City of Isleton

City Council
Staff Report

DATE: September 12, 2023

ITEM#: 5.A

CATEGORY: Consent Calendar

MINUTES OF THE REGULAR CITY COUNCIL MEETING OF AUGUST 8, 2023.

SUMMARY

A. Review of the Regular City Council Meeting minutes of August 8, 2023.

FISCAL IMPACT

There is no fiscal impact associated with this action.

RECOMMENDATION

A. City Council review and approve the draft minutes of the Regular City Council meeting of August 8, 2023.

ATTACHMENTS

- Minutes of the Regular City Council Meeting of August 8, 2023.

Reviewed by: Charles Bergson, City Manager
Prepared and Submitted by: Yvonne Zepeda, Deputy City Clerk

CITY OF ISLETON

City Council Meeting Minutes

Tuesday, August 8, 2023 at 6:30pm
208 Jackson Boulevard
Isleton, California 95641
You can call in to join our public meeting

This meeting will be held via teleconference or in person, pursuant to Executive Order N-29-20 issued by the State of California Executive Order by Governor Gavin Newsom on March 17, 2020. All members of the public interested in participating in this Zoom meeting can dial in by phone at 408-638-0968 (do not put a 1 before the number), Personal Meeting ID 337-903-7904# (for Personal ID just hit #) and then Passcode 123456#. For computer log-in, follow the link below.

Join Zoom Meeting
https://us02web.zoom.us/j/3379037904?pwd=cWdVNkN5aHUxcjVwRGR1M1BpajcwZz09
Meeting ID: 337 903 7904
Passcode: 123456

---

1. **OPENING CEREMONIES**

   A. Welcome & Call to Order – Mayor Pamela Bulahan called to order 6:30pm.
   B. Pledge of Allegiance
   C. Roll Call: PRESENT: Councilmember's Kelly Hutson, David Kent, Iva Walton, Vice Mayor Paul Steele, Mayor Pamela Bulahan, City Manager Charles Bergson.

2. **AGENDA CHANGES OR DELETIONS**
   ACTION: None.
3. **PUBLIC COMMENT**

   This is an opportunity for the public to speak to the Council on any item other than those listed for public hearing on this Agenda. Speakers are requested to use the podium in front of the Council and to begin by stating their name, whether they reside in Isleton and the name of the organization they represent if any. The Mayor may impose a time limit on any speaker depending on the number of people wanting to speak and the time available for the rest of the Agenda. In the event comments are related to an item scheduled on the Agenda, speakers will be asked to wait to make their comments until that item is being considered.
   ACTION: None.
4. **COMMUNICATION**

AMERICANS WITH DISABILITIES ACT NOTICE: In compliance with the Americans with Disabilities Act, persons needing a disability-related modification or accommodation, including auxiliary aids or services, to participate in this meeting, may contact Deputy City Clerk Yvonne Zepeda, at (916) 777-7770, by fax at (916) 777-7775 or by email to Yvonne.zepeda@cityofisleton.com at least 48 hours prior to the meeting.

GOV. CODE § 54957.5 NOTICE: Public records related to an agenda item that are distributed less than 72 hours before this meeting are available for public inspection during normal business hours at Isleton City Hall located at 101 Second Street, Isleton, California 95641.

A. City of Isleton Zoning Code update, City Council and Planning Commission Joint Meeting.

B. Sacramento State Transportation Authority Governing Board Meeting.
ACTION: Sacramento State Transportation Authority Meeting downtown at 3:30 on the 25th of September.

5. CONSENT CALENDAR

A. SUBJECT: Approval of Minutes of the Regular City Council meeting of July 25, 2023.

RECOMMENDATION: City Council review and approve draft minutes of the Regular City Council meeting of June 25, 2023.

ACTION: Vice Mayor Paul Steele motion to approve draft minutes of the Regular City Council meeting of June 25, 2023. Councilmember David Kent second the motion. AYES: Councilmember's Kelly Hutson, David Kent, Iva Walton, Vice Mayor Paul Steele, Mayor Pamela Bulahan. NOES: None. ABSENT: None. ABSTAIN: None. PASSED 5-0.

6. PUBLIC HEARING

A. SUBJECT: None.

7. OLD BUSINESS

A. **SUBJECT**: Isleton Redevelopment Agency Obligations, Relief Plan.

RECOMMENDATION: This report is for information and discussion. With Council comment, this plan will return in September 2023 for approval, to relieve one-third of the RDA obligation.

ACTION: The State dissolved all the RDA's and the debt on the books is 1.3 million. The list of obligations is attached. The City itself is 400,000 and hope to waive, forgiveness, reduction in payment plan. Councilmember Kent said, I would walk to every creditor to wipe it off. Vice Mayor Paul Steel and Kelly Hutson are to sit down and meet with City Manager regarding this. Councilmember Iva Walton, how are other cities handling this? Public Comments-Michelle Burke how is it juvenile Hall ends on this list? City Manager all these agencies, hands in pool. Closed.

B. **SUBJECT**: City Council award division of Boating and Waterway Boat Launch Study to Moffat & Nichols.

RECOMMENDATION: It is recommended that City Council award contract to Moffatt & Nichols.

ACTION: Vice Mayor Paul Steele motion to award contract to Moffatt & Nichols. Councilmember David Kent second the motion. AYES: Councilmember's Kelly Hutson, David Kent, Iva Walton, Vice Mayor Paul Steele, Mayor Pamela Bulahan. NOES: None. ABSENT: None. ABSTAIN: None. PASSED 5-0.

C. **SUBJECT**: City to record Deed Restriction required for Prop 68 Per Capita Grant for Wilson Park Rehabilitation Project.

RECOMMENDATION: It is recommended City Council approve this Deed Restriction which shall remain in full force and effect and shall bind City and all his/her/their assigns or successors-in-interest for the period running from July 1, 2018 through June 30, 2048.

ACTION: Councilmember Iva Walton motion to approve this Deed Restriction which shall remain in full force and effect and shall bind City and all his/her/their assigns or successors-in-interest for the period running from July 1, 2018 through June 30, 2048. Vice Mayor Paul Steele second the motion. AYES: Councilmember's Kelly Hutson, David Kent, Iva Walton, Vice Mayor Paul Steele, Mayor Pamela Bulahan. NOES: None. ABSENT: None. ABSTAIN: None. PASSED 5-0.

8. NEW BUSINESS

A. **SUBJECT:** Ownership change for Cannabis Manufacturing and Distribution-from WTO Essentials, Inc. to Isleton Industry, LLC, at 14719 Highway 160.

RECOMMENDATION: Staff recommends the City Council finds this project is exempt from environmental review, approve the transfer of interest in Development Agreement DA 2018-07 from WTO Essentials, Inc. to Isleton Industries, LLC, and direct staff to re-issue Conditional Use Permit CUP 11-18 in the name of Isleton Industries, LLC.

ACTION: Vice Mayor Paul Steele motion that City Council finds this project is exempt from environmental review, approve the transfer of interest in Development Agreement DA 2018-07 from WTO Essentials, Inc. to Isleton Industries, LLC, and direct staff to re-issue Conditional Use Permit CUP 11-18 in the name of Isleton Industries, LLC. Councilmember Kelly Hutson second the motion. AYES: Councilmember's Kelly Hutson, David Kent, Iva Walton, Vice Mayor Paul Steele,

Mayor Pamela Bulahan. NOES: None. ABSENT: None. ABSTAIN: None. PASSED 5-0.

B. SUBJECT: League of California Cities designation of Voting Delegates and Alternates.

RECOMMENDATION: That the City Council designate a voting delegate and up to two alternate voting delegates to participate in the General Assembly Conference.

ACTION: Council by consensus nominated David Kent as the delegate and Mayor Pamela Bulahan and Kelly Hutson as the two alternates.

9. COUNCIL REPORTS AND COMMITTEE UPDATES

A. Councilmember Kelly Hutson-Drama on 6th Street and the Sherriff's were there.
B. Councilmember David Kent-None.
C. Councilmember Iva Walton-LAFCo, nothing to report. Cal-Am Water meeting. Requested a meeting about Crawdad Festival-take proposal.
D. Vice Mayor Paul Steele-1st of next month meet regarding Crawdad Festival. Councilmember David Kent said never to micromanage, it's to macro manage. This is appropriate for you, you did it. Congratulations!
E. Mayor Pamela Bulahan-Pear fair they had a map and directed traffic, parking it was well organized. Isleton is disadvantage. SACOG Meeting. What constitutes a disadvantage?

10. STAFF GENERAL REPORTS AND DISCUSSION

A. City Manager Report – Ground breaking Wilson Park in September. Councilmember David Kent said congratulations on that. City Manager said meeting with Cal-Am on the 28th.
B. Fire Chief Report – None.
C. Planning Commission – None.
D. Code Enforcement- None.
E. Future Agenda Items – Joint meeting tomorrow.

11. CLOSED SESSION

11.1 None.

12. ADJOURNMENT

AYES:
NOES:
ABSTAIN:

AMERICANS WITH DISABILITIES ACT NOTICE: In compliance with the Americans with Disabilities Act, persons needing a disability-related modification or accommodation, including auxiliary aids or services, to participate in this meeting, may contact Deputy City Clerk Yvonne Zepeda, at (916) 777-7770, by fax at (916) 777-7775 or by email to Yvonne.zepeda@cityofisleton.com at least 48 hours prior to the meeting.

GOV. CODE § 54957.5 NOTICE: Public records related to an agenda item that are distributed less than 72 hours before this meeting are available for public inspection during normal business hours at Isleton City Hall located at 101 Second Street, Isleton, California 95641.

ABSENT:

_____

MAYOR, Pamela Bulahan

ATTEST:

_____

DEPUTY CITY CLERK, Yvonne Zepeda

AMERICANS WITH DISABILITIES ACT NOTICE: In compliance with the Americans with Disabilities Act, persons needing a disability-related modification or accommodation, including auxiliary aids or services, to participate in this meeting, may contact Deputy City Clerk Yvonne Zepeda, at (916) 777-7770, by fax at (916) 777-7775 or by email to Yvonne.zepeda@cityofisleton.com at least 48 hours prior to the meeting.

GOV. CODE § 54957.5 NOTICE: Public records related to an agenda item that are distributed less than 72 hours before this meeting are available for public inspection during normal business hours at Isleton City Hall located at 101 Second Street, Isleton, California 95641.

City of Isleton

City Council
Staff Report

DATE: September 12, 2023

ITEM#: 7.A

CATEGORY: Old Business

WASTEWATER MASTER PLAN 2023 COMPLETED BY BENNETT ENGINEERING (CAPITAL IMPROVEMENT PROJECT 23-08); RECEIVE

SUMMARY

The City Council awarded contract to Bennett Engineering on n June 13, 2023, Item# 8C to complete the City's Wastewater Master Plan.

DISCUSSION

The purpose of this Master Plan is to guide future development within the City limits by identifying capacity deficiencies, and developing City Improvement Projects (CIP) to improve deficiencies and plan infrastructure that will serve future development. This master plan has been prepared to accompany the 2040 General Plan Update.

Staff recommends that the City Council adopt the City's Wastewater Master Plan completed by Bennett Engineering.

FISCAL IMPACT

The project involved staff management of the project and some grant administration. Due to estimated cost estimates, the proposal includes cost not to exceed $34,912; whereas the SB-2 grant allocates $34,000 towards this project. Therefore, the City will need an additional $912 to pay for completing the project plus costs for managing the project and administration of the grant.

RECOMMENDATION

It is recommended that the City Council receive the City's draft Wastewater Master Plan completed by Bennett Engineering.

ATTACHMENT

1. City of Isleton's Wastewater Master Plan 2023

Written by: Diana O'Brien
Reviewed by: Charles Bergson, City Manager
Submitted and prepared by: Yvonne Zepeda, City Clerk

CITY OF ISLETON

DRAFT WASTEWATER MASTER PLAN

Bennett Engineering Services
August 2023

MASTER PLAN GOALS

GUIDE FUTURE DEVELOPMENT IN ALIGNMENT WITH 2040 GENERAL PLAN

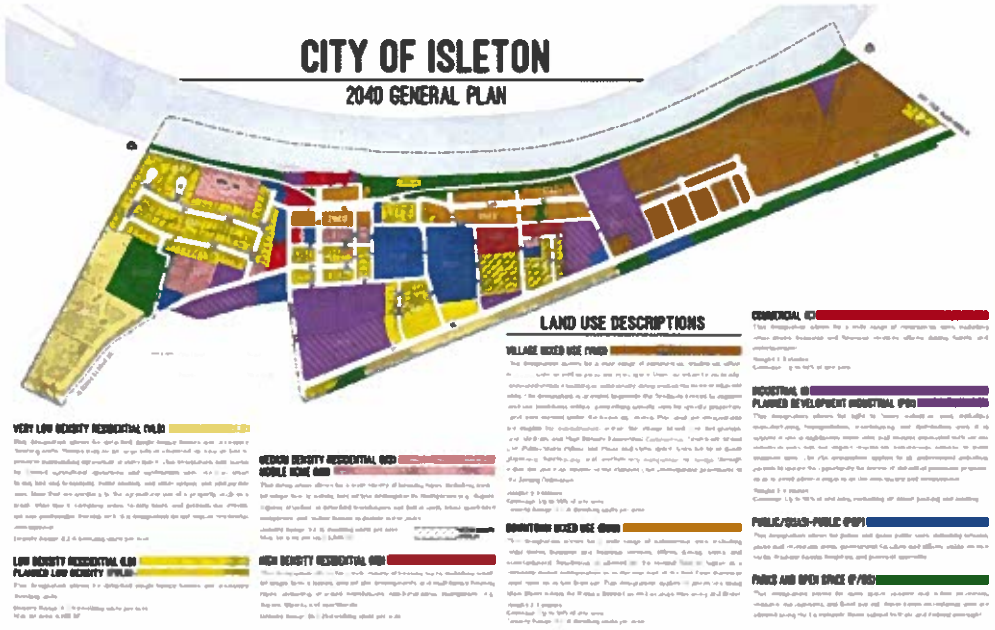


Figure 2 - 2040 General Plan Land Use

CITY OF ISLETON
GENERAL PLAN 2040
LAND USE ELEMENT

MAP LU-1 Land Use

Table 1 - Land Use Designations

Land Use Designations	Allowed Density*	Consistent Zoning Districts	County Zoning
Residential:			
Very Low Density	0.2-6	R-1	RD-3
Low Density and Planned Low Density	6.1-9	R-1	RD-7
Medium Density and Mobile Home	9.1-16	R-1; RM	RD-15
High Density	16.1-25	RM	RD-25
Mixed Use:			
Village Mixed Use	9.1-16	MXU; PUD	RD-7; NMC
Downtown Mixed Use	9.1-16	MXU; PUD	RD-25; NMC
Non-Residential:			
Commercial	n/a	C; PUD	GC
Industrial and Planned Development Industrial	n/a	PDI	M-1;M-2
Other:			
Public/Quasi-Public	n/a	Any District	Depends
Parks and Open Space	n/a	RCO; UR	P/OS

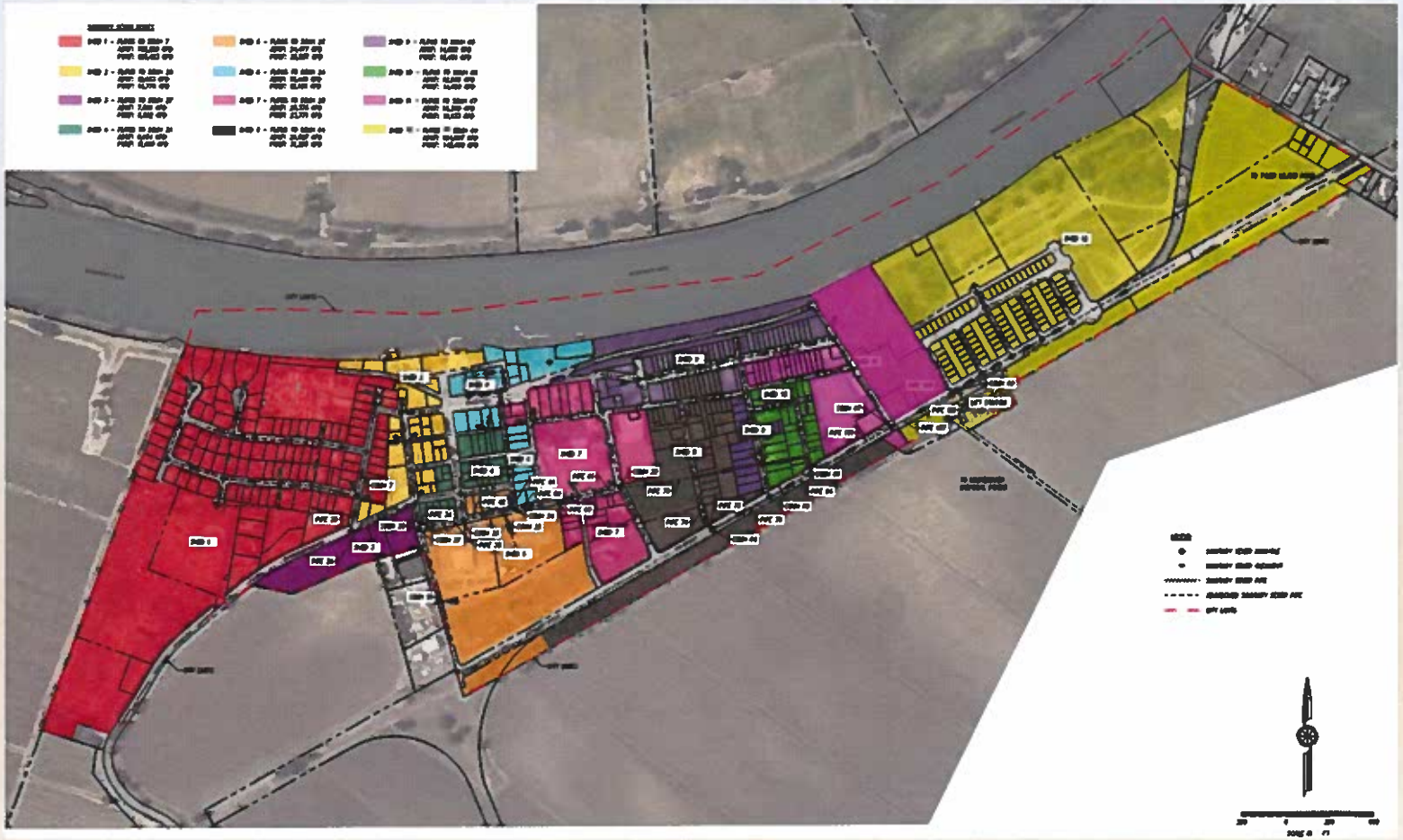
*Allowed Density = Dwelling Units per Acre

COLLECTION SYSTEM - HYDRAULIC CAPACITY

- ASSIGN FLOWS TO EACH PARCEL
  - Use County Mapping and Zoning
  - Use Sacramento Area Sewer District Flow Rates
- CALCULATE ADWF AND PWWF
  - Use calculated flows from above
  - Use formulas provided by SASD
- ALLOCATE FLOWS TO SEWER SHEDS
  - Use elevations from previous project
  - Defines trunk system analyzed
- EVALUATE PIPE CAPACITIES
  - Use total flows from each sewer shed
  - Evaluate for ADWF and PWWF

BEN|EN Y&C

SEWER SHED MAP



TRUNK LINE – PIPE CAPACITY

Shed	Pipe Segment #	Upstream SSMH	Downstream SSMH	Pipe Material	Length (ft)	Mannings (n)	Slope (ft/ft)	Pipe Diameter (in)	ADWF + I&I			PWWF		
									Flow in (gpd)	Hydraulic Depth (in)	Ratio of Percent Full	Flow in (gpd)	Hydraulic Depth (in)	Ratio of Percent Full
1	23	7	8	PVC	205	0.01	0.010	10	103,220	1.82	18.18%	120,423	1.96	19.61%
-	24	8	28	Clay	400	0.014	0.014	10	103,220	2.28	22.82%	120,423	2.47	24.66%
3	34	28	27	PVC	144	0.01	0.010	8	115,883	4.22	52.69%	135,197	4.64	57.97%
2	38	27	26	CIPP	261	0.011	0.011	10	123,480	2.49	24.76%	144,059	2.68	26.77%
4	42	26	25	CIPP	228	0.011	0.011	10	133,434	3.65	36.47%	155,672	3.95	39.46%
5	44	25	24	CIPP	73	0.011	0.011	10	157,911	2.55	25.49%	184,229	2.75	27.48%
6	59	24	23	CIPP	134	0.011	0.011	10	168,356	3.55	35.53%	196,415	3.85	38.48%
-	60	23	22	CIPP	221	0.011	0.011	10	168,356	2.86	28.56%	196,415	3.05	30.54%
-	61	22	20	CIPP	247	0.011	0.011	10	168,356	2.41	24.12%	196,415	2.60	26.01%
7	70	20	53	Clay	424	0.014	0.014	12	188,731	4.25	35.41%	220,186	4.61	38.40%
-	74	53	63	PVC	254	0.01	0.010	12	188,731	3.02	25.20%	220,186	3.22	26.86%
-	75	63	64	PVC	69	0.01	0.010	12	188,731	3.02	25.20%	220,186	3.22	26.86%
8	76	64	65	PVC	374	0.01	0.010	12	215,557	3.27	27.27%	251,483	3.52	29.32%
9	94	65	66	PVC	269	0.01	0.010	12	229,615	3.38	28.16%	267,884	3.64	30.30%
10	101	66	67	PVC	533	0.01	0.010	12	247,180	3.47	28.93%	282,544	3.74	31.14%
11	107	67	68	PVC	398	0.01	0.010	12	258,580	2.90	24.14%	301,677	3.13	26.09%
-	109	68	69	PVC	70	0.01	0.010	12	258,580	3.57	29.75%	301,677	3.87	32.22%
12	121	69	Pump Station	PVC	62	0.01	0.010	12	383,277	4.39	36.57%	447,157	4.77	39.75%

BEN|EN Y&C

WWTF CAPACITY

- CITY FORCE MAIN
  - Existing 10" HDPE Pipe is oversized for flows
  - Use Sacramento Area Sewer District formulas
- PUMP STATION AND HEADWORKS
  - Wet well should be reevaluated after pipe rehabilitation project.
- ALLOCATE FLOWS TO SEWER SHEDS
  - Use elevations from previous project
  - Defines trunk system analyzed
- TREATMENT AND DISPOSAL PONDS
  - Lack capacity for existing flows, overflows, CDO
  - Cannot handle additional development flows

BEN|EN Y&C

CAPITAL IMPROVEMENT PROJECTS

Project 1 – Facilities and Collection System Improvements $8,348,000 (2027-2032)

- Application for construction funding was submitted in March 2023. Aims to reduce I&I in system therefore increasing capacity for wastewater.

Project 2 - Headworks Upgrades $9,295,000 (2032-2037)

- Upgrade security at Pump Station, reinstate bar screens, install additional SCADA and redundancy (Generator, pumps etc)

Project 3 – Pond Improvements $10,517,000 (2037-2042)

- Maintenance and rehabilitation of pond berms as they settle over time.

Project 4 – Long Term Planning $11,899,000 (2042-2047)

- Investigation of regionalization and land acquisition for land application for additional capacity.

BEN|EN Y&C

THANK YOU FOR YOUR TIME
QUESTIONS?

City of Isleton

Draft
Wastewater Master Plan

September 2023

Prepared for:
City of Isleton

Prepared By:

Dave Harden, PE

Ali Holladay, EIT

Jessica Ginnever, EIT

Bennett Engineering Services

1082 Sunrise Avenue, Suite 100
Roseville, CA 95661
916.783.4100

Table of Contents

1 BACKGROUND 1

1.1 Introduction 1
1.2 Purpose and Scope 1
1.3 References 1

2 STUDY AREA 2

2.1 Study Area 2
2.2 Site Geology, Climate and Existing Topography 2
2.3 Delta Plan 3
2.4 Land Use 3
2.5 Historical and Future Population 3

3 WASTEWATER SYSTEM EVALUATION 5

3.1 Collection System 5
3.2 Pump Station and Headworks 5
3.3 Force Main 5
3.4 Treatment and Disposal Ponds 6
3.5 Oxbow Marina 6

4 HISTORICAL WASTEWATER CHARACTERISTICS 7

4.1 Historic Flow Monitoring 7
4.2 Inflow and Infiltration Study 7

5 HYDRAULIC CAPACITY 8

5.1 Approach and Calculations 8
5.2 Collection System Capacity Evaluation 15
5.3 Facilities Capacity Evaluation 15
5.3.1 Force Main 15
5.3.2 Pump Station and Headworks 15
5.3.3 Treatment and Disposal Ponds 16

6 PLANNING CRITERIA 17

7 CAPITAL IMPROVEMENT PROJECTS 17

7.1 Project 1-Facilities and Collection System Improvements 17
7.2 Project 2-Headworks Upgrades 18
7.3 Project 3-Pond Improvements 18
7.4 Project 4-Long Term Planning 18
7.5 Capital Improvements Project Implementation 19

List of Tables

Table 1 - Land Use Designations 8
Table 2 - ADWF Summary 9
Table 3 - Sewer Shed/Node Flow Allocation 11
Table 4 - Hydraulic Pipe Capacity Summary 14
Table 5 - Flow Comparison 16
Table 6 - Project 3 Summary Table 18
Table 7 - CIP Prioritization 19

Table of Contents

List of Figures

Figure 1 - City of Isleton Wastewater Service Area 2
Figure 2 - 2040 General Plan Land Use 4
Figure 3 - Sanitary Sewer Shed Map 10
Figure 4 - Sewer Node Schematic Diagram for ADWF 12
Figure 5 - Sewer Node Schematic Diagram for PWWF 13

Appendices

Appendix A - City of Isleton System Improvement Project: System Evaluation
Appendix B - City of Isleton System Improvement Project: Feasibility Study
Appendix C - Hydraulic Capacity Model
Appendix D - Wastewater System Maps

Abbreviations and Definitions

ADWF	Average Dry Weather Flow
AE	1% Annual chance flooding: Base flood elevations provided. Mandatory flood insurance purchase requirements and floodplain management standards apply
AMSL	Above Mean Sea Level
APN	Assessor Parcel Number
ADWF	Average Dry Weather Flow
BGS	Below Ground Surface
BOD	Biochemical Oxygen Demand
C	Commercial
CCTV	Closed Circuit Television
CDO	Cease and Desist Order
CIP	Capital Improvement Project
CIPP	Cured in Place Pipe
City	City of Isleton
City Limits	Service Area
CIMIS	California Irrigation Management Information System
CWSRF	Clean Water State Revolving Fund
d/D	Flow Depth to Diameter Ratio
Delta	Sacramento-San Joaquin Delta
DI	Drainage Inlet
Discing	Method to rotate the soil at the bottom of the pond and increase percolation rates
DWSRF	Drinking Water State Revolving Fund

EDU	Equivalent Dwelling Unit
FEMA	Federal Emergency Management Agency
Ft/s	Feet per second
GC	General Commercial
General Plan	2021 General Plan Public Review Draft
GPD	Gallons Per Day
HDPE	High Density Polyethylene
HP	Horsepower
I&I	Inflow and Infiltration
in	Inches
LF	Linear Feet
LHMP	Local Hazard Mitigation Plan
M	Industrial Zoning
Master Plan	Wastewater Master Plan
MG	Million Gallons
mgd	Million Gallon per Day
msl	Mean Sea Level
MPN	Most Probable Number
MRP	Monitoring and Reporting Program
MXU	Mixed Use
NEMA	National Electrical Manufacturer Association
NFIP	National Flood Insurance Program
NMC	Neighborhood Mixed Use Center
OS	Open Space
P/OS	Parks and Open Space

PDI	Planned Development Industrial
PF	Peaking Factor
PUD	Planned Unit Development
PWWF	Peak Wet Weather Flow
RCO	Resource Conservation and Open Space
RD	Residential/Multiple Family Residential
RM	Mobile Home Subdivision
SASD	Sacramento Area Sewer District
SCADA	Supervisory Control and Data Acquisition
SOI	Sphere of Influence
SSMH	Sanitary Sewer Manhole
TDS	Total Dissolved Solids
TKN	Total Kjeldahl Nitrogen
TSS	Total Suspended Solids
UR	Urban Reserve
WDR	Waste Discharge Requirement
WWTF	Wastewater Treatment Facility

1 Background

1.1 Introduction

The City is located in the southwestern corner of Sacramento County in the Delta, adjacent to the Sacramento River. The City collects, treats, and disposes of wastewater originating from the residential, commercial, and industrial dischargers within the service area. The City owns, maintains, and operates all wastewater facilities connected to the collection and treatment system within the service area.

The City is currently operating under CDO Number R5-2012-0006. The City's most recent WDR Order 90-186 was adopted in 1990. The City is required under a revised MRP to monitor effluent, ponds, groundwater, reclamation ditch, and sludge. The City must report monthly, quarterly, and annually per the MRP. The CDO was issued due to capacity problems and wastewater spills at the WWTF. The CDO will not be lifted until the Discharger can demonstrate that the WWTF has enough on-site storage to contain the design flow for a 100-year water year with two feet of freeboard. The capacity of the sanitary sewer collection system will be analyzed within this report and discussed in conjunction with storage capacities.

1.2 Purpose and Scope

The purpose of this Master Plan is to guide future development within the City limits by identifying capacity deficiencies, and developing CIP's to improve deficiencies and plan infrastructure that will serve future development. This master plan has been prepared to accompany the 2040 General Plan Update.

This master plan will evaluate the capacity of the sanitary sewer gravity system, the City's force main and discuss known storage capacity issues at the WWTF. The planning period of this master plan has been selected to match the same period as the 2040 General Plan.

1.3 References

The following documents were referenced in the preparation of this master plan:

2040 General Plan, July 2020, City of Isleton

Cease and Desist Order No. R5-2012-0006, February 2012, California Regional Water Quality Control Board Central Valley Region

Hydrogeologic Evaluation Report: City of Isleton Wastewater Treatment Facility, July 2022, Wood Environment and Infrastructure Solutions, Inc.

Initial Study/Proposed Mitigated Negative Declaration for the Meadows of Isleton, February 2023, City of Isleton Planning Department

Notice of Intent to Adopt a Mitigated Negative Declaration, May 2022, City of Isleton

Standards and Specifications, November 2021, Sacramento Area Sewer District

Zoning Code of Sacramento County, January 2023, Sacramento County

2 Study Area

2.1 Study Area

The City provides sewer service to residents within City limits and accepts septage from nearby Oxbow Marina, the sewer service area can be seen in Figure 1.

