



An Overview of Residential Development in Carson City, Nevada

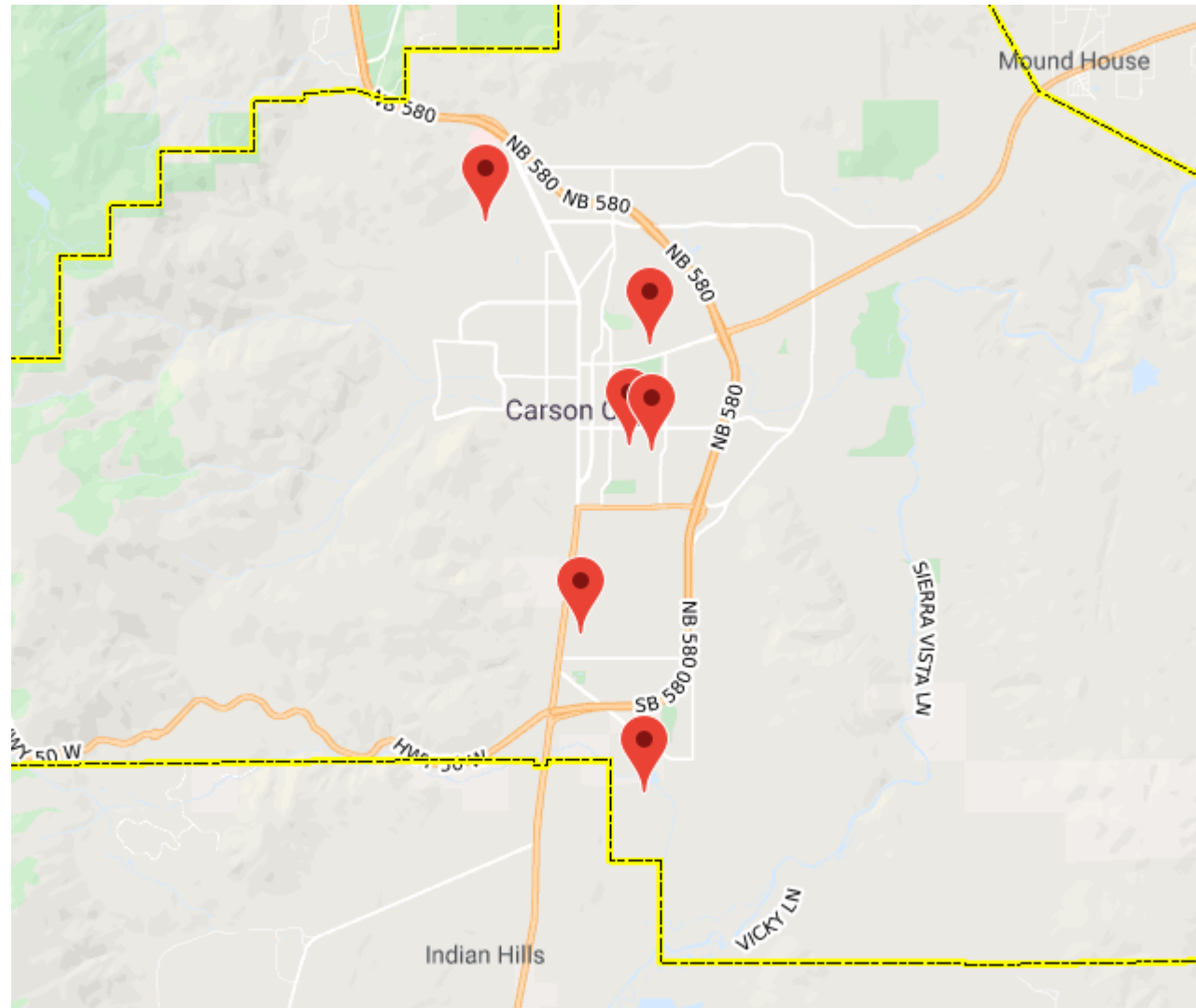
July 2021

New Housing Starts

	<u>2019</u>	<u>2020</u>	<u>2021 *</u>
• Single Family Residential	97	176	79
• Multi-Family Residential	282	0	8
• TOTAL	379	176	87

* Through June 30, 2021

Where is the housing under construction?



ARBOR VILLAS (147 attached SFR)



Location: Northside Little Lane

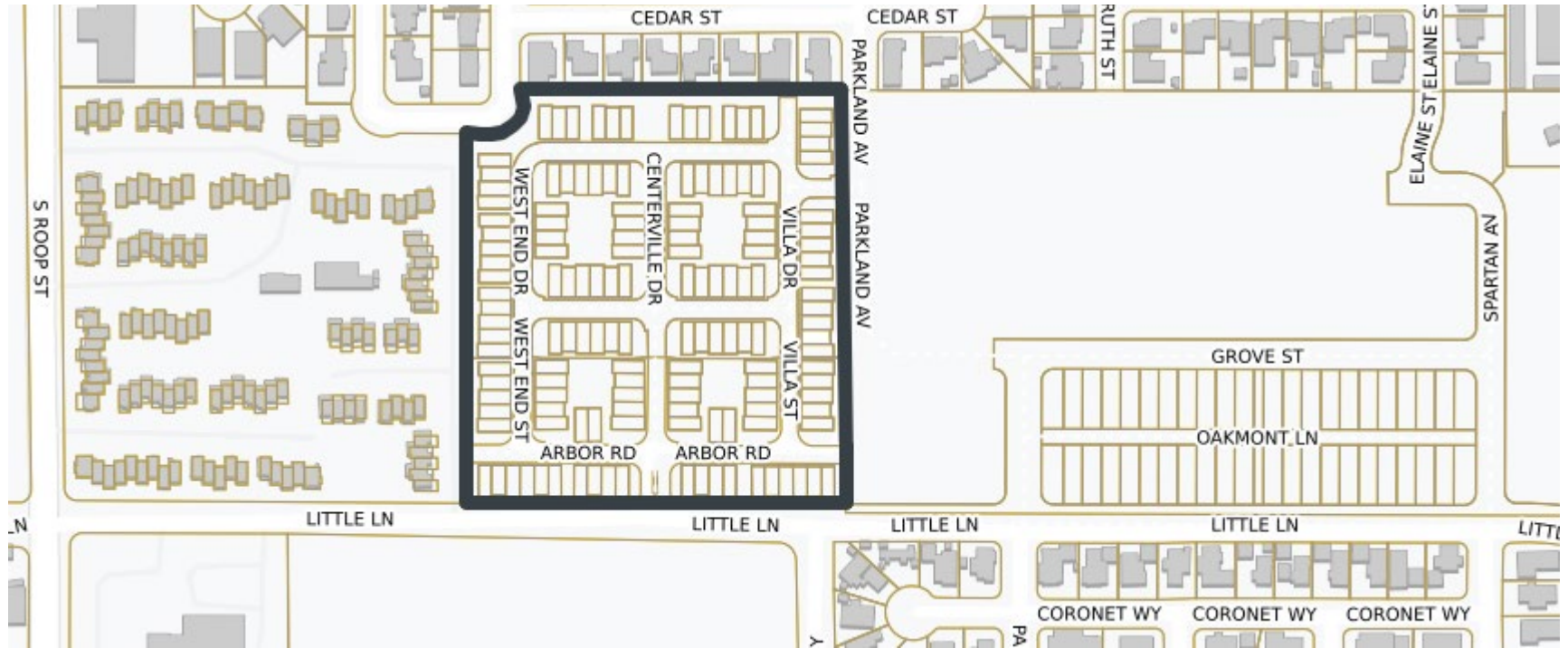


Arbor Villas
CAPSTONE COMMUNITIES

Front Elevation

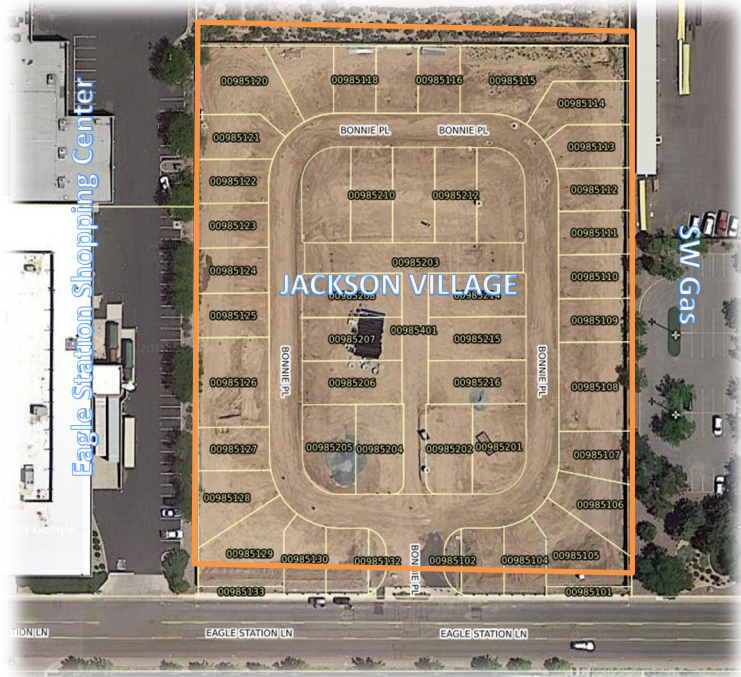
ARBOR VILLAS (147 attached SFR)

Location: Northside Little Lane



JACKSON VILLAGE (41 SFR lots)

