



# SOLANO COUNTY

## Land Use and Transportation Committee

**Meeting of May 17, 2023 at 10:00 a.m.  
675 Texas Street 6<sup>th</sup> Floor Conference Room 6003**

The County of Solano does not discriminate against persons with disabilities. If you wish to participate in this meeting and you will require assistance in order to do so, please call the Department of Resource Management at (707) 784-6765 at least 24 hours in advance of the event to make reasonable arrangements to ensure accessibility to this meeting.

**ATTENTION:** Please see the instructions below for telephonic participation options for the meeting.

To submit comments verbally from your phone, you may do so by dialing: 1-323-457-3408 and using Access Code 562 033 934# on your phone. Once entered in the meeting, you will be able to hear the meeting and will be called upon to speak during the public speaking period.

### **- A G E N D A -**

- 1. Public Comment:** (*This is the opportunity for members of the public to address the committee on matters not listed on the agenda.*)
- 2. Discussion items:**
  - A. Presentation by City of Dixon on Northeast Quadrant (NEQ) Drainage
  - B. Update on proposed County road standards
- 3. Committee Member Comments**
- 4. Adjournment**

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**DEPARTMENT OF RESOURCE MANAGEMENT**



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**MEMORANDUM**

**DATE:** May 15, 2023  
**TO:** Land Use and Transportation Committee  
**FROM:** Terry Schmidtbauer, Director of Resource Management *Terry Schmidtbauer*  
**SUBJECT:** May 17, 2023, Land Use and Transportation Committee (LUTC) Meeting Background Information

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**1. Agenda item #2A: Presentation by City of Dixon on Northeast Quadrant (NEQ) Drainage**

Staff from the City of Dixon (City) will present their current proposal to address stormwater drainage in the City's Northeast Quadrant Area (NEQ) and answer questions of LUTC members with the goal of obtaining support from the County for the City's drainage plan. The presentation will provide background, goals, regional drainage options and next steps. The two options being considered by the City include:

Option 1: Three to four drainage ponds will be constructed within the City for stormwater, which will then be transported through a new channel in the unincorporated area to Putah Creek.

Option 2: Stormwater basin(s) will be constructed in the unincorporated area with the possibility of partnering with the County for potential regional benefits for stormwater capture and groundwater recharge efforts.

Attachment 2A.1: West Yost Technical Memorandum  
Attachment 2A.2: City of Dixon Northeast Quadrant PowerPoint presentation

**2. Agenda item #2B: Update on proposed County road standards**

The Road Improvement Standards & Land Development Requirements (RIS), last updated by the Board on February 26, 2006, provide supplements to various County codes related to roads and development. These Standards offer staff and developers a local agency toolbox for design, construction, and permitting of subdivisions, use permits, and both public and private roads. The aged content of the existing RIS is inadequate to deal with many current development issues.

On November 20, 2020, the Department of Resource Management brought to the Land Use and Transportation Committee (LUTC) a series of proposed changes to consider for updating and amending the RIS. During that discussion, it was noted that the State had just proposed new State Responsibility Area (SRA) Fire Code requirements for roads and accesses given the recent fire disasters. A wait and see approach was taken by the Department since the new SRA requirements were anticipated to be significant. Since our last meeting, the State approved the updated Fire Safe Regulations which became operative April 1, 2023 (see State Minimum Fire Safe Regulations

attached). New SRA fire hazard severity areas are anticipated to be updated in the future, but this will not likely significantly affect any RIS changes.

The Department plans to bring forward a new draft RIS to the Board that will address various issues and address any discrepancies with the new Fire Safe Regulations (see Summary of Proposed Updates attached). These changes will address ingress/egress standards, Vehicle Miles Traveled standards related to CEQA determinations (see Department Vehicle Miles Traveled Policy attached), and other public and private road standards.

Staff will provide an overview of the changes and is seeking direction from the LUTC.

- Attachment 2B.1: Summary of Proposed Updates to Consider for Road Improvement Standards
- Attachment 2B.2: Department Vehicle Miles Traveled Policy
- Attachment 2B.3: State Minimum Fire Safe Regulations



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## TECHNICAL MEMORANDUM

DATE: April 27, 2023

Project No.: 309-60-20-08

SENT VIA: EMAIL

TO: Deborah Barr, City of Dixon

CC: NA

FROM: Doug Moore, PE, RCE #58122, West Yost Associates

REVIEWED BY: Melissa Duffy, PE, RCE #87217, West Yost Associates

SUBJECT: City of Dixon Northeast Quadrant Drainage Plan (Including the Milk Farm) and the Regional Drainage Plan



This Technical Memorandum (TM) summarizes the City of Dixon (City) Northeast Quadrant Drainage Plan (NEQDP, including drainage for the Milk Farm) and describes how the NEQDP integrates with the Tremont 3 Watershed Regional Drainage Plan (RDP). This TM includes the following sections:

- NEQDP and RDP Goals
- NEQDP Description
- RDP Options
- Next Steps

### NEQDP AND RDP GOALS

The goals for the NEQDP and RDP are listed below:

- Reduce regional flooding
- Support development of the NEQ, the Milk Farm, and the Solano County's Agricultural Industrial Services Area (AISA)
- Address NEQ drainage with drainage improvements located within the City Limits.
- Continue the RDP collaboration and partnership to achieve the following for the RDP:
  - Minimize impacts to agriculture
  - Provide additional water to Putah Creek near the fish flow monitoring point at Interstate-80 (I-80).
  - Develop an RDP that is acceptable to all involved agencies.

## NEQDP DESCRIPTION

The NEQDP is shown on Figure 1. On this figure:

- The existing retention basins are shown in solid blue, and these basins are to remain in place.
- The proposed detention basins are shown with blue outlines. These basins are sized to achieve a discharge rate of 0.011 cubic feet per second (cfs) per acre in the 100-year, 4-day design storm, which is consistent with the discharge rate goal established by the Dixon Regional Watershed Joint Power Authority (DRWJPA) for the Tremont 3 Watershed.
- The open channels are shown with green lines. The channels are sized to convey the off-site flow from the South Upper Tremont 3 Watershed during the 100-year, 4-day design storm. The channel south of I-80 both conveys the flow and provides some detention storage and peak flow reduction. The level of peak flow reduction from the channel will be determined through future hydraulic modeling of the NEQDP.
- The trunk storm drain from the channel to the Union Pacific Railroad ditch is shown in light blue. The size of this storm drain will be based on the level of peak flow reduction achieved from the open channel on the south side of I-80.

The NEQDP was developed to:

- Preclude drainage impacts from the NEQ and Milk Farm developments.
- Achieve the DRWJPA flow goals for the NEQ and Milk Farm parcels.
- Convey the off-site flow from the agricultural areas upstream of the Milk Farm Site through the NEQ and Milk Farm to a location where the off-site flow can discharge to the RDP Option 1 channel.
- Be supported by, funded by, and constructed by the NEQ and Milk Farm developers.
- Serve as a first phase of the RDP options.

## RDP OPTIONS

There are two RDP options, including:

- Option 1 - Putah Creek Tributary Channel (Preferred Option). This option is shown as the red line on Figure 2. It includes a new open channel starting at the outlet of the NEQDP trunk storm drain and flowing northeast to Putah Creek. This option would collect the flow from the NEQDP, the Tremont 3 Watershed north of the UPRR, and the Tremont 1 Watershed north of the UPRR. The capacity and size of the channel have not yet been determined, but should have a capacity of at least 310 cfs at the NEQ. The channel should also include capacity for the runoff from the AISA. The capacity will increase moving downstream to the northeast as additional tributary areas discharge into the channel. The north half (approximately) of the channel will require levees and potentially pump stations to prevent flooding of the adjacent agricultural land. The channel could include a westward extension just south of Putah Creek so that the discharge from the channel to Putah Creek occurs at I-80, where the Putah Creek fish flow monitoring occurs. The cost of the channel has not yet been estimated.
- Option 2 – Upper Tremont 3 Watershed Basin(s). This option includes one or more detention basins in the South Upper Tremont 3 Watershed. The locations of the basins have

not been determined. The basins would provide flood reduction and could also provide groundwater recharge. The basins would result in the loss of productive agricultural land, and consequently Option 2 would only be implemented if Option 1 cannot be implemented.

Both RDP options can be integrated and coordinated with the NEQDP. If Option 1 could be constructed prior to the construction of the NEQDP facilities, then some NEQDP facilities could be downsized or eliminated and the Putah Creek Channel could be upsized, which would allow some of the saved construction costs to be contributed to the construction of the Putah Creek Tributary Channel. Option 2 does not provide the potential to downsize or eliminate the NEQDP facilities.

## **NEXT STEPS**

The next steps of implementing the NEQDP and RDP are listed below:

- Obtain support for the NEQDP and the RDP options from:
  - Solano County
  - Solano County Water Agency
  - Dixon Resource Conservation District
  - Reclamation District 2068
  - Maine Prairie Water District
  - Dixon Regional Watershed Joint Powers Authority
- Continue working with the NEQ and Milk Farm developers to implement the NEQDP at a schedule consistent with their development requirements, preferable constructing the initial facilities in the summer of 2024.
- Perform hydraulic modeling of the NEQDP and RDP options to identify the final sizes of all the drainage facilities and to verify there are no drainage impacts.
- Identify the agency that will own, operate, and maintain the RDP facilities.
- Design the drainage facilities.
- Acquire the land and easements for the drainage facilities that will be owned by public agencies.
- Construct the facilities.
- Operate and maintain the facilities.