Figure 1 - City of Isleton Wastewater Service Area

The City limits are bound by West Tyler Island Bridge Road, 6th Street and the Sacramento River. The parcel adjacent to Georgiana Slough, where the WWTF are located, is also within City limits. The service s area encompasses the City limits and cannot be expanded until the WWTF capacity issues have been addressed.

For the purpose of this report the service area and the study area will be the same as the City's General Plan does not include the proposal of an SOI outside the City limits, so the study area only considers buildout of the City limits.

2.2 Site Geology, Climate and Existing Topography

The location of the City and its facilities is unique, as it lies within the Delta on the Andrus Island. The site is located north of the Georgiana Slough and is located on Basin Deposits. The Basin deposits consist of unconsolidated beds of clay with very low Permeability (Ca DWR, 1973). A hydrogeological study completed by Wood in 2019, determined that the groundwater levels within the City limits are likely impacted by the tide in the delta, nearby surface water and local agriculture. The City monitors groundwater levels near the WWTF, and depth to static groundwater varies from 2-9 feet bgs.

Previous reports estimated that the City's average annual precipitation is 16.94 inches. Precipitation data from Staten Island weather station was used from CIMIS.

Elevations within City limits range from -2.4 to 15.6 feet AMSL. The majority of the City is below AMSL with the exception of the levee and River Road.

2.3 Delta Plan

The Sacramento-San Joaquin River Delta is a part of California's Delta Plan which aims to provide a more reliable water supply for California, protect and restore and enhance the Delta ecosystem and protect and enhance the unique cultural, recreational, natural resource and agricultural values of the Delta as an evolving place.

The City's future development should be aligned with the state's Delta Plan to protect beneficial uses of the nearby surface and groundwater. The City's WWTF lies between the Georgiana Slough and a drainage ditch, both of which flow to the Sacramento River. Excess effluent flows at the WWTF, coupled with inadequate storage poses a water quality threat to nearby and downstream water sources.

2.4 Land Use

Land use within City limits consists of low to high density residential, industrial, mixed use, and commercial land types. At the time of this report the land use element of the 2040 General Plan was being updated, see in Figure 2 - 2040 General Plan Land Use.

The 20240 General Plan contains a Land Use Build Out Analysis, including both residential and non-residential. In both the Land Use element and this report, it should be noted that the proposed land use designations will only be applied to vacant or underutilized acreage.

2.5 Historical and Future Population

The City's existing population is 737 and saw a 4.6% increase from 2010 to 2018 according to the US Census. Since 2018, the population has seen a slight decline. The 2040 General Plan's Land Use Element estimates that an additional 925-1224 people could move to the City based on the buildout capacity on vacant or underutilized land in Section 1.6.2.2 in the Land Use Element. For additional information please refer to the Land Use Element of the 2040 General Plan.

CITY OF ISLETON
GENERAL PLAN 2040
LAND USE ELEMENT

MAP LU-1
Land Use Diagram

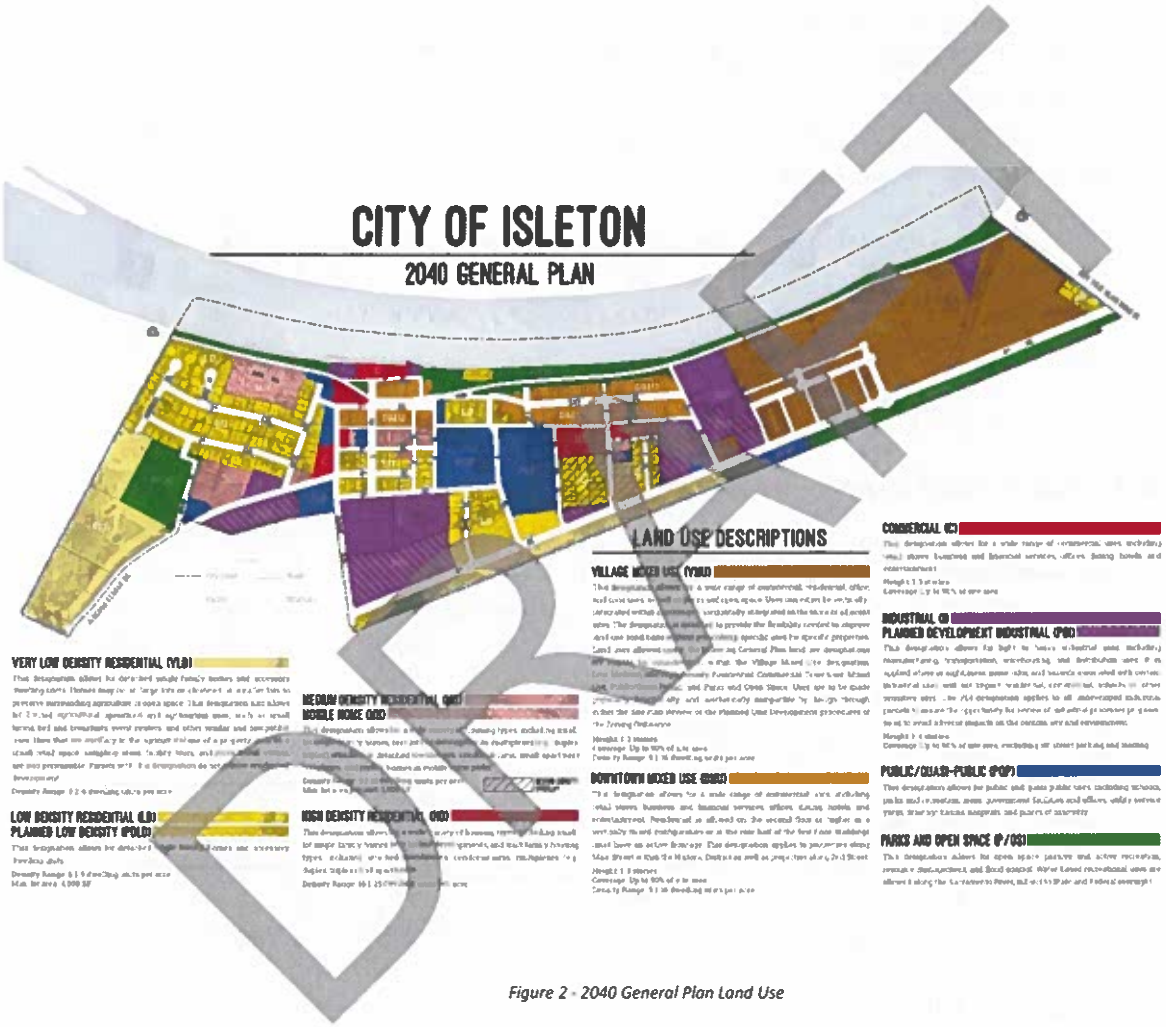


Figure 2 - 2040 General Plan Land Use

3 Wastewater System Evaluation

This section provides a summary of the System Evaluation completed in December 2021 by Bennett Engineering Services, refer to Appendix A for the System Evaluation. The existing facilities can be divided into four components: the collection system, the pump station, the treatment ponds, and disposal ponds.

3.1 Collection System

The collection system consists approximately 21,107 LF of 6-12 inch gravity sewer mains and approximately 81 manholes. The City's collection system generally flows North to South and then East to West. Approximately half of the City's pipes have been replaced or rehabilitated using the CIPP method, the remaining pipes are assumed to be from the early 1900s.

The gravity sewer mains and manholes are the primary source of inflow and infiltration. Many pipes have leaky joints allowing groundwater to enter the system. Catch basins, uncovered cleanouts, and down spout connections are a direct connection for inflow of stormwater into the system.

Maps of the City's collection system can be found in Appendix B.

3.2 Pump Station and Headworks

The City's headworks and pump station convey wastewater to the WWTF. The influent from the collection system runs through a 12-inch trunk line, into the 60-inch grinder manhole near the entry of the pump station, then into the wet well which contains two chopper pumps. Influent is then conveyed to the WWTF via the City's force main.

When the 12-inch trunk line was replaced, it was installed at an elevation lower than the pump station. The bar screen, comminutor, and Parshall flume became nonoperational. The pump station does not have operational bar screens, SCADA controls, auto dialer, back up pumps, or a backup generator. The lack of these components in the pump station contributes heavily to the sludge accumulation in the treatment ponds and requires staffing 24/7 during rainstorms (high flow events).

3.3 Force Main

The City's wastewater system conveys wastewater from the pump station through an 8-inch HDPE force main from the pump station to an existing gate valve, after the valve the force main increases from an 8-inch to a 10-inch HDPE force main. In total there is 4,300 LF of force main.

3.4 Treatment and Disposal Ponds

The City utilizes a pond system with primary aeration pond and a series of two facultative ponds which dispose of treated effluent via six disposal ponds. The disposal ponds utilize percolation and evaporation to dispose of treated effluent.

Currently treatment pond #1 is not operating as it was designed due to the lack of headworks screening and inefficient aerations. Treatment pond #1 does not meet freeboard requirements and has ongoing sludge accumulation and dead zones. Treatment ponds #2 and #3 are operating within freeboard and design parameters.

Historically during the wet season, the WWTF have violated the 2 foot freeboard requirement. The repeated violations resulted in the issuance of a CDO. During the wet season the disposal ponds have a lower disposal rate due to reduced percolation from high groundwater and reduced evapotranspiration due to cloudy weather. The WWTF ponds (storage and treatment) lack sufficient capacity to contain the treated effluent and a 100-yr storm on site. In the past the City has spilled into the irrigation ditch along the northern side of the WWTF. For additional information related to the ponds and their capacity, please reference the System Evaluation in Appendix A and the Feasibility Study in Appendix C.

3.5 Oxbow Marina

The City's WWTF receives wastewater flows from the City's collection system and from the nearby Oxbow Marina via a 6-inch force main. The City is not responsible for any operations or maintenance of Oxbow's force main or collection system. Based on historical flow logs, Oxbow Marina discharges approximately 12,000 gpd to the WWTF. There is an agreement between Oxbow and the City of Isleton for the acceptance of the wastewater but there is not an agreed upon maximum flow.

4 Historical Wastewater Characteristics

4.1 Historic Flow Monitoring

Due to the City's limited budget and grant funding, flow monitoring was not completed as part of this project. The Isleton Wastewater System Improvement Project included flow monitoring however, the flow monitoring period was unusually dry. Historical Flow data was provided by the City and used to calculate I&I. Influent at the WWTF during dry months is 85,492 gpd and during the wet months is 139,760 gpd, including flows from the Oxbow Marina.

4.2 Inflow and Infiltration Study

An I&I study was not conducted as a part of this report. However, there was a study completed as a part of the Isleton Wastewater Improvement Project in 2021. The study included smoke testing, flow monitoring, and structural inspections of the manholes. Although the study was done during an extreme drought year, the historical data analysis and collection system inspections confirmed the excess I&I in system and the need for improvements. The study concluded that the most concerning locations for I&I are the vented manhole lids, possible storm drain, catch basin, down spouts, or yard drains that are connected.

An evaluation of I&I was completed as part of the water balance effort. The annual I&I during an average water year was calculated to be 12.7 MG, which is approximately 20% of the total flows. Refer to Appendix A for additional information.

5 Hydraulic Capacity

5.1 Approach and Calculations

Due to limited funding, an excel spreadsheet was used to create a numeric model evaluating the capacity of the main trunk line through the City. The spreadsheet and supporting calculations can be found in Appendix D. The numeric model was created by assigning design flows to each parcel within the City limits, then allocating flows to sewer nodes (or manholes) totaling the flows up to the pump station. These pipes make up the trunk system of the City and were evaluated for capacity as part of this report.

The first step included downloading the parcel information from the Sacramento County Assessor Parcel website. The information included land use, County zoning, lot size, address, and APN number.

The second step was to assign design flows based on the land use and zoning. The 2040 General Plan Land Use Diagram was used in conjunction with the existing land use provided by the County. It is important to note that the proposed land use designations were only be applied to vacant or underutilized acreage. Parcels which have been developed or fully utilized are assumed to maintain their existing land use. Parcels which have not been developed or are underutilized acreage will be assigned a number of EDUs per Table 1, which can also be found in Section 1.5.13 of the Land Use element.

Table 1 - Land Use Designations

Land Use Designations	Allowed Density*	Consistent Zoning Districts	County Zoning
Residential:			
Very Low Density	0.2-6	R-1	RD-3
Low Density and Planned Low Density	6.1-9	R-1	RD-7
Medium Density and Mobile Home	9.1-16	R-1; RM	RD-15
High Density	16.1-25	RM	RD-25
Mixed Use:			
Village Mixed Use	9.1-16	MXU; PUD	RD-7; NMC
Downtown Mixed Use	9.1-16	MXU; PUD	RD-25; NMC
Non-Residential:			
Commercial	n/a	C; PUD	GC
Industrial and Planned Development Industrial	n/a	PDI	M-1;M-2
Other:			
Public/Quasi-Public	n/a	Any District	Depends
Parks and Open Space	n/a	RCO; UR	P/OS

*Allowed Density = Dwelling Units per Acre

Once each parcel was assigned a number of EDU's, average dry weather and peak wet weather flows were calculated. SASD's standards and specifications from 2019 for flow estimation were utilized. Table 2 provides a summary of the average dry weather flow rates and how they were applied.

Table 2 - ADWF Summary

Land Use	EDU	Flow Rate (gal/day)
Per Residential Single-Family Unit	1	310
Per Residential Multi-Family Unit	0.75	233
Per student at Elementary School (Up to 1000 capita)	-	25,000
Per Acre of Commercial Development		1,900
Per Acre of School Site		1,900
Per Acre of Industrial Development		1,900
Per Acre of Other Usages		1,900

ADWF and PWWF were calculated using equations from SASD's standards and specifications from 2019. The formulas are listed along with their assumptions.

- ADWF (mgd) = (310 gpd/EDU)* ((# EDUs/acre) * # acres)/1000
- I&I (mgd)[1] = 0.20*(ADWF)
- PF[2]= 3.5-1.8*ADWF$^{0.05}$
- PWWF (mgd) = (ADWF*PF) + I&I

[1]I&I was calculated to be 20% of total flows in previous reports by Bennett Engineering.

[2]Minimum value for PF is 1.2

The third step was to allocate each parcel to a sewer shed based on topography and existing invert information. Each parcel and their flows were assigned to flow to a sewer node, located at an existing sanitary sewer manhole. At this node the flows are totaled and that is assumed to be the flow into the downstream pipe. See Figure 3 for the Sanitary Sewer Shed Map.

NO.	REVISIONS	BY	DATE
6			
5			
4			
3			
2			
1			

DESIGN BY	A. HOLLADAY
DRAWN BY	A. HOLLADAY
CHECKED BY	D. WARREN
SCALE	1"=250'
DATE	08/22/2023
PROJ NO.	22287

VERIFY SCALE

BEN EN

Bennett Engineering Services
1082 Sunrise Avenue, Suite 100
Roseville, California 95661
T 916.783.6100
F 916.783.6130

ISLETON WASTEWATER MASTER PLAN

SANITARY SEWER SHED

CITY OF ISLETON CALIFORNIA

EX-1
1
of
1

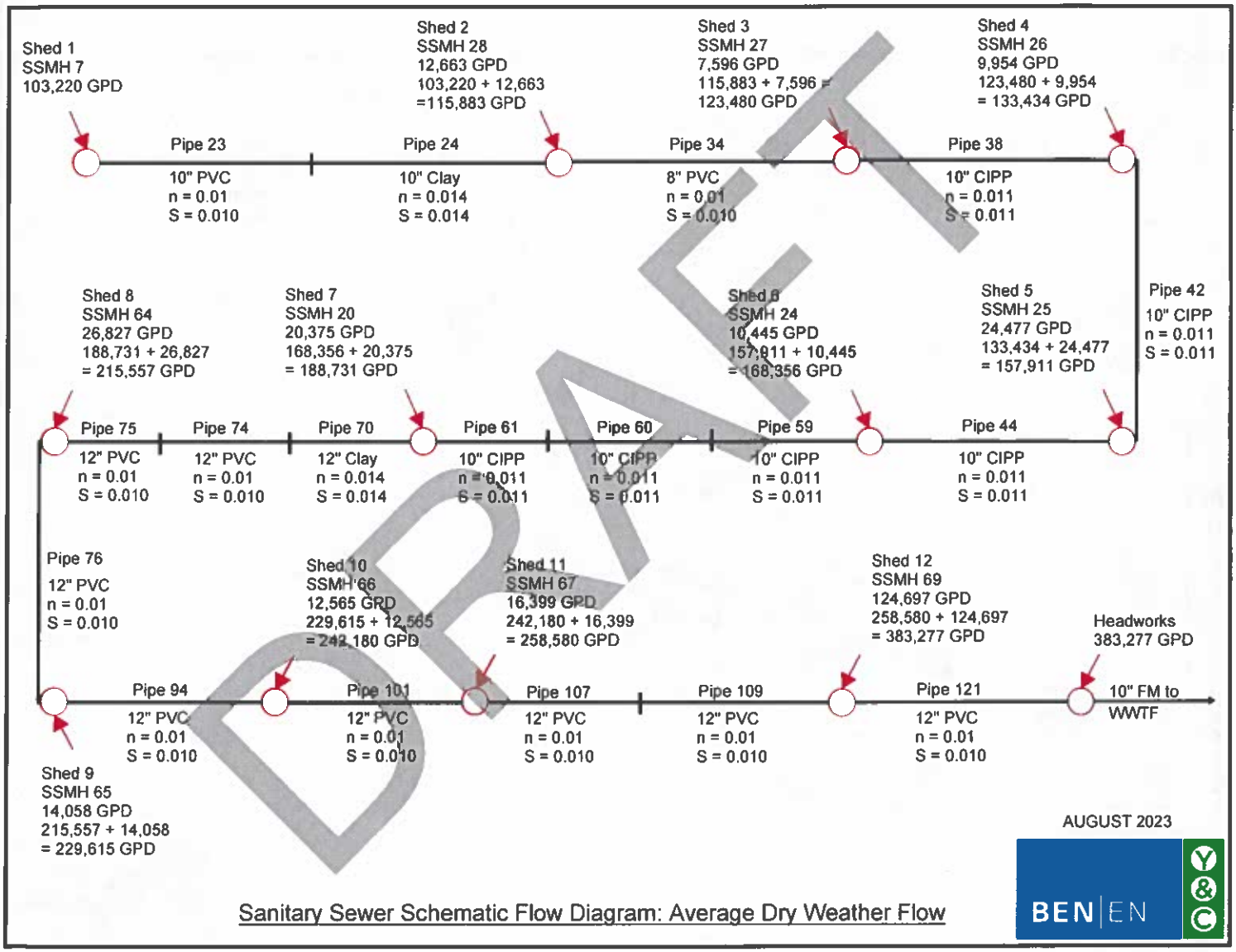
Flows were summed at each node, including ADWF, ADWF plus I&I and PWWF. ADWF plus I&I is different than PWWF, I&I was added to ADWF since the City sees high rates of I&I all year round. Refer to Table 3 for a summary of flows at each node and the total in the system.

Table 3 - Sewer Shed/Node Flow Allocation

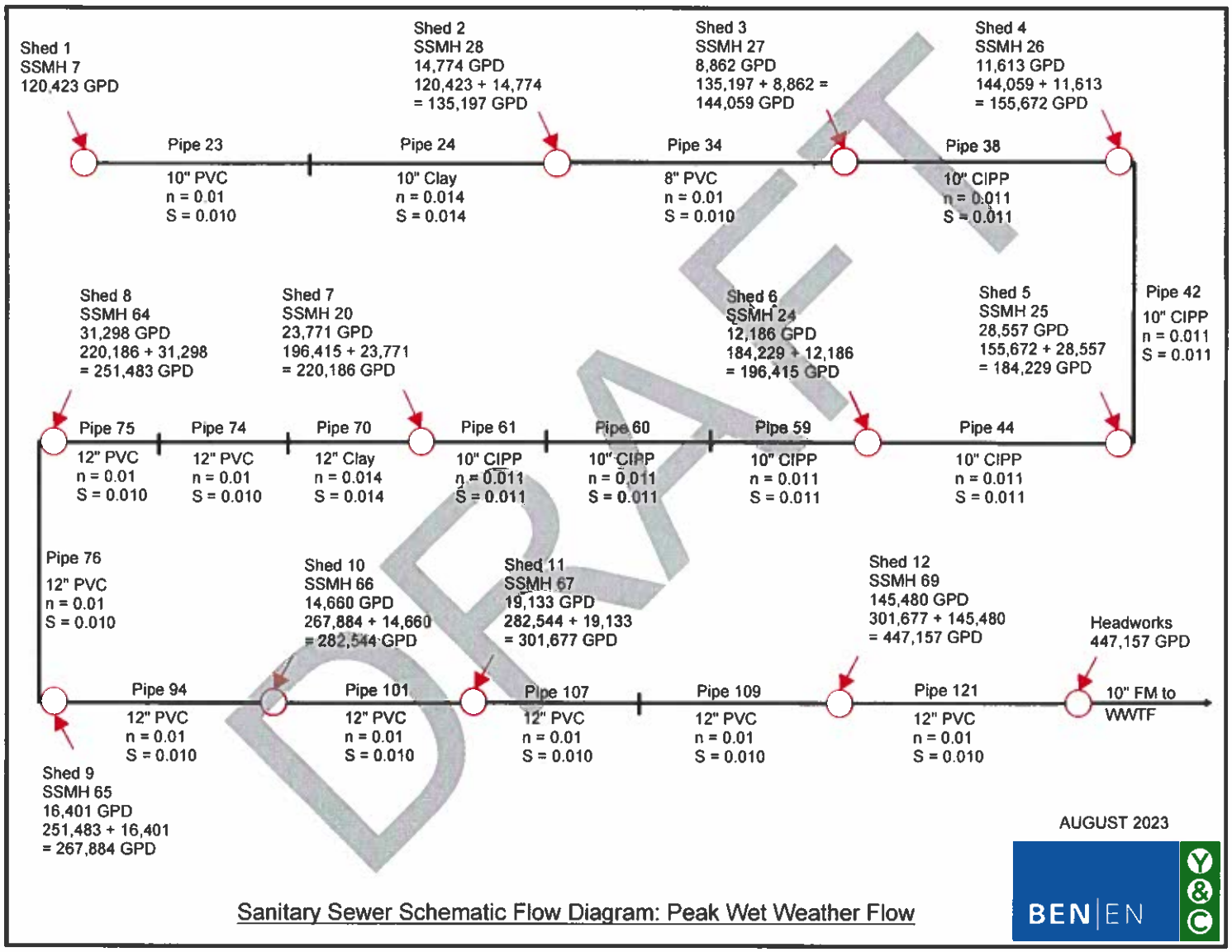
Shed	Node	SSMH	ADWF (gpd)	ADWF plus I&I (gpd)	PWWF (gpd)
1	1	7	86,017	103,220	120,423
2	2	28	10,553	12,663	14,774
3	3	27	6,330	7,596	8,862
4	4	26	8,295	9,954	11,613
5	5	25	20,398	24,477	28,557
6	6	24	8,704	10,445	12,186
7	7	20	16,979	20,375	23,771
8	8	64	22,355	26,827	31,298
9	9	65	11,715	14,058	16,401
10	10	66	10,471	12,565	14,659
11	11	67	13,666	16,399	19,133
12	12	69	103,914	124,697	145,480
TOTAL:			319,398	383,277	447,157

Once the flows were established into each node, the flow out of the node is equal to the flow into the downstream pipe. Using the pipe material, length, slope, and calculated flow the percent full was calculated for both ADWF and PWWF. The goal seek function in excel was used to iterate the percent full that the pipe flows based on the specified flow rates.

Figure 4 and 5 are schematic flow diagrams which were created to illustrate the calculation and results for ADWF plus I&I and PWWF, respectively. A tabular summary of the results for both ADWF plus I&I and PWWF is in Table 4.



Sanitary Sewer Schematic Flow Diagram: Average Dry Weather Flow



AUGUST 2023

Sanitary Sewer Schematic Flow Diagram: Peak Wet Weather Flow

BEN|EN Y&C

Table 4 - Hydraulic Pipe Capacity Summary

Shed	Pipe Segment #	Upstream SSMH	Downstream SSMH	Pipe Material	Length (ft)	Mannings (n)	Slope (ft/ft)	Pipe Diameter (in)	ADWF + I&I			PWWF		
									Flow In (gpd)	Hydraulic Depth (in)	Ratio of Percent Full	Flow In (gpd)	Hydraulic Depth (in)	Ratio of Percent Full
1	23	7	8	PVC	205	0.01	0.010	10	103,220	1.82	18.18%	120,423	1.96	19.61%
-	24	8	28	Clay	400	0.014	0.014	10	103,220	2.28	22.82%	120,423	2.47	24.66%
3	34	28	27	PVC	144	0.01	0.010	8	115,883	4.22	52.69%	135,197	4.64	57.97%
2	38	27	26	CIPP	261	0.011	0.011	10	123,480	2.49	24.76%	144,059	2.68	26.77%
4	42	26	25	CIPP	228	0.011	0.011	10	133,434	3.65	36.47%	155,672	3.95	39.46%
5	44	25	24	CIPP	73	0.011	0.011	10	157,911	2.55	25.49%	184,229	2.75	27.48%
6	59	24	23	CIPP	134	0.011	0.011	10	168,356	3.55	35.53%	196,415	3.85	38.48%
-	60	23	22	CIPP	221	0.011	0.011	10	168,356	2.86	28.56%	196,415	3.05	30.54%
-	61	22	20	CIPP	247	0.011	0.011	10	168,356	2.41	24.12%	196,415	2.60	26.01%
7	70	20	53	Clay	424	0.014	0.014	12	188,731	4.25	35.41%	220,186	4.61	38.40%
-	74	53	63	PVC	254	0.01	0.010	12	188,731	3.02	25.20%	220,186	3.22	26.86%
-	75	63	64	PVC	69	0.01	0.010	12	188,731	3.02	25.20%	220,186	3.22	26.86%
8	76	64	65	PVC	374	0.01	0.010	12	215,557	3.27	27.27%	251,483	3.52	29.32%
9	94	65	66	PVC	269	0.01	0.010	12	229,615	3.38	28.16%	267,884	3.64	30.30%
10	101	66	67	PVC	533	0.01	0.010	12	242,180	3.47	28.93%	282,544	3.74	31.14%
11	107	67	68	PVC	398	0.01	0.010	12	258,580	2.90	24.14%	301,677	3.13	26.09%
-	109	68	69	PVC	70	0.01	0.010	12	258,580	3.57	29.75%	301,677	3.87	32.22%
12	121	69	Pump Station	PVC	62	0.01	0.010	12	383,277	4.39	36.57%	447,157	4.77	39.75%

5.2 Collection System Capacity Evaluation

The collection system's capacity is based on the percent full that the pipe flows under each flow condition. Based on SASD's standards and specifications from 2019 a gravity collection pipe smaller than 12 inch shall not have a percent full ratio greater than 70% and pipes larger than 12 inch can run between 70-100% full. According to Table 4, all of the pipe segments evaluated fall within the design parameters with the maximum being 57.10%.

The gravity pipes evaluated have sufficient capacity to convey both ADWF and PWWF based. However, it is recommended that pipe segment 34, between manholes 27 and 28, be upsized. The percentage full in pipe segment 34 is considerably higher than other pipes within the system. This pipe also could surcharge as there is a larger diameter pipe upstream and downstream of the pipe.

5.3 Facilities Capacity Evaluation

5.3.1 Force Main

A calculation was run on the 10 inch HDPE force main using the ADWF plus I&I and the PWWF. The formula and assumptions made were:

$v = 0.41084*q/d^2$

where: v = velocity in ft/s

q = flow in gpm

d = inside diameter of pipe

For ADWF and PWWF the velocities were 1.5 ft/s and 1.73 ft/s, respectively. Per SASD's standards and specifications from 2019 force mains shall be sized for no less than 3 feet per second and no more than 8 feet per second. Based on these calculations the force main is oversized. It should be noted that the force main was replaced and upsized in 2010 from an 8 inch to a 10-inch pipe. It is assumed that the force main was upsized to provide additional capacity for I&I, which allows flows to back up into the force main during high flow events.

5.3.2 Pump Station and Headworks

The pump station's wet well capacity is 7,759 gallons with 1100 gpm being pumped to the force main by two chopper pumps. During high flow events the City has had to rent pumps in order to keep up with flows and reduce the likelihood of sanitary sewer overflows. The pump station and pumps should be evaluated for upsizing as future development continues.

5.3.3 Treatment and Disposal Ponds

As part of the Wastewater System Evaluation a water balance was completed. The report concluded that the treatment and disposal ponds do not have sufficient capacity to contain the permitted flow of 0.43 gpd and a 100-year rain event without spilling or violating the 2 foot freeboard requirements.

The report discusses the loss of pond capacity as the pond berms settle over time, and a loss of capacity due to I&I. An in-depth water balance of the 2016-2017 water year was created which fell between a 50 - 75 year rain event. The water balance determined that the groundwater table was likely flowing into the percolation pond rather than treated effluent percolating out.

The City has consistently struggled with maintaining sufficient capacity at the WWTF during the wet season, and spills during extremely wet years. The disposal ponds are the limiting factor for the maximum permitted flow of the City. Table 5 compares the existing flows and the 2016-2017 water to the build out capacity flows calculated in this report.

Table 5 - Flow Comparison

WWTF Flows	City Flow (MGD)	Oxbow Flow (MGD	Total Flow (MGD)	Annual MG
2016-2017	-	-	0.16	57.39
Average (2014-2020)	-	-	0.107	39.32
ADWF plus I&I	0.383	0.012	0.395	144.28
PWWF	0.447	0.012	0.459	167.59

The Feasibility Study finalized in 2023 recommended that regionalization be considered, and that an I&I reduction project is constructed. Until the excessive I&I can be mitigated and the City can demonstrate that there is sufficient capacity during the wet season to provide a water balance fulfilling the CDO, the WWTF cannot handle additional flows at this time.

6 Planning Criteria

The City does not have design standards or specifications. The Sacramento County Improvement Standards and SASD Standards and Specifications shall be used for improvement projects within the City.

7 Capital Improvement Projects

This chapter presents the recommended CIP for the City sewer system, and a summary of the capital costs. This chapter is organized to assist the City in making finance decisions, and to plan the sewer system improvements for future development.