Location: Northside Eagle Station Lane



PLAN 1510.20



PLAN 1510.10



PLAN 1510.40



PLAN 1510.30

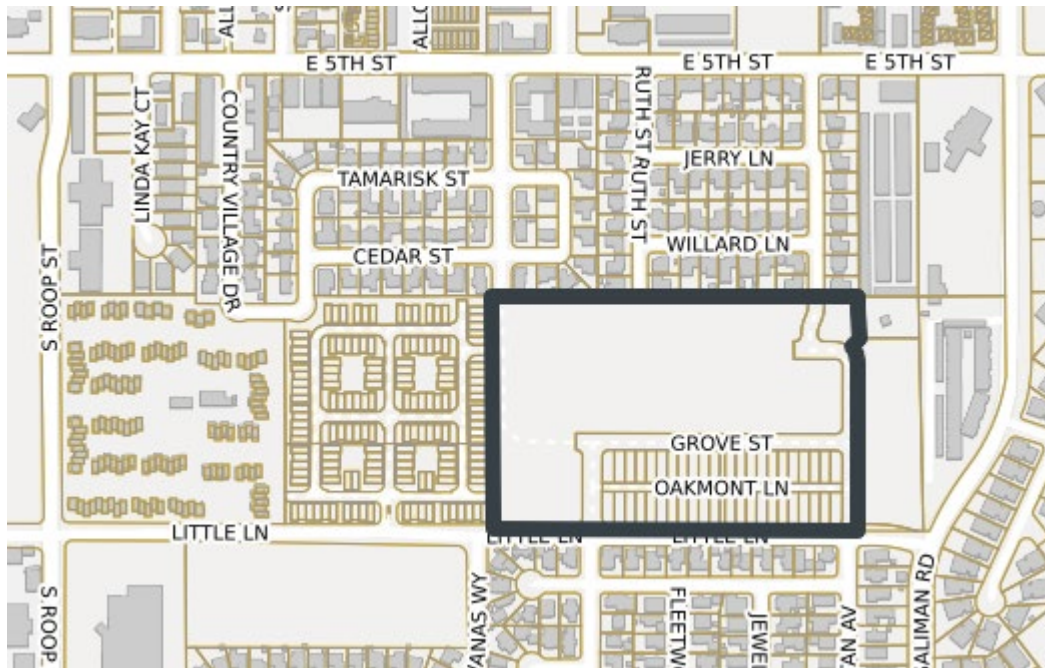
LITTLE LANE VILLAGE (149 lots)

Location: Northside
Little Lane



LITTLE LANE VILLAGE (149 lots)

Location: Northside Little Lane



MILLS LANDING (142 units)

Location: Westside State Street

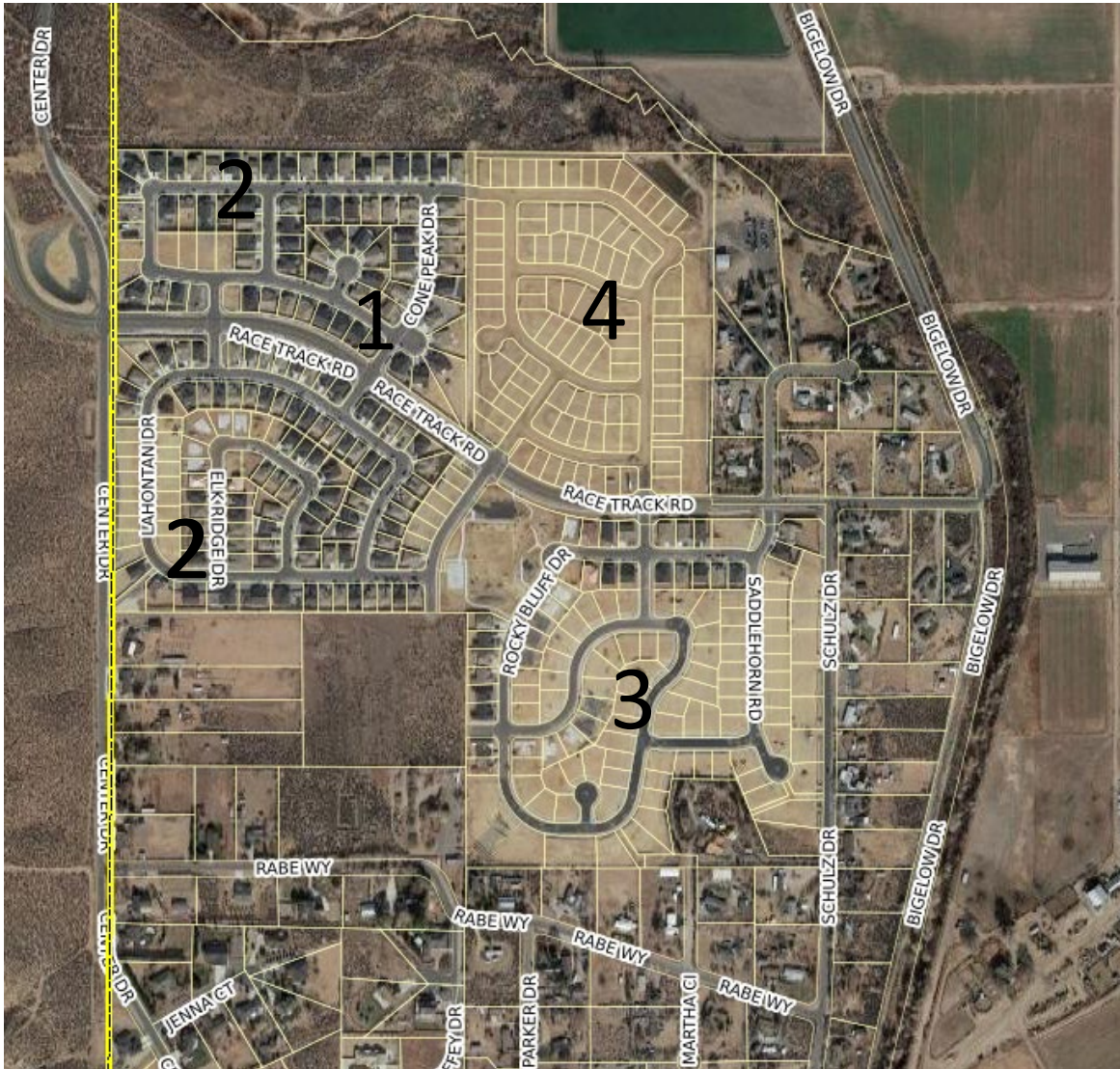


MILLS LANDING (142 units)

Location: Westside State Street



SCHULZ RANCH PHASES 1-4 (416 lots)

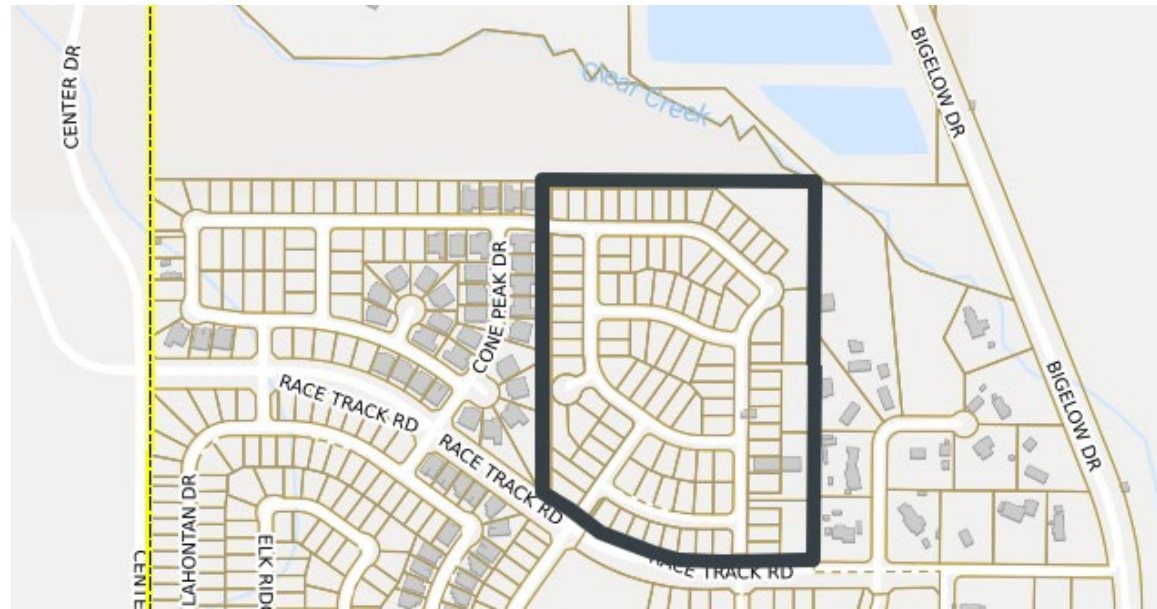


Location: Westside Center Drive



SCHULZ RANCH PHASE 4 (101 lots)

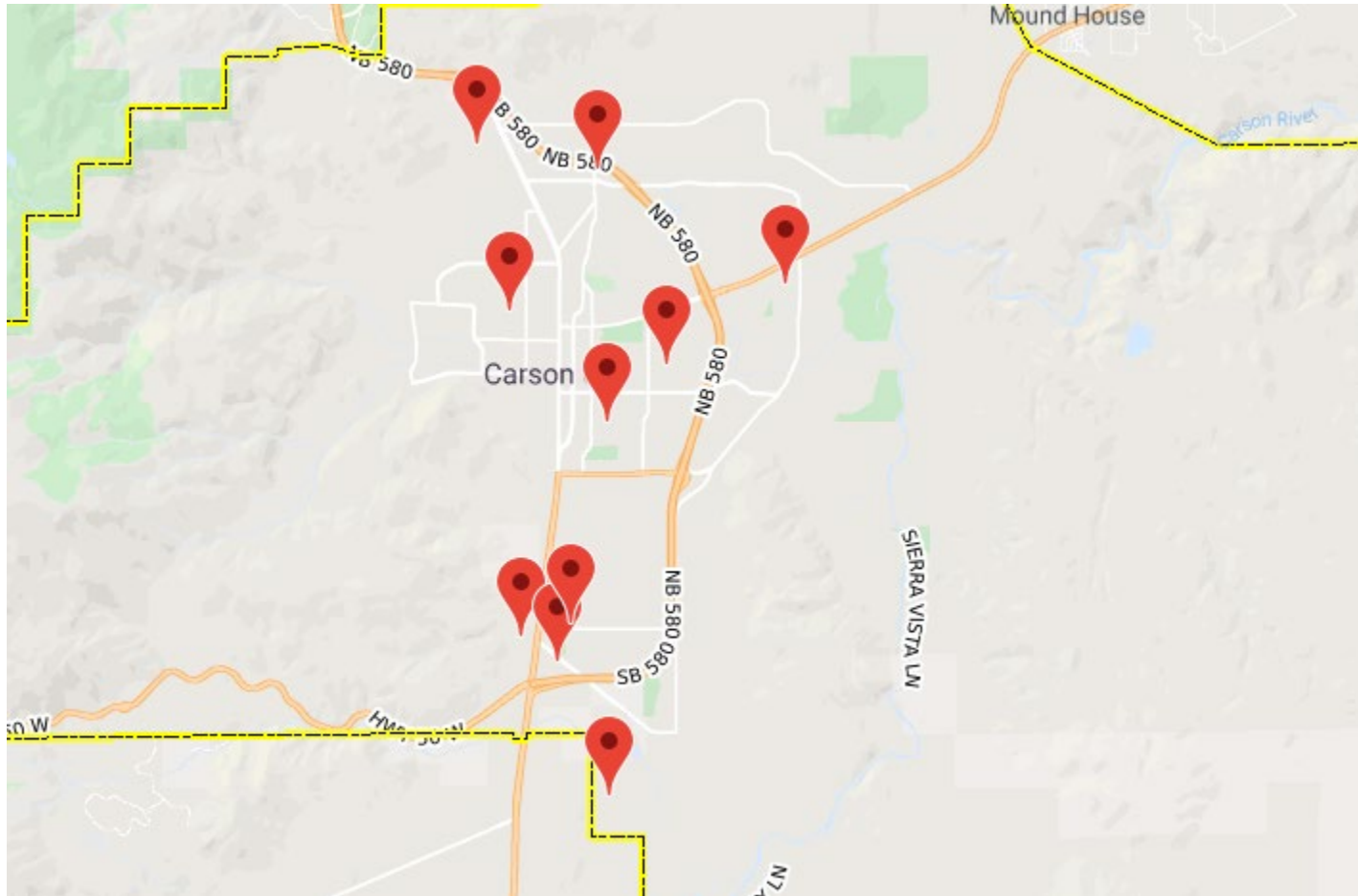
Location: Northside
Race Track Road



SILVER OAK Phase 23B (29 Lots)

