

City of Arcata

Annie & Mary Trail Connectivity Project

Final

Project Report

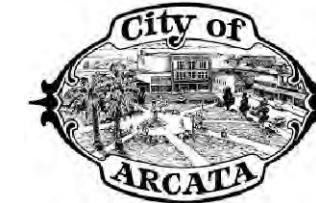
APPENDIX A

Project Plans

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PRELIMINARY DRAWINGS
FOR

ANNIE AND MARY RAIL TRAIL
(SUNSET AVE TO HUMBOLDT BAY MUNICIPAL WATER DISTRICT PARK 1)
ARCATA, CALIFORNIA



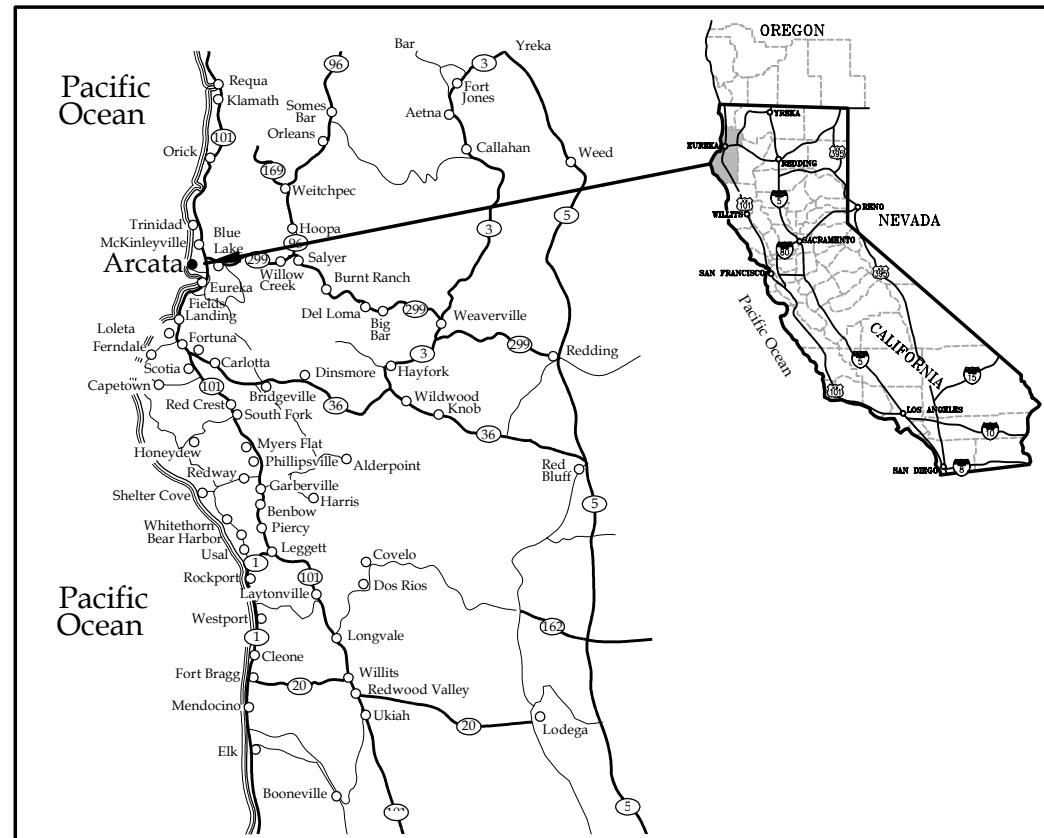
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PRELIMINARY RIGHTS OF WAY NOTE:

THE RIGHTS OF WAY FOR THE NORTHWESTERN PACIFIC RAILROAD (NWPR) AND THE ARCATA AND MAD RIVER RAILROAD (AMRR) AS SHOWN IN THESE PLANS ARE PRELIMINARY AND FOR INITIAL PLANNING PURPOSES. THE PHYSICAL LOCATION OF THE EXISTING RAILROAD TRACKS AND EVIDENCE OF THE ROADBED AFTER REMOVAL OF THE TRACKS WAS USED AS THE BEST EVIDENCE OF THE INTENT OF THE LOCATION OF THE RIGHTS OF WAY. THIS PHYSICAL EVIDENCE WAS COMPILED WITH THE RIGHTS OF WAY WIDTHS AS DETERMINED BY PREVIOUS RESEARCH OF THE HISTORICAL RIGHTS OF WAY CONVEYANCES PROVIDED TO THE CITY OF ARCAT A AND COUNTY OF HUMBOLDT. FIELD LOCATIONS OF THE TRACKS AND ROADBED WERE SURVEYED AND COMPARED TO FOUND MONUMENTS FROM RECORDED SURVEYS ALONG AND PREDICTING THE CURRENT UNDERSTANDING OF OWNERSHIPS ADJOINING THE RIGHTS OF WAY. NOT ALL OF THE RIGHTS OF WAY ARE VERIFIABLE BY THE EVIDENCE OF ADJACENT OWNERSHIP AND CONFLICTS WITH CURRENT OWNERSHIP RIGHTS ALONG THE RAILROADS APPEAR TO EXIST. ADDITIONAL INVESTIGATION OF TITLE RIGHTS WILL BE NEEDED IN THE AREAS WHERE CURRENT SURVEYS DO NOT PREDICT EXISTING OWNERSHIP RIGHTS. THERE ARE CONFLICTS WITH ADJOINING SURVEYS OR THERE IS EVIDENCE OF POTENTIAL OCCUPATION CONFLICTS WITH THE RIGHTS OF WAY AS SHOWN.



AREA MAP



LOCATION MAP

SHEET INDEX

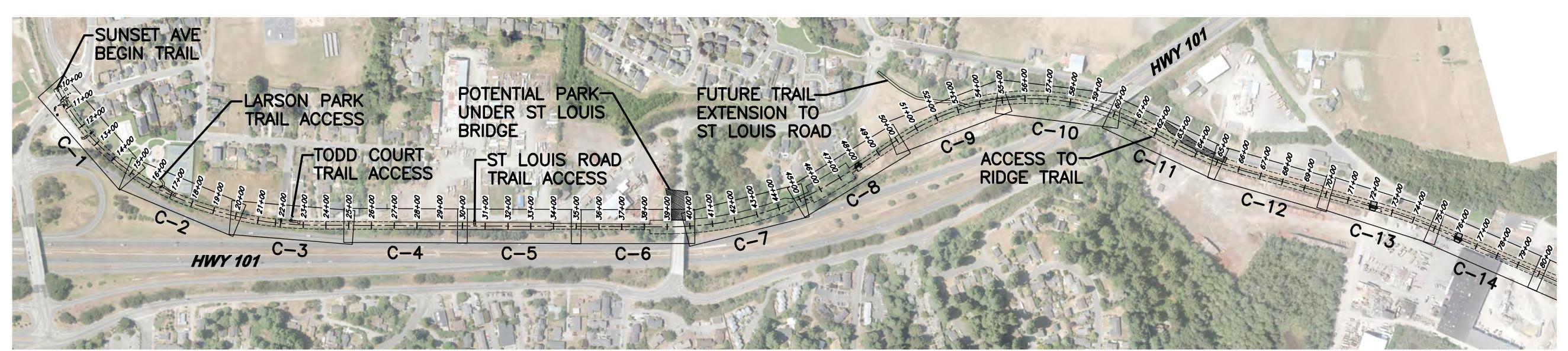
SHEET NO.	SHEET DESCRIPTION
CIVIL DRAWINGS	
G-1	COVER PROJECT OVERVIEW
G-2	TYPICAL TRAIL SECTIONS
C-1	PLAN AND PROFILE
C-2	PLAN AND PROFILE
C-3	PLAN AND PROFILE
C-4	PLAN AND PROFILE
C-5	PLAN AND PROFILE
C-6	PLAN AND PROFILE
C-7	PLAN AND PROFILE
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C-33	PLAN AND PROFILE
C-34	PLAN AND PROFILE
C-35	PLAN AND PROFILE
C-36	JAY STREET AND SUNSET AVENUE TRAIL ACCESS
C-37	LARSON PARK TRAIL ACCESS
C-38	TODD COURT TRAIL ACCESS
C-39	ST LOUIS ROAD TRAIL ACCESS
C-40	ST LOUIS ROAD CONNECTION
C-41	ALDER GROVE ROAD TRAIL ACCESS
C-42	GIUNTOLI LANE TRAIL ACCESS
C-43	FRANK MARTIN COURT TRAIL ACCESS
C-44	ERICSON AND WEST END ROAD TRAIL ACCESS
C-45	TRAIL CONNECTIVITY TO HEAD START

PRELIMINARY

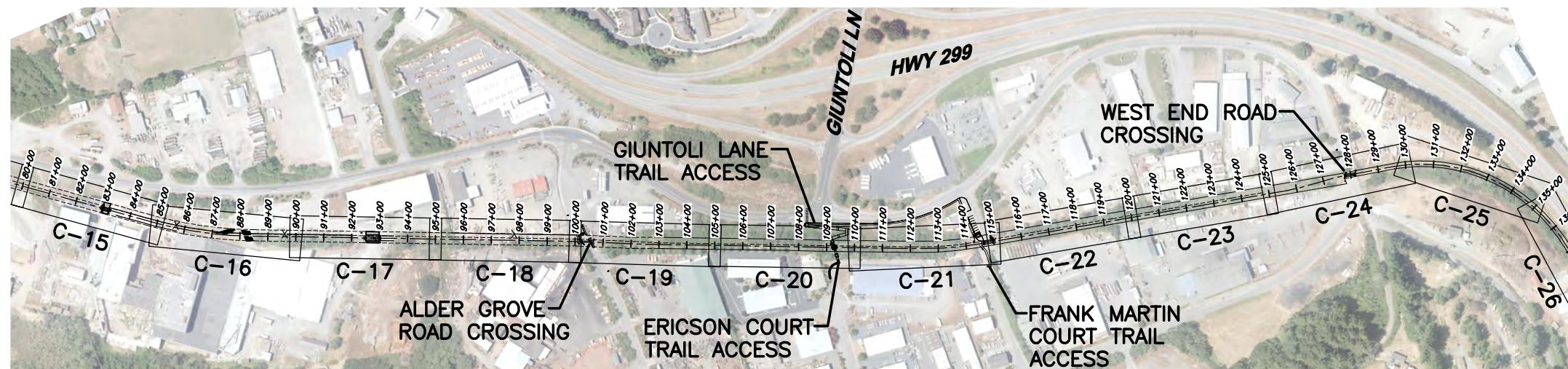
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NOTE:
 SEE PRELIMINARY RIGHTS OF WAY NOTE ON SHEET G-1.

PRELIMINARY

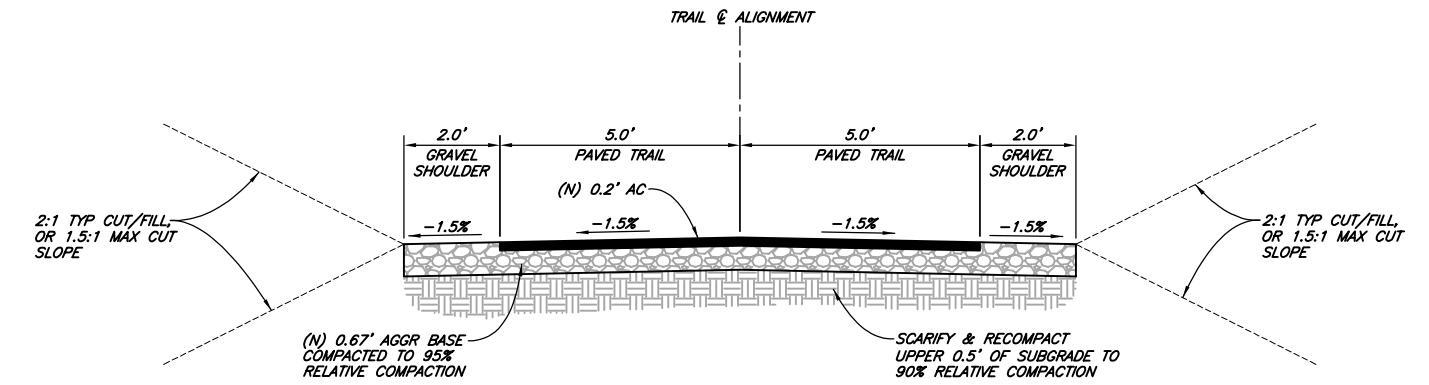
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CITY OF ARCATA
 ANNIE AND MARY RAIL TRAIL
 ARCATA, CALIFORNIA
PROJECT OVERVIEW

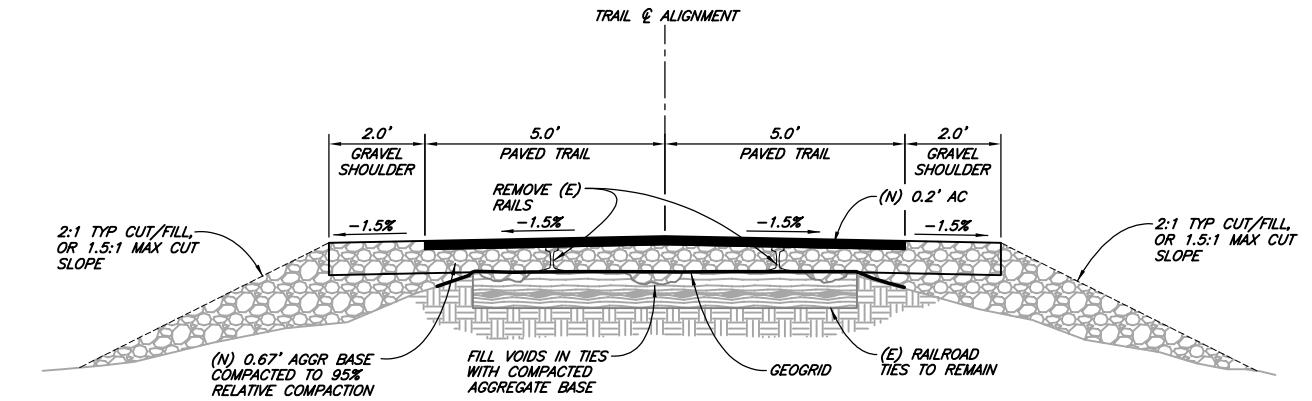
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**TYPICAL TRAIL SECTION
(WHERE NO RAILS PRESENT)**



**TYPICAL TRAIL SECTION
(WHERE RAILS PRESENT)**

NOTE:

SEE PRELIMINARY RIGHTS OF WAY NOTE ON SHEET G-1.