7.1 Project 1-Facilities and Collection System Improvements

This project includes sewer collection system improvements, removing illicit storm drain connections, headworks improvements, and WWTF improvements.

The sanitary sewer improvements will focus on the older areas of town where CCTV footage shows damage to the pipes and manholes or evidence of I&I. Approximately 5,425 linear feet of sanitary sewer pipe and 25 manholes will be replaced. Approximately 1,200 linear feet of pipe will be abandoned using current industry standards to reduce any I&I from entering the system through the pipes that are no longer in service.

The storm drain reconnections will include installing new storm drainpipes to reroute the flows to the storm drain system instead of being directly connected to the sanitary sewer system. By removing these connections from the sanitary sewer system, I&I will be greatly reduced. Approximately 1,200 linear feet of new storm drainpipe, 9 manholes, and 4 drain inlets will be installed. Once an additional survey has been conducted additional DI's may be required.

Headworks improvements will help reduce solids reaching the treatment facility. The improvements will screen large solids prior to entering the headworks grinder and lift station. The improvements will help maintain treatment and disposal capacity in the ponds.

The aeration and equipment upgrades must be designed and sized, but it is anticipated that 8 aerators and 1 blower will be installed, as well as a new NEMA control panel at the WWTF. Additionally, the flow monitoring equipment would be replaced with minor alteration to piping, as well as upgrades to sensors, controls, telemetry, and backup generator to provide operational efficiencies and reliability.

For a more information about the project refer to Appendix C. It is anticipated that a construction grant will fund the construction of the project and the construction funding application was submitted in February 2023.

7.2 Project 2-Headworks Upgrades

This project will upgrade the facilities located around and within the headworks/ pump station corporation yard. Improvements to the corporation yard include security fencing, and video surveillance to reduce theft and vandalism. The wet well would be evaluated for storage capacity, pump capacity and time to overflow. This project would also reinstate the existing comminutor, Parshall flume and bar screen in operation or look to install new appurtenances. The project would also include procurement of emergency back up resources such as a generator, and portable trailer mounted pump.

7.3 Project 3-Pond Improvements

This project includes the maintenance/rebuilding of the treatment and disposal pond berms and other treatment improvements. This project would include grading to rebuild the berms back up to their design elevations, installation of rip rap and other erosion control along the berms, and installation of additional aerators and or evaporators.

The pond berm stability and berm height will be increased per geotechnical recommendations. It is recommended that the berm heights be increased 1 foot every 5 years to provide capacity and adequate freeboard for future permit requirements. When the berms are raised the staff gauges should also be recalibrated for accurate freeboard readings. The first phase of the project will cost more than the following years due to the installation of the aerators and or evaporators. Pest mitigation will be implemented during grading activities to reduce the potential of berm failure due to burrowing animals.

Table 6 illustrates how this project will be broken up throughout the time period.

Table 6 - Project 3 Summary Table

Pond Improvement 1	$8,348,000	2027-2032
Pond Improvement 2	$9,295,000	2032-2037
Pond Improvement 3	$10,517,000	2037-2042
Pond Improvement 4	$11,899,000	2042-2047

7.4 Project 4-Long Term Planning

The City will need to investigate two alternatives for long term planning, regionalization and land application, in order to serve the City's future needs.

Regionalization would benefit the City and the neighboring parcels outside City limits, and potentially the surrounding delta ecosystem. This project would likely include a force main from the City to Rio Vista to transport the effluent. This project would include a force main, one pump station and a crossing under the Sacramento River.

Land application would benefit the City by adding more capacity to the WWTF to hold treated effluent during the wet season. To proceed with this effort, the City would need to acquire more land around the WWTF.

A feasibility study will need to be completed to determine which alternative is feasible, and how the project can be funded.

7.5 Capital Improvements Project Implementation

The CIPs are prioritized based on their urgency to mitigate existing deficiencies and for servicing anticipated growth. It is recommended that improvements to mitigate existing deficiencies be constructed as soon as possible. Table 7 summarizes the projects, their cost and the implementation period.

Table 7 - CIP Prioritization

Project	Improvement	Estimated Cost	Implementation Period
1-Facilities and Collection System Improvements	Reduce I&I, regain capacities	$9,041,000	2023-2026
2-Headworks Upgrades	Improve treatment, redundancy and functionality	$1,53,000	2027-2031
3- Pond Improvements	Pond Berm Stability	$40,059,000	2027-2047
4-Long Term Planning	Improve Delta water quality	$1,500,000	2040-2050

The City is a disadvantaged community which relies on grants and loans to complete CIP projects. Below are funding options to be investigated but are not limited to:

- Clean Water Sate Revolving Fund (CWSRF)
- Drinking Water State revolving Fund (DWSRF)
- Nonpoint Source Grants Program
- US Department of Agriculture, Rural Development, Water and Environmental Programs

Appendices

Appendix A - City of Isleton System Improvement Project: System Evaluation
Appendix B - City of Isleton Wastewater Collection System
Appendix C - City of Isleton System Improvement Project: Feasibility Study
Appendix D - Hydraulic Capacity Model

Appendix A - City of Isleton System Improvement Project: System Evaluation

Appendix B - City of Isleton Wastewater Collection System

Appendix C - City of Isleton System Improvement Project: Feasibility Study

Appendix D - Hydraulic Capacity Model

ISLETON, CA 95641	157-0016-005-0000	4838	0.111	310	310
ISLETON, CA 95641	157-0016-006-0000	4838	0.111	310	310
ISLETON, CA 95641	157-0016-007-0000	4838	0.111	310	310
ISLETON, CA 95641	157-0016-008-0000	4838	0.111	310	310
ISLETON, CA 95641	157-0016-010-0000	6742	0.155	310	310
ISLETON, CA 95641	157-0016-011-0000	5000	0.115	310	310
ISLETON, CA 95641	157-0016-012-0000	5000	0.115	310	310
ISLETON, CA 95641	157-0016-014-0000	7258	0.167	310	310
ISLETON, CA 95641	157-0016-015-0000	7258	0.167	310	310
ISLETON, CA 95641	157-0016-016-0000	6459	0.148	310	310
ANDRUS ISLAND, CA 95641	157-0071-004-0000	4845	0.111	310	310
ANDRUS ISLAND, CA 95641	157-0071-005-0000	4845	0.111	310	310
ISLETON, CA 95641	157-0071-009-0000	2178	0.050	310	310
ISLETON, CA 95641	157-0071-010-0000	4500	0.103	310	310
ISLETON, CA 95641	157-0071-011-0000	5000	0.115	310	310
ISLETON, CA 95641	157-0071-012-0000	5000	0.115	310	310
ISLETON, CA 95641	157-0071-018-0000	4845	0.111	310	310
ISLETON, CA 95641	157-0071-019-0000	6178	0.142	310	310
ISLETON, CA 95641	157-0072-001-0000	6303	0.145	310	310
ISLETON, CA 95641	157-0072-005-0000	13485	0.310	620	620
ANDRUS ISLAND, CA 95641	157-0073-001-0000	5125	0.118	310	310
ANDRUS ISLAND, CA 95641	157-0073-002-0000	5201	0.119	310	310
ANDRUS ISLAND, CA 95641	157-0073-003-0000	5270	0.121	310	310
ANDRUS ISLAND, CA 95641	157-0073-004-0000	5403	0.124	310	310
ANDRUS ISLAND, CA 95641	157-0073-007-0000	12090	0.278	310	310
ANDRUS ISLAND, CA 95641	157-0073-008-0000	3720	0.085	310	310
ANDRUS ISLAND, CA 95641	157-0073-009-0000	4860	0.112	310	310
ANDRUS ISLAND, CA 95641	157-0073-010-0000	4496	0.103	310	310
ANDRUS ISLAND, CA 95641	157-0073-020-0000	25265	0.580	1,864	1,864
ANDRUS ISLAND, CA 95641	157-0073-021-0000	34848	0.800	2,563	2,563
ANDRUS ISLAND, CA 95641	157-0073-026-0000	11703	0.269	310	310
ANDRUS ISLAND, CA 95641	157-0073-031-0000	35630	0.818	1,554	1,554
ANDRUS ISLAND, CA 95641	157-0073-032-0000	14462	0.332	932	932
ANDRUS ISLAND, CA 95641	157-0073-033-0000	14985	0.344	1,165	1,165
ANDRUS ISLAND, CA 95641	157-0073-034-0000	18339	0.421	1,398	1,398
ANDRUS ISLAND, CA 95641	157-0073-036-0000	23164	0.532	1,010	1,010
ANDRUS ISLAND, CA 95641	157-0073-039-0000	10000	0.230	310	310
ANDRUS ISLAND, CA 95641	157-0100-059-0000	16439	0.377	-	-
ANDRUS ISLAND, CA 95641	157-0100-069-0000	402059	9.230	15,611	15,611
ANDRUS ISLAND, CA 95641	157-0100-070-0000	162914	3.740	15,844	15,844
ANDRUS ISLAND, CA 95641	157-0232-001-0000	6505	0.149	310	310
ANDRUS ISLAND, CA 95641	157-0232-002-0000	6118	0.140	310	310
ANDRUS ISLAND, CA 95641	157-0232-003-0000	6200	0.142	310	310
ANDRUS ISLAND, CA 95641	157-0232-004-0000	6620	0.152	310	310
ANDRUS ISLAND, CA 95641	157-0232-005-0000	6514	0.150	310	310
ANDRUS ISLAND, CA 95641	157-0232-006-0000	7130	0.164	310	310
ANDRUS ISLAND, CA 95641	157-0232-007-0000	6042	0.139	310	310
ANDRUS ISLAND, CA 95641	157-0232-008-0000	7130	0.164	310	310
ANDRUS ISLAND, CA 95641	157-0233-001-0000	9300	0.213	620	620
ANDRUS ISLAND, CA 95641	157-0233-002-0000	6510	0.149	310	310
ANDRUS ISLAND, CA 95641	157-0233-003-0000	6500	0.149	310	310
ANDRUS ISLAND, CA 95641	157-0233-004-0000	7285	0.167	310	310
ANDRUS ISLAND, CA 95641	157-0234-002-0000	3485	0.080	310	310
ANDRUS ISLAND, CA 95641	157-0234-003-0000	5658	0.130	310	310

ANDRUS ISLAND, CA 95641	157-0231-029-0000	156816	3.600	11,417	11,417
ANDRUS ISLAND, CA 95641	157-0231-030-0000	13274	0.305	-	-
ANDRUS ISLAND, CA 95641	157-0071-001-0000	9690	0.222	310	310
ANDRUS ISLAND, CA 95641	157-0071-002-0000	4845	0.111	310	310
ISLETON, CA 95641	157-0071-015-0000	4845	0.111	310	310
ISLETON, CA 95641	157-0071-016-0000	4845	0.111	310	310
ISLETON, CA 95641	157-0071-017-0000	224	0.005	-	-
ANDRUS ISLAND, CA 95641	157-0073-027-0000	871	0.020	-	-
ANDRUS ISLAND, CA 95641	157-0231-024-0000	7405	0.170	310	310
ANDRUS ISLAND, CA 95641	157-0232-009-0000	6514	0.150	310	310
ANDRUS ISLAND, CA 95641	157-0232-010-0000	7590	0.174	310	310
ANDRUS ISLAND, CA 95641	157-0232-011-0000	7595	0.174	310	310
ANDRUS ISLAND, CA 95641	157-0232-012-0000	7130	0.164	310	310
ANDRUS ISLAND, CA 95641	157-0232-013-0000	6510	0.149	310	310
Totals:		**1,641,434**	**37.682**	**86,017**	**86,017**

Shed 1 Calculation				
I/I =	0.2* ADWF		17,203	
PF=	3.5-(1.8*ADWF^(0.05)	0.32	1.2	*
ADWF=	Total Flow		86,017	
PWWF=	(ADWF*(3.5-(1.8*ADWF^(0.05)))+ (0.2*ADWF)		120,423	

*If PF is lower than 1.2, use 1.2 as PF

City	PARCEL #	Area (sf)	Area (ac)	Flow (gpd)	Sig figs (gpd)
SHED 2 TO SSMH 28					
ISLETON, CA 95641	157-0011-001-0000	8,506	0.195	-	-
ISLETON, CA 95641	157-0011-002-0000	8,440	0.194	-	-
ISLETON, CA 95641	157-0011-003-0000	18,990	0.436	828	828
ISLETON, CA 95642	157-0011-004-0000	2,780	0.064	121	121
ISLETON, CA 95641	157-0012-003-0000	7,792	0.179	-	-
ISLETON, CA 95641	157-0013-004-0000	3,611	0.083	158	158
ISLETON, CA 95641	157-0013-032-0000	15,840	0.364	691	691
ISLETON, CA 95641	157-0013-033-0000	5,663	0.130	247	247
ISLETON, CA 95641	157-0014-002-0000	3,200	0.073	140	140
ISLETON, CA 95641	157-0014-005-0000	3,485	0.080	152	152
ISLETON, CA 95641	157-0014-006-0000	3,049	0.070	133	133
ISLETON, CA 95641	157-0014-007-0000	3,485	0.080	152	152
ISLETON, CA 95641	157-0014-010-0000	7,792	0.179	340	340
ISLETON, CA 95641	157-0014-011-0000	2,944	0.068	128	128
ISLETON, CA 95641	157-0014-012-0000	5,723	0.131	932	932
ISLETON, CA 95641	157-0014-013-0000	3,434	0.079	932	932
ISLETON, CA 95641	157-0014-014-0000	8,700	0.200	379	380
ISLETON, CA 95641	157-0014-015-0000	7,750	0.178	466	466
ISLETON, CA 95641	157-0015-002-0000	5,227	0.120	228	228
ANDRUS ISLAND, CA 95641	157-0015-003-0000	3,920	0.090	171	171
ISLETON, CA 95641	157-0015-004-0000	14,270	0.328	622	622
ISLETON, CA 95641	157-0021-001-0000	34,000	0.781	1,483	1,483
ISLETON, CA 95641	157-0061-007-0000	2,614	0.060	310	310
ISLETON, CA 95641	157-0061-008-0000	4,800	0.110	310	310
ISLETON, CA 95641	157-0061-009-0000	2,541	0.058	310	310
ISLETON, CA 95641	157-0061-010-0000	6,580	0.151	310	310
ISLETON, CA 95641	157-0072-002-0000	25,850	0.593	310	310

ISLETON, CA 95641	157-0072-003-0000	5,227	0.120	233	233
ISLETON, CA 95641	157-0072-004-0000	6,970	0.160	466	466
Totals:		**233,183**	**5.353**	**10,553**	**10,553**

Shed 2 Calculation				
I/I =	0.2* ADWF		2,111	
PF=	3.5-(1.8*ADWF^(0.05)	0.64	1.2	*
ADWF=	Total Flow		10,553	
PWWF=	(ADWF*(3.5-(1.8*ADWF^(0.05))) + (0.2*ADWF)		**14,774**	

*If PF is lower than 1.2, use 1.2 as PF

City	PARCEL #	Area (sf)	Area (ac)	Flow (gpd)	Sig figs (gpd)
SHED 3 TO SSMH 27					
ANDRUS ISLAND, CA 95641	157-0074-001-0000	108,900	2.500	4,750	4,750
ANDRUS ISLAND, CA 95641	157-0074-002-0000	17,860	0.410	-	-
ANDRUS ISLAND, CA 95641	157-0074-003-0000	16,194	0.372	706	706
ANDRUS ISLAND, CA 95641	157-0074-004-0000	20,038	0.460	874	874
Totals:		**162,992**	**3.742**	**6,330**	**6,330**

Shed 3 Calculation				
I/I =	0.2* ADWF		1,266	
PF=	3.5-(1.8*ADWF^(0.05)	0.71	1.2	*
ADWF=	Total Flow		6,330	
PWWF=	(ADWF*(3.5-(1.8*ADWF^(0.05))) + (0.2*ADWF)		**8,862**	

*If PF is lower than 1.2, use 1.2 as PF

City	PARCEL #	Area (sf)	Area (ac)	Flow (gpd)	Sig figs (gpd)
SHED 4 TO SSMH 26					
ISLETON, CA 95641	157-0027-005-0000	4,904	0.113	233	233
ISLETON, CA 95641	157-0027-006-0000	3,920	0.090	233	233
ISLETON, CA 95641	157-0027-007-0000	3,920	0.090	233	233
ISLETON, CA 95641	157-0027-008-0000	4,856	0.111	233	233
ISLETON, CA 95641	157-0027-009-0000	4,874	0.112	233	233
ISLETON, CA 95641	157-0027-010-0000	9,802	0.225	310	310
ISLETON, CA 95641	157-0061-003-0000	3,200	0.073	310	310
ISLETON, CA 95641	157-0061-004-0000	2,024	0.046	310	310
ISLETON, CA 95641	157-0061-005-0000	1,656	0.038	310	310
ISLETON, CA 95641	157-0061-006-0000	5,160	0.118	310	310
ISLETON, CA 95641	157-0062-001-0000	4,905	0.113	310	310
ISLETON, CA 95641	157-0062-002-0000	2,400	0.055	310	310
ISLETON, CA 95641	157-0062-003-0000	2,400	0.055	310	310
ISLETON, CA 95641	157-0062-004-0000	6,000	0.138	310	310
ISLETON, CA 95641	157-0062-005-0000	3,100	0.071	310	310
ISLETON, CA 95641	157-0062-006-0000	3,100	0.071	310	310
ISLETON, CA 95641	157-0062-007-0000	2,760	0.063	310	310
ISLETON, CA 95641	157-0062-008-0000	2,800	0.064	310	310
ISLETON, CA 95641	157-0062-009-0000	2,800	0.064	310	310
ISLETON, CA 95641	157-0062-011-0000	3,190	0.073	310	310
ISLETON, CA 95641	157-0062-012-0000	3,190	0.073	310	310

ISLETON, CA 95641	157-0064-001-0000	4,960	0.114	310	310
ISLETON, CA 95641	157-0064-002-0000	4,230	0.097	310	310
ISLETON, CA 95641	157-0064-003-0000	4,395	0.101	310	310
ISLETON, CA 95641	157-0064-006-0000	1,742	0.040	310	310
ISLETON, CA 95641	157-0064-007-0000	2,015	0.046	310	310
ISLETON, CA 95641	157-0064-008-0000	3,010	0.069	310	310
ISLETON, CA 95641	157-0064-009-0000	2,887	0.066	310	310
Totals:		**104,200**	**2.392**	**8,295**	**8,295**

Shed 4 Calculation				
I/I =	0.2* ADWF		1,659	
PF=	3.5-(1.8*ADWF^(0.05)	0.67	1.2	*
ADWF=	Total Flow		8,295	
PWWF=	(ADWF*(3.5-(1.8*ADWF^(0.05))) + (0.2*ADWF)		**11,613**	

*If PF is lower than 1.2, use 1.2 as PF

City	PARCEL #	Area (sf)	Area (ac)	Flow (gpd)	Sig figs (gpd)
SHED 5 TO SSMH 25					
ISLETON, CA 95641	157-0040-050-0000	1,307	0.030	310	310
ISLETON, CA 95641	157-0040-051-0000	256,133	5.880	11,172	11,172
ISLETON, CA 95641	157-0065-001-0000	5,270	0.121	310	310
ISLETON, CA 95641	157-0065-002-0000	4,805	0.110	310	310
ISLETON, CA 95641	157-0065-003-0000	4,495	0.103	310	310
ISLETON, CA 95641	157-0065-004-0000	4,185	0.096	310	310
ISLETON, CA 95641	157-0065-007-0000	4,423	0.102	310	310
ISLETON, CA 95641	157-0065-009-0000	4,424	0.102	310	310
ISLETON, CA 95641	157-0066-001-0000	130,680	3.000	5,700	5,700
ISLETON, CA 95641	157-0066-002-0000	16,865	0.387	736	736
ISLETON, CA 95641	157-0066-003-0000	133,294	3.060	620	620
Totals:		**308,441**	**7.081**	**20,398**	**20,398**

Shed 5 Calculation				
I/I =	0.2* ADWF		4,080	
PF=	3.5-(1.8*ADWF^(0.05)	0.54	1.2	*
ADWF=	Total Flow		20,398	
PWWF=	(ADWF*(3.5-(1.8*ADWF^(0.05))) + (0.2*ADWF)		**28,557**	

*If PF is lower than 1.2, use 1.2 as PF

City	PARCEL #	Area (sf)	Area (ac)	Flow (gpd)	Sig figs (gpd)
SHED 6 TO SSMH 24					
ISLETON, CA 95641	157-0021-004-0000	3,123	0.072	136	136
ISLETON, CA 95641	157-0021-005-0000	4,814	0.111	-	-
ISLETON, CA 95641	157-0021-008-0000	40,200	0.923	1,753	1,753
ISLETON, CA 95641	157-0021-010-0000	17,866	0.410	310	310
ISLETON, CA 95641	157-0021-011-0000	5,578	0.128	-	-
ISLETON, CA 95641	157-0021-012-0000	5,312	0.122	232	232
ANDRUS ISLAND, CA 95641	157-0022-004-0000	2,625	0.060	114	115
ISLETON, CA 95641	157-0022-005-0000	7,128	0.164	311	311
ISLETON, CA 95641	157-0022-006-0000	11,720	0.269	511	511

ISLETON, CA 95641	157-0022-008-0000	5,312	0.122	232	232
ISLETON, CA 95641	157-0022-009-0000	10,933	0.251	477	477
ISLETON, CA 95641	157-0027-001-0000	9,600	0.220	419	419
ANDRUS ISLAND, CA 95641	157-0027-002-0000	9,600	0.220	419	419
ISLETON, CA 95641	157-0027-003-0000	7,200	0.165	314	314
ISLETON, CA 95641	157-0027-004-0000	4,800	0.110	209	209
ISLETON, CA 95641	157-0028-005-0000	6,013	0.138	310	310
ISLETON, CA 95641	157-0028-006-0000	4,812	0.110	233	233
ISLETON, CA 95641	157-0028-007-0000	6,021	0.138	466	466
ISLETON, CA 95641	157-0063-001-0000	6,000	0.138	310	310
ISLETON, CA 95641	157-0063-002-0000	6,000	0.138	310	310
ISLETON, CA 95641	157-0063-003-0000	6,000	0.138	310	310
ISLETON, CA 95641	157-0063-004-0000	6,000	0.138	310	310
ISLETON, CA 95641	157-0063-005-0000	4,805	0.110	310	310
ISLETON, CA 95641	157-0063-006-0000	4,650	0.107	310	310
ISLETON, CA 95641	157-0021-002-0000	9,123	0.209	398	398
Totals:		**205,235**	**4.712**	**8,704**	**8,704**

Shed 6 Calculation				
I/I =	0.2* ADWF		1,741	
PF=	3.5-(1.8*ADWF^(0.05)	0.67	1.2	*
ADWF=	Total Flow		8,704	
PWWF=	(ADWF*(3.5-(1.8*ADWF^(0.05)) + (0.2*ADWF)		**12,186**	

*If PF is lower than 1.2, use 1.2 as PF

City	PARCEL #	Area (sf)	Area (ac)	Flow (gpd)	Sig figs (gpd)
SHED 7 TO SSMH 20					
ISLETON, CA 95641	157-0029-001-0000	169,884	3.900	1,325	1,325
ISLETON, CA 95641	157-0028-002-0000	5,556	0.128	242	242
ISLETON, CA 95641	157-0028-004-0000	6,045	0.139	264	264
ISLETON, CA 95641	157-0025-001-0000	10,260	0.236	448	448
ISLETON, CA 95641	157-0025-002-0000	10,494	0.241	310	310
ISLETON, CA 95641	157-0025-005-0000	8,075	0.185	310	310
ISLETON, CA 95641	157-0025-008-0000	10,911	0.250	310	310
ISLETON, CA 95641	157-0025-009-0000	10,510	0.241	310	310
ISLETON, CA 95641	157-0025-010-0000	12,906	0.296	310	310
ISLETON, CA 95641	157-0028-001-0000	2,604	0.060	114	114
ISLETON, CA 95641	157-0040-068-0000	79,279	1.820	5,890	5,890
ISLETON, CA 95641	157-0051-001-0000	61,855	1.420	1,250	1,250
ISLETON, CA 95641	157-0051-002-0000	2,178	0.050	625	625
ISLETON, CA 95641	157-0066-004-0000	8,100	0.186	932	932
ISLETON, CA 95641	157-0066-005-0000	4,320	0.099	310	310
ISLETON, CA 95641	157-0066-006-0000	4,356	0.100	310	310
ISLETON, CA 95641	157-0066-007-0000	10,385	0.238	620	620
ISLETON, CA 95641	157-0067-001-0000	2,614	0.060	310	310
ISLETON, CA 95641	157-0067-002-0000	2,470	0.057	310	310
ISLETON, CA 95641	157-0067-005-0000	2,614	0.060	310	310
ISLETON, CA 95641	157-0067-006-0000	3,720	0.085	310	310
ISLETON, CA 95641	157-0067-009-0000	4,880	0.112	310	310
ISLETON, CA 95641	157-0067-011-0000	4,880	0.112	310	310
ANDRUS ISLAND, CA 95641	157-0067-012-0000	4,191	0.096	310	310

ANDRUS ISLAND, CA 95641	157-0067-013-0000	8,936	0.205	620	620
ANDRUS ISLAND, CA 95641	157-0067-015-0000	14,920	0.343	310	310
Totals:		**466,943**	**10.720**	**16,979**	**16,979**

Shed 7 Calculation				
I/I =	0.2* ADWF		3,396	
PF=	3.5-(1.8*ADWF^(0.05)	0.57	1.2	*
ADWF=	Total Flow		16,979	
PWWF=	(ADWF*(3.5-(1.8*ADWF^(0.05))) + (0.2*ADWF)		**23,771**	

*If PF is lower than 1.2, use 1.2 as PF

City	PARCEL #	Area (sf)	Area (ac)	Flow (gpd)	Sig figs (gpd)
SHED 8 TO SSMH 64					
ISLETON, CA 95641		3,611	0.083	158	158
ISLETON, CA 95641		3,672	0.084	160	160
ISLETON, CA 95641		3,920	0.090	171	171
ISLETON, CA 95641		3,793	0.087	165	165
ISLETON, CA 95641		3,207	0.074	140	140
ISLETON, CA 95641		3,906	0.090	170	170
ISLETON, CA 95641		3,967	0.091	173	173
ANDRUS ISLAND, CA 95641		4,028	0.092	176	176
ISLETON, CA 95641		4,089	0.094	178	178
ISLETON, CA 95641		7,143	0.164	310	310
ISLETON, CA 95641		7,000	0.161	310	310
ISLETON, CA 95641		7,000	0.161	310	310
ISLETON, CA 95641		7,000	0.161	310	310
ISLETON, CA 95641		7,000	0.161	310	310
ISLETON, CA 95641		7,000	0.161	310	310
ISLETON, CA 95641		7,174	0.165	310	310
ISLETON, CA 95641		23,060	0.529	310	310
ISLETON, CA 95641		251,777	5.780	3,720	3,720
ISLETON, CA 95641		436	0.010	625	625
ISLETON, CA 95641		2,178	0.050	-	-
ISLETON, CA 95641		6,000	0.138	310	310
ISLETON, CA 95641		5,663	0.130	310	310
ISLETON, CA 95641		4,449	0.102	310	310
ISLETON, CA 95641		15,682	0.360	930	930
ISLETON, CA 95641		112,385	2.580	-	-
ISLETON, CA 95641		871	0.020	310	310
ISLETON, CA 95641		2,250	0.052	310	310
ISLETON, CA 95641		3,000	0.069	310	310
ISLETON, CA 95641		871	0.020	310	310
ISLETON, CA 95641		2,170	0.050	310	310
ISLETON, CA 95641		2,250	0.052	233	233
ISLETON, CA 95641		2,250	0.052	233	233
ISLETON, CA 95641		2,250	0.052	233	233
ISLETON, CA 95641		2,250	0.052	233	233
ISLETON, CA 95641		7,405	0.170	310	310
ISLETON, CA 95641		38,768	0.890	2,790	2,790
ISLETON, CA 95641		4,650	0.107	310	310
ISLETON, CA 95641		4,400	0.101	310	310
ISLETON, CA 95641		4,400	0.101	310	310

ISLETON, CA 95641	[redacted]	4,356	0.100	310	310
ISLETON, CA 95641	[redacted]	8,800	0.202	310	310
ISLETON, CA 95641	[redacted]	4,400	0.101	310	310
ISLETON, CA 95641	[redacted]	5,663	0.130	310	310
ISLETON, CA 95641	[redacted]	9,610	0.221	1,165	1,165
ISLETON, CA 95641	[redacted]	3,109	0.071	233	233
ISLETON, CA 95641	[redacted]	3,920	0.090	466	466
ISLETON, CA 95641	[redacted]	6,534	0.150	699	699
ISLETON, CA 95641	[redacted]	8,276	0.190	932	932
ISLETON, CA 95641	[redacted]	6,250	0.143	-	-
ISLETON, CA 95641	[redacted]	2,255	0.052	233	233
ISLETON, CA 95641	[redacted]	2,250	0.052	233	233
ISLETON, CA 95641	[redacted]	2,250	0.052	233	233
ISLETON, CA 95641	[redacted]	2,250	0.052	233	233
Totals:		**652,848**	**14.987**	**22,355**	**22,356**

Shed 8 Calculation				
I/I =	0.2* ADWF		4,471	
PF=	3.5-(1.8*ADWF^(0.05)	0.53	1.2	*
ADWF=	Total Flow		22,356	
PWWF=	(ADWF*(3.5-(1.8*ADWF^(0.05))) + (0.2*ADWF)		31,298	

