading plan(s). The blasting mitigation plan will be completed by a qualified contractor.

n. If construction hours are varied for the pouring of concrete slabs, a plan will be submitted to Washoe
   County for approval by the Planning and Building Director.

o. Construction noise will not exceed 65 dB at the property line and ‘hush’ alarms will be installed to
   construction vehicles to mitigate noise.

p. No building permits shall be issued by Washoe County until the property is under Washoe County
   School District ownership.

Amendment to Condition H:

• Existing: All boulders recovered during grading on site or exposed on site shall be placed on cut and
  filled slopes among the required landscaping.

• Proposed: When feasible, boulders recovered during grading on site or exposed on site shall be placed
  on cut and filled slope among the required landscaping, and subject to the Planning Director review
  and approval.
Findings

1. **Consistency** – The proposed use is consistent with the action programs, policies, standards and maps of the Master Plan and the applicable area plan;

2. **Improvements** – Adequate utilities, roadway improvements, sanitation, water supply, drainage, and other necessary facilities have been provided, the proposed improvements are properly related to existing and proposed roadways, and an adequate public facilities determination has been made in accordance with Division Seven;

3. **Site Suitability** – The site is physically suitable for the type of development and for the intensity of development;

4. **Issuance Not Detrimental** – Issuance of the permit will not be significantly detrimental to the public health, safety or welfare; injurious to the property or improvements of adjacent properties; or detrimental to the character of the surrounding area;

5. **Effect on a Military Installation** – Issuance of the permit will not have a detrimental effect on the location, purpose or mission of the military installation.
Thank you
<table>
<thead>
<tr>
<th>Type of Application</th>
<th>Project Title</th>
<th>Description</th>
<th>Property Owner</th>
<th>Applicant</th>
<th>Date Approved</th>
<th>County Case Number</th>
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</thead>
<tbody>
<tr>
<td>Administrative Review Permit</td>
<td>Miller Family Trust - Accessory Dwelling Unit</td>
<td>Request to construct a new accessory dwelling unit</td>
<td>Miller Family Trust</td>
<td>Advanced Design and Construction</td>
<td>Staff approval - August 2, 2018</td>
<td>WDADAR18-0005</td>
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<tr>
<td>Special Use Permit</td>
<td>Madole Construction Special Use Permit</td>
<td>Request to construct a new office building and associated grading</td>
<td>Gurnea Family Trust</td>
<td>Madole Construction</td>
<td>Board of Adjustments - August 2, 2018</td>
<td>WSUP18-00014</td>
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<td>Special Use Permit</td>
<td>Lisa Williams Grading Special Use Permit</td>
<td>Request for a new bar and landscaping with grading that exceeds thresholds</td>
<td>Amour Property Management, LLC</td>
<td>Gail Willey Landscaping</td>
<td>Board of Adjustments - February 1, 2018</td>
<td>WSUP17-0023</td>
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<tr>
<td>Tentative Map</td>
<td>Bailey Creek Estates</td>
<td>Tentative map of for 56 single family lots</td>
<td>Charles Maddox</td>
<td>Silver Crest Homes</td>
<td>County Commission - April 11, 2017</td>
<td>WTM16-003</td>
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<td>Special Use Permit</td>
<td>Truckee Meadows Fire Station #14 Ascente Development</td>
<td>Request for a new fire station and associated grading</td>
<td>Truckee Meadows Fire Protection District</td>
<td>Washoe County</td>
<td>County Commission - January 24, 2017</td>
<td>SB16-010</td>
</tr>
<tr>
<td>Administrative Review Permit</td>
<td>Sun Valley Center Sign</td>
<td>Request to construct a new pylon sign Amendment to tentative map</td>
<td>John Desiderio</td>
<td>YESCO</td>
<td>Board of Adjustments - February 1, 2018</td>
<td>WADMIN17-0011</td>
</tr>
<tr>
<td>Amendment of Conditions</td>
<td>Ladera Ranch</td>
<td>Amendment to tentative map Request to allow a preschool use</td>
<td>Ladera Ranch, LLC</td>
<td>DR Horton</td>
<td>County Commission - July 11, 2017</td>
<td>WAC17-0003</td>
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<tr>
<td>Special Use Permit</td>
<td>CSA Pre-K Spanish Springs U-Haul</td>
<td>Request for 225 single family lots</td>
<td>Sun Valley GID</td>
<td>Kristen Demara (CSA)</td>
<td>Board of Adjustments - October 6, 2016</td>
<td>SB16-009</td>
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<tr>
<td>Special Use Permit</td>
<td>Black Rock Storage</td>
<td>Master Plan Amendment to allow commercial uses Request for development of new greenhouses</td>
<td>Vector Account, LLC</td>
<td>Black Rock Storage, LLC</td>
<td>Planning Commission - May 1, 2018</td>
<td>WDCA17-0008, WMPA18-0002 &amp; WRZA18-0001</td>
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<tr>
<td>Amendment of Conditions</td>
<td>Evans Greenhouses</td>
<td>Request for development of new greenhouses</td>
<td>Don Evans</td>
<td>Brian Bishop-Parise</td>
<td>Board of Adjustments - April 6, 2017</td>
<td>WAC17-0002</td>
</tr>
<tr>
<td>Tentative Map</td>
<td>Blackstone Estates</td>
<td>Request for 161 single family lots</td>
<td>Douglas Properties Inc.</td>
<td>SP58, LLC</td>
<td>Planning Commission - November 1, 2016</td>
<td>TM15-001</td>
</tr>
</tbody>
</table>
Site Design Modifications

- Enhanced drainage and traffic engineering
- Modified design:
  - Moved school location and site layout
  - Reduced land transfer area
  - Reduced site plan to one school
  - Added parking
  - Added traffic signal
Seismic Considerations

- Faults by Age
  - <15,000 years
  - <130,000 years
  - <750,000 years
  - <1,800,000 years
- Class B faults
- Unclassified

100m Buffer

Historical Ruptures - 100m Buffer

Quaternary Faults by Age - 100m Buffer

- <15,000
- <130,000
- <750,000
- <1,800,000
- Class B faults
- Unclassified

Existing Faults Map

Proposed Site Plan
Slope Considerations

Existing Slope Map

Proposed Grading Plan
Drainage Design

• Washoe County Code requirements
  – Design reduces peak flows by more than 75%

• On-site storm water detention basins

• On-site infiltration
  – Playfields
  – Parking lots
Private roadway includes parking along both sides of road

Parking Considerations

Separated bus loading area

Parent drop-off

Required Parking – 109 spaces
Provided On-Site – 303 spaces
Provided Off-site – 240 spaces
TOTAL PROVIDED – 543 spaces

Over 300 parking stalls on-site
Landscape Design

- 40% of site will remain native
- Over 500 new trees
- Over 2,500 native shrubs
- All irrigation with recycled water