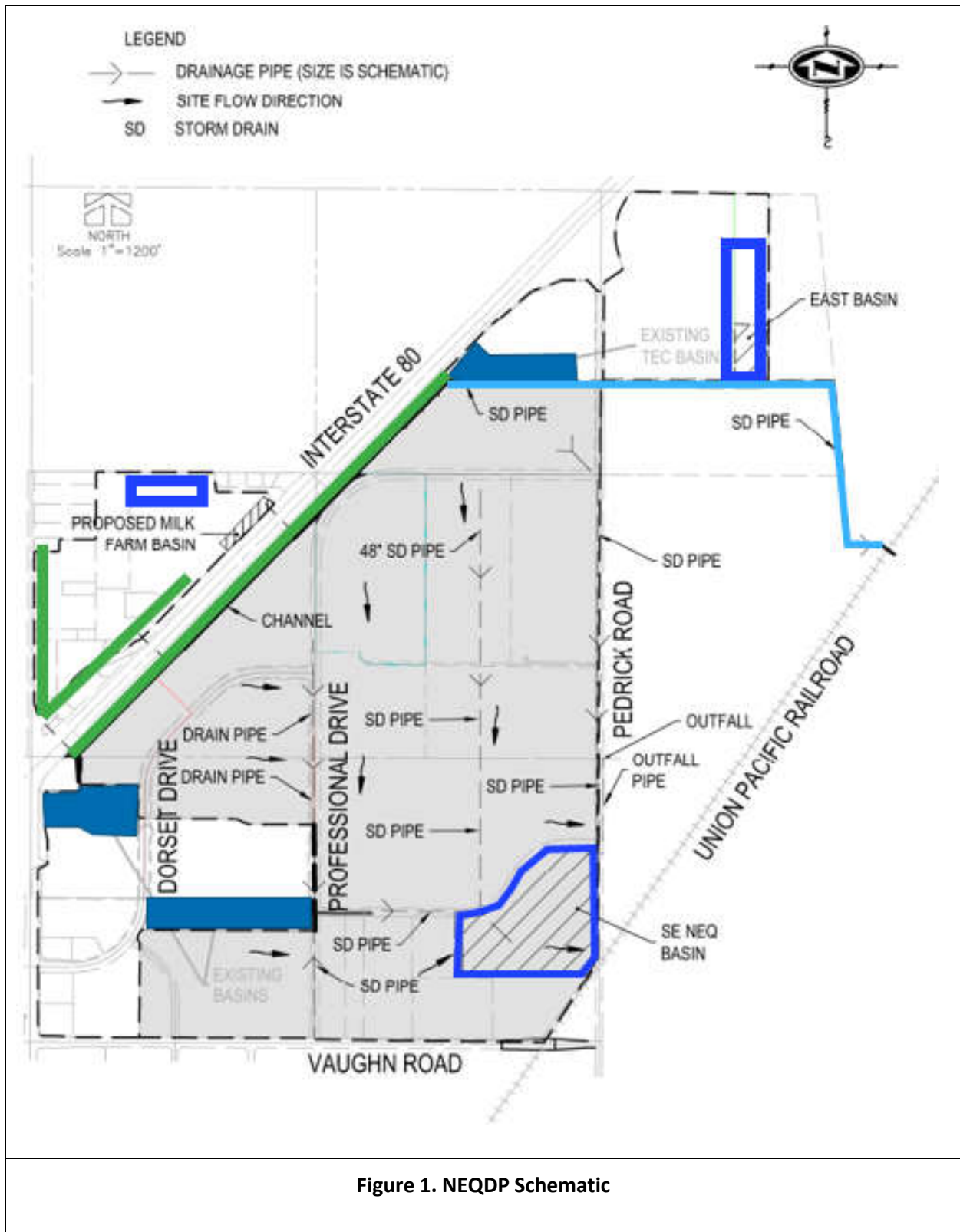


Figure 1. NEQDP Schematic

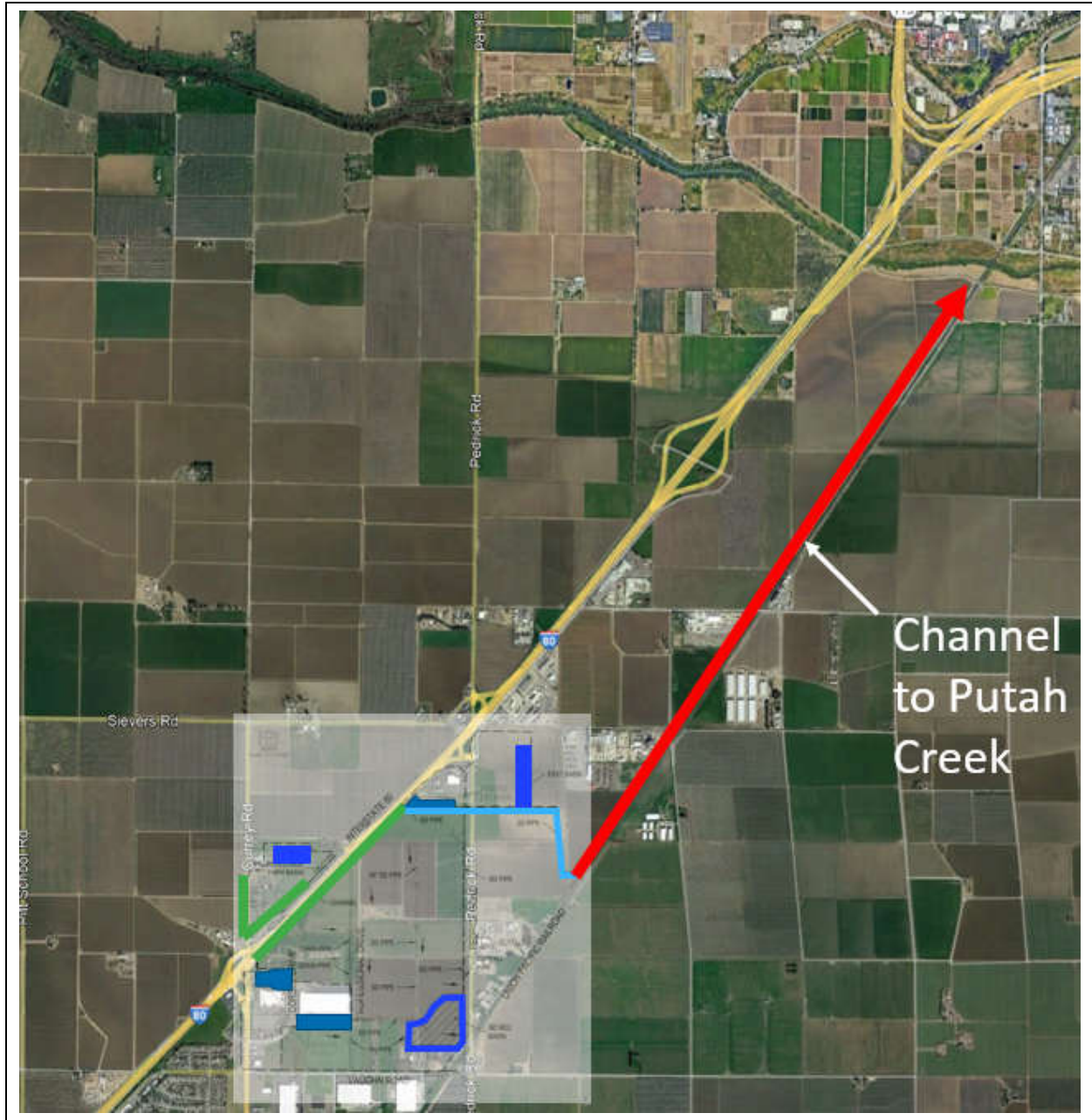


Figure 2. RDP Option 1 (Preferred Option)





## Attachment 2A.2

Solano County Land Use and Transportation Committee

# City of Dixon Northeast Quadrant (NEQ) Drainage Presentation

May 2023

**Initiated By: Deborah Barr, PE**

**City of Dixon**

**City Engineer/Director of Utilities**

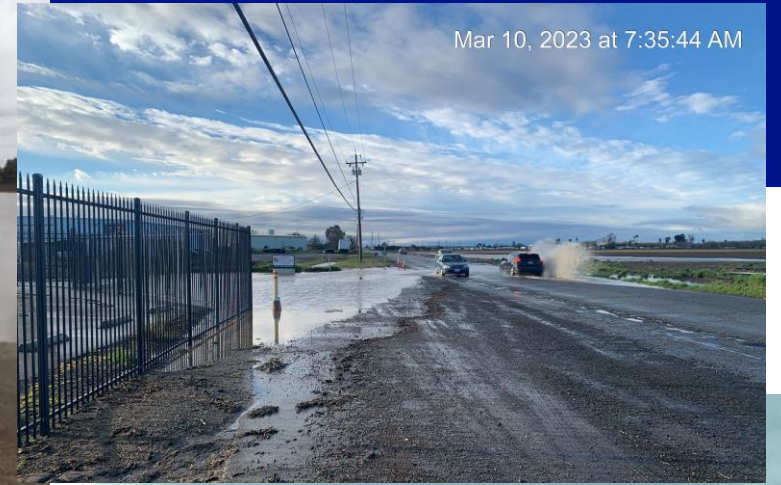
**Prepared By: Doug Moore, PE**

**West Yost Associates**



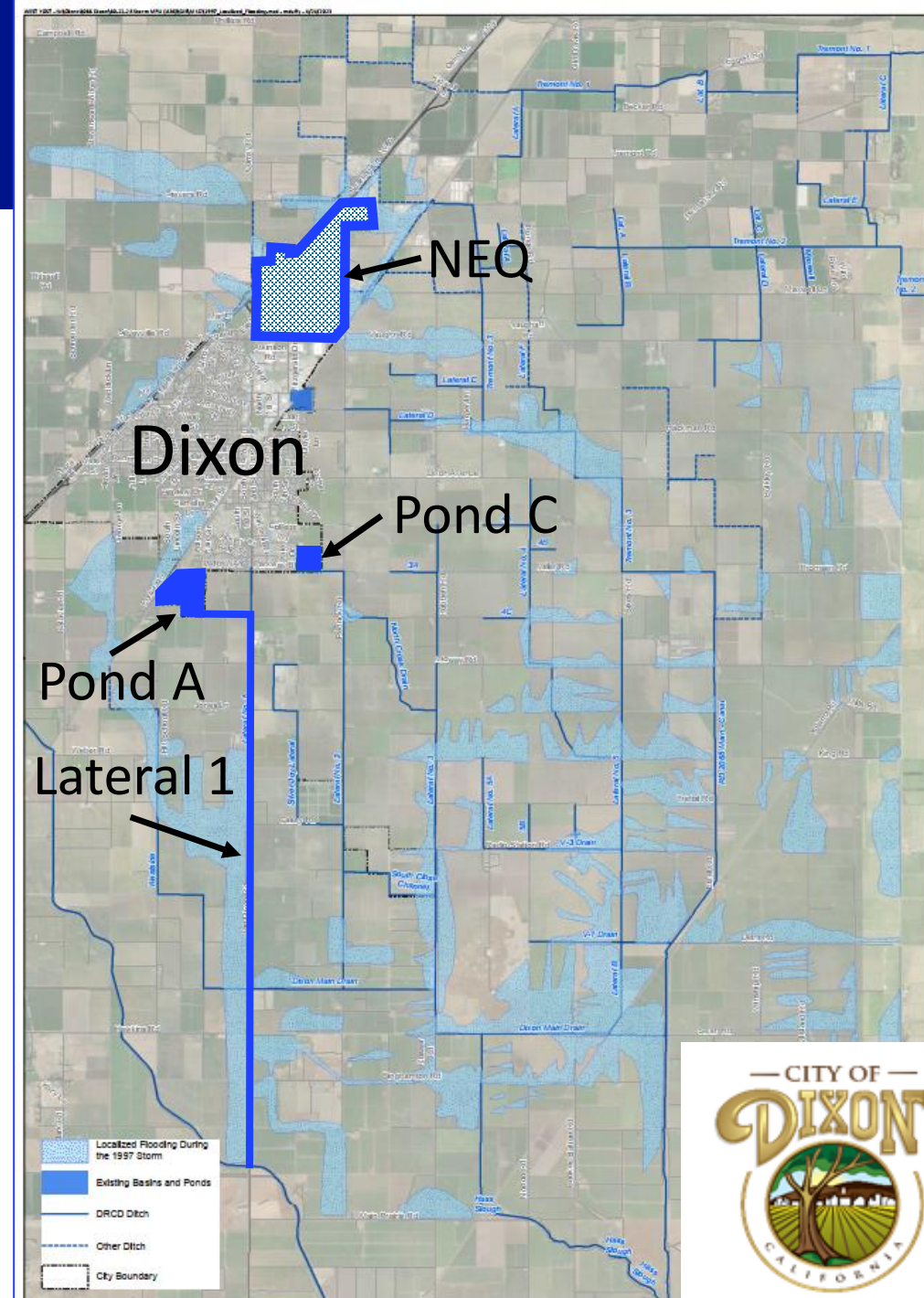
# Overview

- Background
- City of Dixon Goals
- City of Dixon Northeast Quadrant (NEQ) Drainage Plan
- Proposed Regional Drainage Options
- Next Steps



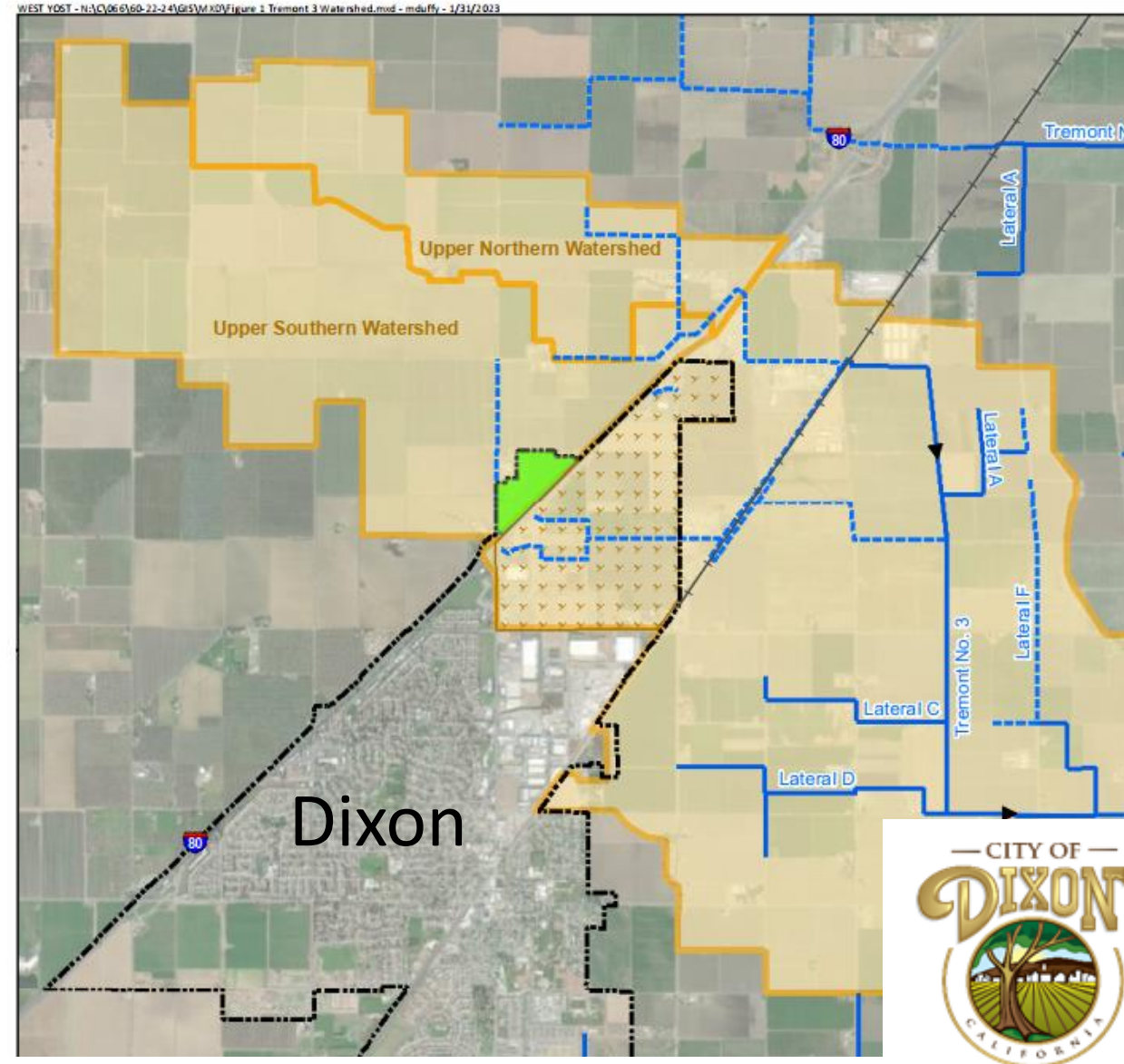
# Background

- SCWA Prepared Dixon Regional Watershed Management Plan to Address Flooding, August 2001
- Two of Three Regional Drainage Projects - Completed
  - Pond A Lateral 1, 2003
  - Pond C, 2007
- City, SCWA, DRCD, County Currently Addressing Third Project, Tremont 3 Watershed
  - North of I-80
  - City's NEQ Undeveloped Areas
  - AISA Areas
  - Downstream Ag Areas
- Shared City Drainage Project with Regional Agencies and Developers