PRELIMINARY

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PROJ. NO.
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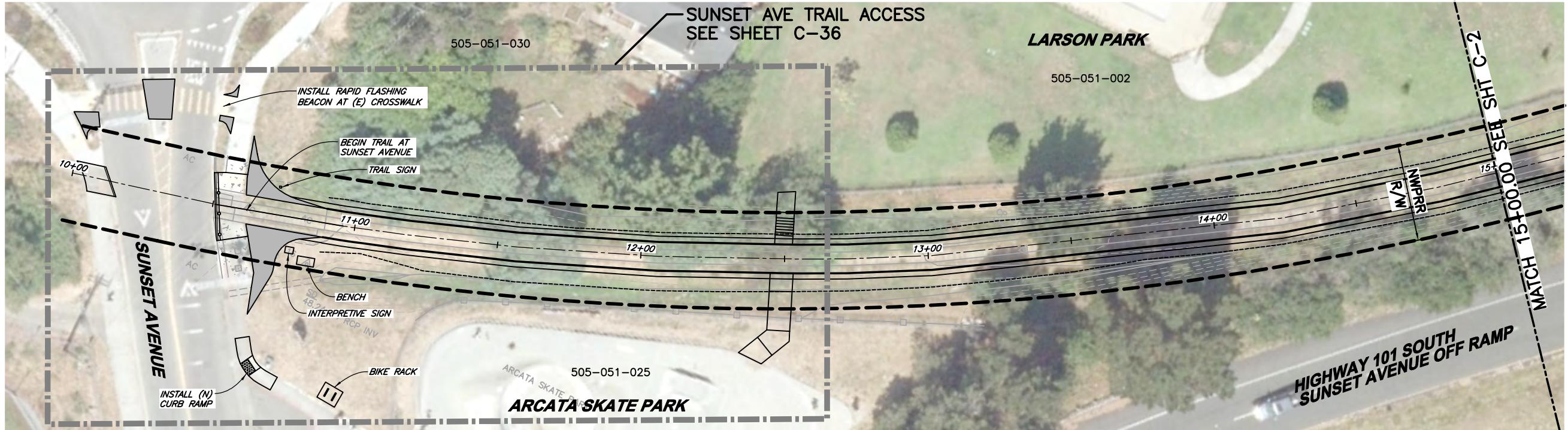
CITY OF ARCATIA
ANNIE AND MARY RAIL TRAIL
ARCATIA, CALIFORNIA
TYPICAL TRAIL SECTIONS

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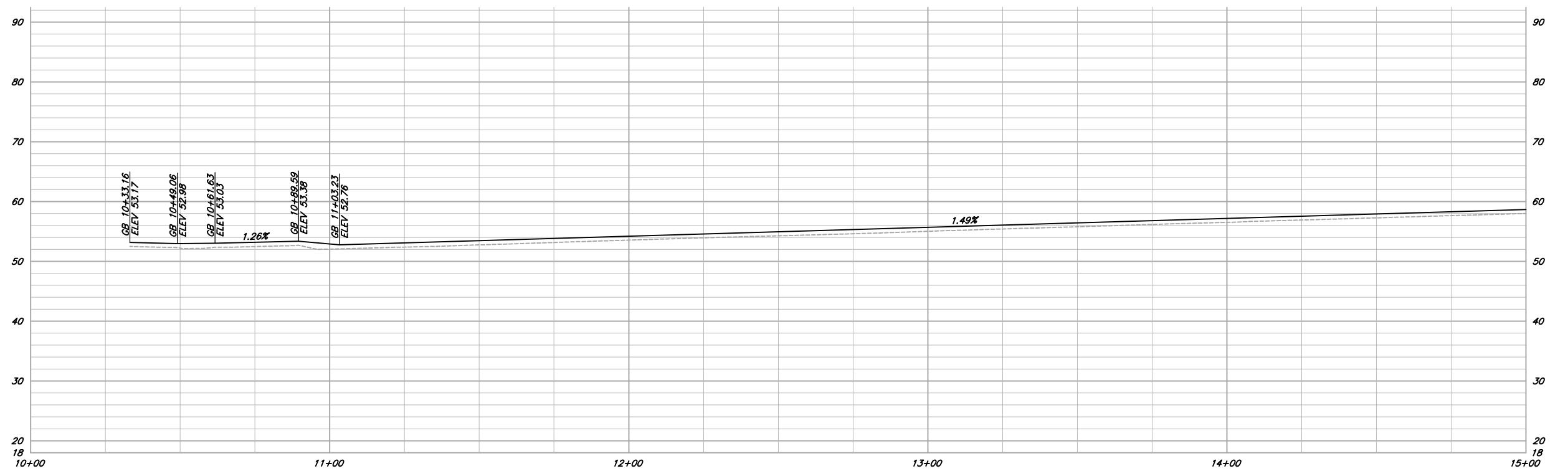


PLAN



LEGEND

— — — — — TRAIL ALIGNMENT CENTERLINE
— — — — — EDGE OF PAVED TRAIL
— — — — — EDGE OF TRAIL GRAVEL SHOULDER
— — — — — PRELIMINARY RAILROAD RIGHT-OF-WAY



PROFILE

SCALE: $1'' = 20' H$
 $1'' = 10' V$

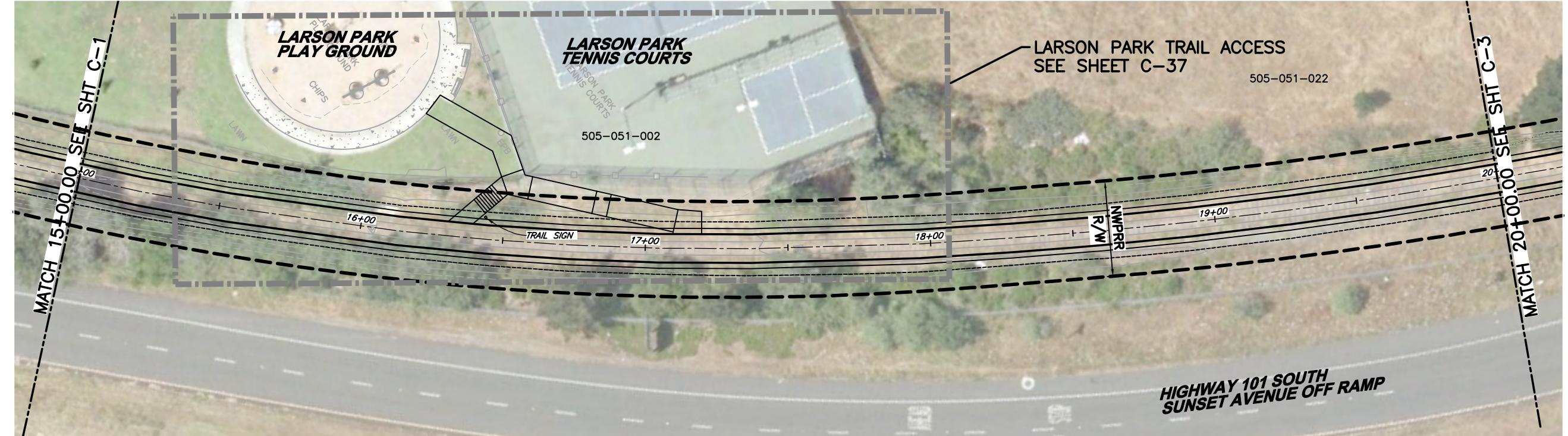
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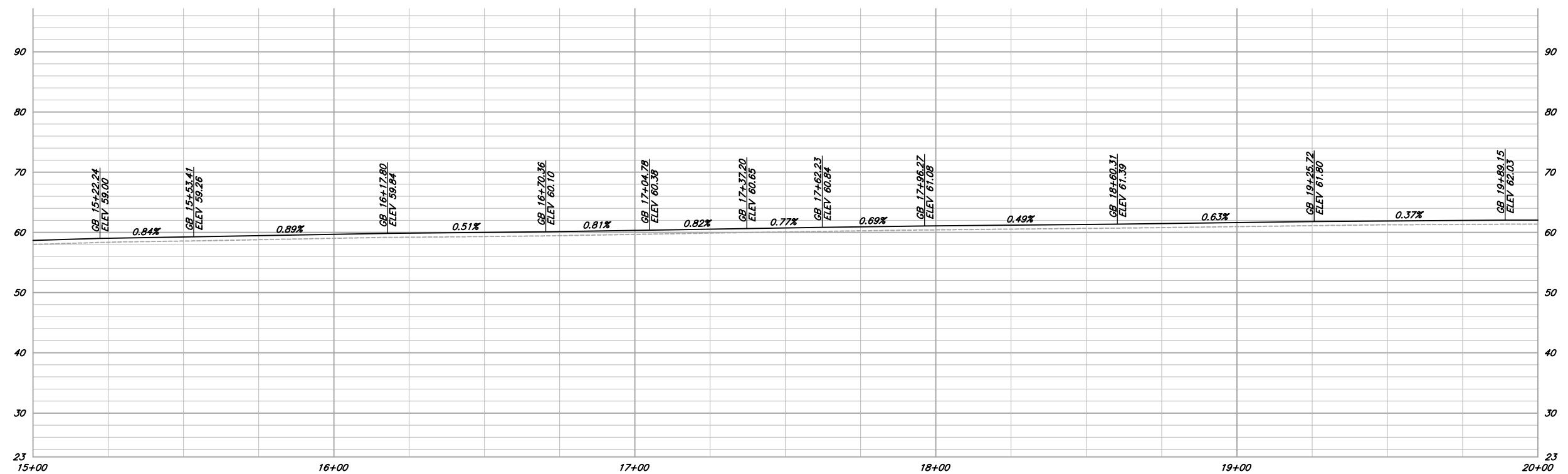


PLAN



LEGEND

- TRAIL ALIGNMENT CENTERLINE
- EDGE OF PAVED TRAIL
- EDGE OF TRAIL GRAVEL SHOULDER
- - - PRELIMINARY RAILROAD RIGHT-OF-WAY



PROFILE

SCALE: 1"=20' H
 1"=10' V

NOTE:

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PRELIMINARY

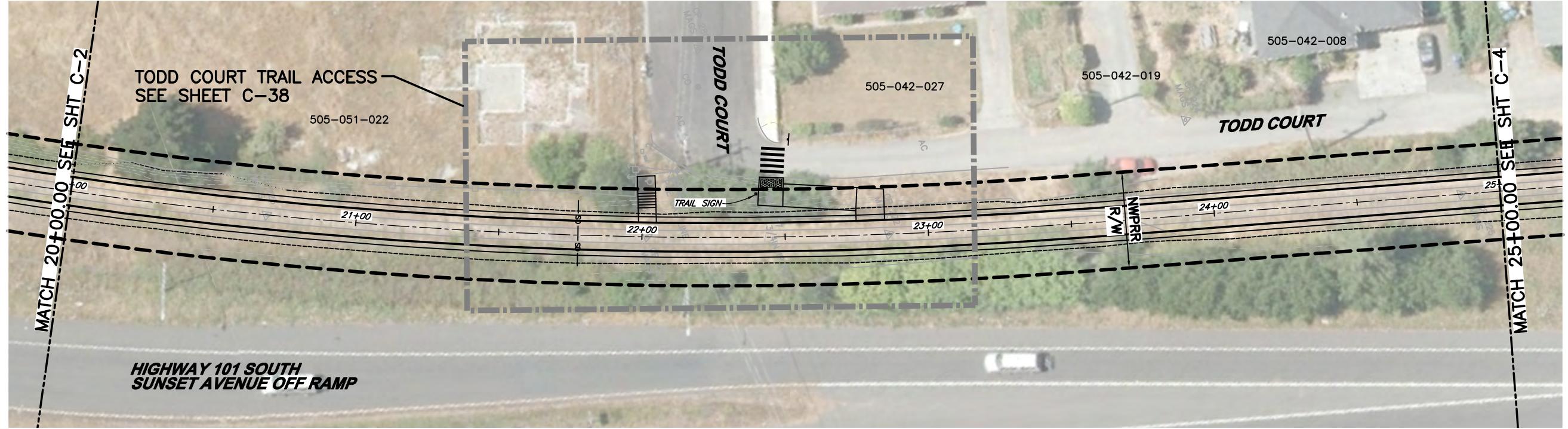
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CITY OF ARCATA
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 ARCATA, CALIFORNIA
PLAN AND PROFILE



PLAN

1"=20'

LEGEND

- Trail Alignment Centerline
- Edge of Paved Trail
- Edge of Trail Gravel Shoulder
- - - Preliminary Railroad Right-of-Way



PROFILE

SCALE: 1"=20' H
 1"=10' V

NOTE:

SEE PRELIMINARY RIGHTS OF WAY NOTE ON SHEET G-1.

PRELIMINARY

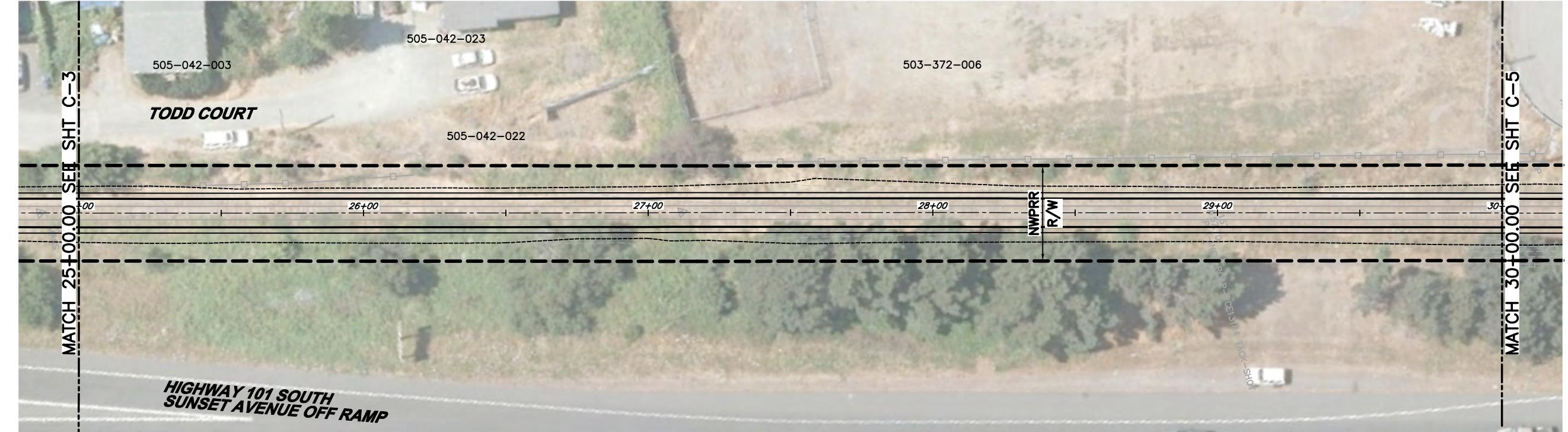
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CITY OF ARCATA
 ANNIE AND MARY RAIL
 ARCATA, CALIFORNIA
PLAN AND PROFILE



HIGHWAY 101 SOUTH
SUNSET AVENUE OFF RAMP

PLAN
1"=20'

LEGEND

- TRAIL ALIGNMENT CENTERLINE
- EDGE OF PAVED TRAIL
- EDGE OF TRAIL GRAVEL SHOULDER
- - - PRELIMINARY RAILROAD RIGHT-OF-WAY



PROFILE
SCALE: 1"=20' H
1"=10' V

NOTE:

SEE PRELIMINARY RIGHTS OF WAY NOTE ON SHEET G-1.

