STAFF REPORT FOR THE PLANNING COMMISSION MEETING OF SEPTEMBER 28, 2022

FILE NO: ZA-2022-0376 & SUB-2022-0375 AGENDA ITEMS: 6.F & 6.G

STAFF CONTACT: Heather Ferris, Planning Manager

AGENDA TITLE:
ZA-2022-0376 For Possible Action: Discussion and possible action regarding a request from John Krmpotic ("Applicant") for a recommendation to the Board of Supervisors ("Board") concerning a proposed ordinance amending the Zoning Map to change the zoning from Single-Family 12,000 ("SF12") to Single-Family 6,000 ("SF6"), for an 8.41-acre parcel located at 1051 N Ormsby Blvd., Assessor's Parcel Number ("APN") 001-241-14. (Heather Ferris, hferris@carson.org)

Summary: The Applicant is seeking to rezone the 8.41-acre parcel from SF12 to SF6 consistent with the zoning to the south and east. The Applicant has concurrently applied for a Tentative Subdivision Map, SUB-2022-0375, proposing the creation of 41 single family residential lots. The Board has the authority to approve a zoning map amendment. The Planning Commission makes recommendation to the Board.

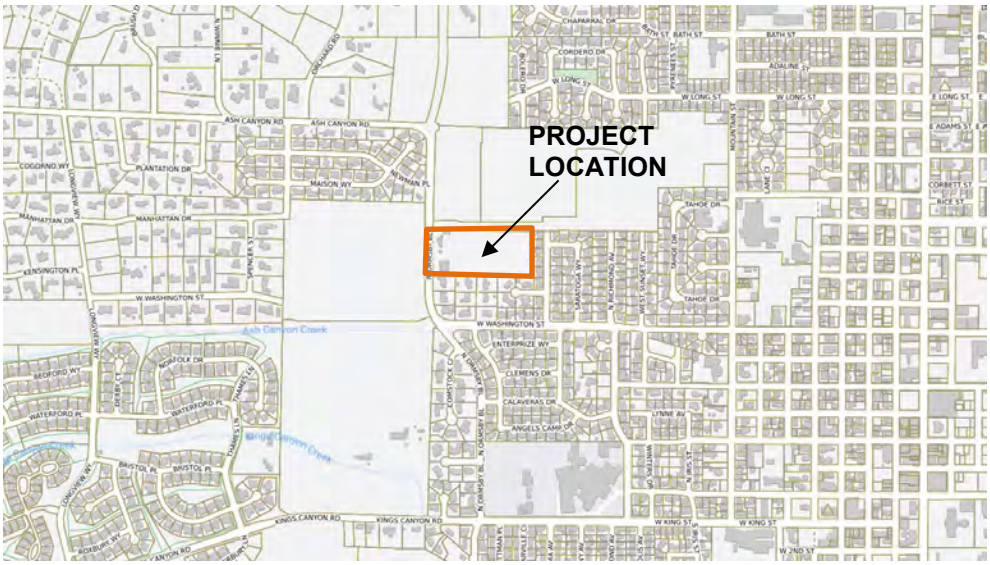
SUB-2022-0375 For Possible Action: Discussion and possible action regarding a request from John Krmpotic ("Applicant") for a recommendation to the Board of Supervisors ("Board") concerning a request for a Tentative Subdivision Map (SUB-2022-0375) known as Ash Canyon SF to create 41 single family residential lots on an 8.41-acre parcel zoned Single-Family 12,000 ("SF12"), located at 1051N Ormsby Blvd., Assessor's Parcel Number ("APN") 001-241-14. (Heather Ferris, hferris@carson.org).

Summary: The Applicant is proposing to create 41 single family residential lots, with a minimum lot size of 6,004 square feet, using the provisions of Carson City Municipal Code ("CCMC") 17.10-Common Open Space Development. The Applicant has concurrently applied for a zoning map amendment (ZA-2022-0376) to change the zoning from SF12 to SF6. The Board has the authority to approve a Tentative Subdivision Map. The Planning Commission makes a recommendation to the Board.

RECOMMENDED MOTIONS:
"I move to recommend approval of zoning map amendment ZA-2022-0376 based on the ability to make the required findings as outlined in the staff report."

"I move to recommend approval of Tentative Subdivision Map SUB-2022-0375 based on the ability to make the required findings and subject to the conditions of approval."

VICINITY MAP:



RECOMMENDED CONDITIONS OF APPROVAL:

The following are conditions of approval required per CCMC 18.02.105(5):

1. All final maps shall be in substantial accord with the approved tentative map.

2. Prior to submittal of any final map, the Carson City Public Works Department Development Engineering Group ("Development Engineering") shall approve all on-site and off-site improvements. The applicant shall provide construction plans to Development Engineering for all required on-site and off-site improvements, prior to any submittals for approval of a final map. The plan must adhere to the recommendations contained in the project soils and geotechnical report.

3. Lots not planned for immediate development shall be left undisturbed and mass grading and clearing of natural vegetation shall not be allowed. Any and all grading shall comply with City standards. A grading permit from the Nevada Division of Environmental Protection shall be obtained prior to any grading. Noncompliance with this provision shall cause a cease and desist order to halt all grading work.

4. All lot areas and lot widths shall meet the zoning requirements approved as part of this tentative map with the submittal of any final map.

5. With the submittal of any final maps, the applicant shall provide evidence to the Cason City Community Development Department Planning Division from the Carson City Health and Human Service Department and the Carson City Fire Department indicating the agencies' concerns or requirements have been satisfied. Said correspondence shall be included in the submittal package for any final maps and shall include approval by the Fire Department of all hydrant locations.

6. The following note shall be placed on all final maps stating:

   "These parcels are subject to Carson City's Growth Management Ordinance and all property owners shall comply with provisions of said ordinance."

7. Placement of all utilities, including AT&T Cablevision, shall be underground within the subdivision. Any existing overhead facilities shall be relocated prior to the submittal of a final map.

8. The applicant must sign and return the Notice of Decision for conditions for approval within ten (10) days of receipt of notification after the Board of Supervisors meeting. If the Notice of Decision is not signed and returned within ten (10) days, then the item may be rescheduled for the next Planning Commission meeting for further consideration.

9. Hours of construction will be limited to 7:00 a.m. to 7:00 p.m., Monday through Friday, and 7:00 a.m. to 5:00 p.m. on Saturday and Sunday. If the hours of construction are not adhered to, the Cason City Community Development Department Building Division will issue a warning for the first violation, and upon a second violation, will have the ability to cause work at the site to cease immediately.

10. The applicant shall adhere to all City standards and requirements for water and sewer systems, grading and drainage, and street improvements.

11. The applicant shall obtain a dust control permit from the Nevada Division of Environmental Protection. The site grading must incorporate proper dust control and erosion control measures.

12. A detailed storm drainage analysis, water system analysis, and sewer system analysis shall be submitted to the Development Engineering prior to approval of a final map.

13. Prior to the recordation of the final map for any phase of the project, the improvements associated with the project must either be constructed and approved by Carson City, or the specific performance of said work secured, by providing the City with a proper surety in the amount of one hundred fifty percent (150%) of the engineer's estimate. In either case, upon acceptance of the improvements by the City, the developer shall provide the City with a proper surety in the amount of ten percent (10%) of the engineer's estimate to secure the developer's obligation to repair defects in workmanship and materials which appear in the work within one (1) year of acceptance by the City.

14. A "will serve" letter from the water and wastewater utilities shall be provided to the Nevada Health Division prior to approval of a final map.

15. The District Attorney’s Office shall approve any Covenants, Conditions & Restrictions (“CC&R's”) prior to recordation of the first final map.

The following conditions are required per CCMC 17.10.050

16. Three-Year Maintenance Plan. Provisions shall be made to monitor and maintain, for a period of three (3) years regardless of ownership, a maintenance plan for the common open space area. The maintenance plan for the common open space area shall, at a minimum, address the following:
    a) Vegetation management;
    b) Watershed management;
    c) Debris and litter removal;
    d) Fire access and suppression;
    e) Maintenance of public access and/or maintenance of limitations to public access; and

f) Other factors deemed necessary by the commission or the board: vector control and noxious weed control.

17. Permanent Preservation and Maintenance. Provisions shall be made for the permanent preservation and ongoing maintenance of the common open space and other common areas using a legal instrument acceptable to the city. This shall be addressed prior to final map recordation. A homeowner's association ("HOA") or similar entity must be formed for maintenance of common open space and other common areas.

18. Screening and Buffering of Adjoining Development. Provisions shall be made to assure adequate screening and buffering of existing and potential developments adjoining the proposed common open space development. This shall include, at a minimum either a solid privacy fence or wall.

19. Common Open Space Restrictions. Designated common open space shall not include areas devoted to public or private vehicular streets or any land which has been, or is to be, conveyed to a public agency via a purchase agreement for such uses as parks, schools or other public facilities. This shall be demonstrated at the time of final map.

Other Conditions of Approval:

20. The required internal setback shall be as follows:
Front yard: 10 feet to the house and 20 feet to the garage
Side yard: 5 feet
Street Side: 10 feet
Rear yard: 10 feet

These setbacks shall be stated on the final map as well as in the CC&Rs.

21. With the site improvement permit application, the applicant shall provide the following:
a) A landscape and irrigation plan demonstrating compliance with the applicable sections of the Development Standards in Division 3 for the common area parcel and any other common area landscaping.
b) An open space exhibit demonstrating both quantitatively and qualitatively, compliance with the requirements of CCMC 17.10.046.

22. The final map and site improvement permit shall provide a trail connection to the planned public trail located to the north of this project site and a public access easement shall be provide across the trail. The location and manner of connection shall be approved by the Park, Recreation and Open Space Director.

23. The Homeowners Association or similar entity required in condition 17 shall maintain all common areas including, but not limited to, the common area parcel, common area landscaping and irrigation, landscaping and irrigation located within the rights-of-way, the drainage basin, on-site trails, private streets, and the private sanitary sewer lift station.

24. Carson City is a Bee City USA. As a result, the developer shall use approximately 50% pollinator friendly plant material for any required landscaping on the project site. Also, any remaining landscape plant material selection needs to be consistent with the City's approved tree species list or other tree species, as approved by the city.

25. The developer is required to incorporate "best management practices" into their construction documents and specifications to reduce the spread of noxious weeds. The

spread of invasive and noxious weeds is a significant issue in construction projects that involve land disturbance. Earth moving activities contribute to the spread of weeds, as does the use of contaminated construction fill, seed, or erosion-control products. Experience has demonstrated that prevention is the least expensive and most effective way to halt the spread of noxious and invasive weeds.

26. The on-site sewer system shall gravity flow to the northeast corner of the site where a privately owned and maintained sanitary sewer lift station will convey the flow uphill to the existing sanitary sewer main in N Ormsby Boulevard. Alternatively, prior to issuance of the site improvement permit, the developer shall obtain an easement from a neighboring property owner(s) that will allow for the sanitary sewer to gravity feed to Yorktown Drive southeast of the development.

27. Prior to issuance of the site improvement permit, the developer shall enter into a pro-rata share agreement for their contribution, based on trip distribution, to the North Ormsby Boulevard extension.

28. The final map shall provide public utility easements over the private streets for Carson City Utilities to access water and sewer mains as necessary.

29. The developer shall provide a revised geotechnical report with the site improvement permit application to address the high groundwater table, possible corrosive soil, and liquefaction. In the event the revised report requires mitigation to meet the development standards, the project must provide for such mitigation to the satisfaction of the City Engineer.

30. The following note shall be placed on the final map:

    "Due to corrosive soils, any concrete with reinforcing steel must have a minimum of 3 inches of concrete cover over streel or other solution as approved by the City Engineer."

31. With the submittal of the site improvement permit application, the developer shall provide updated analyses (water, sewer, and transportation) to include all projects that have been entitled up to 3 months after this project has been entitled. In the event updated reports shall that mitigation is required to meet development standards; the project must provide mitigation to the satisfaction of the City Engineer.

32. Half-street improvements must be installed on N Ormsby Boulevard along the project frontage. This will include striping, sidewalk, curb, gutter and paving to meet the City standard detail for a two-lane urban collector with bike lanes.

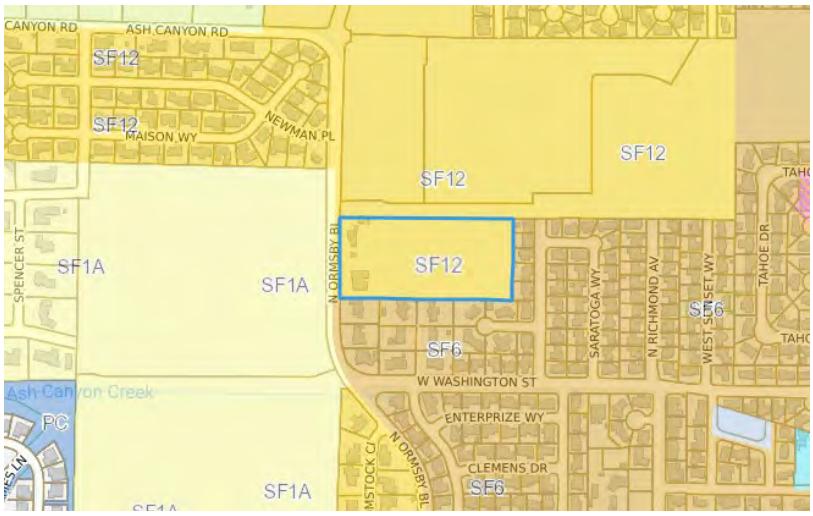
33. The final map shall include drainage easements where storm drain improvements cross property lines.

34. Each unit shall be constructed with an approved automatic sprinkler system. Alternatively, prior to submittal of the site improvement permit application, the developer may request approval, from the Fire Department, of alternative means and methods to meeting the separation requirements for the two points of access for the project. A note shall be placed on the final map indicating the requirement for automatic sprinklers for each unit or if an alternative means and methods is approved, appropriate notes shall be shown on the map.

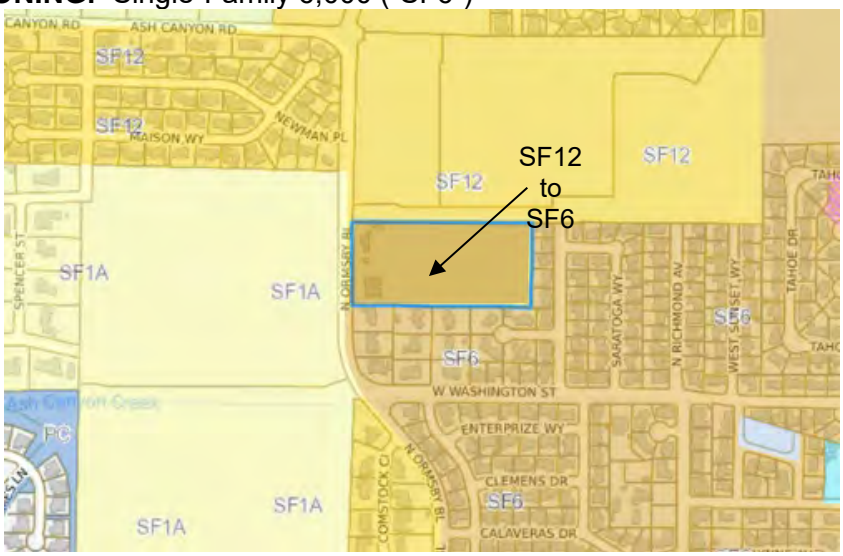
LEGAL REQUIREMENTS: CCMC 17.05 (Tentative Maps); CCMC 17.07 (Findings); CCMC 17.10 (Common Open Space Development); NRS 278.330

SITE DEVELOPMENT INFORMATION:
SUBJECT SITE AREA: 8.41 +/- acres
EXISTING LAND USE: Single-family residential

MASTER PLAN DESIGNATION: Medium Density Residential ("MDR")
EXISTING ZONING: Single-Family 12,000 ("SF12")



PROPOSED ZONING: Single-Family 6,000 ("SF6")



KEY ISSUES: Is the zoning map amendment consistent with the master plan? Is the zoning map amendment compatible with the adjacent land uses? Will the zoning map amendment negatively impact public services or facilities? Is the Tentative Map consistent with the required findings? Does the proposal meet the Tentative Map requirements and other applicable requirements?

SURROUNDING ZONING AND LAND USE INFORMATION
NORTH: SF12 & SF6 / Andersen Ranch Subdivision
SOUTH: SF6 / Single Family Residences
EAST: SF6 / Single Family Residences
WEST: SF1A / vacant

ENVIRONMENTAL INFORMATION:
FLOOD ZONE: Zone X
SLOPE: Generally flat
FAULT: Beyond 500 feet

DISCUSSION:

The subject property is located on the west side of N Ormsby Boulevard, 430± feet north of W Washington Street, immediately south of the Anderson Ranch Subdivision. There are currently two single family residences on-site with various outbuildings on the western most 1 ± acre portion of the property with the balance of the property being vacant. According to the Assessor's Office the parcel is 8.41± acres in size. However, according to a boundary survey completed by the applicant, the parcel is 7.98 acres in size.

The applicant is seeking a zoning map amendment from SF12 to SF6 for the subject parcel concurrently with a request for a Tentative Subdivision Map, SUB-2022-0375, to create 41 single family residential lots with a minimum lot size of 6,004 square feet, using the provisions of CCMC Chapter 17.10-Common Open Space Development. Common Open Space developments must comply with the allowable density of the zoning district, but may have flexibility on lot size, lot width, and setbacks. The allowable density in the proposed SF6 zoning district is 7.26 units per acre. The applicant proposes 5.14 units per acre (based on a 7.98-acre parcel).

The current zoning of the subject parcel is SF12, and the underlying Master Plan is Medium Density Residential. Per the Master Plan, the Medium Density Residential designation provides for single family residential neighborhoods at a density of 3-8 dwelling units per acre. Compatible zoning districts include Single Family 6,000, Mobilehome 6,000, Single Family 12,000, and Mobilehome 12,000. Properties to the south and east of this parcel are zoned SF6 and designated as Medium Density Residential. Additionally, immediately north is the Andersen Ranch Subdivision which includes lots as small as 4,407 square feet. The applicant is proposing to change the zoning of the parcel from SF12 to SF6 which is consistent with the underlying Master Plan.

The overall design concept is the creation of lots that are on average 6,306 square feet with the smallest lot being 6,004 square feet and the largest being 8,058 square feet. The subdivision is proposed to be accessed via a looped road with access at 2 points on N Ormsby Blvd. The internal roadways are proposed to be 36 feet in width with sidewalk on both sides of the street and on-street parking. Homes will have a standard two-car garage and a minimum 20-foot-long driveway.

Per CCMC 17.10.030.3 setbacks requirements are to be established as part of the tentative map approval. The proposed setbacks are as follows:

Front yard:	10 feet to the house and 20 feet to the garage
Side yard:	5 feet
Street Side:	10 feet
Rear yard:	10 feet

Per CCMC 17.10.030.4 the periphery boundary setbacks shall be those established for yard areas by the underlying zoning district. The proposed periphery setbacks meet or exceed the required setbacks for the SF6 zoning district. Of note, all lots will front the internal streets system; therefore, the rear setback is the setback that may impact adjacent development. The required rear setback in the SF6 zoning district is 10 feet; therefore, the future homes will not be any closer to adjacent development than if using the base zoning without the Common Open Space

Development provisions. Per CCMC 17.10.050 a Common Open Space development shall provide for adequate screening and buffering of existing and potential development adjoining the proposed development. Staff has included a condition of approval requiring privacy a fence or wall to be installed along the perimeter (rear yards) of the project.

The Board has the authority to approve a zoning map amendment and Tentative Subdivision Map. The Planning Commission makes recommendation to the Board.

PUBLIC COMMENTS: Public notices were mailed to 90 property owners within 600 feet of the subject site pursuant to the provisions of NRS and CCMC for the Zoning Map Amendment and Tentative Subdivision Map applications. Staff has received 1 written public comment (attached). Any written comments that are received after this report is completed will be submitted prior to or at the Planning Commission meeting on September 28, 2022, depending upon their submittal date to the Planning Division.

OTHER CITY DEPARTMENT OR OUTSIDE AGENCY COMMENTS: The following comments were received from City departments. Recommendations have been incorporated into the recommended conditions of approval, where applicable.

Development Engineering:

Development Engineering has no preference or objection to the zoning change. Information submitted with the application has demonstrated that infrastructure can support the request within standard development practices and is not in conflict with any engineering related master plans.

Development Engineering has reviewed the request within our areas of purview relative to adopted standards and practices and to the provisions of CCMC 18.02.075 Zoning map amendments and zoning code amendments. The following discussion is offered.

CCMC 18.02.075 (5)(b)(1) – Compliance with Master Plan
The zoning map amendment is not in conflict with the intent of master plan elements for water, sewer, transportation, or storm water. Any project will need to meet Carson City Development Standards which will include extension of water and sewer mains along the property frontage and project impact reports for water, sewer, storm drain, and traffic. Other standards may apply depending on the impact and design of the project proposed.

CCMC 18.02.075 (5)(b)(2&3) – Compatible Land Use
Development Engineering has no comment on these findings.

CCMC 18.02.075 (5)(b)(4) – Impact on Public Services, Facilities, Health and Welfare
Any new project that is proposed must complete project impact reports to show that existing facilities can meet demands within the standards set by municipal code. Any project approved in the new zoning area that would cause impacts beyond those allowed by municipal code, would be required by municipal code to mitigate those impacts as part of the design of the new development. These impact reports must include demand imposed by neighboring entitled projects in the existing demand on mains and streets.

Development Engineering has no preference or objection to the tentative map request and offers the following conditions of approval:

- The City's Transportation Master Plan includes extending North Ormsby Boulevard to West Winnie Lane. A Pro Rata share contribution for the North Ormsby Boulevard

extension will be required prior to issuance of the site improvement permit based on the trip distribution.

- Private streets will be incumbered with Public Utility Easements for Carson City Utilities to access water and sewer mains as necessary
- A new geotechnical report will be required with the site improvement permit addressing the high groundwater table, possible corrosive soil, and liquefaction. In the event that the new report shows that mitigation is required to meet development standards, the project must provide mitigation to the satisfaction of the City Engineer.
- Per the Geotechnical report, any concrete with reinforcing steel must have a minimum of 3-inches of concrete cover over steel or other solution as approved by City Engineer. This shall be noted on Tentative Map and mitigated at time of Site Improvement Permit submittal.
- All analyses (water, sewer, and transportation) are to be updated to include all projects that have been entitled up to 3 months after this project has been entitled at the time of the site improvement permit. In the event that the updated reports show that mitigation is required to meet development standards, the project must provide mitigation to the satisfaction of the City Engineer.
- A Homeowners Association is to be established that will maintain all common areas including but not limited to the proposed drainage basin, trails, and private street. The CC&Rs will address operation and maintenance of proposed project elements.
- Either the proposed Sanitary Sewer Lift Station will be privately owned and maintained by the HOA or an easement will be obtained for sanitary sewer to gravity to Yorktown Drive. Any alternate design would require further review by the City Engineer."
- The project must meet Carson City Development Standards and Standard Details including but not limited to:
  - Half-street improvements must be installed on North Ormsby Boulevard along the project frontage. This will include striping, sidewalk, curb, gutter, and paving to meet the City standard detail for a two-lane urban collector with bike lanes.
  - Main locations must meet standard detail C-1.2.4
  - Lot public utility easements must meet minimum width standards.
  - All proposed Storm Drain Improvements shall include Drainage easements when crossing property lines.
  - The unified pathways master plan indicates bike lanes on N Ormsby Blvd. The street has sufficient width to meet the standard detail for a 2-lane urban collector with bike lanes with parking on one side only.
  - A full water main and sewer main analysis must be submitted with the site improvement permit application, which analyzes the capacity and pressures of the proposed and existing mains and includes any entitled projects.

Development Engineering has reviewed the application within our areas of purview relative to adopted standards and practices and to the provisions of CCMC 17.07.005. The following Tentative Map Findings by Development Engineering are based on approval of the above conditions of approval:

1. *Environmental and health laws and regulations concerning water and air pollution, the disposal of solid waste, facilities to supply water, community or public sewage disposal and, where applicable, individual systems for sewage disposal.*

The approved subdivision is served by municipal sewer and water. The developer will be required to meet all applicable development standards related to sewer and water design.

2. *The availability of water which meets applicable health standards and is sufficient in quantity for the reasonably foreseeable needs of the subdivision.*

The City has sufficient system capacity and water rights to meet the required water allocation for the subdivision.

3. The availability and accessibility of utilities.
Water and sanitary sewer utilities are available and accessible.

4. The availability and accessibility of public services such as schools, police protection, transportation, recreation and parks.
The road network necessary for the subdivision is available and accessible.

5. Access to public lands. Any proposed subdivision that is adjacent to public lands shall incorporate public access to those lands or provide an acceptable alternative.
The Anderson Ranch Estates project to the north of the development will include open space and a multi-use path along the northern property line of the development. The development does connect to the Anderson Ranch Estates trail system through sidewalk along N. Ormsby.

6. Conformity with the zoning ordinance and land use element of the city's master plan.
Development engineering has no comment on this finding.

7. General conformity with the city's master plan for streets and highways.
The development is in conformance with the city's master plan for streets and highways.

8. *The effect of the proposed subdivision on existing public streets and the need for new streets or highways to serve the subdivision*.
The development will produce 387 trips per day and will generate 31 AM Peaks hour trips and 41 PM Peak hour trips. Based on these numbers, the threshold for requiring a Traffic Impact Study for this development will not be met.
Local intersections: The site is north of the corner of Washington St and N Ormsby Blvd. Washington St and N Ormsby Blvd are minor collectors.
Parking and internal circulation: There will be on-site driveway parking at each lot, along with parking on both sides of the street of Ormsby Circle.
Adjacent Streets On-Street Parking: Half-street improvements must be installed on North Ormsby Boulevard along the project frontage. This will include striping, curb, gutter, and paving to meet the City standard detail for a two-lane urban collector with bike lanes. Right-of-way must be dedicated as necessary to contain the required improvements with the final map.

9. The physical characteristics of the land such as flood plains, earthquake faults, slope and soil.
Earthquake faults: The closest fault is over 500 feet with a slip rate of less than 0.2 mm/yr.
FEMA flood zones: The FEMA flood zone is Zone X (shaded).
Site slope: The site's slope is between 0% to 2%.
Soils: The geotechnical report states liquefaction is a potential at this site. Final geotechnical report shall indicate what mitigations measures are required to take place in order to avoid liquefaction potential based on known seismicity of nearby fault. Additionally, the report discusses the presence of clays and the shallow groundwater conditions present at the site. It also indicates the presence of soil corrosivity. Due to corrosivity all reinforcing steel needs to have 3 inches of concrete cover unless another solution is approved by City Engineer.

10. The recommendations and comments of those entities reviewing the subdivision request pursuant to NRS 278.330 thru 278.348, inclusive.
Development Engineering has no comment on this finding.

11. The availability and accessibility of fire protection including, but not limited to, the availability and accessibility of water and services for the prevention and containment of fires including fires in wild lands.

The subdivision has sufficient secondary access, and sufficient fire water flows.

12. *Recreation and trail easements*.

Development engineering has no comment on this finding.

Carson City Fire Department:

1. Project must comply with the International Fire Code and Northern Nevada Fire Code Amendments as adopted by Carson City.

2. The project as presented does not comply with IFC Appendix D requirements for two points of access with remoteness to serve the subdivision. As noted in the Alternative Means and Methods note, and AM&M shall be approved prior to final map and site improvement permit.
   a. Per Appendix D107.1 exception: Provide each dwelling unit with an approved automatic sprinkler system in accordance with section 903.3.11, 903.3.1.2, or 903.3.1.3, the remoteness requirement shall not be required.

ZONING MAP AMENDMENT FINDINGS: Staff recommends the following findings for approval of the Zoning Map Amendment pursuant to CCMC 18.02.075, Zoning Map Amendments and Zoning Code Amendments.

1. That the proposed amendment is in substantial compliance with and supports the goals and policies of the master plan.

The zoning map amendment is consistent with the zoning of the parcels to the east and south. Moreover, the Andersen Ranch Subdivision located immediately north of the subject parcel has been approved for development with lots as small as 4,407 square feet. The applicant has concurrently applied for a Tentative Subdivision map. The proposed subdivision is a medium density residential development that proposes 5.14 units per acre with 41 lots.

The Master Plan designation of the subject parcel is Medium Density Residential. The Master Plan is a policy document that outlines the City's vision and goals for the future and provides guidance for making choices regarding the long-range needs of the community. The Zoning Map is a tool to implement the Master Plan. Pursuant to Nevada Revised statutes (NRS) 278.250 the zoning map designation shall be consistent with the Master Plan designation. The current zoning designation of Single-Family 12,000 is consistent with the underlying Master Plan of Medium Density Residential. Likewise, the proposed zoning of Single-Family 6,000 is also consistent with the underlying master plan.

Per the Master Plan, the Medium Density Residential designation provides for single family residential neighborhoods at a density of 3-8 dwelling units per acre. Compatible zoning districts include Single Family 6,000, Mobilehome 6,000, Single Family 12,000 and Mobilehome 12,000. The range of density in this master plan designation is 3-8 units per acre. The proposed zoning map amendment is consistent with the master plan.

2. That the proposed amendment will provide for land uses compatible with existing adjacent land uses and will not have detrimental impacts to other properties in the vicinity.

The proposed zoning map amendment will not have a detrimental impact on other properties in the vicinity. The proposed SF6 zoning will be consistent with the zoning to the south and east and allow for lot sizes similar to those to the north within the Andersen Ranch Subdivision. The proposed zoning is compatible with the adjacent single family residential uses in the area.

3. That the proposed amendment will not negatively impact existing or planned public services or facilities and will not adversely impact the public health, safety and welfare.

The proposed zoning map amendment will not negatively impact existing or planned public services or facilities in the area and will not adversely impact the public health, safety and welfare. The capacities of the city sewer, water, storm drain, and transportation systems are sufficient to meet the demand that may result. The zoning map amendment itself will not result in impacts to public services or facilities; however future projects could cause impacts that require mitigation. The applicant has concurrently applied for a Tentative Subdivision map. Staff has recommended conditions of approval for the Tentative Map to address the impacts resulting from the project.

TENTATIVE MAP FINDINGS: Staff recommends approval of the Tentative Subdivision Map based on the findings below and in the information contained in the attached reports and documents, pursuant to CCMC 17.05 (Tentative Maps); 17.07 (Findings), 17.10 (Common Open Space Development), and NRS 278.349, subject to the recommended conditions of approval, and further substantiated by the applicant's written justification. In making findings for approval, the Planning Commission and Board of Supervisors must consider:

1. Environmental and health laws and regulations concerning water and air pollution, the disposal of solid waste, facilities to supply water, community or public sewage disposal and, where applicable, individual systems for sewage disposal.

The development is required to comply with all applicable environmental and health laws concerning water and air pollution and disposal of solid waste. A copy of the proposed tentative map was submitted to the Nevada Division of Water Resources and the Nevada Division of Environmental Protection ("NDEP") for review. An intent to serve or a will serve letter from the municipal sewer service provider is required at the time the final map is presented to the State for final approval and signature. The Carson City Public Works Department has advised of adequate capacity in the City systems to meet water demand and sewage disposal needs. The utility design is required to meet all applicable development standards related to water and sewer design.

2. The availability of water which meets applicable health standards and is sufficient in quantity for the reasonably foreseeable needs of the subdivision.

Water supplied to the development will meet applicable health standards. The City has sufficient system capacity and water rights to meet the required water allocation for the subdivision.