*If PF is lower than 1.2, use 1.2 as PF

City	PARCEL #	Area (sf)	Area (ac)	Flow (gpd)	Sig figs (gpd)
SHED 9 TO SSMH 65					
ISLETON, CA 95641	[redacted]	1,307	0.030	-	-
ANDRUS ISLAND, CA 95641	[redacted]	16,988	0.390	-	-
ANDRUS ISLAND, CA 95641	[redacted]	5,103	0.117	223	223
ISLETON, CA 95641	[redacted]	5,810	0.133	310	310
ISLETON, CA 95641	[redacted]	7,000	0.161	305	305
ISLETON, CA 95641	[redacted]	3,049	0.070	310	310
ISLETON, CA 95641	[redacted]	5,730	0.132	310	310
ISLETON, CA 95641	[redacted]	5,335	0.122	233	233
ISLETON, CA 95641	[redacted]	2,910	0.067	127	127
ISLETON, CA 95641	[redacted]	2,910	0.067	127	127
ISLETON, CA 95641	[redacted]	2,910	0.067	127	127
ISLETON, CA 95641	[redacted]	2,910	0.067	127	127
ISLETON, CA 95641	[redacted]	2,910	0.067	127	127
ISLETON, CA 95641	[redacted]	2,910	0.067	127	127
ISLETON, CA 95641	[redacted]	2,910	0.067	127	127
ISLETON, CA 95641	[redacted]	5,335	0.122	233	233
ISLETON, CA 95641	[redacted]	3,049	0.070	133	133
ISLETON, CA 95641	[redacted]	2,910	0.067	127	127
ISLETON, CA 95641	[redacted]	3,049	0.070	133	133
ISLETON, CA 95641	[redacted]	2,910	0.067	127	127
ISLETON, CA 95641	[redacted]	2,910	0.067	127	127
ISLETON, CA 95641	[redacted]	2,910	0.067	127	127
ISLETON, CA 95641	[redacted]	2,425	0.056	106	106
ISLETON, CA 95641	[redacted]	5,115	0.117	223	223
ISLETON, CA 95641	[redacted]	3,099	0.071	135	135
ISLETON, CA 95641	[redacted]	3,311	0.076	144	144
ISLETON, CA 95641	[redacted]	3,523	0.081	154	154

ISLETON, CA 95641	157-0032-025-0000	3,595	0.083	157	157
ISLETON, CA 95641	157-0032-026-0000	3,666	0.084	160	160
ISLETON, CA 95641	157-0032-027-0000	3,737	0.086	163	163
ISLETON, CA 95641	157-0032-028-0000	3,807	0.087	166	166
ISLETON, CA 95641	157-0032-029-0000	10,709	0.246	467	467
ISLETON, CA 95641	157-0033-001-0000	9,553	0.219	417	417
ISLETON, CA 95641	157-0033-002-0000	3,489	0.080	152	152
ISLETON, CA 95641	157-0033-003-0000	3,550	0.081	155	155
ISLETON, CA 95641	157-0033-013-0000	4,160	0.096	181	182
ISLETON, CA 95641	157-0033-014-0000	3,485	0.080	152	152
ISLETON, CA 95641	157-0052-007-0000	3,255	0.075	233	233
ISLETON, CA 95641	157-0052-008-0000	3,680	0.084	466	466
ISLETON, CA 95641	157-0052-009-0000	3,680	0.084	466	466
ISLETON, CA 95641	157-0052-010-0000	4,030	0.093	466	466
ISLETON, CA 95641	157-0052-011-0000	5,227	0.120	310	310
ISLETON, CA 95641	157-0052-013-0000	6,820	0.157	310	310
ISLETON, CA 95641	157-0052-014-0000	6,531	0.150	310	310
ISLETON, CA 95641	157-0052-015-0000	6,531	0.150	310	310
ISLETON, CA 95641	157-0052-016-0000	6,534	0.150	310	310
ISLETON, CA 95641	157-0052-017-0000	6,531	0.150	310	310
ISLETON, CA 95641	157-0052-018-0000	7,841	0.180	310	310
ISLETON, CA 95641	157-0054-014-0000	7,241	0.166	310	310
ISLETON, CA 95641	157-0054-015-0000	2,178	0.050	-	-
ISLETON, CA 95641	157-0054-016-0000	7,841	0.180	342	342
ISLETON, CA 95641	157-0032-030-0000	3,241	0.074	141	141
ISLETON, CA 95641	157-0032-031-0000	3,170	0.073	138	138
ISLETON, CA 95641	157-0032-034-0000	3,633	0.083	158	159
ISLETON, CA 95641	157-0032-035-0000	3,565	0.082	155	156
ISLETON, CA 95641	157-0032-036-0000	3,453	0.079	151	151
Totals:		**254,664**	**5.846**	**11,715**	**11,715**

Shed 9 Calculation			
I/I =	0.2* ADWF		2,343
PF=	3.5-(1.8*ADWF^(0.05)	0.62	1.2 *
ADWF=	Total Flow		11,715
PWWF=	(ADWF*(3.5-(1.8*ADWF^(0.05))) + (0.2*ADWF)		**16,401**

*If PF is lower than 1.2, use 1.2 as PF

City	PARCEL #	Area (sf)	Area (ac)	Flow (gpd)	Sig figs (gpd)
SHED 10 TO SSMH 66					
ISLETON, CA 95641	157-0053-003-0000	436	0.010	-	-
ISLETON, CA 95641	157-0053-004-0000	2,775	0.064	233	233
ISLETON, CA 95641	157-0053-005-0000	6,975	0.160	932	932
ISLETON, CA 95641	157-0053-006-0000	3,485	0.080	466	466
ISLETON, CA 95641	157-0053-007-0000	3,488	0.080	466	466
ISLETON, CA 95641	157-0053-008-0000	3,488	0.080	466	466
ISLETON, CA 95641	157-0053-009-0000	3,485	0.080	466	466
ISLETON, CA 95641	157-0053-010-0000	3,796	0.087	466	466
ISLETON, CA 95641	157-0053-012-0000	4,125	0.095	466	466
ISLETON, CA 95641	157-0054-001-0000	10,850	0.249	310	310
ISLETON, CA 95641	157-0054-002-0000	4,805	0.110	310	310
ISLETON, CA 95641	157-0054-003-0000	4,185	0.096	310	310
ISLETON, CA 95641	157-0054-004-0000	3,049	0.070	310	310
ISLETON, CA 95641	157-0054-007-0000	6,308	0.145	310	310
ISLETON, CA 95641	157-0054-008-0000	3,049	0.070	310	310
ISLETON, CA 95641	157-0054-009-0000	4,030	0.093	310	310
ISLETON, CA 95641	157-0054-010-0000	10,230	0.235	620	620
ISLETON, CA 95641	157-0054-011-0000	7,241	0.166	310	310
ISLETON, CA 95641	157-0054-012-0000	7,241	0.166	310	310
ISLETON, CA 95641	157-0054-013-0000	7,241	0.166	310	310
ISLETON, CA 95641	157-0054-017-0000	6,203	0.142	310	310
ISLETON, CA 95641	157-0055-001-0000	3,100	0.071	310	310
ISLETON, CA 95641	157-0055-002-0000	3,110	0.071	310	310
ISLETON, CA 95641	157-0055-003-0000	3,154	0.072	310	310
ISLETON, CA 95641	157-0055-004-0000	6,308	0.145	310	310
ISLETON, CA 95641	157-0055-005-0000	3,154	0.072	310	310
ISLETON, CA 95641	157-0055-006-0000	3,049	0.070	310	310
ISLETON, CA 95641	157-0055-007-0000	1,742	0.040	310	310
ISLETON, CA 95641	157-0055-008-0000	5,270	0.121	310	310
Totals:		**135,372**	**3.108**	**10,471**	**10,471**

Shed 10 Calculation			
I/I =	0.2* ADWF		2,094
PF=	3.5-(1.8*ADWF^(0.05)	0.64	1.2 *
ADWF=	Total Flow		10,471
PWWF=	(ADWF*(3.5-(1.8*ADWF^(0.05))) + (0.2*ADWF)		**14,659**

*If PF is lower than 1.2, use 1.2 as PF

City	PARCEL #	Area (sf)	Area (ac)	Flow (gpd)	Sig figs (gpd)
SHED 11 TO SSMH 67					
ISLETON, CA 95641	157-0034-002-0000	3,750	0.086	164	164
ISLETON, CA 95641	157-0034-003-0000	3,750	0.086	164	164
ISLETON, CA 95641	157-0034-004-0000	3,750	0.086	164	164
ISLETON, CA 95641	157-0034-005-0000	7,405	0.170	-	-
ISLETON, CA 95641	157-0034-006-0000	3,750	0.086	164	164
ISLETON, CA 95641	157-0034-007-0000	2,170	0.050	95	95
ISLETON, CA 95641	157-0034-008-0000	1,580	0.036	69	69
ISLETON, CA 95641	157-0034-009-0000	3,750	0.086	164	164
ISLETON, CA 95641	157-0034-010-0000	3,750	0.086	164	164
ISLETON, CA 95641	157-0034-012-0000	3,750	0.086	164	164
ISLETON, CA 95641	157-0034-013-0000	3,750	0.086	164	164
ISLETON, CA 95641	157-0034-014-0000	11,761	0.270	513	513
ISLETON, CA 95641	157-0034-015-0000	4,403	0.101	192	192
ISLETON, CA 95641	157-0034-016-0000	3,750	0.086	164	164
ANDRUS ISLAND, CA 95641	157-0034-017-0000	3,750	0.086	164	164
ISLETON, CA 95641	157-0034-018-0000	3,058	0.070	133	133
ISLETON, CA 95641	157-0034-019-0000	2,569	0.059	112	112
ISLETON, CA 95641	157-0040-001-0000	871	0.020	38	38
ISLETON, CA 95641	157-0040-024-0000	8,442	0.194	368	368
ISLETON, CA 95641	157-0040-025-0000	17,360	0.399	757	757
ISLETON, CA 95641	157-0310-001-0000	174,676	4.010	310	310
ISLETON, CA 95641	157-0040-026-0000	1,307	0.030	-	-
ISLETON, CA 95641	157-0040-027-0000	111,514	2.560	4,864	4,864
ISLETON, CA 95641	157-0310-002-0000	104,980	2.410	4,579	4,579
Totals:		**489,596**	**11.240**	**13,666**	**13,667**

Shed 11 Calculation			
I/I =	0.2* ADWF		2,733
PF=	3.5-(1.8*ADWF^(0.05)	0.60	1.2 *
ADWF=	Total Flow		13,667
PWWF=	(ADWF*(3.5-(1.8*ADWF^(0.05))) + (0.2*ADWF)		**19,133**

*If PF is lower than 1.2, use 1.2 as PF

City	PARCEL #	Area (sf)	Area (ac)	Flow (gpd)	Sig figs (gpd)
SHED 12 TO SSMH69					
ISLETON, CA 95641	157-0040-004-0000	7,744	0.178	-	-
ISLETON, CA 95641	157-0040-005-0000	112,385	2.580	2,790	2,790
ISLETON, CA 95641	157-0040-012-0000	11,200	0.257	-	-
ISLETON, CA 95641	157-0040-017-0000	6,534	0.150	-	-
ISLETON, CA 95641	157-0040-034-0000	3,644	0.084	310	310
ISLETON, CA 95641	157-0040-035-0000	3,720	0.085	310	310
ISLETON, CA 95641	157-0040-036-0000	4,555	0.105	310	310
ISLETON, CA 95641	157-0040-037-0000	4,909	0.113	310	310
ISLETON, CA 95641	157-0040-040-0000	196,456	4.510	8,370	8,370
ISLETON, CA 95641	157-0040-043-0000	42,125	0.967	1,837	1,837
ISLETON, CA 95641	157-0040-047-0000	10,200	0.234	-	-
ISLETON, CA 95641	157-0040-048-0000	2,700	0.062	-	-
ISLETON, CA 95641	157-0040-056-0000	15,154	0.348	930	930

ISLETON, CA 95642	157-0040-065-0000	21,107	0.485	-	-
ISLETON, CA 95641	157-0040-074-0000	140,699	3.230	6,137	6,137
ISLETON, CA 95641	157-0040-076-0000	366,340	8.410	18,600	18,600
ISLETON, CA 95641	157-0100-061-0000	2,047,320	47.000	150	150
ISLETON, CA 95641	157-0260-001-0000	2,895	0.066	310	310
ISLETON, CA 95641	157-0260-002-0000	2,096	0.048	310	310
ISLETON, CA 95641	157-0260-003-0000	2,053	0.047	310	310
ISLETON, CA 95641	157-0260-004-0000	2,014	0.046	310	310
ISLETON, CA 95641	157-0260-005-0000	2,057	0.047	310	310
ISLETON, CA 95641	157-0260-006-0000	2,137	0.049	310	310
ISLETON, CA 95641	157-0260-007-0000	3,043	0.070	310	310
ISLETON, CA 95641	157-0260-008-0000	2,728	0.063	310	310
ISLETON, CA 95641	157-0260-009-0000	2,000	0.046	310	310
ISLETON, CA 95641	157-0260-010-0000	2,000	0.046	310	310
ISLETON, CA 95641	157-0260-011-0000	2,000	0.046	310	310
ISLETON, CA 95641	157-0260-012-0000	2,000	0.046	310	310
ISLETON, CA 95641	157-0260-013-0000	2,000	0.046	310	310
ISLETON, CA 95641	157-0260-014-0000	2,698	0.062	310	310
ISLETON, CA 95641	157-0260-015-0000	2,698	0.062	310	310
ISLETON, CA 95641	157-0260-016-0000	2,000	0.046	310	310
ISLETON, CA 95641	157-0260-017-0000	2,000	0.046	310	310
ISLETON, CA 95641	157-0260-018-0000	2,000	0.046	310	310
ISLETON, CA 95641	157-0260-019-0000	2,000	0.046	310	310
ISLETON, CA 95641	157-0260-020-0000	2,000	0.046	310	310
ISLETON, CA 95641	157-0260-021-0000	2,728	0.063	310	310
ISLETON, CA 95641	157-0260-022-0000	2,728	0.063	310	310
ISLETON, CA 95641	157-0260-023-0000	2,000	0.046	310	310
ISLETON, CA 95641	157-0260-024-0000	2,000	0.046	310	310
ISLETON, CA 95641	157-0260-025-0000	2,000	0.046	310	310
ISLETON, CA 95641	157-0260-026-0000	2,000	0.046	310	310
ISLETON, CA 95641	157-0260-027-0000	2,000	0.046	310	310
ISLETON, CA 95641	157-0260-028-0000	2,698	0.062	310	310
ISLETON, CA 95641	157-0260-029-0000	2,744	0.063	310	310
ISLETON, CA 95641	157-0260-030-0000	2,033	0.047	310	310
ISLETON, CA 95641	157-0260-031-0000	2,033	0.047	310	310
ISLETON, CA 95641	157-0260-032-0000	2,033	0.047	310	310
ISLETON, CA 95641	157-0260-033-0000	2,033	0.047	310	310
ISLETON, CA 95641	157-0260-034-0000	2,033	0.047	310	310
ISLETON, CA 95641	157-0260-035-0000	2,774	0.064	310	310
ISLETON, CA 95641	157-0260-036-0000	2,709	0.062	310	310
ISLETON, CA 95641	157-0260-037-0000	2,149	0.049	310	310
ISLETON, CA 95641	157-0260-038-0000	2,149	0.049	310	310
ISLETON, CA 95641	157-0260-039-0000	2,149	0.049	310	310
ISLETON, CA 95641	157-0260-040-0000	2,149	0.049	310	310
ISLETON, CA 95641	157-0260-041-0000	2,149	0.049	310	310
ISLETON, CA 95641	157-0260-042-0000	2,149	0.049	310	310
ISLETON, CA 95641	157-0260-043-0000	2,149	0.049	310	310
ISLETON, CA 95641	157-0260-044-0000	2,149	0.049	310	310
ISLETON, CA 95641	157-0260-045-0000	2,149	0.049	310	310
ISLETON, CA 95641	157-0260-046-0000	2,281	0.052	310	310
ISLETON, CA 95641	157-0260-047-0000	12,375	0.284	-	-
ISLETON, CA 95641	157-0260-048-0000	12,375	0.284	-	-
ISLETON, CA 95641	157-0270-001-0000	2,774	0.064	310	310
ISLETON, CA 95641	157-0270-002-0000	2,033	0.047	310	310

ISLETON, CA 95641	157-0270-003-0000	2,033	0.047	310	310
ISLETON, CA 95641	157-0270-004-0000	2,033	0.047	310	310
ISLETON, CA 95641	157-0270-005-0000	2,033	0.047	310	310
ISLETON, CA 95641	157-0270-006-0000	2,033	0.047	310	310
ISLETON, CA 95641	157-0270-007-0000	2,744	0.063	310	310
ISLETON, CA 95641	157-0270-008-0000	2,744	0.063	310	310
ANDRUS ISLAND, CA 95641	157-0270-009-0000	2,033	0.047	310	310
ISLETON, CA 95641	157-0270-010-0000	2,033	0.047	310	310
ISLETON, CA 95641	157-0270-011-0000	2,033	0.047	310	310
ISLETON, CA 95641	157-0270-012-0000	2,033	0.047	310	310
ISLETON, CA 95641	157-0270-013-0000	2,033	0.047	310	310
ISLETON, CA 95641	157-0270-014-0000	2,774	0.064	310	310
ISLETON, CA 95641	157-0270-015-0000	2,774	0.064	310	310
ISLETON, CA 95641	157-0270-016-0000	2,033	0.047	310	310
ISLETON, CA 95641	157-0270-017-0000	2,033	0.047	310	310
ISLETON, CA 95641	157-0270-018-0000	2,033	0.047	310	310
ISLETON, CA 95641	157-0270-019-0000	2,033	0.047	310	310
ISLETON, CA 95641	157-0270-020-0000	2,033	0.047	310	310
ISLETON, CA 95641	157-0270-021-0000	2,744	0.063	310	310
ISLETON, CA 95641	157-0270-022-0000	2,867	0.066	310	310
ISLETON, CA 95641	157-0270-023-0000	2,383	0.055	310	310
ISLETON, CA 95641	157-0270-024-0000	2,383	0.055	310	310
ISLETON, CA 95641	157-0270-025-0000	2,383	0.055	310	310
ISLETON, CA 95641	157-0270-026-0000	2,383	0.055	310	310
ISLETON, CA 95641	157-0270-027-0000	2,383	0.055	310	310
ISLETON, CA 95641	157-0270-028-0000	3,121	0.072	310	310
ISLETON, CA 95641	157-0270-029-0000	2,709	0.062	310	310
ISLETON, CA 95641	157-0270-030-0000	2,083	0.048	310	310
ISLETON, CA 95641	157-0270-031-0000	2,083	0.048	310	310
ISLETON, CA 95641	157-0270-032-0000	2,083	0.048	310	310
ISLETON, CA 95641	157-0270-033-0000	2,083	0.048	310	310
ISLETON, CA 95641	157-0270-034-0000	2,083	0.048	310	310
ISLETON, CA 95641	157-0270-035-0000	2,083	0.048	310	310
ISLETON, CA 95641	157-0270-036-0000	2,083	0.048	310	310
ISLETON, CA 95641	157-0270-037-0000	2,083	0.048	310	310
ISLETON, CA 95641	157-0270-038-0000	2,083	0.048	310	310
ISLETON, CA 95641	157-0270-039-0000	2,083	0.048	310	310
ISLETON, CA 95641	157-0270-040-0000	2,083	0.048	310	310
ISLETON, CA 95641	157-0270-041-0000	2,709	0.062	310	310
ISLETON, CA 95641	157-0040-010-0000	227,383	5.220	13,020	13,020
ISLETON, CA 95641	157-0040-044-0000	284,447	6.530	11,470	11,470
ISLETON, CA 95641	157-0040-042-0000	45,738	1.050	3,720	3,720
ISLETON, CA 95641	157-0040-075-0000	24,393	0.560	1,860	1,860
ISLETON, CA 95641	157-0040-021-0000	71,438	1.640	-	-
ISLETON, CA 95641	157-0040-072-0000	139,392	3.200	6,820	6,820
ANDRUS ISLAND, CA 95641	157-0270-042-0000	12,375	0.284	-	-
ANDRUS ISLAND, CA 95641	157-0270-043-0000	12,375	0.284	-	-
ISLETON, CA 95641	157-0280-001-0000	40,511	0.930	-	-
ISLETON, CA 95641	157-0280-002-0000	79,279	1.820	-	-
Totals:		**4,154,743**	**95.380**	**103,914**	**103,914**

Shed 12 Calculation				
I/I =	0.2* ADWF		20,783	
PF=	3.5-(1.8*ADWF^(0.05)	0.29	1.2	*
ADWF=	Total Flow		103,914	
PWWF=	(ADWF*(3.5-(1.8*ADWF^(0.05))) + (0.2*ADWF)		**145,480**	

*If PF is lower than 1.2, use 1.2 as PF

Parcel Information										
City	PARCEL #	Land Use	Zoning Code	Area (sf)	Area (ac)	# of EDUs	Flow Rate (gal/day/acre)	Flow Rate (gal/day/EDU)	Flow (gal/day)	Notes
ISLETON, CA 95641	157-0011-001-0000	P/OS	P/OS	8,508	0.195	-	-	-	-	Openspace assumed no restroom being developed
ISLETON, CA 95641	157-0011-002-0000	P/OS	P/OS	8,440	0.194	-	-	-	-	Openspace assumed no restroom being developed
ISLETON, CA 95641	157-0011-003-0000	I	M1	18,990	0.436	-	1,900	-	828	
ISLETON, CA 95641	157-0011-004-0000	POI	I	2,780	0.064	-	1,900	-	121	
ISLETON, CA 95641	157-0012-003-0000	P/OS	P/OS	7,792	0.179	-	-	-	-	Openspace assumed no restroom being developed
ISLETON, CA 95641	157-0013-002-0000	PQP	PQP	11,761	0.270	-	-	-	-	Openspace assumed no restroom being developed
ISLETON, CA 95641	157-0013-004-0000	C	GC	3,611	0.083	-	1,900	-	158	General store
ISLETON, CA 95641	157-0013-005-0000	PQP	PQP	4,792	0.110	-	1,900	-	209	City hall
ISLETON, CA 95641	157-0013-006-0000	PQP	PQP	4,792	0.110	-	1,900	-	209	City hall
ISLETON, CA 95641	157-0013-007-0000	LD	RD-7	4,865	0.112	1	-	310	310	
ISLETON, CA 95641	157-0013-008-0000	LD	RD-7	5,000	0.115	1	-	310	310	
ISLETON, CA 95641	157-0013-009-0000	LD	RD-7	5,000	0.115	1	-	310	310	
ISLETON, CA 95641	157-0013-010-0000	LD	RD-7	5,000	0.115	1	-	310	310	
ISLETON, CA 95641	157-0013-011-0000	LD	RD-7	5,000	0.115	1	-	310	310	
ISLETON, CA 95641	157-0013-012-0000	LD	RD-7	5,000	0.115	1	-	310	310	
ISLETON, CA 95641	157-0013-013-0000	LD	RD-7	5,000	0.115	1	-	310	310	
ISLETON, CA 95641	157-0013-014-0000	LD	RD-7	4,500	0.103	1	-	310	310	
ISLETON, CA 95641	157-0013-015-0000	LD	RD-7	4,500	0.103	1	-	310	310	
ISLETON, CA 95641	157-0013-017-0000	LD	RD-7	4,000	0.092	1	-	310	310	
ISLETON, CA 95641	157-0013-021-0000	LD	RD-7	4,845	0.111	1	-	310	310	
ISLETON, CA 95641	157-0013-022-0000	LD	RD-7	4,845	0.111	1	-	310	310	
ISLETON, CA 95641	157-0013-023-0000	LD	RD-7	4,845	0.111	1	-	310	310	
ISLETON, CA 95641	157-0013-024-0000	LD	RD-7	4,845	0.111	1	-	310	310	
ISLETON, CA 95641	157-0013-029-0000	LD	RD-7	9,990	0.222	2	-	310	620	
ISLETON, CA 95641	157-0013-032-0000	PQP	PQP	15,840	0.364	-	1,900	-	693	Grocery store
ISLETON, CA 95641	157-0013-033-0000	PQP	PQP	5,663	0.130	-	1,900	-	247	City hall storage
ISLETON, CA 95641	157-0013-034-0000	LD	RD-7	2,614	0.060	1	-	310	310	
ISLETON, CA 95641	157-0013-035-0000	LD	RD-7	7,461	0.171	1	-	310	310	
ISLETON, CA 95641	157-0014-002-0000	DMU	NMC	3,300	0.073	-	1,900	-	140	
ISLETON, CA 95641	157-0014-005-0000	PQP	PQP	3,485	0.080	-	1,900	-	152	Church
ISLETON, CA 95641	157-0014-006-0000	PQP	PQP	3,049	0.070	-	1,900	-	133	Church
ISLETON, CA 95641	157-0014-007-0000	PQP	PQP	3,485	0.080	-	1,900	-	152	Church
ISLETON, CA 95641	157-0014-010-0000	C	GC	7,792	0.179	-	1,900	-	340	Garage yard
ISLETON, CA 95641	157-0014-011-0000	DMU	NMC	2,944	0.068	-	1,900	-	128	
ISLETON, CA 95641	157-0014-012-0000	DMU	RD-25	5,723	0.131	3	-	310	932	Parcel is developed as an apartment building, assumed 4 EDUs with multi family flow rates
ISLETON, CA 95641	157-0014-013-0000	DMU	RD-25	3,434	0.079	1	-	310	932	Parcel is developed as an apartment building, assumed 4 EDUs with multi family flow rates
ISLETON, CA 95641	157-0014-014-0000	DMU	NMC	8,700	0.200	-	1,900	-	379	
ISLETON, CA 95641	157-0014-015-0000	MD	RD-15	2,750	0.178	2	-	233	466	
ISLETON, CA 95641	157-0015-001-0000	LD	RD-7	5,735	0.132	1	-	310	310	
ISLETON, CA 95641	157-0015-002-0000	PQP	PQP	5,227	0.120	-	1,900	-	228	Fire department, other usage
ISLETON, CA 95641	157-0015-003-0000	PQP	PQP	3,920	0.090	-	1,900	-	171	Fire department, other usage
ISLETON, CA 95641	157-0015-004-0000	PQP	PQP	14,238	0.328	-	1,900	-	622	Community center
ISLETON, CA 95641	157-0015-005-0000	LD	RD-7	5,500	0.126	1	-	310	310	
ISLETON, CA 95641	157-0015-006-0000	LD	RD-7	4,960	0.114	1	-	310	310	
ISLETON, CA 95641	157-0015-007-0000	LD	RD-7	4,400	0.101	1	-	310	310	
ISLETON, CA 95641	157-0015-008-0000	LD	RD-7	4,360	0.101	1	-	310	310	
ISLETON, CA 95641	157-0015-009-0000	LD	RD-7	3,815	0.088	1	-	310	310	
ISLETON, CA 95641	157-0016-004-0000	LD	RD-7	4,836	0.111	1	-	310	310	
ISLETON, CA 95641	157-0016-005-0000	LD	RD-7	4,836	0.111	1	-	310	310	
ISLETON, CA 95641	157-0016-006-0000	LD	RD-7	4,838	0.111	1	-	310	310	
ISLETON, CA 95641	157-0016-007-0000	LD	RD-7	4,838	0.111	1	-	310	310	
ISLETON, CA 95641	157-0016-008-0000	LD	RD-7	4,838	0.111	1	-	310	310	
ISLETON, CA 95641	157-0016-010-0000	LD	RD-7	6,742	0.155	1	-	310	310	
ISLETON, CA 95641	157-0016-011-0000	LD	RD-7	4,900	0.113	1	-	310	310	
ISLETON, CA 95641	157-0016-012-0000	LD	RD-7	5,054	0.116	1	-	310	310	
ISLETON, CA 95641	157-0016-014-0000	LD	RD-7	7,258	0.167	1	-	310	310	
ISLETON, CA 95641	157-0016-015-0000	LD	RD-7	6,968	0.160	1	-	310	310	
ISLETON, CA 95641	157-0016-016-0000	LD	RD-7	6,458	0.148	1	-	310	310	
ISLETON, CA 95641	157-0021-001-0000	C	GC	94,089	2.160	-	1,900	-	1,483	Delta Queen Dock and Office
ISLETON, CA 95641	157-0021-003-0000	M1	M1	9,323	0.209	-	1,900	-	398	
ISLETON, CA 95641	157-0021-004-0000	DMU	NMC	3,123	0.072	-	1,900	-	136	
ISLETON, CA 95641	157-0021-005-0000	P/OS	P/OS	4,814	0.111	-	-	-	-	Openspace assumed no restroom being developed
ISLETON, CA 95641	157-0021-006-0000	P/OS	P/OS	40,200	0.923	-	-	1,900	1,753	Dock and restroom
ISLETON, CA 95641	157-0021-013-0000	LD	RD-7	17,666	0.410	4	-	310	310	Parcel is mostly developed, assumed 1 EDU
ISLETON, CA 95641	157-0021-018-0000	P/OS	P/OS	5,578	0.128	-	-	-	-	Openspace assumed no restroom being developed
ISLETON, CA 95641	157-0021-012-0000	DMU	NMC	5,332	0.122	-	1,900	-	232	
ISLETON, CA 95641	157-0022-004-0000	DMU	NMC	2,625	0.060	-	1,900	-	114	
ISLETON, CA 95641	157-0022-005-0000	DMU	NMC	7,118	0.164	-	1,900	-	311	Abandon commercial building