PRELIMINARY

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PLAN AND PROFILE											

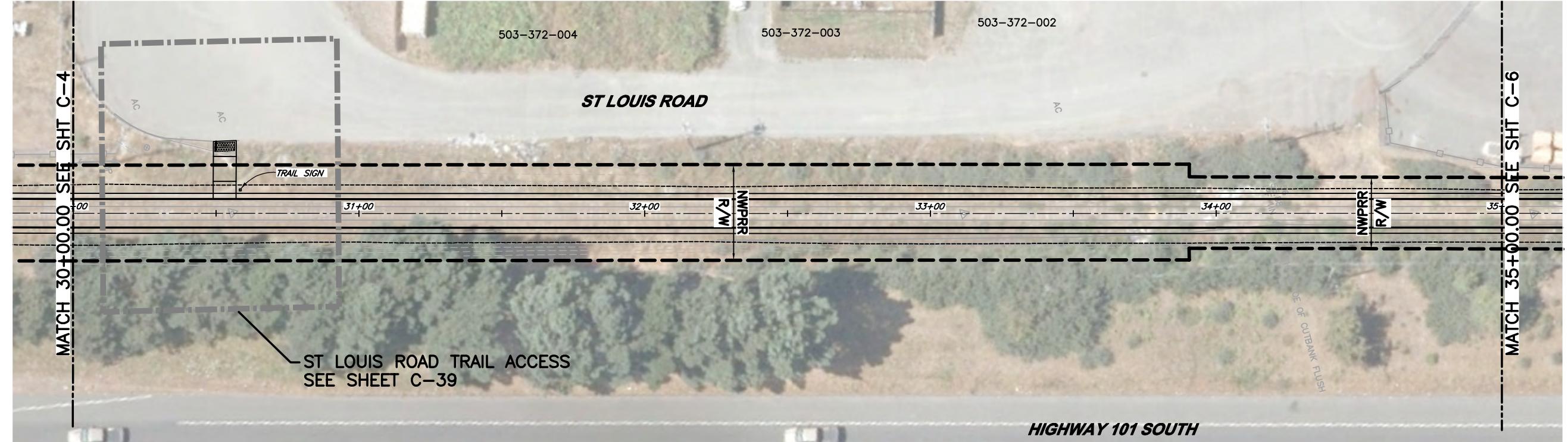
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TRAIL
ARCATA, CALIFORNIA
PLAN AND PROFILE

SEQ	C-4
DATE	12/2019
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PLAN
 $1''=20'$

LEGEND

- TRAIL ALIGNMENT CENTERLINE
- EDGE OF PAVED TRAIL
- EDGE OF TRAIL GRAVEL SHOULDER
- PRELIMINARY RAILROAD RIGHT-OF-WAY



PROFILE
 SCALE: $1''=20' H$
 $1''=10' V$

NOTE:
 SEE PRELIMINARY RIGHTS OF WAY NOTE ON SHEET G-1.

PRELIMINARY

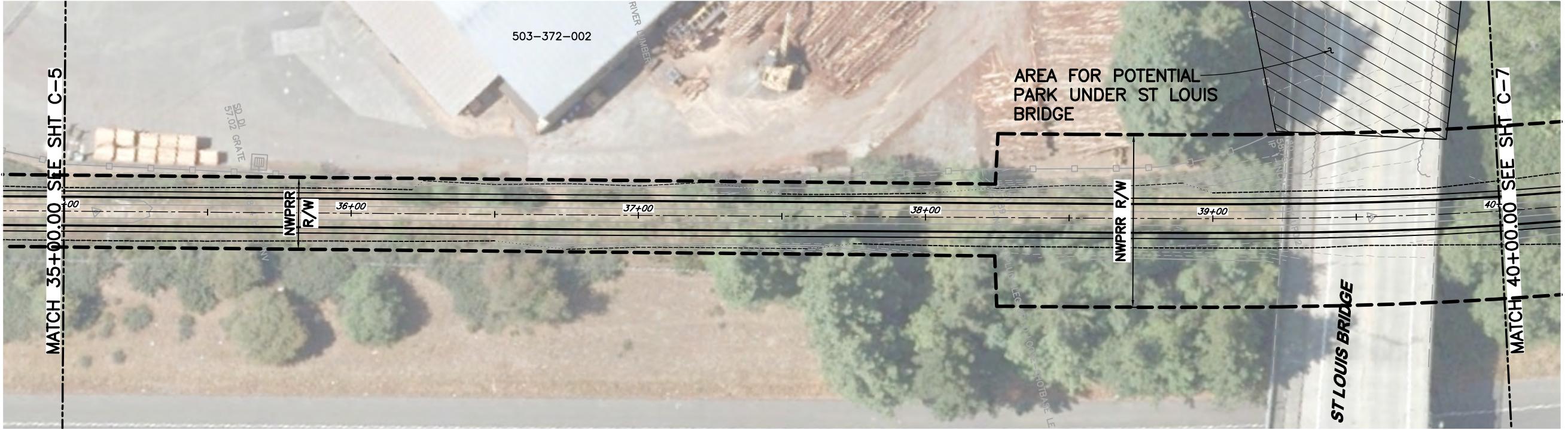
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CITY OF ARCATA
 ANNIE AND MARY RAIL
 TRAIL
 ARCATA, CALIFORNIA
PLAN AND PROFILE



PLAN

1"=20'

LEGEND

- Trail Alignment Centerline
- Edge of Paved Trail
- Edge of Trail Gravel Shoulder
- Preliminary Railroad Right-of-Way



PROFILE

SCALE: 1"=20' H
 1"=10' V

NOTE:

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PRELIMINARY

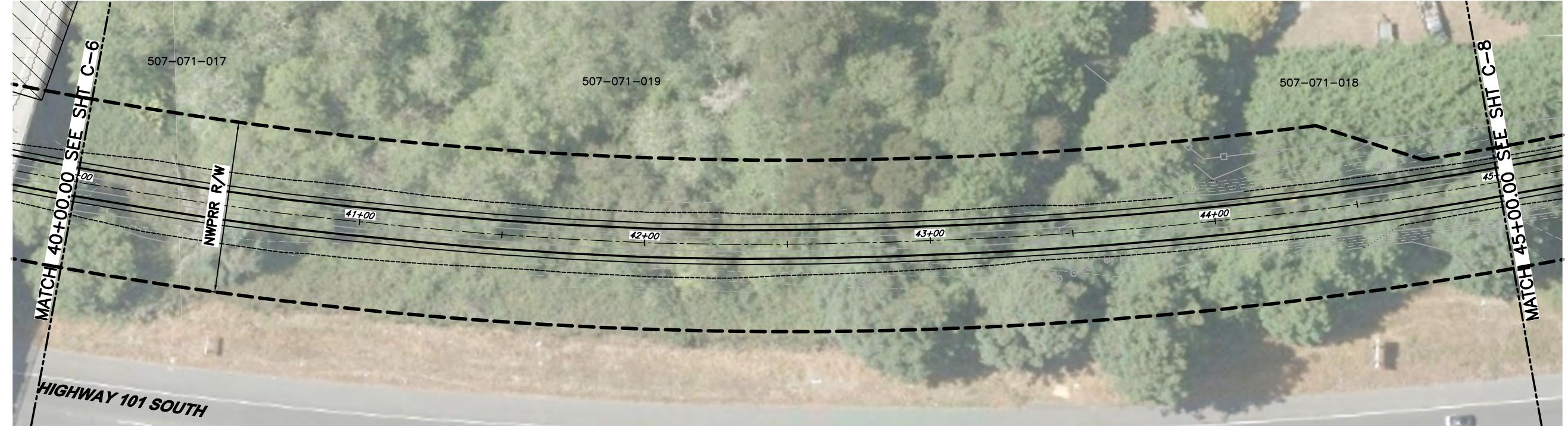
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 ANNIE AND MARY RAIL TRAIL
 ARCATA, CALIFORNIA
 PLAN AND PROFILE

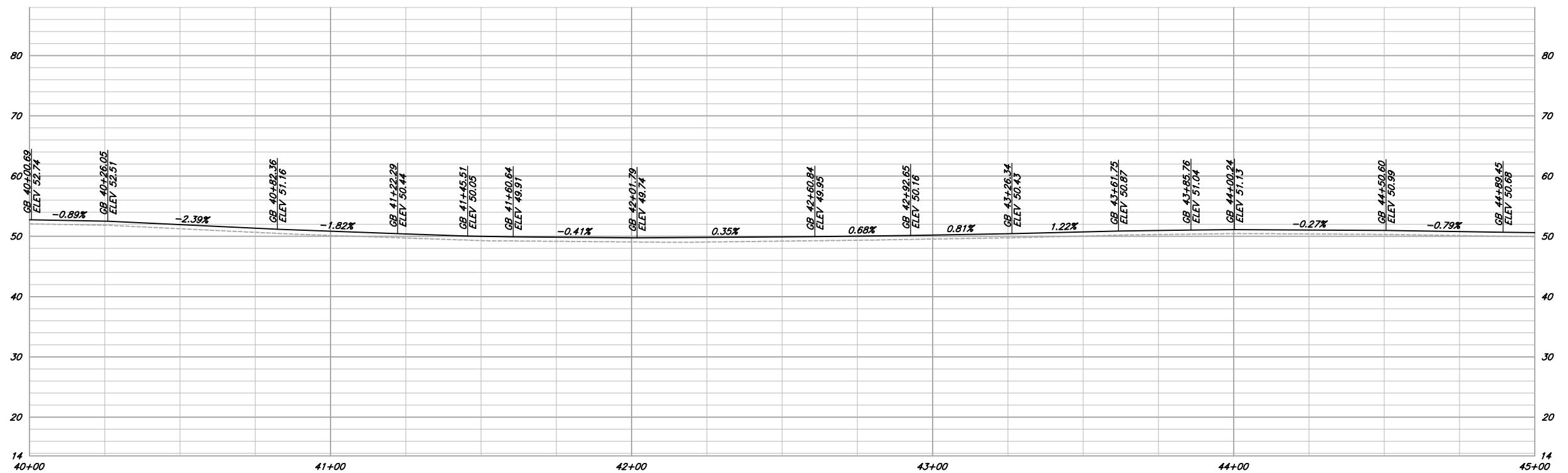


PLAN

1"=20'

LEGEND

- Trail Alignment Centerline
- Edge of Paved Trail
- Edge of Trail Gravel Shoulder
- - - Preliminary Railroad Right-of-Way



PROFILE

SCALE: 1"=20' H
 1"=10' V

NOTE:

SEE PRELIMINARY RIGHTS OF WAY NOTE ON SHEET G-1.

PRELIMINARY

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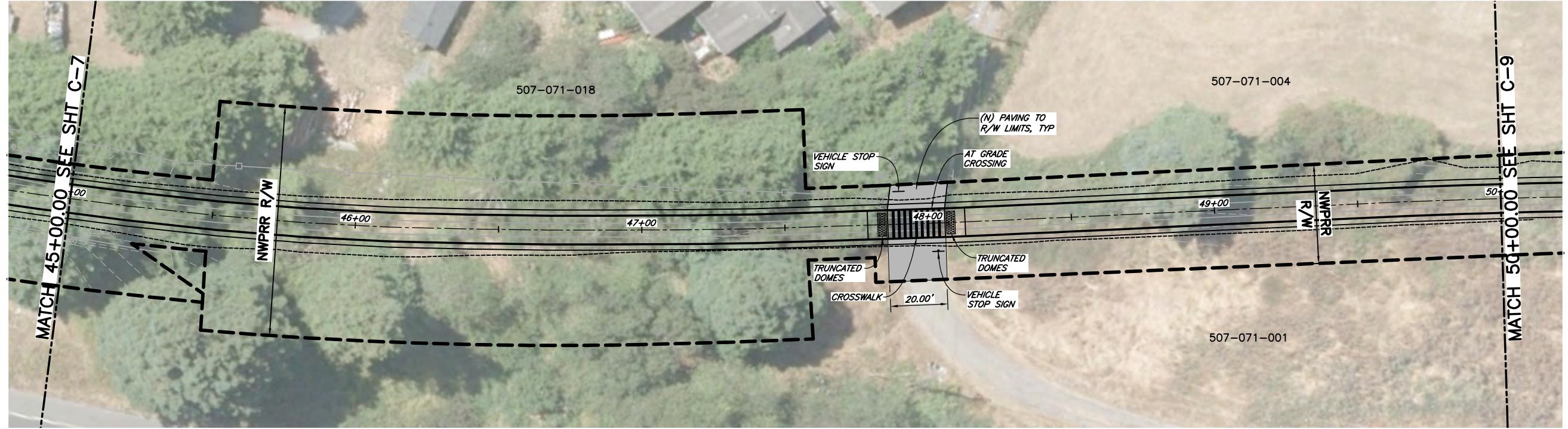
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 TRAIL
 ARCATA, CALIFORNIA

PLAN AND PROFILE

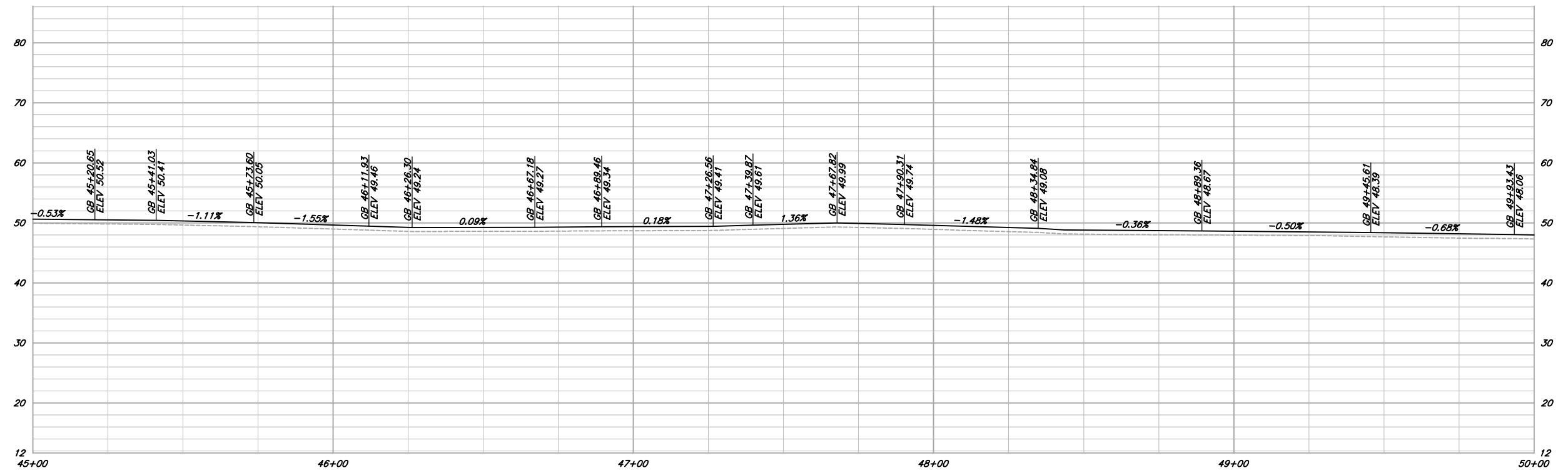


PLAN

1"=20'

LEGEND

- TRAIL ALIGNMENT CENTERLINE
- EDGE OF PAVED TRAIL
- EDGE OF TRAIL GRAVEL SHOULDER
- - - PRELIMINARY RAILROAD RIGHT-OF-WAY
- AC PAVING



PROFILE

SCALE: 1"=20' H
 1"=10' V

NOTE:

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PRELIMINARY

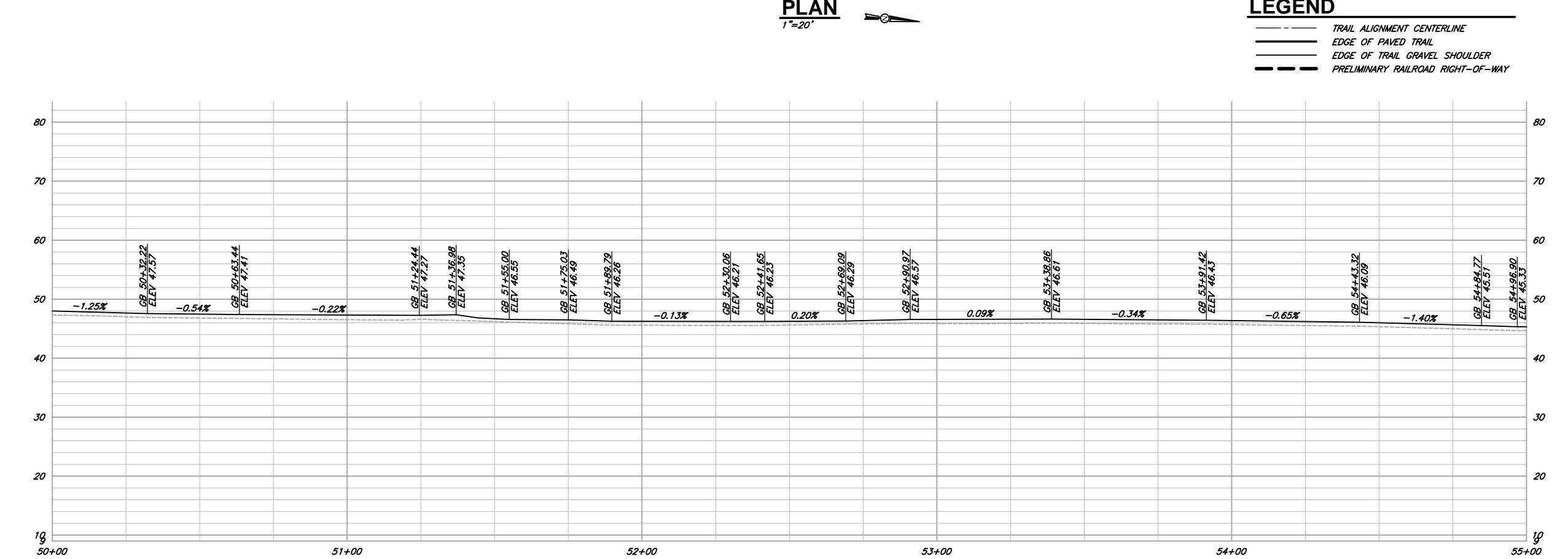
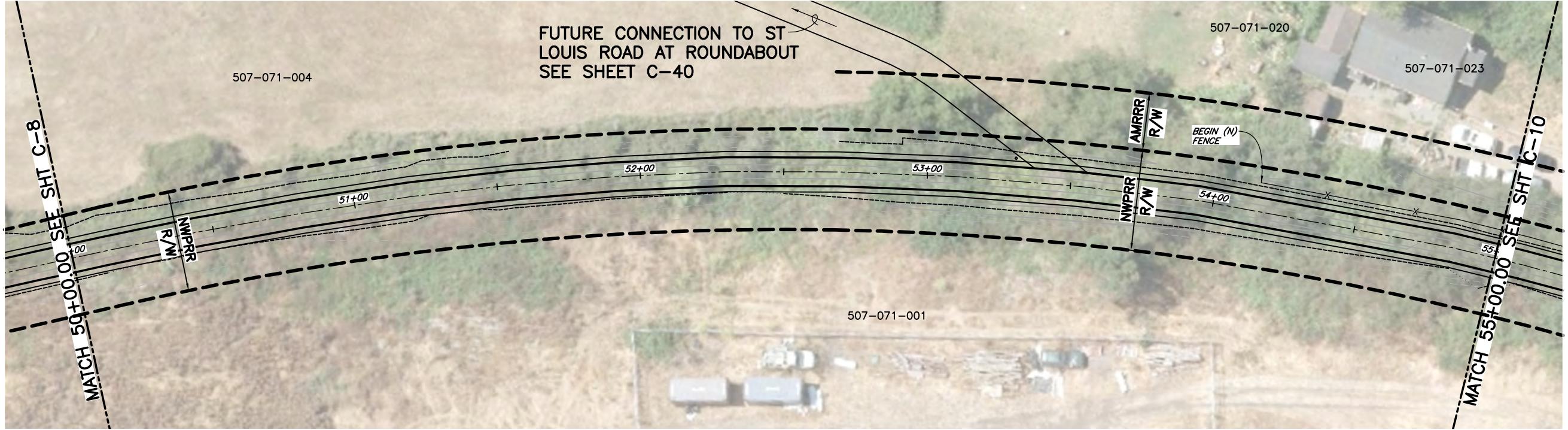
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 ANNIE AND MARY RAIL TRAIL
 ARCATA, CALIFORNIA
 PLAN AND PROFILE



NOTE:
 SEE PRELIMINARY RIGHTS OF WAY NOTE ON SHEET G-1.

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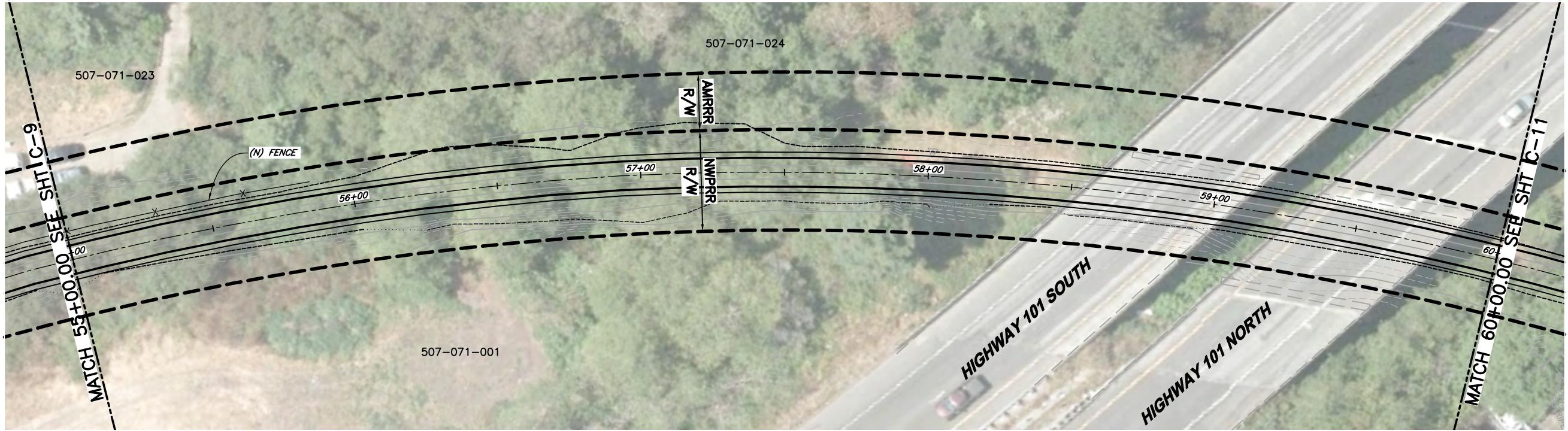
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 TRAIL
 ARCATA, CALIFORNIA
PLAN AND PROFILE



PLAN

1"=20'

LEGEND

- Trail Alignment Centerline
- Edge of Paved Trail
- Edge of Trail Gravel Shoulder
- Preliminary Railroad Right-of-Way



PROFILE

SCALE: 1"=20' H
1"=10' V

NOTE:

SEE PRELIMINARY RIGHTS OF WAY NOTE ON SHEET G-1.

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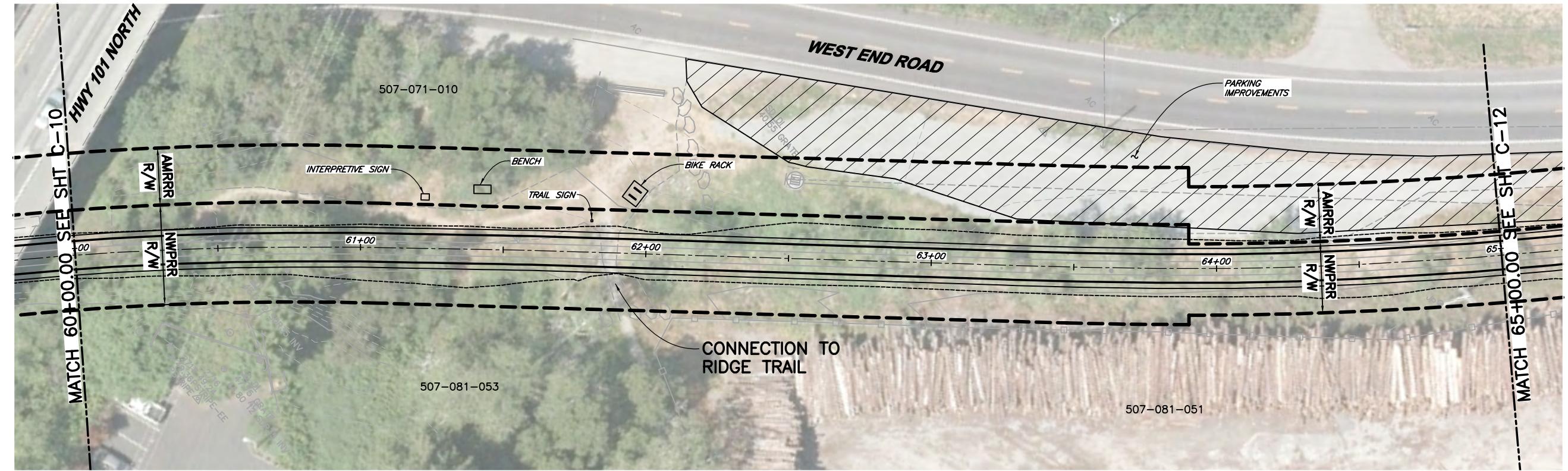
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CITY OF ARCATA
 ANNIE AND MARY RAIL TRAIL
 ARCATA, CALIFORNIA

PLAN AND PROFILE

VERIFICATION
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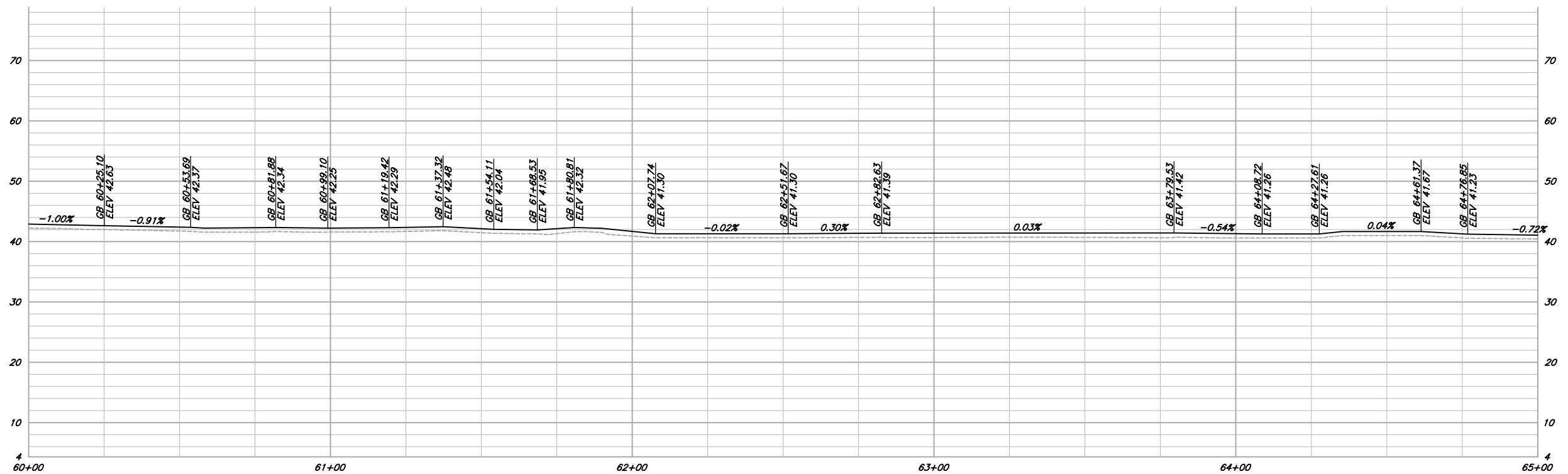
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PLAN
 $1''=20'$



LEGEND

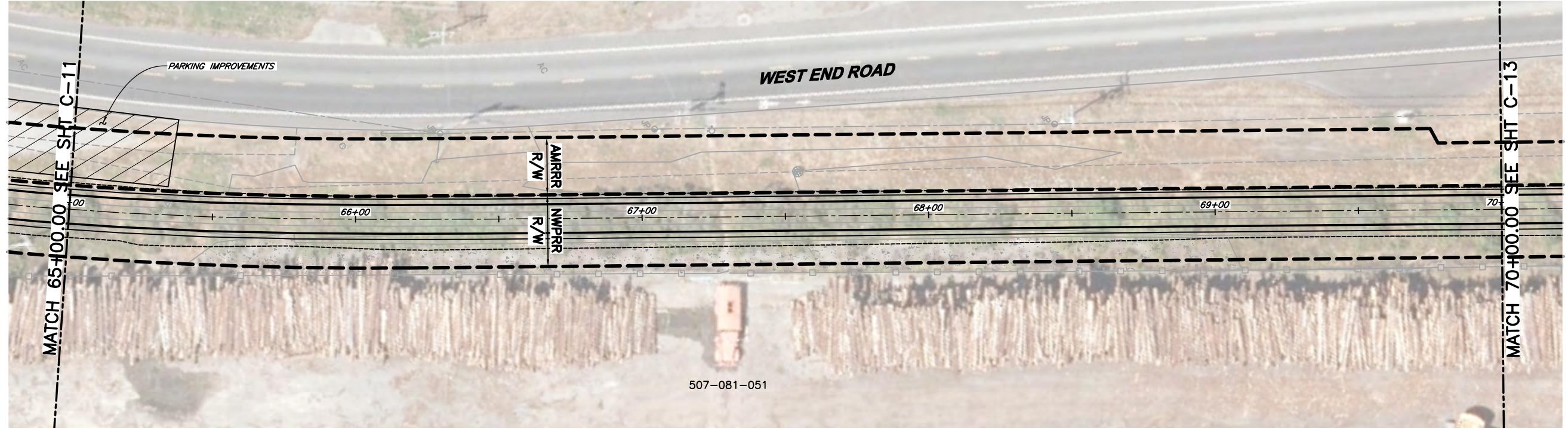
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- EDGE OF PAVED TRAIL
- EDGE OF TRAIL GRAVEL SHOULDER
- - - PRELIMINARY RAILROAD RIGHT-OF-WAY



PROFILE
 $1''=20' H$
 $1''=10' V$

NOTE:
 SEE PRELIMINARY RIGHTS OF WAY NOTE ON SHEET G-1.