3. The availability and accessibility of utilities.

All utilities are available in the area to serve this development. The utility design will be reviewed at the time of a site improvement permit to ensure it meets all applicable standards.

4. The availability and accessibility of public services such as schools, police protection, transportation, recreation and parks.

The project is located adjacent to existing single-family developments which are served by the existing public services including schools, sheriff, transportation facilities, and parks. As noted in

the June 29, 2022 annual report to the Growth Management Commission the School District has indicated that they do not have any concerns with the number of children resulting from the new construction. Development Engineering has reviewed the development for impacts to water, sewer, storm drainage, and roadway systems. As conditioned, the existing infrastructure has been found to be sufficient to supply water and sanitary sewer and the City has capacity to meet the demand. This project will be required to enter a pro-rata share agreement for the extension of N Ormsby Boulevard to West Winne Lane. Staff is recommending conditions of approval half-street improvements to be installed on North Ormsby along the project frontage, including striping, sidewalk, curb, gutter and paving with bike lanes. The Fire Department has reviewed the project and has indicated that the project will either be required to provide approved automatic sprinkler systems in each dwelling unit or receive approval of alternative means and methods to meeting the separation requirements for the two points of access for the project. At the time a site improvement permit is submitted and prior to recordation of the final map the project will be reviewed to ensure compliance with the currently adopted edition of the International Fire Code and the Northern Nevada Fire Code Amendments as adopted by Carson City.

5. Access to public lands. Any proposed subdivision that is adjacent to public lands shall incorporate public access to those lands or provide an acceptable alternative.

Access will be provided to the planned public trails to the north of this project site. Staff is recommending a condition of approval requiring the final map and site improvement permit to provide the trail connection including a public access easement across the trail.

6. Conformity with the zoning ordinance and land use element of the City's Master Plan.

The proposed common open space development must comply with the allowable density of the zoning district, but may have flexibility on lot size, lot width, and setbacks. The allowable density in the SF6 zoning district is 7.26 units per acre. The applicant proposes 5.14 units per acre.

Per Division 2 of the Development Standards, the applicant must provide two parking spaces per dwelling unit provided the internal or abutting streets provide for on-street parking. The internal streets will provide for on-street parking and each lot will provide for a minimum of two parking spaces, typically via a two-car garage.

As part of the requirements for a Common Open Space Development the applicant must provide for 250 square feet of open space per dwelling unit, which may include private open space and/or common open space. At least 100 square feet per dwelling unit of common open space must be designed for recreational use. This translates to a total open space requirement of 14,350 square feet (0.33 acres). The applicant proposes approximately 615 square feet of private open space in the backyard of each residence and an additional 8,544 squre feet of common open space which will be landscaped and include amenities such as a walking path, benches, and a bike path. Staff has recommended a condition of approval that an open space diagram be submitted at the time of application for site improvement permit, demonstrating compliance with the open space requirements. Additionally, a landscaping plan will be required to be submitted with the site improvement permit application to confirm compliance with Division 3 of the Development Standards.

The proposed periphery setbacks meet or exceed the required setbacks for the SF6 zoning. Of note, all lots will front the internal streets system; therefore, the rear setback is the setback that may impact adjacent development. The required rear setback in the SF6 zoning district is 10 feet; therefore, the future homes will not be any closer to adjacent development than if using the based zoning without the Common Open Space Development provisions. Per the standard conditions

for a Common Open Space Development, the project must provide for adequate screening and buffering of existing and potential development adjoining the proposed development. The proposal does not address proposed screening and buffering; therefore, staff has included a condition of approval requiring privacy a fence or wall to be installed along the perimeter (rear yards) of the project.

The Master Plan designation of the subject parcel is Medium Density Residential. The Medium Density Residential designation provides for single family residential neighborhoods at a density of 3-8 dwelling units per acre. Compatible zoning districts include Single Family 6,000, Mobilehome 6,000, Single Family 12,000, and Mobilehome 12,000. Properties in this area are of similar size and density to the proposed subdivision.

7. General conformity with the City's Master plan for streets and highways.

The development is in conformance with the City's Master Plan for streets and highways.

8. The effect of the proposed subdivision on existing public streets and the need for new streets or highways to serve the subdivision.

As conditioned, the road network will be adequate to serve the project. Staff is recommending conditions of approval requiring the applicant to enter into an agreement with the City to pay for its pro rata share of the extension of N Ormsby Boulevard to W Winnie Lane. Additionally, staff is recommending a condition requiring the applicant to construct half street improvements on N Ormsby along the project frontage.

9. The physical characteristics of the land such as flood plains, earthquake faults, slope and soil.

The site is relatively flat, and there are no faults within 500 feet. The site includes areas designated as FEMA zone X shaded. The geotechnical report provided with the application states that liquefaction is a potential issue at this site. Additionally, staff is aware of high groundwater in the area. To mitigate potential impacts, staff is recommending a condition requiring a revised geotechnical report be submitted with the site improvement permit application. Any mitigations required to meet the requirements of the City's development standards will be required to be implemented by the developer to the satisfaction of the City Engineer.

10. The recommendations and comments of those entities reviewing the subdivision request pursuant to NRS 278.330 thru 278.348, inclusive.

The proposed tentative map has been routed to the Nevada Department of Environmental Protection (NDEP) and the Nevada Division of Water Resources. A will serve letter for the sewer and water will be required prior to the State signing the Final Map.

11. The availability and accessibility of fire protection including, but not limited to, the availability and accessibility of water and services for the prevention and containment of fires including fires in wild lands.

The Carson City Public Works Department has reviewed the project in conjunction with the Carson City Fire Department. However, the Fire Department has reviewed the project does not meet the necessary separation requirements for the two points of access. Therefore, staff is recommending a condition of approval requiring either approved automatic sprinkler systems in each dwelling unit or approval of alternative means and methods to meeting the separation requirements for the two points of access for the project. At the time a site improvement permit is submitted and prior to

recordation of the final map the project will be reviewed to ensure compliance with the currently adopted edition of the International Fire Code and the Northern Nevada Fire Code Amendments as adopted by Carson City.

12. Recreation and trail easements.

Access will be provided to the planned public trails to the north of this project site. Staff is recommending a condition of approval requiring the final map and site improvement permit to provide the trail connection including a public access easement over the on-site trail as well as the connection to the planned public trails to the north.

Attachments

Public Comments
Application- ZA-2022-0376 & SUB-2022-0375

Ash Canyon

Application to City of Carson City for a:

Tentative Subdivision Map
Zoning Map Amendment

Prepared by:

John F. Krmpotic, AICP
KLS Planning & Design Group
1 East 1st Street, Suite 1400
Reno, Nevada 89501

Michael Vicks, P.E.
775.636.7905
mike@montevistaconsulting.com
575 E. Plumb Lane, Suite 101
Reno, NV 89502

Revised August 30, 2022

Table of Contents

List of Figures

Appendix A

Application Materials

Tentative Subdivision Map Application
Property Owner's Affidavit
Tentative Subdivision Map Submittal Checklist
Carson City Road Name Reservation/Approval Application
Master Plan Policy Checklist
Carson City Conceptual Map Letter
Zoning Map Amendment Application
Zoning Map Amendment Checklist
Documentation of Taxes Paid
Common Area Landscape Site Plan

Appendix B

Civil Reports/Studies

Tentative Onsite Drainage Study
Tentative Sewer Letter
Preliminary Geotechnical Report
Traffic Letter

Civil Plan Set

C1.0 - Title Sheet
C2.0 - Geometric Site Plan
C3.0 - Site and Utility Plan
C4.0 - Grading Plan
C5.0 - Drainage Plan

Project Request

This application is a request for a **Tentative Subdivision Map** to include 41 Single Family detached lots and a **Zoning Map Amendment** to the SF-6 zone. This is a 7.98-acre site on one parcel located on Ormsby Drive just north of Washington Street (*See Figure 1 – Vicinity Map below*).

Figure 1 – Vicinity Map

Zoning and Land Uses

The site is adjacent to SF-6 zoning to the east and south and has an established SF neighborhood abutting on those sides (See *Figure 2 – Existing Zoning Map below*). To the north is the approved Andersen Ranch PUD with lots sizes that average 6,140 sq. ft. On the west boundary is N. Ormsby Boulevard.

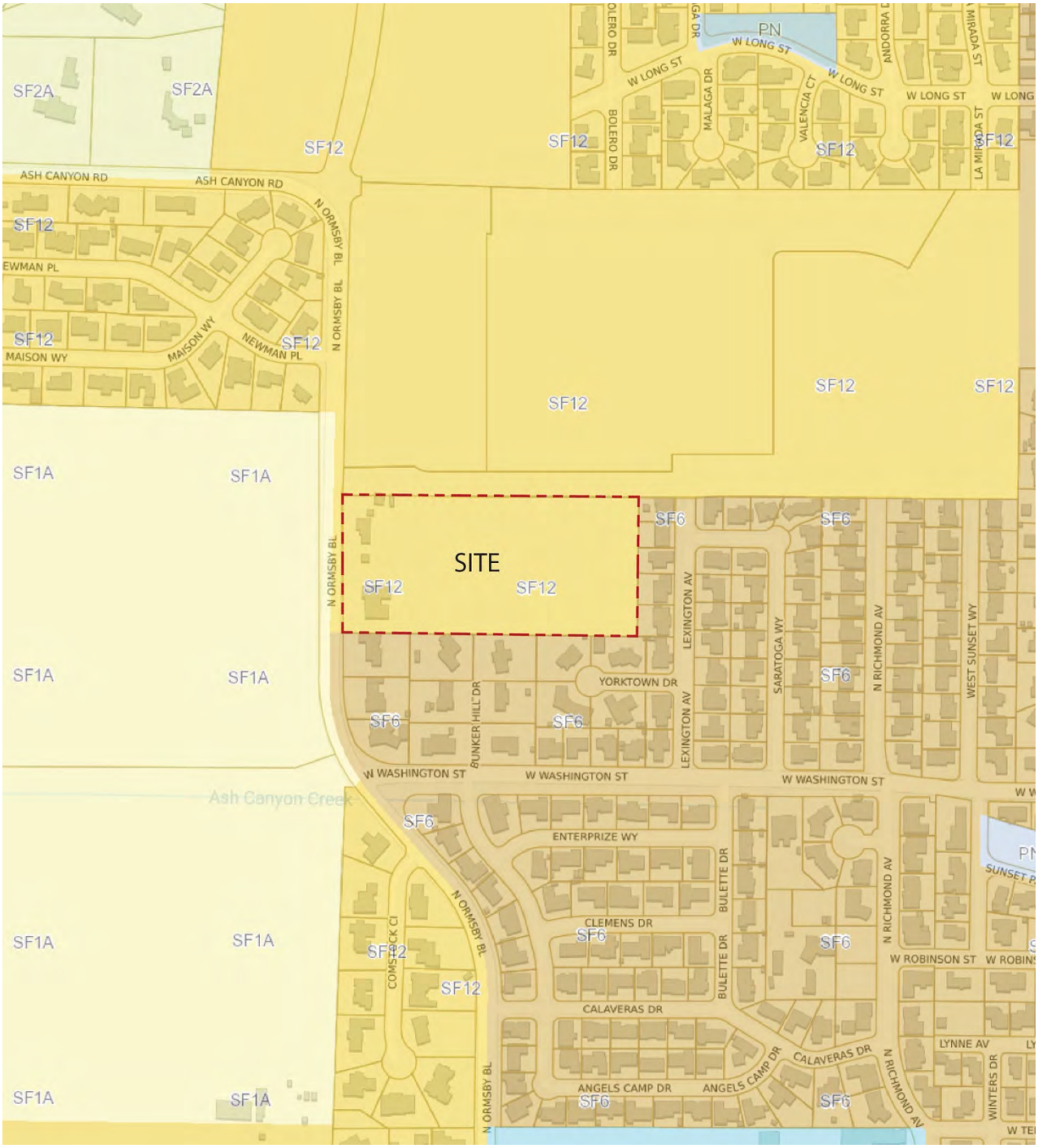


Figure 2 – Existing Zoning Map

Figure 3 – Proposed Zoning Map

Figure 4 – Conceptual Development Plan

Project Description

- This is a 41-lot single family detached project
- Proposed density is 5.14 du per acre
- Home sizes shown are footprints of roughly 1,800 sf to 2,300 sf to provide scale
- All homes will have a minimum 2-car garage and driveway spaces for parking
- The minimum lot size is 6,004 square feet with larger lots on the perimeter
- Average lot size is 6,306 sf and the largest lot is 8,058 sf
- Street widths meet the Carson City Special Street Section for private streets with parking & sidewalk on both sides.

Proposed Setbacks (Per SF-6):
Front Yard = 10' to the house and 20' to the garage
Side yard = 5'
Rear yard = 10' minimum depth
The street side setbacks refer to the corner lots within the project which are 10' setbacks. The lots adjacent to Ormsby Blvd are also side street lots with a 10' setback being proposed.

Key Planning Issues

The design approach of the site considers the surrounding area and neighborhoods, along with proposed density and home pricing in the area. Fitting into the area and being sensitive to the adjacent neighborhood is a primary consideration of forming this plan. The design basic design features include:

- A "loop street" configuration will help create a quiet neighborhood and no "punch through" streets to adjacent parcels and/or streets
- The mid-range of density for the SF-6 zone at 5.14 du per acre that allows up to 7 du per acre
- A proposed density that is just below the middle of the density range of the MDR master plan land use designation with a range of 3 to 8 du per acre
- Access to Ormsby Blvd with two connections to meet Carson City Municipal Code Standards and fire access standards
- Wider than typical lot sizes to help with neighborhood compatibility on the south and east property lines where existing lots are wider
- Above average home prices in this neighborhood because of the location and sensitive surroundings and lower density proposal
- Several floor plans with several elevations proposed for the project to create variation and interest at the street level

Common Open Space Development

In an effort to efficiently use the land for the site and provide open space, front setbacks are varied, and a common open space element is included in the northeast corner of the site. The code requirements regarding the open space are listed below.

CCMC 17.10.035 – Site Analysis.
A site analysis showing development opportunities and constraints shall be prepared as a key consideration, along with the project design objectives, to determine the total area covered by lots and roads, lot areas and the total area to be designated as common open space. The site analysis

shall include information and maps, including a site opportunities and constraints map, describing all significant physical and contextual features or factors which may affect the development of the property. The elements of the site analysis shall include, as a minimum, the following information:

1. Location Map. A general location map providing the context of location and vicinity of the site.

   See Figure 1 – Vicinity Map above.

2. Land Use and Zoning. Current and planned land use and adopted zoning on the site and adjacent adopted zoning and current, planned and approved, but unbuilt land uses.

   The current and proposed land use is Medium Density Residential (MDR) in the master plan. Current zoning is SF-12 and proposed zoning is SF-6 which is consistent with the MP land use designation.

3. Existing Structures. A description of the location, physical characteristics, condition and proposed use of any existing structures.

   The site contains two single-family, single-story units and a shed on the western boundary accessible from Ormsby Blvd. Both homes are unutilized and to be demolished in preparation for the project.

4. Existing Vegetation. A description of existing vegetation, including limits of coverage, and major tree sizes and types. In the instance of heavily wooded sites, typical tree sizes, types and limits of tree coverage may be substituted.

   The site is covered with pasture grass and is generally free of any other existing vegetation besides the trees in the yards of the single-family homes, which are to be removed and replaced.

5. Topography. An analysis of slopes on the site, and adjacent to the site, using a contour interval of 5 feet, or at a contour interval appropriate for the site and agreed to by the director, identifying areas with 15 percent or greater slope, areas with 33 percent or greater slope and areas identified as "skyline" on the adopted Carson City skyline map.

   The site is mostly flat with an average slope of less than two percent. There is an elevation change of 4760ft on the western edge to 4744ft on the eastern edge and a site width of 870ft. The average slope of 2% is also a constant slope so nowhere near any areas that have greater than 15 percent slope or is identified as “skyline” on the Carson City map.

6. Soil. An analysis of the soil characteristics of the site using Soil Conservation Service (SCS) information.

   The soil characteristics of the site are analyzed in the Geotechnical Report. In summary, there are two loam soils typical of level floodplains and recommendations to accommodate this soil type for development are outlined in the report. We have not engaged the Soil Conservation Service for this effort but will, if necessary, over time.

7. Natural Drainageways. Identification of natural drainageways on and adjacent to the site.
   There is no natural drainageway on the property. There is a historical pattern of drainage that runs thru the site into Anderson Ranch that carries storm waters. It is a drainage course that is fundamentally different than a drainageway.

8. Wetlands and Water Bodies. Identification of existing or potential wetlands and water bodies on the site.
   There are no existing or potential wetlands or water bodies on the site.

9. Flood Hazards. Identification of existing and potential flood hazards using Federal Emergency Management Agency (FEMA) information.
   The site is in FEMA Flood Zone Shaded X which will be addressed one of two ways. Either we elevate the structures one foot above that defined elevation. We have been informed that the city is leading a CLOMR process to remove an adjacent property from the flood plain. This site is part of the same watershed and it would be prudent to consider this site as part of that CLOMR if appropriate. Further analysis and recommendations can be found in the Tentative Drainage Report.

10. Seismic Hazards. Identification of seismic hazards on and/or near the site, including location of any Halocene faults.
    The Geotechnical Report found no faults that cross the property, and the nearest Holocene fault is 0.20 miles north of the property.

11. Easements. A description of the type and location of any easements, public and/or private, on the site.
    There are currently no easements encumbering the property.

12. Utilities. A description of existing or available utilities, and an analysis of appropriate locations for water, power, sanitary sewer and storm water sewer facilities.
    All necessary utilities are located adjacent to the site in Ormsby Blvd. The included Utility Plan shows the locations to connect these utilities to efficiently serve the project. There is proven capacity for Water in the main located in Ormsby Blvd per the staff comments in the Conceptual Development letter.

13. Appropriate Access Points. An analysis of appropriate access points based upon existing and proposed streets and highways and site opportunities and constraints.
    A proposed private loop road within the project will create two access points to existing Ormsby Blvd, see Tentative Site Plan.

CCMC 17.10.046 - Open Space.
A minimum of 250 square feet of open space per dwelling unit shall be provided, which may include private open space and/or common open space subject to the following provisions.

250 square feet of open space per dwelling unit equates to a minimum of 10,250 square feet of combined private and/or common open space in the development. The private open space provided is 32,569 square feet and the common open space provided is 8,544 square feet. This is a combined 41,1134 square feet of open space, meeting this requirement.

1. Private Open Space. Private open space may include private yard areas with no dimension less than 15 feet.

   Each lot has a private yard with a minimum of 615 square feet. We currently have only setback diagrams that are based on code required setbacks and not house footprints. The applicant will accept a condition of approval to meet this requirement.

2. Common Open Space. Common open space may include common areas with no dimension less than 25 feet and:
   a. Shall serve those lots developed with less than the minimum per lot open space requirement; and

   b. At least 100 square feet of common open space per residential unit shall be designed for recreation, which may include but not be limited to picnic areas, sports courts, a softscape surface covered with turf, sand or similar materials acceptable for use by young children, including play equipment and trees, with a slope of 5 percent or less.

      The common open space provided is 8,544 square feet, which equals 208 square feet per residential unit, exceeding the 100 square feet minimum requirement. The common open space is landscaped area with amenities including a pond, walking path, benches, synthetic turf, a picnic table, and bike rack. The area is landscaped with ornamental and trees and shrubs and deciduous shade trees. This does satisfy 17.10.046 (2) b. See Common Area Landscape Site Plan in Appendix A.

Tentative Subdivision Map Findings

The tentative subdivision map application requires findings responses for Carson City Municipal Code, Section 17.07 and NRS 278.349(3), both of which are found below with responses in *italics* below each section.

(1) CCMC 17.07.005 - Findings

In considering parcel maps, planned unit developments and tentative subdivision maps the director shall consider the following:

1. Environmental and health laws and regulations concerning water and air pollution, the disposal of solid waste, facilities to supply water, community or public sewage disposal and, where applicable, individual systems for sewage disposal.

   Yes, the project does connect to community water and sewer utilities owned by Carson City. The solid waste service will be provided by Waste Management.

2. The availability of water which meets applicable health standards and is sufficient in quantity for the reasonably foreseeable needs of the subdivision.
   Water is connected to the project via the main in Ormsby and looped with a second connection to Ormsby. This is required in the Public Works Design Manual and the Carson City engineering staff.

3. The availability and accessibility of utilities.
   All utilities are located adjacent to the site in Ormsby Blvd. Connections are made to those utilities as needed to serve the project. The sanitary sewer connection will requre a private lift station.

4. The availability and accessibility of public services such as schools, police protection, transportation, recreation and parks.
   The site is zoned for Fritsch Elementary School, Carson Middle School, and Carson High School. There are existing established police and fire run districts, and several parks exist within a half mile of the site.

5. Access to public lands. Any proposed subdivision that is adjacent to public lands shall incorporate public access to those lands or provide an acceptable alternative
   This is not applicable as the site is not adjacent to any public lands. This is an infill Suburban project with existing/impending development in all directions abutting the site.

6. Conformity with the zoning ordinance and land use element of the city's master plan.
   This project does conform with the SF-6 zoning ordinance as proposed which allows for the use. Similarly, the Master Plan Policy Checklist shows conformance with the Master Plan for those applicable goals and policies.

7. General conformity with the city's master plan for streets and highways.
   The project generates 41 p.m. peak hour trips which is well below the 80 p.m. peak hour trips threshold, and it is consistent with the collector street classification of Ormsby Blvd and its capacity restrictions.

8. The effect of the proposed subdivision on existing public streets and the need for new streets or highways to serve the subdivision.
   The proposed subdivision traffic is routinely managed on the existing public streets without necessary mitigation. There is one new local street being created to serve the project named Ormsby Circle.

9. The physical characteristics of the land such as flood plains, earthquake faults, slope and soil.

The physical characteristics of the land are ideally suited for a single-family project of this order. There are no environmental constraints, no topographic constraints, and no earthquake faults to restrict development of this nature. There shaded X flood zone designation on the property is addressed with raised lots near Ormsby Blvd and walls along the eastern side of the site that help with sewer depth challenges.

10. The recommendations and comments of those entities reviewing the subdivision request pursuant to NRS 278.330 thru 278.348, inclusive.

    This is not applicable at the time of this application submittal. Any recommendations and comments from reviewers will be addressed once received.

11. The availability and accessibility of fire protection including, but not limited to, the availability and accessibility of water and services for the prevention and containment of fires including fires in wild lands.

    Fire protection services will be provided by the station located on South Stewart Street about 1.7 miles from the site. The applicant understands this is about a 3-minute response time (travel time only) from that station. There are fire hydrants located on Ormsby Drive in the immediate vicinity of the site. Fire hydrants within subdivision will be added to the satisfaction of the Fire Marshal. An alternate means and methods proposal will need to be approved by the Fire Department in order to address the remoteness deficiencies in the two site access points.

12. Recreation and trail easements.

    There are no recreation areas or trails immediately abutting the site that would require easements.

(2) NRS 278.349(3)

NRS 278.349 Action on tentative map by governing body; considerations in determining action on tentative map; final disposition.

3. The governing body, or planning commission if it is authorized to take final action on a tentative map, shall consider:

(a) Environmental and health laws and regulations concerning water and air pollution, the disposal of solid waste, facilities to supply water, community or public sewage disposal and, where applicable, individual systems for sewage disposal;

Yes, the project does connect to community water and sewer utilities owned by Carson City. The solid waste service will be provided by Waste Management.

(b) The availability of water which meets applicable health standards and is sufficient in quantity for the reasonably foreseeable needs of the subdivision;

Water is connected to the project via the main in Ormsby and looped with a second connection to Ormsby. This is required in the Public Works Design Manual and the Carson City engineering staff.

(c) The availability and accessibility of utilities;
All utilities are located adjacent to the site in Ormsby Blvd. Connections are made to those utilities as needed to serve the project. The sanitary sewer connection will require a private lift station.

(d) The availability and accessibility of public services such as schools, police protection, transportation, recreation and parks;
The site is zoned for Fritsch Elementary School, Carson Middle School, and Carson High School. There are existing established police and fire run districts, and several parks exist within a half mile of the site.

(e) Conformity with the zoning ordinances and master plan, except that if any existing zoning ordinance is inconsistent with the master plan, the zoning ordinance takes precedence;
This project does conform with the SF-6 zoning ordinance as proposed which allows for the use. Similarly, the Master Plan Policy Checklist shows conformance with the Master Plan for those applicable goals and policies.

(f) General conformity with the governing body's master plan of streets and highways; *The project generates 41 p.m. peak hour trips which is well below the 80 p.m. peak hour trips threshold, and it is consistent with the collector street classification of Ormsby Blvd and its capacity restrictions.*

(g) The effect of the proposed subdivision on existing public streets and the need for new streets or highways to serve the subdivision;
The proposed subdivision traffic is routinely managed on the existing public streets without necessary mitigation. There is one new local street being created to serve the project named Ormsby Circle.

(h) Physical characteristics of the land such as floodplain, slope and soil;
The physical characteristics of the land are ideally suited for a single-family project of this order. There are no environmental constraints, no topographic constraints, and no earthquake faults to restrict development of this nature. There shaded X flood zone designation on the property is addressed with raised lots near Ormsby Blvd and walls along the eastern side of the site that help with sewer depth challenges.

(i) The recommendations and comments of those entities and persons reviewing the tentative map pursuant to NRS 278.330 to 278.3485, inclusive;

This is not applicable at the time of this application submittal. Any recommendations and comments from reviewers will be addressed once received.

(j) The availability and accessibility of fire protection, including, but not limited to, the availability and accessibility of water and services for the prevention and containment of fires, including fires in wild lands; and

Fire protection services will be provided by the station located on South Stewart Street about 1.7 miles from the site. The applicant understands this is about a 3-minute response time (travel time only) from that station. There are fire hydrants located on Ormsby Drive in the immediate vicinity of the site. Fire hydrants within subdivision will be added to the satisfaction of the Fire Marshal.

(k) The submission by the subdivider of an affidavit stating that the subdivider will make provision for payment of the tax imposed by chapter 375 of NRS and for compliance with the disclosure and recording requirements of subsection 5 of NRS 598.0923, if applicable, by the subdivider or any successor in interest.

An affidavit from the subdivider will be submitted to ensure compliance with all state requirements.

Master Plan Policy Analysis for Tentative Subdivision Map

The following is information addressing the five items that appear in the Carson City Master Plan as outlined in the Master plan Policy Checklist. Each theme looks at how the proposed development can help achieve the goals of the Carson City Master Plan.

Chapter 3: A Balanced Land Use Pattern
The Carson City Master Plan seeks to establish a balance of land uses within the community by providing employment opportunities, a diverse choice of housing, recreational opportunities, and retail services.

This project provides residential use at the intended density and location as was planned out for the Carson City Master Plan. The single-family development will include a variety of housing models and will provide the resources and services necessary for new housing choices for Carson City residents.

Chapter 4: Equitable Distribution of Recreational Opportunities
The Carson City Master Plan seeks to continue providing a diverse range of park and recreational opportunities to include facilities and programming for all ages and varying interests to serve both existing and future neighborhoods.

Within the project, each lot contains a private yard that exceeds the minimum open space requirement for this zoning district. In addition, there is a common open space element that will include a landscaped pond and open pedestrian area that will be available to the subdivision residents. Considering the additional parks within a half mile of the site, there is ample space to host facilities and programming for the varying interests of the new residents.

Chapter 5: Economic Vitality

The Carson City Master Plan seeks to maintain its strong diversified economic base by promoting principles which focus on retaining and enhancing the strong employment base, include a broader range of retail services in targeted areas, and include the roles of technology, tourism, recreational amenities, and other economic strengths vital to a successful community.

This project adds to the city housing opportunity and can improve the quality of life for new residents that are interested in this medium density, single-family style of living. This is an exceptional location for a single-family neighborhood given the surrounding and the views to the west of the Carson Range.

Chapter 6: Livable Neighborhoods and Activity Centers
The Carson City Master Plan seeks to promote safe, attractive and diverse neighborhoods, compact mixed-use activity centers, and a vibrant, pedestrian-friendly Downtown.

The subdivision is designed to match the character of the surrounding neighborhoods while keeping visual and street level interest with a variety of housing models. The height and density ensure a smooth transition to and from the abutting residential surroundings.

Chapter 7: A Connected City
The Carson City Master Plan seeks promote a sense of community by linking its many neighborhoods, employment areas, activity centers, parks, recreational amenities and schools with an extensive system of interconnected roadways, multi-use pathways, bicycle facilities, and sidewalks.

The internal loop road allows for two connections to Ormsby Boulevard and the city's street network while keeping the road quiet as it is intended to serve only those residents.

Zoning Map Amendment Findings

CCMC 18.02.075 - Zoning map amendments and zoning code amendments.

5. Findings. The applicant for a zoning map amendment or zoning code amendment shall have the burden of proof to provide facts supporting the proposed zoning map amendment or zoning code amendment. For purposes of legal clarity, this shall include the burden of going forward with the evidence and the burden of persuasion on all questions of fact which are to be determined by the commission and the board. Additionally, the applicant shall provide adequate information in the application and on the site plan to substantiate the findings required in this section. The commission and board shall determine if the information presented is adequate to support their decisions.

a. Before a zoning map amendment may be recommended for approval, the applicant shall provide evidence to the commission and board concerning the physical use of land and zoning currently existing in the general vicinity, and which have occurred in the previous five (5) year time period, and describe:

   (1) How the proposal will impact the immediate vicinity,

   The proposal aims to create housing at a density that is compatible and consistent with its surroundings. The abutting neighborhoods have lot sizes and characteristics that transition smoothly to and from the project site.

(2) How the proposal supports the goals, objectives and recommendations of the master plan concerning land use and related policies for the neighborhood where the subject project is situated,

The site's land use is Medium Density Residential, which is consistent with the proposed SF-6 zoning. From the Carson City Master Plan, the intended use and density for the MDR category are single-family residences at 3-8 dwelling units/acre, where this project proposes the middle of this range at 5.14 dwelling units/acre. In addition, the Master Plan characterizes MDR land use with a mix of housing types in a neighborhood setting, a recognizable center, and connective green spaces to unify the development. This project will include multiple housing models with a layout that efficiently uses the land that is available and can give the neighborhood a distinct character while maintaining compatibility and smoothly transitioning with the adjacent neighborhoods.

(3) If the proposed amendment will impact properties within that use district,

The project meets the SF-6 development standards and will not directly impact other SF-6 properties as there is no proposed amendment to the use district itself. The city established SF-6 abutting the site and this matches that designation. This amendment fundamentally will match the predominant designation in the area.

(4) Any impacts on public services and facilities.

Public services and facilities in the vicinity already serve the existing neighborhoods and are equipped to serve the new development and provide new residents with necessary resources. There is roadway capacity, established utility capacities, and acceptable fire response time form the station that will serve the site.

Application Questionnaire

GENERAL REVIEW OF PERMITS

Source: CCMC 18.02.050 (Review) and 18.02.075 (ZMA). The Board of Supervisors and the Planning Commission in reviewing and judging the merit of a proposal for a variance, special use permit, or a zoning map amendment, shall direct its considerations to, and find that in addition to other standards in this title, the following conditions and standards are met:

1. That the proposed amendment is in substantial compliance with and supports the goals and policies of the Master Plan.

   a) In reviewing the attached Carson City Master Plan Policy Checklist, determine which Policies are applicable to the proposal. Explain what features of the proposed project support your selection of Goals and Policies concerning land use and related policies for the neighborhood where the subject project is located.