ISLETON, CA 95641	157-0022-006-0000	DMU	NMC	11,720	0.269	-	1,900	-	511	Abandon commercial building
ISLETON, CA 95641	157-0022-008-0000	DMU	NMC	5,312	0.122	-	1,900	-	232	Abandon commercial building
ANDRUS ISLAND, CA 95641	157-0022-009-0000	DMU	NMC	10,933	0.251	-	1,900	-	477	Resturant
ISLETON, CA 95641	157-0023-001-0000	P/OS	P/OS	1,307	0.030	-	-	-	-	Openspace assumed no [illegible] being developed
ISLETON, CA 95641	157-0024-001-0000	P/OS	P/OS	16,988	0.390	-	-	-	-	Openspace assumed no [illegible] being developed
ISLETON, CA 95641	157-0024-002-0000	DMU	NMC	5,103	0.117	-	1,900	-	223	
ISLETON, CA 95641	157-0025-001-0000	PQP	PQP	10,260	0.236	-	1,900	-	448	USPS
ISLETON, CA 95641	157-0025-002-0000	LD	RD-7	10,494	0.241	2	-	310	310	Parcel is mostly developed, assumed 1 EDU
ISLETON, CA 95641	157-0025-005-0000	LD	RD-7	8,075	0.185	2	-	310	310	Parcel is mostly [illegible], assumed 1 EDU
ISLETON, CA 95641	157-0025-008-0000	LD	RD-7	10,911	0.250	2	-	310	310	Parcel is mostly developed, assumed 1 EDU
ISLETON, CA 95641	157-0025-009-0000	LD	RD-7	10,510	0.241	2	-	310	310	Parcel [illegible] developed, assumed 1 EDU
ISLETON, CA 95641	157-0025-010-0000	LD	RD-7	12,906	0.296	3	-	310	310	Parcel is mostly developed, assumed 1 EDU
ISLETON, CA 95641	157-0026-001-0000	LD	RD-7	5,810	0.133	1	-	310	310	
ISLETON, CA 95641	157-0026-002-0000	DMU	NMC	7,000	0.161	-	1,900	-	305	Parcel is 23,394sf, however on 7,000sf is available to develop because the [illegible] is a parking lot
ISLETON, CA 95641	157-0026-003-0000	LD	RD-7	3,049	0.070	1	-	310	[illegible]	
ISLETON, CA 95641	157-0026-004-0000	LD	RD-7	5,730	0.132	1	-	310	310	
ISLETON, CA 95641	157-0027-001-0000	DMU	NMC	9,600	0.220	-	1,900	-	[illegible]	Office
ISLETON, CA 95641	157-0027-002-0000	DMU	NMC	9,600	0.220	-	1,900	-	[illegible]	Coffee shop
ISLETON, CA 95641	157-0027-003-0000	DMU	NMC	7,200	0.165	-	1,900	-	314	
ISLETON, CA 95641	157-0027-004-0000	DMU	NMC	4,800	0.110	-	1,900	-	209	
ISLETON, CA 95641	157-0027-005-0000	MD	RD-15	4,904	0.113	1	-	233	[illegible]	
ISLETON, CA 95641	157-0027-006-0000	MD	RD-15	3,920	0.090	1	-	233	[illegible]	
ISLETON, CA 95641	157-0027-007-0000	MD	RD-15	3,920	0.090	1	-	233	[illegible]	
ISLETON, CA 95641	157-0027-008-0000	MD	RD-15	4,856	0.111	1	-	233	233	
ISLETON, CA 95641	157-0027-009-0000	MD	RD-15	4,874	0.112	1	-	233	[illegible]	
ISLETON, CA 95641	157-0027-010-0000	MD	RD-15	9,802	0.225	3	-	233	310	Parcel is mostly developed, assumed 1 EDU
ISLETON, CA 95641	157-0028-001-0000	DMU	NMC	2,604	0.060	-	1,900	-	114	
ISLETON, CA 95641	157-0028-002-0000	DMU	NMC	5,556	0.128	-	1,900	-	242	
ISLETON, CA 95641	157-0028-004-0000	DMU	NMC	6,045	0.139	-	1,900	-	264	
ISLETON, CA 95641	157-0028-005-0000	MD	RD-15	6,013	0.138	2	-	233	310	Parcel is mostly developed, assumed 1 EDU
ISLETON, CA 95641	157-0028-006-0000	MD	RD-15	4,812	0.110	1	-	233	[illegible]	
ISLETON, CA 95641	157-0028-007-0000	MD	RD-15	6,021	0.138	2	-	233	466	
ISLETON, CA 95641	157-0029-001-0000	PQP	PQP	169,884	3.900	-	-	-	1,335	School, SASD [illegible] for [illegible], split 153 student between parcels
ISLETON, CA 95641	157-0032-002-0000	DMU	NMC	5,335	0.122	-	1,900	-	[illegible]	
ISLETON, CA 95641	157-0032-003-0000	DMU	NMC	2,910	0.067	-	1,900	-	[illegible]	
ISLETON, CA 95641	157-0032-004-0000	DMU	NMC	2,910	0.067	-	1,900	-	127	
ISLETON, CA 95641	157-0032-005-0000	DMU	NMC	2,910	0.067	-	1,900	-	127	
ISLETON, CA 95641	157-0032-006-0000	DMU	NMC	2,910	0.067	-	1,900	-	127	
ISLETON, CA 95641	157-0032-007-0000	DMU	NMC	2,910	0.067	-	1,900	-	127	
ISLETON, CA 95641	157-0032-008-0000	DMU	NMC	2,910	0.067	-	1,900	-	127	
ISLETON, CA 95641	157-0032-009-0000	DMU	NMC	2,910	[illegible]	-	1,900	-	127	
ISLETON, CA 95641	157-0032-010-0000	DMU	NMC	5,335	[illegible]	-	1,900	-	233	
ISLETON, CA 95641	157-0032-011-0000	DMU	NMC	3,049	[illegible]	-	1,900	-	133	
ISLETON, CA 95641	157-0032-012-0000	DMU	NMC	2,910	[illegible]	-	1,900	-	127	
ISLETON, CA 95641	157-0032-013-0000	DMU	NMC	3,049	0.070	-	1,900	-	133	
ISLETON, CA 95641	157-0032-014-0000	DMU	NMC	2,910	0.067	-	1,900	-	127	
ISLETON, CA 95641	157-0032-015-0000	DMU	NMC	[illegible]	0.067	-	1,900	-	127	
ISLETON, CA 95641	157-0032-016-0000	DMU	NMC	2,910	0.067	-	1,900	-	127	
ISLETON, CA 95641	157-0032-017-0000	DMU	NMC	[illegible]	0.056	-	1,900	-	106	
ISLETON, CA 95641	157-0032-018-0000	DMU	NMC	5,115	0.117	-	1,900	-	223	
ISLETON, CA 95641	157-0032-020-0000	DMU	NMC	[illegible]	0.071	-	1,900	-	135	
ISLETON, CA 95641	157-0032-022-0000	DMU	NMC	[illegible]	0.076	-	1,900	-	144	
ISLETON, CA 95641	157-0032-024-0000	DMU	NMC	[illegible]	[illegible]	-	1,900	-	154	
ISLETON, CA 95641	157-0032-025-0000	DMU	NMC	3,595	[illegible]	-	1,900	-	157	
ISLETON, CA 95641	157-0032-026-0000	DMU	NMC	3,666	[illegible]	-	1,900	-	160	
ISLETON, CA 95641	157-0032-027-0000	DMU	NMC	3,737	0.086	-	1,900	-	163	
ISLETON, CA 95641	157-0032-028-0000	DMU	NMC	3,807	[illegible]	-	1,900	-	166	
ISLETON, CA 95641	157-0032-029-0000	DMU	NMC	[illegible]	[illegible]	-	1,900	-	467	
ISLETON, CA 95641	[illegible]	DMU	NMC	[illegible]	0.074	-	1,900	-	141	
ISLETON, CA 95641	157-0032-031-[illegible]	DMU	NMC	3,170	0.073	-	1,900	-	138	
ISLETON, CA 95641	[illegible]	[illegible]	NMC	[illegible]	0.083	-	1,900	-	158	
ISLETON, CA 95641	[illegible]	[illegible]	NMC	[illegible]	0.082	-	1,900	-	155	
ISLETON, CA 95641	[illegible]	DMU	NMC	[illegible]	[illegible]	-	1,900	-	151	
ISLETON, CA 95641	[illegible]	DMU	NMC	9,553	[illegible]	-	1,900	-	417	
ISLETON, CA 95641	[illegible]	DMU	NMC	[illegible]	[illegible]	-	1,900	-	152	
ISLETON, CA 95641	[illegible]	DMU	NMC	3,550	[illegible]	-	1,900	-	155	
ISLETON, CA 95641	[illegible]	[illegible]	NMC	3,611	[illegible]	-	1,900	-	158	
ISLETON, CA 95641	[illegible]	[illegible]	NMC	3,672	[illegible]	-	1,900	-	160	
ISLETON, CA 95641	[illegible]	[illegible]	NMC	3,920	[illegible]	-	1,900	-	171	
ISLETON, CA 95641	157-0033-007-[illegible]	[illegible]	NMC	3,793	[illegible]	-	1,900	-	165	
ISLETON, CA 95641	157-0033-008-0000	[illegible]	NMC	3,207	0.074	-	1,900	-	140	
ISLETON, CA 95641	157-0033-009-0000	DMU	NMC	[illegible]	0.090	-	1,900	-	170	
ISLETON, CA 95641	157-0033-010-0000	DMU	NMC	[illegible]	0.091	-	1,900	-	173	
ISLETON, CA 95641	157-0033-011-0000	DMU	NMC	[illegible]	0.092	-	1,900	-	176	
ISLETON, CA 95641	157-0033-012-0000	DMU	NMC	[illegible]	0.094	-	1,900	-	178	
ISLETON, CA 95641	157-0033-013-0000	DMU	NMC	[illegible]	0.096	-	1,900	-	181	
ISLETON, CA 95641	157-0033-014-0000	DMU	NMC	3,485	0.080	-	1,900	-	152	
ANDRUS ISLAND, CA 95641	157-0034-002-0000	DMU	NMC	3,750	0.086	-	1,900	-	164	
ISLETON, CA 95641	157-0034-003-0000	DMU	NMC	3,750	0.086	-	1,900	-	164	
ISLETON, CA 95641	157-0034-004-0000	DMU	NMC	3,750	0.086	-	1,900	-	164	

ISLETON, CA 95641	157-0034-005-0000	P/OS	P/OS	7,405	0.170	-	-	-	-	Openspace assumed no restroom being developed
ISLETON, CA 95641	157-0034-006-0000	DMU	NMC	3,750	0.086	-	1,900	-	164	
ISLETON, CA 95641	157-0034-007-0000	DMU	NMC	2,170	0.050	-	1,900	-	95	
ISLETON, CA 95641	157-0034-008-0000	DMU	NMC	1,580	0.036	-	1,900	-	69	
ISLETON, CA 95641	157-0034-009-0000	DMU	NMC	3,750	0.086	-	1,900	-	164	
ISLETON, CA 95641	157-0034-010-0000	DMU	NMC	3,750	0.086	-	1,900	-	164	
ISLETON, CA 95641	157-0034-012-0000	DMU	NMC	3,750	0.086	-	1,900	-	164	
ISLETON, CA 95641	157-0034-013-0000	DMU	NMC	3,750	0.086	-	1,900	-	164	
ISLETON, CA 95641	157-0034-014-0000	DMU	NMC	11,761	0.270	-	1,900	-	513	Government building, assume commercial
ISLETON, CA 95641	157-0034-015-0000	DMU	NMC	4,403	0.101	-	1,900	-	192	
ISLETON, CA 95641	157-0034-016-0000	DMU	NMC	3,750	0.086	-	1,900	-	164	
ISLETON, CA 95641	157-0034-017-0000	DMU	NMC	3,750	0.086	-	1,900	-	164	
ISLETON, CA 95641	157-0034-018-0000	DMU	NMC	3,058	0.070	-	1,900	-	133	
ISLETON, CA 95641	157-0034-019-0000	DMU	NMC	2,569	0.059	-	1,900	-	112	
ISLETON, CA 95641	157-0040-001-0000	PDI	I	871	0.020	-	1,900	-	[illegible]	
ISLETON, CA 95641	157-0040-004-0000	P/OS	P/OS	7,744	0.178	-	-	-	-	Openspace assumed no restroom being developed
ISLETON, CA 95641	157-0040-005-0000	VMU	RD-7	112,385	2.580	9	-	310	2,790	VOTD plans, 9 planned lots
ISLETON, CA 95641	157-0040-010-0000	VMU	RD-7	227,383	5.220	42	-	310	13,020	VOTD plans, total lots between 40-010 and 40-040 is 27+42=69
ISLETON, CA 95641	157-0040-012-0000	LD	N/A	11,200	0.257	-	-	-	-	Road, so no sewer flow
ISLETON, CA 95641	157-0040-017-0000	PQP	PQP	6,534	0.150	-	-	-	-	Sewer headworks, bathroom accounted for in wwtp parcel
ISLETON, CA 95641	157-0040-021-0000	VMU	N/A	71,438	1.640	-	-	-	-	Road, so no sewer flow
ISLETON, CA 95641	157-0040-024-0000	VMU	NMC	8,442	0.194	-	1,900	-	368	Commercial allocation
ISLETON, CA 95641	157-0040-025-0000	VMU	NMC	17,380	0.399	-	1,900	-	757	Commercial allocation
ISLETON, CA 95641	157-0040-026-0000	PQP	PQP	1,307	0.030	-	-	-	-	PGE gas valves
ANDRUS ISLAND, CA 95641	157-0040-027-0000	PDI	I	111,514	2.560	-	1,900	-	4,864	
ISLETON, CA 95641	157-0040-034-0000	LD	RD-7	3,644	0.084	1	-	310	310	
ISLETON, CA 95641	157-0040-035-0000	LD	RD-7	3,720	0.085	1	-	310	310	
ISLETON, CA 95641	157-0040-036-0000	LD	RD-7	4,555	0.105	1	-	310	310	
ISLETON, CA 95641	157-0040-037-0000	LD	RD-7	4,909	0.113	1	-	310	310	
ISLETON, CA 95641	157-0040-040-0000	VMU	RD-7	196,456	4.510	27	-	310	8,370	VOTD plans, total lots between 40-010 and 40-040 is 27+42=69
ISLETON, CA 95641	157-0040-042-0000	VMU	RD-7	45,738	1.050	12	-	310	3,720	VOTD plans, total lots between 40-044, 40-076, and 40-042 is 60+37+12=109
ISLETON, CA 95641	157-0040-043-0000	PDI	I	42125.000	0.967	-	1,900	-	1,837	Road subtracted from total parcel area to allocate flow more accurately
ISLETON, CA 95641	157-0040-044-0000	VMU	RD-7	284,447	6.530	37	-	310	11,470	VOTD plans, total lots between 40-044, 40-076, and 40-042 is 60+37+12=109
ANDRUS ISLAND, CA 95641	157-0040-047-0000	P/OS	P/OS	10,200	0.234	-	-	-	-	Openspace assumed no restroom being developed
ANDRUS ISLAND, CA 95641	157-0040-048-0000	P/OS	P/OS	2,700	0.062	-	-	-	-	Openspace assumed no restroom being developed
ISLETON, CA [illegible]	157-0040-050-0000	PDLD	RD-7	1,307	0.030	1	-	310	310	
ISLETON, CA 95641	157-0040-051-0000	PDI	I	256,133	5.880	-	1,900	-	11,172	
ISLETON, CA 95641	[illegible]	LD	RD-7	7,143	0.164	1	-	310	310	
ISLETON, CA 95641	[illegible]	LD	RD-7	7,000	0.161	1	-	310	310	
ISLETON, CA 95641	[illegible]	LD	RD-7	7,000	0.161	1	-	310	310	
ISLETON, CA 95641	[illegible]	LD	RD-7	7,000	0.161	1	-	310	310	
ISLETON, CA 95641	[illegible]	LD	RD-7	7,000	0.161	1	-	310	310	
ISLETON, CA 95641	[illegible]	LD	RD-7	7,000	0.161	1	-	310	310	
ISLETON, CA 95641	[illegible]	LD	RD-7	7,174	0.165	1	-	310	310	
ISLETON, CA 95641	157-0040-054-0000	PDI	I	21,000	0.429	-	1,900	-	910	Storage facility, assumed 1 EDU
ISLETON, CA 95641	157-0040-056-0000	LD	RD-7	15,158	0.348	3	-	310	930	
ISLETON, CA 95641	157-0040-060-0000	VLD	RD-3	[illegible]	5.780	12	-	310	3,720	
ISLETON, CA 95641	157-0040-065-0000	P/OS	P/OS	21,[illegible]	0.485	-	-	-	-	Openspace assumed no restroom being developed
ISLETON, CA 95641	157-0040-068-0000	LD	RD-7	[illegible]	1.820	19	-	310	5,890	
ANDRUS ISLAND, CA 95641	157-0040-072-0000	VMU	P/OS	139,392	3.200	22	-	310	6,820	VOTD 22 planned lots
ISLETON, CA 95641	157-0040-074-0000	VMU	NMC	[illegible]	3.230	-	1,900	-	6,137	Open space and two large lots for mix use
ISLETON, CA 95641	157-0040-075-0000	VMU	RD-7	24,393	0.560	6	-	310	1,860	VOTD plans, 6 lots
ISLETON, CA 95641	157-0040-076-0000	VMU	RD-7	[illegible]	[illegible]	60	-	310	18,600	VOTD plans, total lots between 40-044, 40-076, and 40-042 is 60+37+12=109
ISLETON, CA 95641	157-0051-001-0000	PQP	PQP	61,855	1.420	-	-	-	1,250	School, SASD 1000capita for 25000gal/day, split 153 student between parcels
ISLETON, CA 95641	157-0051-002-0000	PQP	PQP	2,178	0.050	-	-	-	625	School, SASD 1000capita for 25000gal/day, split 153 student between parcels
ISLETON, CA 95641	157-0051-003-0000	PQP	PQP	436	0.010	-	-	-	625	School, SASD 1000capita for 25000gal/day, split 153 student between parcels
ISLETON, CA 95641	157-0051-004-0000	PQP	PQP	2,178	0.050	-	-	-	-	Utilities
ISLETON, CA 95641	157-0051-007-0000	PQP	RD-7	[illegible]	0.138	1	-	310	310	
ISLETON, CA 95641	157-0051-009-0000	PQP	RD-7	[illegible]	0.130	1	-	310	310	
ISLETON, CA 95641	157-0051-010-0000	PQP	RD-7	4,449	0.102	1	-	310	310	
ISLETON, CA 95641	157-0051-011-0000	PQP	RD-7	[illegible]	0.340	3	-	310	930	
ISLETON, CA 95641	157-0051-012-0000	PQP	PQP	332,[illegible]	7.580	-	-	-	-	Playfield
ISLETON, CA 95641	157-0051-015-0000	PQP	RD-7	871	0.020	1	-	310	310	
ISLETON, CA 95641	157-0051-016-0000	PQP	RD-7	2,250	0.052	1	-	310	310	
ISLETON, CA 95641	157-0051-017-0000	PQP	RD-7	3,000	0.069	1	-	310	310	
ISLETON, CA 95641	157-0051-018-0000	PQP	RD-7	871	0.020	1	-	310	310	
ISLETON, CA 95641	157-0051-[illegible]	PQP	RD-7	2,170	0.050	1	-	310	310	
ISLETON, CA 95641	157-0052-001-0000	HD	RD-25	2,250	0.052	1	-	233	233	
ISLETON, CA 95641	157-0052-002-0000	HD	RD-25	2,250	0.052	1	-	233	233	
ISLETON, CA 95641	157-0052-003-0000	HD	RD-25	2,250	0.052	1	-	233	233	
ISLETON, CA 95641	157-0052-005-0000	HD	RD-25	2,250	0.052	1	-	233	233	
ISLETON, CA 95641	157-0052-007-0000	HD	RD-25	3,[illegible]	0.075	1	-	233	233	
ISLETON, CA 95641	157-0052-008-0000	HD	RD-25	[illegible]	0.084	2	-	233	466	
ISLETON, CA 95641	157-0052-009-0000	HD	RD-25	3,680	0.084	2	-	233	466	
ISLETON, CA 95641	157-0052-010-0000	HD	RD-25	4,[illegible]	0.093	2	-	233	466	
ISLETON, CA 95641	157-0052-011-0000	PDLD	RD-7	5,227	0.120	1	-	310	310	
ISLETON, CA 95641	157-0052-012-0000	PDLD	RD-7	7,405	0.170	1	-	310	310	
ISLETON, CA 95641	157-0052-013-0000	PDLD	RD-7	6,820	0.157	1	-	310	310	
ISLETON, CA 95641	157-0052-014-0000	PDLD	RD-7	6,531	0.150	1	-	310	310	
ISLETON, CA 95641	157-0052-015-0000	PDLD	RD-7	6,531	0.150	1	-	310	310	

ISLETON, CA 95641	157-0052-016-0000 POLD	RD-7	6,534	0.150	1	-	310	310	
ISLETON, CA 95641	157-0052-017-0000 POLD	RD-7	6,531	0.150	1	-	310	310	
ISLETON, CA 95641	157-0052-018-0000 POLD	RD-7	7,841	0.180	1	-	310	310	
ISLETON, CA 95641	157-0052-019-0000 POLD	RD-7	38,768	0.890	9	-	310	2,790	
ISLETON, CA 95641	157-0052-020-0000 POLD	RD-7	4,650	0.107	1	-	310	310	
ISLETON, CA 95641	157-0052-021-0000 POLD	RD-7	4,400	0.101	1	-	310	310	
ISLETON, CA 95641	157-0052-022-0000 POLD	RD-7	4,400	0.101	1	-	310	310	
ISLETON, CA 95641	157-0052-023-0000 POLD	RD-7	4,356	0.100	1	-	310	310	
ISLETON, CA 95641	157-0052-024-0000 POLD	RD-7	8,800	0.202	2	-	310	310	Parcel is mostly developed, assumed 1 EDU
ISLETON, CA 95641	157-0052-025-0000 POLD	RD-7	4,400	0.101	1	-	310	310	
ISLETON, CA 95641	157-0052-026-0000 POLD	RD-7	5,663	0.130	1	-	310	310	
ISLETON, CA 95641	157-0052-027-0000 HD	RD-25	9,610	0.221	5	-	233	1,165	
ISLETON, CA 95641	157-0052-028-0000 HD	RD-25	3,109	0.071	1	-	233	233	
ISLETON, CA 95641	157-0052-030-0000 HD	RD-25	3,920	0.090	2	-	233	466	
ISLETON, CA 95641	157-0052-031-0000 HD	RD-25	6,534	0.150	3	-	233	699	
ISLETON, CA 95641	157-0052-032-0000 HD	RD-25	8,276	0.190	4	-	233	932	
ISLETON, CA 95641	157-0052-033-0000 HD	RD-25	6,250	0.143		-		-	
ISLETON, CA 95641	157-0052-034-0000 HD	RD-25	2,755	0.052	1	-	233	233	
ISLETON, CA 95641	157-0052-035-0000 HD	RD-25	2,250	0.052	1	-	233	233	
ISLETON, CA 95641	157-0052-036-0000 HD	RD-25	2,250	0.052	1	-	233	233	
ISLETON, CA 95641	157-0052-037-0000 HD	RD-25	2,250	0.052	1	-	233	233	
ISLETON, CA 95641	157-0053-001-0000 HD	N/A	436	0.010		-	233	-	
ISLETON, CA 95641	157-0053-004-0000 HD	RD-25	2,775	0.064	1	-	233	233	
ISLETON, CA 95641	157-0053-005-0000 HD	RD-25	6,975	0.160	4	-	233	932	
ISLETON, CA 95641	157-0053-006-0000 HD	RD-25	3,485	0.080	2	-	233	466	
ISLETON, CA 95641	157-0053-007-0000 HD	RD-25	3,488	0.080	2	-	233	466	
AMORUS ISLAND, CA 95641	157-0053-008-0000 HD	RD-25	3,488	0.080	2	-	233	466	
ISLETON, CA 95641	157-0053-009-0000 HD	RD-25	3,485	0.080	2	-	233	466	
ISLETON, CA 95641	157-0053-010-0000 HD	RD-25	3,796	0.087	2	-	233	466	
ISLETON, CA 95641	157-0053-012-0000 HD	RD-25	4,135	0.095	2	-	233	466	
ISLETON, CA 95641	157-0054-001-0000 MD	RD-15	10,850	0.249	3	-	233	930	Parcel is mostly developed, assumed 1 EDU
ISLETON, CA 95641	157-0054-002-0000 POLD	RD-7	4,805	0.110	1	-	310	310	
ISLETON, CA 95641	157-0054-003-0000 POLD	RD-7	4,185	0.096	1	-	310	310	
ISLETON, CA 95641	157-0054-004-0000 POLD	RD-7	3,049	0.070	1	-	310	310	
ISLETON, CA 95641	157-0054-007-0000 POLD	RD-7	6,308	0.145	1	-	310	310	
ISLETON, CA 95641	157-0054-008-0000 POLD	RD-7	3,049	0.070	1	-	310	310	
ISLETON, CA 95641	157-0054-009-0000 POLD	RD-7	4,030	0.093	1	-	310	310	
ISLETON, CA 95641	157-0054-010-0000 POLD	RD-7	10,230	0.235	2	-	310	620	
ISLETON, CA 95641	157-0054-011-0000 POLD	RD-7	7,241	0.166	1	-	310	310	
ISLETON, CA 95641	157-0054-012-0000 POLD	RD-7	7,241	0.166	1	-	310	310	
ISLETON, CA 95641	157-0054-013-0000 POLD	RD-7	7,241	0.166	1	-	310	310	
ISLETON, CA 95641	157-0054-014-0000 POLD	RD-7	7,241	0.166	1	-	310	310	
ISLETON, CA 95641	157-0054-015-0000 POP	OS/P	2,178	0.050		-		-	
ISLETON, CA 95641	157-0054-016-0000 POP	POP	7,841	0.180	1.100	-	342	342	Church
AMORUS ISLAND, CA 95641	157-0054-017-0000 POLD	RD-7	6,703	0.142	1	-	310	310	
ISLETON, CA 95641	157-0055-001-0000 POLD	RD-7	3,049	0.071	1	-	310	310	
ISLETON, CA 95641	157-0055-002-0000 POLD	RD-7	3,049	0.071	1	-	310	310	
ISLETON, CA 95641	157-0055-003-0000 POLD	RD-7	3,134	0.072	1	-	310	310	
ISLETON, CA 95641	157-0055-004-0000 POLD	RD-7	6,534	0.145	1	-	310	310	
ISLETON, CA 95641	157-0055-005-0000 POLD	RD-7	3,134	0.072	1	-	310	310	
ISLETON, CA 95641	157-0055-006-0000 POLD	RD-7	3,049	0.070	1	-	310	310	
ISLETON, CA 95641	157-0055-007-0000 POLD	RD-7	1,745	0.040	1	-	310	310	
ISLETON, CA 95641	157-0055-008-0000 POLD	RD-7	6,534	0.150	1	-	310	310	
ISLETON, CA 95641	157-0061-003-0000 LD	RD-7	3,200	0.073	1	-	310	310	
ISLETON, CA 95641	157-0061-004-0000 LD	RD-7	2,034	0.046	1	-	310	310	
ISLETON, CA 95641	157-0061-005-0000 LD	RD-7	1,656	0.038	1	-	310	310	
ISLETON, CA 95641	157-0061-006-0000 LD	RD-7	5,160	0.118	1	-	310	310	
ISLETON, CA 95641	157-0061-007-0000 LD	RD-7	3,614	0.083	1	-	310	310	
ISLETON, CA 95641	157-0061-008-0000 LD	RD-7	4,800	0.110	1	-	310	310	
ISLETON, CA 95641	157-0061-009-0000 LD	RD-7	2,541	0.058	1	-	310	310	
ISLETON, CA 95641	157-0061-010-0000 LD	RD-7	6,665	0.153	1	-	310	310	
ISLETON, CA 95641	157-0062-001-0000 LD	RD-7	4,905	0.113	1	-	310	310	
ISLETON, CA 95641	157-0062-002-0000 LD	RD-7	5,400	0.124	1	-	310	310	
ISLETON, CA 95641	157-0062-003-0000 LD	RD-7	2,400	0.055	1	-	310	310	
ISLETON, CA 95641	157-0062-004-0000 MD	RD-15	6,000	0.138	2	-	233	930	Parcel is mostly developed, assumed 1 EDU
ISLETON, CA 95641	157-0062-005-0000 LD	RD-7	3,100	0.071	1	-	310	310	
ISLETON, CA 95641	157-0062-006-0000 LD	RD-7	3,100	0.071	1	-	310	310	
ISLETON, CA 95641	157-0062-007-0000 LD	RD-7	2,760	0.063	1	-	310	310	
ISLETON, CA 95641	157-0062-008-0000 LD	RD-7	2,800	0.064	1	-	310	310	
ISLETON, CA 95641	157-0062-009-0000 LD	RD-7	2,800	0.064	1	-	310	310	
ISLETON, CA 95641	157-0062-011-0000 LD	RD-7	3,330	0.076	1	-	310	310	
ISLETON, CA 95641	157-0062-012-0000 LD	RD-7	3,180	0.073	1	-	310	310	
ISLETON, CA 95641	157-0063-001-0000 LD	RD-7	6,098	0.140	1	-	310	310	
ISLETON, CA 95641	157-0063-002-0000 LD	RD-7	6,098	0.140	1	-	310	310	
ISLETON, CA 95641	157-0063-003-0000 LD	RD-7	6,098	0.140	1	-	310	310	
ISLETON, CA 95641	157-0063-004-0000 LD	RD-7	6,000	0.138	1	-	310	310	
ISLETON, CA 95641	157-0063-005-0000 LD	RD-7	4,805	0.110	1	-	310	310	
ISLETON, CA 95641	157-0063-006-0000 LD	RD-7	4,656	0.107	1	-	310	310	
ISLETON, CA 95641	157-0064-001-0000 LD	RD-7	4,960	0.114	1	-	310	310	
ISLETON, CA 95641	157-0064-007-0000 LD	RD-7	4,280	0.097	1	-	310	310	