PRELIMINARY

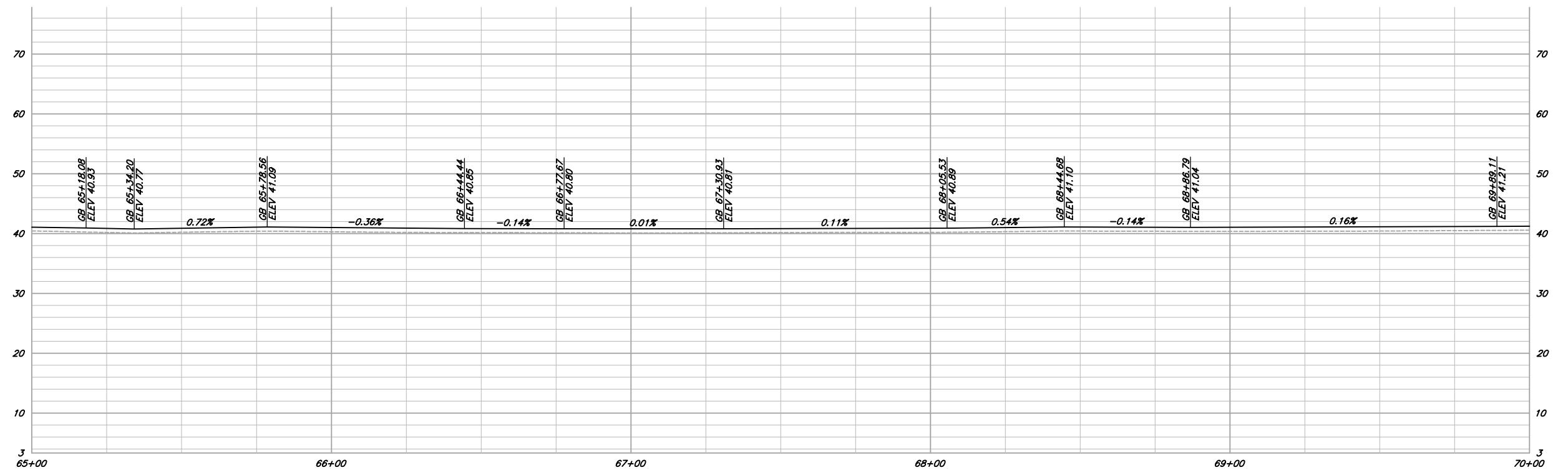


PLAN

1"=20'

LEGEND

- TRAIL ALIGNMENT CENTERLINE
- EDGE OF PAVED TRAIL
- EDGE OF TRAIL GRAVEL SHOULDER
- PRELIMINARY RAILROAD RIGHT-OF-WAY



PROFILE

SCALE: 1"=20' H
 1"=10' V

NOTE:

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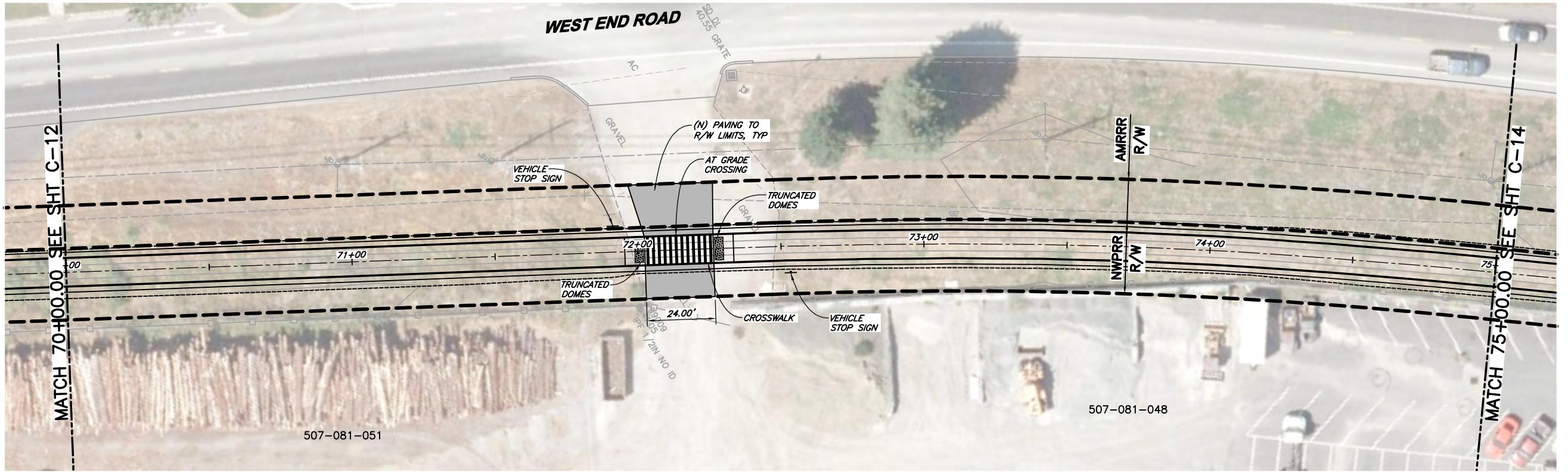
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 TRAIL
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SAVED: 12/19/2019 3:16 PM CNEWELL, PLOTTED: 12/19/2019 3:43 PM CHRIS D. NEWELL
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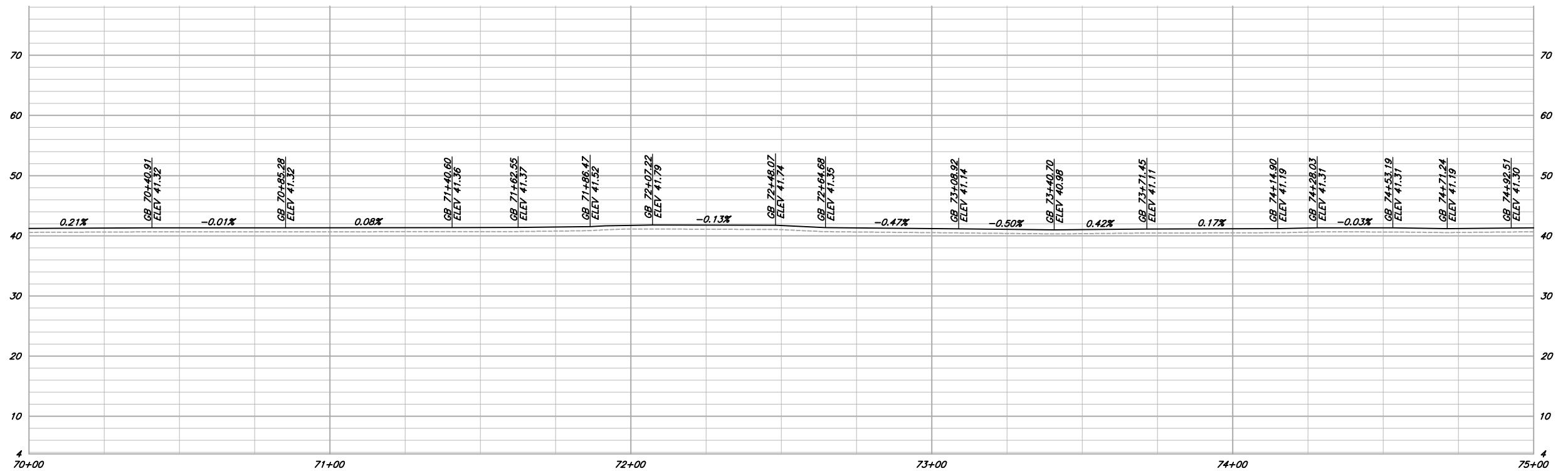
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PLAN



LEGEND

— — — TRAIL ALIGNMENT CENTERLINE
— — — EDGE OF PAVED TRAIL
— — — EDGE OF TRAIL GRAVEL SHOULDER
— — — PRELIMINARY RAILROAD RIGHT-OF-WAY



PROFILE

SCALE: $1'' = 20' H$
 $1'' = 10' V$

NOTE:

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VERIFY SCALES

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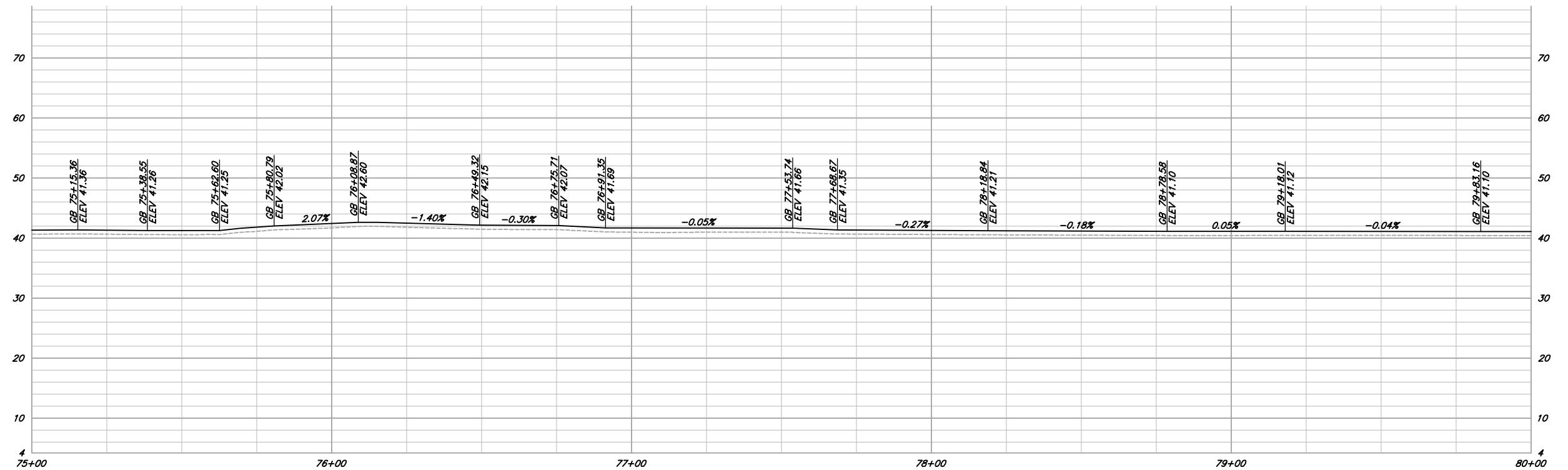
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PLAN
1"=20'

LEGEND

- TRAIL ALIGNMENT CENTERLINE
- EDGE OF PAVED TRAIL
- EDGE OF TRAIL GRAVEL SHOULDER
- PRELIMINARY RAILROAD RIGHT-OF-WAY
- AC PAVING



PROFILE
SCALE: 1"=20' H
1"=10' V

NOTE:
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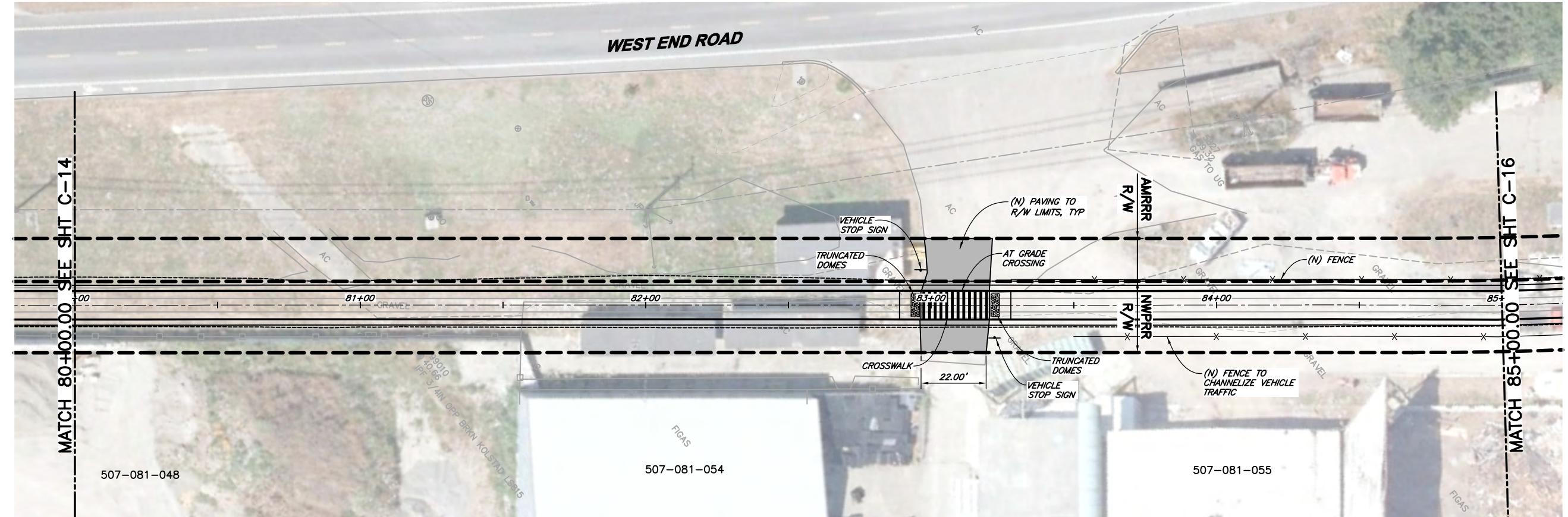
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 ANNIE AND MARY RAIL
 TRAIL
 ARCATA, CALIFORNIA
 PLAN AND PROFILE



PLAN
1"=20'

LEGEND

- TRAIL ALIGNMENT CENTERLINE
- EDGE OF PAVED TRAIL
- EDGE OF TRAIL GRAVEL SHOULDER
- PRELIMINARY RAILROAD RIGHT-OF-WAY



PROFILE

SCALE: 1"=20' H
1"=10' V

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 SEE PRELIMINARY RIGHTS OF WAY NOTE ON SHEET G-1.

PRELIMINARY

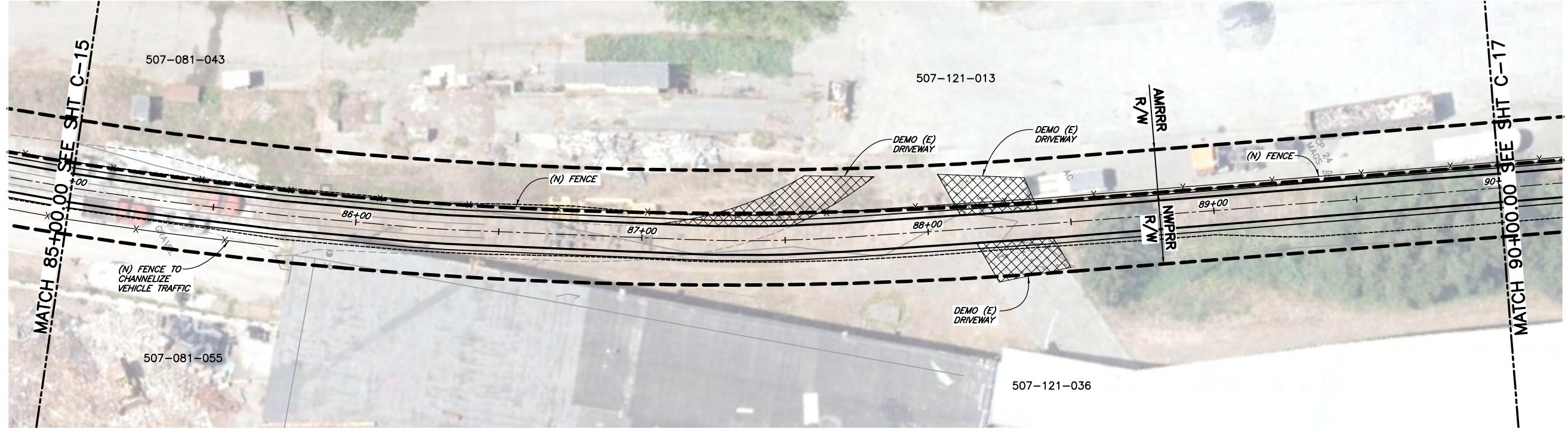
SHEET	C-15
SEQ	
DATE	12/2019
PROJ. NO.	018218