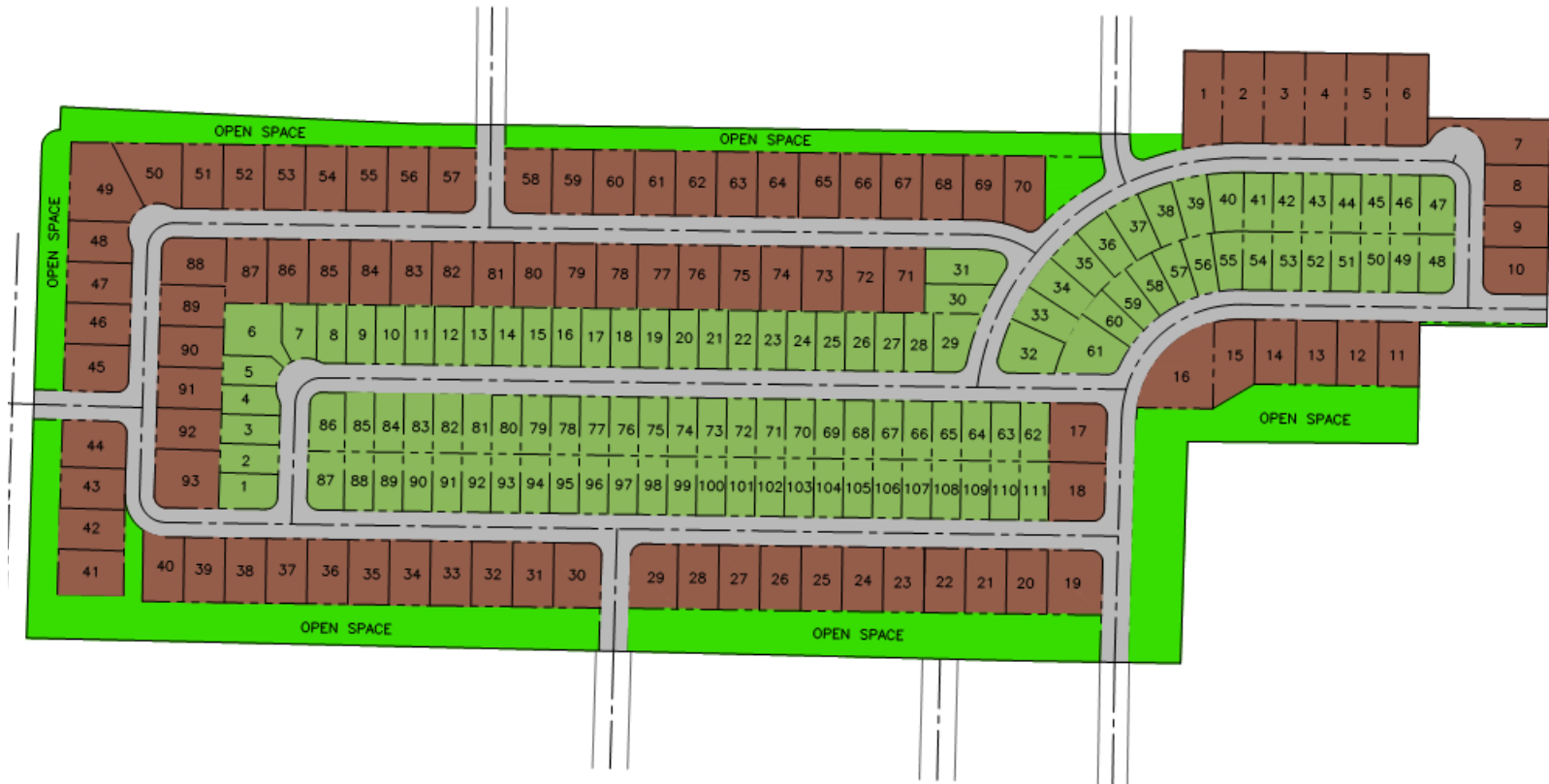


Where is the site under construction in anticipation of building houses?



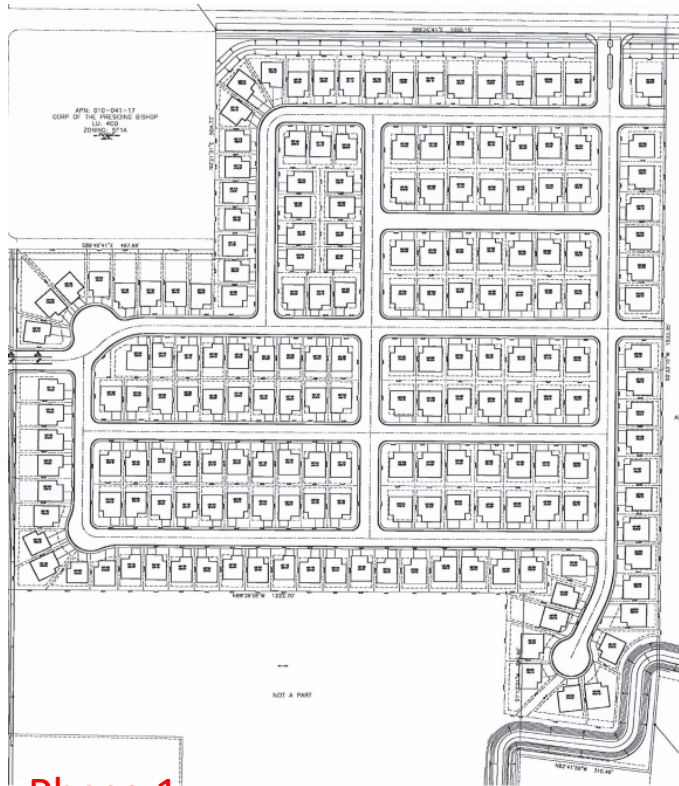
ANDERSON RANCH (203 lots)

Location: Westside Mountain Street



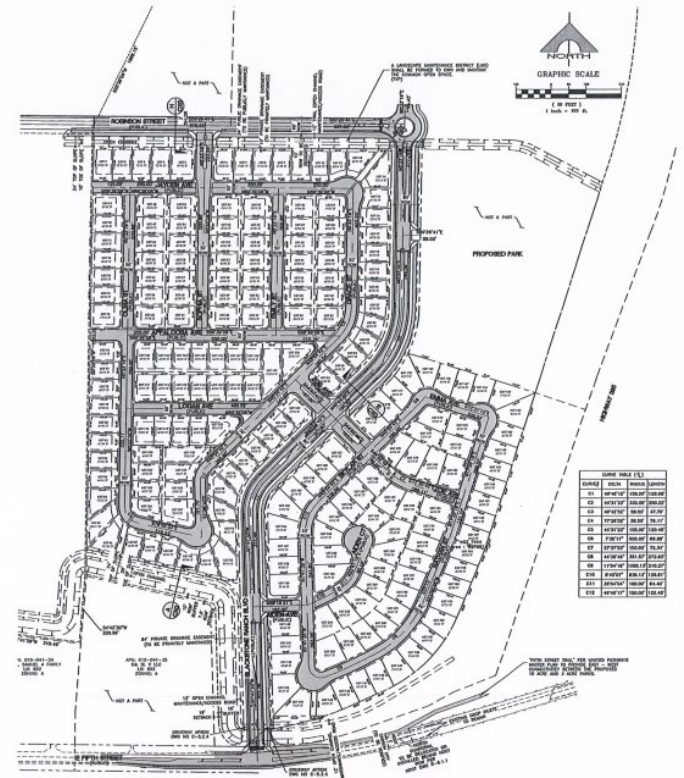
BLACKSTONE RANCH – PHASE 1 (189 units)/PHASE 2 (204 units)