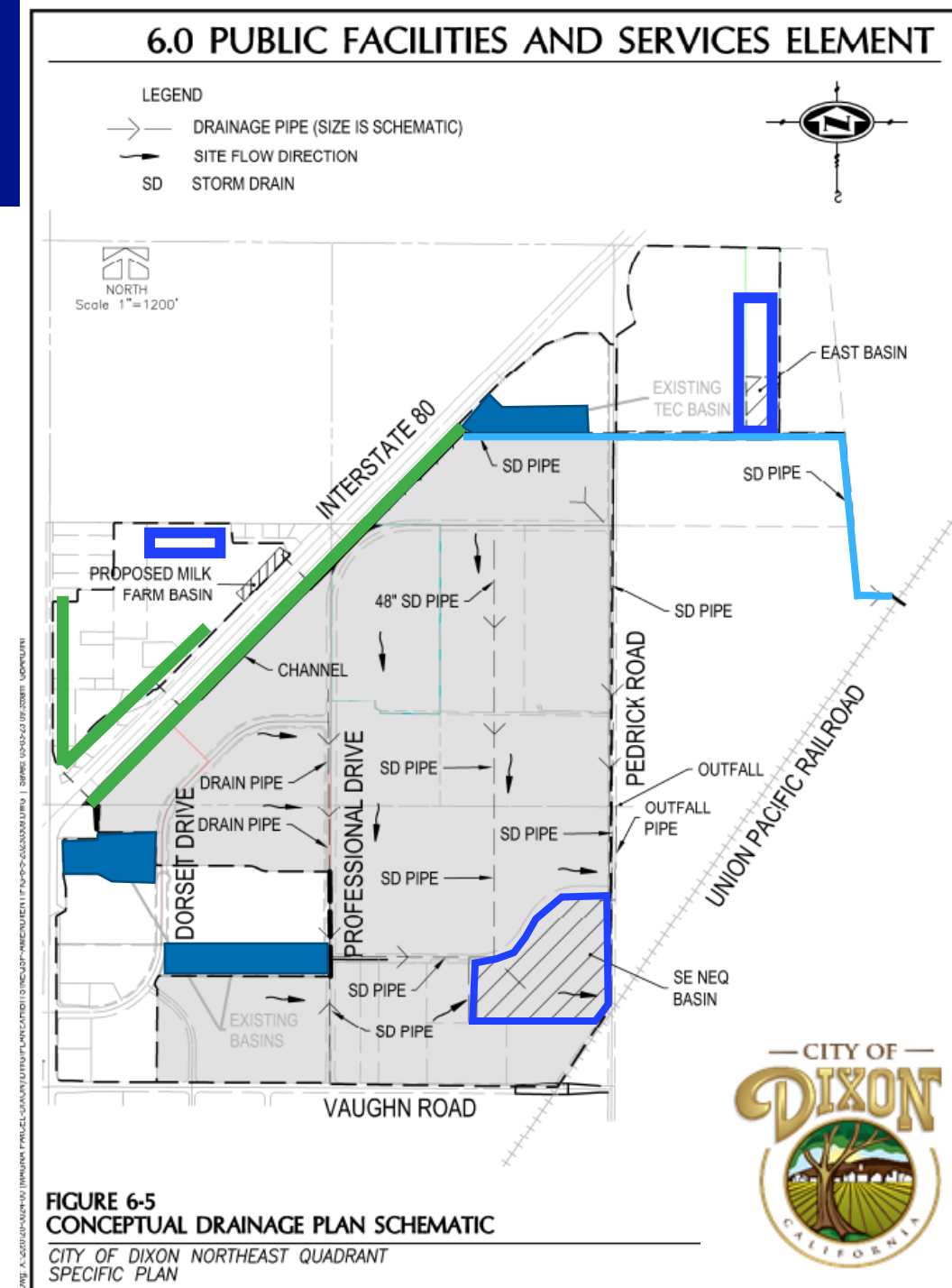
# City of Dixon Goals

- Reduce Regional Flooding
- Support Development of the NEQ and Undeveloped Areas
- Address City Drainage within City Limits
- Continue Collaboration and Partnership to Meet Regional Goals
  - Minimize Impacts to Agriculture
  - Support Regional Development, including the Solano County Agricultural Industrial Services Area (AISA)
  - Provide Additional Water to Putah Creek near Monitoring Point (I-80)
  - Regional Drainage Project Acceptable to all Agencies



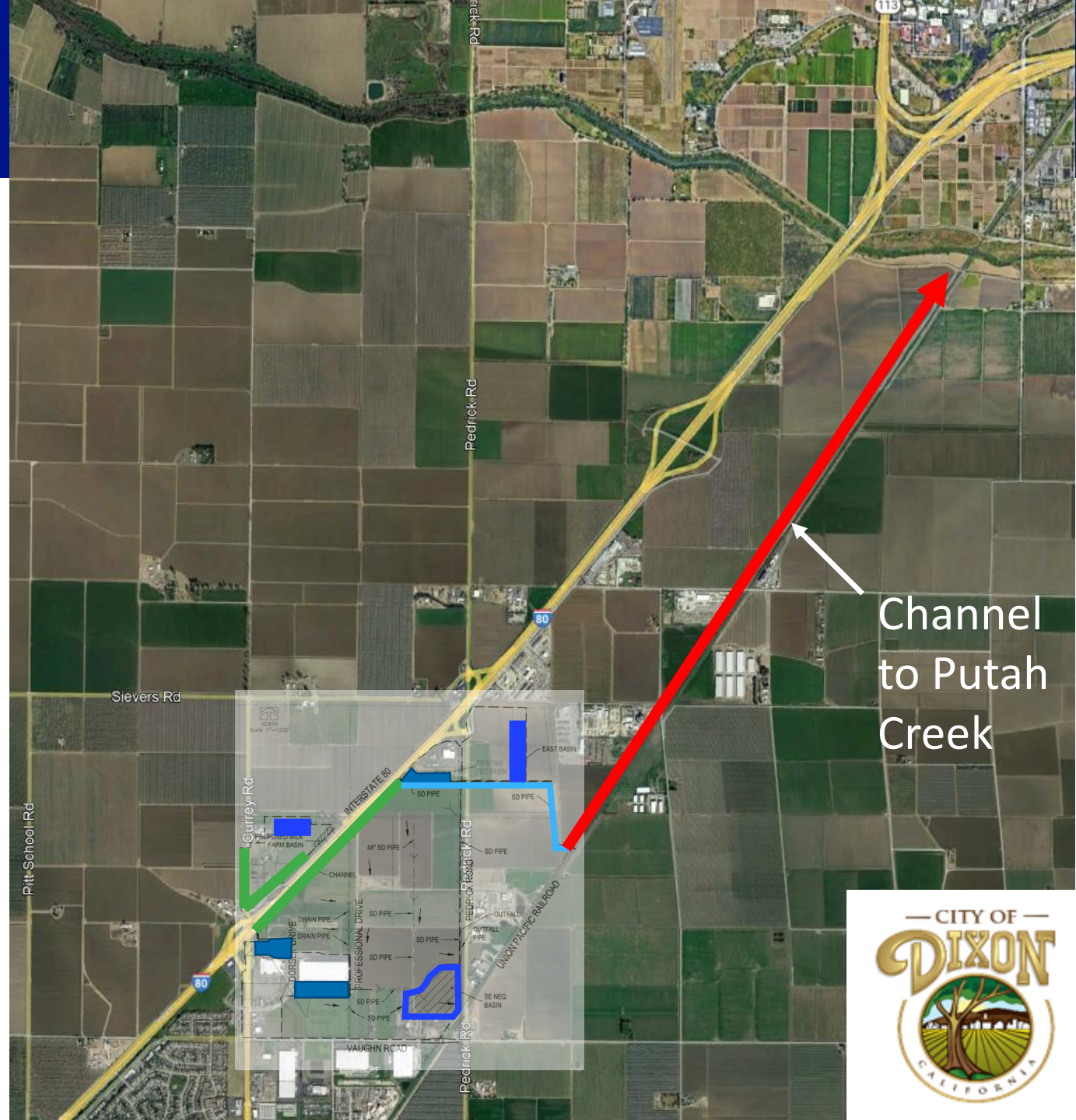
# City of Dixon NEQ Drainage Plan

- Three Existing Retention Basins (Private)
  - Walmart
  - TEC Equipment
  - Dixon Crossing
- Three Proposed Detention Basin
  - Milk Farm Basin (Private)
  - SE NEQ Basin (Municipal)
  - East Basin (Private)
- North Channel (Municipal; through Milk Farm)
- NEQ I-80 Channel (Municipal)
- Trunk Drain (Municipal; through City / County AISA)
- Integrates Into Regional Drainage Plan



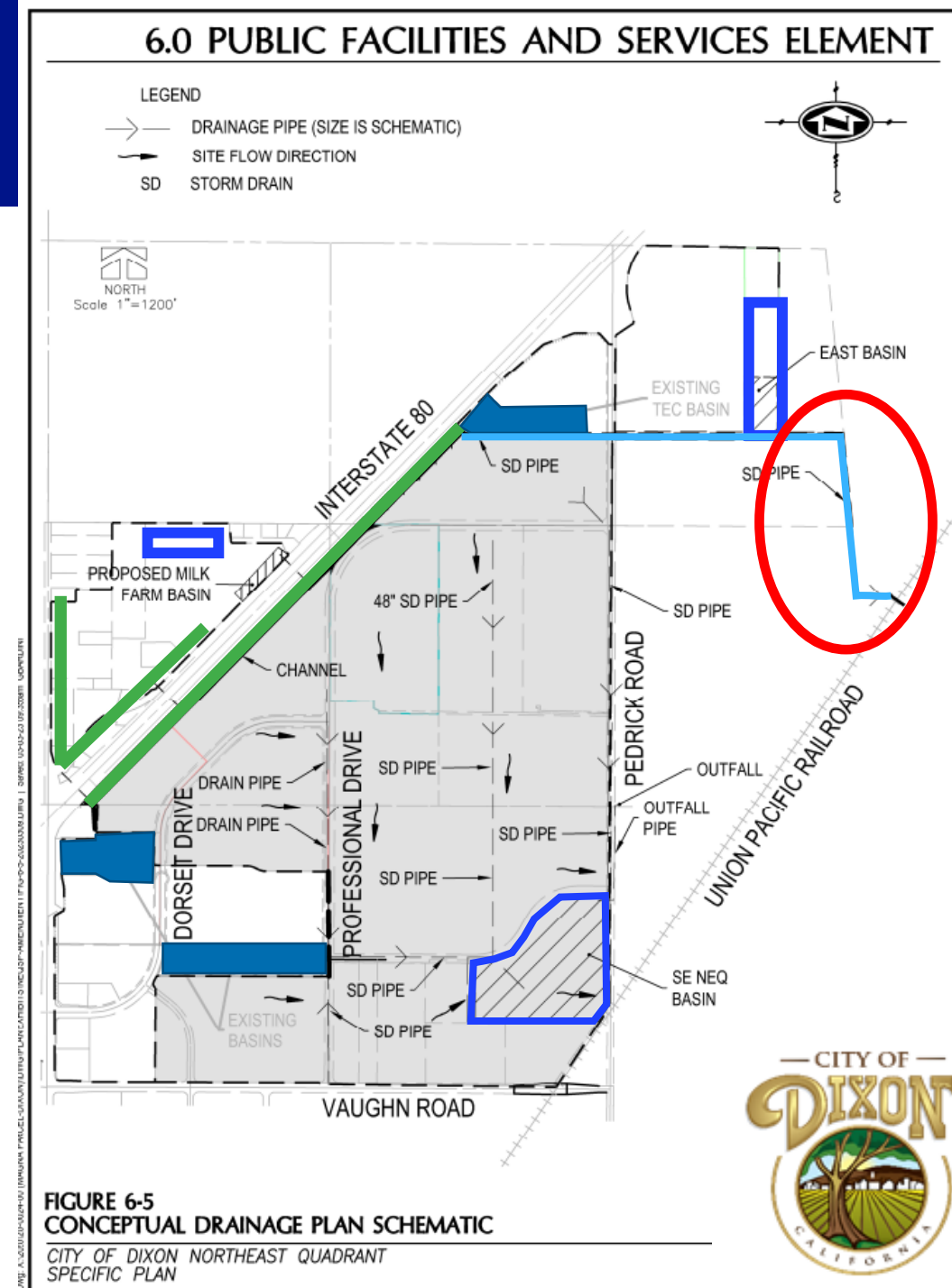
# Proposed Regional Drainage Options

- Option 1: Putah Creek
  - Open Channel, Levees, Culverts, Outfall at Putah Creek
  - Outlet for NEQ, AISA, Tremont 1 and Tremont 3 Watershed Areas (North R/R)
  - Increase Flow to Putah Creek Near I-80
  - City Drainage Plan Integrates Into Option 1
- Option 2: Upper Tremont 3 Watershed Basin
  - One or More Basins in the South Upper Tremont 3 Watershed, locations to be determined
  - Option 2 Integrates with City Drainage Plan
  - Utilize Agricultural Land for Proposed Basins



# Next Steps

- Obtain Letter of Support from County for City Drainage Plan May 2023
- Continue Working with Developers to Implement Plan June 2023
- Assist Hydraulic Modeling (funded by SCWA) for Regional Drainage Options July 2023
- Obtain Letter of Support from Reginal Agencies June-August 2023
  - Dixon Regional Watershed Joint Powers Authority: Dixon Resource Conservation District, Reclamation District 2068, Maine Prairie Water District
  - Solano County Water Agency
- Acquire Trunk Storm Drain Easement Through AISA 2024
- Support Regional Drainage Project