ISLETON, CA 95641	157-0064-003-0000 LD	RD-7	4,395	0.101	1	-	310	310	
ISLETON, CA 95641	157-0064-006-0000 LD	RD-7	1,742	0.040	1	-	310	310	
ISLETON, CA 95641	157-0064-007-0000 LD	RD-7	2,015	0.046	1	-	310	310	
ISLETON, CA 95641	157-0064-008-0000 LD	RD-7	3,010	0.069	1	-	310	310	
ISLETON, CA 95641	157-0064-009-0000 LD	RD-7	2,887	0.066	1	-	310	310	
ISLETON, CA 95641	157-0065-001-0000 LD	RD-7	5,270	0.121	1	-	310	310	
ISLETON, CA 95641	157-0065-002-0000 LD	RD-7	4,805	0.110	1	-	310	310	
ISLETON, CA 95641	157-0065-003-0000 LD	RD-7	4,495	0.103	1	-	310	310	
ISLETON, CA 95641	157-0065-004-0000 LD	RD-7	4,185	0.096	1	-	310	310	
ISLETON, CA 95641	157-0065-007-0000 LD	RD-7	4,423	0.102	1	-	310	310	
ISLETON, CA 95641	157-0065-009-0000 LD	RD-7	4,424	0.102	1	-	310	310	
ISLETON, CA 95641	157-0066-001-0000 I	M2	130,680	3.000	-	1,900	-	5,700	Pallet Yard
ISLETON, CA 95641	157-0066-002-0000 I	M1	16,065	0.387	-	1,900	-	736	
ISLETON, CA 95641	157-0066-003-0000 I	M2	133,294	3.060	-	1,900	-	620	Parcel is mostly developed for California American Water, assumed 2 EDUs instead of regular commercial
ISLETON, CA 95641	157-0066-004-0000 LD	RD-7	8,100	0.186	2	-	233	[illegible]	**Parcel is developed as an apartment building, assumed 4 EDUs with [illegible] flow rates**
ISLETON, CA 95641	157-0066-005-0000 LD	RD-7	4,320	0.099	1	-	310	310	
ISLETON, CA 95641	157-0066-006-0000 LD	RD-7	4,356	0.100	1	-	310	310	
ISLETON, CA 95641	157-0066-007-0000 LD	RD-7	10,385	0.238	2	-	310	[illegible]	
ISLETON, CA 95641	157-0067-001-0000 LD	RD-7	2,614	0.060	1	-	310	310	
ISLETON, CA 95641	157-0067-002-0000 LD	RD-7	2,470	0.057	1	-	310	310	
ISLETON, CA 95641	157-0067-005-0000 LD	RD-7	2,614	0.060	1	-	310	310	
ISLETON, CA 95641	157-0067-006-0000 LD	RD-7	3,720	0.085	1	-	310	310	
ISLETON, CA 95641	157-0067-009-0000 LD	RD-7	4,880	0.112	1	-	310	310	
ISLETON, CA 95641	157-0067-011-0000 LD	RD-7	4,880	0.112	1	-	310	310	
ISLETON, CA 95641	157-0067-012-0000 LD	RD-7	4,191	0.096	1	-	310	310	
ISLETON, CA 95641	157-0067-013-0000 LD	RD-7	8,936	0.205	2	-	310	[illegible]	
ISLETON, CA 95641	157-0067-015-0000 LD	RD-7	14,920	0.343	3	-	310	310	**Parcel is mostly developed, assumed 1 EDU**
ISLETON, CA 95641	157-0071-001-0000 LD	RD-7	9,690	0.222	2	-	310	310	Parcel is mostly developed, assumed 1 EDU
ISLETON, CA 95641	157-0071-002-0000 LD	RD-7	4,845	0.111	1	-	310	310	
ISLETON, CA 95641	157-0071-004-0000 LD	RD-7	4,845	0.111	1	-	310	310	
ISLETON, CA 95641	157-0071-005-0000 LD	RD-7	4,845	0.111	1	-	310	310	
ISLETON, CA 95641	157-0071-009-0000 LD	RD-7	2,178	0.050	1	-	310	310	
ISLETON, CA 95641	157-0071-010-0000 LD	RD-7	4,500	0.103	1	-	310	310	
ISLETON, CA 95641	157-0071-011-0000 LD	RD-7	5,000	0.115	1	-	310	310	
ISLETON, CA 95641	157-0071-012-0000 LD	RD-7	5,000	0.115	1	-	310	310	
ISLETON, CA 95641	157-0071-015-0000 LD	RD-7	4,845	0.111	1	-	310	310	
ISLETON, CA 95641	157-0071-016-0000 LD	RD-7	4,845	0.111	1	-	310	310	
ISLETON, CA 95641	157-0071-017-0000 LD	RD-7	224	0.005	[illegible]	-	-	-	Utilities
ISLETON, CA 95641	157-0071-018-0000 LD	RD-7	4,845	0.111	1	-	310	310	
ISLETON, CA 95641	157-0071-019-0000 LD	RD-7	6,178	0.142	1	-	310	310	
ISLETON, CA 95641	157-0072-001-0000 LD	RD-7	6,303	[illegible]	1	-	310	310	
ISLETON, CA 95641	157-0072-002-0000 C	GC	25,850	[illegible]	-	1,900	-	310	Storage facility, assumed 1 EDU
ISLETON, CA 95641	157-0072-003-0000 MD	RD-15	5,227	[illegible]	[illegible]	-	[illegible]	233	
ISLETON, CA 95641	157-0072-004-0000 MD	RD-15	6,970	[illegible]	2	-	[illegible]	466	
ISLETON, CA 95641	157-0072-005-0000 LD	RD-7	[illegible]	[illegible]	3	-	[illegible]	620	Parcel is mostly developed, assumed 2 EDU
ISLETON, CA 95641	157-0073-001-0000 LD	RD-7	[illegible]	0.118	1	-	310	310	
ISLETON, CA 95641	157-0073-002-0000 LD	RD-7	[illegible]	0.119	1	-	[illegible]	310	
ISLETON, CA 95641	157-0073-003-0000 LD	RD-7	[illegible]	0.121	1	-	310	310	
ISLETON, CA 95641	157-0073-004-0000 LD	RD-7	[illegible]	0.124	1	-	[illegible]	310	
ISLETON, CA 95641	157-0073-007-0000 LD	RD-7	[illegible]	0.278	3	-	[illegible]	310	Parcel is mostly developed, assumed 1 EDU
ISLETON, CA 95641	157-0073-008-0000 LD	RD-7	[illegible]	0.085	1	-	[illegible]	310	
ISLETON, CA 95641	157-0073-009-0000 LD	RD-7	[illegible]	0.112	1	-	310	310	
ISLETON, CA 95641	157-0073-010-0000 LD	RD-7	[illegible]	[illegible]	1	-	310	310	
ISLETON, CA 95641	157-0073-020-0000 MD	RD-15	25,765	[illegible]	8	-	233	1,864	
ISLETON, CA 95641	157-0073-021-0000 MD	RD-15	34,848	[illegible]	11	-	233	2,563	
ISLETON, CA 95641	157-0073-026-0000 LD	[illegible]	11,703	[illegible]	2	-	310	310	Parcel is mostly developed, assumed 1 EDU
ISLETON, CA 95641	157-0073-027-0000 P/OS	[illegible]	871	[illegible]	-	-	-	-	Openspace assumed no restroom being developed
ISLETON, CA 95641	157-0073-031-0000 I	M1	[illegible]	0.818	-	1,900	-	1,554	
ISLETON, CA 95641	157-0073-032-[illegible]	RD-15	[illegible]	0.332	[illegible]	-	233	932	
ISLETON, CA 95641	157-0073-033-[illegible] MD	RD-15	14,985	0.344	5	-	233	1,165	
ISLETON, CA 95641	157-0073-[illegible]	RD-15	[illegible]	0.421	6	-	233	1,398	
ISLETON, CA 95641	157-0073-[illegible] PQP	PQP	[illegible]	0.532	-	1,900	-	1,010	Church
ISLETON, CA 95641	157-[illegible] LD	RD-7	[illegible]	[illegible]	[illegible]	-	310	310	Parcel is mostly developed, assumed 1 EDU
ISLETON, CA 95641	15[illegible] POI	I	108,900	[illegible]	-	1,900	-	4,750	
ISLETON, CA 95641	15[illegible] PQP	PQP	17,080	[illegible]	-	1,900	-	-	Parking lot for Church
ISLETON, CA 95641	157-[illegible] PQP	PQP	16,194	[illegible]	-	1,900	-	706	Church
ISLETON, CA 95641	157-[illegible]	PQP	20,038	[illegible]	-	1,900	-	874	Church
ISLETON, CA 95641	157-0100-[illegible] P/OS	P/OS	16,439	[illegible]	-	-	-	-	Openspace assumed no restroom being developed
ISLETON, CA 95641	157-0100-061-[illegible]	PQP	2,047,320	[illegible]	-	-	-	150	WWTP with one restroom, 150gpd
ISLETON, CA 95641	157-0100-069-[illegible]	[illegible]	402,059	[illegible]	67	-	233	15,611	Lots 0100-069 and 0100-070 make up Meadows submitted plans, 135-68=67 lots
ISLETON, CA 95641	157-0100-070-0000 VL[illegible]	[illegible]	162,914	[illegible]	68	-	233	15,844	Lots 0100-069 and 0100-070 make up Meadows submitted plans, 135-67=68 lots
ISLETON, CA 95641	157-0231-001-0000 LD	[illegible]	[illegible]	0.157	1	-	310	310	
ISLETON, CA 95641	157-0231-002-0000 LD	[illegible]	[illegible]	0.157	1	-	310	310	
ISLETON, CA 95641	157-0231-003-0000 LD	[illegible]	[illegible]	0.157	1	-	310	310	
ISLETON, CA 95641	157-0231-004-0000 LD	[illegible]	[illegible]	0.157	1	-	310	310	
ISLETON, CA 95641	157-0231-005-0000 LD	RD-7	[illegible]	0.157	1	-	310	310	
ISLETON, CA 95641	157-0231-006-0000 LD	RD-7	[illegible]	0.157	1	-	310	310	
ISLETON, CA 95641	157-0231-007-0000 LD	RD-7	6,875	0.157	1	-	310	310	
ISLETON, CA 95641	157-0231-008-0000 LD	RD-7	6,766	0.155	1	-	310	310	
ISLETON, CA 95641	157-0231-009-0000 LD	RD-7	8,680	0.199	2	-	310	310	Parcel is mostly developed, assumed 1 EDU

ISLETON, CA 95641	157-0231-010-0000 LD	RD-7	29,915	0.687	7	-	310	310	Parcel is mostly developed, assumed 1 EDU
ISLETON, CA 95641	157-0231-011-0000 LD	RD-7	17,205	0.395	4	-	310	310	Parcel is mostly developed, assumed 1 EDU
ISLETON, CA 95641	157-0231-012-0000 LD	RD-7	15,655	0.359	3	-	310	310	Parcel is mostly developed, assumed 1 EDU
ISLETON, CA 95641	157-0231-013-0000 LD	RD-7	7,905	0.181	1	-	310	310	
ISLETON, CA 95641	157-0231-014-0000 LD	RD-7	7,440	0.171	1	-	310	310	
ISLETON, CA 95641	157-0231-015-0000 LD	RD-7	6,655	0.153	1	-	310	310	
ISLETON, CA 95641	157-0231-016-0000 LD	RD-7	8,170	0.188	2	-	310	310	Parcel is mostly developed, assumed 1 EDU
ISLETON, CA 95641	157-0231-017-0000 LD	RD-7	8,060	0.185	2	-	310	310	Parcel is mostly developed, assumed 1 EDU
ISLETON, CA 95641	157-0231-018-0000 LD	RD-7	7,285	0.167	1	-	310	310	
ISLETON, CA 95641	157-0231-019-0000 LD	RD-7	17,050	0.391	4	-	310	310	Parcel is mostly developed, assumed 1 EDU
ISLETON, CA 95641	157-0231-020-0000 LD	RD-7	19,000	0.436	4	-	310	310	Parcel is mostly developed, assumed 1 EDU
ISLETON, CA 95641	157-0231-021-0000 LD	RD-7	17,725	0.407	4	-	310	310	Parcel is mostly developed, assumed 1 EDU
ISLETON, CA 95641	157-0231-022-0000 LD	RD-7	7,710	0.177	1	-	310	310	
ISLETON, CA 95641	157-0231-023-0000 LD	RD-7	6,534	0.150	1	-	310	310	
ISLETON, CA 95641	157-0231-024-0000 LD	RD-7	7,405	0.170	1	-	310	310	
ISLETON, CA 95641	157-0231-029-0000 MH	RM-2	156,816	3.600	49	-	293	14,417	Existing Trailer Park, 40 lots, 8 apartments, 1 management building. Assumed 49 EDUs with multi family flow rate
ISLETON, CA 95641	157-0231-030-0000 P/OS	P/OS	13,274	0.305	-	-	-	-	Apartments assumed no restroom being developed
ISLETON, CA 95641	157-0232-001-0000 LD	RD-7	6,505	0.149	1	-	310	310	
ISLETON, CA 95641	157-0232-002-0000 LD	RD-7	6,118	0.140	1	-	310	310	
ISLETON, CA 95641	157-0232-003-0000 LD	RD-7	6,200	0.142	1	-	310	310	
ISLETON, CA 95641	157-0232-004-0000 LD	RD-7	6,620	0.152	1	-	310	310	
ISLETON, CA 95641	157-0232-005-0000 LD	RD-7	6,534	0.150	1	-	310	310	
ISLETON, CA 95641	157-0232-006-0000 LD	RD-7	7,130	0.164	1	-	310	310	
ISLETON, CA 95641	157-0232-007-0000 LD	RD-7	6,042	0.139	1	-	310	310	
ISLETON, CA 95641	157-0232-008-0000 LD	RD-7	7,130	0.164	1	-	310	310	
ISLETON, CA 95641	157-0232-009-0000 LD	RD-7	6,514	0.150	1	-	310	310	
ISLETON, CA 95641	157-0232-010-0000 LD	RD-7	7,590	0.174	1	-	310	310	
ISLETON, CA 95641	157-0232-011-0000 LD	RD-7	7,595	0.174	1	-	310	310	
ISLETON, CA 95641	157-0232-012-0000 LD	RD-7	7,130	0.164	1	-	310	310	
ISLETON, CA 95641	157-0232-013-0000 LD	RD-7	6,510	0.149	1	-	310	310	
ISLETON, CA 95641	157-0233-001-0000 LD	RD-7	9,300	0.213	2	-	620	620	
ISLETON, CA 95641	157-0233-002-0000 LD	RD-7	6,510	0.149	1	-	310	310	
ISLETON, CA 95641	157-0233-003-0000 LD	RD-7	6,500	0.149	1	-	310	310	
ISLETON, CA 95641	157-0233-004-0000 LD	RD-7	7,285	0.167	1	-	310	310	
ISLETON, CA 95641	157-0254-002-0000 LD	RD-7	3,485	0.080	1	-	310	310	
ISLETON, CA 95641	157-0234-003-0000 LD	RD-7	5,658	0.130	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0260-001-0000 VMU	RD-7	2,895	0.066	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0260-002-0000 VMU	RD-7	2,096	0.048	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0260-003-0000 VMU	RD-7	2,053	0.047	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0260-004-0000 VMU	RD-7	2,014	0.046	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0260-005-0000 VMU	RD-7	2,057	0.047	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0260-006-0000 VMU	RD-7	2,137	0.049	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0260-007-0000 VMU	RD-7	3,043	0.070	1	-	310	310	
ISLETON, CA 95641	157-0260-008-0000 VMU	RD-7	2,728	0.063	1	-	310	310	
ISLETON, CA 95641	157-0260-009-0000 VMU	RD-7	2,005	0.046	1	-	310	310	
ISLETON, CA 95641	157-0260-010-0000 VMU	RD-7	2,005	0.046	1	-	310	310	
ISLETON, CA 95641	157-0260-011-0000 VMU	RD-7	2,005	0.046	1	-	310	310	
ISLETON, CA 95641	157-0260-012-0000 VMU	RD-7	2,005	0.046	1	-	310	310	
ISLETON, CA 95641	157-0260-013-0000 VMU	RD-7	2,005	0.046	1	-	310	310	
ISLETON, CA 95641	157-0260-014-0000 VMU	RD-7	2,696	0.062	1	-	310	310	
ISLETON, CA 95641	157-0260-015-0000 VMU	RD-7	2,696	0.062	1	-	310	310	
ISLETON, CA 95641	157-0260-016-0000 VMU	RD-7	2,005	0.046	1	-	310	310	
ISLETON, CA 95641	157-0260-017-0000 VMU	RD-7	2,005	0.046	1	-	310	310	
ISLETON, CA 95641	157-0260-018-0000 VMU	RD-7	2,000	0.046	1	-	310	310	
ISLETON, CA 95641	157-0260-019-0000 VMU	RD-7	2,000	0.046	1	-	310	310	
ISLETON, CA 95641	157-0260-020-0000 VMU	RD-7	2,000	0.046	1	-	310	310	
ISLETON, CA 95641	157-0260-021-0000 VMU	RD-7	2,728	0.063	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0260-022-0000 VMU	RD-7	2,678	0.061	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0260-023-0000 VMU	RD-7	2,696	0.062	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0260-024-0000 VMU	RD-7	2,000	0.046	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0260-025-0000 VMU	RD-7	2,000	0.046	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0260-026-0000 VMU	RD-7	2,000	0.046	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0260-027-0000 VMU	RD-7	2,000	0.046	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0260-028-0000 VMU	RD-7	2,696	0.062	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0260-029-0000 VMU	RD-7	2,744	0.063	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0260-030-0000 VMU	RD-7	2,033	0.047	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0260-031-0000 VMU	RD-7	2,033	0.047	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0260-032-0000 VMU	RD-7	2,033	0.047	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0260-033-0000 VMU	RD-7	2,033	0.047	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0260-034-0000 VMU	RD-7	2,033	0.047	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0260-035-0000 VMU	RD-7	2,794	0.064	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0260-036-0000 VMU	RD-7	2,705	0.062	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0260-037-0000 VMU	RD-7	2,149	0.049	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0260-038-0000 VMU	RD-7	2,149	0.049	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0260-039-0000 VMU	RD-7	2,149	0.049	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0260-040-0000 VMU	RD-7	2,149	0.049	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0260-041-0000 VMU	RD-7	2,149	0.049	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0260-042-0000 VMU	RD-7	2,149	0.049	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0260-043-0000 VMU	RD-7	2,149	0.049	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0260-044-0000 VMU	RD-7	2,149	0.049	1	-	310	310	

ANDRUS ISLAND, CA 95641	157-0260-045-0000 VMU	RD-7	2,149	0.049	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0260-046-0000 VMU	RD-7	2,281	0.052	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0260-047-0000 VMU	N/A	12,375	0.284	-	-	-	-	Road, so no sewer flow
ANDRUS ISLAND, CA 95641	157-0260-048-0000 VMU	N/A	12,375	0.284	-	-	-	-	Road, so no sewer flow
ANDRUS ISLAND, CA 95641	157-0270-001-0000 VMU	RD-7	2,774	0.064	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0270-002-0000 VMU	RD-7	2,033	0.047	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0270-003-0000 VMU	RD-7	2,033	0.047	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0270-004-0000 VMU	RD-7	2,033	0.047	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0270-005-0000 VMU	RD-7	2,833	0.047	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0270-006-0000 VMU	RD-7	2,033	0.047	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0270-007-0000 VMU	RD-7	2,744	0.063	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0270-008-0000 VMU	RD-7	2,744	0.063	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0270-009-0000 VMU	RD-7	2,033	0.047	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0270-010-0000 VMU	RD-7	2,033	0.047	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0270-011-0000 VMU	RD-7	2,033	0.047	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0270-012-0000 VMU	RD-7	2,033	0.047	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0270-013-0000 VMU	RD-7	2,033	0.047	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0270-014-0000 VMU	RD-7	2,774	0.064	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0270-015-0000 VMU	RD-7	2,774	0.064	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0270-016-0000 VMU	RD-7	2,033	0.047	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0270-017-0000 VMU	RD-7	2,033	0.047	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0270-018-0000 VMU	RD-7	2,033	0.047	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0270-019-0000 VMU	RD-7	2,033	0.047	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0270-020-0000 VMU	RD-7	2,033	0.047	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0270-021-0000 VMU	RD-7	2,744	0.063	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0270-022-0000 VMU	RD-7	2,867	0.066	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0270-023-0000 VMU	RD-7	2,383	0.055	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0270-024-0000 VMU	RD-7	2,383	0.055	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0270-025-0000 VMU	RD-7	2,383	0.055	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0270-026-0000 VMU	RD-7	2,383	0.055	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0270-027-0000 VMU	RD-7	2,383	0.055	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0270-028-0000 VMU	RD-7	3,123	0.072	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0270-029-0000 VMU	RD-7	2,709	0.062	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0270-030-0000 VMU	RD-7	2,063	0.048	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0270-031-0000 VMU	RD-7	2,063	0.048	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0270-032-0000 VMU	RD-7	2,063	0.048	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0270-033-0000 VMU	RD-7	2,063	0.048	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0270-034-0000 VMU	RD-7	2,063	0.048	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0270-035-0000 VMU	RD-7	2,083	0.048	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0270-036-0000 VMU	RD-7	2,083	0.048	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0270-037-0000 VMU	RD-7	2,083	0.048	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0270-038-0000 VMU	RD-7	2,063	0.047	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0270-039-0000 VMU	RD-7	2,063	0.047	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0270-040-0000 VMU	RD-7	2,063	0.047	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0270-041-0000 VMU	RD-7	2,709	0.062	1	-	310	310	
ANDRUS ISLAND, CA 95641	157-0270-042-0000 P/OS	N/A	12,375	0.284	-	-	-	-	Road, so no sewer flow
ANDRUS ISLAND, CA 95641	157-0270-043-0000 P/OS	N/A	12,375	0.284	-	-	-	-	Road, so no sewer flow
ANDRUS ISLAND, CA 95641	157-0280-001-0000 P/OS	P/OS	40,511	0.930	-	-	-	-	Openspace assumed no restroom being developed
ANDRUS ISLAND, CA 95641	157-0280-002-0000 P/OS	P/OS	79,219	1.819	-	-	-	-	Openspace assumed no restroom being developed
ISLETON, CA 95641	157-0310-001-0000 PDI	I	174,674	4.010	-	1,900	310	310	Boat storage facility, assumed 1 EDU
ISLETON, CA 95641	157-0310-002-0000 PDI	I	164,386	3.773	-	1,900	4,579	4,579	

Dry Month WWTF Flows			
	Average	Average	MAX
	MG	MGD	MG
June 2014-2019	2.67	0.09	3.24
July 2014-2019	2.59	0.08	3.25
August 2014-2019	2.58	0.08	3.35

Note: The historic values were taken from the previously completed water balance done for the Feasibility Study

Dry Month I&I Values from Water Balance					
Month	I&I	I&I	Total WWTP Flow	Pecentage of I&I	Avg I&I Percentage
	Gallons	gpd	Galloons		
June	575,644	18,569	2,672,566	21.54%	20.00%
July	486,226	15,685	2,590,581	18.77%	
August	485,505	15,661	2,580,958	18.81%	

I&I Backcheck		
Annual I&I Check:		
Annual I&I (gal)		12,724,219.44
Annual Flow (mg & gal)	39.316	39,316,008.53
Annual Percentage of I&I		32.36%
SASD I&I Check:		
City of Isleton (acres)	208 *	
I&I (mgd & gpd) SASD	0.333	333,091

* Area of the City was calculated without including acreage that extends into the water (that isn't a parcel) and main streets

ADWF + I&I Backcheck using 2040 General Plan EDUs						
LOW ADWF				HIGH ADWF		
Total Flows				Total Flows		
Ex ADWF	82,000.00	gpd		Ex ADWF	82,000.00	gpd
2040 Res Units	112,220.00		362 EDU	2040 Res Units	148,800.00	480 EDU
2040 Commercial	47481.03		1,088,586 sq ft	2040 Commercial	163,304.48	1,743,970 sq ft
ADWF	241,701	gpd		ADWF	394,104	gpd
ADWF + I&I	290,041	gpd		ADWF + I&I	472,925	gpd

Total Flows	
Total Design Flows (GPD):	319,398
Total estimated I&I (GPD):	63,880
Total Flow:	383,277

WWTF Flows	City Flow (MGD)	Oxbow Flow (MGD	Total Flow (MGD)	Annual MG
2016-2017			0.16	57.39
Average (2014-2020)			0.107	59.32
ADWF plus I&I	0.383	0.012	0.395	144.28
PWWF	0.447	0.012	0.459	167.59

Pipe Capacity Calculations

Mannings Coefficient Assumptions		
Per Engineering Tool Box		Chosen
PVC	0.009-0.011	0.01
VCP (Clay)	0.013-0.015	0.014
CIPP	0.010-0.012	0.011

Note:
- (orange) Flows compared using goal seek to get ratio of percentage
- (yellow) Flows compared converted to gpd

Equation Used: $Q = (1.49/n) A R_h^{2/3} S^{1/2}$

ADWF + I&I

Shed	Pipe Segment #	upstream SSMH	downstream SSMH	Pipe Material	LF	Ratio of Percentage (d/D)	Mannings	Slope	Pipe Size (Diameter in)	Pipe Size (Diameter ft)	Hydraulic Depth (ft)
1	23	7	8	PVC	205	18.18%	0.01	0.006	10	0.83	0.152
	24	8	28	Clay	400	22.82%	0.014	0.005	10	0.83	0.190
2	34	28	27	PVC	144	52.69%	0.01	0.0004	8	0.67	0.351
3	38	27	26	CIPP	261	24.76%	0.011	0.003	10	0.83	0.206
4	42	26	25	CIPP	328	36.47%	0.011	0.001	10	0.83	0.304
5	44	25	24	CIPP	73	25.49%	0.011	0.004	10	0.83	0.213
6	59	24	23	CIPP	134	35.51%	0.011	0.001	10	0.83	0.296
	60	23	22	CIPP	221	28.14%	0.011	0.001	10	0.83	0.234
	61	22	20	CIPP	247	24.12%	0.011	0.006	10	0.83	0.201
7	70	20	51	Clay	424	35.41%	0.014	0.001	12	1.00	0.354
	74	53	63	PVC	254	25.20%	0.01	0.002	12	1.00	0.252
	75	63	64	PVC	69	25.20%	0.01	0.002	12	1.00	0.252
8	76	64	65	PVC	374	27.27%	0.01	0.002	12	1.00	0.273
9	94	65	66	PVC	369	28.18%	0.01	0.002	12	1.00	0.282
10	101	66	67	PVC	533	28.93%	0.01	0.002	12	1.00	0.289
11	107	67	68	PVC	398	24.14%	0.01	0.005	12	1.00	0.241
	109	68	69	PVC	70	29.75%	0.01	0.002	12	1.00	0.298
12	121	69	Pump Station	PVC	62	36.57%	0.01	0.007	12	1.00	0.366

Pipe Segment #	Hydraulic Depth (in)	Central Angle (Radians)	Central Angle (Degrees)	Area (ft2)	Wetted Perimeter (ft)	Hydraulic Radius (ft)	Calculated Flow (cfs)	Calculated Flow (gpd)	Cummulative Flow (gpd)	Cummulative Flow (gpm)	Cummulative Flow (cfs)
23	1.82	1.757	[illegible]	0.068	0.734	0.093	[illegible]	103,315	103,720	71.68	0.160
24	2.28	1.99	[illegible]	0.094	0.830	0.113	[illegible]	103,253	103,720	71.68	0.160
34	4.22	3.246	[illegible]	0.186	1.081	0.172	[illegible]	115,896	115,881	80.47	0.179
38	2.48	[illegible]	119.356	0.105	0.868	0.121	0.191	[illegible]	123,480	85.75	0.191
42	3.65	[illegible]	148.592	0.180	1.081	0.166	0.206	[illegible]	133,434	92.66	0.206
44	2.55	2.117	121.295	[illegible]	0.882	0.124	0.244	[illegible]	157,921	109.66	0.244
59	3.55	[illegible]	146.766	0.174	1.064	0.163	0.262	[illegible]	168,756	116.91	0.261
60	[illegible]	2.255	129.716	[illegible]	0.940	0.133	0.262	[illegible]	168,756	116.91	0.261
61	[illegible]	2.053	117.654	[illegible]	0.856	0.118	0.261	189,423	168,756	116.91	0.261
70	4.25	2.550	146.077	[illegible]	1.275	0.195	0.293	189,593	188,731	131.06	0.292
74	3.02	2.104	120.53	[illegible]	1.052	0.148	0.296	191,467	188,731	131.06	0.292
75	3.02	[illegible]	120.5	[illegible]	1.052	0.148	[illegible]	191,467	188,731	131.06	0.292
76	3.27	[illegible]	[illegible]	0.174	1.099	0.158	[illegible]	218,292	215,557	149.69	0.334
94	3.38	2.2	[illegible]	0.181	1.119	0.162	[illegible]	232,351	229,615	159.46	0.355
101	3.47	2.271	[illegible]	0.186	1.136	0.164	[illegible]	244,917	242,180	168.18	[illegible]
107	2.90	2.054	117.702	0.148	1.027	0.144	[illegible]	258,614	258,580	179.57	0.400
109	3.57	2.300	132.2	0.196	1.154	0.170	[illegible]	258,653	258,580	179.57	0.400
121	4.39	2.598	148.8	[illegible]	1.299	0.200	[illegible]	383,307	383,277	266.16	0.593

PWWF

Shed	Pipe Segment #	upstream SSMH	downstream SSMH	Pipe Material	LF	Ratio of Percentage (d/D)	Mannings	Slope	Pipe Size (Diameter in)	Pipe Size (Diameter ft)	Hydraulic Depth (ft)
1	23	7	8	PVC	205	19.61%	0.01	0.006	10	0.83	[illegible]
	24	8	28	Clay	400	24.66%	0.014	0.005	10	0.83	[illegible]
2	34	28	27	PVC	144	57.97%	0.01	0.0004	8	0.67	[illegible]
3	38	27	26	CIPP	261	26.77%	0.011	[illegible]	10	0.83	[illegible]
4	42	26	25	CIPP	328	39.46%	0.011	[illegible]	10	0.83	[illegible]
5	44	25	24	CIPP	73	27.48%	0.011	[illegible]	10	0.83	[illegible]
6	59	24	23	CIPP	134	38.48%	0.011	0.001	10	0.83	[illegible]
	60	23	22	CIPP	221	30.54%	0.011	0.001	10	0.83	[illegible]
	61	22	20	CIPP	247	26.01%	0.011	0.006	10	0.83	0.21677
7	70	20	53	Clay	424	38.40%	0.014	0.001	12	1.00	0.384013
	74	53	63	PVC	254	26.86%	0.01	0.002	12	1.00	[illegible]
	75	63	64	PVC	69	26.86%	0.01	0.002	12	1.00	[illegible]
8	76	64	65	PVC	374	29.32%	0.01	0.002	12	1.00	0.293234
9	94	65	66	PVC	369	30.30%	0.01	0.002	12	1.00	0.302952
10	101	66	67	PVC	533	31.14%	0.01	0.002	12	1.00	[illegible]
11	107	67	68	PVC	398	26.09%	0.01	0.005	12	1.00	[illegible]
	109	68	69	PVC	70	32.22%	0.01	0.002	12	1.00	[illegible]
12	121	69	Pump Station	PVC	62	39.75%	0.01	0.007	12	1.00	[illegible]