Location: North of 5th Street



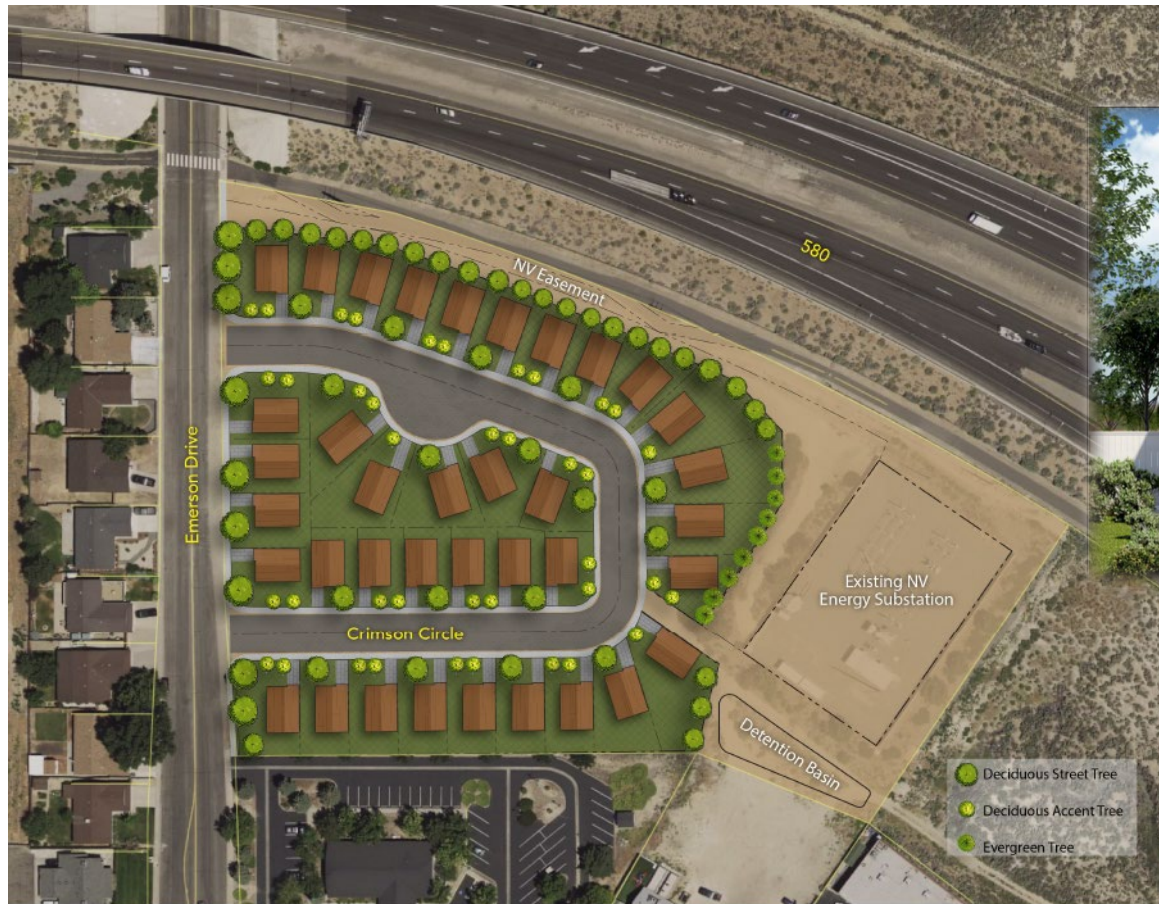
Phase 1

Phase 2



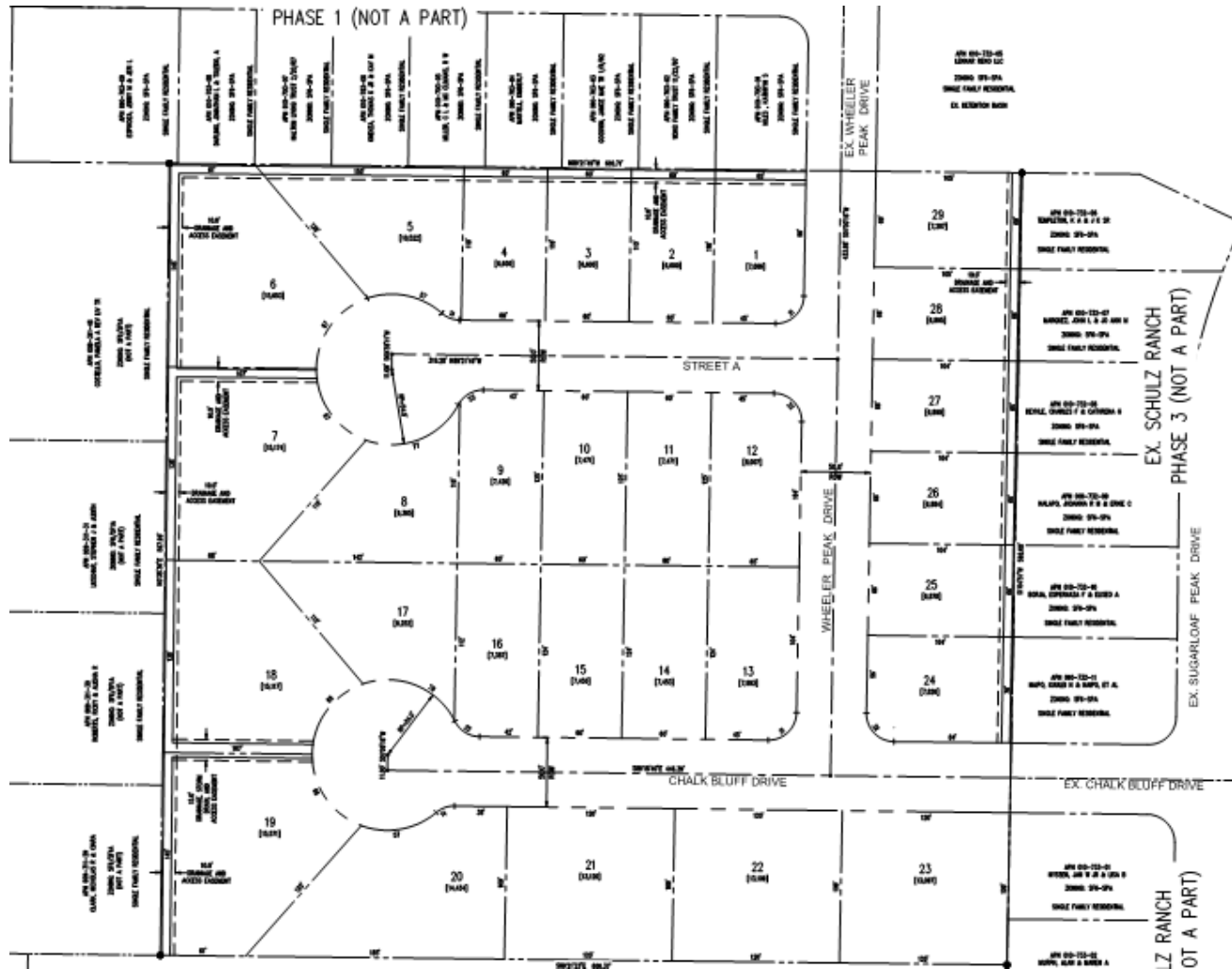
EMERSON COTTAGES (37 lots)

Location: Eastside Emerson Drive



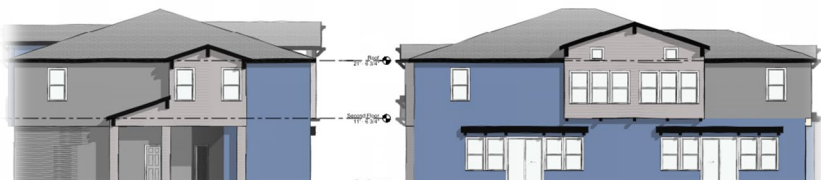
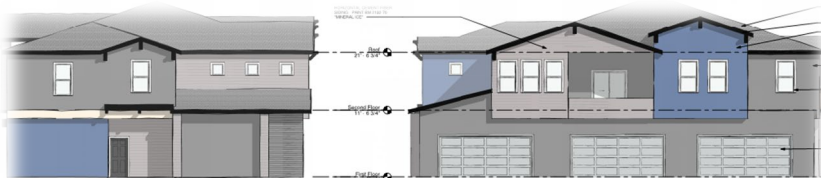
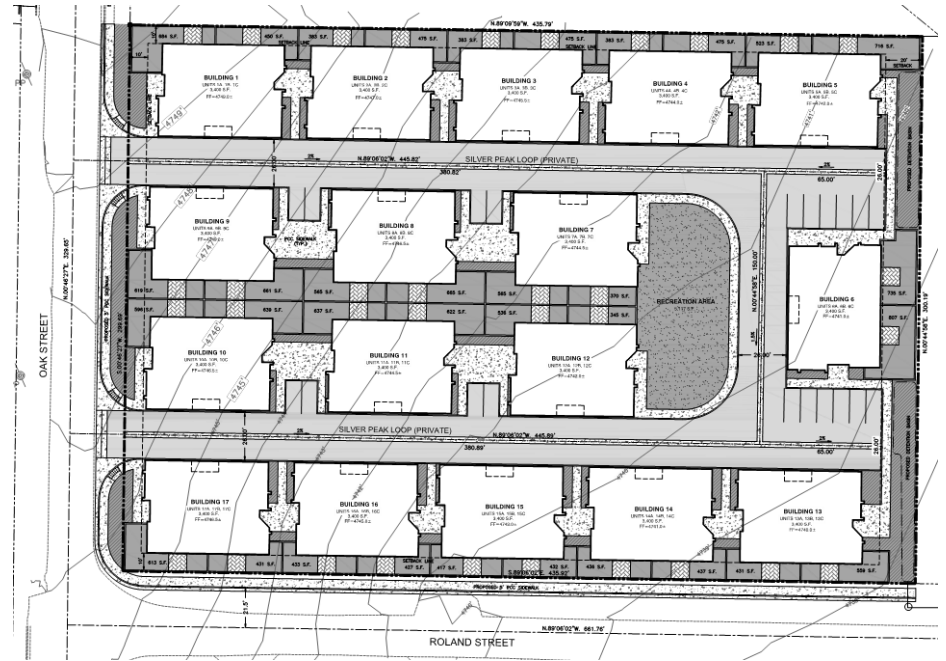
SCHULZ RANCH – PHASE 5 (29 lots)

Location: North of Rabe Way



SILVER CREST CONDOMINIUMS (51 lots)

Location: Northeast of the corner of Oak Street and Roland Street



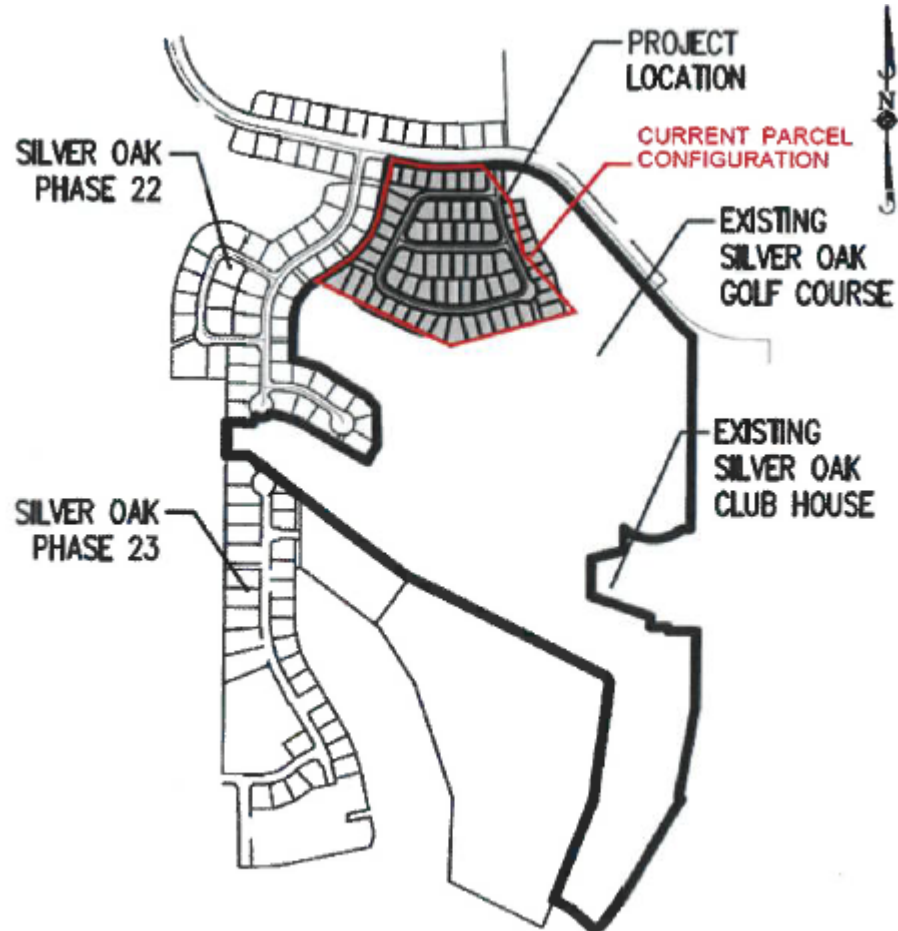
SILVER VIEW TOWNHOMES (34 LOTS)