# Questions?

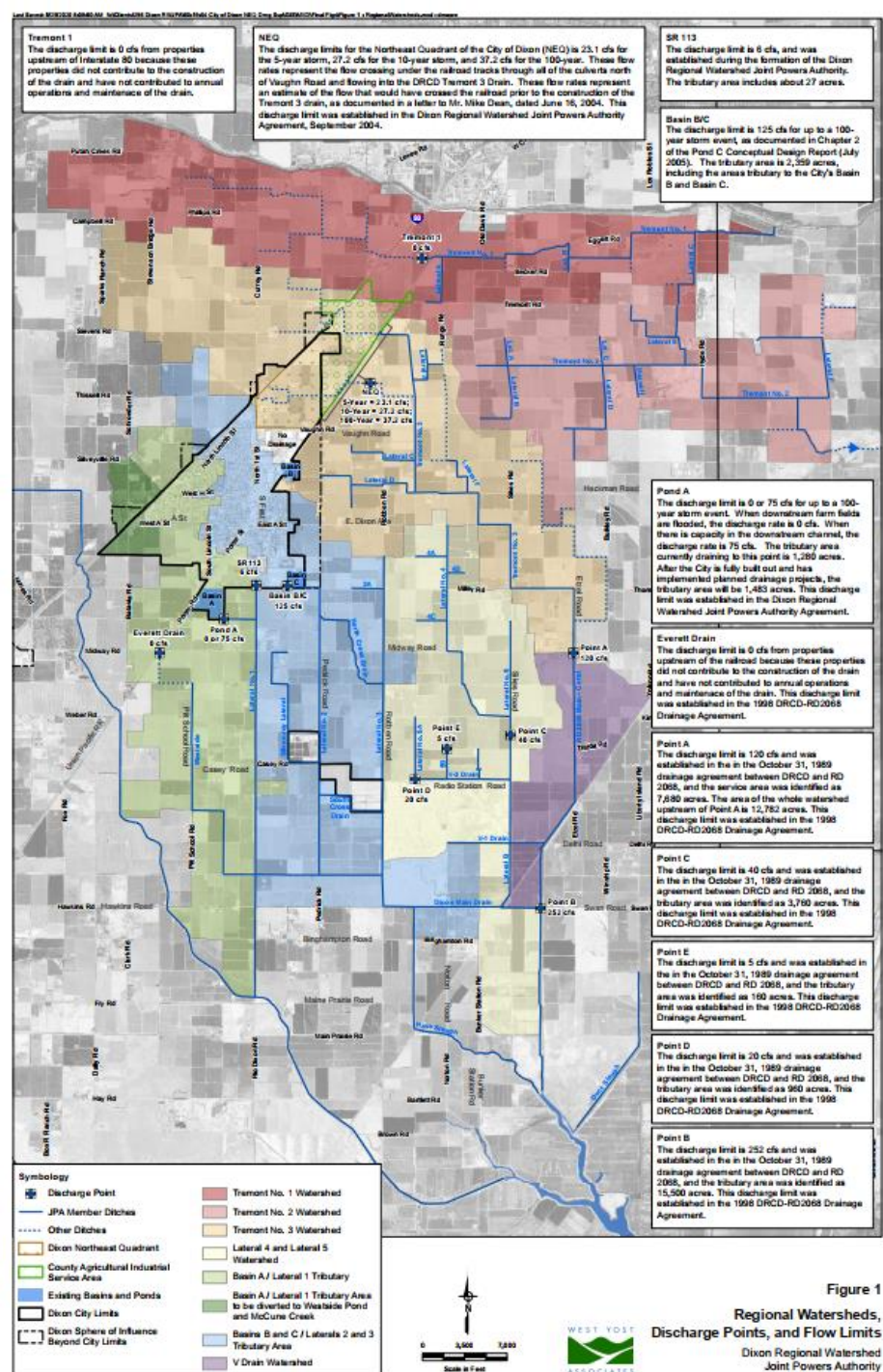
**Initiated By: Deborah Barr, PE**  
**City of Dixon**  
**City Engineer/Director of Utilities**

**Prepared By: Doug Moore, PE**  
**West Yost Associates**

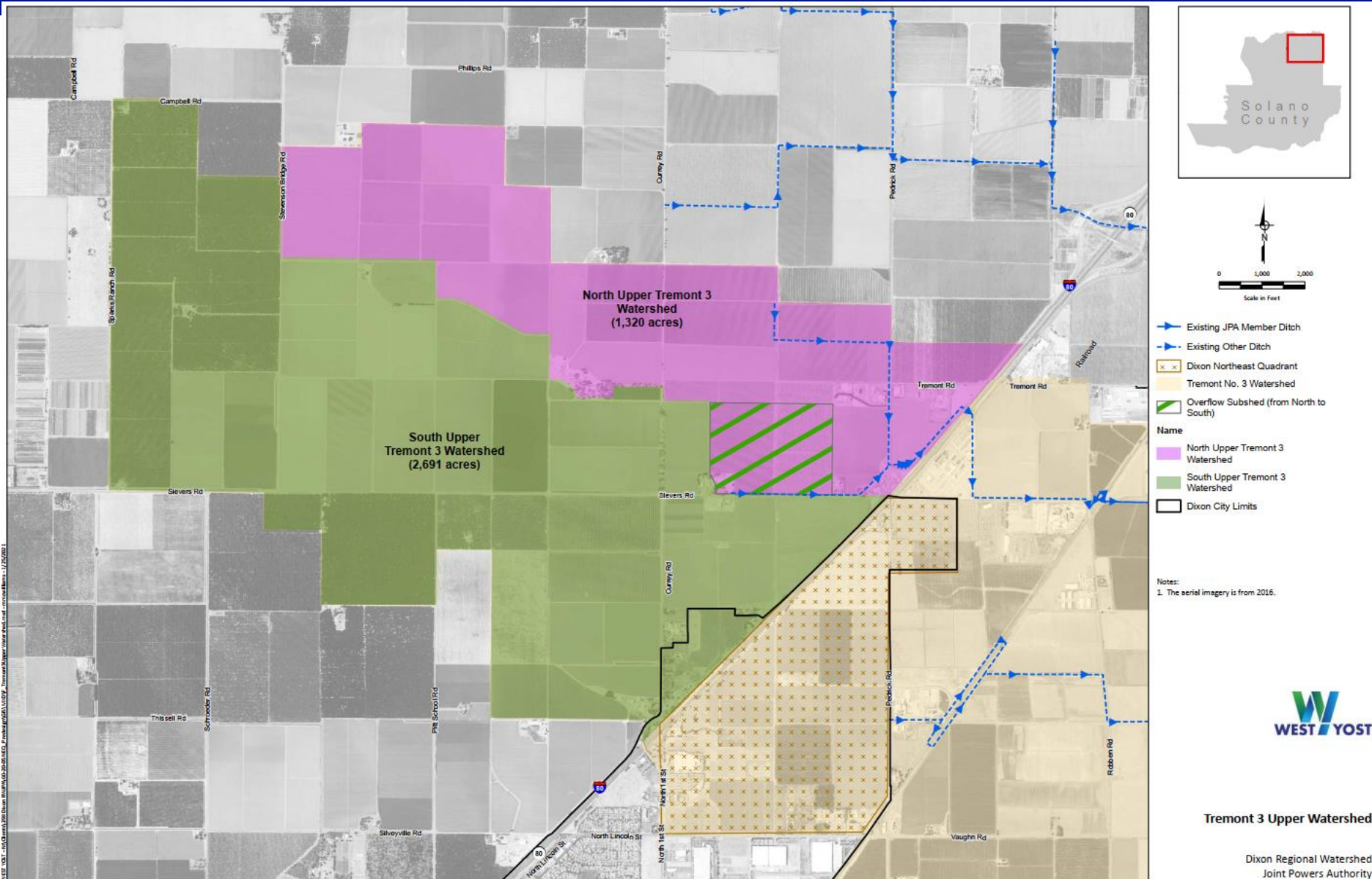




# Regional Watersheds



# Tremont 3 Upper Watershed



## Upper Tremont 3 Watershed

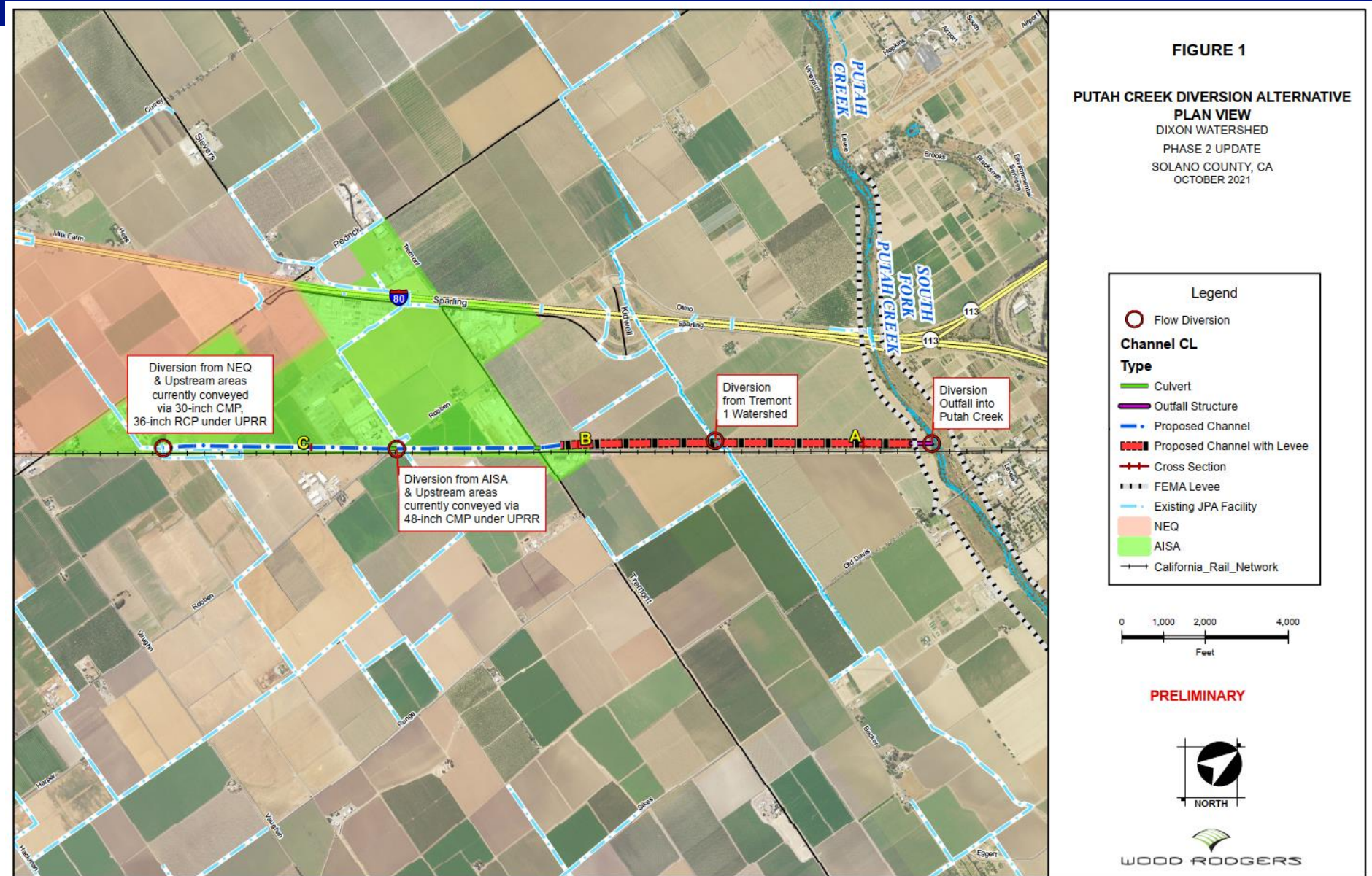
- Upper North Watershed flows around the NEQ (1,320 acres)
- Upper South Watershed flows through the NEQ (2,691 acres)



Tremont 3 Upper Watershed

Dixon Regional Watershed  
Joint Powers Authority

# Preliminary Putah Creek Channel Alignment



\\Jobs\0246-024670-County\Draw\Watershed\0246005\Draw\Watershed-0\A\GIS\T\T\T\Putah\Append\FIGURE 1 - PUTAH.aprx 10/20/2021 9:53:32 PM dmu\bet

# Preliminary Putah Creek Channel Profile

Solano County Water Agency  
Dixon Watershed Management Plan  
Tremont 3 Watershed Project Alternatives  
Technical Memorandum Addendum – Putah Creek Diversion Alternative