The proposed project considers the goals of each of the five themes in the Carson City Master Plan in its design and use, and it is aligned with the MDR land use category that was intended for the site. See Master Plan Policy Analysis above.

2. That the proposed amendment will provide for land uses compatible with existing adjacent land uses and will not have detrimental impacts to other properties in the vicinity.

   a) Describe the land uses and zoning adjoining your property (for example: North: two houses, Single-Family One Acre zoning; East: restaurant, Retail Commercial zoning, etc.), and how your zoning will be compatible with those uses and not cause detrimental impacts.

   The site has neighborhoods to the north, east, and south that are also medium density, single-family detached homes. The site is adjacent to SF-6 zoning on the east and south boundaries which make the use and design of this project compatible with its surroundings. To the west of the site is undeveloped land reserved for single family parcels across Ormsby Boulevard.

   b) Describe land use and zoning changes in the general vicinity which have occurred in the previous five-year period.

   The site's vicinity is entirely residential use. The north of the site has had the recent approval of the Andersen Ranch Estates development with minimum lot sizes of 5,000 sq. ft. in its PUD zoning district.

3. That the proposed amendment will not negatively impact existing or planned public services or facilities and will not adversely impact the public health, safety and welfare.

   There is no conceivable detriment to the public health, safety, and welfare of any citizens with this proposed amendment.

4. That sufficient consideration has been exercised by the applicant in adapting the project to existing improvements in the area. Be sure to indicate the source of the information that you are providing (private engineer, development engineering, title report, or other sources). Describe how your proposed Zoning Map Amendment will not adversely impact drainage, sewer, water, traffic, schools, emergency services, roadways and other city services.

   a) Is drainage adequate in the area to support the density that may occur with the rezoning? How will drainage be accommodated? How have you arrived at this conclusion?

   Please see the attached Drainage Study in this application. We responsibly meet all drainage criteria requires in the PWDM to safely and adequately drain the site.

   b) Are the water supplies in the area of your project adequate to meet your needs without degrading supply and quality to others? Is there adequate water pressure?

Are the lines in need of replacement? Talk to the Utilities Department for the required information.

Yes, there is a main located in Ormsby Blvd that will serve the site. The loop thru the site will the design criteria as required by the city. Per the comments received from Engineering staff on the conceptual development map, we found there is adequate water pressure to serve the project.

c) Are roadways sufficient in the area to serve the density that may occur from the rezoning? How have you arrived at this conclusion?

Yes, Ormsby is an arterial street with adequate capacity to accommodate the project without significant impact. It was noted in Conceptual Development Plan review that a traffic study will be required if the project generates 80 p.m. peak hour trips. The project as proposed is well below that threshold.

d) Will the school district be able to serve the student population that may occur from the rezoning? How have you arrived at this conclusion?

We must defer to the school district for projections on the student population that can be expected for this project.

e) Are adequate means of access available for emergency vehicles to serve the site? What is the approximate response time for emergency vehicles? If your application is approved to rezone the property, will additional means of access be required for increased density? Or will existing access ways be adequate? How have you arrived at this conclusion?

There are two means of access provided to the site as designed. An alternate means and methods proposal will need to be approved by the Fire Department in order to address the remoteness deficiencies in the two site access points. The street widths meet the city standard for fire access.

Appendix A
Application Materials

Tentative Subdivision Map Application
Property Owner's Affidavit
Tentative Subdivision Map Submittal Checklist
Carson City Road Name Reservation/Approval Application
Master Plan Policy Checklist
Carson City Conceptual Map Letter
Zoning Map Amendment Application
Zoning Map Amendment Checklist
Documentation of Taxes Paid
Common Area Landscape Site Plan

Carson City Planning Division
108 E. Proctor Street· Carson City NV 89701
Phone: (775) 887-2180 • E-mail: planning@carson.org

FOR OFFICE USE ONLY:

CCMC 17.06 and 17.07

TENTATIVE SUBDIVISION MAP

FEE*: $3,500.00 + noticing fee
*Due after application is deemed complete by staff

FILE

APPLICANT	PHONE #
John Krmpotic, AICP - KLS Planning & Design	775-857-7710

MAILING ADDRESS, CITY, STATE, ZIP
1 East 1st Street, Suite 1400, Reno, NV 89501

EMAIL
johnk@klsdesigngroup.com

PROPERTY OWNER	PHONE #
KP Investors, LLC - Attn: Pat Owens	775-544-5464

MAILING ADDRESS, CITY, STATE, ZIP
12000 Red Rock Road, Reno, NV 89508

EMAIL
powens@kpinvestorsllc.com

APPLICANT AGENT/REPRESENTATIVE	PHONE #
John Krmpotic, AICP - KLS Planning & Design	775-857-7710

MAILING ADDRESS, CITY, STATE, ZIP
1 East 1st Street, Suite 1400, Reno, NV 89501

EMAIL
johnk@klsdesigngroup.com

Project's Assessor Parcel Number(s)
001-241-14

Project's Street Address
1051 N Ormsby Blvd, Carson City, NV 89703

Nearest Major Cross Street(s)
N Ormsby Blvd & W Washington St

Project's Master Plan Designation
Medium Density Residential (MDR)

Project's Current Zoning
Single Family 12,000 (SF-12)

- ☐ **SUBMITTAL PACKET – 5 Complete Packets (1 Unbound Original and 4 Copies) including:**
  - ☐ Application Form including Applicant's Acknowledgment
  - ☐ Property Owner Affidavit
  - ☐ Copy of Conceptual Subdivision Map Letter
  - ☐ Detailed Written Project Description
  - ☐ Proposed Street Names
  - ☐ Master Plan Policy Checklist
  - ☐ Wet Stamped Tentative Map (24" x 36")
  - ☐ Reduced Tentative Map (11" x 17")
  - ☐ Conceptual Drainage Study
  - ☐ Geotechnical Report
  - ☐ Traffic Study (if applicable)
  - ☐ Documentation of Taxes Paid to Date
- ☐ **CD or USB DRIVE with complete application in PDF**
- ☐ **STATE AGENCY SUBMITTAL including:**
  - ☐ 2 Wet-stamped copies of Tentative Map (24" x 36")
  - ☐ Check made out to NDEP for $400.00 + $3/lot
  - ☐ Check made out to Division of Water Resources for $180.00 + $1/lot

Application Reviewed and Received By:

_____

Submittal Deadline: Planning Commission application submittal schedule.

Note: Submittals must be of sufficient clarify and detail for all departments to adequately review the request. Additional information may be required.

Project Name
Ash Canyon

Total Project Area	Number of Lots	Smallest Parcel Size
7.98 acres	41	6,004 sq. ft.

Please provide a brief description of your proposed project below. Provide additional pages to describe your request in more detail.
This is a 41 lot SF detached project with 6,306 sq. ft. average lot sizes. See the attached Project Description for details.

NOTE: If your project is located within the Historic District or airport area, it may need to be scheduled before the Historic Resources Commission or the Airport Authority in addition to being scheduled for review by the Planning Commission. Planning staff can help you make this determination.

ACKNOWLEDGMENT OF APPLICANT: (a) I certify that the foregoing statements are true and correct to the best of my knowledge and belief; (b) I agree to fulfill all conditions established by the Board of Supervisors.

_____ 08/18/22

Applicant's Signature Date

PROPERTY OWNER'S AFFIDAVIT

I, EDWARD P. OWENS (Print Name), being duly deposed, do hereby affirm that I am the record owner of the subject property located at 1051 + 1089 N. ORMSBY, CARSON CITY, NV (Property Address and APN) 001-241-14, and that I have knowledge of, and I agree to, the filing of this Tentative Subdivision Map application.

Signature

12460 SPRUCE LN, RENO, NV
Address

AUG 16, 2022
Date

Use additional page(s) if necessary for other names.

STATE OF NEVADA)
COUNTY)

On August 16th, 2022, personally appeared before me, a notary public, Edward Patrick Owens, personally known (or proved) to me to be the person whose name is subscribed to the foregoing document and who acknowledged to me that he/she executed the foregoing document.

Garrett Pettipiece
Notary Public

GARRETT PETTIPIECE
Notary Public - State of Nevada
Appointment Recorded in Washoe County
No: 22-2225-02 - Expires March 26, 2026

TENTATIVE SUBDIVISION MAP SUBMITTAL CHECKLIST

Each application must include the following information:

- ☒ Copy of Conceptual Map Letter from Carson City. Completing the Conceptual Subdivision Map process is required prior to submitting for a Tentative Subdivision Map. If you have not completed this step, your Tentative Subdivision Map application will not be accepted. Please contact the Planning Division for additional information.

- ☒ Detailed Written Project Description including the following:
  - ☒ General project details (number of lots, lot sizes, setbacks, proposed uses, etc.)
  - ☒ Information indicating the benefits of the development to Carson City, any impacts which may arise from the development and the mitigation programs, how the proposed development will enhance or benefit the surrounding areas and how dust will be controlled.
  - ☒ Address how your project complies with the findings outlined in Carson City Municipal Code, Section 17.07 and NRS 278.349(3), listing each finding and providing a separate response for each.
  - ☒ Information addressing the Master Plan Policy Checklist for a Tentative Subdivision Map of the five items that appear in the Carson City Master Plan. Each theme looks at how a proposed development can help achieve the goals of the Carson City Master Plan. Address each theme in the checklist and provide written support of the policy statement in your own words. For additional guidance, please refer to the Carson City Master Plan document on our website at www.carson.org/planning or you may contact the Planning Division to review the document in our office or request a copy.
  - ☒ A master plan for potential development of the property under the ownership or control of the developer in the area of the proposed development, if applicable.
  - ☒ In the case of plans which call for development over a period of years, a schedule showing proposed time within which applications for final approval of all sections of the development are intended to be filed.
  - ☒ An indication of the type of water system to be used, its water sources and engineering data flows.
  - ☒ Solid waste provision.
  - ☒ An indication of method of sewage disposal to be used and the area of disposal.
  - ☒ The form of organization proposed to own and maintain any common open space, if applicable.

- ☒ Completed Carson City Road Name Reservation/Approval Application.

- ☒ Completed Master Plan Policy Checklist.

- ☒ Tentative Subdivision Map drawn to scale including:
  - ☒ Subdivision name.
  - ☒ North arrow, scale and all sheets numbered.
  - ☒ Name and address of developer and engineer and date of map.
  - ☒ Ownership interest in land.
  - ☒ Legal description of land described by 40 acre subdivision, section, township and range.
  - ☒ Vicinity map.
  - ☒ Existing Master Plan and zoning of site.
  - ☒ Adjacent subdivision(s), land uses, zoning and ownership abutting the project.
  - ☒ Location of existing buildings and improvements, if any.
  - ☒ Areas not a part of the subdivision to be designated as “Not a Part”.
  - ☒ Table showing the total project area, number of lots, calculation of residential densities and percentage designated for each proposed use. The density shall be described in terms of units per acre (gross and net building areas).
  - ☒ Topography at 2.5-foot contour intervals for slopes of less than 10 percent and 5-foot contour intervals for slopes of greater than 10 percent. The location of natural features including trees may be required.
  - ☒ Proposed lot layout, lot sizes and setbacks. Blocks and parcels are to be numbered consecutively and the dimensions of all parcels are to be shown.
  - ☒ Typical lot detail.
  - ☒ Height, size, location and use of all structures, fences and walls shown.
  - ☒ Location and size of proposed parks, common areas and/or open space and amount of recreational improvements.
  - ☒ Conceptual landscape plan, if applicable.

- ☒ Proposed circulation system showing all public and private streets (including proposed street names), sidewalks, and bikeways, the width of all streets, typical street cross sections, location of adjoining streets (with street names), sidewalks and bikeways.
- ☒ Proposed parking.
- ☒ Proposed boat and/or RV parking, if applicable.
- ☒ Layout of proposed water, sewer and storm drainage facilities.
- ☒ Location of all natural drainages shown.
- ☒ Show 100-year floodplain, as determined by FEMA Flood Insurance Maps or recognized methods, for those areas subject to flooding.
- ☒ Show earthquake fault lines through the proposed development with building setbacks from fault line as recommended by a geotechnical study.
- ☒ Grading plan for the site (including streets) meeting Carson City Development Standards and requirements showing all cuts, fills and retaining walls.
- ☒ Erosion control plan including stream protection, road drainage, erosion prevention and prevention of untreated discharge to streams, if applicable.
- ☒ All existing and proposed easements.

☒ Conceptual Drainage Study per Carson City Development Standards Sections 14.6 and 14.8. Contact Development Engineering at (775) 887-2300 for additional information.

☒ Geotechnical Report including soil types, seasonal high water table and percolation rates.

☒ Traffic Study per Carson City Development Standards Section 12.13.1 (if applicable).

☒ Documentation of property taxes paid to date on all parcels associated with the proposed project.

Once staff has determined your application is complete, you will be required to provide 15 hard copies of the entire application packet, including a wet stamped tentative map (24”x36”) and a reduced copy of the map (11”x17”).

STATE AGENCY SUBMITTALS

To assure the necessary reviews are completed, the Planning Division will submit the Tentative Subdivision Map on your behalf to the Nevada Division of Environmental Protection and the Nevada Division of Water Resources.

To complete these submittals, we will require two wet-stamped copies of the Tentative Subdivision Map and payment of the State fees at the time of the City application submittal. This can be handled by submitting two checks to the Planning Division office: one payable to NDEP for $400 per map plus $3.00 per lot; the second payable to STATE WATER RESOURCES in the amount of $180 per map plus $1.00 per lot. The checks will be routed to the State offices with their copy of the Tentative Subdivision Map.

NOTE: Fees are subject to change. While Carson City makes every effort to keep this application up to date, it is the applicant’s responsibility to ensure State agency checks submitted are for the current fee amounts.

Carson City Planning Division

108 E. Proctor St.
Carson City, Nevada 89701
(775) 887-2180
Planning@carson.org
www.carson.org

Carson City Road Name Reservation/Approval Application

All road names must conform to the Carson City Municipal Ordinance Title 18 Appendix Division 22: Street Naming and Address Assignment Regulation.

Street Naming Guidelines:

- A primary street name shall be used only once and shall not be used in any other alignment. The same primary street name cannot be repeated with a different suffix nor may a name be separated and used again (e.g. Bitterroot St. - Bitter Root St.).
- Once a primary street name is assigned to any alignment it shall not change anywhere along the extension of that alignment unless the subject primary street name does not and cannot in the future connect to the existing public right-of-way.
- Names that are the same or pronounced the same (homonyms) or similarly with different spellings may be used only once, e.g., Ellis: Alice, Allen: Alan, Hinson: Henson.
- Only the common or correct spelling of street names will be accepted. E.g. Jane not Jayne, or Frederick not Phrederyck.
- Street names in a foreign language will not be considered unless accompanied by a common English translation and their meaning is inoffensive and/or reasonable.
- Foreign language suffixes (e.g. Via, Camino, Rua, Chemin, Rue, etc.) shall not be used in any part of a street.
- Names that tend to be slurred or difficult to pronounce by emergency response services shall not be used.
- Street names are restricted to a maximum of 20 characters (includes street name, space, prefix, and suffix).
- Directional prefixes and suffixes are not permitted as primary street names (e.g. Northgate Rd.).
- No street names can be a stand-alone preposition, conjunction, numbers or letters.
- Driveways shall not be named.

The proposed street names shall be reserved as long as a Tentative Map has not expired. Street names are to be confirmed and are to be placed on the Final Map, including all private street names. The developer must specify any unusual addressing requirements. Street addresses shall not be issued until recordation of the plat.

Submittal Requirements:

- The application form must be fully completed and accompanied by a road layout plan, including future road extensions and existing surrounding roads. Please number the new roads for identification.

Carson City Planning Division

108 E. Proctor St.
Carson City, Nevada 89701
(775) 887-2180
Planning@carson.org
www.carson.org

Carson City Road Name Reservation/Approval Application

Request Date: August 18, 2022	**Requested By:** KLS Planning & Design Group
Phone Number: 775-857-7710	**Email:** johnk@klsdesigngroup.com
Total Number of Roads: 1	**Subdivision Name:** Ash Canyon

Road #	Proposed Road Name	Public or Private	Accepted or Denied	Reason for Denial	Comments
1	Ormsby Circle	Private			

This application is not complete without the road layout map with the proposed street names shown.

Master Plan Policy Checklist

Conceptual & Tentative Subdivisions, PUD's & Parcel Maps

PURPOSE

The purpose of a development checklist is to provide a list of questions that address whether a development proposal is in conformance with the goals and objectives of the 2006 Carson City Master Plan that are related to subdivisions of property. This checklist is designed for developers, staff, and decision-makers and is intended to be used as a guide only.

Development Name: Ash Canyon

Reviewed By: _____

Date of Review: _____

DEVELOPMENT CHECKLIST

The following five themes are those themes that appear in the Carson City Master Plan and which reflect the community's vision at a broad policy level. Each theme looks at how a proposed development can help achieve the goals of the Carson City Master Plan. A check mark indicates that the proposed development meets the applicable Master Plan policy. The Policy Number is indicated at the end of each policy statement summary. Refer to the Comprehensive Master Plan for complete policy language.

CHAPTER 3: A BALANCED LAND USE PATTERN

The Carson City Master Plan seeks to establish a balance of land uses within the community by providing employment opportunities, a diverse choice of housing, recreational opportunities, and retail services.

Is or does the proposed development:

- ☑ Consistent with the Master Plan Land Use Map in location and density?
- ☑ Meet the provisions of the Growth Management Ordinance (1.1d, Municipal Code 18.12)?
- ☑ Encourage the use of sustainable building materials and construction techniques to promote water and energy conservation (1.1e, f)?
- ☐ Located in a priority infill development area (1.2a)?
- ☐ Provide pathway connections and easements consistent with the adopted Unified Pathways Master Plan and maintain access to adjacent public lands (1.4a)?

- ☐ Encourage cluster development techniques, particularly at the urban interface with surrounding public lands, as appropriate, and protect distinctive site features (1.4b, c, 3.2a)?
- ☐ At adjacent county boundaries, coordinated with adjacent existing or planned development with regards to compatibility, access and amenities (1.5a)?
- ☑ Located to be adequately served by city services including fire and sheriff services, and coordinated with the School District to ensure the adequate provision of schools (1.5d)?
- ☐ In identified Mixed-Use areas, promote mixed-use development patterns as appropriate for the surrounding context consistent with the land use descriptions of the applicable Mixed-Use designation, and meet the intent of the Mixed-Use Evaluation Criteria (2.1b, 2.2b, 2.3b, Land Use Districts, Appendix C)?
- ☑ Provide a variety of housing models and densities within the urbanized area appropriate to the development size, location and surrounding neighborhood context (2.2a, 9.1a)?
- ☐ Protect environmentally sensitive areas through proper setbacks, dedication, or other mechanisms (3.1b)?
- ☑ If at the urban interface, provide multiple access points, maintain defensible space (for fires) and are constructed of fire resistant materials (3.3b)?
- ☐ Sited outside the primary floodplain and away from geologic hazard areas or follow the required setbacks or other mitigation measures (3.3d, e)?
- ☑ Provide for levels of services (i.e. water, sewer, road improvements, sidewalks, etc.) consistent with the Land Use designation and adequate for the proposed development (Land Use table descriptions)?
- ☐ If located within an identified Specific Plan Area (SPA), meet the applicable policies of that SPA (Land Use Map, Chapter 8)?

CHAPTER 4: EQUITABLE DISTRIBUTION OF RECREATIONAL OPPORTUNITIES

The Carson City Master Plan seeks to continue providing a diverse range of park and recreational opportunities to include facilities and programming for all ages and varying interests to serve both existing and future neighborhoods.

Is or does the proposed development:

- ☑ Provide park facilities commensurate with the demand created and consistent with the City's adopted standards (4.1b, c)?
- ☐ Consistent with the Open Space Master Plan and Carson River Master Plan (4.3a)?

CHAPTER 5: ECONOMIC VITALITY

The Carson City Master Plan seeks to maintain its strong diversified economic base by promoting principles which focus on retaining and enhancing the strong employment base, include a broader range of retail services in targeted areas, and include the roles of technology, tourism, recreational amenities, and other economic strengths vital to a successful community.

Is or does the proposed development:

- ☑ Incorporating public facilities and amenities that will improve residents' quality of life (5.5e)?
- ☐ Promote revitalization of the Downtown core (5.6a)?
- ☐ Incorporate additional housing in and around Downtown, including lofts, condominiums, duplexes, live-work units (5.6c)?

CHAPTER 6: LIVABLE NEIGHBORHOODS AND ACTIVITY CENTERS

The Carson City Master Plan seeks to promote safe, attractive and diverse neighborhoods, compact mixed-use activity centers, and a vibrant, pedestrian-friendly Downtown.

Is or does the proposed development:

- ☑ Promote variety and visual interest through the incorporation of varied lot sizes, building styles and colors, garage orientation and other features (6.1b)?
- ☑ Provide variety and visual interest through the incorporation of well-articulated building facades, clearly identified entrances and pedestrian connections, landscaping and other features consistent with the Development Standards (6.1c)?
- ☑ Provide appropriate height, density and setback transitions and connectivity to surrounding development to ensure compatibility with surrounding development for infill projects or adjacent to existing rural neighborhoods (6.2a, 9.3b 9.4a)?
- ☐ If located in an identified Mixed-Use Activity Center area, contain the appropriate mix, size and density of land uses consistent with the Mixed-Use district policies (7.1a, b)?
- ☐ If located Downtown:
  - ☐ Integrate an appropriate mix and density of uses (8.1a, e)?
  - ☐ Include buildings at the appropriate scale for the applicable Downtown Character Area (8.1b)?
  - ☐ Incorporate appropriate public spaces, plazas and other amenities (8.1d)?

CHAPTER 7: A CONNECTED CITY

The Carson City Master Plan seeks promote a sense of community by linking its many neighborhoods, employment areas, activity centers, parks, recreational amenities and schools with an extensive system of interconnected roadways, multi-use pathways, bicycle facilities, and sidewalks.

Is or does the proposed development:

- ☐ Promote transit-supportive development patterns (e.g. mixed-use, pedestrian-oriented, higher density) along major travel corridors to facilitate future transit (11.2b)?
- ☑ Maintain and enhance roadway connections and networks consistent with the Transportation Master Plan (11.2c)?
- ☑ Provide appropriate pathways through the development and to surrounding lands, including parks and public lands, consistent with the Unified Pathways Master Plan (12.1a, c)?

CARSON CITY
PLANNING DIVISION

108 E. Proctor Street
Carson City, Nevada 89701
(775) 887-2180
Hearing Impaired: 711

July 8, 2022

John Krmpotic
KLS Planning & Design
1 East 1st Street, Suite 1400
Reno, NV 89501
Via Email: johnk@klsdesigngroup.com

Conceptual Map: CSM-2022-0010

Project Description: Proposed subdivision of 8.41 acres into 41 single family residential lots ranging in size from 6,181 to 8,360 square feet; and a zoning map amendment from Single Family 12,000 to Single Family 6,000.

Review Date: June 21, 2022

Conceptual Map Comments

The Conceptual Map Committee has reviewed the proposed plans for the proposed subdivision. The following requirements and comments are provided for your use in preparing final plans and submittals for the project. Please be advised that the comments presented in this letter are based on the plans submitted with the Conceptual Map application and may not include all the requirements or conditions which may be placed on the project at the time of submittal of tentative map. It is hoped, however, that this review will expedite the completion of your project.

Some of the requirements noted below may have already been shown or otherwise indicated in the plans and need only be submitted in the final improvement plan form. Final on- and off-site improvement plans shall be submitted to the Permit Center, (108 E. Proctor Street). These plans must contain all appropriate requirements of Development Engineering, Health, Utilities, Fire, and Planning Divisions/Departments.

SITE INFORMATION:

Address: 1051 North Ormsby Blvd
APN: 001-241-14
Parcel Size: 8.41 acres
Master Plan Designation: Medium Density Residential (MDR)
Zoning: Single Family 12,000 (SF12)

PLANNING DIVISION
Contact Heather Ferris, Planning Manager
hferris@carson.org; 775-283-7080

1. To achieve the requested lot size, a zoning map amendment to Single Family 6,000 will be required.

2. The proposed map will require Tentative Map approval by the Planning Commission and the Board of Supervisors.

3. Please note, if parking cannot be accommodated on-street, separate on-site guest parking is required to be provided at a ratio of 1 space for every 2 units per Division 2 of the Development Standard.

4. As currently proposed, this is a regular subdivision therefore the setbacks outlined in CCMC 18.04.190 for the SF6 zoning district must be met. You are proposing reduced setbacks along the front property lines as small as 10 feet to the front of the house. The project must either be redesigned to meet the setbacks outlined in CCMC 18.04.190 or you may consider applying for a Planned Unit Development or a Common Open Space Development, both of which offer the ability to reduce setbacks in exchange for a percentage of open space.
    a. If you pursue either a Planned Unit Development or a Common Open Space Development, the application should include:
        i. An exhibit demonstrating, both quantitatively and qualitatively, how the project will meet the open space requirements.
        ii. Street side and periphery setbacks.
    b. If you pursue a Common Open Space Development your application must include a site analysis per CCMC 17.10.035.

Development Engineering
Contact Stephen Pottey, Senior Project Manager
spottey@carson.org; 775-283-7079

Transportation:
1. A memo signed by a professional engineer must be provided with the tentative map application showing that the project will not generate more than 80 peak hour trips and will not generate more than 500 trips per day according to ITE trip generation rates. If either of these limits is expected to be exceeded, a traffic impact study signed by a professional engineer must be provided, meeting the requirements of CCDS 12.13. Please contact Bryan Byrne for traffic impact study scoping at 775-283-7431.

2. The City's transportation master plan includes extending North Ormsby Boulevard north to West Winnie Lane. This subdivision will be required to contribute its pro rata share to the extension of North Ormsby Boulevard. In addition to the trip generation rate, a trip distribution must be provided with the tentative map to determine this pro rata share.

3. Half-street improvements must be installed on North Ormsby Boulevard along the project frontage. This will include striping, curb, gutter, sidewalk and paving to meet the city standard detail for a two-lane urban collector with bike lanes. Bike lane striping must be installed on both sides of the street. Right-of-way must be dedicated as necessary to contain the required improvements with the final map.

4. Please ensure driveways are a minimum of 50 feet from the entrances of the subdivision.

5. The city cannot accept the proposed streets as public streets due to the City's current streets funding deficit and due to the fact that these streets only serve the subject project.
   a. Please note that other developers in the past have obtained City approval of public streets by volunteering to provide the City, prior to approval of the final map, with a check equal to the cost of a slurry seal of the internal public roads (square footage of the asphalt section of the road multiplied by the price per square foot that Carson City has negotiated with its seasonal provider) plus estimated inflation for 5 years and all costs associated with slurry seal to the satisfaction of the public works director.

6. The internal street must meet either Carson City Standard Detail C-5.1.8 for public streets, or C-5.1.8.1 for private streets. Both street sections require sidewalk on both sides. There is an optional road verge in C-5.1.8.1.

Water:

7. With the tentative map, a water main analysis signed by a professional engineer must be submitted in accordance with CCDS 15.3.1(a) to show that adequate pressure will be delivered to the meter and fire flows meet the minimum requirements of the Carson City Fire Department. Please see attached fire flow sheet. The entire development will be in the 4960-pressure zone.

8. New Water mains shall be hot tapped into the existing 12-inch main in Ormbsy Blvd and looped.

9. All water services shall be perpendicular to water mains.

10. All water services and mains shall have proper clearance from other utilities.

Sewer:

11. The proposed sewer lift station must be located on private property and be privately owned and maintained.

12. The lift station must meet the requirements of CCDS 15.3.3

13. There is an existing 8” AC main in N Ormsby Blvd. This main is approximately 45% full (d/D).

14. With the tentative map, a sewer main analysis signed by a professional engineer must be submitted that includes addressing the effect of flows on the existing City system. See section 15.3.2 of CCDS.

Storm Drainage and Flooding:

15. With the tentative map a conceptual drainage study must be provided. In July 2021the Carson City Drainage Manual became effective and is required for all new and redeveloped parcels. The detention design storm requirements changed from a 5-year, 24-hour event to a 10-year 24-hour event. The Drainage Manual includes Low Impact Development (LID) design requirements. The manual is available here: https://www.carson.org/home/showpublisheddocument/76280/637624691903200000

16. Explanation provided for proposed drainage improvements seem reasonable. Coordination with developer of Andersen Ranch Estates shall be continued to ensure drainage system will function as designed.

17. Please explain how the existing irrigation and water rights will be handled.

General Comments:

18. Any engineering work done on this project must be wet stamped and signed by an engineer licensed in Nevada. This will include site, grading, utility and erosion control plans as well as standard details.

19. All construction work must be to Carson City Development Standards (CCDS) and meet the requirements of the Carson City Standard Details.

20. Fresh water must be used for Dust control. Contact the Water Operations Supervisor Public Works at 283-7382 for more information.

21. A private testing agreement will be necessary for the compaction and material testing in the street right of way. The form can be obtained through Carson City Permit Engineering.

22. An erosion control plan meeting section 13 of CCDS will be required in the plan set.

23. New electrical service must be underground.

24. Please show sufficient utility information to ensure that minimum spacing is met between water meters and dry utilities.

25. Any work performed in the street right of way will require a traffic control plan and a timeline type schedule to be submitted before the work can begin. A minimum of one week notice must be given before any work can begin in the street right of way.

26. Please show any easements on the construction drawings.

27. A Construction Stormwater Permit from the Nevada Division of Environmental Protection (NDEP) will be required for the construction of projects 1 acre or greater.

28. A Dust Control Permit from NDEP will be required for any project 5 acres or greater.

These comments are based on a very general site plan and do not indicate a complete review. All pertinent requirements of Nevada State Law, Carson City Code, and Carson City Development Standards will still apply whether mentioned in this letter or not.

Environmental Control
Contact Jen Churchward, Environmental Control Officer
jchurchward@carson.org; 775-283-7409

1. An asbestos assessment is required on all applicable materials being demolished, per CCMC 12.12.065 and 40 CFR Part 61.

2. After receiving results back from the asbestos assessment, complete Carson City's Acknowledgement of Asbestos Assessment Form. Submit a copy of this form along with a copy of the asbestos assessment at the Carson City Building Department, per CCMC 12.12.065.

3. An EPA 10 Day Notification is required. Submit a completed copy of this document to the Carson City Building Department along with proof that the Notification was sent to EPA Region IX, per CCMC 12.12.065.

4. Please note: if any asbestos containing material is to be taken to the Carson City Landfill for disposal, you must first obtain an Industrial Waste Manifest from the ECA Department before this material will be allowed to enter the landfill, per CCMC 12.12.050. If asbestos containing material is taken to Lockwood Landfill, ECA will require the receipt from Lockwood to be submitted to Carson City Building Department.

These comments are based on a very general site plan and do not indicate a complete review. All pertinent requirements of Federal Code, Nevada State Law, Carson City Municipal Code, and Carson City Development Standards will still apply whether mentioned in this letter or not.

Fire Department
Contact Jenny Williamson, Fire Inspector II/Investigator, CFI
jwilliamson@carson.org; 775-283-7152

1. Project must comply with the International Fire Code and northern Nevada fire code amendments as adopted by Carson City.

2. As noted on the plans, the project as presented does not comply with IFC Appendix D requirements for two points of access with remoteness to serve the subdivision. As noted in the Alternative Means and Methods note, an AM&M shall be approved prior to the final map and site improvement permit.
   a. Per Appendix D107.1 exception: Provide each dwelling unit with an approved automatic sprinkler system in accordance with section 903.3.1.1, 903.3.1.2, or 903.3.1.3, the remoteness requirement shall not be required.