Location: Northwest corner of Clearview Drive and Silver Sage Drive



SILVER OAK Phase 24 (64 lots)

Location: Southside Silver Oak Drive



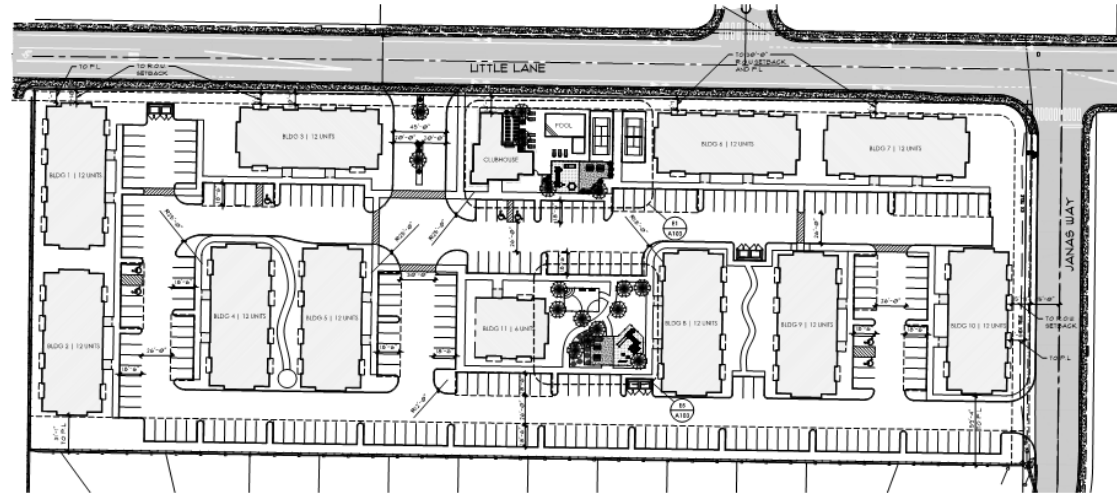
BROWN STREET APARTMENTS (90 units)

Location: Westside Brown St.



LITTLE LANE APARTMENTS (140 units)

Location: Southside Little Lane



CONCEPTUAL SITE PLAN





QUESTIONS?

THANK YOU!!!!



Carson City Water and Wastewater Capacity Analysis Update

Board of Supervisors
July 15, 2021





Wastewater Treatment Capacity

- Currently treating approximately 5 mgd

- Influenced by growth, moisture, water rates.

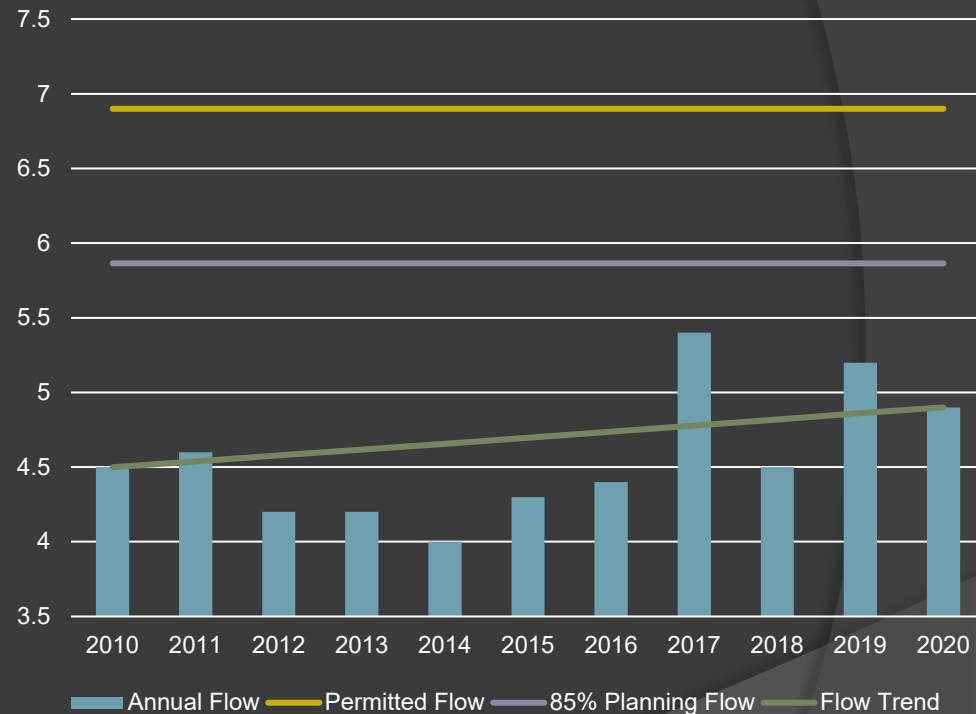
- Water Resource Recovery Facility permitted for 6.9 mgd

- Flows trending upwards at approximately 0.9%

- Facility planning for next upgrade required at 85% of permitted flow rate

- Reclaimed Master Plan update in final review

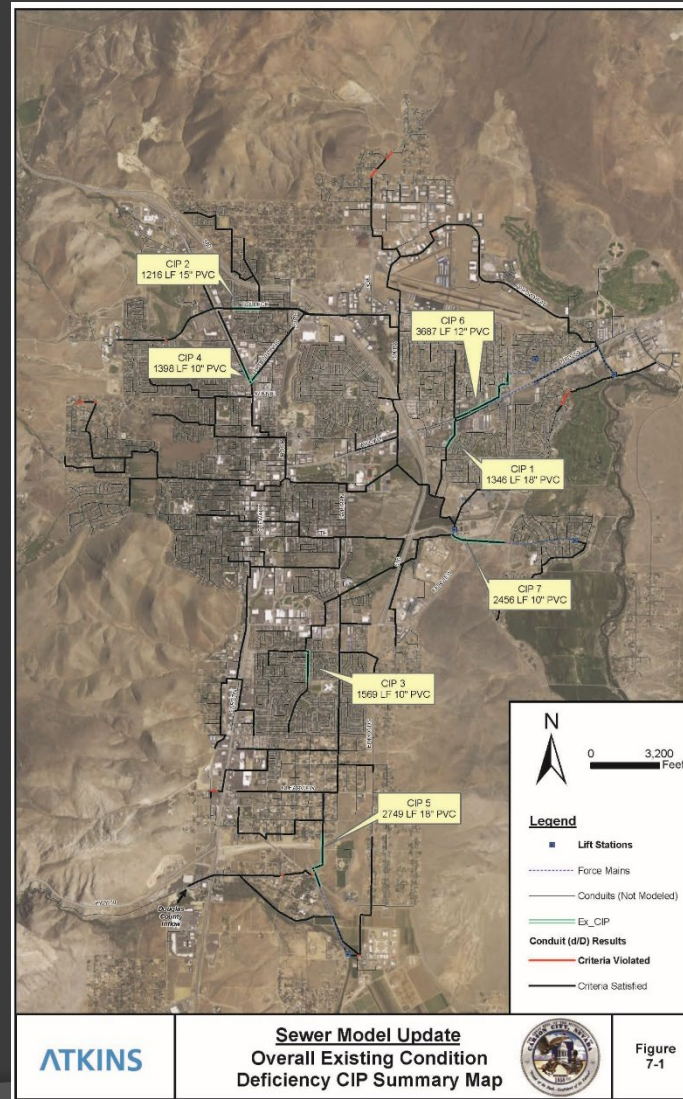
Carson City WRRF Flow
(million gallons per day)





Conveyance System Capacity

- Collection system Master Plan updated in 2017
 - Model review underway
- Buildout based model Planned significant developments included
- CIP's identified for existing and future condition deficiencies





Asset Management and Projects

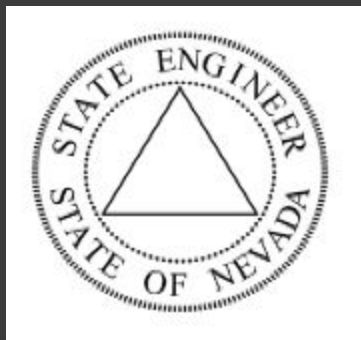
- Collection system video inspection
 - Provides condition-based ranking to assist in CIP prioritization
- Facility Condition Assessment recently completed
- WRRF Electrical upgrades
- Lift Station upgrades