Pipe Segment #	Hydraulic Depth (in)	Central Angle (Radians)	Central Angle (Degrees)	Area (ft2)	Wetted Perimeter (ft)	Hydraulic Radius (ft)	Calculated Flow (cfs)	Calculated Flow (gpd)	Cummulative Flow (gpd)	Cummulative Flow (gpm)	Cummulative Flow (cfs)
23	[illegible]	[illegible]	[illegible]	[illegible]	0.784875	[illegible]	[illegible]	120,554	120,423	83.63	[illegible]
24	[illegible]	2.078447	[illegible]	[illegible]	0.866017	[illegible]	[illegible]	120,454	[illegible]	83.63	[illegible]
34	[illegible]	3.461711	198.34142	[illegible]	1.153904	[illegible]	[illegible]	135,206	135,197	93.89	0.20920
38	[illegible]	2.175	[illegible]	0.117371	[illegible]	[illegible]	[illegible]	144,067	144,059	100.04	0.22291
42	[illegible]	[illegible]	[illegible]	[illegible]	1.132065	[illegible]	[illegible]	155,686	155,672	108.11	0.24088
44	2.75	2.207	[illegible]	[illegible]	[illegible]	0.132431	[illegible]	184,092	184,229	127.94	[illegible]
59	3.85	[illegible]	[illegible]	[illegible]	[illegible]	0.173445	[illegible]	[illegible]	[illegible]	136.40	[illegible]
60	3.05	2.341	134.183295	[illegible]	[illegible]	0.144541	[illegible]	191,242	196,415	136.40	[illegible]
61	2.60	[illegible]	122.663854	[illegible]	0.892037	0.126411	[illegible]	196,817	196,415	136.40	[illegible]
70	4.61	2.673397	153.174181	0.277765	[illegible]	[illegible]	[illegible]	220,527	220,186	152.91	0.34070
74	[illegible]	2.179	124.858744	[illegible]	[illegible]	0.155864	[illegible]	217,062	220,186	152.91	[illegible]
75	[illegible]	2.179	124.858744	[illegible]	[illegible]	0.155864	[illegible]	217,062	220,186	152.91	0.34070
76	[illegible]	[illegible]	131.146267	[illegible]	1.144467	0.167753	[illegible]	251,498	251,483	174.64	[illegible]
94	3.64	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	267,899	267,884	186.03	[illegible]
101	3.74	[illegible]	135	0.208705	1.184102	[illegible]	[illegible]	282,559	282,544	196.21	[illegible]
107	3.13	2.144	122.858015	[illegible]	[illegible]	[illegible]	[illegible]	301,713	301,677	[illegible]	[illegible]
109	3.87	2.414315	138.329785	[illegible]	1.207155	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
121	[illegible]	[illegible]	154.340112	0.290918	1.364325	0.213232	[illegible]	447,183	447,157	310.53	[illegible]

SUMMARY TABLE

Shed	Pipe Segment #	Upstream SSMH	Downstream SSMH	Pipe Material	Length (ft)	Mannings (n)	Slope (ft/ft)	Pipe Diameter (in)	ADWF + I&I			PWWF		
									Flow in (gpd)	Hydraulic Depth (in)	Ratio of Percent Full	Flow in (gpd)	Hydraulic Depth (in)	Ratio of Percent Full
1	23	7	8	PVC	205	0.01	0.010	10	303,220	1.82	18.18%	320,423	1.96	19.61%
	24	8	28	Clay	400	0.014	0.014	10	303,220	2.78	27.82%	320,423	2.47	24.66%
2	34	28	27	PVC	344	0.01	0.010	8	215,883	4.22	52.69%	235,197	4.64	57.97%
3	38	27	26	CIPP	261	0.011	0.011	10	323,480	2.48	24.76%	344,059	2.68	26.77%
4	42	26	25	CIPP	228	0.011	0.011	10	333,434	3.65	36.47%	355,672	3.95	39.46%
5	46	25	24	CIPP	73	0.011	0.011	10	157,911	2.55	25.49%	184,229	2.75	27.[illegible]
6	59	24	23	CIPP	134	0.011	0.011	10	168,156	3.55	35.53%	196,415	3.85	38.48%
	60	23	22	CIPP	221	0.011	0.011	10	168,156	2.86	28.59%	196,415	3.05	30.54%
	61	22	20	CIPP	247	0.011	0.011	10	168,156	2.41	24.12%	196,415	2.60	26.01%
7	70	20	53	Clay	424	0.014	0.014	12	188,731	4.25	35.41%	220,186	4.[illegible]	38.40%
	74	53	63	PVC	254	0.01	0.010	12	188,731	3.02	25.20%	220,186	3.[illegible]	26.86%
	75	63	64	PVC	99	0.01	0.010	12	188,731	3.02	25.20%	220,186	3.[illegible]	26.86%
8	76	64	65	PVC	374	0.01	0.010	12	215,557	3.27	27.27%	251,483	3.[illegible]	29.32%
9	94	65	66	PVC	269	0.01	0.010	12	229,615	3.38	28.16%	267,884	3.64	30.30%
10	101	66	67	PVC	513	0.01	0.010	12	242,180	3.47	28.93%	282,[illegible]	3.74	31.14%
11	107	67	68	PVC	398	0.01	0.010	12	258,580	2.90	24.14%	301,677	3.[illegible]	26.09%
	109	68	69	PVC	70	0.01	0.010	12	258,580	3.57	29.75%	301,677	3.83	32.22%
12	171	69	Pump Station	PVC	62	0.01	0.010	12	381,277	4.39	36.57%	447,357	4.77	39.7[illegible]

Force Main Calculation

Terms:	
n (HDPE)	0.012
d	8.679 in
S	0.00188

Slope Calculation	
Invert @ PS	-12.93
Invert @ WWTF	-4.86
Length	4302
S=	0.00188

Max Flow Rate

Q max= (0.463/n)*(d^(8/3)*S^.5)

Q= 532 cfs

Q= 238,615 gpm

PWWF	Q=	311	gpm
ADWF + I&I	Q=	266	gpm
Existing WWTF	Q=	56.9	gpm

PWWF Velocity

v= 0.4084q/(d^2)

v= 1.68 ft/min

ADWF Velocity

v= 0.4084q/(d^2)

v= 1.4431 ft/min

Existing Flows Velocity

v= 0.4084q/(d^2)

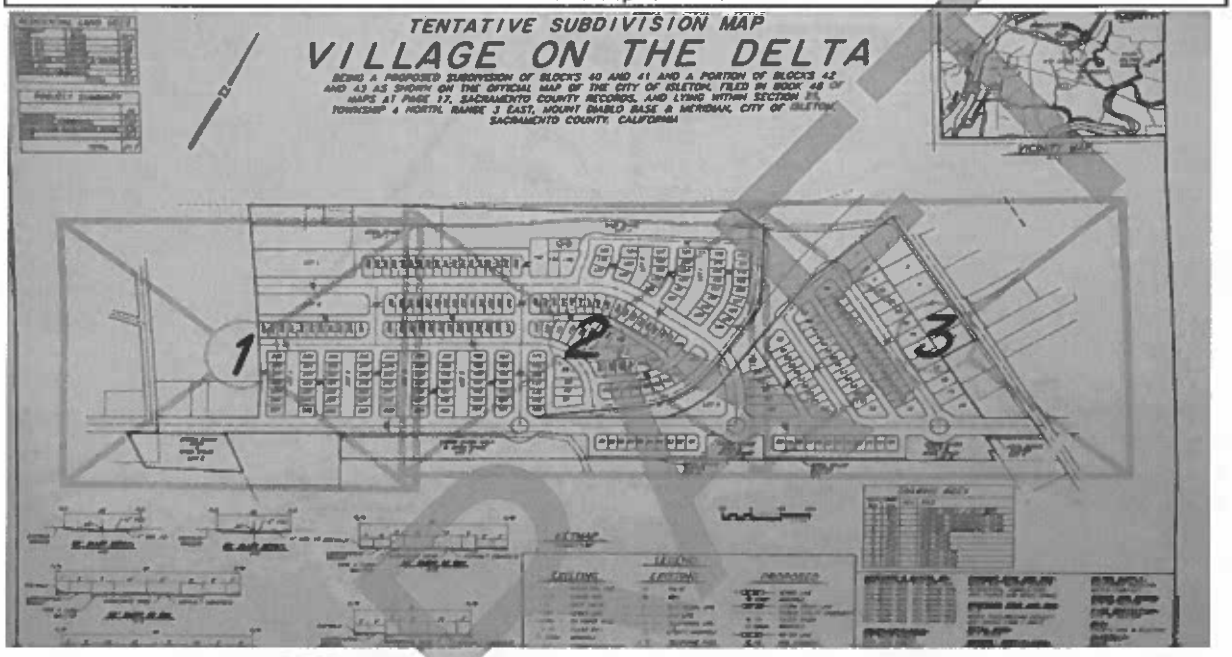
v= 0.3087 ft/min

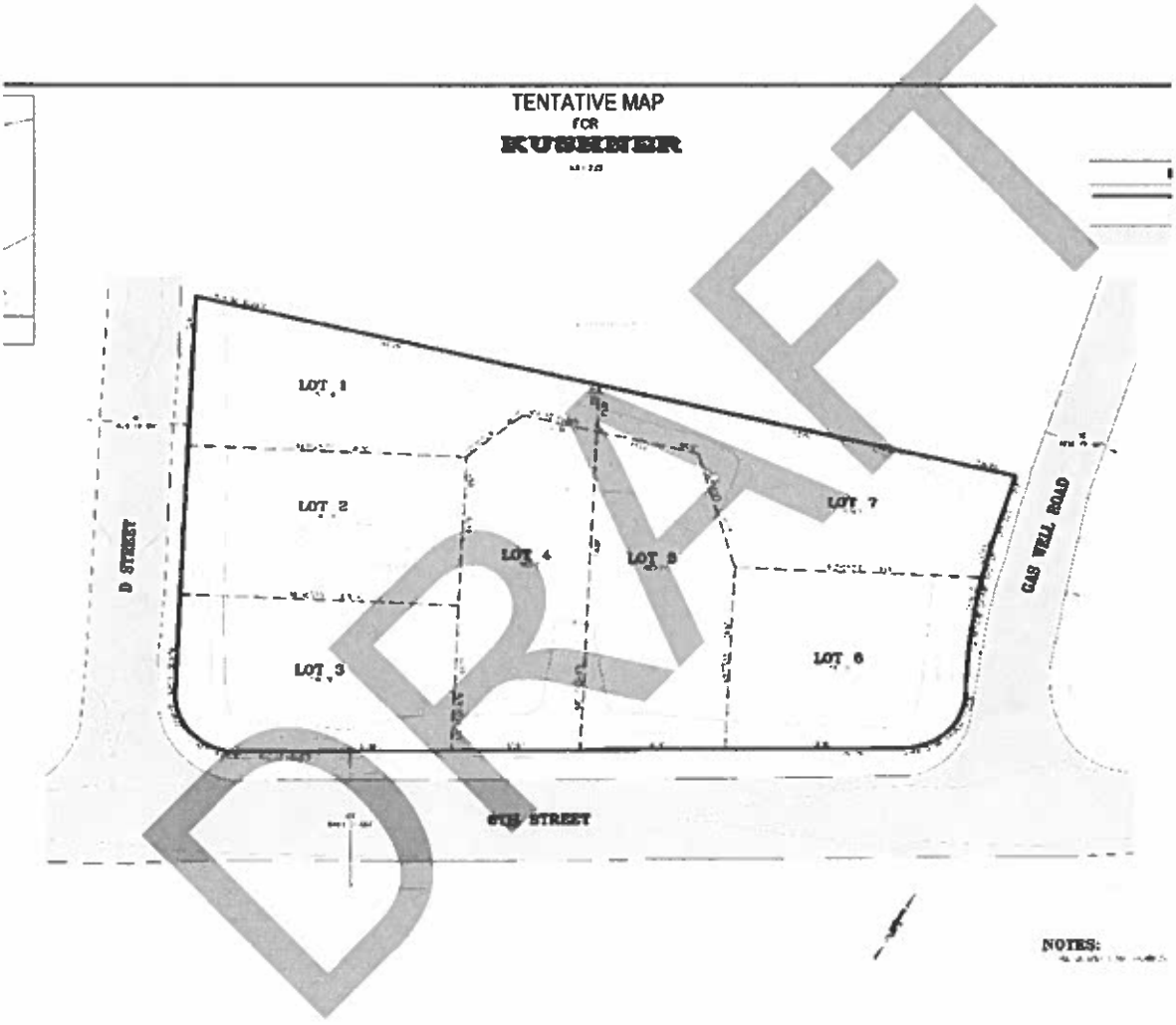
Note: Velocity equation uses q as (gpm)

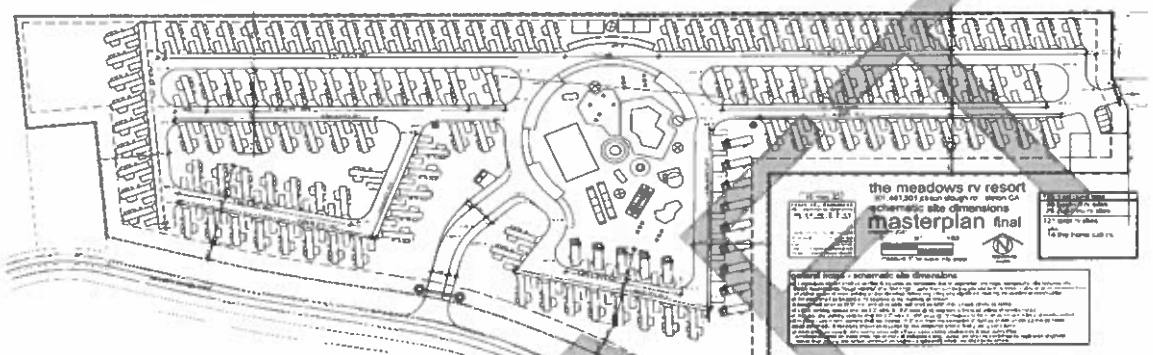
Wet well

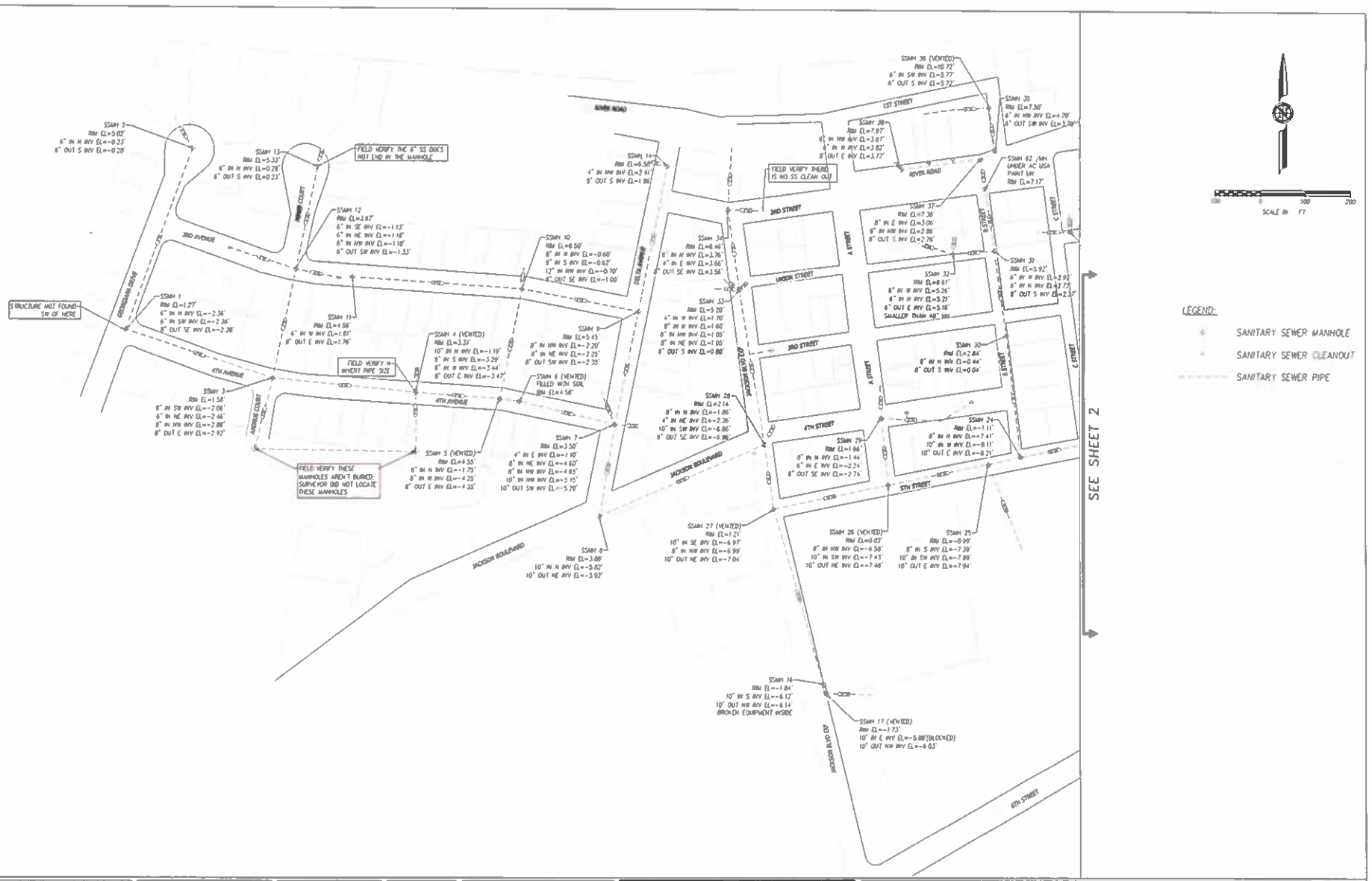
Volume of wet well	7759 gallons
Pumping from pumps	1100 gpm
Time to empty	7.05 minutes

Future Development Plans




TENTATIVE MAP
FOR
KUSHNER
LOT 1
LOT 2
LOT 3
LOT 4
LOT 5
LOT 6
LOT 7
D STREET
GAS WELL ROAD
6TH STREET
NOTES:





NO	REVISIONS	BY	DATE
1			
2			
3			
4			
5			

BENCH MARK: ELEV = XX Datum XX
DESCRIPTION
HORIZONTAL DATUM NAD 83 CALIFORNIA ZONE 2
VERTICAL DATUM NAVD 88 AS ADJUSTED TO NGS PID JS1017 ELEV=26.5 FT TO ATTAIN THE ELEVATION OF RECORD CITY OF ISLETON WASTEWATER TREATMENT PROJECT PLANS DATED 1973 SUBTRACT 1.85 FT

DESIGN BY	A. DUNAWAY
DRAWN BY	A. DUNAWAY
CHECKED BY	D. HARDEN
SCALE	1"=100'
DATE	8/16/2019
PROJ NO.	19208

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

PRINT DATE
NOT FOR CONSTRUCTION
8/16/2019

BEN EN
TRUSTED ENGINEERING ADVISORS

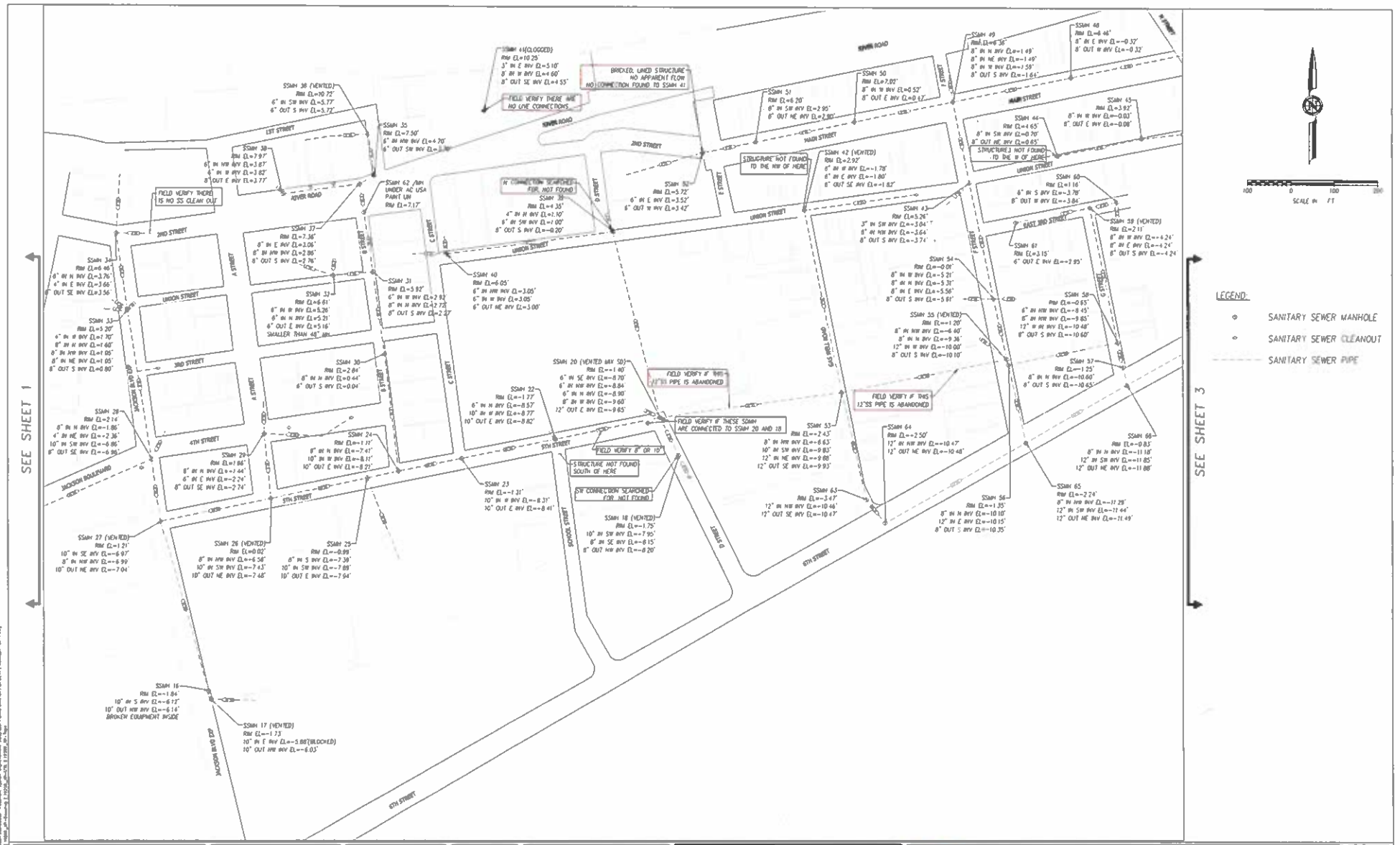
Bennett Engineering Services
1082 Sunrise Avenue, Suite 100
Roseville, California 95661
T 916.783.4100
F 916.783.4110

ISLETON WASTEWATER TREATMENT SYSTEM IMPROVEMENT STUDY

SANITARY SEWER MANHOLE MAP

CITY OF ISLETON CALIFORNIA

EX-1
1 OF 3



NO	REVISIONS	BY	DATE
1			
2			
3			
4			
5			

BENCH MARK ELEV ft DATUM ft

DESCRIPTION

HORIZONTAL DATUM NAD 83 CALIFORNIA ZONE 2
VERTICAL DATUM NAVD 88 AS ADJUSTED TO NGS PID JS1817 ELEV=26.5 FT TO ATTAIN THE ELEVATION OF RECORD CITY OF ISLETON WASTEWATER TREATMENT PROJECT PLANS DATED 1973 SUBTRACT 1.85 FT

DESIGN BY	A DUNAWAY
DRAWN BY	A DUNAWAY
CHECKED BY	D HARDEN
SCALE	1"=100'
DATE	5/16/2019
PROJ NO	19208

VERIFY SCALE

BAR IS ONE INCH ON ORIGINAL DRAWING

IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

PRINT 51"H
NOT FOR CONSTRUCTION
5.16.2019

BEN EN
TRUSTED ENGINEERING ADVISORS

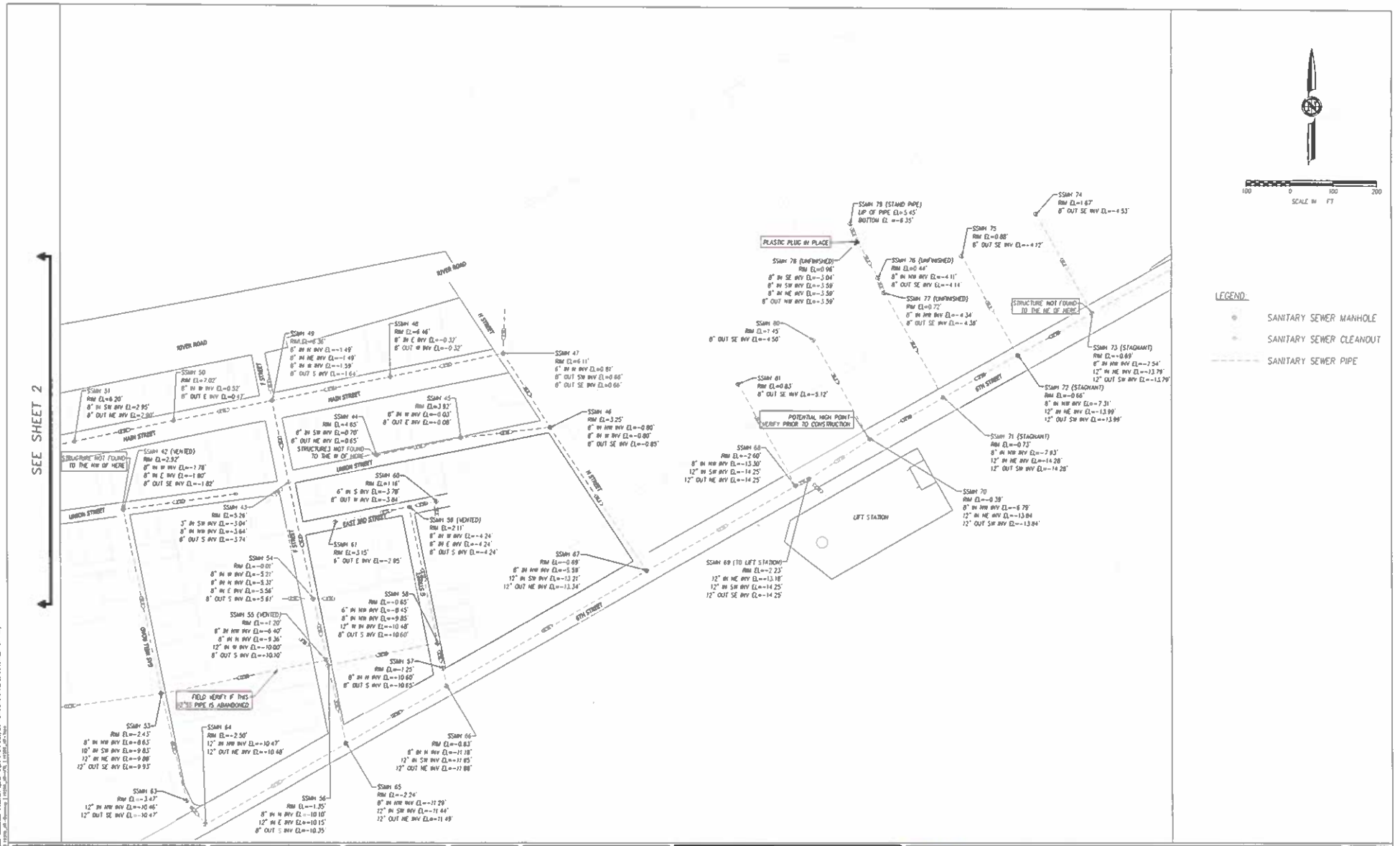
Bennett Engineering Services
1082 Sunrise Avenue, Suite 100
Roseville, California 95661
T 916.783.4100
F 916.783.4110

ISLETON WASTEWATER TREATMENT SYSTEM IMPROVEMENT STUDY

SANITARY SEWER MANHOLE MAP

CITY OF ISLETON CALIFORNIA

EX-2
2 OF 3



NO	REVISIONS	BY	DATE
1			
2			
3			
4			
5			

BENCH MARK ELEV = XX Datum XX

DESCRIPTION:

HORIZONTAL DATUM NAD 83 CALIFORNIA ZONE 2 VERTICAL DATUM NAVD 88 AS ADJUSTED TO NGS PID JS4817 ELEV=29.5 FT TO ATTAIN THE ELEVATION OF RECORD CITY OF ISLETON WASTEWATER TREATMENT PROJECT PLANS DATED 1973 SUBTRACT 1.85 FT

DESIGN BY :	A DUNAWAY
DRAWN BY :	A DUNAWAY
CHECKED BY :	D HARDEN
SCALE :	1"=100'
DATE	8/16/2019
PROJ NO	19208

VERIFY SCALE

BAR IS ONE INCH ON ORIGINAL DRAWING

IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

PRINT SUN
NOT FOR CONSTRUCTION
8.16.2019

BEN EN
TRUSTED ENGINEERING ADVISORS

Bennett Engineering Services
3082 Sunrise Avenue, Suite 100
Roseville, California 95661
T 916.783.4100
F 916.783.4110

ISLETON WASTEWATER TREATMENT SYSTEM IMPROVEMENT STUDY

SANITARY SEWER MANHOLE MAP

CITY OF ISLETON CALIFORNIA

EX-3
3 of 3

City of Isleton

City Council
Staff Report

DATE: September 12, 2023

ITEM#: 7.B

CATEGORY: Old Business

WASTEWATER TREATMENT SYSTEM IMPROVEMENT PROJECT - PLANNING GRANT COMPLETION BY BENNETT ENGINEERING; RECEIVE REPORT

SUMMARY

Bennett Engineering completed the Isleton's Wastewater Treatment System Improvement Project funded by the State Water Resources Control Board in 2017.

DISCUSSION

The Wastewater Treatment System needs and objectives include fulfilling the outstanding requirements of the Cease and Desist Order, address capacity at the Wastewater Treatment Plant to meet 100-year water year requirements, a hydraulic capacity evaluation for a 100-year water year and other system improvements (I&I, Headworks, Disposal).

The deliverables include: Assess Existing Conditions completed in December 2021, Feasibility Study completed in February 2023, Preliminary Design & Environmental documents completed in 2023, Fiscal Sustainability Plan completed in February 2023 and construction funding application completed in March 2023.

Bennett Engineering is providing a status report on this project.

FISCAL IMPACT

The State Department of Water Resources (Agreement #SWRCB0000000000180400401/Project No.: C-06-7886-110) funded this planning grant which includes involved staff management of the project and grant administration. Total amount of grant $465,000.