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CITY OF ARCATA
 ANNIE AND MARY RAIL TRAIL
 ARCATA, CALIFORNIA
 PLAN AND PROFILE

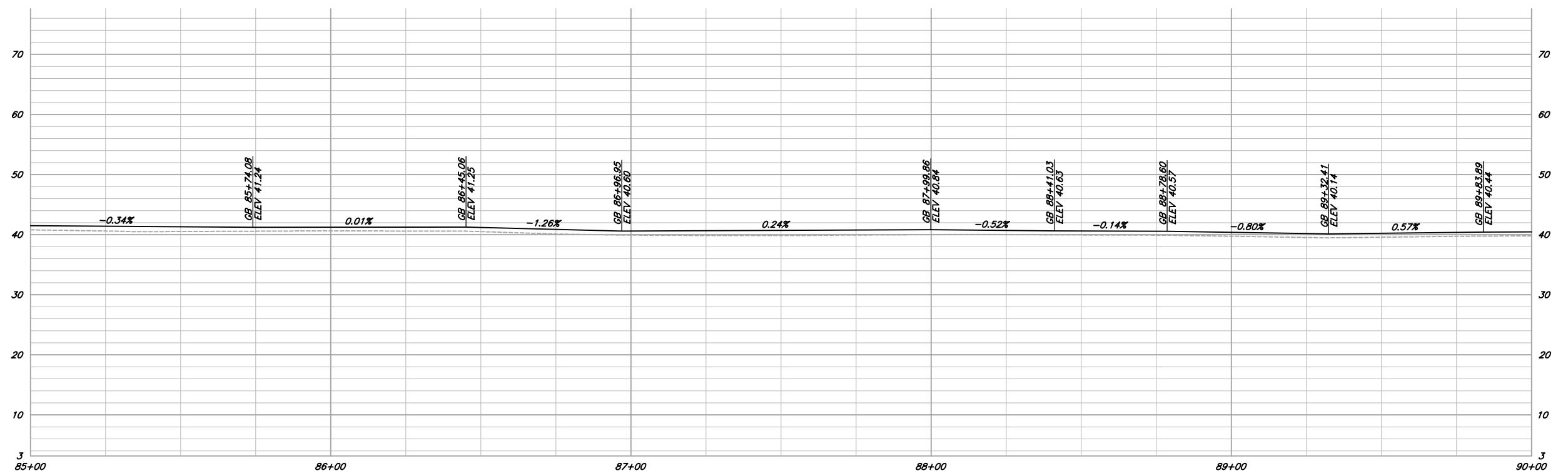


PLAN



LEGEND

- Trail Alignment Centerline
- Edge of Paved Trail
- Edge of Trail Gravel Shoulder
- Preliminary Railroad Right-of-Way



PROFILE

SCALE: 1"=20' H
 1"=10' V

NOTE:

SEE PRELIMINARY RIGHTS OF WAY NOTE ON SHEET G-1.

PRELIMINARY

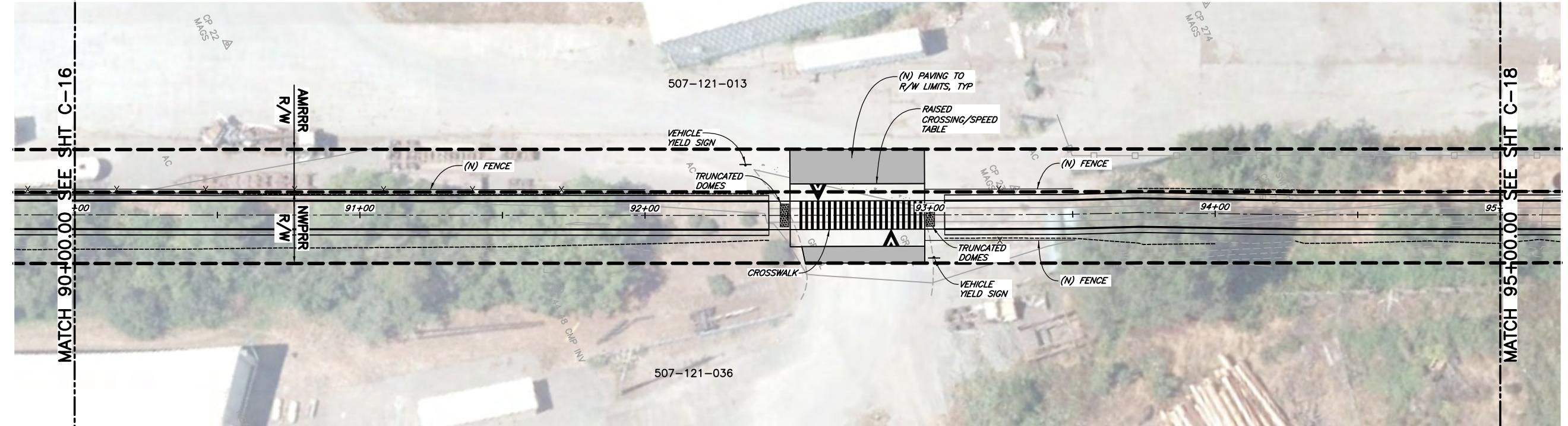
SEQ	PROJ. NO.	DATE
C-16	018218	12/2019

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PLAN AND PROFILE

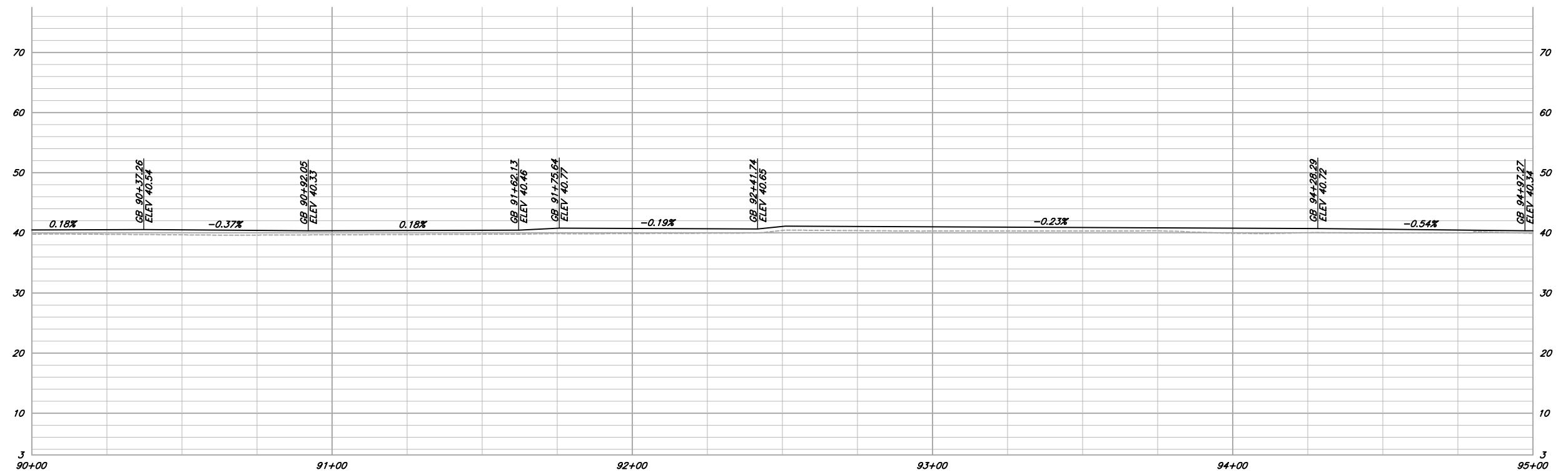


PLAN

1"=20'

LEGEND

- TRAIL ALIGNMENT CENTERLINE
- EDGE OF PAVED TRAIL
- EDGE OF TRAIL GRAVEL SHOULDER
- PRELIMINARY RAILROAD RIGHT-OF-WAY
- AC PAVING



PROFILE

SCALE: 1"=20' H
 1"=10' V

NOTE:

SEE PRELIMINARY RIGHTS OF WAY NOTE ON SHEET G-1.

PRELIMINARY

SEQ	C-17
DATE	12/2019
PROJ. NO.	018218

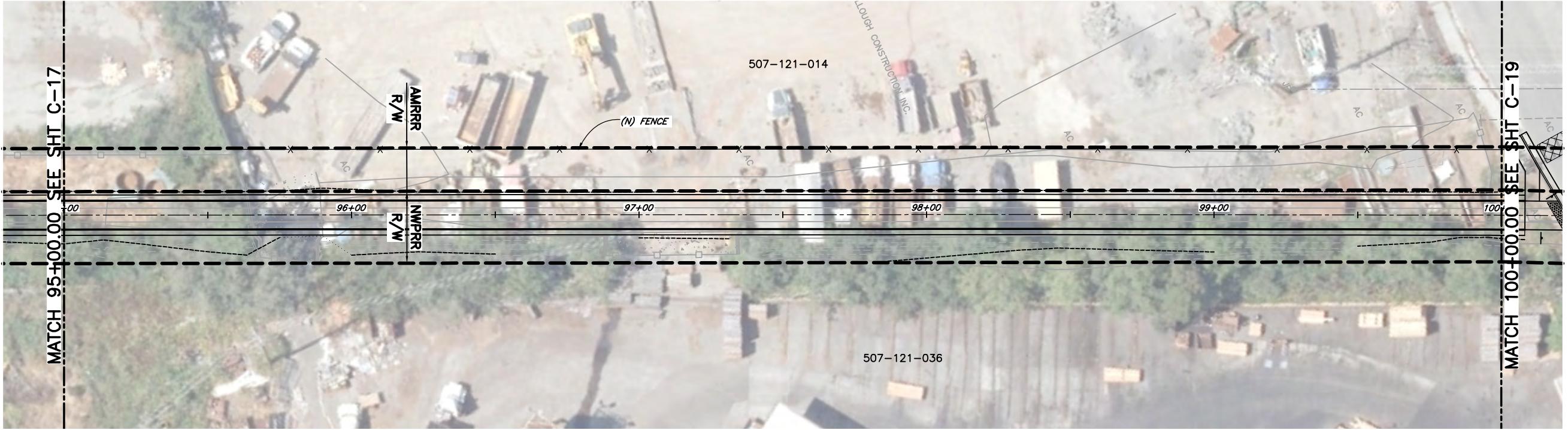
VERIFY SCALES
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DSGN	CDN
DR	CDN
CHK	JSO
APVD	

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 ANNIE AND MARY RAIL TRAIL
 ARCATA, CALIFORNIA
 PLAN AND PROFILE

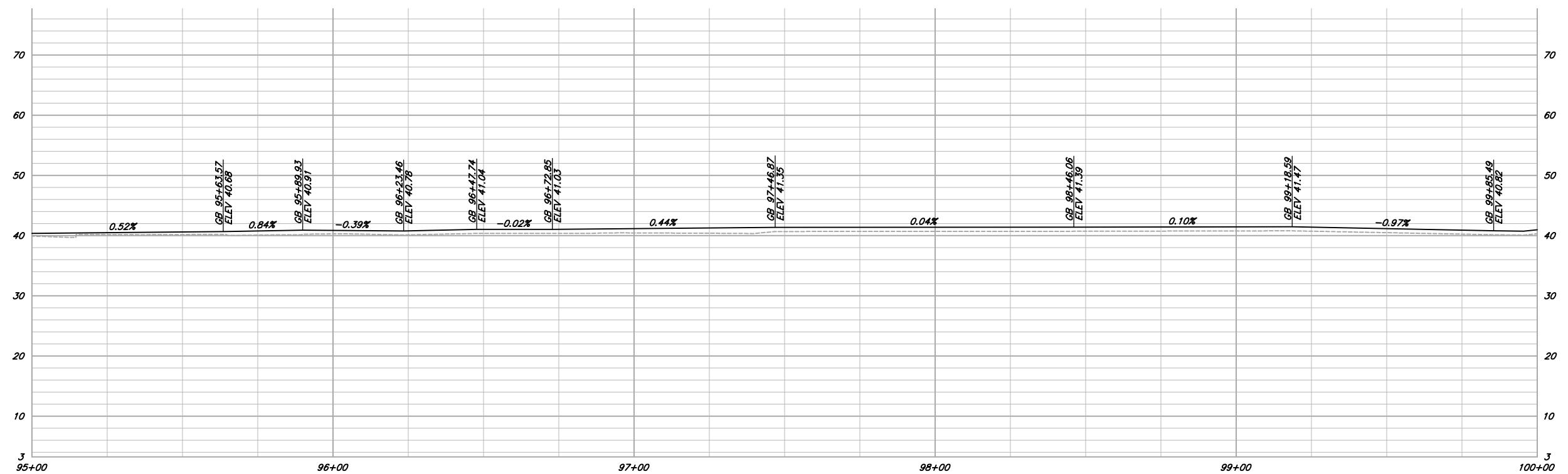


PLAN

1"=20'

LEGEND

- TRAIL ALIGNMENT CENTERLINE
- EDGE OF PAVED TRAIL
- EDGE OF TRAIL GRAVEL SHOULDER
- - - PRELIMINARY RAILROAD RIGHT-OF-WAY



PROFILE

SCALE: 1"=20' H
 1"=10' V

NOTE:

SEE PRELIMINARY RIGHTS OF WAY NOTE ON SHEET G-1.