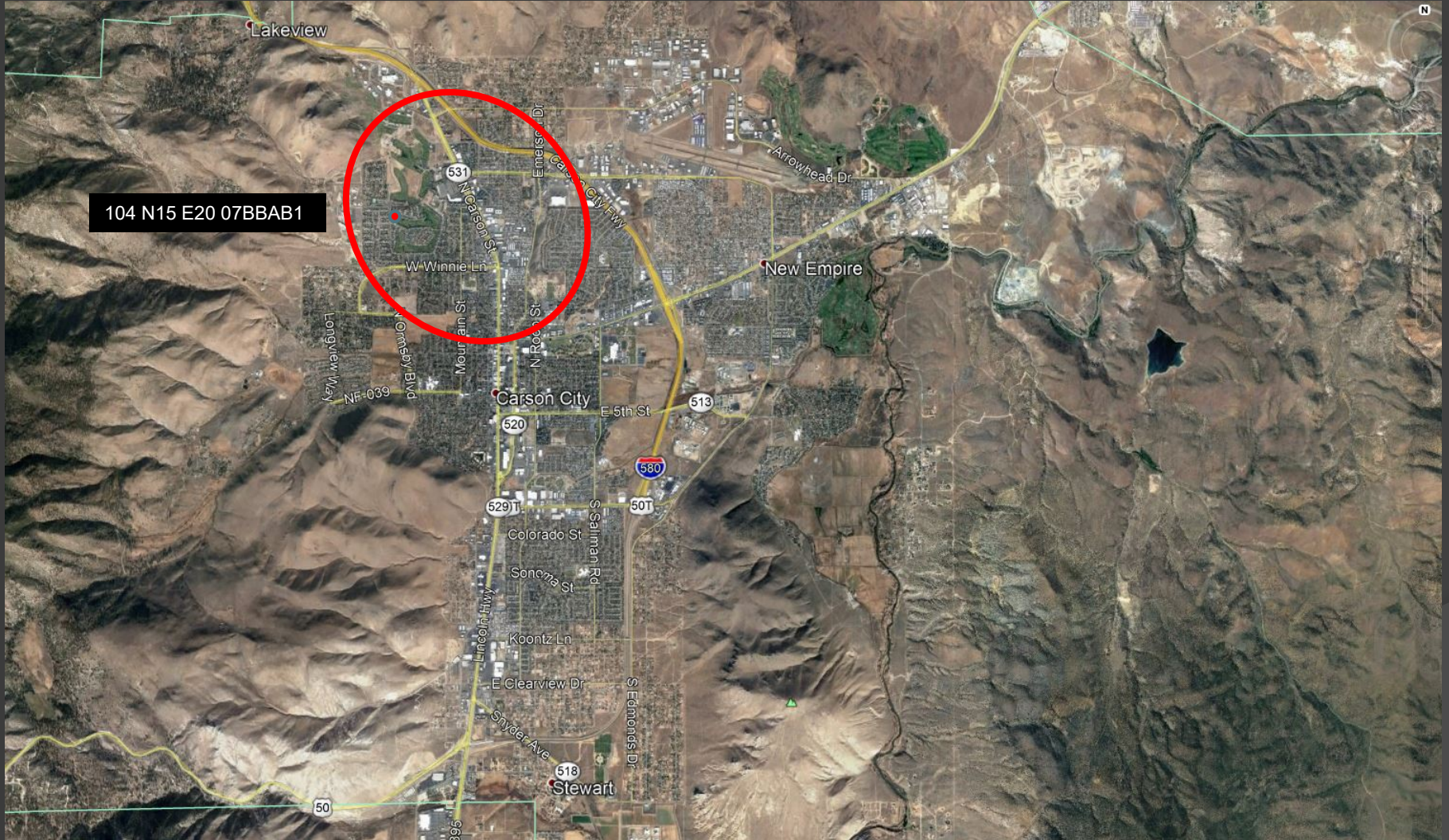


Ground Water Basins and Sustainability

- Perennial Yield: The maximum amount of groundwater that can be salvaged each year over the long term (think 100's of years) without depleting the groundwater reservoir.
- Basins are over allocated but not over pumped
 - Eagle Valley Yield of 9,000 AFA vs. Pumped 4-5,000 AFA
 - Dayton Valley Yield of 8 to 20,000 AFA vs. Pumped 8-10,000 AFA
 - Carson Valley Yield of 49,000 AFA vs. Pumped 30 -35,000 AFA
- Regulated by the State Engineer's (SE) Office. Data tracked by USGS.