Parks, Recreation and Open Space
Contact Nick Wentworth, Project Manager
nwentworth@carson.org; 775-283-7733

1. The City will not be responsible for any landscape or irrigation system maintenance on the project. All landscaping and landscape maintenance in the right of way will be the sole responsibility of the owner. The developer is required to maintain all common landscape and open space areas within the development including any landscaping in the street(s) right of ways in perpetuity.

2. Carson City is a Bee City, USA. As a result, the developer shall use approximately 50% pollinator friendly plant material for any required landscaping on the project site. Also, any remaining landscape plant material selection needs to be consistent with the City's approved tree species list or other tree species, as approved by the City.

3. The developer is required to incorporate "best management practices" into their construction documents and specifications to reduce the spread of noxious weeds. The spread of invasive and noxious weeds is a significant issue in construction projects that involve land disturbance. Earth moving activities contribute to the spread of weeds, as does the use of contaminated construction fill, seed, or erosion-control products. Experience has demonstrated that prevention is the least expensive and most effective way to halt the spread of noxious and invasive weeds. Preventing the establishment or spread of weeds relies upon:

   - Educating workers about the importance of managing weeds on an ongoing basis;
   - Properly identifying weed species to determine most appropriate treatment strategies;
   - Avoiding or treating existing weed populations; and
   - Incorporating measures into projects that prevent weed seeds or other plant parts from establishing new or bigger populations such as certification of weed-free products.

4. Deciduous trees must be planted a minimum of 5' from any city/public street, sidewalk or pathway. Evergreen trees must be planted a minimum of 10' from any city/public street, sidewalk or pathway. Fruit bearing, "non-fruiting" flowering or any other trees that drop debris such as seed pods will not be permitted near or placed where they will eventually hang over city/public sidewalks or pathways.

5. Carson City Municipal Code: Title 18, Division 3 should be reviewed by any/all parties involved in the proposed landscape design prior to landscape plans being submitted to the city for final approval of a building or site improvement permit. Note: Special care and consideration should be taken in the protection of existing trees on-site.
6. The project is subject to the collection of Residential Construction Tax (RCT), compliant with NRS Chapter 278 and Carson City Municipal Code (CCMC 15.60).

Building Division
Contact Corey Coleman, Building Official
ccoleman@carson.org; 775-283-7052

1. If side yards are less than or equal 10' AC units may be required to be located in back yards.

We look forward to working with you on this project.

Sincerely,
Community Development Department, Planning Division

Heather Ferris
Planning Manager

cc: CSM-2022-0010

Carson City Planning Division
108 E. Proctor Street· Carson City NV 89701
Phone: (775) 887-2180 • E-mail: planning@carson.org

FILE

APPLICANT	PHONE #
John Krmpotic, AICP - KLS Planning & Design	775-857-7710

MAILING ADDRESS, CITY, STATE, ZIP
1 East 1st Street, Suite 1400, Reno, NV 89501

EMAIL ADDRESS
johnk@klsdesigngroup.com

PROPERTY OWNER	PHONE #
KP Investors, LLC - Attn: Pat Owens	775-544-5464

MAILING ADDRESS, CITY, STATE, ZIP
12000 Red Rock Road, Reno, NV 89508

EMAIL ADDRESS
powens@kpinvestorsllc.com

APPLICANT AGENT/REPRESENTATIVE	PHONE #
John Krmpotic, AICP - KLS Planning & Design	775-857-7710

MAILING ADDRESS, CITY, STATE, ZIP
1 East 1st Street, Suite 1400, Reno, NV 89501

EMAIL ADDRESS
johnk@klsdesigngroup.com

FOR OFFICE USE ONLY:

ZONING MAP AMENDMENT

FEE: $2,450.00 + noticing fee

SUBMITTAL PACKET

- ☐ Application Form
- ☐ Written Project Description
- ☐ Site Plan
- ☐ Proposal Questionnaire With Both Questions and Answers Given, Supporting Documentation
- ☐ Applicant's Acknowledgment Statement
- ☐ 5 Completed Application Packets (1 Original + 4 Copies)
- ☐ Documentation of Taxes Paid-to-Date (1 copy)
- ☐ Project Impact Reports (Engineering-4 copies)
- ☐ CD containing application data (all to be submitted once application is deemed complete by staff)

Application Reviewed and Received By:

_____

Submittal Deadline: Planning Commission application submittal schedule.

Note: Submittals must be of sufficient clarity and detail such that all departments are able to determine if they can support the request. Additional Information may be required.

Project's Assessor Parcel Number(s)	Street Address	ZIP Code
001-241-14	1051 N Ormsby Blvd, Carson City, NV 89703	

Project's Master Plan Designation	Project's Current Zoning	Nearest Major Cross Street(s)
Medium Density Residential (MDF	Single Family 12,000 (SF-12)	N Ormsby Blvd & W Washington St

Briefly describe the components of the proposed project: in accordance with Carson City Municipal Code (CCMC), Section 18.02.075. In addition to the brief description of your project and proposed use, provide additional page(s) to show a more detailed summary of your project and proposal.

This is a 41-lot SF detached project with 6,306 sq. ft. average lot sizes. See the attached Project Description for details.

PROPERTY OWNER'S AFFIDAVIT

I,_____, being duly deposed, do hereby affirm that I am the record owner of the subject property, and that I have knowledge of, and I agree to, the filing of this application.

_____ _____ _____
Signature Address Date

Use additional page(s) if necessary for other names.

On_____, 2___, _____, personally appeared before me, a notary public, personally known (or proved) to me to be the person whose name is subscribed to the foregoing document and who acknowledged to me that he/she executed the foregoing document.

_____
Notary Public

Carson City Planning Division
108 E. Proctor Street· Carson City NV 89701
Phone: (775) 887-2180 • E-mail: planning@carson.org

FOR OFFICE USE ONLY:

ZONING MAP AMENDMENT

FEE: $2,450.00 + noticing fee

SUBMITTAL PACKET

- ☐ Application Form
- ☐ Written Project Description
- ☐ Site Plan
- ☐ Proposal Questionnaire With Both Questions and Answers Given, Supporting Documentation
- ☐ Applicant's Acknowledgment Statement
- ☐ 5 Completed Application Packets (1 Original + 4 Copies)
- ☐ Documentation of Taxes Paid-to-Date (1 copy)
- ☐ Project Impact Reports (Engineering-4 copies)
- ☐ CD containing application data (all to be submitted once application is deemed complete by staff)

Application Reviewed and Received By:

_____

Submittal Deadline: Planning Commission application submittal schedule.

Note: Submittals must be of sufficient clarity and detail such that all departments are able to determine if they can support the request. Additional information may be required.

FILE #

APPLICANT	**PHONE #**
EDWARD P. OWENS	775-544-8464
MAILING ADDRESS, CITY, STATE, ZIP	
PATOWENS@USA.COM	
EMAIL ADDRESS	
KP INVESTORS, LLC	SAME
PROPERTY OWNER	**PHONE #**
12460 SPRUCE LN, RENO, NV 89511	
MAILING ADDRESS, CITY, STATE, ZIP	
~~SAME~~	
EMAIL ADDRESS	
SAME	
APPLICANT AGENT/REPRESENTATIVE	**PHONE #**
OWNER/MANAGE	775-544-8464
MAILING ADDRESS, CITY, STATE, ZIP	
SAME	
EMAIL ADDRESS	
SAME	

Project's Assessor Parcel Number(s)	Street Address	ZIP Code
001-241-14	1051 + 1099 ORMSBY BLVD, CARSON CITY	89703

Project's Master Plan Designation	Project's Current Zoning	Nearest Major Cross Street(s)

Briefly describe the components of the proposed project: in accordance with Carson City Municipal Code (CCMC), Section 18.02.075. In addition to the brief description of your project and proposed use, provide additional page(s) to show a more detailed summary of your project and proposal.

PROPERTY OWNER'S AFFIDAVIT

I, EDWARD PATRICK OWENS, being duly deposed, do hereby affirm that I am the record owner of the subject property, and that I have knowledge of, and I agree to, the filing of this application.

Signature _____ Address 12460 SPRUCE LN Date AUG. 16, 2022

Use additional page(s) if necessary for other names.

On August 16th, 2022, Edward Patrick Owens, personally appeared before me, a notary public, personally known (or proved) to me to be the person whose name is subscribed to the foregoing document and who acknowledged to me that he/she executed the foregoing document.

Garrett Pettipiece
Notary Public

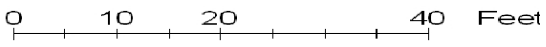
GARRETT PETTIPIECE
Notary Public - State of Nevada
Appointment Recorded in Washoe County
No: 22-2225-02 - Expires March 26, 2026

ZONING MAP AMENDMENT CHECKLIST

Each application must contain the following information:

1. Detailed Written Project Description

2. Site Plan drawn at an appropriate scale or dimension to deptict the parcel and containing the following information:
    a. Show a north point arrow and plot plan scale. A bar scale is preferred because when the drawings are reduced, it will still show an accurate scale. A bar scale could appear like this for a project that has a scale of one inch equals twenty feet on the original plot plan:



    b. Vicinity map must be shown on map must be shown on the plot plan. This is a map, not to scale, that you would provide a visitor unfamiliar with the area as directions to get to your property. It will show adjacent streets.
    c. Title block in lower right-hand corner including:
        i. Applicant's name, mailing address, and daytime phone number (including area code).
        ii. The name, mailing address, and daytime phone number of the person preparing the plot plan, if different from applicant.
        iii. The name, mailing address, and daytime phone number of the record owner of the subject property, if different from applicant.
        iv. Assessor Parcel Number(s) and address (or location if no address) of the subject property.
        v. Project title and permit request. (Example: variance, special use permit)
    d. Property lines of the subject property with dimensions indicated.
    e. All existing structures shall be shown, including:
        i. Distances from property lines indicated by dimensions.
        ii. Distances between buildings shall be indicated on the plot plan.
        iii. Clearly label existing structures and show dimensions.
        iv. Square footage of all existing structures.
        v. If a commercial or multi-family project, show all elevations and submit roof plans showing all proposed roof equipment and means of screening from view along with plans for trash receptacle screening.
    f. Project access:
        i. Show the location of street access.
        ii. Show adjoining street names.
        iii. Show all curb cuts with dimension.
    g. Show the Assessor Parcel Number(s) of the adjoining parcels.
    h. Show all existing parking and traffic aisles with dimensions.
    i. Show location of existing utilities and indicate whether overhead or underground.

3. Response to Fining and Questionnaire (attached)

4. Documentation of Taxes Paid-To-Date

5. Project impact reports - documentation regarding project impacts related to traffic, drainage, water, and sewer, including supportive calculations and/or reports per the Carson City Development Standards Divisions 12, 14 and 15.

ZONING MAP AMENDMENT FINDINGS

The Carson City Municipal Code (CCMC 18.02.075) sets out the required findings. These can be paraphrased as:

a.The Zoning Map Amendment must support the goals and policies of the Carson City Master Plan for the neighborhood of the subject project.

b.The Zoning Map Amendment and subsequent development of the property will not be or have detrimental impacts on other property in the neighborhood.

c.The Zoning Map Amendment will have a general benefit to the people of the City as a whole.

d.The applicant shall have the burden of proof of going forward with the evidence and the burden of persuasion on all questions of fact, and must provide adequate information in the application and on the site plan to substantiate required "Findings".

In order for you to meet the requirement that "proof of satisfying the findings come from the applicant," you are going to need to do some background work to provide the facts and evidence.

Here are the ways you can get the facts:

1. Review the goals listed in the Master Plan and identify those policies that support your proposal. The Master Plan Policy Checklist is attached to this application. You may want to acquire a free CD or purchase a paper copy of the Master Plan from the Planning Division, or review the copy in the Planning Office or in the reference section of the Carson City Public Library on Roop Street, or use our website at www.carson.org

   In addition to the land use element, you may find other objectives or recommendations in the Master Plan's other elements. You may review the Parks and Recreation Master Plan or Transportation Master Plan among other Master Plan elements to see if there are recommendations supporting your proposal.

2. Show on your plot plan and describe in writing, how you are planning to incorporate design, landscaping, or other features to protect the neighborhood from any potential adverse effects. Look at your proposal objectively. Try to consider what you would feel if you lived next door and someone were to be proposing this Zoning Map Amendment next to your business or home.

3. The more information you assemble before turning your project into the Planning Division helps to ensure that there are few or no "surprises" when other departments and agencies look at your proposal.

Complete information provided with your application and quality drawings or plans you submit make it easier for the Commission and the Board to arrive at their decision.

Remember, it's your job to ensure that the Commission and Board have the information and legible drawings to make the required findings. The Planning Division can offer some help, but we cannot do the work for you. If you have any questions, please give us a call.

PROPOSAL DOCUMENTATION

In the introduction, there are a number of findings of fact listed that must be supported by data in your application. These findings are enumerated in Sections 18.02.075 of the Carson City Municipal Code. State law requires that the Planning Commission and the Board of Supervisors consider and support these issues with facts in the record. You need to complete the attached Proposal Questionnaire with as much detail as possible to ensure that there is adequate evidence supporting your proposal.

The questionnaire lists the findings in the exact language found in the Carson City Municipal Code, then follows this with a series of questions seeking information to support the findings. Answer the questions as completely as possible so that you provide the Commission and Board with the details that they will need to consider your project.

Before a Zoning Map Amendment may be recommended for approval, the applicant shall provide evidence to the Commission and Board concerning the physical use of land and zoning currently existing in the general vicinity, and which have occurred in the previous five-year time period, that the proposal will not be detrimental to the immediate vicinity, and that the proposal supports the goals, objectives, and recommendations of the master plan elements concerning land use and related policies for the neighborhood where the subject project is situated.

The applicant for a Zoning Map Amendment shall have the burden of proof to provide facts supporting the proposed Zoning Map Amendment. For purposes of legal clarity, this shall include the burden of going forward with the evidence and the burden of persuasion on all questions of fact which are to be determined by the Commission and the Board. Additionally, the applicant shall provide adequate information in the application and on the site plan to substantiate the findings required in this section. The Commission and Board shall determine if the information presented is adequate to support their decision.

APPLICATION QUESTIONNAIRE

Please type or print in black ink on separate sheets. Attach to your application. List each question, then respond in your own words.

GENERAL REVIEW OF PERMITS

Source: CCMC 18.02.050 (Review) and 18.02.075 (ZMA). The Board of Supervisors and the Planning Commission in reviewing and judging the merit of a proposal for a variance, special use permit, or a zoning map amendment, shall direct its considerations to, and find that in addition to other standards in this title, the following conditions and standards are met:

1. That the proposed amendment is in substantial compliance with and supports the goals and policies of the Master Plan.

A. In reviewing the attached Carson City Master Plan Policy Checklist, determine which Policies are applicable to the proposal. Explain what features of the proposed project support your selection of Goals and Policies concerning land use and related policies for the neighborhood where the subject project is located.

2. That the proposed amendment will provide for land uses compatible with existing adjacent land uses and will not have detrimental impacts to other properties in the vicinity.

A. Describe the land uses and zoning adjoining your property (for example: North: two houses, Single-Family One Acre zoning; East: restaurant, Retail Commercial zoning, etc.), and how your zoning will be compatible with those uses and not cause detrimental impacts.

B. Describe land use and zoning changes in the general vicinity which have occurred in the previous five-year period.

3. That the proposed amendment will not negatively impact existing or planned public services or facilities and will not adversely impact the public health, safety and welfare.

4. That sufficient consideration has been exercised by the applicant in adapting the project to existing improvements in the area. Be sure to indicate the source of the information that you are providing (private engineer,

development engineering, title report, or other sources). Describe how your proposed Zoning Map Amendment will not adversely impact drainage, sewer, water, traffic, schools, emergency services, roadways and other city services.

A. Is drainage adequate in the area to support the density that may occur with the rezoning? How will drainage be accommodated? How have you arrived at this conclusion?

B. Are the water supplies in the area of your project adequate to meet your needs without degrading supply and quality to others? Is there adequate water pressure? Are the lines in need of replacement? Talk to the Utilities Department for the required information.

C. Are roadways sufficient in the area to serve the density that may occur from the rezoning? How have you arrived at this conclusion?

D. Will the school district be able to serve the student population that may occur from the rezoning? How have you arrived at this conclusion?

E. Are adequate means of access available for emergency vehicles to serve the site? What is the approximate response time for emergency vehicles? If your application is approved to rezone the property, will additional means of access be required for increased density? Or will existing access ways be adequate? How have you arrived at this conclusion?

APPLICATION FOR A Zoning Map Amendment

WHAT IS ZONING?

Carson City is divided into land use categories called "zoning districts", or more commonly just "zones". These categories include rural areas, residential areas in various densities, commercial areas, industrial areas, and lands set aside for public uses.

Each zone is intended to establish the standards that are used to determine where buildings are placed on a lot, the types of development standards (parking, landscaping, and similar items), and what types of uses are allowed in the district. Each zone has a stated "purpose" that provides a broad guideline as to the intent of the zone. The specific requirements are listed in the Nevada Revised Statutes (NRS) and the Carson City Municipal Code (CCMC). Copies are available at the Planning Division or the Carson City Library.

In order to obtain a zoning district change for a parcel, the land owner must first look at the Carson City Master Plan. The Master Plan is the blueprint for long-term land development and uses in Carson City.

The Master Plan land use map shows where in the City various zones are permitted and which category (residential, commercial, etc.) is allowed. The Master Plan allocates both general land uses and a range of densities.

The review of the Master Plan is very important when a property owner is considering a change in the land use zone for a parcel. It is not possible to request a commercial zoning district when the Master Plan shows the property in a residential classification. In this situation, in order to make a change from Residential to Commercial, a Master Plan Amendment is also required.

The "zoning ordinance" is actually a series of ordinances adopted and enacted by the Board of Supervisors over the years. The composite of all the various zoning ordinances are contained in Title 18 of the CCMC. This is called the "Zoning Code" or "the zoning ordinance." Whenever someone refers to zoning, the person is referring to Title 18 of the Municipal Code.

HOW DOES ONE CHANGE A ZONE?

In order to change a zone, an application for a Zoning Map Amendment must be filed with the Planning Division. A Zoning Map Amendment requires a recommendation from the Planning Commission and then the preparation of an ordinance for enactment by the Board of Supervisors. Because an ordinance is required, the Board must hold both a first and second reading of the ordinance prior to giving final approval to the Zoning Map Amendment. In addition, the Commission and the Board must be able to substantiate certain findings prior to approval (see next page).

The application is first submitted to the Planning Division for review. It is distributed to various City departments and other agencies for their comments. Then a staff report is prepared, making a recommendation to the Commission. The Commission holds a public hearing for which notices are mailed to your neighboring property owners seeking their comments or inquiries.

The Commission, at its hearing, may approve, approve a modified version of your request, or deny the Zoning Map Amendment. The Commission's decision is a recommendation forwarded to the Board of Supervisors.

Next, staff prepares the text of the ordinance for a "first reading" by the Board of Supervisors. At the first reading, the Board considers the recommendation from the Commission, the Planning Division's staff report, and any public comments.

The Board then takes action on the first reading. The Board may approve the ordinance as recommended by the Commission, it may modify the Commission's recommendation, or it may deny the Zoning Map Amendment.

If the Board approves the first reading, the ordinance is then scheduled for a second reading. At the second reading, the Board takes final action to enact a change in the City's Municipal Code to approve the Zoning Map Amendment. When the Board takes its final action, the zone change is effective the following Monday after the date of Board approval.

WHAT IF I DON'T WANT TO CHANGE MY ZONE, BUT A USE IN THE ZONE?

The zoning ordinance dictates the specific land uses permitted within a zoning district. You may be in a situation where you have the general category of zoning you require for your desired use (for example, commercial zoning), but the use that you want to establish is not permitted in the specific zone.

In this case, it is possible to apply to change the zoning ordinance itself. The application is similar to a Zoning Map Amendment, but there is more detailed data required from you. In addition, because of a change in the zoning code has a much greater effect on the City as a whole, there may be a greater reluctance on the part of the Planning Commission or Board of Supervisors to approve ordinance changes of this type.

Excerpts From the Carson City Master Plan

LAND USE

Carson City is located in Northwestern Nevada approximately 25 miles east of the California-Nevada state line at Lake Tahoe and approximately 25 miles south of Reno. The City is served by U. S. Highways 50 and 395 which trisect the community.

The City is approximately 25 miles long from east and west and varies from four to eleven miles wide. There are five major topographical features: Lake Tahoe, the Carson Range, the Virginia Range, the Pine Nut Mountains and Eagle Valley. The most prominent feature, when viewed from the populated areas of the city, are the steep slopes of the Carson Range which rise some 4,000 feet to exceed a 9,000 foot elevation. On the western border, Lake Tahoe provides inspirational vistas and unlimited recreational opportunities. The Pine Nut and Virginia Ranges exhibit contrast to the lush vegetation of the Carson Range with the granite foothills of the Pine Nuts and the rolling hills of the Virginia Range. The mountain ranges which surround populated Eagle Valley total 73.9% of the land area within Carson City.

Because of the mountainous terrain of Carson City's non-urbanized areas, use for other than recreation is limited. It does provide a wealth of opportunities for camping, hunting, fishing, and hiking and such winter activities as skiing and tobogganing.

Growth in Carson City has primarily occurred in Eagle Valley, which has been a commercial and trade area for more than a century. The City is divided into an urban area and a rural/suburban area. The urban area is primarily that portion of the Eagle Valley that lies within the 15% slope contour. It totals approximately 18,740 acres and comprises approximately 18.6% fo the total surface area of Carson City.

The City's urban district represents the boundaries of the City prior to its consolidation with Ormsby County in 1969. There have, in recent years, been annexations of small portions in the rural district into the urban boundaries which have increased the size slightly from its original 2,570 acres. Growth in the urban district has been consistent in all directions. The mid-1970's saw a shift in population from the urban district to the rural as urban land neared its capacity for sustained growth. From approximately 1975 to the present, growth in the rural district has increased at a rate which exceeds the increase displayed in the urban district.

During the last ten years of growth the proportion of properties developed for residential uses in the urban district has decreased from approximately 36.6% in 1970 to approximately 20% of the developed portions of the District in 1980. This has been a result of a marked increase in commercial development in the urban district in 1980.

The communities' residential uses consist of single family dwellings, multi-family dwellings and mobile homes.

Commercial uses are predominately located within 500 feet of Carson and East William Streets. Approximately 70% of commercial uses continue to be of a general retail nature, while tourist oriented uses (service stations, restaurants, motels, hotels and casinos) comprise the remaining 30%.

Industrial uses consume the smallest amount of land area of any designated use. Development of an industrial nature has occurred primarily in the northern and southern sections of the City with some manufacturing and storage uses developing in the Eastern sections.

Billing Fiscal Year (2022 - 2023)

Installment	Date Due	Tax Billed	Cost Billed	Penalty/Interest	Total Due	Amount Paid	Total Unpaid
1	8/15/2022	$1,651.79	$0.00	$0.00	$1,651.79	$0.00	$1,651.79
2	10/3/2022	$1,649.83	$0.00	$0.00	$1,649.83	$0.00	$1,649.83
3	1/2/2023	$1,649.83	$0.00	$0.00	$1,649.83	$0.00	$1,649.83
4	3/6/2023	$1,649.83	$0.00	$0.00	$1,649.83	$0.00	$1,649.83
Total		**$6,601.28**	**$0.00**	**$0.00**	**$6,601.28**	**$0.00**	**$6,601.28**

Payment History

	Fiscal Year	Total Due	Total Paid	Amount Unpaid
⊕	(2022 - 2023)	$6,601.28	$0.00	$6,601.28
⊕	(2021 - 2022)	$6,112.45	$6,112.45	$0.00
⊕	(2020 - 2021)	$5,951.74	$5,951.74	$0.00
⊕	(2019 - 2020)	$5,688.05	$5,688.05	$0.00
⊕	(2018 - 2019)	$5,427.52	$5,427.52	$0.00
⊕	(2017 - 2018)	$5,260.89	$5,260.89	$0.00
⊕	(2016 - 2017)	$5,077.49	$5,077.49	$0.00
⊕	(2015 - 2016)	$5,068.89	$5,068.89	$0.00
⊕	(2014 - 2015)	$4,911.60	$4,911.60	$0.00
⊕	(2013 - 2014)	$4,768.58	$4,768.58	$0.00

Show 5 More (17)

Related Names

Structure 1 of 4

Structure 2 of 4

Structure 3 of 4

Structure 4 of 4

Carson City Property Inquiry

- New Search
- Other Resources
  - County Website
- Other Resources
  - County Website

County Seal

Successful Payment Receipt

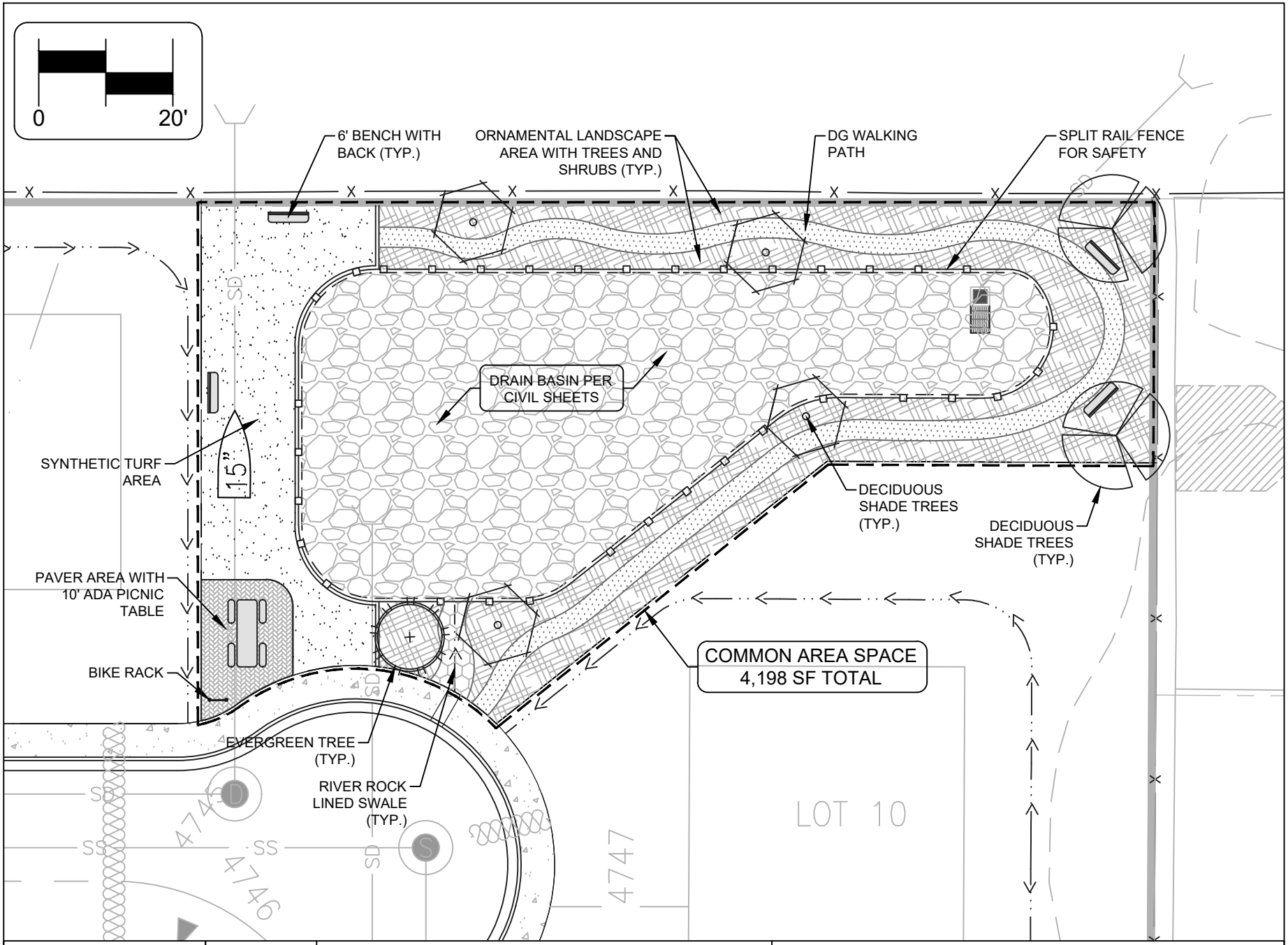
Please print this receipt for your records

Remittance ID:	2227268
Received:	August 18, 2022 10:29AM PDT
Customer Email:	kastle@bfba.com
Customer Phone Number:	9167091337
Amount:	$3,301.62
Service Fee:	$80.89
Service Fee Type:	Dual Transaction
Total Amount:	$3,382.51
Transaction Type:	Authorization and Capture
Card Information:	Visa KENNETH ASTLE **********0356
Billing Information:	Address Line 1: 3299 Old Orchard Lane Country: United States City: Loomis State: CA ZIP Code: 95650

Data updated: 2020/03/20

wEdge Version 5.0.7368.15458

Assembly Date: 2020/03/04



Scale: 1:20

Date: 10/14/2021

North

J&A DESIGN STUDIO
LANDSCAPE ARCHITECTURE
PO Box 6780
Reno, NV 89513
gjameson@jadesignreno.com
O: 775.507.4041 C: 775.741.8305

COMMON AREA LANDSCAPE SITE PLAN

Goni-Ormsby Neighborhood
Common Area Amenities

SHEET:
L1

Appendix B

Civil Reports/Studies

Tentative Onsite Drainage Study
Tentative Sewer Letter
Preliminary Geotechnical Report
Traffic Letter

TENTATIVE DRAINAGE REPORT

FOR

Ash Canyon SF

Prepared For:

KLS Planning & Design Group
Attn: John Krmpotic
1 E. 1st Street, Suite 1400
Reno, NV 89501

Prepared By:

MONTE VISTA CONSULTING

575 E. Plumb Lane, Suite 101
Reno, NV 89502
775.636.7905

August 2022

21.034

Table of Contents

Tentative Onsite Drainage Report

Project: Ash Canyon SF Date: August 2022

Description: The proposed Goni-Ormsby Neighborhood will create 41 new single-family residences. Improvements will include a single looped street, utilities and drainage improvements.

Location: 1051 N. Ormsby Blvd. Carson City, Nevada		APN: 001-241-14
Site Area: 7.98 ac	Developed Area: 7.98 ac	Disturbance: 7.98 ac
Flood Zone: Shaded X	Firm: 3200010092G	Restrictions: Yes

Pre-Development Discussion

Existing Development & Drainage Facilities:

The site is mostly open pasture land with two existing single-family residences located at the western property line near N. Ormsby Blvd. In addition to the two homes, there are several detached structures. The site slopes from west to east at a grade between 1%-2%. Storm flows generated onsite mostly infiltrate in smaller storm events and then shed to the east in larger events. An irrigation interceptor channel is located along the eastern property line which intercepts flow from the pasture to the west. This flow is routed to an existing 10" culvert near the midpoint of the eastern property line where flow is then routed to Lexington Avenue where it discharges into the curb and gutter. This flow continues to the public storm drain system located at the corner of W. Washington Street and Saratoga Way. Any flow exceeding the capacity of this 10" culvert will break to the northeast corner of the site prior to entering the residential properties to the east. There is very little elevation differential along the eastern property line therefore, any inconsistencies or blockages could cause the residential properties directly to the east to receive runoff from the subject site. The site is part of "Watershed A" which discharges into the existing detention facility located east of I-580 and north of E. 5th Street. From there flow is ultimately released to the Carson River.