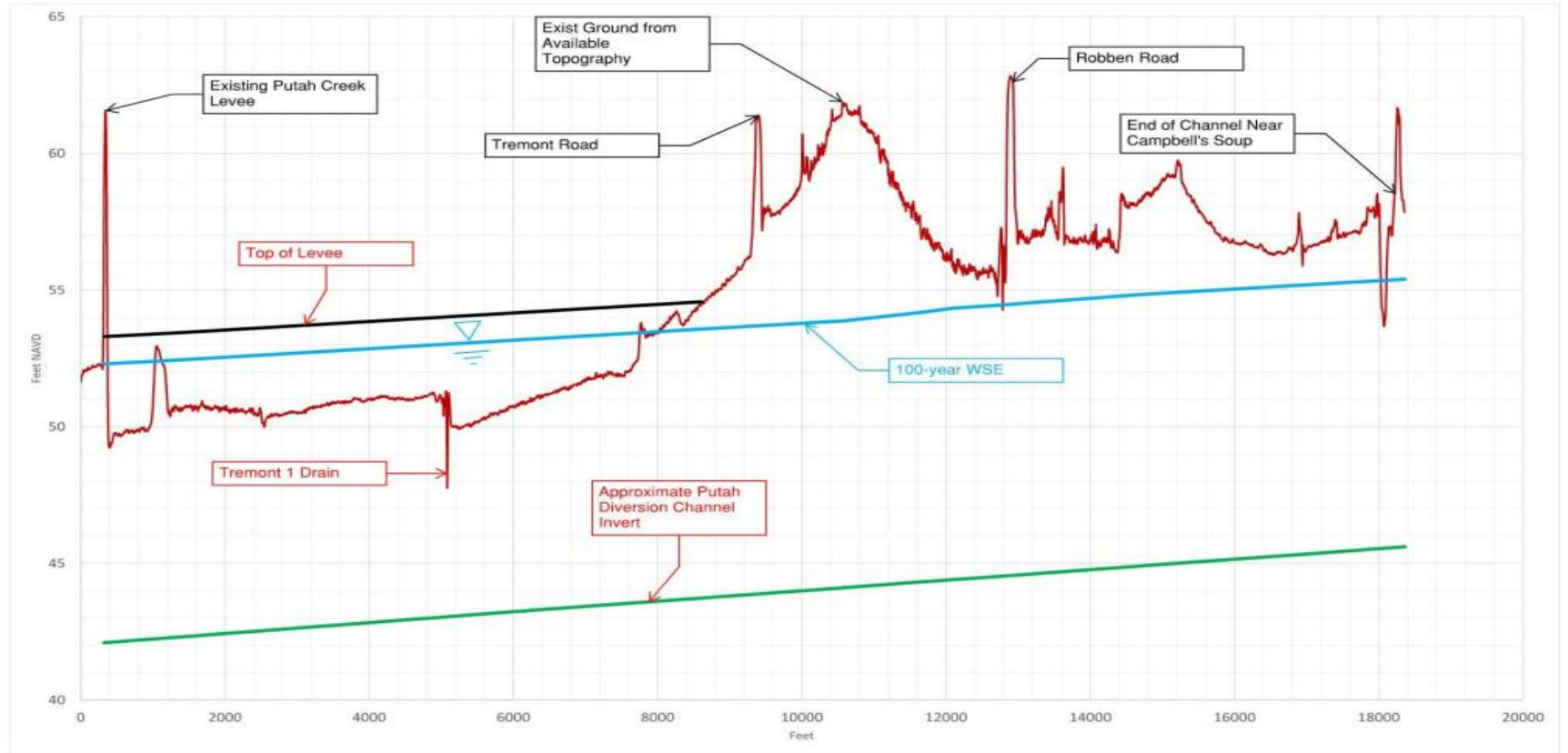
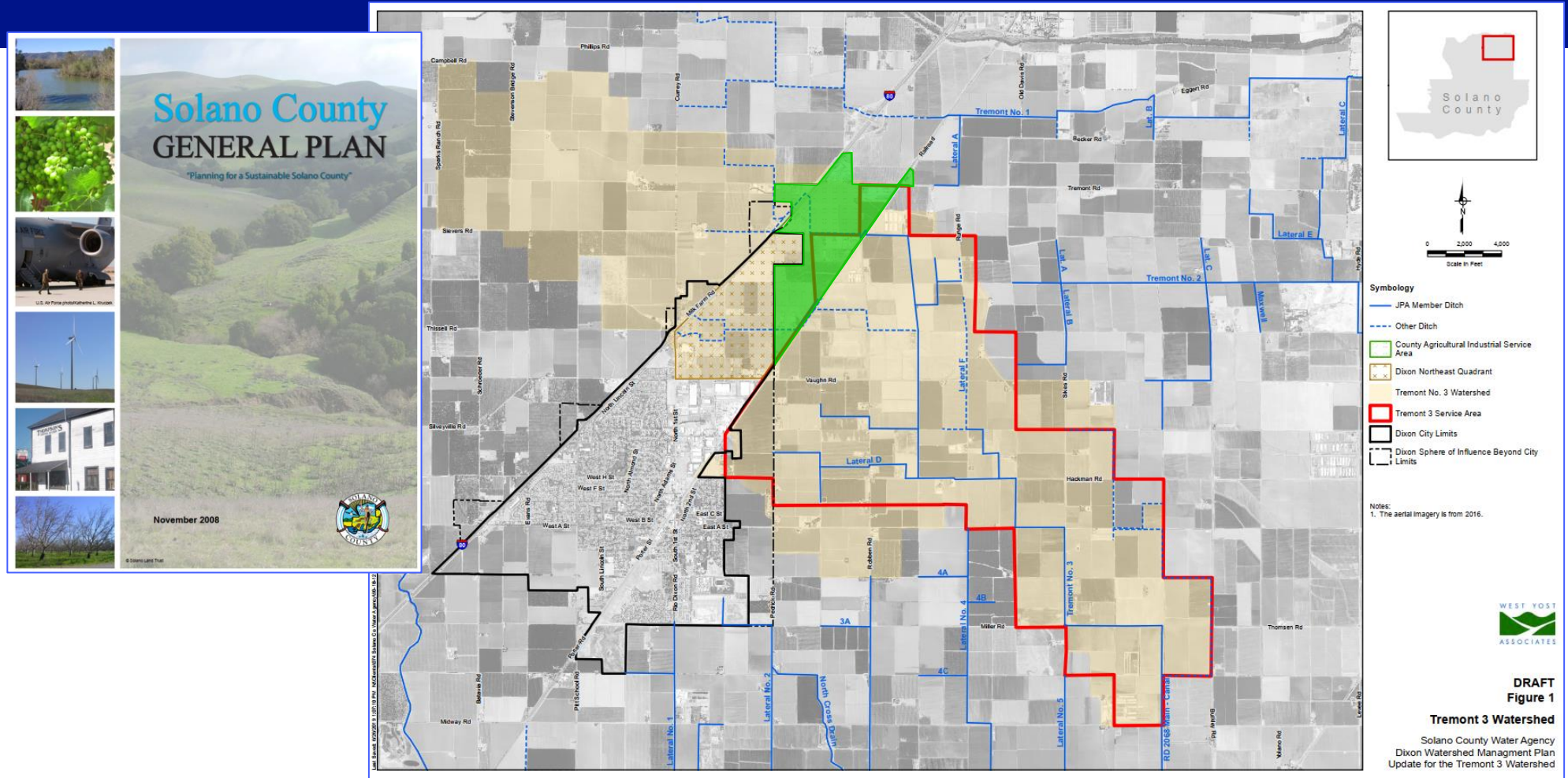


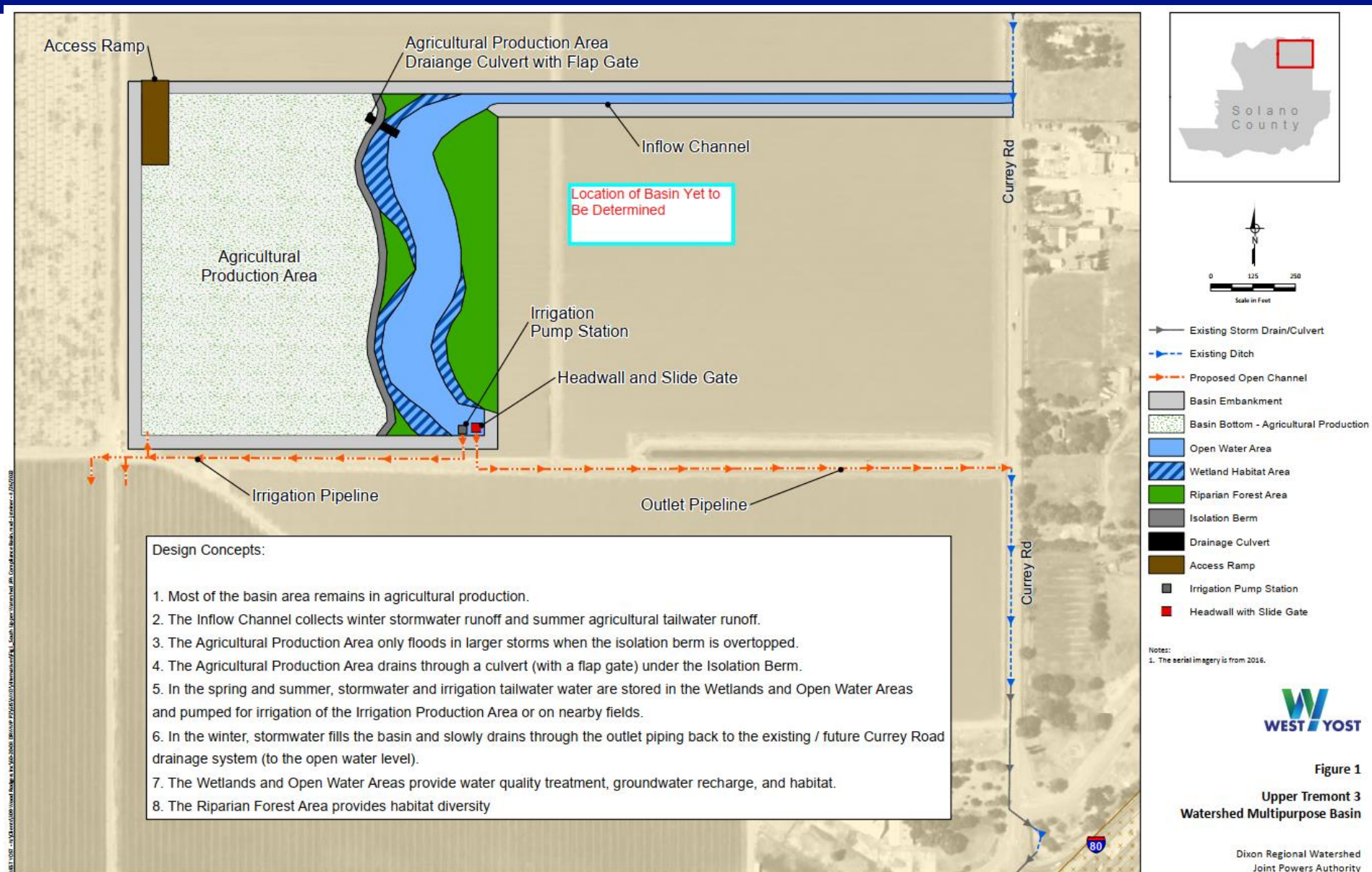
Exhibit 6, Approximate Profile, Putah Creek Diversion

# Preliminary Putah Creek Channel Profile



- Agricultural Industrial Service Area (green)
- 515 Acres in the Tremont 3 Drain Watershed

# Multiple Use Basin Concepts



# Attachment 2B.1

## Summary of Proposed Updates to Consider for Road Improvement Standards

The following items are proposed RIS changes:

1. General Changes & Updates:
  - a. Update some of SRA/Fire Safe Regulations by citation
  - b. Update Driveway standards
    - i. No concrete unless commercial driveway
    - ii. Require reflective address number standard for Fire response with citation
    - iii. Require 30-foot pull-in setback requirement for gated entrances
    - iv. Add site distance standards by citation
    - v. Require self-certification for legal access to easements
  - c. Update and add basic standards by citation for bridges, ADA, drainage, signs, utilities, level of service, etc.
  - d. Update and add bond requirements for deferred work:
    - i. Establish a bonding term of no longer than 3 years; and,
    - ii. Require bonded work to be estimated for a standard County solicited public works contract at prevailing wages, including contingency
2. California Environmental Quality Act (CEQA) updated thresholds for Vehicle Miles Traveled (VMT):
  - a. Establish standards following the State CEQA VMT guidelines that also provides consideration and some exemption for agricultural development/uses.
    - i. Incorporate Department VMT Policy, attached.
3. Public Roads:
  - a. Update new public road requirements to meet current/tentative zoning and remove requirement that new public roads be built for “potential parcels” based on the General Plan
    - i. Avoids public roads to nowhere
  - b. Add requirement for public road standard and public easement for all subdivision of land creating accesses with more than 10 parcels
    - i. Currently only required to meet public road standard for dimension and structure
  - c. Add design exceptions for clear recovery zone width down to 8 feet for trees, break-away poles, and necessary roadway objects, and down to 4 feet for roads less than 35 MPH
    - i. Highway Design manual requires up to 16-foot clear recovery zone width which puts most of the County’s roads outside tolerance
    - ii. New standard would match rural road standard in the Highway Design Manual for light use
    - iii. Example mitigations for exception consideration: paved shoulders, low numbers of objects, and improvement over existing conditions.
  - d. Update requirements for grading, encroachment, and use-permit activities that use extensive trucking to compensate for pavement damage using equivalent single axle load (ESAL) analysis

4. Private Roads:

- a. Modify current chip seal road requirement into gravel road requirement (or better) for up to 10 parcel access (lower costs, easier maintenance, no storm water impacts). More than 10 parcels would still require pavement.
- b. Requirement for secondary access private or dedicated primary public road for all subdivisions of land creating accesses with more than 10 parcels
  - i. Produces safer emergency access routes and meets Fire Code.
- c. Use permit activities must mitigate for increased road maintenance costs related to use, as determined by the Director of Resource Management.



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## DEPARTMENT OF RESOURCE MANAGEMENT



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### Public Works – Engineering Services Division

June 15, 2021

From: Terry Schmidtbauer, Director

To: Department Staff performing development and CEQA review

Re: Interim Modification of Standards for the Department of Resource Management Regarding CEQA Considerations for Traffic, Vehicle Miles Traveled, and Their Thresholds of Significance

In consideration of the State of California's goals to reduce greenhouse gas (GHG) emissions with SB375, and to reduce vehicle miles traveled (VMT) with SB743, the following findings, measures, exemptions, and mitigations shall be considered and incorporated into the Department's review of use permits and other discretionary actions requiring CEQA consideration of vehicle trips and vehicle miles traveled. This memorandum directive is being issued in accordance with Solano County's *Road Improvement Standards and Land Development Requirements*, section 1-1.2, Modifications of Standards, and shall remain in force until these CEQA considerations are incorporated into Solano County's local ordinance and/or the *Road Improvement Standards and Land Development Requirements*.