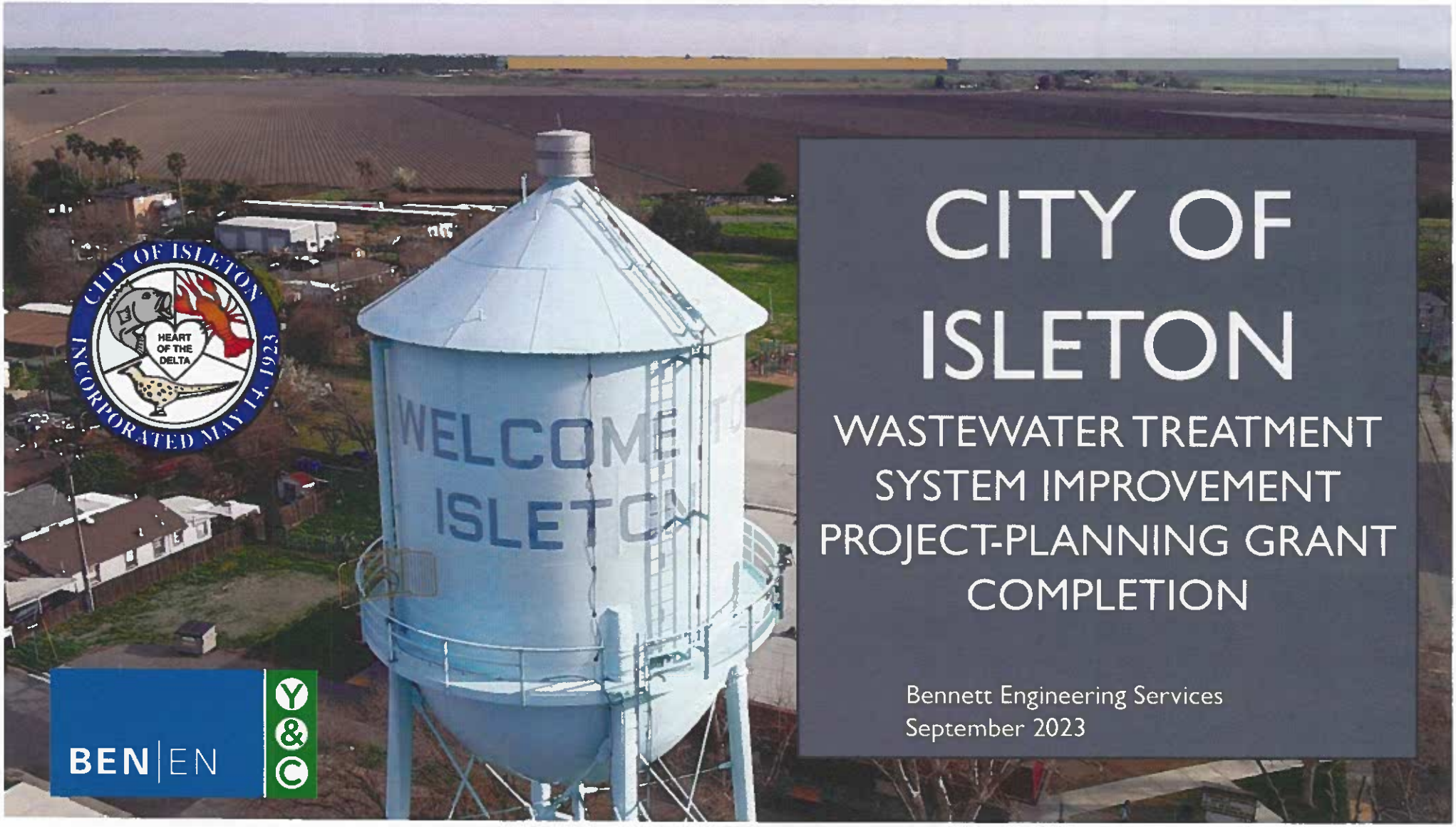
RECOMMENDATION

It is recommended City Council receive the Engineer's report on Isleton's Wastewater Treatment System Improvement Project.

ATTACHMENT

1. Isleton Wastewater Treatment System Improvement Project – Planning Grant Completion

Written by: Diana O'Brien
Reviewed by: Charles Bergson, City Manager
Submitted and prepared by: Yvonne Zepeda, City Clerk



CITY OF ISLETON

WASTEWATER TREATMENT SYSTEM IMPROVEMENT PROJECT-PLANNING GRANT COMPLETION

Bennett Engineering Services
September 2023

PROJECT NEEDS & OBJECTIVES

- FULFILL THE OUTSTANDING REQUIREMENTS OF THE CDO
- ADDRESS CAPACITY AT WWTP TO MEET 100-YEAR WATER YEAR REQUIREMENTS
- A HYDRAULIC CAPACITY EVALUATION FOR A 100-YEAR WATER YEAR
- OTHER SYSTEM IMPROVEMENTS (I&I, HEADWORKS, DISPOSAL)

BEN | EN Y&C

PROJECT STAGES & DELIVERABLES

- ASSESS EXISTING CONDITIONS COMPLETED DECEMBER 2021
  - *City of Isleton Wastewater System Improvement Project System Evaluation*
- FEASIBILITY STUDY COMPLETED FEBRUARY 2023
  - *Alternative Analysis & Feasibility Study*
- PRELIMINARY DESIGN & ENVIRONMENTAL DOCUMENTS COMPLETED APRIL 2023
  - *30% PS&E, and Environmental Documents*
- FISCAL SUSTAINABILITY PLAN COMPLETED FEDRUARY 2023
  - *Asset Inventory and Condition, Conservation Efforts and Asset Management and Fiscal Planning*
- CONSTRUCTION FUNDING APPLICATION COMPLETED MARCH 2023
  - *CWSRF Construction Funding Application*

BEN|EN Y&C

IMPORTANT FINDINGS

- GROUNDWATER INFILTRATES INTO DISPOSAL PONDS
- POND BERMS ARE "SINKING"
- LARGE QUANTITY OF SOLIDS PASSED TO THE PONDS
- WWTP PONDS DO NOT HAVE ENOUGH CAPACITY TO CONTAIN 100-YEAR WATER YEAR (18 MG)
- LARGE AMOUNTS OF I&I IN COLLECTION SYSTEM
- WATER BALANCE IS COMPLICATED DUE TO TIDAL INFLUENCES AND GROUNDWATER INFILTRATING

SETTLEMENT DUE TO FILL PLACEMENT

Profile	Fill Height (ft)	Settlement (inches)	
		After 10 years	After 50 years
Percolation Basins and Lower Wastewater Ponds	1	5	6
	2	10	14
	3	15	21
	5	22	28
Upper Wastewater Pond	1	0.7	0.8
	2	1.2	1.3
	3	2	2
	5	7	7

BEN | EN Y&C

ALTERNATIVES ANALYSIS

- PROVIDE ADEQUATE CAPACITY FOR 100-YR STORM
- PROVIDE 2-FOOT FREEBOARD
- REPORT OF WASTE DISCHARGE RESULTING IN NEW PERMIT
- REDUCTION IN MAINTENANCE COST
- INCREASED TREATMENT EFFICIENCY

ALTERNATIVE 1 – REGIONALIZATION

$21,078,457

ALTERNATIVE 2 – SYSTEM UPGRADES

$9,850,907

ALTERNATIVE 3 – DISPOSAL PONDS IMPROVEMENTS

$6,967,039

BEN|EN Y&C

SELECTED PROJECT – ALTERNATIVE 2 SYSTEM UPGRADES

SANITARY SEWER IMPROVEMENTS

- REPLACE 5,425 LF OF PIPE, 25 MANHOLES

STORM DRAIN IMPROVEMENTS

- NEW STORM DRAIN PIPE TO REMOVE ILLICIT CONNECTIONS AT MOBILE HOME PARK

WWTF UPGRADES

- HEADWORKS IMPROVEMENTS, AERATION, SCADA, AND FLOW MONITORING

Project Milestone	Estimated Completion Date
Construction Application Submitted	2/28/2023
Plans and Specifications completed	6/30/2025
Bid Advertisement	7/31/2025
Issue Notice to Proceed	8/20/2025
Complete Construction	10/31/2026

REMAINING WORK BEFORE CONSTRUCTION:

- ACCEPTANCE OF CONSTRUCTION APPLICATION
- EXECUTION OF STATE FUNDING
- COMPLETION OF CONSTRUCTION PLANS
- BIDDING AND AWARD

BEN | EN Y&C

City of Isleton

City Council
Staff Report

DATE: September 12, 2023

ITEM#: 7.C

CATEGORY: Old Business

TO RESCIND CITY OF ISLETON DECLARATION STATE OF EMERGENCY RESULTING FROM WINTER STORMS OF JANUARY 7, 2023 TO MARCH 28, 2023

SUBJECT:

Pursuant to California Government Code Section 8630 (a) A local emergency may be proclaimed only by the governing body of a city, county, or city and county, or by an official designated by ordinance adopted by that governing body.

DISCUSSION

The County of Sacramento declared local emergency due to the Severe Winter Storms of December 2022. Governor Newsom signed Proclamation of a State of Emergency due to Winter Storms on January 4, 2023. The President of the United States declared State of Emergency in the State of California specifically identifying the County of Sacramento on January 8 2023.

The volume and rate of active water flows through the Sacramento River, the Georgiana Slough and the Delta Region groundwater, has resulted in the flooding of roads, loss of utilities, impairment of infrastructure, thereby prompting local authorities to alert the County and State emergency agencies.

FISCAL IMPACT

There is no fiscal impact.

RECOMMENDATION

That City Council rescind the Declaration State of Emergency resulting from Winter Storms.

ATTACHMENTS
· Declaration State of Emergency dated January 8, 2023 and March 9, 2023.

Prepared and Submitted by: Deputy City Clerk, Yvonne Zepeda

Reviewed by: City Manager, Charles Bergson ___

CITY OF ISLETON

DECLARATION STATE OF EMERGENCY

A DECLARATION BY THE MAYOR OF THE CITY OF ISLETON OF STATE OF EMERGENCY RESULTING FROM WINTER STORMS

WHEREAS, pursuant to California Government Code Section 8630 (a) A local emergency may be proclaimed only by the governing body of a city, county, or city and county, or by an official designated by ordinance adopted by that governing body; and

WHEREAS, the County of Sacramento declared local emergency due to the Severe Winter Storms of December 2022; and

WHEREAS, Governor Newsom signed Proclamation of a State of Emergency due to Winter Storms on January 4, 2023; and

WHEREAS, the President of the United States declared State of Emergency in the State of California specifically identifying the County of Sacramento on January 8, 2023.

WHEREAS, the volume and rate of active water flows through the Sacramento River, the Georgiana Slough, and the Delta Region groundwater, has resulted in the flooding of roads, loss of utilities, impairment of infrastructure, thereby prompting local authorities to alert the County and State emergency agencies; and

WHEREAS, this local emergency condition commenced on January 7, 2023; and

WHEREAS, the City of Isleton has been providing ongoing operational response activities and continuing area damage assessments due to the 2023 Winter storms, particularly in sewer system ponds and areas of the City where additional impact, have diverted local resources from day to day operations, and the impacts of these storms are beyond the control of personnel, services, equipment and budget of the City; and

WHEREAS, the City of Isleton must use all preventive measures, which will require access to available services, personnel, equipment, and facilities, to respond to the storm and prepare and carryout plans for the protection of persons and property within the City due to this emergency, including actual or threated existence of conditions of disaster or extreme peril including epidemics, and

WHEREAS, further damages are anticipated as ongoing precipitation from multiple, continuing and projected storm and events are anticipated to result in sustained runoff inflow from rivers, streams and channels which continue to impact Isleton; and

WHEREAS, there may be extensive damages to homes, businesses, agricultural crops, products, large animals and livestock.

NOW, THEREFORE, the Mayor of the City of Isleton, in accordance with the authority pursuant to Isleton Ordinance 230 and Isleton Municipal Code Chapter 5.40.060 finds that conditions to the health and safety of persons and property within the City of Isleton are threatened and hereby declares a State of Emergency in the City of Isleton.

Mayor Pamela Bulahan

Date: Jan 19, 2023

ATTEST:

By: Yvonne Zepeda

Yvonne Zepeda, Deputy City Clerk

CITY OF ISLETON

DECLARATION STATE OF EMERGENCY

A DECLARATION BY THE MAYOR OF THE CITY OF ISLETON OF STATE OF EMERGENCY RESULTING FROM SEVERE STORMS OF MARCH 2023

WHEREAS, pursuant to California Government Code Section 8630 (a) A local emergency may be proclaimed only by the governing body of a city, county, or city and county, or by an official designated by ordinance adopted by that governing body; and

WHEREAS, the Deputy Director of Emergency Services of the County of Sacramento find that conditions of extreme peril to the safety of persons and property will arise within the County of Sacramento, from imminent and extreme winter storms that will result in widespread flooding, extraordinary stress upon levees, persistent levee overtopping, local flooding of communities and local infrastructure, and will exhaust local resources and budgets, and cause other critical conditions; and

WHEREAS, the City of Isleton has been providing ongoing operational response activities and continuing area damage assessments due to the severe storms in March, particularly in sewer system ponds and areas of the City where additional impact, have diverted local resources from day to day operations, and the impacts of these storms are beyond the control of personnel, services, equipment and budget of the City; and

WHEREAS, this local emergency condition commenced on March 9, 2023; and

WHEREAS, the City of Isleton must use all preventive measures, which will require access to available services, personnel, equipment, and facilities, to respond to the storm and prepare and carryout plans for the protection of persons and property within the City due to this emergency, including actual or threated existence of conditions of disaster or extreme peril including epidemics, and

WHEREAS, further damages are anticipated as ongoing precipitation from multiple, continuing and projected storm and events are anticipated to result in sustained runoff inflow from rivers, streams and channels which continue to impact Isleton; and

WHEREAS, there may be extensive damages to homes, businesses, agricultural crops, products, large animals and livestock.

BE IT FURTHER PROCLAIMED AND ORDERED, the City Manager of the City of Isleton is authorized to use and employ any of the property, services, personnel and resources of the County to help mitigate this emergency, and may request Federal, State, and other public agencies provide mutual aid, including personnel, equipment and other available resources, to assist the City during this emergency, and

BE IT FURTHER PROCLAIMED AND ORDERED, the local emergency shall remain in effect for the next seven (7) days unless it has been ratified and extended by the Isleton City Council, who shall review the need for continuing the local emergency at least once every 60 days, and shall terminate the local emergency at the earliest possible date that conditions warrant.

NOW, THEREFORE, the Mayor of the City of Isleton, in accordance with the authority pursuant to Isleton Ordinance 230 and Isleton Municipal Code Chapter 5.40.060 finds that conditions to the health and safety of persons and property within the City of Isleton are threatened and hereby declares a State of Emergency in the City of Isleton.

Mayor Pamela Bulahan

Date: March 28, 2023

ATTEST:

By: Yvonne Zepeda

Yvonne Zepeda, Deputy City Clerk

City of Isleton

City Council
Staff Report

DATE: September 12, 2023

ITEM#: 7.D

CATEGORY: Old Business

CITY COUNCIL FESTIVAL COMMITTEE GUIDELINES

SUMMARY

Given the achievement and the return the Crawdad Festival to Isleton, the Council has directed the formation a Festival Committee to facilitate the presentation of all festivals and special events in Isleton.

DISCUSSION

It is recommended that the City Council form a Festival Committee and provide it direction and objectives.

It is suggested that the Committee be comprised of the following members: a Councilmember, a Resident, Main Street Business representative, the Chamber of Commerce, and one each representatives from City Staff and the Fire Department.

The charge to the Committee will be along the following criteria, to be produced in order and submitted for Council to approve before moving to the next criterion:

1. Resident Plan – presents methods for preserving access to residents during the event and security for residential neighborhoods. This is to include a map designating the affected neighborhoods.
2. Event Land Use Plan – Presents plan for all activities associated with event including vendors, entertainment, adult zone, event participants parking and loading. Also to be addressed are traffic plan and city wide parking plan and production an Event Map for all key activities
3. Festival Launch and Promotion – Presents the plan for starting the promotion the Event.
4. Plan for compliance with Isleton Municipal Code sections 4.28 Special Events and 3.36 Excise Tax on Short-Term Parking

FISCAL IMPACT

There is no fiscal impact associated with this item.

RECOMMENDATION

Staff recommends City Council adopt the Isleton Festival Committee Guidelines and direct that it be implemented.

Reviewed by: City Manager, Charles Bergson

Submitted and prepared by: Deputy City Clerk, Yvonne Zepeda

City of Isleton

City Council
Staff Report

DATE: September 12, 2023

ITEM#: 8.A

CATEGORY: New Business

NOTICE OF CAL-WASTE REFUSE REUSE AND RECYCLE RATE INCREASE TO START OCTOBER 1, 2023.

SUMMARY

Following the provisions of Section 3.02 of the Solid Waste Collection Agreement between California Waste Recovery Systems and the City of Isleton, they are submitting herein their rate adjustment notification. These rates will be effective beginning October 1, 2023. This is the fourth rate adjustment by Cal-Waste since the contract executed in 2017. Cal-Waste did not apply for the 2018 rate adjustment.

In accordance with Section 3.02.B of the Agreement, they are to use the Water and Sewer and Trash Collection Services Index (CUSR0000SEHG), as established by the United States Department of Labor Bureau of Labor Statistics, and base their percentage change to that of the index for the next 12-month period ending March. The provisions state that the annual rate adjustment shall not exceed four percent (4.00%) in any given year.

Council may wish to conduct a public hearing on this rate increase.

DISCUSSION

Staff recommends City Council review rates and give direction to staff. Contract with Cal-waste Recovery Systems, LLC terminates September 30, 2024.

FISCAL IMPACT

City received adjustment notice from Cal-Waste Recovery System, LLC for 4.00% increase for services.

RECOMMENDATION

Staff recommends City Council review rates and give direction to staff.

ATTACHMENTS

A. Letter from Cal-Waste dated May 25, 2023
B. Water and Sewer and Trash Collection Services Index
C. Exhibit A. Res/Comm. & Roll off Services Rate Schedule
D. Exhibit A. City of Isleton Special Services Rate Schedule

Reviewed by City Manager, Charles Bergson, P.E.
Prepared and Submitted by: Yvonne Zepeda, Deputy City Clerk

CAL-WASTE
RECOVERY SYSTEMS

May 25, 2023

Charles Bergson, City Manager
City of Isleton
P.O. Box 716
Isleton, CA 95641

Dear Mr. Bergson:

Following the provisions of Section 3.02 of the Solid Waste Collection Agreement between California Waste Recovery Systems and the City of Isleton, we are submitting herein our rate adjustment notification. These adjusted rates will be effective beginning October 1, 2023. This will be the fifth rate adjustment by Cal-Waste since the contract execution in 2017; Cal-Waste did not apply for the 2018 rate adjustment.

In accordance with Section 3.02.B of the Agreement, we are to use the Water and Sewer and Trash Collection Services Index (CUSR0000SEHG), as established by the United States Department of Labor Bureau of Labor Statistics and base our percentage change to that of the index for the 12-month period ending March. Additionally, the provisions state that the annual rate adjustment shall not exceed four percent (4%) in any given year. According to the above referenced BLS index for the period March 2023 over March 2022, the percentage change calculates to be 5.38%. Since agreement provisions state the rate shall not exceed 4.00%, all residential and commercial rates going into effect on October 1, 2023 shall have a **4.00%** increase over the October 1, 2022 rates, a $1.59 increase to the 64 Gallon Trash Cart rate. Also, in accordance with Section 3.02B, the excess .02% from the 2022 rate adjustment and the 1.38% from the 2023 adjustment will be carried by Cal-Waste to be applied on a future rate increase.

On January 1st, 2022, California SB1383 legislation became effective regarding the mandatory collection of residential and commercial organic waste (including food waste). The purpose of this legislation is to reduce Greenhouse Gas Emissions and Short-Lived Climate Pollutants. Effective January 1, 2022 Isleton was granted a Department Approved Low Population Waiver that waives the organic waste collection requirements that are outlined in Article 3 (14 CCR 18984 – 18984.14) and is valid until December 31, 2026. Therefore, the Isleton collection programs do not yet include new mandatory organics programs.

In accordance with Section 3.02.F of the Agreement, the City Manager is to review our rate application to confirm the adjustments are being made in accordance with the Agreement, prior to being implemented by Hauler. We request that you complete your review by August 31st so that we can notify our customers with their September billing. Thank you in advance for your prompt attention to this rate application. Please advise if you would like us to make a presentation to the City Council and let me know if you have any questions.

Sincerely,

Rudy Vaccarezza
Owner

California Waste Recovery Systems, LLC

2023 Isleton Rate Adjustment

Series Id: CUSR0000SEHG https://data.bls.gov/cgi-bin/srgate
Seasonally Adjusted
Series Title: Water and sewer and trash collection services in U.S.
Area: U.S. city average
Item: Water and sewer and trash collection services
Base Period: DECEMBER 1997=100
Years: 2021 to 2023
Publish Date: 5/26/2023

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2021	257.514	258.612	259.153	259.546	259.815	260.638	261.759	262.627	263.785	264.293	264.485	265.401
2022	267.913	269.366	269.568	270.382	270.379	271.159	272.243	273.188	274.523	276.684	277.156	278.018
2023	281.078	283.302	284.06	285.009								

Current Year Rate Increase: **5.38%**

EXHIBIT A: CITY OF ISLETON
RESIDENTIAL, COMMERCIAL & ROLLOFF SERVICES RATE SCHEDULE
EFFECTIVE OCTOBER 1, 2023

Residential Waste Cart Services	Current Customer Rate	New Customer Rate
38 Gallon Trash Cart, 96 Gallon Recycle Cart, 96 Gallon Yard Cart	$35.31	$36.72
64 Gallon Trash Cart, 96 Gallon Recycle Cart, 96 Gallon Yard Cart	$39.72	$41.31
96 Gallon Trash Cart, 96 Gallon Recycle Cart, 96 Gallon Yard Cart	$49.65	$51.63
Additional 96 Gallon Recycling Cart or Yard Cart	$7.72	$8.03

Commercial Trash Services	Current Customer Rate	New Customer Rate
38 Gallon Trash Cart	$35.31	$36.72
64 Gallon Trash Cart	$39.72	$41.31
96 Gallon Trash Cart	$49.65	$51.63
1 YD 1X Week Trash Service	$97.09	$100.97
1 YD 2X Week Trash Service	$198.60	$206.54
2 YD 1X Week Trash Service	$198.60	$206.54
2 YD 2X Week Trash Service	$386.16	$401.60
3 YD 1X Week Trash Service	$286.86	$298.34
3 YD 2X Week Trash Service	$579.24	$602.41
4 YD 1X Week Trash Service	$397.19	$413.08
4 YD 2X Week Trash Service	$661.99	$688.47
5 YD 1X Week Trash Service	$386.16	$401.60
5 YD 2X Week Trash Service	$717.15	$745.84
6 YD 1X Week Trash Service	$441.32	$458.98
6 YD 2X Week Trash Service	$772.32	$803.21

Commercial Recycling Services	Current Customer Rate	New Customer Rate
96 Gallon Recycling Cart	$13.24	$13.77
1 YD 1X Week Recycle Service	$82.53	$85.83
1 YD 2X Week Recycle Service	$168.80	$175.55
2 YD 1X Week Recycle Service	$168.80	$175.56
2 YD 2X Week Recycle Service	$328.24	$341.37
3 YD 1X Week Recycle Service	$243.83	$253.58
3 YD 2X Week Recycle Service	$492.36	$512.05
4 YD 1X Week Recycle Service	$337.62	$351.13
4 YD 2X Week Recycle Service	$562.69	$585.20
5 YD 1X Week Recycle Service	$328.24	$341.37
5 YD 2X Week Recycle Service	$609.58	$633.96
6 YD 1X Week Recycle Service	$375.13	$390.14
6 YD 2X Week Recycle Service	$656.48	$682.73

EXHIBIT A: CITY OF ISLETON
RESIDENTIAL, COMMERCIAL & ROLLOFF SERVICES RATE SCHEDULE
EFFECTIVE OCTOBER 1, 2023

Commercial Organics Services	Current Customer Rate	New Customer Rate
64 Gallon Food Waste Cart	$165.85	$172.48
64 Gallon Food Waste Cart 2X	$331.69	$344.96
1 YD 1X Week Food Waste Service	$221.85	$230.72
1 YD 2X Week Food Waste Service	$443.69	$461.44
2 YD 1X Week Food Waste Service	$255.23	$265.44
2 YD 2X Week Food Waste Service	$510.46	$530.88
3 YD 1X Week Food Waste Service	$292.92	$304.64
3 YD 2X Week Food Waste Service	$585.84	$609.28

Rolloff Bin Services	Current Customer Rate	New Customer Rate
Delivery Charge	$261.34	$271.79
Removal or Exchange Charge	$470.87	$489.71
Disposal Charge, per Ton	$62.17	$64.66
Diversion Charge, per Ton	$65.62	$68.25

EXHIBIT A: CITY OF ISLETON
SPECIAL SERVICES RATE SCHEDULE
EFFECTIVE OCTOBER 1, 2023

Special Services	Current Customer Rate	New Customer Rate
Extra service on scheduled service day (per dump). An extra service on an unscheduled service day is not available.	$11.51	$11.97
On-call bulky item pickup (per cubic yard, per pickup)	$20.73	$21.56
Backyard Charge (per household, per month)	$18.42	$19.16
Disabled Backyard Charge	$0.00	$0.00
The City of Isleton has provided an exemption for handicapped and physically impaired residents. Customers that need this exemption must submit a letter from their physician attesting to their physical impairment and length of the impairment to the City. If there are others residing at the same premise that are not physically impaired a charge for backyard service will be applied.		
Key charges (per container, per month)	$0.00	$0.00
Gate Service charge (per container, per month)	$0.00	$0.00
Long Walk/Push charges Per container, per month	$0.00	$0.00
Residential Account Activation charge	$0.00	$0.00
Commercial Account Activation charge	$0.00	$0.00
Residential Deliveries	$0.00	$0.00
Commercial Deliveries	$0.00	$0.00
Residential restart - with or without cart delivery	$23.03	$23.95
An administrative charge will be applied when a service restart is requested after the account has been closed due to non-payment.		
Commercial restart - with or without container delivery	$23.03	$23.95
An administrative charge will be applied when a service restart is requested after the account has been closed due to non-payment.		
Cart or Container Replacement Fee	$57.57	$59.88
A service charge may be applied for each cart or container that is lost or damaged.		
Contamination Charge	$11.93	$12.41
On the third reminder or thereafter, a contamination charge will be applied to any recycling or green waste cart that is contaminated with unacceptable items.		
Residential Overage Charge (lid will not fully close on cart/can due to overfull) per occurrence. Driver does not clean up material on ground	$5.76	$5.99
Commercial Overage Charge (lid will not fully close on cart/can due to overfull) per occurrence. Driver does not clean up material on ground	$40.30	$41.91
Bad/Return check fee (per check):	$28.78	$29.94
Administrative charge will be applied when banks return payment checks due to insufficient funds.		
Delinquent (late payment) Fee*	See below	See below
A non-payment penalty will be applied when the customer fails to make a timely payment with 30 days of the invoice due date. Commencing sixty days following the delinquency date the amount of the delinquency, not including the penalty, shall be charged interest at a rate of 18% pursuant to Section 18 of the contract.		

City of Isleton

City Council
Staff Report

DATE: September 12, 2023

ITEM# 8.B

CATEGORY: New Business

ISLETON MAIN STREET OMNIBUS REPORT

SUMMARY

The following is an overview of various programs, agencies, and resources with interests in the City's central commercial district.

DISCUSSION

[Omnibus, definition – "of, relating to, or providing for many things at once"]

The following is a brief summary of the range of projects, organizations, and studies currently underway for the City's business district - Second Street/Highway 10 and Main Street, the City's commercial corridor. This is being brought forth for Council's information and to identify the need to establish a broader view and plan for the City's commercial corridor.

Studies

- Main Street Redesign and Revitalization Plan (CalTrans Sustainable Commu Planning grant)
- Main Street Infill Study (SACOG- Green Means Go grant)
- General Plan Update (SACOG)
- City Zoning Code Update (SACOG)
- InterCity Transit Feasibility study (pending application)
- Waterfront Boat Launch (State Dept Boating & Waterways)
- Isleton Main Street Design Project, 2021 (SACOG Rural Tech Asst grant)

Projects

- Main Street Rehab & Lighting (SACOG, SHRA)
- Traffic Improvements (State Highway Safety Infra Project)
- Pedestrian Improvements (State Highway Safety Infra Project)
- Main Street Park Restroom (County ARPA)
- Green Zone Parking (City)
- Preferential Permit Parking District (City)
- State Parks Lease Renewal for Waterfront (State Parks)
- Certified Local Government status from Office of Historical Preservation
- Main Street Marketing Plan (pending)
- Crawdad Festival 2024

Agencies/Organizations

- Isleton Historic Review Board
- Isleton Historical Society
- Isleton Chamber of Commerce
- Isleton Museum

This is a large number of projects, activities and agencies with significant interests in the commercial district. This phenomena - large amount of public action projects/interests without an overall "blueprint" - is common to midsize and smaller cities. In large part this happens from a combination of a profession flawed with a lack of education in public planning with the tendencies of public agencies to cast for any grant that crossing its path.

This item is brought to the Council's attention to inform, prepare to move forward, and provide direction and pace to the City and staff. As can be seen, with this many moving parts, a larger perspective and view is needed. Staff plans to establish this broad perspective through large discussions with these groups, agencies, and consultants and return to Council with an organized Commercial Corridor Plan. This Plan will be presented in a subsequent Council report within three months.

FISCAL IMPACT: There is no fiscal impact associated with this report.

RECOMMENDATION: None; for Council information and discussion.

ATTACHMENT:

By: Charles Bergson, City Manager

City of Isleton

DATE: September 12, 2023

Special City Council

ITEM#: 8.C

Staff Report

CATEGORY: New Business

ASSEMBLY CONSTITUTIONAL AMENDMENT 13

SUBJECT

Presentation by Councilmember David Kent on (ACA) Assembly Constitutional Amendment 13, Voting thresholds.

SUMMARY

Councilmember David Kent will provide a summary.

FISCAL IMPACT

There is no fiscal impact with this action.

RECOMMENDATION

Discussion and consider action to support, not support, or take no action.

ATTACHMENTS

- LEGISCAN Bill Text: CA ACA13

Reviewed by: Charles Bergson, City Manager

Submitted and prepared by: Yvonne Zepeda, City Clerk