Surrounding Properties:

- North: Undeveloped Residential Property (Anderson Ranch Estates Proposed)
- South: Existing Residential Development (SF6 zoning)
- East: Existing Residential Development (SF6 zoning)
- West: Undeveloped Residential Property (SF1A zoning)

Post-Development Discussion

Proposed Drainage Improvements:

The site will maintain existing 100-year drainage patterns with the proposed development while eliminating the irrigation channel discharge to the east. Additionally, in order to address the requirements of being located in FEMA Flood Zone Shaded X, the proposed structures will be elevated a minimum of 1.0' above existing grade. The flow generated on individual lots will be collected in the streets and directed to the northeast corner of the site via curb and gutter and underground storm drain improvements. A portion of flow generated by the (5) lots along the eastern property line of the

development will drain to a valley gutter running along the eastern side of the development. This flow will discharge directly to the stormwater detention pond via surface flow.

The storm drain improvements are designed to fully capture the 100-year storm event and the streets have the required additional capacity to convey 100-year storm flows. The storm drain network will discharge into a new detention pond proposed at the northeast corner of the site.

The detention pond is sized to accommodate the 10-Year 24-Hour storm event in accordance with the recently adopted drainage standards. Based on conversations with the Carson City Public Works Department, the channel being constructed in association with the Anderson Ranch Estates development to the north will be under Carson City jurisdiction. Carson City Public Works had indicated an orifice-controlled pond outlet into this channel will be acceptable which will provide a reliable detention facility. Flow in excess of the orifice capacity will back up into the pond maintaining pre-development discharge rates. In events exceeding the design event, flow will be allowed to freely discharge through an overflow outlet structure. The pond outlet will discharge directly into the drainage channel along the southern property of Anderson Ranch Estates. This flow will be routed through the storm drain system proposed with Anderson Ranch Estates and will maintain its current downstream drainage pattern contributing to the Carson River.

Low Impact Development Features:

This site will utilize a bio-retention pond to promote sedimentation and infiltration addressing LID requirements.

Conclusions:

The proposed development will be constructed in accordance with Carson City Design Standards. Peak flow from the site will be limited to pre-development conditions and the proposed bio-retention basin will address the post construction stormwater quality requirements.

Onsite Drainage Calculations - Rational Method

Project: Ash Canyon SF

Hydrology Methodology

Rational Method Analysis is used for all calculations in this report. Peak runoff is determined using equation 708 of the TMRDM:

Q = Peak Flow (cfs)

C = Runoff Coefficient

$$Q = CiA$$

The runoff coefficient is determined by land use type and surface type. For typical surfaces standard runoff coefficients can be determined utilizing Table 701 of the TMRDM. For this analysis, a composite runoff coefficient can be determined utilizing weighted averaging of the individual surface runoff coefficients.

i = Rainfall Intensity (in/hr)

Rainfall intensity is determined utilizing the NOAA Atlas Point Precipitation Frequency Estimates which give rainfall intensities based on average recurrence intervals and duration. The duration of a storm is also known as the time of concentration. For small urbanized paved areas shall be 5 minutes & 10 minutes for vegetated landscape areas.

A = Basin Area (acres)

Site Runoff Coefficients

5-Year	$C_{Undeveloped}$= 0.2	$C_{Impervious}$= 0.88	$C_{Landscape}$= 0.2	$C_{open\ Space}$= 0.05	$C_{Residential\ 0.25}$= 0.5
100-Year	$C_{Undeveloped}$= 0.5	$C_{Impervious}$= 0.93	$C_{Landscape}$= 0.5	$C_{open\ Space}$= 0.3	$C_{Residential\ 0.25}$= 0.65

Pre-Development Condition

1.1 Time of Concentration Calculations

Basin	Initial/Overland Time (ti)			Travel Time (tt)				tc (ti + tt)	tc Urbanized Basins Check		Final tc (min)
	Length (ft)	Slope (%)	ti (min)	Length (ft)	Slope (%)	Vel. (fps)	tt (min)	tc (min)	Length (ft)	tc=L/180+10	
X1	870	1.87	43.25	0	0.00	1.00	0.00	43.2	870	14.8	14.8

1.2 Intensity Calculations

NOAA Atlas PPFE 90%		Intensity (in/hr)	
Event	5	100	5	100
5	0.163	0.394	1.956	4.728
10	0.248	0.600	1.488	3.600
15	0.308	0.744	1.232	2.976
30	0.414	1.000	0.828	2.000
60	0.513	1.240	0.513	1.240

Basin	Tc	I5	I100
X1	14.8	1.241	2.997

1.3 Composite Runoff Coefficient

Basin	Area (s.f.)	Impervious Area (s.f.)	Undeveloped Area (s.f.)	C_5	C_{100}
X1	347483	19441	328042	0.10	0.34
Totals	**347483**	**19441**	**328042**	**0.10**	**0.34**

1.4 Rational Flow Calculations

Basin	Area (ac)	i_5 (in/hr)	i_{100} (in/hr)	Q_5 (cfs)	Q_{100} (cfs)	Q_{10} (24 hr) (cfs)	Target
X1	7.98	1.24	3.00	0.954	8.014	0.261	Offsite
Totals	**7.98**			**0.954**	**8.014**	**0.261**	

Post-Development Condition

2.1 Time of Concentration Calculations

Basin	Initial/Overland Time (ti)			Travel Time (tt)				tc (ti + tt)	tc Urbanized Basins Check		tc (min)	Final tc (min)
	Length (ft)	Slope (%)	ti (min)	Length (ft)	Slope (%)	Vel. (fps)	tt (min)	tc (min)	Length (ft)	tc=L/180+10		
1	141	1.90	10.35	891	1.77	2.75	5.40	15.8	1032	15.7	15.7	15.7
2	141	2.00	10.18	1027	1.56	2.50	6.85	17.0	1168	16.5	16.5	16.5
3	123	1.20	11.27	367	0.50	1.40	4.37	15.6	490	12.7	12.7	12.7
4	18	4.70	2.77	0	0.00	1.00	0.00	2.8	18	10.1	2.8	10.0

2.2 Intensity Calculations

NOAA Atlas PPFE 90%			Intensity (in/hr)	
Event	5	100	5	100
5	0.163	0.394	1.956	4.728
10	0.248	0.600	1.488	3.600
15	0.308	0.744	1.232	2.976
30	0.414	1.000	0.828	2.000
60	0.513	1.240	0.513	1.240

Basin	Tc	I5	I100
1	15.7	1.212	2.928
2	16.5	1.192	2.879
3	12.7	1.349	3.260
4	10.0	1.488	3.600

2.3 Composite Runoff Coefficient

Basin	Area (s.f.)	Impervious Area (s.f.)	Landscape Area (s.f.)	C_5	C_{100}
1	147752	147752	0	0.50	0.65
2	170206	170206	0	0.50	0.65
3	20981	20981	0	0.50	0.65
4	8544	0	8544	0.20	0.50
Totals	**347483**	**338939**	**8544**	**0.49**	**0.65**

2.3 Rational Flow Calculations

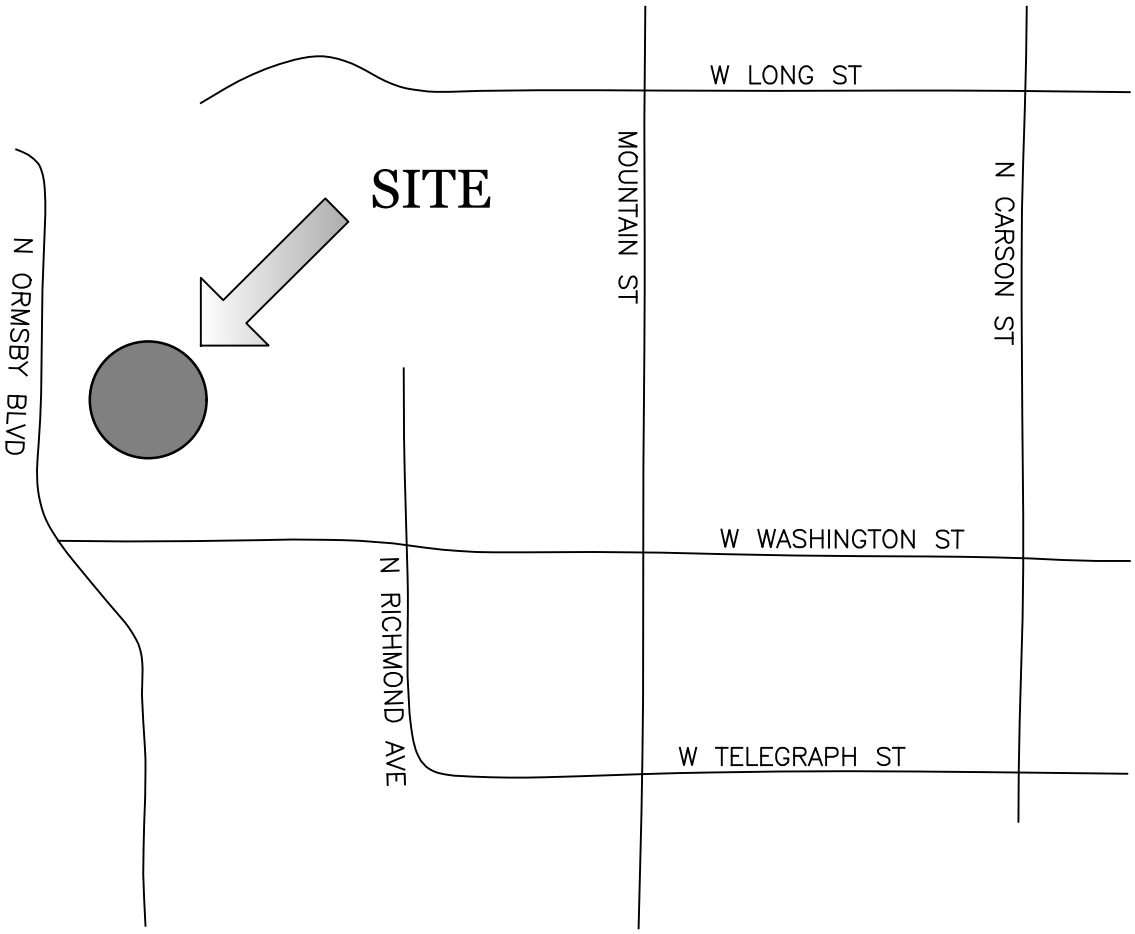
Basin	Area (ac)	i_5 (in/hr)	i_{100} (in/hr)	Q_5 (cfs)	Q_{100} (cfs)	Q_{10} (24 hr) (cfs)	Target Inlet
1	3.39	1.21	2.93	2.056	6.456	0.215	CB#1
2	3.91	1.19	2.88	2.329	7.312	0.248	CB#2
3	0.48	1.35	3.26	0.325	1.021	0.031	Valley Gutter
4	0.20	1.49	3.60	0.058	0.353	0.010	Pond
Totals	**7.98**			**4.768**	**15.142**	**0.503**	

2.6 Detention Calculations

Event	Pre-Dev Q_{10} (cfs)	Post-Dev Q_{10} (cfs)	Required Detention (cfs)	Required Detention (ft^3)
24 hr	0.26	0.50	0.24	20903

Pond	Area (ft^2)	Volume (ft^3)	Infiltration Rate (in/hr)	Volume Capacity (cfs)	Infiltration Capacity (cfs)	Total Capacity (cfs)	Q_{100} (24hr) (cfs)	Bypassed Flow (cfs)	Target	Factor of Safety
1	6080	22400	0.8	0.259	0.113	0.37	0.50	0.13	Offsite	1.5

Infiltration Rate per Web Soil Survey (percolation test will be required in association with the final civil design)



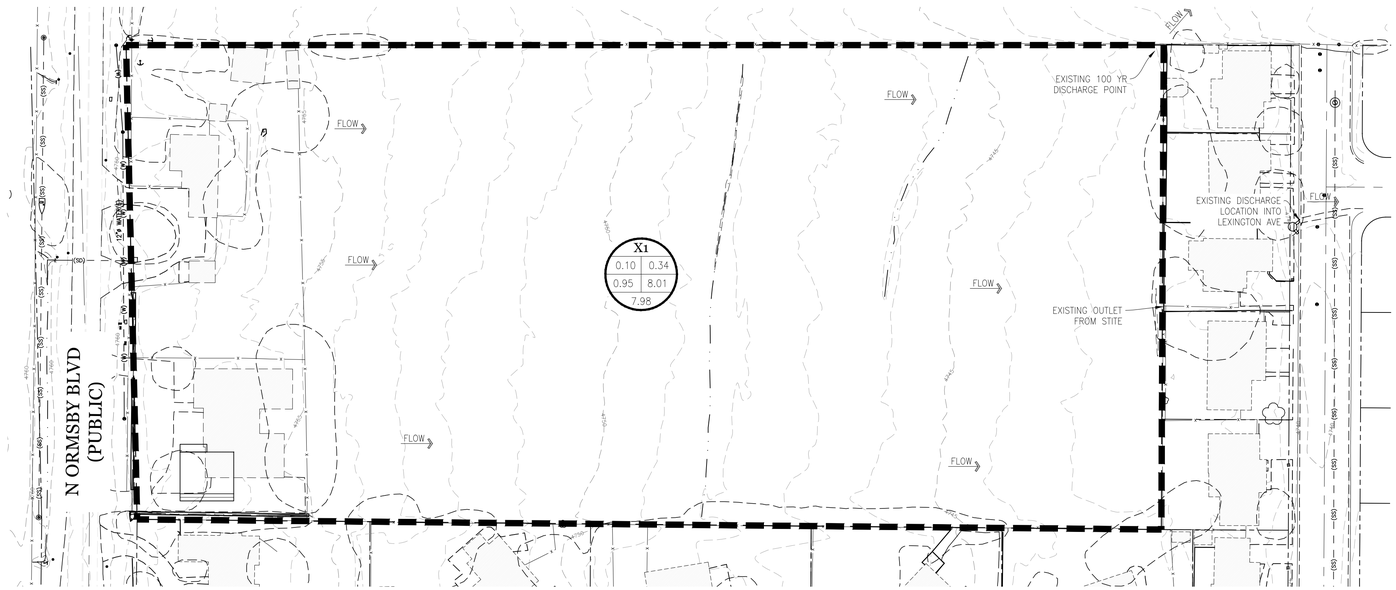
Ash Canyon SF	Vicinity Map	MONTE VISTA CONSULTING
1051 N Ormsby Blvd		575 E. Plumb Lane #101, Reno, NV 89502
APN: 001-241-14		775.636.7905
21.034		montevistaconsulting.com

GRADING & DRAINAGE LEGEND

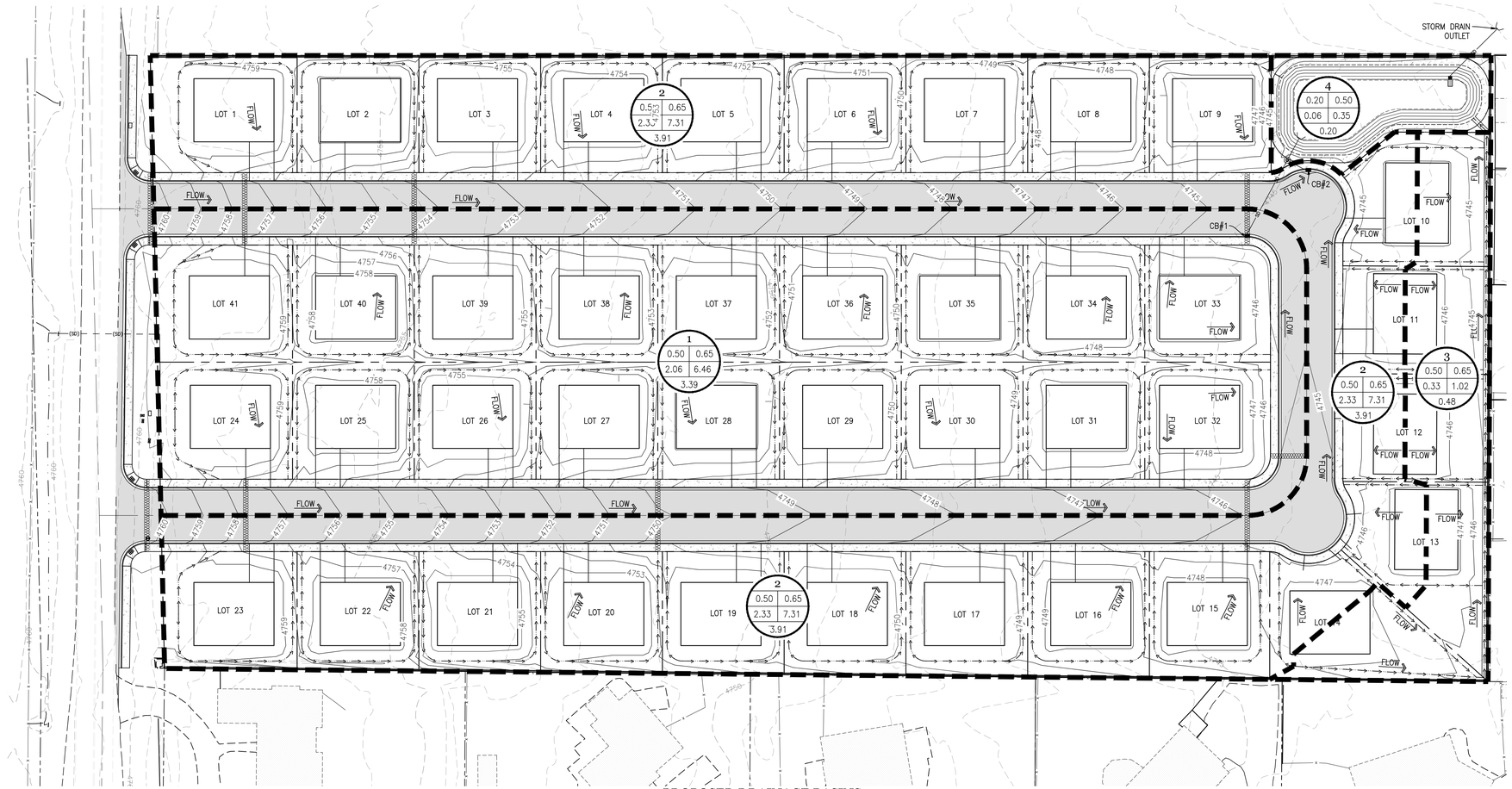
- A.C. PAVEMENT AREA
- CONCRETE AREA
- UTILITY — PROPOSED UTILITY LINE W. DESCRIPTION
- (UTILITY) — EXISTING UTILITY LINE W. DESCRIPTION
- MAHHOLE W. DESCRIPTION (EXISTING/PROPOSED)
- CLEANOUT (EXISTING/PROPOSED)
- CATCH BASIN/DROP INLET
- YARD DRAIN
- GRADE BREAK
- 4900 PROPOSED CONTOUR LINE
- 4900 EXISTING CONTOUR LINE
- (FG:XX.XX) FG:XX.XX SPOT ELEVATION (EXISTING) ~ PROPOSED
- FLOW FLOW DIRECTION ARROW
- BASIN: C_5 | C_{100} / Q_5CFS | Q_{100}CFS / ACRES — DRAINAGE BASIN CHARACTERISTICS

FLOOD ZONE

THIS SITE LIES IN FEMA FLOOD ZONE X SHADED (32009C0920G). ZONE X (SHADED) IS DEFINED AS A MODERATE FLOOD HAZARD AREA AND IS BETWEEN THE LIMITS OF THE BASE FLOOD AND THE 0.2-PERCENT-ANNUAL-CHANCE (OR 500-YEAR) FLOOD. FINISH FLOOR OF ALL HOUSES TO BE SET 1.0' MINIMUM ABOVE HIGHEST EXISTING ADJACENT GRADE.



EXISTING DRAINAGE BASINS
SCALE:1"=60'



PROPOSED DRAINAGE BASINS
SCALE:1"=40'

1"=40' 0 20 40 80

MONTE VISTA CONSULTING
575 E. Plumb Lane #101
Reno, NV 89502
775.636.7905
montevistaconsulting.com

NORTH

Ash Canyon SF Conceptual Subdivision Map

Drainage Plan

1051 N Ormsby Blvd
APN: 001-241-14
Carson City, Nevada

Project #	21.034
Drawn	HBA
Checked	MWV
Date	8.18.2022
△	Revisions

FOR PRELIMINARY REVIEW NOT FOR CONSTRUCTION

PROFESSIONAL ENGINEER - STATE OF NEVADA
MICHAEL W. VICKS
Exp. 6.30.2024
CIVIL
NO. 21025

August 17, 2022

C5.0
5 of 5

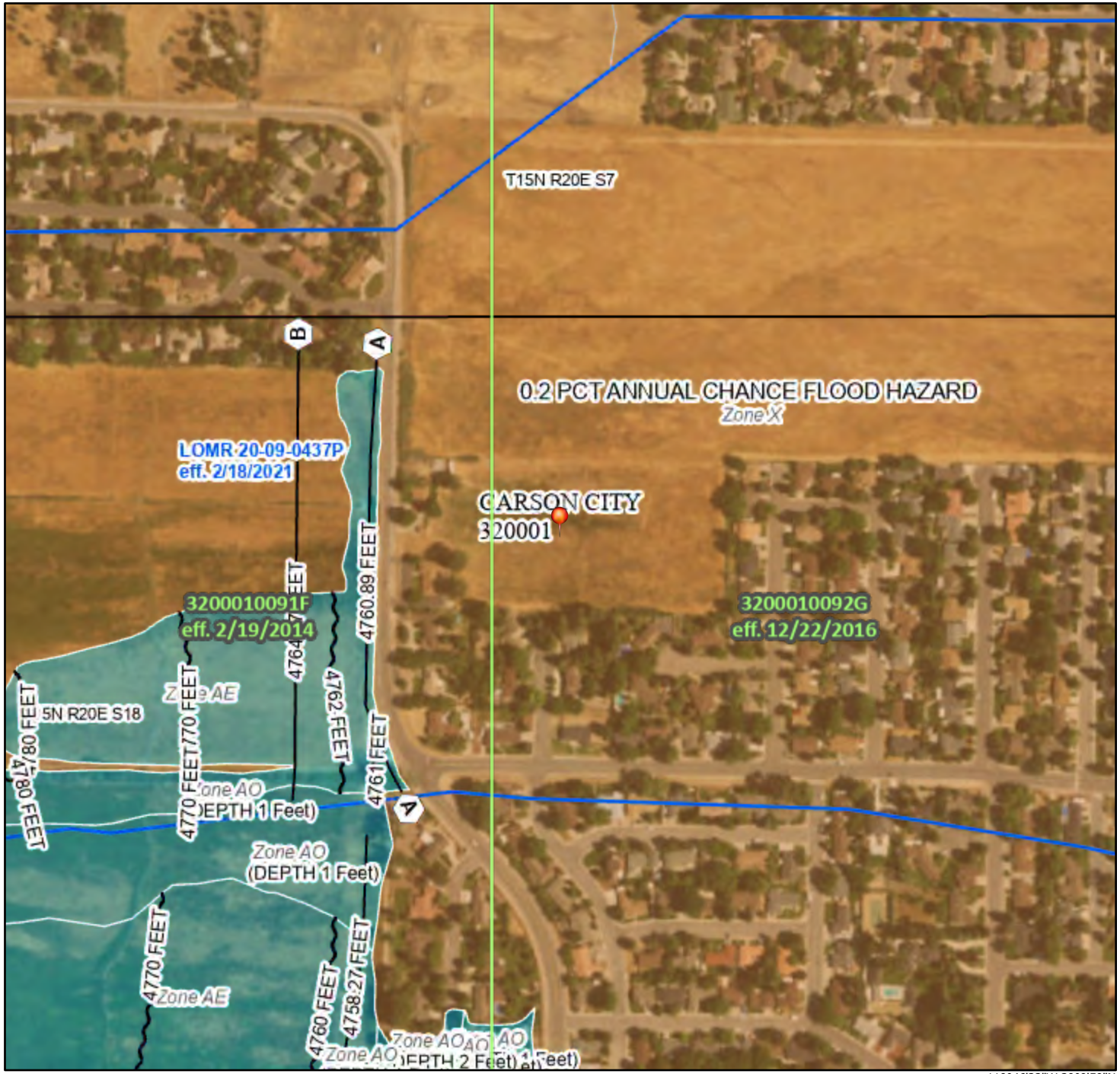
C:\Users\mike\Monte Vista Dropbox\2021 Projects\034 Gon-Ormsby Neighborhood\2022 Revisions\Ormsby (8.17.22).dwg 8/17/2022 1:42 PM

Appendix

National Flood Hazard Layer FIRMette

FEMA

119°47'9"W 39°10'27"N



119°46'32"W 39°9'59"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 4/19/2021 at 3:10 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

NOAA Atlas 14, Volume 1, Version 5
Location name: Carson City, Nevada, USA*
Latitude: 39.1703°, Longitude: -119.7806°
Elevation: 4753.89 ft**
* source: ESRI Maps
** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	**0.098** (0.085-0.116)	**0.122** (0.106-0.145)	**0.163** (0.140-0.193)	**0.202** (0.172-0.239)	**0.266** (0.219-0.315)	**0.325** (0.259-0.387)	**0.394** (0.304-0.475)	**0.478** (0.354-0.585)	**0.611** (0.427-0.765)	**0.731** (0.487-0.932)
10-min	**0.150** (0.129-0.176)	**0.186** (0.162-0.220)	**0.248** (0.213-0.294)	**0.308** (0.262-0.364)	**0.405** (0.334-0.480)	**0.494** (0.394-0.589)	**0.600** (0.463-0.724)	**0.727** (0.539-0.892)	**0.929** (0.650-1.16)	**1.11** (0.741-1.42)
15-min	**0.186** (0.160-0.219)	**0.231** (0.200-0.273)	**0.308** (0.264-0.365)	**0.382** (0.324-0.451)	**0.502** (0.414-0.595)	**0.613** (0.489-0.731)	**0.744** (0.574-0.897)	**0.901** (0.668-1.11)	**1.15** (0.806-1.44)	**1.38** (0.919-1.76)
30-min	**0.250** (0.215-0.294)	**0.311** (0.269-0.368)	**0.414** (0.355-0.491)	**0.514** (0.437-0.608)	**0.676** (0.558-0.801)	**0.825** (0.659-0.984)	**1.00** (0.773-1.21)	**1.21** (0.900-1.49)	**1.55** (1.09-1.94)	**1.86** (1.24-2.37)
60-min	**0.309** (0.266-0.364)	**0.384** (0.334-0.455)	**0.513** (0.440-0.608)	**0.636** (0.541-0.752)	**0.837** (0.690-0.992)	**1.02** (0.815-1.22)	**1.24** (0.957-1.50)	**1.50** (1.11-1.84)	**1.92** (1.34-2.40)	**2.30** (1.53-2.93)
2-hr	**0.421** (0.376-0.481)	**0.522** (0.464-0.597)	**0.664** (0.587-0.757)	**0.790** (0.691-0.900)	**0.979** (0.835-1.12)	**1.15** (0.957-1.33)	**1.34** (1.09-1.57)	**1.57** (1.23-1.87)	**1.98** (1.48-2.42)	**2.35** (1.70-2.96)
3-hr	**0.506** (0.454-0.569)	**0.630** (0.569-0.710)	**0.788** (0.705-0.886)	**0.917** (0.814-1.03)	**1.10** (0.961-1.24)	**1.26** (1.08-1.43)	**1.43** (1.20-1.65)	**1.66** (1.37-1.94)	**2.03** (1.62-2.45)	**2.38** (1.85-2.99)
6-hr	**0.711** (0.639-0.792)	**0.886** (0.797-0.992)	**1.10** (0.982-1.22)	**1.26** (1.13-1.41)	**1.49** (1.31-1.67)	**1.67** (1.44-1.88)	**1.84** (1.57-2.10)	**2.05** (1.71-2.37)	**2.35** (1.91-2.76)	**2.62** (2.08-3.12)
12-hr	**0.949** (0.847-1.07)	**1.19** (1.06-1.34)	**1.50** (1.33-1.68)	**1.74** (1.53-1.95)	**2.06** (1.79-2.32)	**2.30** (1.99-2.62)	**2.56** (2.17-2.94)	**2.81** (2.34-3.27)	**3.16** (2.56-3.75)	**3.43** (2.73-4.13)
24-hr	**1.26** (1.14-1.39)	**1.58** (1.44-1.75)	**2.00** (1.81-2.21)	**2.34** (2.11-2.58)	**2.80** (2.52-3.10)	**3.18** (2.83-3.51)	**3.56** (3.15-3.95)	**3.97** (3.48-4.41)	**4.52** (3.90-5.06)	**4.95** (4.22-5.60)
2-day	**1.53** (1.37-1.72)	**1.92** (1.72-2.16)	**2.45** (2.19-2.76)	**2.88** (2.57-3.24)	**3.49** (3.09-3.94)	**3.98** (3.49-4.50)	**4.49** (3.91-5.10)	**5.03** (4.34-5.76)	**5.78** (4.90-6.68)	**6.38** (5.33-7.45)
3-day	**1.69** (1.50-1.91)	**2.13** (1.90-2.41)	**2.74** (2.43-3.10)	**3.24** (2.87-3.66)	**3.94** (3.46-4.47)	**4.50** (3.92-5.12)	**5.10** (4.41-5.82)	**5.73** (4.90-6.58)	**6.62** (5.56-7.67)	**7.34** (6.08-8.58)
4-day	**1.85** (1.64-2.10)	**2.34** (2.07-2.65)	**3.02** (2.67-3.44)	**3.59** (3.16-4.08)	**4.38** (3.83-4.99)	**5.02** (4.35-5.73)	**5.71** (4.90-6.54)	**6.44** (5.47-7.40)	**7.47** (6.23-8.65)	**8.30** (6.82-9.71)
7-day	**2.16** (1.92-2.44)	**2.74** (2.43-3.10)	**3.56** (3.15-4.03)	**4.21** (3.72-4.78)	**5.14** (4.51-5.84)	**5.88** (5.12-6.69)	**6.66** (5.74-7.61)	**7.48** (6.40-8.57)	**8.62** (7.27-9.98)	**9.54** (7.92-11.1)
10-day	**2.40** (2.13-2.71)	**3.06** (2.71-3.46)	**3.98** (3.52-4.50)	**4.70** (4.14-5.32)	**5.69** (4.99-6.45)	**6.48** (5.64-7.35)	**7.29** (6.29-8.29)	**8.13** (6.96-9.28)	**9.28** (7.85-10.7)	**10.2** (8.51-11.8)
20-day	**2.98** (2.66-3.34)	**3.79** (3.38-4.26)	**4.91** (4.38-5.50)	**5.76** (5.12-6.45)	**6.90** (6.10-7.74)	**7.77** (6.82-8.72)	**8.66** (7.55-9.76)	**9.54** (8.27-10.8)	**10.7** (9.19-12.3)	**11.6** (9.85-13.4)
30-day	**3.42** (3.06-3.82)	**4.35** (3.89-4.86)	**5.62** (5.03-6.28)	**6.58** (5.87-7.35)	**7.87** (6.98-8.79)	**8.85** (7.79-9.90)	**9.85** (8.61-11.1)	**10.8** (9.40-12.2)	**12.2** (10.4-13.9)	**13.2** (11.2-15.1)
45-day	**4.04** (3.63-4.50)	**5.16** (4.62-5.74)	**6.66** (5.96-7.40)	**7.77** (6.95-8.64)	**9.22** (8.20-10.3)	**10.3** (9.11-11.5)	**11.3** (10.0-12.7)	**12.4** (10.9-13.9)	**13.7** (11.9-15.5)	**14.7** (12.7-16.7)
60-day	**4.66** (4.17-5.19)	**5.95** (5.33-6.64)	**7.67** (6.87-8.54)	**8.90** (7.96-9.91)	**10.5** (9.30-11.6)	**11.6** (10.3-12.9)	**12.6** (11.2-14.2)	**13.7** (12.0-15.3)	**14.9** (13.1-16.8)	**15.8** (13.8-17.9)