PRELIMINARY

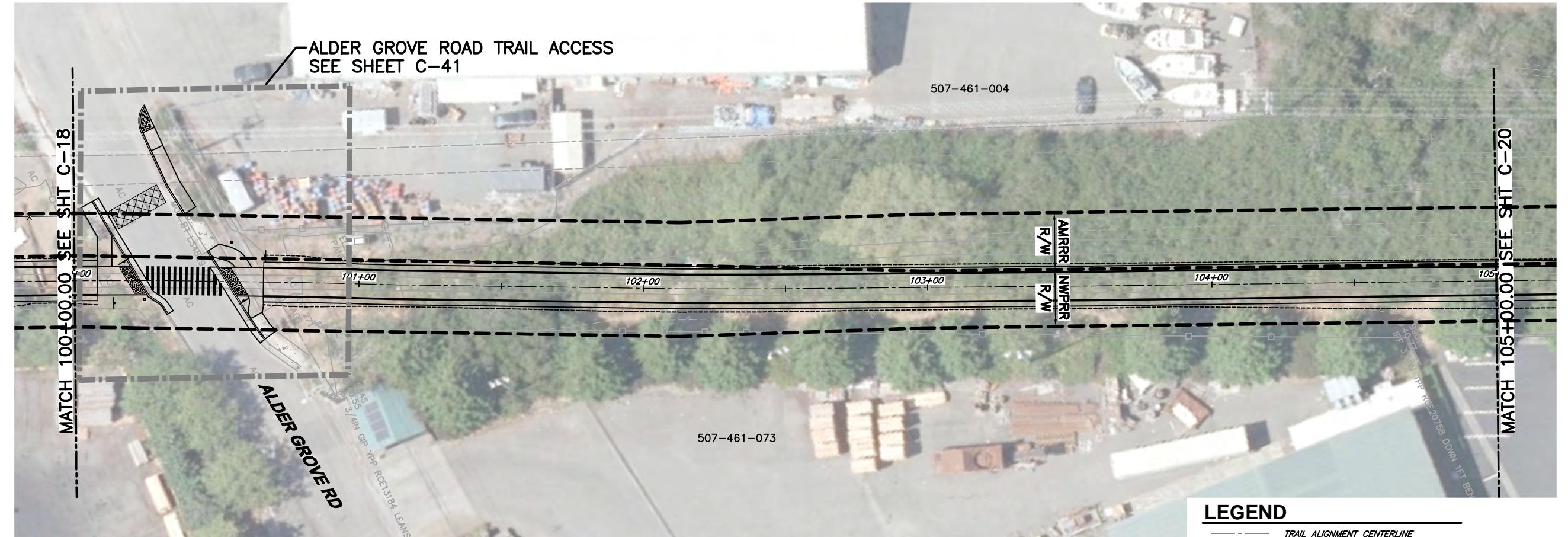
Sheet C-18
 SEQ
 DATE 12/2019
 PROJ. NO.
 018218

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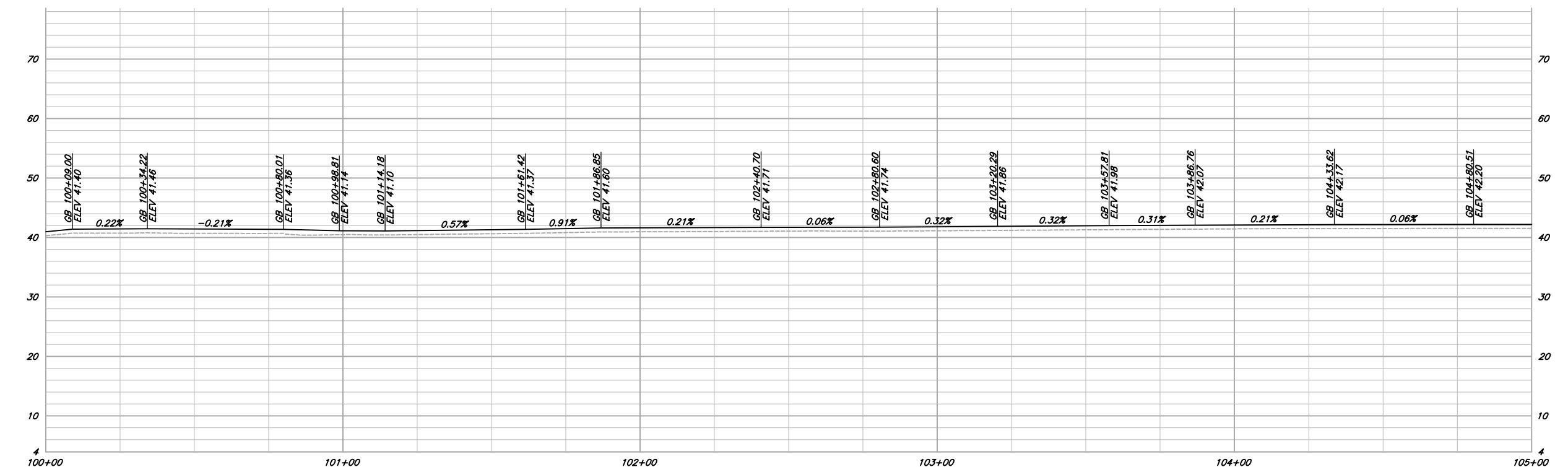


CITY OF ARCATA
 ANNIE AND MARY RAIL
 TRAIL
 ARCATA, CALIFORNIA
PLAN AND PROFILE



507-461-004

507-461-073



PROFILE
 SCALE: 1'-0"=20' H
 1'-0"=10' V

NOTE:
 SEE PRELIMINARY RIGHTS OF WAY NOTE ON SHEET G-1.

PRELIMINARY

CITY OF ARCATA
 ANNIE AND MARY RAIL
 TRAIL
 ARCATA, CALIFORNIA

PLAN AND PROFILE

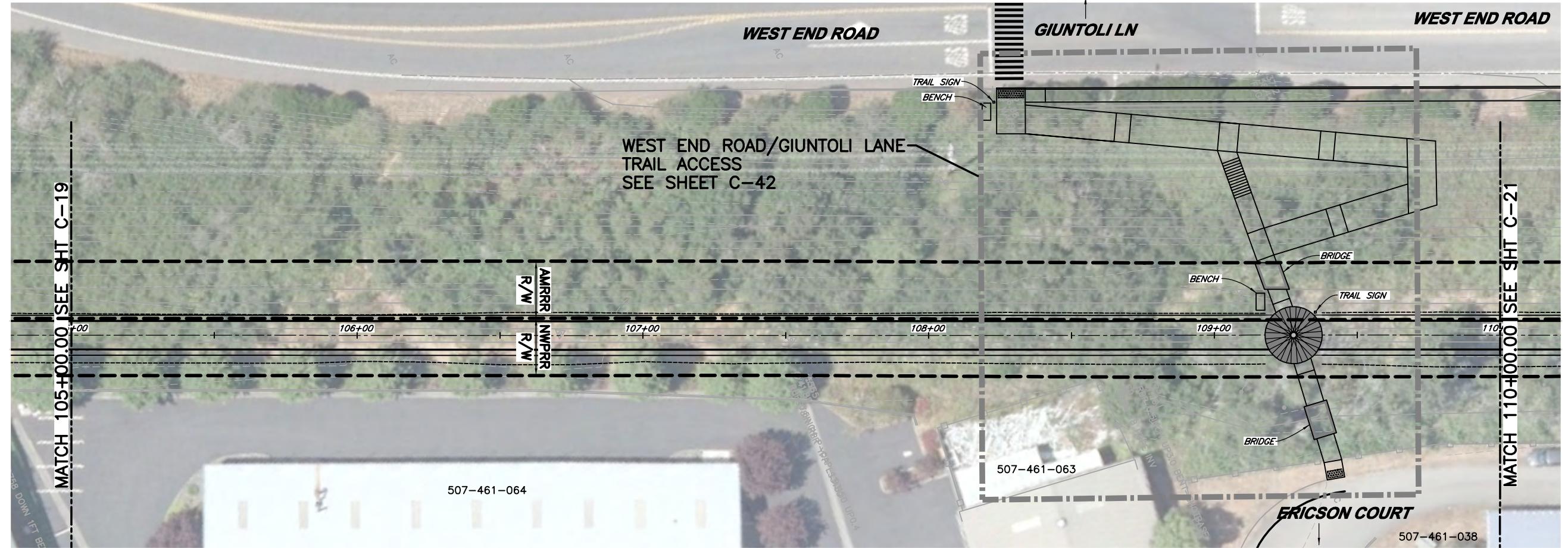
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SEQ	DATE	PROJ. NO.
C-19	12/2019	018218



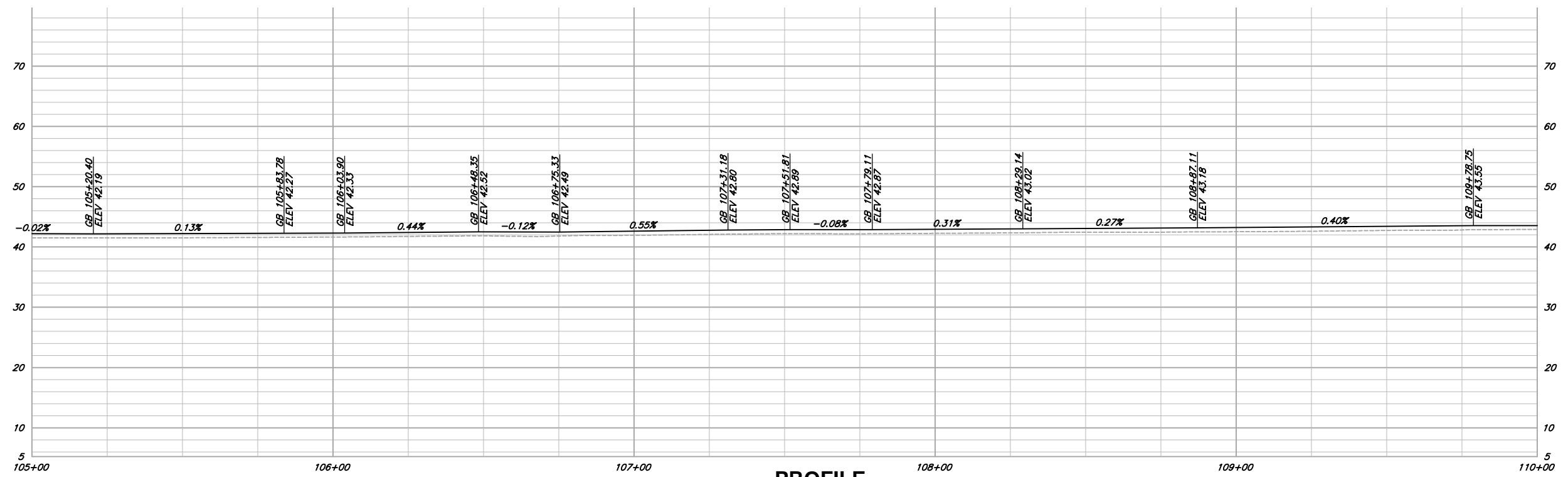
LEGEND

- TRAIL ALIGNMENT CENTERLINE
- EDGE OF PAVED TRAIL
- EDGE OF TRAIL GRAVEL SHOULDER
- PRELIMINARY RAILROAD RIGHT-OF-WAY

NOTE:

SEE PRELIMINARY RIGHTS OF WAY NOTE ON SHEET G-1.

PLAN
1"=20'



PROFILE
SCALE: 1"=20' H
1"=10' V

PRELIMINARY
C-20
SEQ 1
DATE 12/2019
PROJ. NO. 018218

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ORIGINAL DRAWING
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SCALES ACCORDINGLY

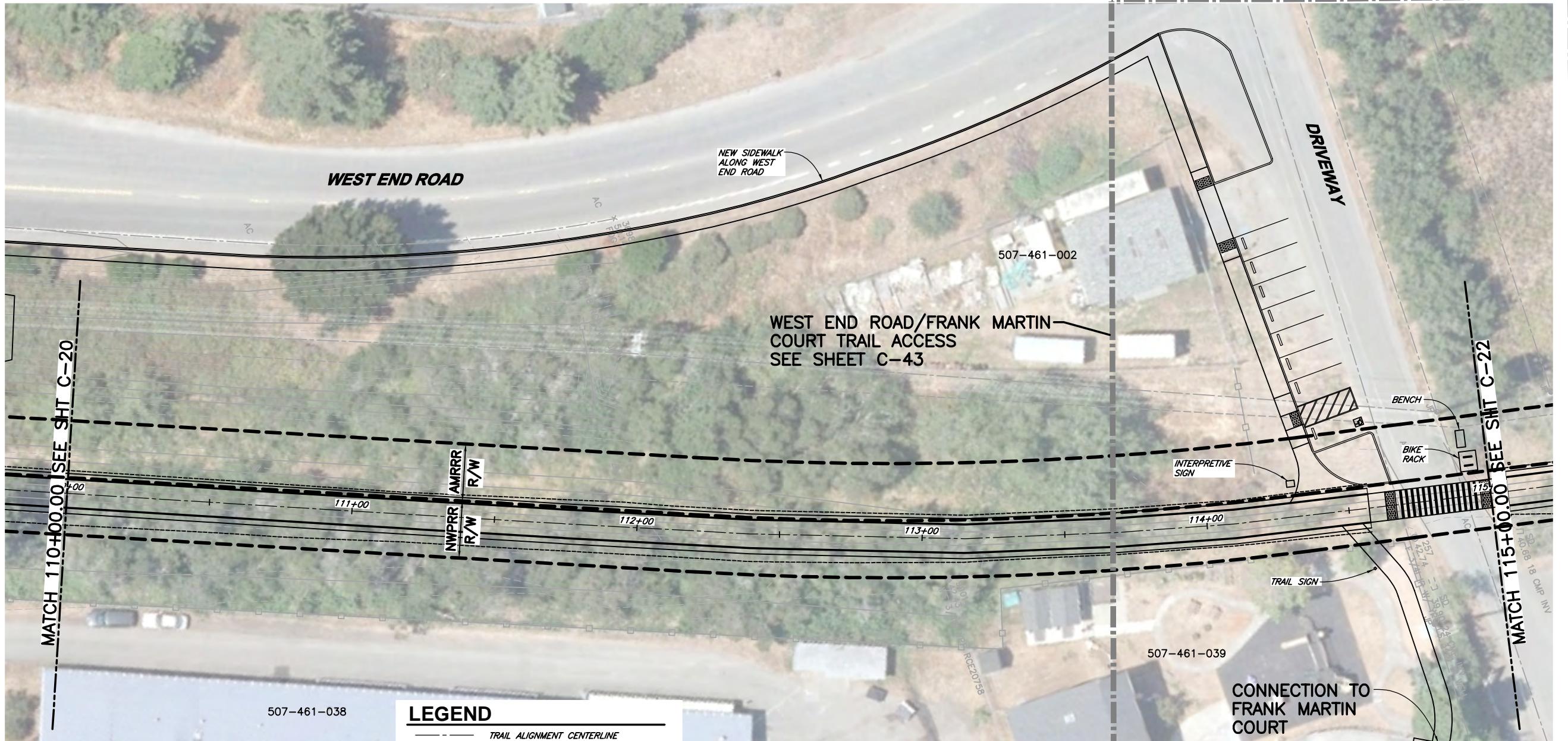
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DESIGN	CDN
DR	CDN
CHK	JSO
APVD	
NO.	DATE
REVISION	

CITY OF ARCATA
ANNIE AND MARY RAIL TRAIL
ARCATA, CALIFORNIA

PLAN AND PROFILE



PROFILE
 SCALE: 1"=20' H
 1"=10' V

NOTE:
 SEE PRELIMINARY RIGHTS OF WAY NOTE ON SHEET G-1.