Northwest Eagle Valley

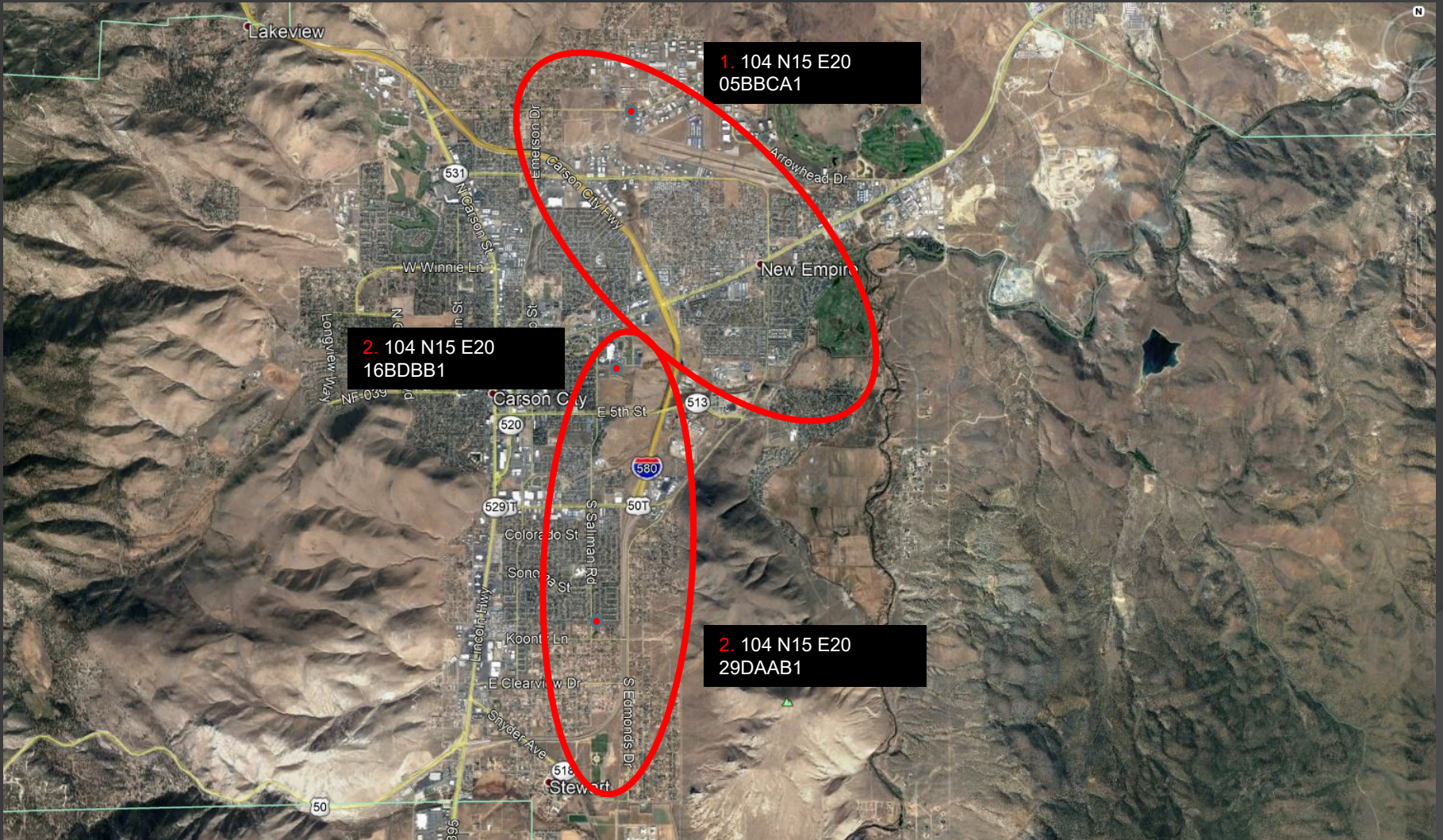




Hydrograph For Site 104 N15 E20 07BBAB1



Central Eagle Valley



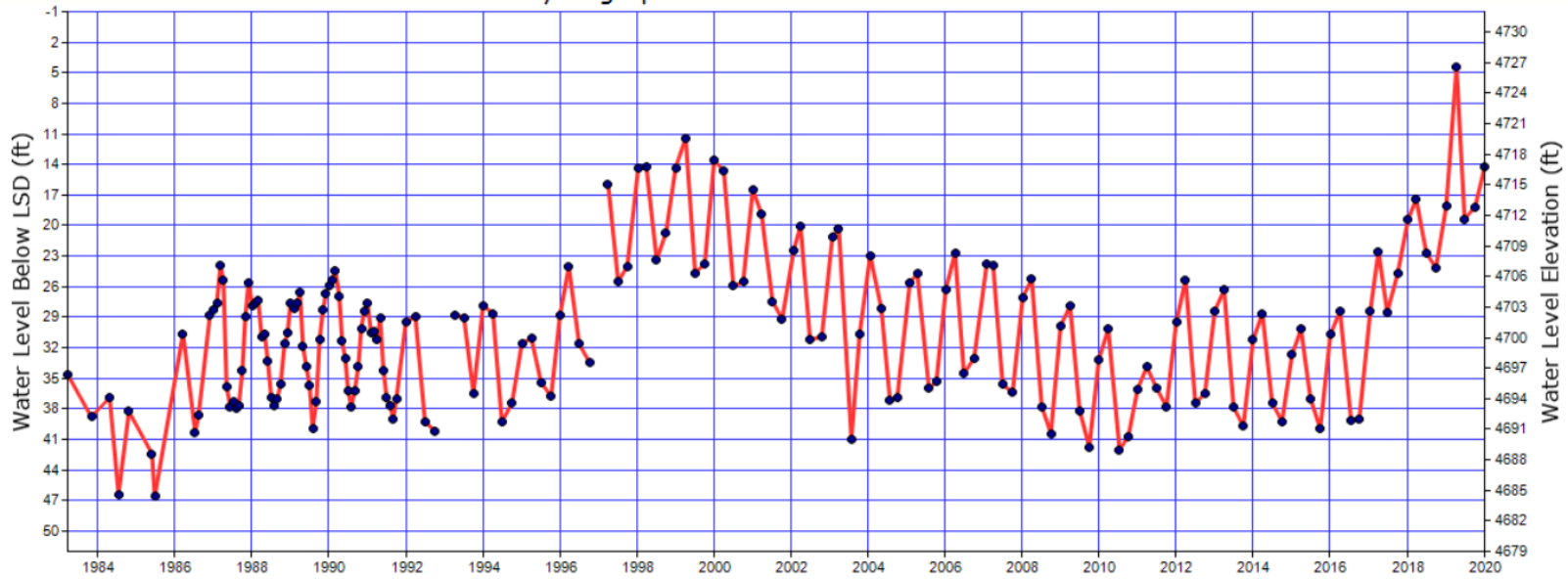
1. 104 N15 E20
05BBCA1

2. 104 N15 E20
16BDBB1

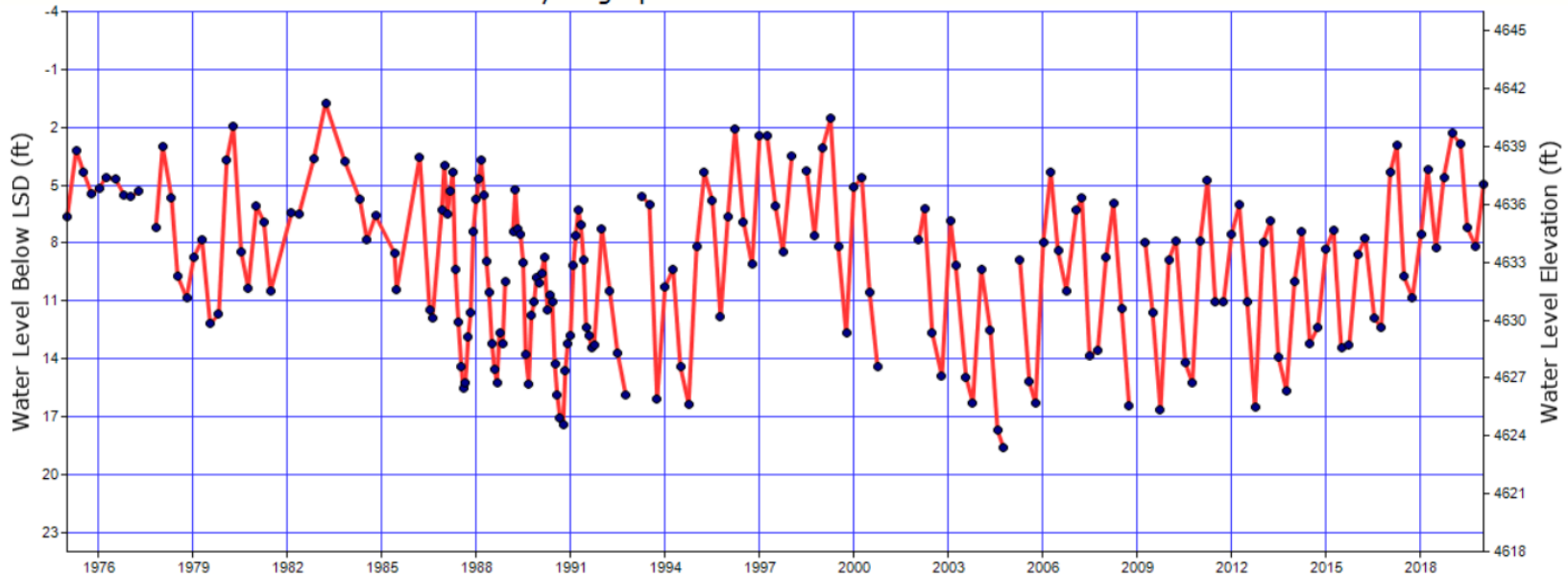
2. 104 N15 E20
29DAAB1



Hydrograph For Site 104 N15 E20 05BBCA1

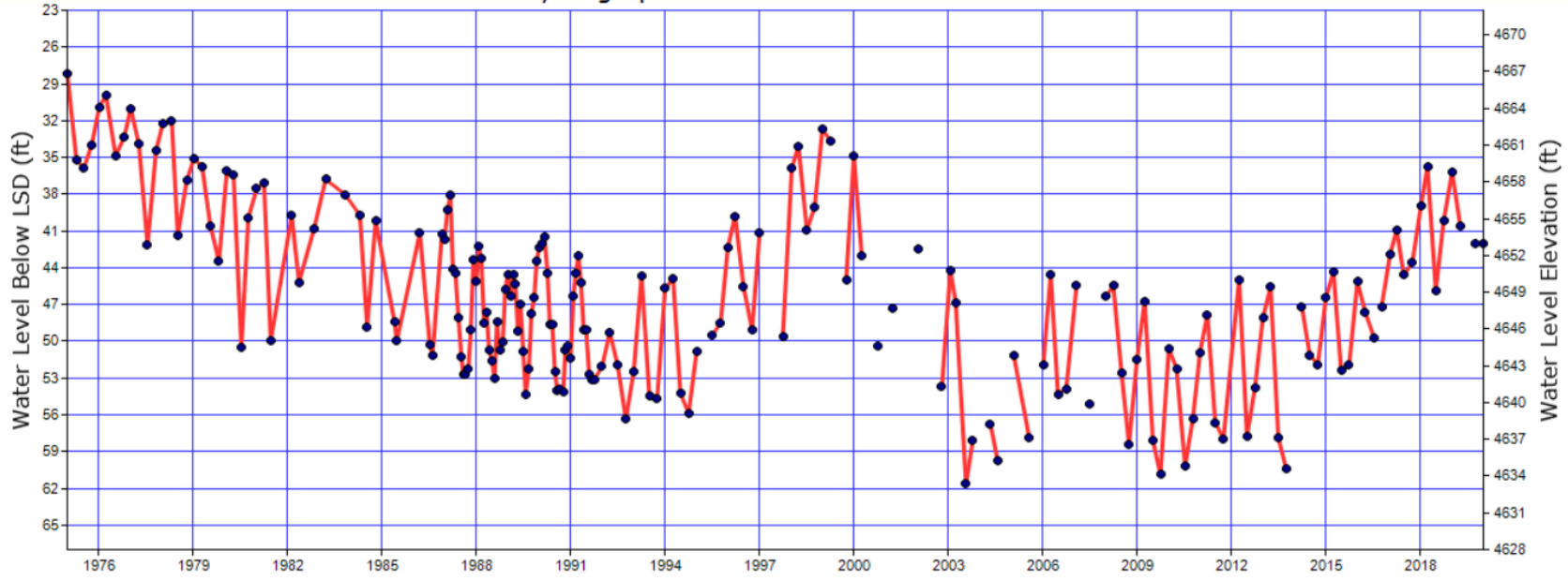


Hydrograph For Site 104 N15 E20 16BDBB1





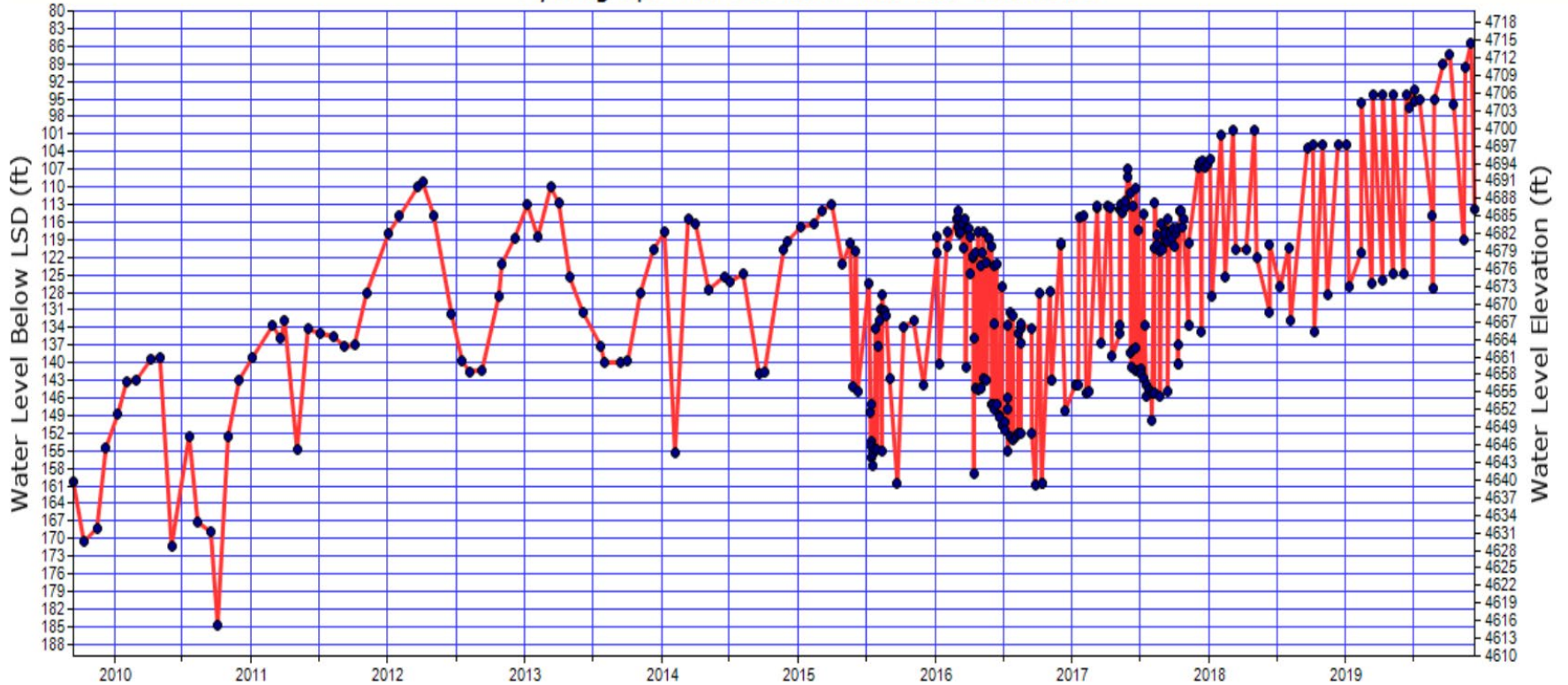
Hydrograph For Site 104 N15 E20 29DAAB1





Well 3 GW Levels

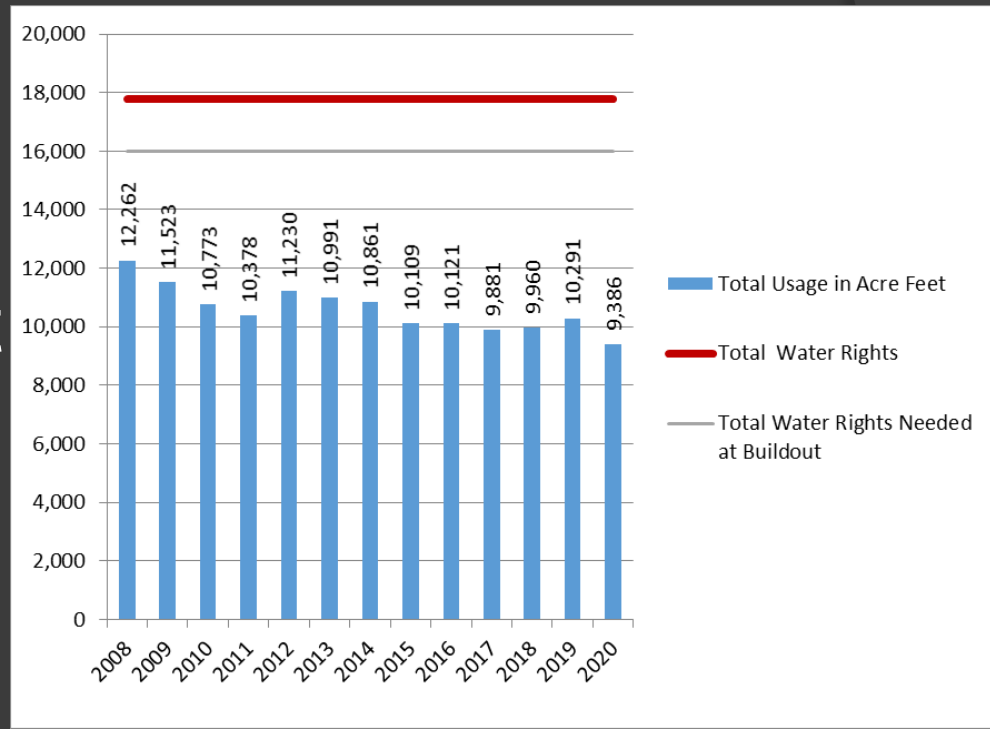
Hydrograph For Site 104 N15 E19 12DADD1





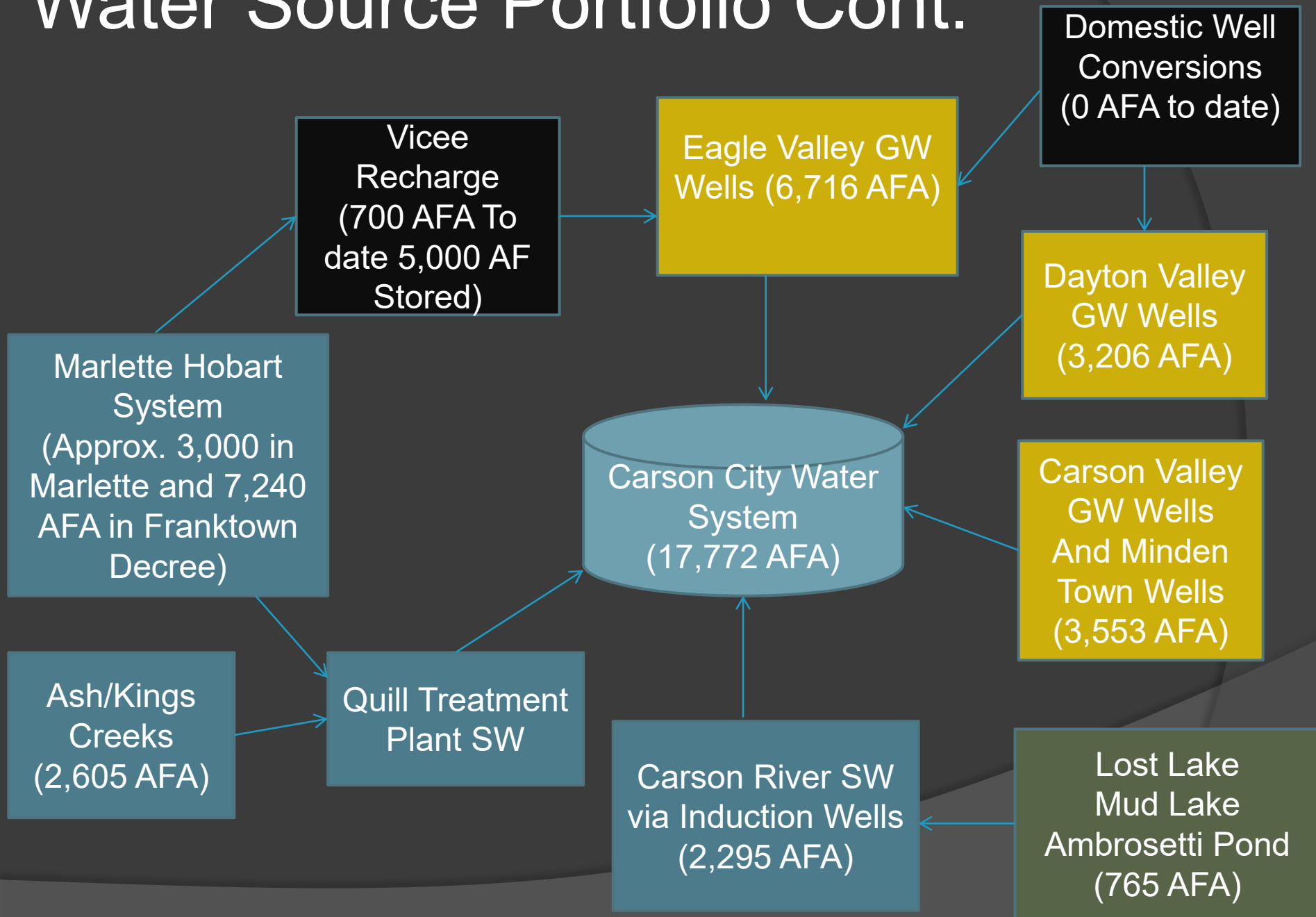
Usage/ Max Day Demand Summary

- Buildout Timeframe- Population of 80,000 between 2055 and 2085
- Increase annual water usage by 5,000 ac-feet at buildout (< current available water rights)
- Increase production by 8 MGD to meet buildout demand w/ 20% buffer



Annual Water Usage Projection

Water Source Portfolio Cont.



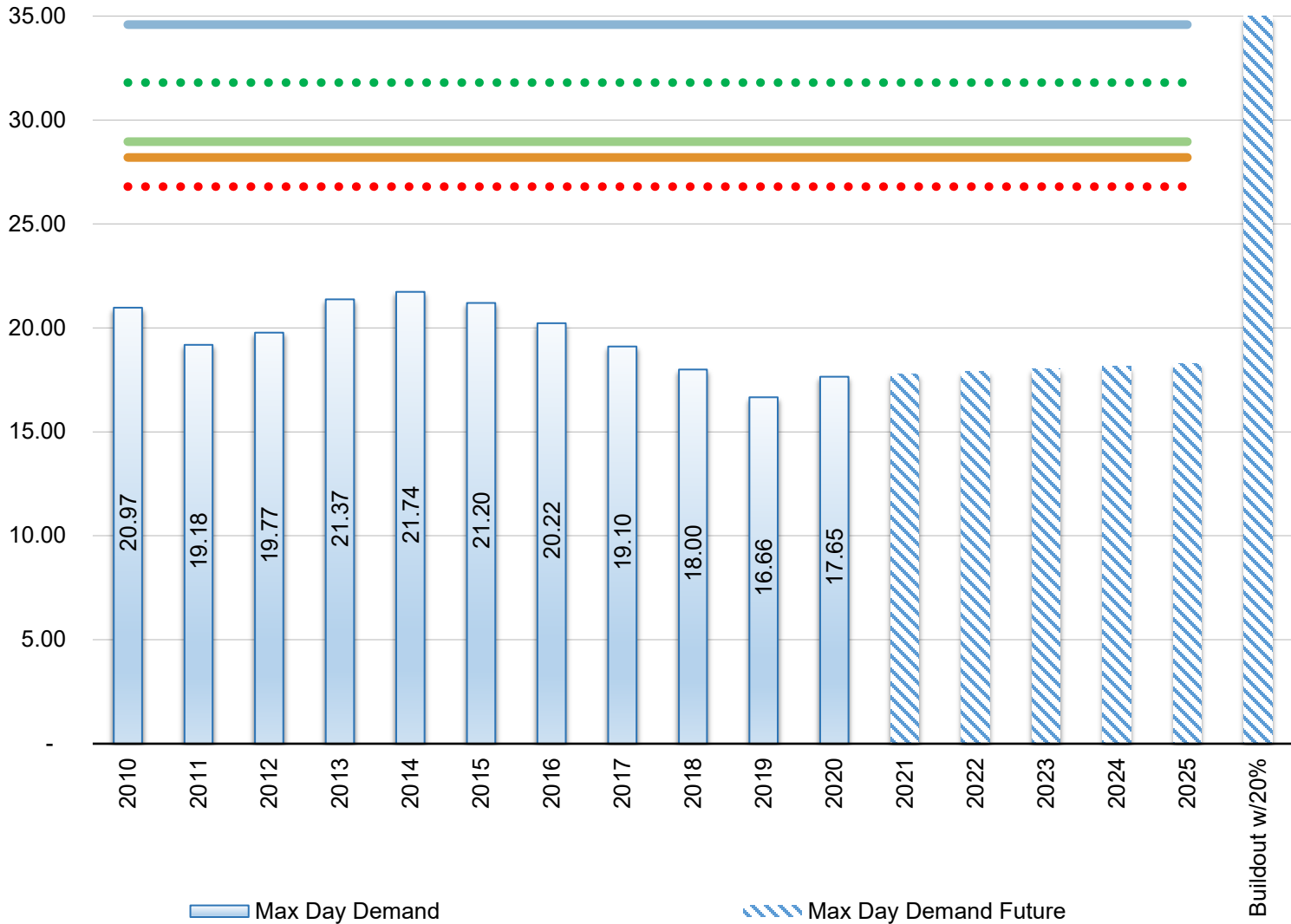
Future/Current Projects related to System Efficiencies, Redundancy and Future Demand

- East/West Transmission Main and Booster Pump Station – Final Phase 2B (Carson City)
 - Completed 2021 Required for System Resilience (moving imported water to the entire system)
- Well 3 Re-Drill (Double the Capacity)
 - Completed 2021 (added 1.87 MGD to existing total capacity)
- Quill WTP Improvements
 - Design is underway by Lumos and Jacobs Engineering.
 - Conjunctive Use, Demand, and Water Quality Driven
- Well 4 Re-Drill
 - 2024
- New Induction Well
 - TBD



New Well 3B

Carson City Max Day Demand (Million Gallons per Day) vs. Total Production (MGD)



- ▭ Max Day Demand
- ▨ Max Day Demand Future
- Total Max Day Production (Current)
- Max Day w/Quill WTP Full Capacity
- ▬ Max Day Production with Well 4 Re-Drill
- ▬ Combination Projects
- ▬ Max Day Production with New InductionWell

Conclusion



- Complex and dynamic water system
- Diverse water portfolio
- Secured water rights for the future in healthy basins
- Strategic, smart and resilient plan to increase production, improve system inefficiencies and redundancy