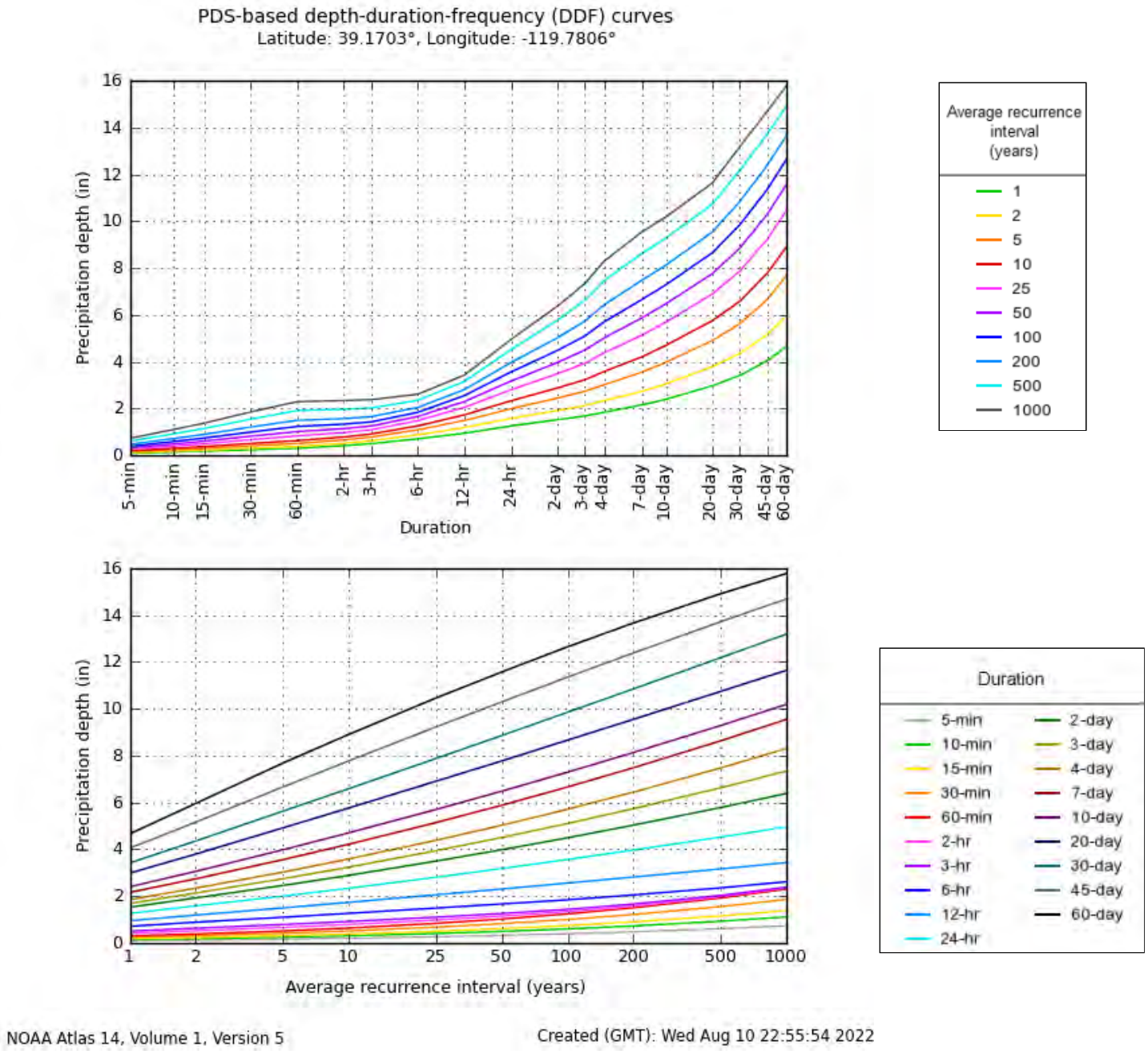
[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

Back to Top

PF graphical



NOAA Atlas 14, Volume 1, Version 5

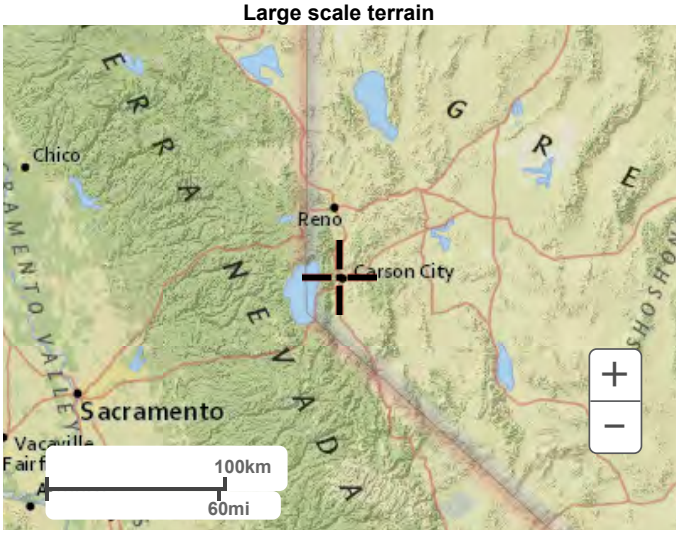
Created (GMT): Wed Aug 10 22:55:54 2022

Back to Top

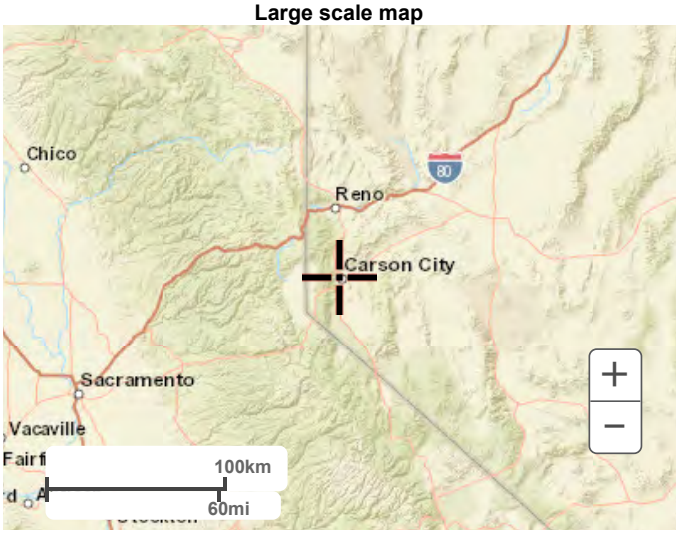
Maps & aerials

Small scale terrain

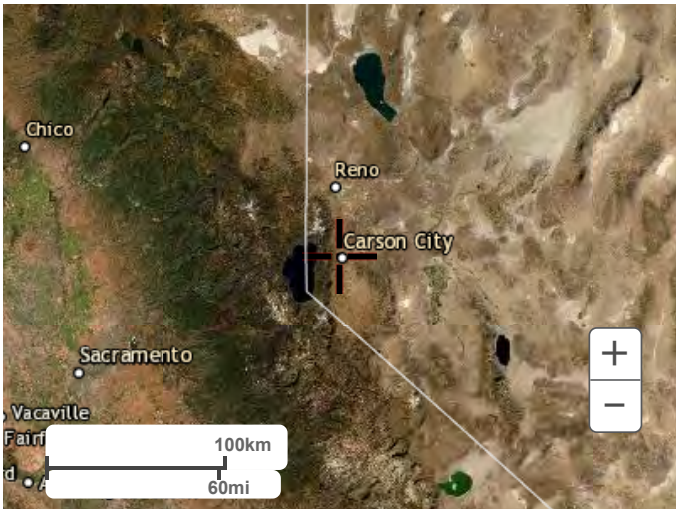
Large scale terrain



Large scale map



Large scale aerial



Back to Top

US Department of Commerce
National Oceanic and Atmospheric Administration
National Weather Service
National Water Center
1325 East West Highway
Silver Spring, MD 20910
Questions?: HDSC.Questions@noaa.gov

Disclaimer

RATIONAL FORMULA METHOD
RUNOFF COEFFICIENTS

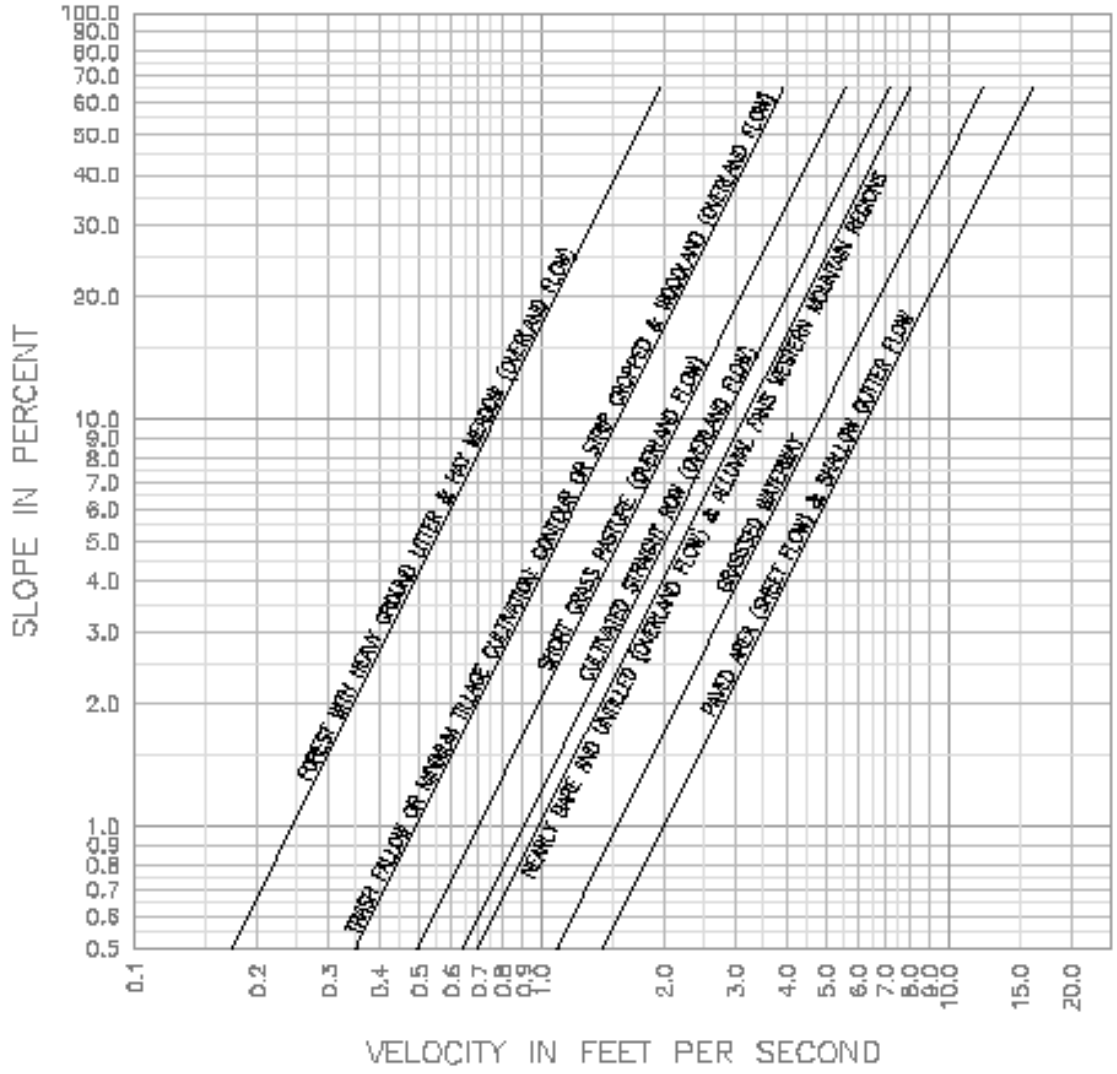
Land Use or Surface Characteristics	Aver. % Impervious Area	Runoff Coefficients 5-Year (C_5)	Runoff Coefficients 100-Year (C_{100})
Business/Commercial:			
Downtown Areas	85	.82	.85
Neighborhood Areas	70	.65	.80
Residential:			
(Average Lot Size)			
⅛ Acre or Less (Multi-Unit)	65	.60	.78
¼ Acre	38	.50	.65
⅛ Acre	30	.45	.60
½ Acre	25	.40	.55
1 Acre	20	.35	.50
Industrial:	72	.68	.82
Open Space:			
(Lawns, Parks, Golf Courses)	5	.05	.30
Undeveloped Areas:			
Range	0	.20	.50
Forest	0	.05	.30
Streets/Roads:			
Paved	100	.88	.93
Gravel	20	.25	.50
Drives/Walks:	95	.87	.90
Roof:	90	.85	.87

Notes:

1. Composite runoff coefficients shown for Residential, Industrial, and Business/Commercial Areas assume irrigated grass landscaping for all pervious areas. For development with landscaping other than irrigated grass, the designer must develop project specific composite runoff coefficients from the surface characteristics presented in this table.

TRUCKEE MEADOWS REGIONAL DRAINAGE MANUAL

TRAVEL TIME VELOCITY



Version: April 30, 2009	REFERENCE: Soil Conservation Service, 1985 (Modified)	FIGURE 701
PLACES—CSI		

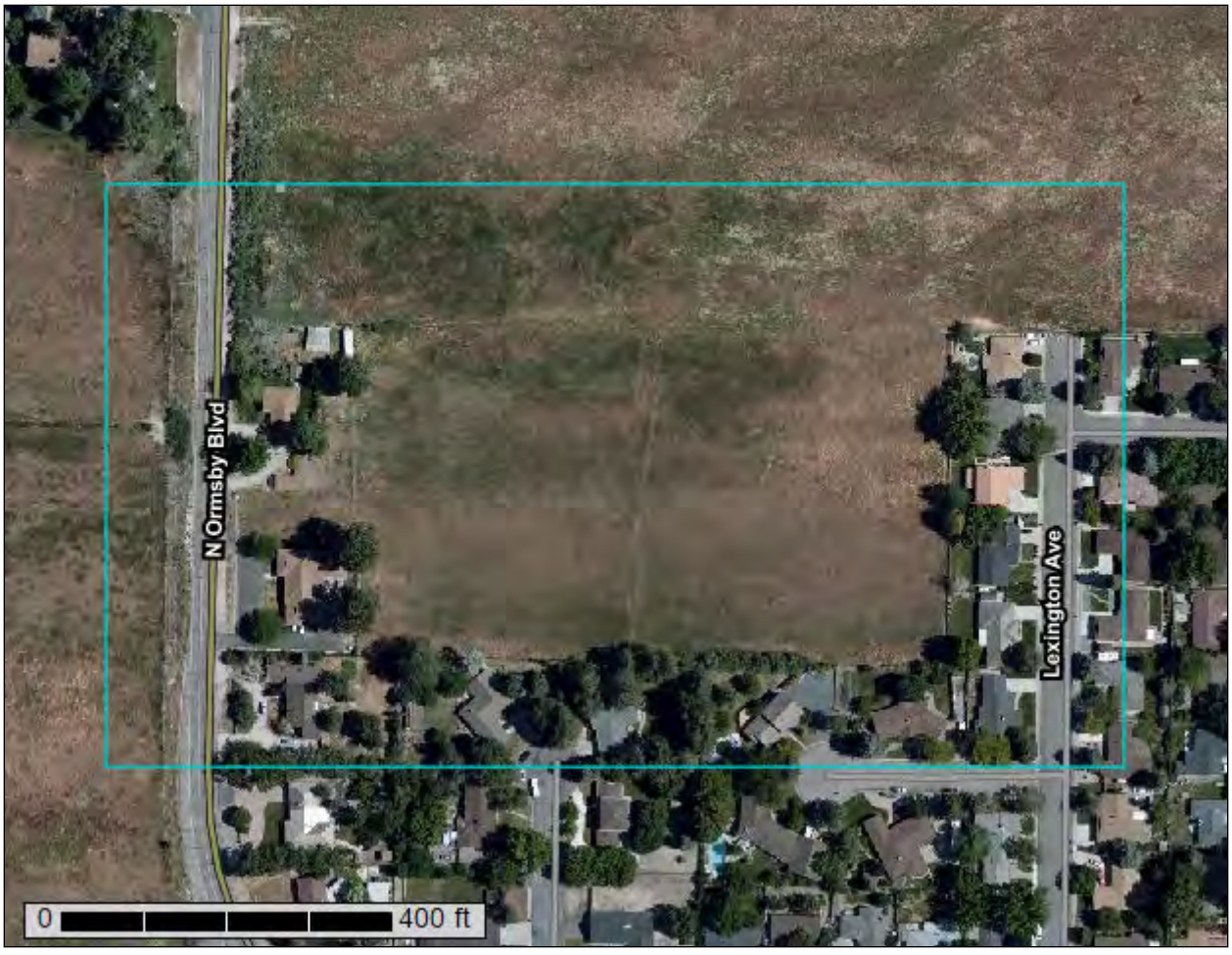
United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Carson City Area, Nevada



October 5, 2021

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map

Map Scale: 1:2,060 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 30 60 120 180

Feet: 0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Carson City Area, Nevada
Survey Area Data: Version 16, Sep 9, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 1, 2018—Jun 30, 2018

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
4	Bishop loam, saline	7.1	35.4%
36	Jubilee coarse sandy loam, 0 to 2 percent slopes	10.7	53.5%
71	Urban land	2.2	11.1%
Totals for Area of Interest		**19.9**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the

development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Carson City Area, Nevada

4—Bishop loam, saline

Map Unit Setting

National map unit symbol: 2nnnd
Elevation: 4,500 to 4,700 feet
Mean annual precipitation: 8 to 12 inches
Mean annual air temperature: 49 to 50 degrees F
Frost-free period: 100 to 110 days
Farmland classification: Not prime farmland

Map Unit Composition

Bishop and similar soils: 95 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Bishop

Setting

Landform: Flood plains
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed

Typical profile

H1 - 0 to 28 inches: loam
H2 - 28 to 60 inches: stratified sandy loam to clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: About 18 to 24 inches
Frequency of flooding: NoneOccasional
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Slightly saline to moderately saline (4.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 13.0
Available water supply, 0 to 60 inches: High (about 9.8 inches)

Interpretive groups

Land capability classification (irrigated): 4w
Land capability classification (nonirrigated): 6w
Hydrologic Soil Group: C/D
Ecological site: R026XY003NV - WET MEADOW 10-14 P.Z.
Hydric soil rating: No

Minor Components

Voltaire

Percent of map unit: 5 percent
Landform: Flood plains

Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R026XY002NV - WET SODIC BOTTOM
Hydric soil rating: Yes

36—Jubilee coarse sandy loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 2nnpf
Elevation: 4,500 to 4,600 feet
Mean annual precipitation: 10 to 12 inches
Mean annual air temperature: 49 to 51 degrees F
Frost-free period: 100 to 110 days
Farmland classification: Not prime farmland

Map Unit Composition

Jubilee and similar soils: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Jubilee

Setting

Landform: Flood plains
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed

Typical profile

H1 - 0 to 20 inches: coarse sandy loam
H2 - 20 to 60 inches: stratified coarse sand to sandy loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: About 10 to 12 inches
Frequency of flooding: Rare
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 5.6 inches)

Interpretive groups

Land capability classification (irrigated): 5w
Land capability classification (nonirrigated): 5w
Hydrologic Soil Group: A/D
Ecological site: R026XY003NV - WET MEADOW 10-14 P.Z.
Hydric soil rating: Yes

71—Urban land

Map Unit Composition

Urban land: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Urban Land

Setting

Landform: Valleys
Down-slope shape: Convex
Across-slope shape: Convex

Soil Information for All Uses

Soil Properties and Qualities

The Soil Properties and Qualities section includes various soil properties and qualities displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each property or quality.

Soil Physical Properties

Soil Physical Properties are measured or inferred from direct observations in the field or laboratory. Examples of soil physical properties include percent clay, organic matter, saturated hydraulic conductivity, available water capacity, and bulk density.

Saturated Hydraulic Conductivity (Ksat)

Saturated hydraulic conductivity (Ksat) refers to the ease with which pores in a saturated soil transmit water. The estimates are expressed in terms of micrometers per second. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Saturated hydraulic conductivity is considered in the design of soil drainage systems and septic tank absorption fields.

For each soil layer, this attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

The numeric Ksat values have been grouped according to standard Ksat class limits.

Map—Saturated Hydraulic Conductivity (Ksat)

Map Scale: 1:2,060 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 30 60 120 180

Feet
0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

Soil Rating Polygons

- <= 5.6428
- > 5.6428 and <= 70.5263
- Not rated or not available

Soil Rating Lines

- <= 5.6428
- > 5.6428 and <= 70.5263
- Not rated or not available

Soil Rating Points

- <= 5.6428
- > 5.6428 and <= 70.5263
- Not rated or not available

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Carson City Area, Nevada
Survey Area Data: Version 16, Sep 9, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 1, 2018—Jun 30, 2018

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Table—Saturated Hydraulic Conductivity (Ksat)

Map unit symbol	Map unit name	Rating (micrometers per second)	Acres in AOI	Percent of AOI
4	Bishop loam, saline	5.6428	7.1	35.4%
36	Jubilee coarse sandy loam, 0 to 2 percent slopes	70.5263	10.7	53.5%
71	Urban land		2.2	11.1%
Totals for Area of Interest			**19.9**	**100.0%**

Rating Options—Saturated Hydraulic Conductivity (Ksat)

Units of Measure: micrometers per second

Aggregation Method: Dominant Component

Component Percent Cutoff: None Specified

Tie-break Rule: Fastest

Interpret Nulls as Zero: No

Layer Options (Horizon Aggregation Method): Depth Range (Weighted Average)

Top Depth: 0

Bottom Depth: 60

Units of Measure: Inches

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

Carson City
Community Development Department
108 E. Proctor Street
Carson City, NV 89701

August 18, 2022

MONTE VISTA CONSULTING
575 E. Plumb Lane
Suite 101
Reno, NV 89502
775.636.7905

Ash Canyon SF – Sanitary Sewer Generation Letter

The Ash Canyon SF project is located at 1051 N. Ormsby Boulevard, north of W. Washington Street (APN: 001-241-14). The site is currently developed as a residential/agricultural site with existing homes along Ormsby Boulevard with the remainder of the site to the east as an irrigated field. There is currently an existing public sanitary sewer main adjacent to the site in Ormsby Boulevard. The proposed subdivision will include 41 new single-family residences and a single looped street, Ormsby Circle, which will be privately maintained. In order to determine the sanitary sewer generation quantities, the Carson City Municipal Code states, "Sewer equivalent residential customer (SERC)" is the average daily sewer system contribution for a residential unit at a discharge of two hundred fifty (250) gallons per day. This rate has been utilized to determine the proposed sanitary sewer contributions for the project:

(41 Residences)*(250 GPD/unit) = 10,250 GPD (0.016 cfs)

The project will gravity flow to the northeast corner of the site through an 8" PVC Sewer main system. From there, a sanitary sewer lift station will convey flow uphill to the existing 8" AC sanitary sewer main in N. Ormsby Boulevard through a 2" force main. This main is at approximately 45% full (d/D) per the Conceptual Map Comments Letter. The proposed project will have a minimal impact on the capacity of the existing sanitary sewer infrastructure. Ultimately, all sanitary sewer contributions from this site will be treated at the Carson City Waste Water Treatment Plant. No additional sanitary sewer study or analysis has been completed.

Please contact Monte Vista Consulting if you have any questions or if there is anything else I can help with.

Sincerely,

Monte Vista Consulting

Michael Vicks, P.E.

Principal

EarthTech
Geotechnical and Construction Testing Services
681 Edison Way, Reno, NV 89502

PRELIMINARY GEOTECHNICAL INVESTIGATION

PROPOSED

GONI-ORMSBY SINGLE-FAMILY NEIGHBORHOOD

Carson City Assessor's Office Parcel Number 001-241-14

1051 N. Ormsby Blvd

CARSON CITY, NEVADA

Prepared for:

KLS Planning & Design
1 E. 1st St. Suite 1400
Reno, Nevada 89501

Attention: John Krmpotic, ACIP

October 5, 2021

Project No. 258.02.21-G

Earth Tech
Geotechnical and Construction Testing Services
681 Edison Way, Reno, NV 89502

October 5, 2021
Project No. 258.02.21-G

KLS Planning & Design
1 E. 1st St. Suite 1400
Reno, Nevada 89501

Attn: John Krmpotic, AICP

Re: Preliminary Geotechnical Investigation, Proposed Goni-Ormsby Single-Family Neighborhood, APN 001-241-14, 1051 N. Ormsby Blvd, Carson City, Nevada

Dear Mr. Krmpotic:

Earth Tech is pleased to present results of a preliminary geotechnical investigation our firm conducted for the project. Based on results of our work, experience in the area, and understanding of proposed development, we conclude that, from a preliminary geotechnical standpoint, the property is suitable for its intended use. The primary geotechnical concerns are potential presence of expansive material and shallow groundwater, presence of existing development and location of the floodplain.

We appreciate having been selected to prepare this preliminary investigation and trust results fulfill your needs. If you or your design consultants have questions, please do not hesitate to contact us at (775) 771-2388 or chris@earthtechnv.com.

Respectfully,

Joshua V. Reyes
Joshua V. Reyes, E.I.

Chris D. Betts
Chris D. Betts, P.E.
President

C O N T E N T S

Earth Tech, LLC
681 Edison Way
Reno, Nevada 89502
(775) 771-2388

I INTRODUCTION

Earth Tech is pleased to present results of a preliminary geotechnical investigation our firm conducted for the proposed Goni-Ormsby Single-Family Neighborhood to be located in Carson City, Nevada. The 8.41-acre site is at 1051 N. Ormsby Boulevard and is Carson City Assessor's Office parcel number 001-241-14 (Property). According to a geometric site plan by Monte Vista Consulting, proposed development includes construction of 41 isolated pads for single-family residences to be serviced by community water, sewer and storm drain systems. We assume the structures will have one to two levels, will be wood-framed with joist-supported floors, and will be supported by shallow conventional spread foundations. Dedicated service streets will be surfaced with asphaltic concrete.

We have not received information concerning anticipated foundation loads; however, we anticipate maximum wall loads will be on the order of one to two kips per foot (dead plus live plus snow load), and that maximum column loads will be less than five kips (dead plus live plus snow load). For frost protection, perimeter foundation will bottom at least 24 inches below lowest adjacent exterior ground surface. Structural design will follow criteria outlined in the 2018 *International Building Code*.

We have not received civil design plans; however, we anticipate earthwork necessary to attain proposed pad grades and for proper site drainage will result in minimal cuts and fills up to about two feet. Neither new slopes nor site retaining walls are anticipated. Depth of utility trenches should be less than eight feet. We assume underground utilities in proposed structural areas will be abandoned or relocated. Earthwork will be performed in accordance with the 2012 Standard Specifications for Public Works Construction, Revision 8 by the Regional Transportation Commission.

The purpose of our preliminary investigation was to perform a site reconnaissance and review available literature and maps to provide opinions and discussions concerning the geotechnical suitability of the Property for its intended use. Once design parameters, such as finish floor elevations, foundation loads and proposed grading are known; a design-level geotechnical investigation report with detailed information of the subsurface soil conditions and recommendations for design and construction must be performed.

This report is preliminary and geotechnical in nature and not intended to identify other potential site constraints such as environmental hazards, wetlands determinations or the potential presence of buried utilities. Opinions and discussions included in this report are specific to development at the Property and are not intended for off-site development.

Earth Tech, LLC
681 Edison Way
Reno, Nevada 89502
(775) 771-2388

II SITE AND SOIL CONDITIONS

The Property is bordered by N. Ormsby Blvd to the west, undeveloped land to the north, and residential developments to the south and east. The Property is flat, matches elevations of adjacent development, and is covered by pasture grass. Two single-family residences are present along the western border.

View of Property from East

Based on the United States Geological Survey 7.5-Minute topographic map of the Carson City Quadrangle, 2018, the site is in the northern ½ of Section 18, Township 15 North, Range 20 East, and elevation is about 4,760 feet relative to mean sea level.

Based on mapping by Dennis T. Trexler (*Carson City Folio Geologic Map*, Nevada Bureau of Mines and Geology, dated 1977), materials underlying the Property consist of alluvial-plain deposits of Eagle Valley (Qal). This unit includes yellowish-brown to gray, unbedded to poorly bedded, poorly to moderately sorted, fine silty sand, sandy silt, granular muddy coarse sand, and minor sandy gravel. Underlies broad surfaces of low gradient.

Geologic units according to the Carson City Folio Geologic Map

Earth Tech, LLC
681 Edison Way
Reno, Nevada 89502
(775) 771-2388

According to the *Web Soil Survey* and to mapping by the U.S. Department of Agriculture, Soil Conservation Service and Forest Service (*Soil Survey of Carson City Area, Nevada,* approved 1975, Sheet No. 1), the underlying earth materials consist of Bishop loam, saline (# 4) and Jubilee coarse sandy loam, 0 to 2 percent slops (# 36). These units are described as follows:

Bishop Loam, Saline (# 4). This deep, poorly drained soil is on flood plains. This soil formed in mixed alluvium. Slope ranges from 0 to 2 percent. Elevation is about 4,600 feet. Typically, the surface layer is light brownish gray and grayish brown loam about 28 inches thick. Below this to a depth of 60 inches is light brownish gray, pale brown, and pale olive, stratified sandy loam to sandy clay loam. Permeability is moderately slow. Effective rooting depth is 60 inches or more. Runoff is very slow, and the hazard of water erosion is slight. The water table is at a depth of 18 to 24 inches. Shallow, low-velocity flooding is common. This soil is slightly saline affected. Limitations for shallow excavations are severe due to wetness. Limitations for dwellings with or without basements and for small commercial buildings are severe due to floods and wetness. Limitations for roadways are severe due to frost action and wetness. Limitations for septic tank absorption fields are severe due to wetness and slow percolation rates. The shrink-swell potential is moderate. The risk of corrosion to uncoated steel is high. The risk of corrosion to concrete is moderate. The frequency of flooding is common. Depth to high water table is 1.5 to 2.0 feet. Depth to bedrock is greater than 60 inches. Limitations associated with the use of these soils for urban development, as defined by the soil survey, are the moderately slow permeability, potential for flooding and high water table.

Jubilee coarse sandy loam, 0 to 2 percent slopes (# 36). This deep, poorly drained soil is on nearly level flood plains. It formed in alluvium from mixed rock. Elevation ranges from 4,500 to 4,600 feet. Typically, the surface layer is a dark grayish brown coarse sandy loam about 20 inches thick. Below this to a depth of 60 inches is a grayish brown and light brownish gray, stratified coarse sand to sandy loam. Permeability is moderately rapid. Effective rooting depth is about 60 inches. Available water capacity is moderate. Surface runoff is very slow, and the hazard of erosion is slight. The water table is at a depth of 1 to 2 feet. This soil is rarely flooded. Limitations for shallow excavations are severe due to wetness and caving cutbanks. Limitations for dwellings with or without basements and for small commercial buildings are severe due to wetness and floods. Limitations for roadways are severe due to wetness and frost action. Limitations for septic tank absorption fields are severe due to wetness. The shrink-swell potential is low. The risk of corrosion to uncoated steel is moderate. The risk of corrosion to concrete is low. The frequency of flooding is rare. Depth to high water table is 1.0 to 2.0 feet. Depth to bedrock is greater than 60 inches. Limitations associated with the use of these soils for urban development, as defined by the soil survey, are the potential for flooding, wetness and seepage.