#### Findings:

The following constitute findings that memorialize pertinent State law and Solano County's existing activities and commitments that are reducing GHG and VMT countywide:

- 1) SB375 establishes the value of local farm products being processed and consumed in local markets and recognizes that this system goal significantly reduces GHG due to resulting reduced VMT in farm/product distribution and consumption. SB375 provides the means to facilitate this goal by providing for Counties to receive financial incentives for farm to market transportation investments:
  - a. Section 65080 of the State code reads, "The metropolitan planning organization or county transportation agency, whichever entity is appropriate, shall consider financial incentives for cities and counties that have resource areas or farmland, as defined in Section 65080.01, for the purposes of, for example, transportation investments for the preservation and safety of the city street or county road system and farm to market and interconnectivity transportation needs."
- 2) SB375 establishes the value of growth within Counties to occur primarily within the cities boundaries, and recognizes that this system goal significantly reduces GHG due to resulting reduced VMT with smart growth (pedestrian options), reduced trip lengths, and local transit alternatives. Solano County is an orderly growth county, having passed the Orderly Growth initiative in 1984 and extending it to 2028.

- a. Section 65080 of the State code reads, "The metropolitan planning organization or county transportation agency, whichever entity is appropriate, shall also consider financial assistance for counties to address countywide service responsibilities in counties that contribute towards the greenhouse gas emission reduction targets by implementing policies for growth to occur within their cities."
  - b. Solano County's commitment to the Orderly Growth Initiative provides mitigation for development in the unincorporated County.
- 3) SB743 establishes the value of transit and multimodal oriented investment and development and recognizes that this system goal significantly reduces GHG due to reduced vehicle trip demand and reduced VMT.
  - 4) California Office of Planning & Research has issued a *Technical Advisory On Evaluating Transportation Impacts in CEQA* for guidance and recommendations in local agency consideration of VMT from development.
  - 5) Solano County continues to commit its whole share of Transportation Development Act (TDA) Article 8 funds, approximately \$750,000, to countywide and regionally beneficial transit services provided by Soltrans and the Solano Transportation Authority.
    - a. The County commits funding for its per capita use and population shares to countywide and regionally beneficial transit services at approximately \$200,000 per year.
    - b. The remainder of the County's TDA Art 8 funding, approximately \$550,000, goes to subsidize city and regional transit services, and provides mitigation credit for VMT generation in the unincorporated areas of the County.
    - c. Solano County's financial commitments to fund and subsidize transit services for cities provides mitigation for projects in the unincorporated County.
  - 6) Solano residents generate a significant number of commuting trips (large VMT) for employment outside of Solano County. Job creation within Solano County has the potential to reduce VMT by creating local employment options that reduce the longer VMT commute trips.
  - 7) Solano County has planned a countywide network of bike routes/lanes to increase multimodal accessibility and use of the public rights of way, and requires impacting private development to construct these improvements, thus decreasing vehicle trips and VMT.
  - 8) Solano County constructs shoulder improvement and bike lanes to enhance the safety and use for multimodal access of the public rights of way, and thus decreasing vehicle trips and VMT.

Measures:

To determine the extent and potential for a Use Permit or other discretionary development to impact traffic operations and VMT, an applicant may be required to submit information and studies that vary depending on the amount of traffic generation:

- 1) An application which generates 10 truck trips per day or less and 50 total vehicle trips per day or less does not need to provide a traffic study as part of the application.

- 2) An application which generates more than 10 truck trips per day and/or more than 50 total vehicle trips per day must provide a traffic study as part of the application.

A traffic study must include standard discussion and analysis for route use, corridor operations, intersection operations, level of service changes, frontage geometry, encroachment conditions, proposed improvements, etc. In consideration of trip generation and VMT, the study must include discussion and analysis of anticipated route uses, trip generation, trip length estimates, multimodal options, transit options, carpool/vanpool options, and also any improvements or operations that will facilitate reduction in vehicle trips and VMT.

A traffic study for a Use Permit or other discretionary development that generates more than 10 truck trips per day shall also include axle loading and life cycle analysis of the used portions of Solano County right of way, pavement degradation discussion, and proposed mitigation(s).

#### Impacts and Mitigations:

Department staff shall consider the above findings and measures in order to determine if, and to what extent, mitigations will be required for the trips and VMT generated in the application. The following are recommended guidelines for less than significant impact and mitigation requirement determinations:

##### “Less Than Significant Impact”:

- 1) A Use Permit or other discretionary development which generates 110 total vehicle trips per day or less (770 total vehicle trips per week or less) will have less than significant impact on VMT. Employee trips are not considered in the total vehicle trip generation due to the reduction in regional commute trips and VMT due to local job creation.
- 2) An agricultural development that facilitates farm products primarily to local ag processing centers, cities, and markets in Solano County will have less than significant impact on VMT.
- 3) A development that is within ½-mile of an active transit stop with reasonable transportation connections qualifies for less than significant impact on VMT.
- 4) A development that is adjacent to a fully developed and connected system of bike lanes qualify for less than significant impact on VMT for up to 125 total vehicle trips per day or less (875 total vehicle trips per week or less).
- 5) Permitted special events that include advertisements for and coordinated assistance with carpool and/or transit options for attendees.

##### Mitigation Options for VMT:

- 1) Construction of bike racks, a charging station, and/or other various multimodal improvements at the development site will be considered as minor mitigation.
- 2) Business plans that include carpool/vanpool coordination for employees at the development site will be considered as minor mitigation.

- 3) Operating a vanpool or providing on-demand transit services for employees at the development site to reduce trips to below 110 vehicles per day will be considered as major mitigation.
- 4) Construction of a nearby active transit stop in the public right of way by the applicant will be considered as major mitigation.
- 5) Construction of sidewalks and other pedestrian gap improvements in the public right of way by the applicant to connect to other fully connected public pedestrian facilities will be considered as major mitigation.
- 6) Construction of frontage Class 2 (or better) bike lanes in the public right of way by the applicant to connect to other fully connected public Class 2 (or better) bike lanes will be considered as major mitigation.

These impact and mitigation guidelines may be supplemented with pertinent information related to the application, site location, Solano Transportation Authority's Active Transportation Plan, as well as local and regional transit services. Staff may also consider technological changes and advances that reduce VMT that are not currently in active use on the date of this memorandum.

The Director of Resource Management may also make changes to the staff recommendations for impact findings and mitigation requirements.

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# State Minimum Fire Safe Regulations

## Board of Forestry and Fire Protection



FOR INFORMATIONAL USE ONLY

View the official California Code of Regulations online at  
[govt.westlaw.com/calregs](http://govt.westlaw.com/calregs)

As of April 1, 2023

California Code of Regulations

Title 14 Natural Resources

Division 1.5 Department of Forestry

Chapter 7 - Fire Protection

Subchapter 2 State Minimum Fire Safe Regulations

Articles 1-5

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## Article 1 Administration

### § 1270.00. Title

Subchapter 2 shall be known as the “State Minimum Fire Safe Regulations,” and shall constitute the minimum Wildfire protection standards of the California Board of Forestry and Fire Protection.

### § 1270.01. Definitions

The following definitions are applicable to Subchapter 2.

- (a) Agriculture: Land used for agricultural purposes as defined in a Local Jurisdiction's zoning ordinances.
- (b) Board: California Board of Forestry and Fire Protection.
- (c) Building: Any Structure used or intended for supporting or sheltering any use or Occupancy, except those classified as Utility and Miscellaneous Group U.
- (d) CAL FIRE: California Department of Forestry and Fire Protection.
- (e) Dead-end Road: A Road that has only one point of vehicular ingress/egress, including cul-de-sacs and Roads that loop back on themselves
- (f) Defensible Space: The area within the perimeter of a parcel, Development, neighborhood or community where basic wildland fire protection practices and measures are implemented, providing the key point of defense from an approaching Wildfire or defense against encroaching Wildfires or escaping Structure fires. The perimeter as used in this regulation is the area encompassing the parcel or parcels proposed for construction and/or Development, excluding the physical Structure itself. The area is characterized by the establishment and maintenance of emergency vehicle access, emergency water reserves, Road names and Building identification, and fuel modification measures.
- (g) Development: As defined in section 66418.1 of the California Government Code.
- (h) Director: Director of the Department of Forestry and Fire Protection or their designee.
- (i) Driveway: A vehicular pathway that serves no more than four (4) Residential Units and any number of non-commercial or non-industrial Utility or Miscellaneous Group U Buildings on each parcel. A Driveway shall not serve commercial or industrial uses at any size or scale.
- (j) Exception: An alternative to the specified standard requested by the applicant that may be necessary due to health, safety, environmental conditions, physical site limitations or other limiting conditions, such as recorded historical sites, that provides mitigation of the problem.
- (k) Fire Apparatus: A vehicle designed to be used under emergency conditions to transport personnel and equipment or to support emergency response, including but not limited to the suppression of fires.
- (l) Fire Authority: A fire department, agency, division, district, or other governmental body responsible for regulating and/or enforcing minimum fire safety standards in the Local Jurisdiction.
- (m) Fire Hydrant: A valved connection on a water supply or storage system for the purpose of providing water for fire protection and suppression operations.
- (n) Fuel Break: A strategically located area where the volume and arrangement of vegetation has been managed to limit fire intensity, fire severity, rate of spread, crown fire potential, and/or ember production.
- (o) Greenbelts: open space, parks, wildlands, other areas, or a combination thereof, as designated by Local Jurisdictions, which are in, surround, or are adjacent to a city or urbanized area, that may function as Fuel Breaks and where Building construction is restricted or prohibited.
- (p) Greenways: Linear open spaces or corridors that link parks and neighborhoods within a community through natural or manmade trails and paths.

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(q) Hammerhead/T: A “T” shaped, three-point Turnaround space for Fire Apparatus on a Road or Driveway, being no narrower than the Road or Driveway that serves it.

(r) Hazardous Land Use: A land use that presents a significantly elevated potential for the ignition, prolonged duration, or increased intensity of a Wildfire due to the presence of flammable materials, liquids, or gasses, or other features that initiate or sustain combustion. Such uses are determined by the Local Jurisdiction and may include, but are not limited to, power-generation and distribution facilities; wood processing or storage sites; flammable gas or liquids processing or storage sites; or shooting ranges.

(s) Local Jurisdiction: Any county, city/county agency or department, or any locally authorized district that approves or has the authority to regulate Development.

(t) Municipal-Type Water System: A system having water pipes servicing Fire Hydrants and designed to furnish, over and above domestic consumption, a minimum of 250 gpm (950 L/min) at 20 psi (138 kPa) residual pressure for a two (2) hour duration.

(u) Occupancy: The purpose for which a Building, or part thereof, is used or intended to be used.

(v) One-way Road: A Road that provides a minimum of one Traffic Lane width designed for traffic flow in one direction only.

(w) Residential Unit: Any Building or portion thereof which contains living facilities including provisions for sleeping, eating, cooking and/or sanitation, for one or more persons. Manufactured homes, mobile homes, and factory-built housing are considered Residential Units.

(x) Ridgeline: The line of intersection of two opposing slope aspects running parallel to the long axis of the highest elevation of land; or an area of higher ground separating two adjacent streams or watersheds.

(y) Road: A public or private vehicular pathway to more than four (4) Residential Units, or to any industrial or commercial Occupancy.

(z) Road or Driveway Structures: Bridges, culverts, and other appurtenant Structures which supplement the Traffic Lane or Shoulders.

(aa) Same Practical Effect: As used in this subchapter, means an Exception or alternative with the capability of applying accepted wildland fire suppression strategies and tactics, and provisions for fire fighter safety, including:

- (1) access for emergency wildland fire equipment,
- (2) safe civilian evacuation,
- (3) signing that avoids delays in emergency equipment response,
- (4) available and accessible water to effectively attack Wildfire or defend a Structure from Wildfire, and

- (5) fuel modification sufficient for civilian and fire fighter safety.

(bb) Shoulder: A vehicular pathway adjacent to the Traffic Lane.

(cc) State Responsibility Area (SRA): As defined in Public Resources Code sections 4126-4127; and the California Code of Regulations, title 14, division 1.5, chapter 7, article 1, sections 1220-1220.5.

(dd) Strategic Ridgeline: a Ridgeline identified pursuant to § 1276.02(a) that may support fire suppression activities or where the preservation of the Ridgeline as an Undeveloped Ridgeline would reduce fire risk and improve fire protection.

(ee) Structure: That which is built or constructed or any piece of work artificially built up or composed of parts joined together in some definite manner.

(ff) Traffic Lane: The portion of a Road or Driveway that provides a single line of vehicle travel.

(gg) Turnaround: An area which allows for a safe opposite change of direction for Fire Apparatus at the end of a Road or Driveway.

(hh) Turnout: A widening in a Road or Driveway to allow vehicles to pass.



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- (ii) Undeveloped Ridgeline: A Ridgeline with no Buildings.
- (jj) Utility and Miscellaneous Group U: A Structure of an accessory character or a miscellaneous Structure not classified in any specific Occupancy permitted, constructed, equipped, and maintained to conform to the requirements of Title 24, California Building Standards Code.
- (kk) Vertical Clearance: The minimum specified height of a bridge, overhead projection, or vegetation clearance above the Road or Driveway.
- (ll) Vertical Curve: A curve at a high or low point of a Road that provides a gradual transition between two Road grades or slopes.
- (mm) Very High Fire Hazard Severity Zone (VHFHSZ): As defined in Government Code section 51177(i).
- (nn) Wildfire: Has the same meaning as “forest fire” in Public Resources Code Section 4103.