Earth Tech, LLC
681 Edison Way
Reno, Nevada 89502
(775) 771-2388

Soils units according to the Web Soil Survey

Based on mapping by Terry Katzer (*Carson City Quadrangle Groundwater Map,* Nevada Bureau of Mines and Geology, dated 1980), approximate depth to groundwater is less than 10 feet below ground surface.

III GEOLOGIC AND SEISMIC CONSIDERATIONS

To evaluate potential geological hazards at the Property, our study included a site reconnaissance and review of available literature and maps.

A. Geology

The Property is in the western portion of Eagle Valley, a structural basin bound by the Carson Range to the west and southwest, Virginia Range to the north, Pinenut Mountains and Prison Hill to the east and southeast. The topography of the basin is due to a combination of extensional normal faulting, left-lateral faulting, Tertiary age volcanism and Quaternary age basinal sedimentation.

B. Faulting and Seismicity

Based on mapping by Dennis T. Trexler and John W. Bell (*Carson City Quadrangle Earthquake Hazards Map*, Nevada Bureau of Mines and Geology, dated 1979), no faults cross the Property. According to *Quaternary Faults in Google Earth* by the USGS, no faults cross the Property. Quaternary-age faults are those which have experienced movement in the last 1.6 million years. The website indicates that the nearest Holocene- to latest-Pleistocene-age fault is approximately 0.20 miles north of the Property. Faults of this age have moved or shifted in the last 15,000 years.

Earth Tech, LLC
681 Edison Way
Reno, Nevada 89502
(775) 771-2388

Based on the Nevada Seismological Laboratory website and to *Quaternary Faults in Google Earth,* the nearest principal Quaternary-age fault is the Carson City fault about 0.75 miles to the NW. The Nevada Seismological Laboratory indicates an earthquake of magnitude 6.8 is possible along this fault zone (*Reno/Carson Fault Information*, updated January 31, 2003).

C. Liquefaction

Liquefaction is a loss of soil shear strength associated with loose saturated granular soils subjected to strong earthquake shaking. Liquefaction can result in unacceptable movement of foundations supported by such soils. Based on the referenced earthquake hazards mapping, the site has additionally been delineated as existing within an area with unconsolidated underlying materials with low to moderately high rigidity which may be potentially susceptible to moderate to great shaking during a seismic event and, as a result, possibly experience liquefaction when the depth to ground water is less than 10 feet. Assessment of liquefaction potential is beyond the scope of our work; however, should be addressed during the design-level geotechnical investigation.

D. Slope Stability

Based on the level nature of the Property and our anticipation that slopes are not proposed, we do not believe the Property is susceptible to rock falls, slumps, or landslides.

E. Radon

Radon, a colorless, odorless, radioactive gas derived from the natural decay of uranium, is found in nearly all rocks and soils. The Environmental Protection Agency (EPA) suggests that remedial action be taken to reduce radon in any structure with average indoor radon of 4.0 picocuries per liter (pCi/L) or more. Based on *Radon in Nevada* (Rigby *et al*., Nevada Bureau of Mines and Geology, Bulletin 108, 1994), the Property, as well as much of northern Carson City, is in or is in close proximity to an area where average indoor radon concentrations could exceed 4.0 pCi/L.

F. Flooding

The Federal Emergency Management Agency flood maps (FEMA-Maps 3200010092G dated December 22, 2016 and LOMR 20-09-0437P dated February 18, 2021) maps the Property in Flood Hazard Zone X (shaded). According to FEMA, these *are areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.*

Earth Tech, LLC
681 Edison Way
Reno, Nevada 89502
(775) 771-2388

IV OPINIONS AND DISCUSSIONS

According to the soil survey, portions of underlying soils may consist of clay soil. Clay soil can exhibit a potential for expansion. Expansive soils are subject to substantial volume changes (shrink and swell) with changes in moisture content. Changes in moisture content can occur due to seasonal variations in precipitation, landscape irrigation, broken or leaking water pipes and sewer lines, and/or poor site drainage. These volume changes can cause differential movements (settlement or heave) of foundations, interior slabs-on-grade, exterior flatwork such as walkways, stoops and patios, and pavement sections.

One method to reduce the potential for movement is to remove (over-excavate) the expansive material to a sufficient depth and replace it with approved compacted fill, thereby reducing the thickness of the expansive layer, providing surcharge, and maintaining moisture at a suitable and near constant level. In conjunction with over-excavation and filling, moisture conditioning of the exposed materials to a slightly over optimum moisture content will be needed during construction. Proper site grading and drainage is necessary for preventing infiltration of water and maintaining the expansive soil at a near-constant moisture content.

In addition to their expansive characteristics, expansive materials also exhibit a lower Resistance Value and Modulus of Subgrade Reaction (k) than granular material. To reduce the thickness of aggregate base and to minimize future maintenance in slab-on-grade, exterior flatwork and pavement areas, portions of these soils should be removed and replaced with approved compacted fill subbase.

As clay soil is fine-grain, it can also inhibit achieving uniform moisture content and impede compaction efforts, consideration should be given to time constraints associated with scarification, moisture conditioning, drying and compacting clay soils. During periods of inclement weather, water may also become perched above the clayey soil, resulting in a saturated condition for prolonged periods and creating additional limitations on equipment mobility. Consideration should be given to the necessity for maintaining moisture content to prevent wind erosion and for controlling dust during earthwork operations. Consideration should be given to performing infiltration tests if retention/detention basins are proposed.

As the Property may be underlain by shallow ground water consideration should be given to stabilization and dewatering may be needed to facilitate construction. Trench over-break of trench sidewalls may occur, and stabilization and dewatering may be needed to facilitate construction. Mobility and use of vibratory or rubber-tire equipment will be restricted in these areas, and permanent dewatering will be required. Consideration should also be given to time constraints associated with drying of trench backfill prior to its reuse. Where the presence of ground water restricts compaction effort, free draining, crushed clean gravel and filter fabric may be necessary for reuse as backfill and, with the Manufacturer's approval, pipe bedding.

Earth Tech, LLC
681 Edison Way
Reno, Nevada 89502
(775) 771-2388

As the presence of long-term moisture can create detrimental conditions, foundation drain systems should be considered to prevent the accumulation of water against foundations, grade beams or in crawlspaces.

As a portion of the Property is developed, consideration should be given to potential presence of basements, heating oil tanks, or service such as sewer and utility trenches associated with development. Where remnant improvements exist in development areas, they will require complete removal and replacement with approved, compacted fill material.

According to FEMA the Property is in an area of potential flooding. Consideration should be given to local and federal regulations which may impose construction constraints, such as requiring minimum finish floor elevations, or ordinances banning basements. Due to revisions associated with flood zoning, the Property delineation with respect to flood zoning should be verified with the most current map at the time of building permit application.

According to the soil survey, the soil is slightly saline affected, is subject to frost action, and may be corrosive to concrete and uncoated steel or metal. Consideration should be given to chemical constituents which may inhibit establishment of landscaping, such as lawns, plants and other vegetation growth not indigenous to the area. Laboratory testing to determine the agronomic characteristics of the native soils was not part of the scope of our work; however, it should be considered. Based on our anticipation that structural subbase and aggregate base and proper site drainage will be provided in development area, we do not believe that frost action will adversely impact the Property. Based on our experience in the area we believe that adequate corrosion mitigation can be attained through use of properly prepared and placed Type II portland cement concrete, and by maintaining a minimum 3-inch concrete cover where reinforcing steel or other metal is near native soil.

The Property may exceed action levels established by the Environmental Protection Agency (EPA) for Radon gas. The EPA recommends taking corrective measures to reduce exposure to radon gas when action levels exceed 4.0 pCi/L. Consideration should be given to constructing the structure with a passive or “natural ventilation” radon reduction system which can be converted to an active or “pressurized” system if warranted. Refer to *Radon in Nevada* by Rigby *et al*., Nevada Bureau of Mines and Geology, Bulletin 108, 1994 for additional information concerning radon gas and its mitigation.

The referenced earthquake hazards map indicates the Property may be in area of potential liquefaction. Assessment of liquefaction potential is beyond the scope of our work; however, it should be addressed during the design-level geotechnical investigation.

There are no other apparent geologic hazards that would place unusual constraints on the project; however, strong ground shaking associated with earthquakes should be expected to occur during the life of the project.

Earth Tech, LLC
681 Edison Way
Reno, Nevada 89502
(775) 771-2388

V REFERENCES

American Concrete Institute, *Building Code Requirements for Reinforced Concrete* (ACI 318-14), dated 2014.

Federal Emergency Management Agency, U.S. Department of Homeland Security, *FEMA's Flood Map Service Center* (https://msc.fema.gov/portal).

Katzer, Terry. *Carson City Quadrangle Groundwater Map.* Reno: Nevada Bureau of Mines & Geology, University of Nevada, Reno, 1980.

Lieberman, P. *Accelerated Corrosion Tests for Buried Metal Structures*. Pipeline and Gas Journal, October 1996. Page. 51.

International Code Council *2018 International Residential and Building Codes,* Whittier: International Code Council, Inc., 2018.

Regional Transportation Commission of Washoe County. *Standard Specification for Public Works Construction, Revision 8.* Reno: Regional Transportation Commission of Washoe County, 2012.

Rigby, James G., Jonathan G. Price, Lindsay G. Christensen, Daphne D. La Pointe, Alan R. Ramelli, Mario O. Desilets, Ronald H. Hess, and Stanley R. Marshall. *Radon in Nevada*. Reno: Nevada Bureau of Mines & Geology, Bulletin 108, University of Nevada, Reno, 1994.

Trexler, Dennis T. and Bell, John W. *Carson City Quadrangle Earthquake Hazards Map*. Reno: Nevada Bureau of Mines & Geology, University of Nevada, Reno, 1979.

Trexler, Dennis T. *Carson City Folio Geologic Map*. Reno: Nevada Bureau of Mines & Geology, University of Nevada, Reno, 1977.

United States Department of Agriculture, Soil Conservation Service. *Soil Survey of Carson City Area, Nevada*. Approved 1975.

United States Department of the Interior Geological Survey. *Carson City Quadrangle*. 7.5-minute series map (topographic). 1:24,000. Denver: USGS, 2018.

Earth Tech, LLC
681 Edison Way
Reno, Nevada 89502
(775) 771-2388

VI DISTRIBUTION

One wet-stamped .pdf copy via e-mail to:

KLS Planning & Design
1 E. 1st St. Suite 1400
Reno, Nevada 89501
Attn: John Krmpotic, ACIP

MONTE VISTA CONSULTING
575 E. Plumb Lane
Suite 101
Reno, NV 89502
775.636.7905

Carson City
Community Development Department
108 E. Proctor Street
Carson City, NV 89701

August 18, 2022

Ash Canyon SF – Trip & Parking Generation Letter

The Ash Canyon SF project is located at 1051 N. Ormsby Boulevard, north of W. Washington Street (APN: 001-241-14). Ormsby Boulevard is under Carson City jurisdiction and is classified as a local street in the vicinity of the project. The site is currently developed as a residential/agricultural site with existing homes along Ormsby Boulevard with the remainder of the site to the east as an irrigated field. The proposed subdivision will include 41 new single-family residences and a single looped street, Ormsby Circle, which will be maintained as a private street. In order to determine the trip and parking generation quantities, the ITE Trip Generation Manual (11th Edition) has been utilized based on the following parameters:

Single-Family Detached Housing 210, General Urban/Suburban not close to rail transit

Based on this use the project is anticipated to generate the following:

Weekday Daily Trips: 387

Weekday AM Peak Trips: 31

Weekday PM Peak Trips: 41

The proposed site layout includes parking on both sides of the street in accordance with the "Special Street Section." No additional traffic study or analysis has been completed.

Please contact Monte Vista Consulting if you have any questions or if there is anything else I can help with.

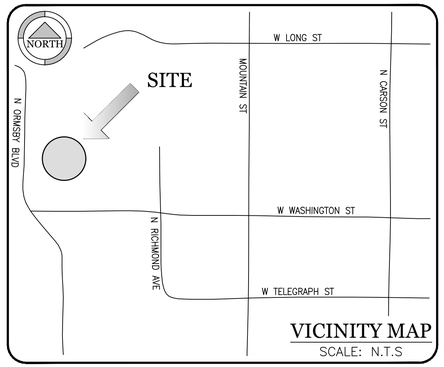
Sincerely,

Monte Vista Consulting

Michael Vicks, P.E.

Principal

TENTATIVE MAP FOR
Ash Canyon SF



VICINITY MAP
SCALE: N.T.S

SERVICE PROVIDERS	
DOMESTIC WATER	CARSON CITY PUBLIC WORKS
IRRIGATION WATER	CARSON CITY PUBLIC WORKS
SANITARY SEWER	CARSON CITY PUBLIC WORKS
STORM DRAIN	CARSON CITY PUBLIC WORKS
NATURAL GAS	SOUTHWEST GAS
ELECTRICITY	NV ENERGY
TELECOMMUNICATIONS	AT&T / CHARTER COMMUNICATIONS
FIRE	CARSON CITY FIRE DEPARTMENT
POLICE	CARSON CITY SHERIFF'S OFFICE

OWNER INFORMATION

KP INVESTORS, LLC
ATTN: PAT OWENS
12000 RED ROCK ROAD
RENO, NV 89508
775.544.5464

APPLICANT

KLS PLANNING & DESIGN GROUP
ATTN: JOHN KRMPOTIC
1EAST 1ST STREET, SUITE 1400
RENO, NV 89501
775.857.7710

SURVEYOR

MST SURVEYING
10650 SANTA FE ROAD
RENO, NV 89508
775.544.7817

CIVIL ENGINEER

MONTE VISTA CONSULTING, LTD.
575 E. PLUMB LANE, SUITE 101
RENO, NV 89502
775.636.7905

GEOTECHNICAL ENGINEER

EARTH TECH, LLC
681 EDISON WAY
RENO, NV 89502
775.771.2388

ABBREVIATIONS

AC – ASPHALT CONCRETE
AGG – AGGREGATE
BC – BEGIN CURVE
BFC – BACK FACE OF CURB
BVC – BEGIN VERTICAL CURVE
BW – BOTTOM OF WALL
CL_{C} – CENTERLINE
CB – CATCH BASIN
CFS – CUBIC FEET PER SECOND
CO – CLEAN OUT
CONC – CONCRETE
CONST– CONSTRUCT
COORD– COORDINATE
DET – DETAIL
DI – DROP INLET
DIP – DUCTILE IRON PIPE
DOM – DOMESTIC
E – EXISTING
EC – END CURVE
EG – EXISTING GRADE
ELEV – ELEVATION
EVC – END VERTICAL CURVE
FDC – FIRE DEPARTMENT CONNECTION
FF – FINISHED FLOOR ELEVATION
FFC – FRONT FACE OF CURB
FG – FINISHED GRADE
FH – FIRE HYDRANT
FL_{E} – FLOW LINE
FLG – FLANGE
FT – FOOT
GB – GRADE BREAK
GF – GARAGE FLOOR ELEVATION
GV – GATE VALVE
HC – HANDICAPPED
HP – HIGH POINT
IE – INVERT ELEVATION
IN – INCH
INT – INTERSECTION
IRR – IRRIGATION
L – LENGTH
LAT – LATERAL
LF – LINEAR FEET
LP – LOW POINT
LT – LEFT
MAX – MAXIMUM
MDD – MAXIMUM DRY DENSITY
MH – MANHOLE
MIN – MINIMUM
MISC – MISCELLANEOUS
NPWL – NON POTABLE WATER LINE
NTS – NOT TO SCALE
OD – OUTSIDE DIAMETER
P – PROPOSED
PAD – PAD GRADE
PCC – PORTLAND CEMENT CONCRETE
PI – POINT OF INTERSECTION
PIV – POST INDICATOR VALVE
PL_{P} – PROPERTY LINE
PO – PUSH ON
PRC – POINT OF REVERSE CURVATURE
PUE – PUBLIC UTILITY EASEMENT
PVC – POLYVINYL CHLORIDE
PVI – POINT OF VERTICAL INTERSECTION
Q_5 – FIVE YEAR FLOW RATE
Q_{100} – ONE HUNDRED YEAR FLOW RATE
Q_{CAP} – CAPACITY FLOW RATE
R – RADIUS
REF – REFERENCE
RJ – RESTRAINED JOINT
RP – RADIUS POINT
RT – RIGHT
RW – RIGHT-OF-WAY
S – SLOPE
SCH – SCHEDULE
SD – STORM DRAIN
SF – SQUARE FOOT
SS – SANITARY SEWER
STA – STATION
STD – STANDARD
SW – SIDEWALK
T – TANGENT
TB – THRUST BLOCK
TC – TOP OF CURB
TOE – TOE OF SLOPE
TOP – TOP OF SLOPE
TW – TOP OF WALL
TYP – TYPICAL
V – VELOCITY
W – WATER
YD – YARD DRAIN

GENERAL NOTES

1. THESE PLANS ARE FOR TENTATIVE MAP PURPOSES ONLY AND ARE NOT FOR CONSTRUCTION.
2. THE CONTRACTOR/DEVELOPER SHALL BE RESPONSIBLE FOR ENSURING ALL REQUIRED PERMITTING IS OBTAINED PRIOR TO COMMENCEMENT OF CONSTRUCTION, INCLUDING, BUT NOT LIMITED TO, DEMOLITION, ENCROACHMENT, BUILDING, GRADING, AND TRAFFIC CONTROL PERMITS.
3. UNLESS SPECIFICALLY PERMITTED OTHERWISE, CONSTRUCTION HOURS SHALL BE LIMITED TO BETWEEN THE HOURS OF 7:00 AM AND 6:00 PM MONDAY THROUGH FRIDAY AND BETWEEN THE HOURS OF 8:00 AM AND 6:00 PM ON SATURDAY. THERE SHALL BE NO CONSTRUCTION ON SUNDAY EXCLUDING DUST CONTROL AND STORM WATER POLLUTION PREVENTION PLAN MEASURES.
4. ALL CONSTRUCTION SHALL BE CLOSELY COORDINATED WITH THE OWNER, CARSON CITY AND/OR ENGINEER OF RECORD SO THAT THE QUALITY OF WORK CAN BE CHECKED FOR APPROVAL.
5. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (SSPWC) AND THE STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION (SDPWC), AS ADOPTED BY CARSON CITY, AND SHALL BE SUBJECT TO THE APPROVAL OF THE OWNER. ALL SPECIFICATIONS REFERENCED HEREIN REFER TO THE SSPWC UNLESS INDICATED OTHERWISE.
6. ALL QUANTITIES INDICATED IN THESE PLANS ARE APPROXIMATE AND INTENDED FOR ENTITLEMENT PURPOSES ONLY.
7. CONSTRUCTION OF IMPROVEMENTS MUST ALLOW FOR THE PERPETUATION OF ALL EXISTING LEGAL ACCESSES AND EXISTING DRIVEWAYS.
8. ALL NEW TRAFFIC CONTROL IMPROVEMENTS TO MEET CURRENT MUTCD REQUIREMENTS.

BASIS OF BEARINGS

THE BASIS OF BEARINGS FOR THIS SURVEY IS STATE PLANE NV WEST ZONE.

BASIS OF ELEVATIONS

NAVD88 CARSON CITY BENCH MARK
NO.CC042 EL=4822.82

SHEET INDEX

MONTE VISTA CONSULTING
575 E. Plumb Lane #101
Reno, NV 89502
775.636.7905
montevistaconsulting.com

811 Know what's below. Call before you dig.

Ash Canyon SF
Tentative Subdivision Map
Title Sheet

1051 N Ormsby Blvd
APN: 001-241-14
Carson City, Nevada

Project #	21.034
Drawn	HBA
Checked	MWV
Date	8.29.2022
△	Revisions

FOR PRELIMINARY REVIEW
NOT FOR CONSTRUCTION

PROFESSIONAL ENGINEER-STATE OF NEVADA
MICHAEL W. VICKS
Exp: 6.30.2024
CIVIL
No. 21025

August 29, 2022

C1.0
1 of 5

SITE ANALYSIS	
TOTAL SITE AREA	7.98 AC
ZONING	SF12 (SF6 PROPOSED)
MASTER PLAN	MEDIUM DENSITY RESIDENTIAL
RIGHT-OF-WAY	1.85 AC (23.2%)
COMMON AREA	0.20 AC (2.5%)
LOT AREA	5.93 AC (74.3%)
RESIDENTIAL LOTS	41
DENSITY	5.14 UNITS/AC
LARGEST	8,058 S.F. (0.18 AC)
SMALLEST	6,004 S.F. (0.14 AC)
AVERAGE	6,306 S.F. (0.14 AC)

Parcel Table	
Parcel #	Area
1	7178
2	6004
3	6004
4	6004
5	6004
6	6004
7	6004
8	6004
9	6004
10	7665
11	6673
12	6649
13	8058
14	7664

Parcel Table	
Parcel #	Area
15	6438
16	6456
17	6394
18	6332
19	6271
20	6209
21	6147
22	6085
23	6621
24	6595
25	6004
26	6004
27	6004
28	6004

Parcel Table	
Parcel #	Area
29	6004
30	6004
31	6004
32	6146
33	6146
34	6004
35	6004
36	6004
37	6004
38	6004
39	6004
40	6004
41	6731
COMMON AREA	8544

MONTE VISTA CONSULTING
575 E. Plumb Lane #101
Reno, NV 89502
775.636.7905
montevistaconsulting.com

NORTH

Ash Canyon SF
Tentative Subdivision Map
Geometric Plan

1051 N Ormsby Blvd
APN: 001-241-14
Carson City, Nevada

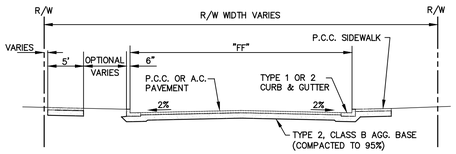
Project #	21.034
Drawn	HBA
Checked	MWV
Date	8.29.2022
△	Revisions

PROFESSIONAL ENGINEER-STATE OF NEVADA
MICHAEL W. VICKS
Exp. 6.30.2024
CIVIL
No. 21025

FOR PRELIMINARY REVIEW
NOT FOR CONSTRUCTION

August 29, 2022

C2.0



TYPICAL SECTION
NTS

FUNCTIONAL CLASSIFICATION ⚠1 SPECIAL URBAN	NO PARKING (SEE NOTE 6)	PARKING ONE SIDE (SEE NOTE 6)	PARKING BOTH SIDES	SIDEWALK
	"FF"	"FF"	"FF"	MIN.
LOCAL – 25 MPH	23'	28'	36'	5'
LOCAL – 15–20 MPH	20'	28'	36'	5'

ORMSBY CIRCLE

APPLICABILITY: THE SPECIAL URBAN STREET SECTION IS ONLY ALLOWED FOR PRIVATE STREETS. USE OF THE SPECIAL URBAN STREET SECTION REQUIRES SPECIFIC ⚠1 APPROVAL FROM THE CARSON CITY ENGINEER OR PUBLIC WORKS DIRECTOR.

NOTES:

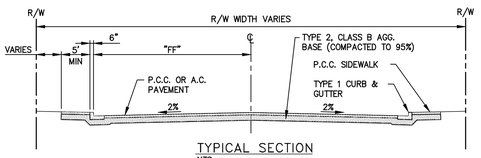
1. DISTANCE "FF" IS MEASURED TO FRONT FACE OF CURB.
2. STRUCTURAL SECTION BY ENGINEERING DESIGN, BUT NOT LESS THAN THE MINIMUM 3 INCHES OF A.C. W/6 INCHES OF AGG. BASE.
3. ASPHALT MIX SHALL BE PG 64–28 NV WITH LIME TREATED TYPE 2 AGGREGATE, MAXIMUM 15% RECLAIMED ASPHALT PAVEMENT, 50 BLOW. ALL A.C. SURFACES SHALL BE COMPACTED TO 96% (MINIMUM) MARSHALL MAXIMUM DENSITY. NON–POLYMER OIL SURFACES SHALL RECEIVE A NON–POLYMER FOG SEAL.
4. STREET LENGTH CENTERLINE TO CENTERLINE IS TYPICALLY 440 FEET TO 600 FEET.
5. BITUMINOUS PAVING MACHINES SHALL BE SELF CONTAINED, POWER–PROPELLED UNITS, WITH AN ACTIVATED SCREED OR STRIKE–OFF ASSEMBLY, HEATED IF NECESSARY, MINIMUM HOPPER CAPACITY OF 10 TONS AND CAPABLE OF SPREADING AND FINISHING COURSES OF BITUMINOUS MIXTURE IN LANE AND SHOULDER WIDTHS APPLICABLE TO THE SPECIFIED TYPICAL SECTION AND THICKNESS SHOWN ON PLANS.
6. "NO PARKING" SIGNS SHALL BE PLACED IN RESTRICTED AREAS PER MUTCD SECTION 2B.

NO.	REVISION	DATE
⚠1	PRIVATE ONLY	9/21
APPROVED BY:		9/21

STANDARD DETAIL FOR PUBLIC WORKS CONSTRUCTION

SPECIAL SECTION URBAN STREETS

SECTION CARSON CITY
DRAWING NO. C–5.1.8.1
DATE SEP 2021



TYPICAL SECTION
NTS

MINIMUM STRUCTURAL SECTION
ARTERIAL (MIN. 6" A.C. W/ MIN. 12" AGG. BASE)
COLLECTOR (MIN. 4" A.C. W/ 8" AGG. BASE)
LOCAL (MIN. 3" A.C. W/6" AGG. BASE)

FUNCTIONAL CLASSIFICATION URBAN	NUMBER OF LANES	WITHOUT BIKE LANES: NO PARKING	PARKING ONE SIDE	PARKING BOTH SIDES	SIDEWALK
		MINIMUM "FF"	MINIMUM "FF"	MINIMUM "FF"	MINIMUM
ARTERIAL	5 4	32' 27.5'	N/A	N/A	5' 5'
COLLECTOR	3 2	18.5' 15.5'	23' 19.5'	30.5' 23.5'	5' 5'
LOCAL	2	15.5'	19.5'	23.5'	5'
FUNCTIONAL CLASSIFICATION URBAN	NUMBER OF LANES	WITH BIKE LANES: NO PARKING	PARKING ONE SIDE	PARKING BOTH SIDES	SIDEWALK
		MINIMUM "FF"	MINIMUM "FF"	MINIMUM "FF"	MINIMUM
ARTERIAL	5 4	36' 29'	N/A	N/A	5' 5'
COLLECTOR	3 2	23' 17'	27.5' 21.5'	32' 25'	5' 5'
LOCAL	2	17'	N/A	N/A	5'

N. ORMSBY BLVD

NOTES:

1. DISTANCE "FF" IS MEASURED TO FRONT FACE OF CURB.
2. STRUCTURAL SECTION BY ENGINEERING DESIGN, BUT NOT LESS THAN THE MINIMUM SHOWN.
3. ASPHALT MIX SHALL BE PG 64–28 NV WITH LIME TREATED TYPE 2 AGGREGATE, MAXIMUM 15% RECLAIMED ASPHALT PAVEMENT, 50 BLOW. ALL A.C. SURFACES SHALL BE COMPACTED TO 96% (MINIMUM) MARSHALL MAXIMUM DENSITY. NON–POLYMER OIL SURFACES SHALL RECEIVE A NON–POLYMER FOG SEAL.
4. COLLECTOR STREETS SHALL INCLUDE CENTER STRIPING.
5. COLLECTOR STREETS WITH BIKE LANES SHALL INCLUDE BICYCLE PAVEMENT MARKINGS AND SIGNS PER M.U.T.C.D.
6. BITUMINOUS PAVING MACHINES SHALL BE SELF CONTAINED, POWER–PROPELLED UNITS, WITH AN ACTIVATED SCREED OR STRIKE–OFF ASSEMBLY, HEATED IF NECESSARY, MINIMUM HOPPER CAPACITY OF 10 TONS AND CAPABLE OF SPREADING AND FINISHING COURSES OF BITUMINOUS MIXTURE IN LANE AND SHOULDER WIDTHS APPLICABLE TO THE SPECIFIED TYPICAL SECTION AND THICKNESS SHOWN ON PLANS.

NO.	REVISION	DATE
⚠1	DWG#, NOTE 3	9/17
⚠2	NOTE 3–RAP	2/18
APPROVED BY:		2/18

STANDARD DETAIL FOR PUBLIC WORKS CONSTRUCTION

ROADWAY SECTION URBAN STREETS

SECTION CARSON CITY
DRAWING NO. C–5.1.8 ⚠1
DATE FEB 2018

SITE & UTILITY NOTES

1. THIS TENTATIVE DEVELOPMENT PLAN IS NOT INTENDED FOR CONSTRUCTION, IT IS FOR PRELIMINARY REVIEW ONLY.
2. THE FIELD SURVEY PREPARED BY MST SURVEYING IS THE BASIS OF THIS DESIGN. MVC TAKES NO RESPONSIBILITY FOR THE ACCURACY OF THE SURVEY.
3. UTILITIES MAY EXIST THAT ARE NOT SHOWN ON THE PLANS. THE LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE ONLY AND ARE BASED ON THE BEST AVAILABLE INFORMATION AT THE TIME. THE INFORMATION IS NOT TO BE RELIED UPON AS EXACT OR COMPLETE. THE CONTRACTOR SHALL VERIFY ACTUAL LOCATIONS OF EXISTING UTILITIES PRIOR TO CONSTRUCTION. SHOULD THE CONTRACTOR DISCOVER ANY DISCREPANCIES BETWEEN ACTUAL CONDITIONS AND THE INFORMATION SHOWN ON THESE DRAWINGS, THEY SHALL NOTIFY MVC BEFORE PROCEEDING WITH CONSTRUCTION.
4. ALL EXISTING ONSITE STRUCTURES AND ASSOCIATED SITE IMPROVEMENTS INCLUDING BUT NOT LIMITED TO CONCRETE FLATWORK, DRIVEWAY APRONS, WALKWAYS, LANDSCAPING AND UTILITY SERVICES SHALL BE DEMOLISHED. THE CONTRACTOR IS REPONSIBLE FOR COORDINATION WITH ALL UTILITY SERVICE PROVIDERS.
5. AN ENCROACHMENT & EXCAVATION PERMIT IS REQUIRED FOR ALL WORK WITHIN THE CARSON CITY RIGHT–OF–WAY.
6. ALL WORK WITHIN THE CARSON CITY RIGHT–OF–WAY SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST CODES, STANDARD SPECIFICATIONS & DETAILS.
7. ALL PERMANENT STRIPING, SIGNAGE & TRAFFIC CONTROL IMPROVEMENTS SHALL BE INSTALLED IN ACCORDANCE WITH CURRENT "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) REQUIREMENTS.
8. MAINTAIN 3.5' MINIMUM COVER OVER ALL WATER MAINS AND SERVICES.
9. MAINTAIN 3.0' MINIMUM HORIZONTAL CLEARANCE AROUND ALL FIRE HYDRANTS.
7. ALL PROPOSED WATER AND GRAVITY SEWER IMPROVEMENTS ARE PUBLIC UNLESS OTHERWISE NOTED.
8. THE PROPOSED SANITARY SEWER LIFT STATION, SANITARY SEWER FORCE MAIN, AND ALL STORM DRAIN IMPROVEMENTS ARE PRIVATE AND SHALL BE MAINTAINED BY THE ASSOCIATION.
9. NO LOCATION FOR TELEPHONE, CABLE TV OR ANY OTHER LOW VOLTAGE IMPROVEMENT IS SHOWN. THE CONTRACTOR SHALL COORDINATE THE DESIGN & CONSTRUCTION OF THESE UTILITIES DIRECTLY WITH THE SERVICE PROVIDER.
10. ADD 4700' TO ALL SPOT ELEVATIONS.