### § 1270.02. Purpose

- (a) Subchapter 2 has been prepared and adopted for the purpose of establishing state minimum Wildfire protection standards in conjunction with Building, construction, and Development in the State Responsibility Area (SRA) and, after July 1, 2021, the Very High Fire Hazard Severity Zones, as defined in Government Code § 51177(i) (VHFHSZ).
- (b) The future design and construction of Structures, subdivisions and Developments in the SRA and, after July 1, 2021, the VHFHSZ shall provide for basic emergency access and perimeter Wildfire protection measures as specified in the following articles.
- (c) These standards shall provide for emergency access; signing and Building numbering; private water supply reserves for emergency fire use; vegetation modification, Fuel Breaks, Greenbelts, and measures to preserve Undeveloped Ridgelines. Subchapter 2 specifies the minimums for such measures.

### § 1270.03. Scope

- (a) Subchapter 2 shall apply to:
  - (1) the perimeters and access to all residential, commercial, and industrial Building construction within the SRA approved after January 1, 1991, and those approved after July 1, 2021 within the VHFHSZ, except as set forth below in subsection (b).
  - (2) the siting of newly installed commercial modulars, manufactured homes, mobilehomes, and factory-built housing, as defined in Health and Safety Code sections 18001.8, 18007, 18008, and 19971;
  - (3) all tentative and parcel maps or other Developments approved after January 1, 1991; and
  - (4) applications for Building permits on a parcel approved in a pre-1991 parcel or tentative map to the extent that conditions relating to the perimeters and access to the Buildings were not imposed as part of the approval of the parcel or tentative map.
- (b) Subchapter 2 does not apply where an application for a Building permit is filed after January 1, 1991 for Building construction on a parcel that was formed from a parcel map or tentative map (if the final map for the tentative map is approved within the time prescribed by the local ordinance) approved prior to January 1, 1991, to the extent that conditions relating to the perimeters and access to the Buildings were imposed by the parcel map or final tentative map approved prior to January 1, 1991.
- (c) Affected activities include, but are not limited to:
  - (1) permitting or approval of new parcels, excluding lot line adjustments as specified in Government Code (GC) section 66412(d);
  - (2) application for a Building permit for new construction not relating to an existing Structure;

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(3) application for a use permit;

(4) Road construction including construction of a Road that does not currently exist, or extension of an existing Road.

(d) The standards in Subchapter 2 applicable to Roads shall not apply to Roads used solely for Agriculture; mining; or the management of timberland or harvesting of forest products.

### § 1270.04. Provisions for Application of these Regulations

This Subchapter shall be applied as follows:

(a) the Local Jurisdictions shall provide the Director of the California Department of Forestry and Fire Protection (CAL FIRE) or their designee with notice of applications for Building permits, tentative parcel maps, tentative maps, and installation or use permits for construction or Development within the SRA, or if after July, 1 2021, the VHFHSZ.

(b) the Director or their designee may review and make fire protection recommendations on applicable construction or development permits or maps provided by the Local Jurisdiction.

(c) the Local Jurisdiction shall ensure that the applicable sections of this Subchapter become a condition of approval of any applicable construction or Development permit or map.

### § 1270.05. Local Regulations

(a) Subchapter 2 shall serve as the minimum Wildfire protection standards applied in SRA and VHFHSZ. However, Subchapter 2 does not supersede local regulations which equal or exceed the standards of this Subchapter.

(b) A local regulation equals or exceeds a minimum standard of this Subchapter only if, at a minimum, the local regulation also fully complies with the corresponding minimum standard in this Subchapter.

(c) A Local Jurisdiction shall not apply exemptions to Subchapter 2 that are not enumerated in Subchapter 2. Exceptions requested and approved in conformance with § 1270.07 (Exceptions to Standards) may be granted on a case-by-case basis.

(d) Notwithstanding a local regulation that equals or exceeds the State Minimum Fire Safe Regulations, Building construction shall comply with the State Minimum Fire Safe Regulations.

### § 1270.06. Inspections

Inspections shall conform to the following requirements:

(a) Inspections in the SRA shall be made by:

(1) the Director, or

(2) Local Jurisdictions that have assumed state fire protection responsibility on SRA lands, or

(3) Local Jurisdictions where the inspection duties have been formally delegated by the Director to the Local Jurisdictions, pursuant to subsection (b).

(b) The Director may delegate inspection authority to a Local Jurisdiction subject to all of the following criteria:

(1) The Local Jurisdiction represents that they have appropriate resources to perform the delegated inspection authority.

(2) The Local Jurisdiction acknowledges that CAL FIRE's authority under subsection (d) shall not be waived or restricted.

(3) The Local Jurisdiction consents to the delegation of inspection authority.

(4) The Director may revoke the delegation at any time.

(5) The delegation of inspection authority, and any subsequent revocation of the delegation, shall be documented in writing, and retained on file at the CAL FIRE Unit headquarters that administers SRA fire protection in the area.

(c) Inspections in the VHFHSZ shall be made by the Local Jurisdiction.

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(d) Nothing in this section abrogates CAL FIRE's authority to inspect and enforce state forest and fire laws in the SRA even when the inspection duties have been delegated pursuant to this section.

(e) Reports of violations within the SRA shall be provided to the CAL FIRE Unit headquarters that administers SRA fire protection in the Local Jurisdiction.

(f) When inspections are conducted, they shall occur prior to: the issuance of the use permit or certificate of Occupancy; the recordation of the parcel map or final map; the filing of a notice of completion; or the final inspection of any project or Building permit.

### § 1270.07. Exceptions to Standards

(a) Upon request by the applicant, an Exception to standards within this Subchapter may be allowed by the Inspection entity in accordance with 14 CCR § 1270.06 (Inspections) where the Exceptions provide the Same Practical Effect as these regulations towards providing Defensible Space. Exceptions granted by the Local Jurisdiction listed in 14 CCR § 1270.06, shall be made on a case-by-case basis only. Exceptions granted by the Local Jurisdiction listed in 14 CCR § 1270.06 shall be forwarded to the appropriate CAL FIRE unit headquarters that administers SRA fire protection in that Local Jurisdiction, or the county in which the Local Jurisdiction is located and shall be retained on file at the Unit Office.

(b) Requests for an Exception shall be made in writing to the Local Jurisdiction listed in 14 CCR § 1270.06 by the applicant or the applicant's authorized representative.

At a minimum, the request shall state the specific section(s) for which an Exception is requested; material facts supporting the contention of the applicant; the details of the Exception proposed; and a map showing the proposed location and siting of the Exception. Local Jurisdictions listed in § 1270.06 (Inspections) may establish additional procedures or requirements for Exception requests.

(c) Where an Exception is not granted by the inspection entity, the applicant may appeal such denial to the Local Jurisdiction. The Local Jurisdiction may establish or utilize an appeal process consistent with existing local building or planning department appeal processes.

(d) Before the Local Jurisdiction makes a determination on an appeal, the inspector shall be consulted and shall provide to that Local Jurisdiction documentation outlining the effects of the requested Exception on Wildfire protection.

(e) If an appeal is granted, the Local Jurisdiction shall make findings that the decision meets the intent of providing Defensible Space consistent with these regulations. Such findings shall include a statement of reasons for the decision. A written copy of these findings shall be provided to the CAL FIRE Unit headquarters that administers SRA fire protection in that Local Jurisdiction.

### § 1270.08. Distance Measurements

All specified or referenced distances are measured along the ground, unless otherwise stated.

## Article 2 Ingress and Egress

### § 1273.00. Intent

Roads, and Driveways, whether public or private, unless exempted under 14 CCR § 1270.03(d), shall provide for safe access for emergency Wildfire equipment and civilian evacuation concurrently, and shall provide unobstructed traffic circulation during a Wildfire emergency consistent with 14 CCR §§ 1273.00 through 1273.09.

### § 1273.01. Width.

(a) All roads shall be constructed to provide a minimum of two ten (10) foot traffic lanes, not including shoulder and striping. These traffic lanes shall provide for two-way traffic flow to support emergency vehicle and civilian egress, unless other standards are provided in this article or additional requirements are mandated by Local Jurisdictions or local subdivision requirements. Vertical clearances shall conform to the requirements in California Vehicle Code section 35250.

(b) All One-way Roads shall be constructed to provide a minimum of one twelve (12) foot traffic lane, not including Shoulders. The Local Jurisdiction may approve One-way Roads.

(1) All one-way roads shall, at both ends, connect to a road with two traffic lanes providing for travel in different directions, and shall provide access to an area currently zoned for no more than ten (10) Residential Units.

(2) In no case shall a One-way Road exceed 2,640 feet in length. A turnout shall be placed and constructed at approximately the midpoint of each One-way Road.

(c) All driveways shall be constructed to provide a minimum of one (1) ten (10) foot traffic lane, fourteen (14) feet unobstructed horizontal clearance, and unobstructed vertical clearance of thirteen feet, six inches (13' 6").

### § 1273.02. Road Surface

(a) Roads shall be designed and maintained to support the imposed load of Fire Apparatus weighing at least 75,000 pounds, and provide an aggregate base.

(b) Road and Driveway Structures shall be designed and maintained to support at least 40,000 pounds.

(c) Project proponent shall provide engineering specifications to support design, if requested by the Local Jurisdiction.

### § 1273.03. Grades

(a) At no point shall the grade for all Roads and Driveways exceed 16 percent.

(b) The grade may exceed 16%, not to exceed 20%, with approval from the Local Jurisdiction and with mitigations to provide for Same Practical Effect.

### § 1273.04. Radius

(a) No Road or Road Structure shall have a horizontal inside radius of curvature of less than fifty (50) feet. An additional surface width of four (4) feet shall be added to curves of 50-100 feet radius; two (2) feet to those from 100-200 feet.

(b) The length of vertical curves in Roadways, exclusive of gutters, ditches, and drainage structures designed to hold or divert water, shall be not less than one hundred (100) feet.

### § 1273.05. Turnarounds

(a) Turnarounds are required on Driveways and Dead-end Roads.

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(b) The minimum turning radius for a turnaround shall be forty (40) feet, not including parking, in accordance with the figures in 14 CCR §§ 1273.05(e) and 1273.05(f). If a hammerhead/T is used instead, the top of the “T” shall be a minimum of sixty (60) feet in length.

(c) Driveways exceeding 150 feet in length, but less than 800 feet in length, shall provide a turnout near the midpoint of the Driveway. Where the driveway exceeds 800 feet, turnouts shall be provided no more than 400 feet apart.

(d) A turnaround shall be provided on Driveways over 300 feet in length and shall be within fifty (50) feet of the building.

(d) Each Dead-end Road shall have a turnaround constructed at its terminus. Where parcels are zoned five (5) acres or larger, turnarounds shall be provided at a maximum of 1,320 foot intervals.

(e) Figure A. Turnarounds on roads with two ten-foot traffic lanes.

Figure A/Image 1 on the left is a visual representation of paragraph (b).

(f) Figure B. Turnarounds on driveways with one ten-foot traffic lane.

Figure B/Image 2 on the right is a visual representation of paragraph (b).

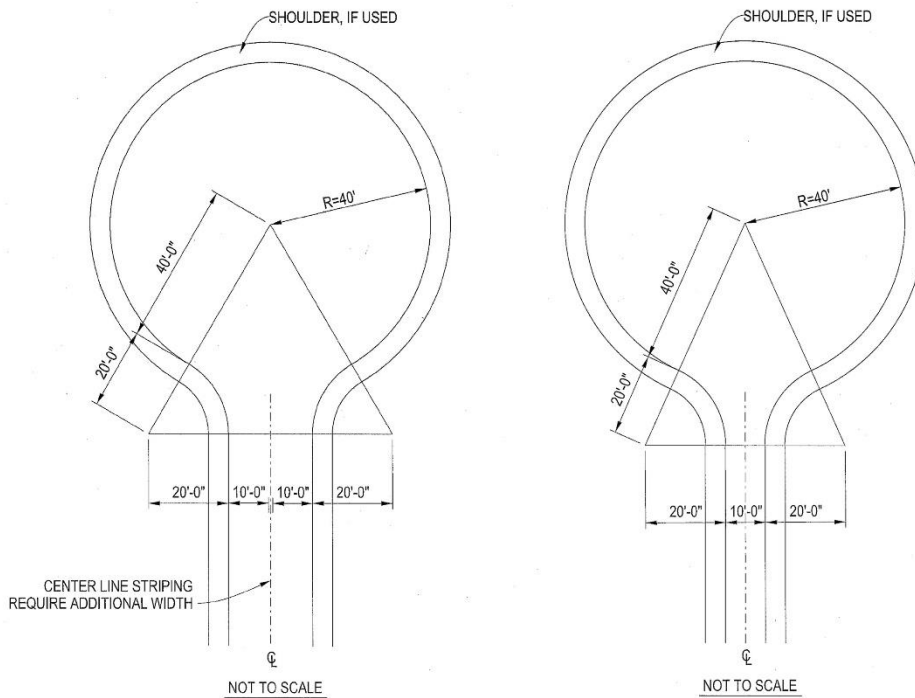


FIGURE FOR 14 CCR § 1273.05. TURNAROUND EXAMPLES

§ 1273.06. Turnouts

Turnouts shall be a minimum of twelve (12) feet wide and thirty (30) feet long with a minimum twenty-five (25) foot taper on each end.

§ 1273.07. Road and Driveway Structures

(a) Appropriate signing, including but not limited to weight or vertical clearance limitations, One-way Road or single traffic lane conditions, shall reflect the capability of each bridge.

(b) Where a bridge or an elevated surface is part of a Fire Apparatus access road, the bridge shall be constructed and maintained in accordance with the American Association of State and

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Highway Transportation Officials Standard Specifications for Highway Bridges, 17th Edition, published 2002 (known as AASHTO HB-17), hereby incorporated by reference. Bridges and elevated surfaces shall be designed for a live load sufficient to carry the imposed loads of fire apparatus. Vehicle load limits shall be posted at both entrances to bridges when required by the local authority having jurisdiction.

(c) Where elevated surfaces designed for emergency vehicle use are adjacent to surfaces which are not designed for such use, barriers, or signs, or both, as approved by the local authority having jurisdiction, shall be installed and maintained.

(d) A bridge with only one traffic lane may be authorized by the Local Jurisdiction; however, it shall provide for unobstructed visibility from one end to the other and turnouts at both ends.

### § 1273.08. Dead-end Roads

(a) The maximum length of a Dead-end Road, including all Dead-end Roads accessed from that Dead-end Road, shall not exceed the following cumulative lengths, regardless of the number of parcels served:

- parcels zoned for less than one acre - 800 feet
- parcels zoned for 1 acre to 4.99 acres - 1,320 feet
- parcels zoned for 5 acres to 19.99 acres - 2,640 feet
- parcels zoned for 20 acres or larger - 5,280 feet

All lengths shall be measured from the edge of the Road surface at the intersection that begins the Road to the end of the Road surface at its farthest point. Where a dead-end road crosses areas of differing zoned parcel sizes requiring different length limits, the shortest allowable length shall apply.

(b) See 14 CCR § 1273.05 for dead-end road turnaround requirements.

### § 1273.09. Gate Entrances

(a) Gate entrances shall be at least two (2) feet wider than the width of the traffic lane(s) serving that gate and a minimum width of fourteen (14) feet unobstructed horizontal clearance and unobstructed vertical clearance of thirteen feet, six inches (13' 6").

(b) All gates providing access from a Road to a Driveway shall be located at least thirty (30) feet from the roadway and shall open to allow a vehicle to stop without obstructing traffic on that Road.

(c) Where a One-way Road with a single traffic lane provides access to a gated entrance, a forty (40) foot turning radius shall be used.

(d) Security gates shall not be installed without approval. Where security gates are installed, they shall have an approved means of emergency operation. Approval shall be by the local authority having jurisdiction. The security gates and the emergency operation shall be maintained operational at all times.

## **Article 3 Signing and Building Numbering**

### **§ 1274.00. Intent**

To facilitate locating a fire and to avoid delays in response, all newly constructed or approved Roads and Buildings shall be designated by names or numbers posted on signs clearly visible and legible from the Road. This section shall not restrict the size of letters or numbers appearing on road signs for other purposes.

### **§ 1274.01. Road Signs.**

(a) Newly constructed or approved Roads must be identified by a name or number through a consistent system that provides for sequenced or patterned numbering and/or non-duplicative naming within each Local Jurisdiction. This section does not require any entity to rename or renumber existing roads, nor shall a Road providing access only to a single commercial or industrial Occupancy require naming or numbering.

(b) The size of letters, numbers, and symbols for Road signs shall be a minimum four (4) inch letter height, half inch (.5) inch stroke, reflectorized, contrasting with the background color of the sign.

### **§ 1274.02. Road Sign Installation, Location, and Visibility.**

(a) Road signs shall be visible and legible from both directions of vehicle travel for a distance of at least one hundred (100) feet.

(b) Signs required by this article identifying intersecting Roads shall be placed at the intersection of those Roads.

(c) A sign identifying traffic access or flow limitations, including but not limited to weight or vertical clearance limitations, dead-end roads, one-way roads, or single lane conditions, shall be placed:

(1) at the intersection preceding the traffic access limitation, and

(2) no more than one hundred (100) feet before such traffic access limitation.

(d) Road signs required by this article shall be posted at the beginning of construction and shall be maintained thereafter.

### **§ 1274.03. Addresses for Buildings.**

(a) All Buildings shall be issued an address by the Local Jurisdiction which conforms to that jurisdiction's overall address system. Utility and miscellaneous Group U Buildings are not required to have a separate address; however, each Residential Unit within a Building shall be separately identified.

(b) The size of letters, numbers, and symbols for addresses shall conform to the standards in the California Fire Code, California Code of Regulations title 24, part 9.

(c) Addresses for residential Buildings shall be reflectorized.

### **§ 1274.04. Address Installation, Location, and Visibility.**

(a) All buildings shall have a permanently posted address which shall be plainly legible and visible from the Road fronting the property.

(b) Where access is by means of a private Road and the address identification cannot be viewed from the public way, an unobstructed sign or other means shall be used so that the address is visible from the public way.

(c) Address signs along one-way Roads shall be visible from both directions.

(d) Where multiple addresses are required at a single driveway, they shall be mounted on a single sign or post.

(e) Where a Road provides access solely to a single commercial or industrial business, the address sign shall be placed at the nearest Road intersection providing access to that site, or otherwise posted to provide for unobstructed visibility from that intersection.

(f) In all cases, the address shall be posted at the beginning of construction and shall be maintained thereafter.

## **Article 4 Emergency Water Standards**

### **§ 1275.00. Intent**

Emergency water for Wildfire protection shall be available, accessible, and maintained in quantities and locations specified in the statute and these regulations in order to attack a Wildfire or defend property from a Wildfire.

### **§ 1275.01. Application**

The provisions of this article shall apply in the tentative and parcel map process when new parcels are approved by the Local Jurisdiction.

### **§ 1275.02. Water Supply.**

(a) When a water supply for structure defense is required to be installed, such protection shall be installed and made serviceable prior to and during the time of construction except when alternative methods of protection are provided and approved by the Local Jurisdiction.

(b) Water systems equaling or exceeding the California Fire Code, California Code of Regulations title 24, part 9, or, where a municipal-type water supply is unavailable, National Fire Protection Association (NFPA) 1142, "Standard on Water Supplies for Suburban and Rural Fire Fighting," 2017 Edition, hereby incorporated by reference, shall be accepted as meeting the requirements of this article.

(c) Such emergency water may be provided in a fire agency mobile water tender, or naturally occurring or man made containment structure, as long as the specified quantity is immediately available.

(d) Nothing in this article prohibits the combined storage of emergency Wildfire and structural firefighting water supplies unless so prohibited by local ordinance or specified by the local fire agency.

(e) Where freeze or crash protection is required by Local Jurisdictions, such protection measures shall be provided.

### **§ 1275.03. Hydrants and Fire Valves.**

(a) The hydrant or fire valve shall be eighteen (18) inches above the finished surface. Its location in relation to the road or driveway and to the building(s) or structure(s) it serves shall comply with California Fire Code, California Code of Regulations title 24, part 9, Chapter 5, and Appendix C.

(b) The hydrant head shall be a two and half (2 1/2) inch National Hose male thread with cap for pressure and gravity flow systems and four and a half (4 1/2) inch for draft systems.

(c) Hydrants shall be wet or dry barrel and have suitable freeze or crash protection as required by the local jurisdiction.

### **§ 1275.04. Signing of Water Sources.**

(a) Each hydrant, fire valve, or access to water shall be identified as follows:

- (1) if located along a driveway, a reflectorized blue marker, with a minimum dimension of three (3) inches shall be located on the driveway address sign and mounted on a fire retardant post, or
- (2) if located along a road,



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- (i) a reflectorized blue marker, with a minimum dimension of three (3) inches, shall be mounted on a fire retardant post. The sign post shall be within three (3) feet of said hydrant or fire valve, with the sign no less than three (3) feet nor greater than five (5) feet above ground, in a horizontal position and visible from the driveway, or
- (ii) as specified in the State Fire Marshal's Guidelines for Fire Hydrant Markings Along State Highways and Freeways, May 1988.

§ 1275.04. Signing of Water Sources.

- (a) Each Fire Hydrant or access to water shall be identified as follows:
  - (1) if located along a Driveway, a reflectorized blue marker, with a minimum dimension of three (3) inches shall be located on the Driveway address sign and mounted on a fire retardant post, or
  - (2) if located along a Road,
    - (i) a reflectorized blue marker, with a minimum dimension of three (3) inches, shall be mounted on a fire retardant post. The sign post shall be within three (3) feet of said Fire Hydrant with the sign no less than three (3) feet nor greater than five (5) feet above ground, in a horizontal position and visible from the Driveway, or
    - (ii) as specified in the State Fire Marshal's Guidelines for Fire Hydrant Markings Along State Highways and Freeways, May 1988.

**Article 5 Building Siting, Setbacks, and Fuel Modification**

§ 1276.00 Intent

To reduce the intensity of a Wildfire, reducing the volume and density of flammable vegetation around Development through strategic fuel modification, parcel siting and Building setbacks, and the protection of Undeveloped Ridgelines shall provide for increased safety for emergency fire equipment, including evacuating civilians, and a point of attack or defense from a Wildfire.

§ 1276.01. Building and Parcel Siting and Setbacks

- (a) All parcels shall provide a minimum thirty (30) foot setback for all Buildings from all property lines and/or the center of a Road, except as provided for in subsection (b).
- (b) A reduction in the minimum setback shall be based upon practical reasons, which may include but are not limited to, parcel dimensions or size, topographic limitations, Development density requirements or other Development patterns that promote low-carbon emission outcomes; sensitive habitat; or other site constraints , and shall provide for an alternative method to reduce Structure-to-Structure ignition by incorporating features such as, but not limited to:
  - (1) non-combustible block walls or fences; or
  - (2) non-combustible material extending five (5) feet horizontally from the furthest extent of the Building; or
  - (3) hardscape landscaping; or
  - (4) a reduction of exposed windows on the side of the Structure with a less than thirty (30) foot setback; or
  - (5) the most protective requirements in the California Building Code, California Code of Regulations Title 24, Part 2, Chapter 7A, as required by the Local Jurisdiction.

## § 1276.02. Ridgelines

(a) The Local Jurisdiction shall identify Strategic Ridgelines, if any, to reduce fire risk and improve fire protection through an assessment of the following factors:

- (1) Topography;
- (2) Vegetation;
- (3) Proximity to any existing or proposed residential, commercial, or industrial land uses;
- (4) Construction where mass grading may significantly alter the topography resulting in the elimination of Ridgeline fire risks;
- (5) Ability to support effective fire suppression; and
- (6) Other factors, if any, deemed relevant by the Local Jurisdiction.

(b) Preservation of Undeveloped Ridgelines identified as strategically important shall be required pursuant to this section.

(c) New Buildings on Undeveloped Ridgelines identified as strategically important are prohibited, as described in subsections (c)(1), (c)(2), and (c)(3).

(1) New Residential Units are prohibited within or at the top of drainages or other topographic features common to Ridgelines that act as chimneys to funnel convective heat from Wildfires.

(2) Nothing in this subsection shall be construed to alter the extent to which utility infrastructure, including but not limited to wireless telecommunications facilities, as defined in Government Code section 65850.6, subdivision (d)(2), or Storage Group S or Utility and Miscellaneous Group U Structures, may be constructed on Undeveloped Ridgelines.

(3) Local Jurisdictions may approve Buildings on Strategic Ridgelines where Development activities such as mass grading will significantly alter the topography that results in the elimination of Ridgeline fire risks.

(d) The Local Jurisdiction may implement further specific requirements to preserve Undeveloped Ridgelines.

## § 1276.03. Fuel Breaks

(a) When Building construction meets the following criteria, the Local Jurisdiction shall determine the need and location for Fuel Breaks in consultation with the Fire Authority:

- (1) the permitting or approval of three (3) or more new parcels, excluding lot line adjustments as specified in Government Code (GC) section 66412(d); or
- (2) an application for a change of zoning increasing zoning intensity or density; or
- (3) an application for a change in use permit increasing use intensity or density.

(b) Fuel Breaks required by the Local Jurisdiction, in consultation with the Fire Authority, shall be located, designed, and maintained in a condition that reduces the potential of damaging radiant and convective heat or ember exposure to Access routes, Buildings, or infrastructure within the Development.

(c) Fuel Breaks shall have, at a minimum, one point of entry for fire fighters and any Fire Apparatus. The specific number of entry points and entry requirements shall be determined by the Local Jurisdiction, in consultation with the Fire Authority.

(d) Fuel Breaks may be required at locations such as, but not limited to:

- (1) Directly adjacent to defensible space as defined by 14 CCR § 1299.02 to reduce radiant and convective heat exposure, ember impacts, or support fire suppression tactics;
- (2) Directly adjacent to Roads to manage radiant and convective heat exposure or ember impacts, increase evacuation safety, or support fire suppression tactics;
- (3) Directly adjacent to a Hazardous Land Use to limit the spread of fire from such uses, reduce radiant and convective heat exposure, or support fire suppression tactics;

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(4) Strategically located along Ridgelines, in Greenbelts, or other locations to reduce radiant and convective heat exposure, ember impacts, or support community level fire suppression tactics.

- (e) Fuel Breaks shall be completed prior to the commencement of any permitted construction.
- (f) Fuel Breaks shall be constructed using the most ecologically and site appropriate treatment option, such as, but not limited to, prescribed burning, manual treatment, mechanical treatment, prescribed herbivory, and targeted ground application of herbicides.
- (g) Where a Local Jurisdiction requires Fuel Breaks, maintenance mechanisms shall be established to ensure the fire behavior objectives and thresholds are maintained over time.
- (h) The mechanisms required shall be binding upon the property for which the Fuel Break is established, shall ensure adequate maintenance levels, and may include written legal agreements; permanent fees, taxes, or assessments; assessments through a homeowners' association; or other funding mechanisms.

**§ 1276.04 Greenbelts, Greenways, Open Spaces and Parks**

(a) Where a Greenbelt, Greenway, open space, park, landscaped or natural area, or portions thereof, is intended to serve as a Fuel Break, the space or relevant portion thereof shall conform with the requirements in § 1276.03 (Fuel Breaks).

**§ 1276.05 Disposal of Flammable Vegetation and Fuels**

The disposal, including burning or removal to a site approved by the Local Jurisdiction, in consultation with the Fire Authority, of flammable vegetation and fuels caused by site construction, Road, and Driveway construction shall be in accordance with all applicable laws and regulations.

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