ALTERNATE MEANS & METHODS NOTE

THE SUBDIVISION PROPOSES TWO CONNECTIONS TO ORMSBY BOULEVARD IN ACCORDANCE WITH CARSON CITY DESIGN REQUIREMENTS, HOWEVER, BASED ON THE GEOMETRIC CONFIGURATION OF THE LOT, IT IS NOT POSSIBLE TO LOCATE THESE ACCESS ROADS IN ACCORDANCE WITH THE 2018 INTERNATIONAL FIRE CODE REMOTENESS REQUIREMENTS. AN ALTERNATE MEANS AND METHODS OF PROTECTION WILL NEED TO BE PROPOSED PRIOR TO SUBMITTING FOR A SITE IMPROVEMENT PERMIT. THE CARSON CITY FIRE DEPARTMENT WILL BE THE AUTHORITY HAVING JURISDICTION REGARDING REVIEW AND APPROVAL OF THE PROPOSAL.

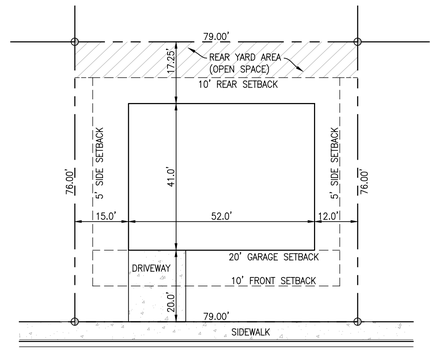
OPEN SPACE QUANTITIES

Rear Yard Area	
Parcel #	Area
1	752
2	790
3	790
4	790
5	790
6	790
7	790
8	790
9	790
10	870
11	700
12	700
13	1249
14	1364

Rear Yard Area	
Parcel #	Area
15	780
16	790
17	790
18	790
19	790
20	790
21	790
22	790
23	661
24	675
25	790
26	790
27	790
28	790

Rear Yard Area	
Parcel #	Area
29	790
30	790
31	790
32	615
33	615
34	790
35	790
36	790
37	790
38	790
39	790
40	790
41	678
TOTAL	32569
MINIMUM	615
MAXIMUM	1364

NOTE: THE PROPOSED OPEN SPACE IS BASED ON LANDSCAPING THE REAR YARD SETBACK ONLY. BASED ON FINAL PRODUCT IT IS LIKELY OPEN SPACE IN EXCESS OF THIS MINIMUM WILL ULTIMATELY BE PROVIDED.



TYPICAL LOT DETAIL
N.T.S.

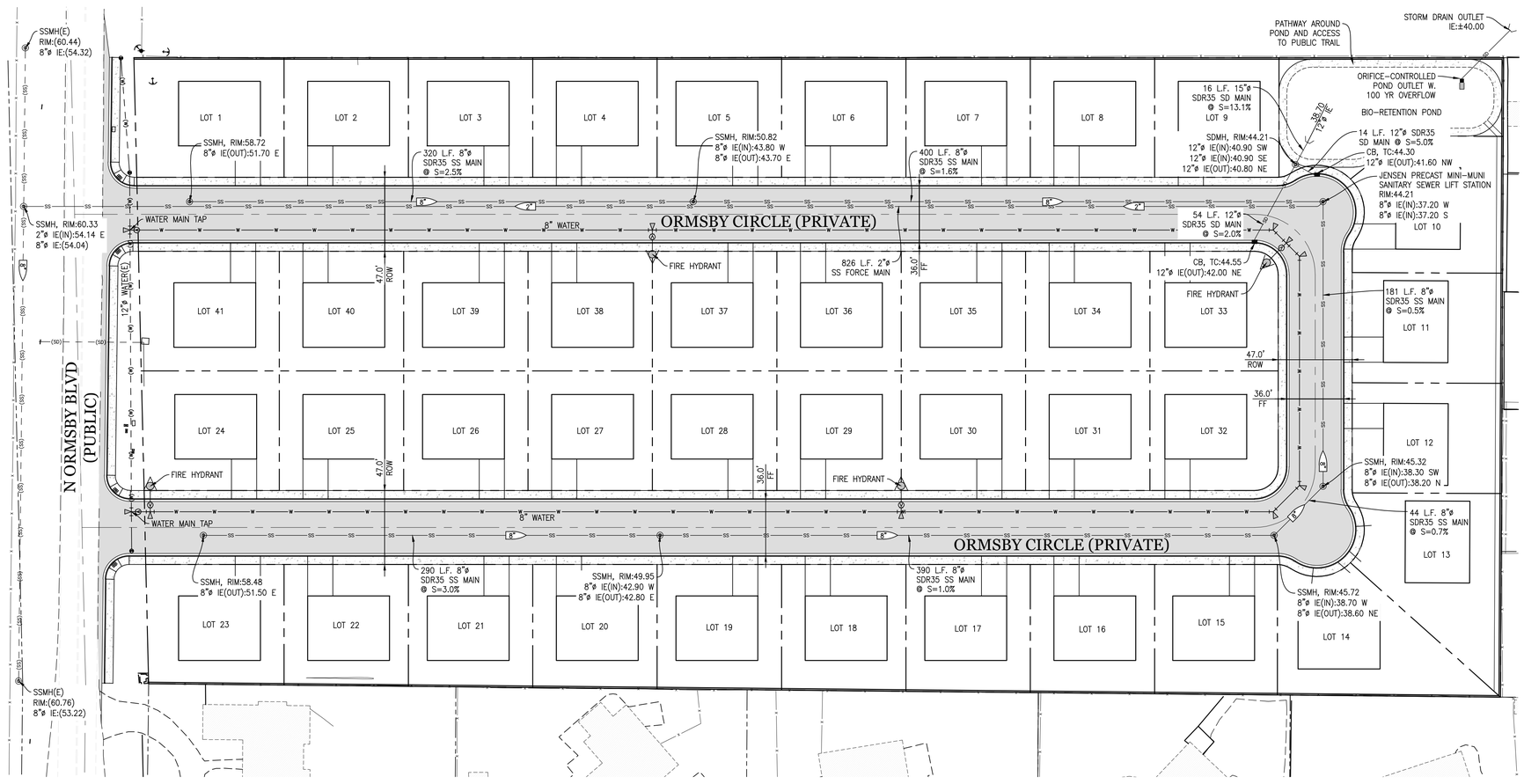
OPEN SPACE CALCULATIONS

REQUIREMENTS		UNITS	REQUIRED OPEN SPACE
MIN. 250 S.F./DWELLING UNIT		41	10,250 S.F.
TOTAL REQUIRED OPEN SPACE	COMMON OPEN SPACE PROVIDED		PRIVATE OPEN SPACE PROVIDED
10,250 S.F.	8,544 S.F.		32,569 S.F.
	AVERAGE PER LOT	208 S.F.	AVERAGE PER LOT 794 S.F.

NOTES:
1. REQUIREMENTS DETERMINED USING CARSON CITY MUNICIPAL CODE TITLE 17, CHAPTER 17.10.046

SITE & UTILITY LEGEND

- A.C. PAVEMENT AREA
- CONCRETE AREA
- OPEN SPACE AREA
- UTILITY —— PROPOSED UTILITY LINE W. DESCRIPTION
- (UTILITY) — — EXISTING UTILITY LINE W. DESCRIPTION
- FIRE HYDRANT ASSEMBLY (EXISTING/PROPOSED)
- FLUSH VALVE ASSEMBLY (EXISTING/PROPOSED)
- DUAL/SIINGLE WATER SERVICE (EXISTING/PROPOSED)
- AIR RELEASE VALVE ASSEMBLY (EXISTING/PROPOSED)
- WATER MAIN TEE W. GATE VALVES & THRUST BLOCK
- BACKFLOW PREVENTION ASSEMBLY
- ELBOW W. THRUST BLOCK
- MAHHOLE W. DESCRIPTION (EXISTING/PROPOSED)
- CLEANOUT (EXISTING/PROPOSED)
- SANITARY SEWER LATERAL
- CATCH BASIN/DROP INLET
- YARD DRAIN
- ACCESSIBLE PARKING SPACE W. SIGN & PAVEMENT MARKINGS
- PEDESTRIAN ACCESS RAMP
- ACCESSIBLE ROUTE
- (12) PARKING SPACE COUNT
- (1)(1)(1)(1) KEYNOTE (REF. CORRESPONDING LEGEND)



MONTE VISTA CONSULTING
575 E. Plumb Lane #101
Reno, NV 89502
775.636.7905
montevistaconsulting.com

NORTH

Ash Canyon SF
Tentative Subdivision Map
Site & Utility Plan

1051 N Ormsby Blvd
APN: 001-241-14
Carson City, Nevada

Project #	21.034
Drawn	HBA
Checked	MWV
Date	8.29.2022
△	Revisions

PROFESSIONAL ENGINEER STATE OF NEVADA
MICHAEL W. VICKS
Exp: 6.30.2024
CIVIL
No. 21025

FOR PRELIMINARY REVIEW NOT FOR CONSTRUCTION

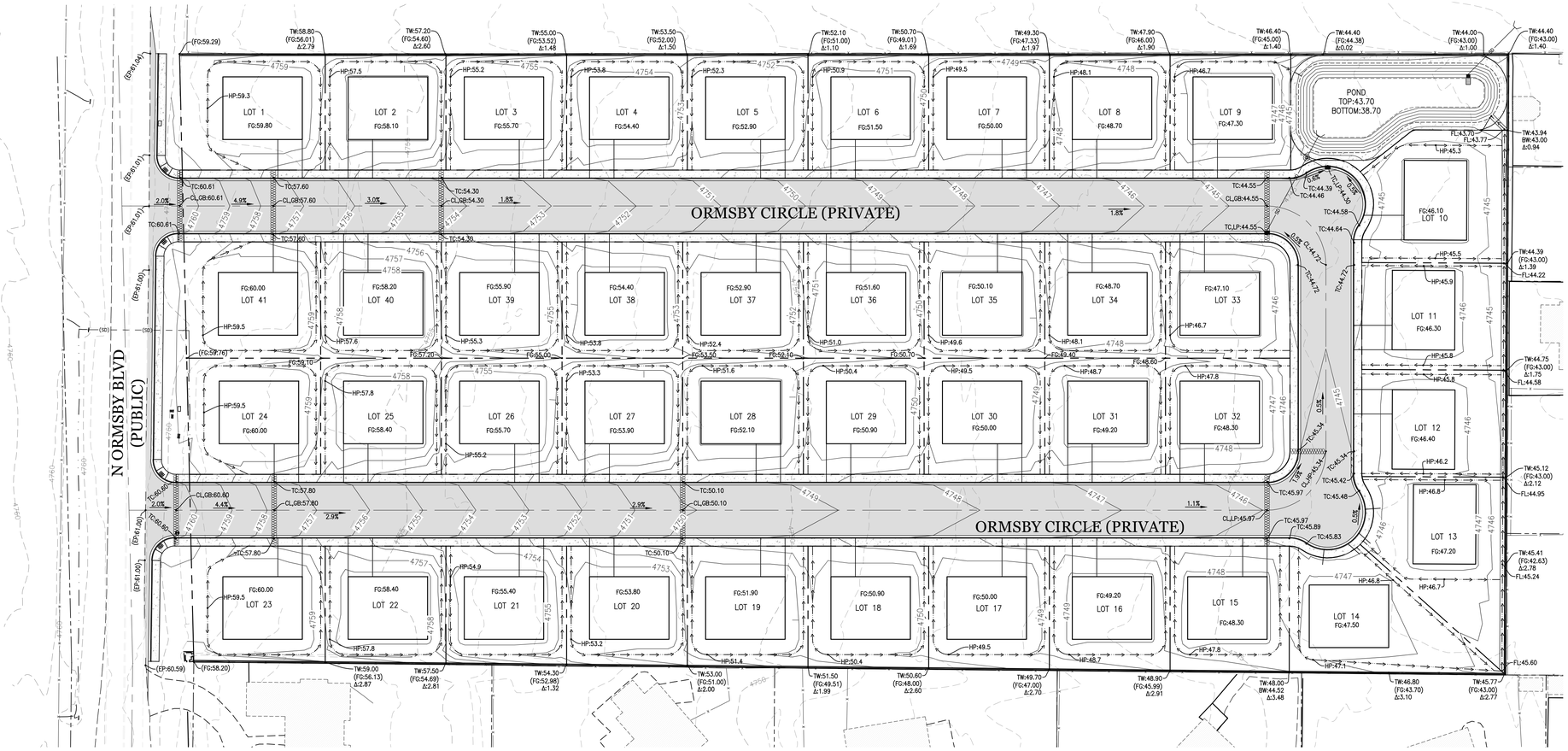
August 29, 2022

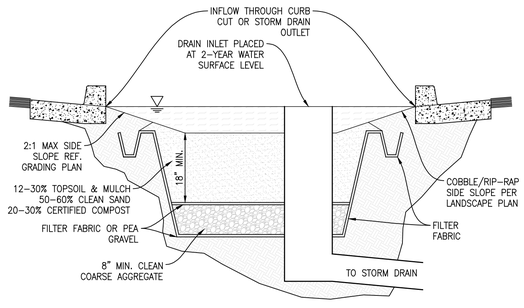
C3.0
3 of 5

GRADING LEGEND

- A.C. PAVEMENT AREA
- CONCRETE AREA
- UTILITY — PROPOSED UTILITY LINE W. DESCRIPTION
- (UTILITY) — EXISTING UTILITY LINE W. DESCRIPTION
- MAHHOLE W. DESCRIPTION (EXISTING/PROPOSED)
- CLEANOUT (EXISTING/PROPOSED)
- CATCH BASIN/DROP INLET
- YARD DRAIN
- DIRECTIONAL FLOW LINE
- GRADE BREAK
- 4900 PROPOSED CONTOUR LINE
- 4900 EXISTING CONTOUR LINE
- (FG:XX.XX) FG:XX.XX SPOT ELEVATION (EXISTING) ~ PROPOSED

1"=40' 0 20 40 80





BIORETENTION BASIN NOTES:

1. BASINS ARE PRIVATELY OWNED & MAINTAINED UNLESS SPECIFICALLY NOTED OTHERWISE.
2. REFERENCE PLAN FOR SPECIFICATIONS OF DRAIN INLET AND ADDITIONAL DESIGN.
3. PROVIDE A 3' WIDE LOW FLOW SWALE IN THE BOTTOM OF THE BASIN LINED WITH 1.5"-3" ROCK AS SPECIFIED BY THE LANDSCAPE ARCHITECT.
4. MAX SIDE SLOPE SHALL BE 3:1 AND DISTURBED SLOPES SHALL BE STABILIZED WITHIN 1 WEEK OF CONSTRUCTION.
5. THE BASINS SHALL BE INSPECTED ANNUALLY, AND FOLLOWING ANY MAJOR STORM EVENT.
6. DEBRIS SHALL BE PERIODICALLY REMOVED AND ANY VEGETATION MAINTAINED.
7. IF THE BASIN DOES NOT FULLY INFILTRATE WITHIN 7, DAYS, THE FILTER MEDIA SHALL BE REPLACED.
8. EVERY 5-10 YEARS THE AREA SHOULD BE TILLED, FINE MATERIALS REMOVED AND THE BASE REGARDED TO MAINTAIN LONG TERM VIABILITY OF THE BASIN.
9. IF A HAZARDOUS MATERIALS SPILL OCCURS AND THE SOILS BECOME CONTAMINATED, THE AFFECTED AREAS SHOULD BE REMOVED IMMEDIATELY AND APPROPRIATE SOILS AND MATERIALS REPLACES AS SOON AS POSSIBLE.

LANDSCAPE BIO-RETENTION BASIN
WITH STORM DRAIN OVERFLOW

EARTHWORK ANALYSIS

SITE AREA	7.98 AC
SITE DISTURBANCE	7.98 AC
PROPOSED CUT	1,800 YD^3
PROPOSED FILL	18,800 YD^3
NET EARTHWORK	17,000 YD^3 FILL

THIS ANALYSIS COMPARES THE EXISTING FINISH GRADE SURFACE TO THE PROPOSED FINISH GRADE SURFACE AND IS INTENDED FOR PERMITTING PURPOSES ONLY. THE CONTRACTOR SHALL PREPARE AN INDEPENDENT EARTHWORK ANALYSIS INCORPORATING ANY OVER EXCAVATION, SHRINKAGE, EXPANSION AND/OR STRUCTURAL SECTIONS, ETC.

GRADING & DRAINAGE NOTES

1. ALL GRADING SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL REPORT PREPARED BY EARTH TECH, LLC.
2. ALL ELEVATIONS IDENTIFIED ARE TO FINAL SURFACE FINISH GRADE UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL ADJUST GRADING TO ACCOMMODATE THE DEPTH OF ANY RIP-RAP PROTECTION, LANDSCAPE SURFACE TREATMENTS OR THE LIKE TO ENSURE THE IDENTIFIED GRADES ARE ESTABLISHED WITH COMPLETE SITE STABILIZATION.
3. ANY RETAINED HEIGHTS INDICATED ARE FROM SURFACE TO SURFACE UNLESS OTHERWISE NOTED.SLOPES STEEPER THAN 3H:1V SHALL BE MECHANICALLY STABILIZED IN ACCORDANCE WITH THE GEOTECHNICAL INVESTIGATION/REPORT PREPARED BY EARTH TECH, LLC. UNLESS NOTED OTHERWISE, SLOPES GREATER THAN 3:1 SHALL BE STABILIZED WITH RIP-RAP. SWALES AND V-DITCHES SHALL BE RIP RAPPED AS SPECIFIED ON PLANS. THE ROCK SHALL CONTAIN A MINIMUM OF FOUR FRACTURED FACES AND BE PLACED TO A MINIMUM DEPTH OF 12 INCHES. A MINIMUM OF 75% OF THE RIP-RAP SHALL BE THE SPECIFIED ROCK DIAMETER OR GREATER.
4. ALL PROPOSED STORM DRAIN IMPROVEMENTS AND DETENTION POND ARE PRIVATE AND SHALL BE MAINTAINED BY THE ASSOCIATION.
5. ADD 4700' TO ALL ELEVATIONS.

FLOOD ZONE

THIS SITE LIES IN FEMA FLOOD ZONE X SHADED (32000100926). ZONE X (SHADED) IS DEFINED AS A MODERATE FLOOD HAZARD AREA AND IS BETWEEN THE LIMITS OF THE BASE FLOOD AND THE 0.2-PERCENT-ANNUAL-CHANCE (OR 500-YEAR) FLOOD. FINISH FLOOR OF ALL HOUSES TO BE SET 1.0' MINIMUM ABOVE HIGHEST EXISTING ADJACENT GRADE.

MONTE VISTA CONSULTING
575 E. Plumb Lane #101
Reno, NV 89502
775.636.7905
montevistaconsulting.com

Ash Canyon SF
Tentative Subdivision Map
Grading Plan

1051 N Ormsby Blvd
APN: 001-241-14
Carson City, Nevada

Project #	21.034
Drawn	HBA
Checked	MWV
Date	8.29.2022
△	Revisions

FOR PRELIMINARY REVIEW NOT FOR CONSTRUCTION

PROFESSIONAL ENGINEER-STATE OF NEVADA
MICHAEL W. VICKS
Exp: 6.30.2024
CIVIL
No. 21025

August 29, 2022

C4.0
4 of 5

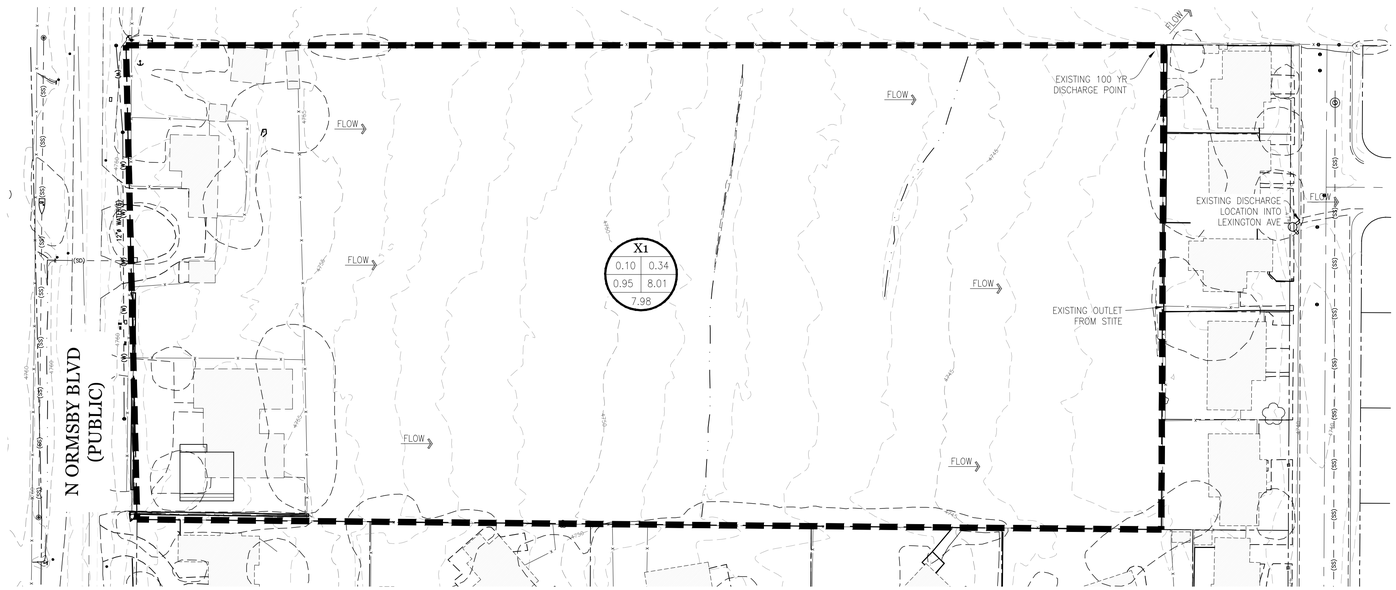
C:\Users\MikeVicks\Monte Vista Dropbox\2021 Projects\034 Ash Canyon SF (Ormsby)\2022 Revisions\Ash Canyon SF (8.29.22).dwg 8/29/2022 5:12 PM

GRADING & DRAINAGE LEGEND

- A.C. PAVEMENT AREA
- CONCRETE AREA
- UTILITY — PROPOSED UTILITY LINE W. DESCRIPTION
- (UTILITY) — EXISTING UTILITY LINE W. DESCRIPTION
- MAHHOLE W. DESCRIPTION (EXISTING/PROPOSED)
- CLEANOUT (EXISTING/PROPOSED)
- CATCH BASIN/DROP INLET
- YARD DRAIN
- GRADE BREAK
- 4900 PROPOSED CONTOUR LINE
- 4900 EXISTING CONTOUR LINE
- (FG:XX.XX) FG:XX.XX SPOT ELEVATION (EXISTING) ~ PROPOSED
- FLOW FLOW DIRECTION ARROW
- BASIN: C_5 | C_{100}; Q_5CFS | Q_{100}CFS; ACRES — DRAINAGE BASIN CHARACTERISTICS

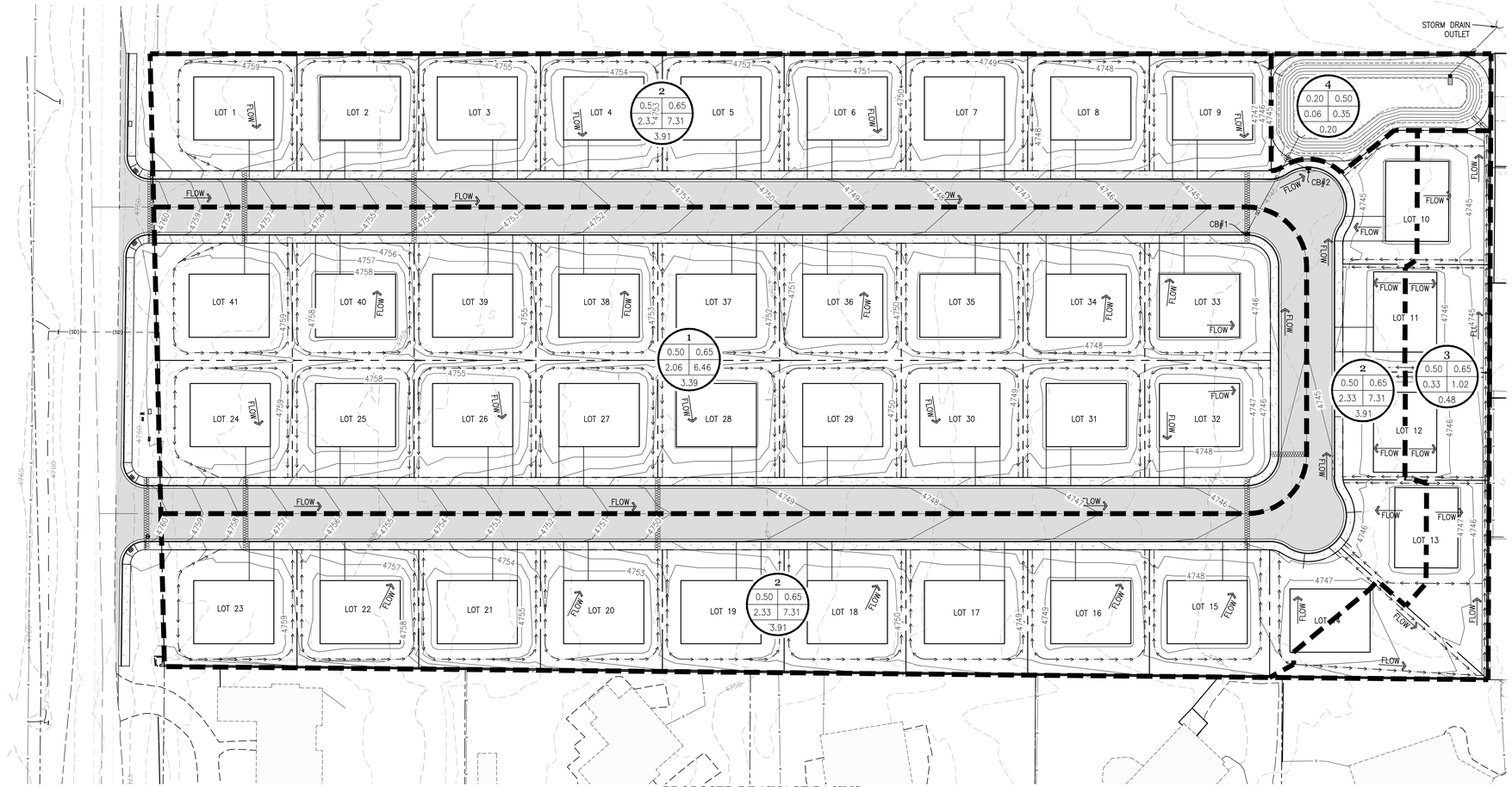
FLOOD ZONE

THIS SITE LIES IN FEMA FLOOD ZONE X SHADED (32000100926). ZONE X (SHADED) IS DEFINED AS A MODERATE FLOOD HAZARD AREA AND IS BETWEEN THE LIMITS OF THE BASE FLOOD AND THE 0.2-PERCENT-ANNUAL-CHANCE (OR 500-YEAR) FLOOD. FINISH FLOOR OF ALL HOUSES TO BE SET 1.0' MINIMUM ABOVE HIGHEST EXISTING ADJACENT GRADE.



EXISTING DRAINAGE BASINS

SCALE:1"=60'



PROPOSED DRAINAGE BASINS

SCALE:1"=40'

1"=40' 0 20 40 80

MONTE VISTA CONSULTING
575 E. Plumb Lane #101
Reno, NV 89502
775.636.7905
montevistaconsulting.com

NORTH

Ash Canyon SF
Tentative Subdivision Map

Drainage Plan

1051 N Ormsby Blvd
APN: 001-241-14
Carson City, Nevada

Project #	21.034
Drawn	HBA
Checked	MWV
Date	8.29.2022
△	Revisions

FOR PRELIMINARY REVIEW NOT FOR CONSTRUCTION

PROFESSIONAL ENGINEER-STATE OF NEVADA
MICHAEL W. VICKS
Exp: 6.30.2024
CIVIL
No. 21025

August 29, 2022

C5.0

5 of 5

From:	ROBERT WILLIG
To:	Planning Department
Subject:	Sub-2022-0375
Date:	Friday, September 16, 2022 5:59:57 PM

The area being planned for development should not be changed from SF12 to SF6 thereby allowing a more dense development in an area already having problems with water pressure. I live on 5 Yorktown Drive and most mornings my water pressure is less than 20 PSI, sometimes the sprinkler head does not pop up. It does not get to 40 to 50 PSI until late morning early afternoon. When I took this up with the city they said it was due to everyone using irrigation on their property, this is not going to get better with more and more houses in the area. The reference to water pressure on the Christy project was for the fire department at the hydrants, not at the houses and not based on time. When the water department checked the hydrant all was fine, this does not help with our homes. The 203 homes in the Christy development is going to impact the water availability in the surrounding area, 41 more will not improve things unless the city improves water availability in the older areas of the city. If the homes in the area can not get more water pressure how are all these new places going to get it? Before anymore projects are approved they need to check water pressure at houses at 5:00 in the morning and see what needs to be done to improve water availability for everyone in the area.
This are also has deer going through it on a regular basis not that anyone cares about that but the Westside is used to wildlife going through the area, you keep cramming houses into every available space like in California, this areas quality of life will be decreased, everything will change. make them SF24 instead of SF6

Bob and Marinka Willig
5 Yorktown Drive

775 301 6840

From:	ROBERT WILLIG
To:	Planning Department
Subject:	Sub-2022-0375
Date:	Friday, September 16, 2022 5:59:57 PM

The area being planned for development should not be changed from SF12 to SF6 thereby allowing a more dense development in an area already having problems with water pressure. I live on 5 Yorktown Drive and most mornings my water pressure is less than 20 PSI, sometimes the sprinkler head does not pop up. It does not get to 40 to 50 PSI until late morning early afternoon. When I took this up with the city they said it was due to everyone using irrigation on their property, this is not going to get better with more and more houses in the area. The reference to water pressure on the Christy project was for the fire department at the hydrants, not at the houses and not based on time. When the water department checked the hydrant all was fine, this does not help with our homes. The 203 homes in the Christy development is going to impact the water availability in the surrounding area, 41 more will not improve things unless the city improves water availability in the older areas of the city. If the homes in the area can not get more water pressure how are all these new places going to get it? Before anymore projects are approved they need to check water pressure at houses at 5:00 in the morning and see what needs to be done to improve water availability for everyone in the area.
This are also has deer going through it on a regular basis not that anyone cares about that but the Westside is used to wildlife going through the area, you keep cramming houses into every available space like in California, this areas quality of life will be decreased, everything will change. make them SF24 instead of SF6

Bob and Marinka Willig
5 Yorktown Drive

775 301 6840