PRELIMINARY

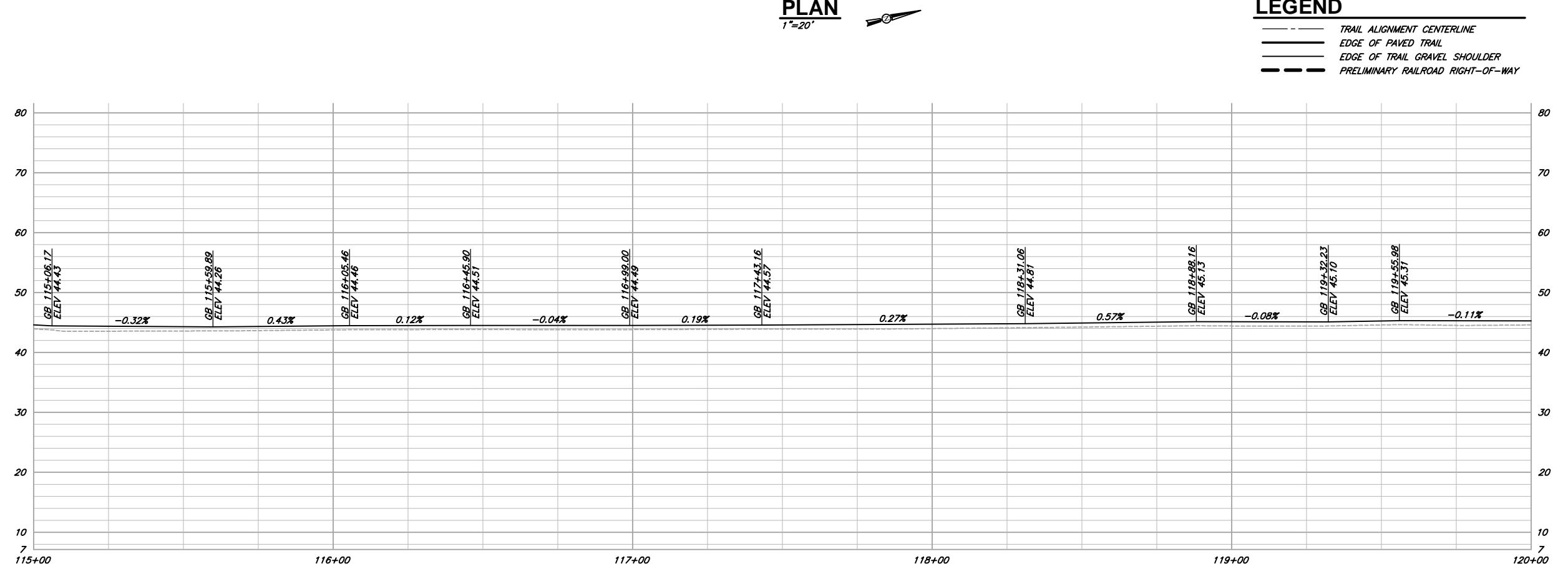
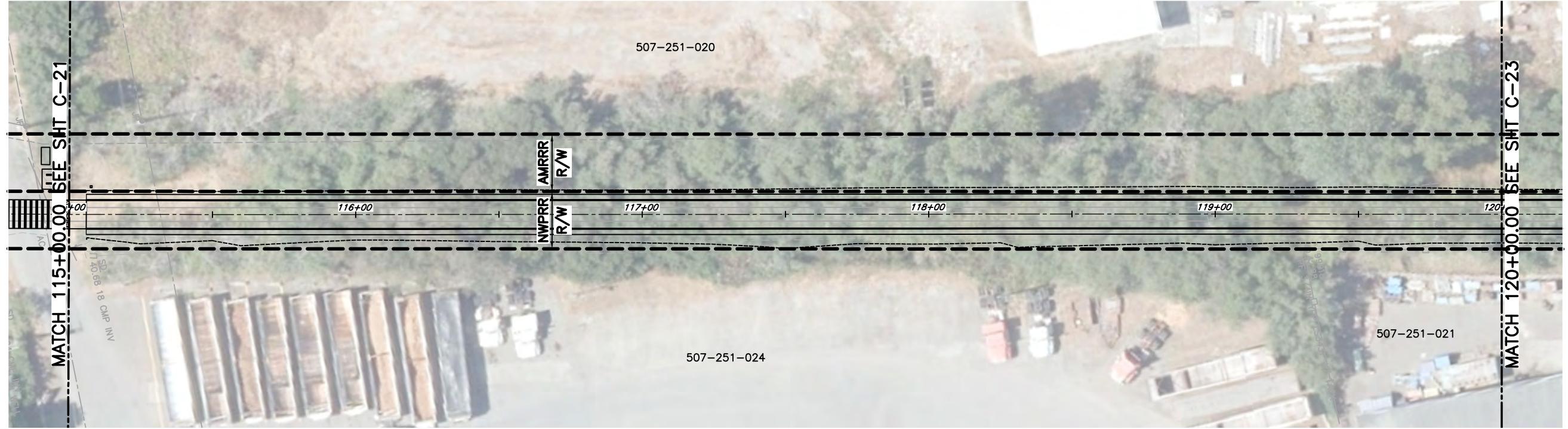
SHEET C-21
 SEQ
 DATE 12/2019
 PROJ. NO. 018218

USGN CDN
 DR CDN
 CHK JSO
 APVD
 NO. DATE
 REVISION

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 ORIGINAL DRAWING
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 THIS SHEET, ADJUST
 SCALES ACCORDINGLY





LEGEND

- Trail Alignment Centerline
- Edge of Paved Trail
- Edge of Trail Gravel Shoulder
- - - Preliminary Railroad Right-of-Way

NOTE:
 SEE PRELIMINARY RIGHTS OF WAY NOTE ON SHEET G-1.

PRELIMINARY

PLAN AND PROFILE
 SHEET C-22
 SEQ 1
 DATE 12/2019
 PROJ. NO. 018218

VERIFY SCALES
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 ORIGINAL DRAWING
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PLAN



LEGEND

- Trail Alignment Centerline
- Edge of Paved Trail
- Edge of Trail Gravel Shoulder
- Preliminary Railroad Right-of-Way



PROFILE

SCALE: 1"=20' H
 1"=10' V

NOTE:

SEE PRELIMINARY RIGHTS OF WAY NOTE ON SHEET G-1.

PRELIMINARY

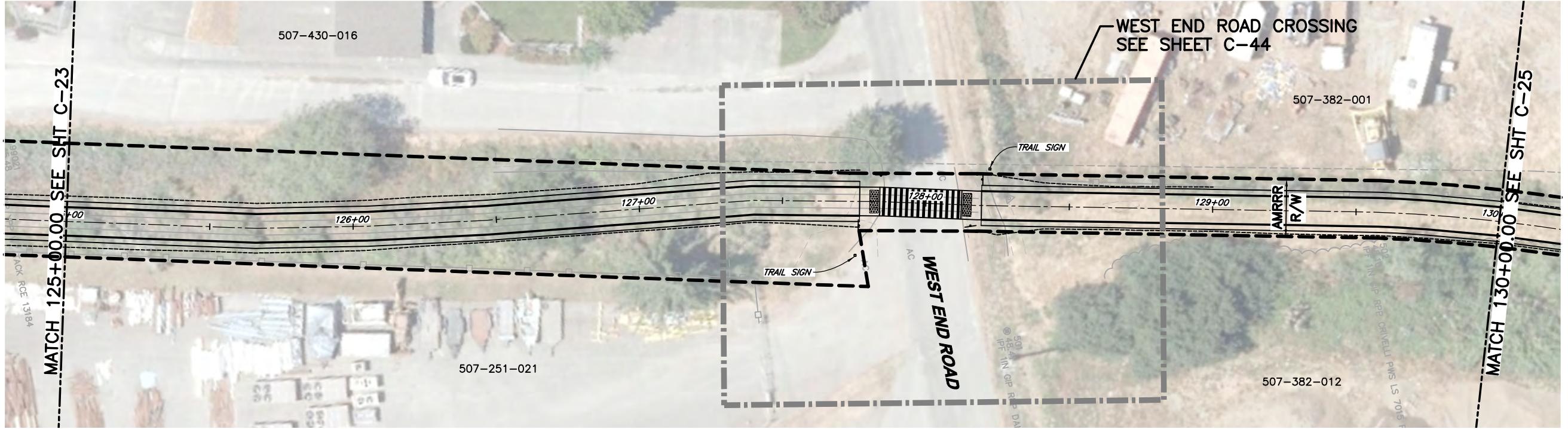
SEQ	C-23
DATE	12/2019
PROJ. NO.	018218

VERIFY SCALES
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CITY OF ARCATA
 ANNIE AND MARY RAIL
 TRAIL
 ARCATA, CALIFORNIA
PLAN AND PROFILE

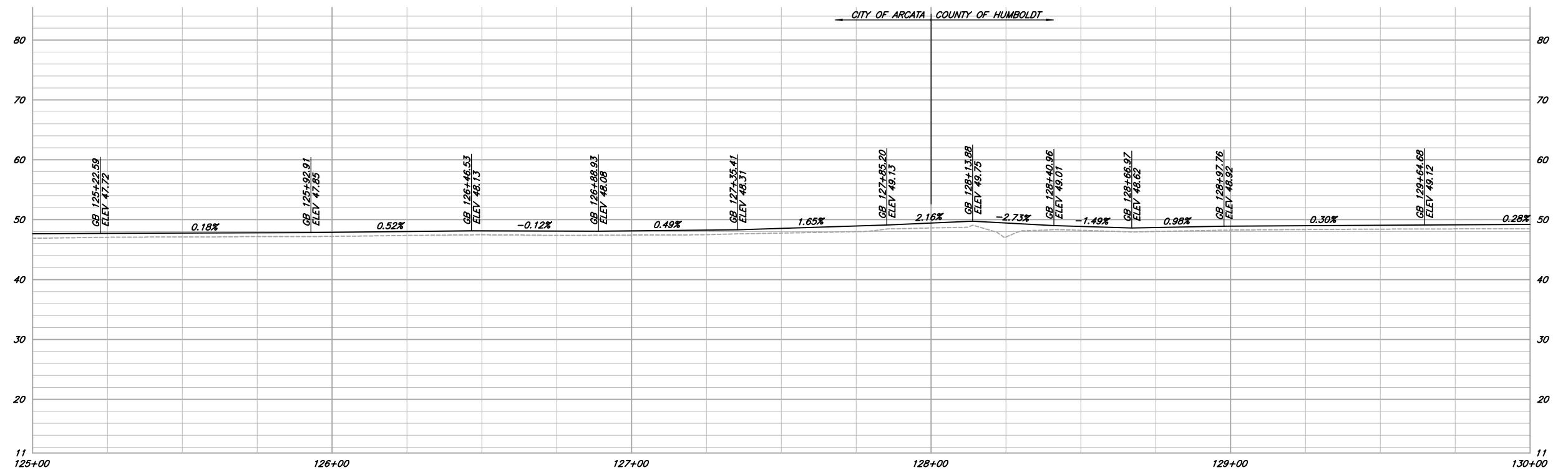


PLAN

1"=20'

LEGEND

- TRAIL ALIGNMENT CENTERLINE
- EDGE OF PAVED TRAIL
- EDGE OF TRAIL GRAVEL SHOULDER
- PRELIMINARY RAILROAD RIGHT-OF-WAY



PROFILE

SCALE: 1"=20' H
 1'=10' V

NOTE:

SEE PRELIMINARY RIGHTS OF WAY NOTE ON SHEET G-1.

PRELIMINARY

SEQ	C-24
DATE	12/2019
PROJ. NO.	018218

VERIFY SCALES
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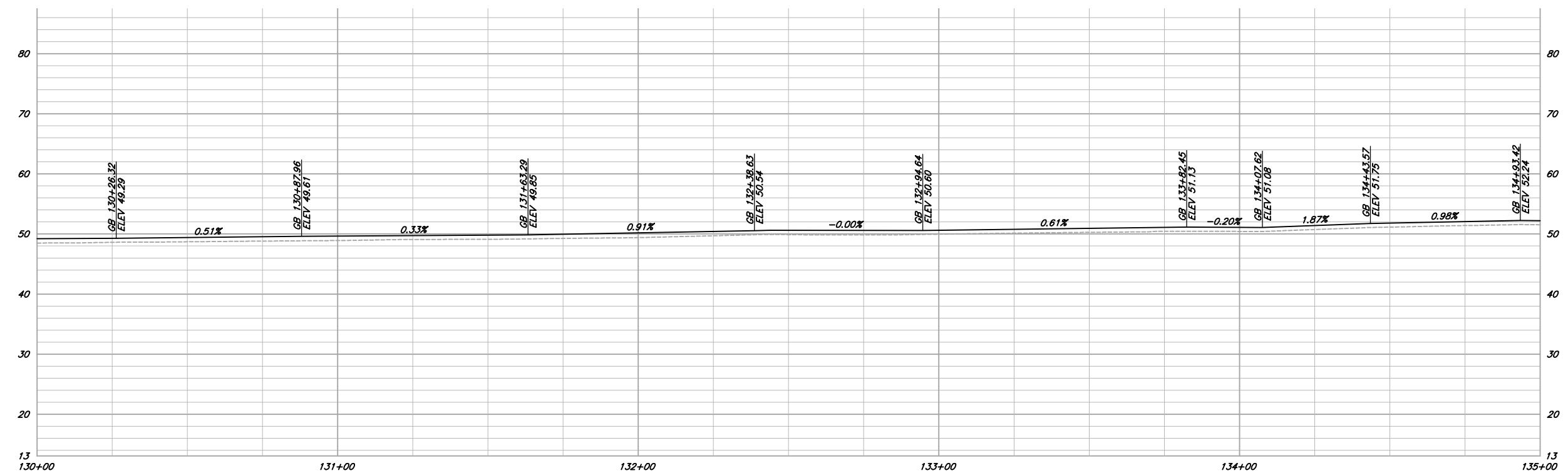
PLAN

1"=20'



LEGEND

- TRAIL ALIGNMENT CENTERLINE
- EDGE OF PAVED TRAIL
- EDGE OF TRAIL GRAVEL SHOULDER
- - - PRELIMINARY RAILROAD RIGHT-OF-WAY



PROFILE

SCALE: 1"=20' H
 1"=10' V

NOTE:

SEE PRELIMINARY RIGHTS OF WAY NOTE ON SHEET G-1.

PRELIMINARY

CITY OF ARCATA
 ANNIE AND MARY RAIL TRAIL
 ARCATA, CALIFORNIA

PLAN AND PROFILE

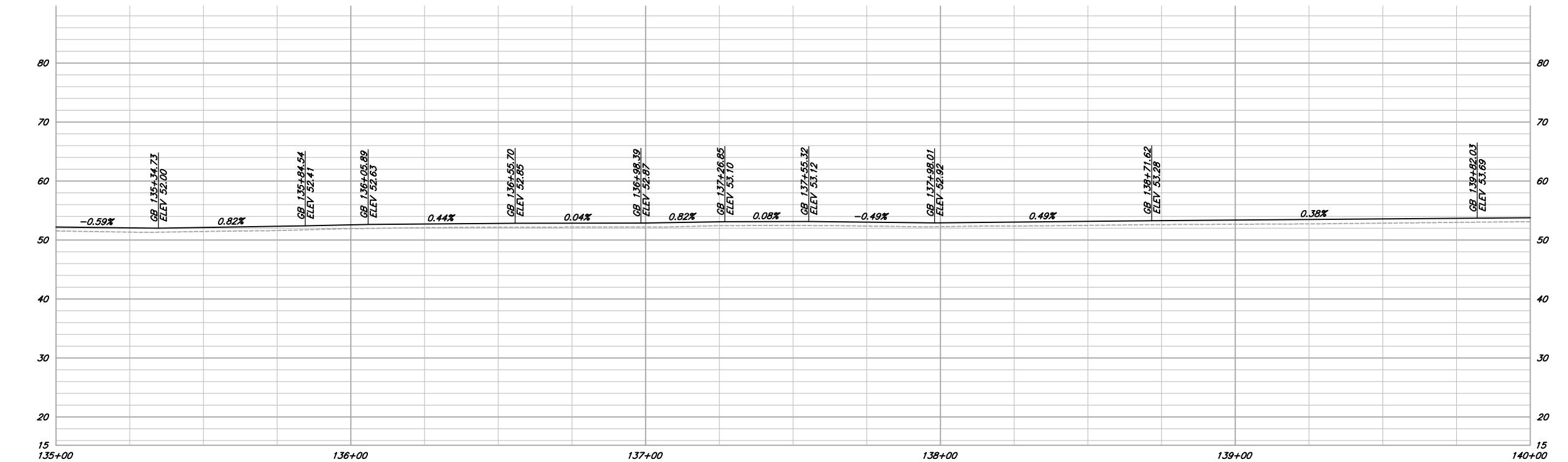
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SEQ	DATE	PROJ. NO.
C-25	12/2019	018218



PROFILE
 SCALE: $1''=20'$ H
 $1''=10'$ V

NOTE:
 SEE PRELIMINARY RIGHTS OF WAY NOTE ON SHEET G-1.

PRELIMINARY

SEQ
C-26
DATE 12/2019
PROJ. NO. 018218

VERIFY SCALES
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 SCALES ACCORDINGLY

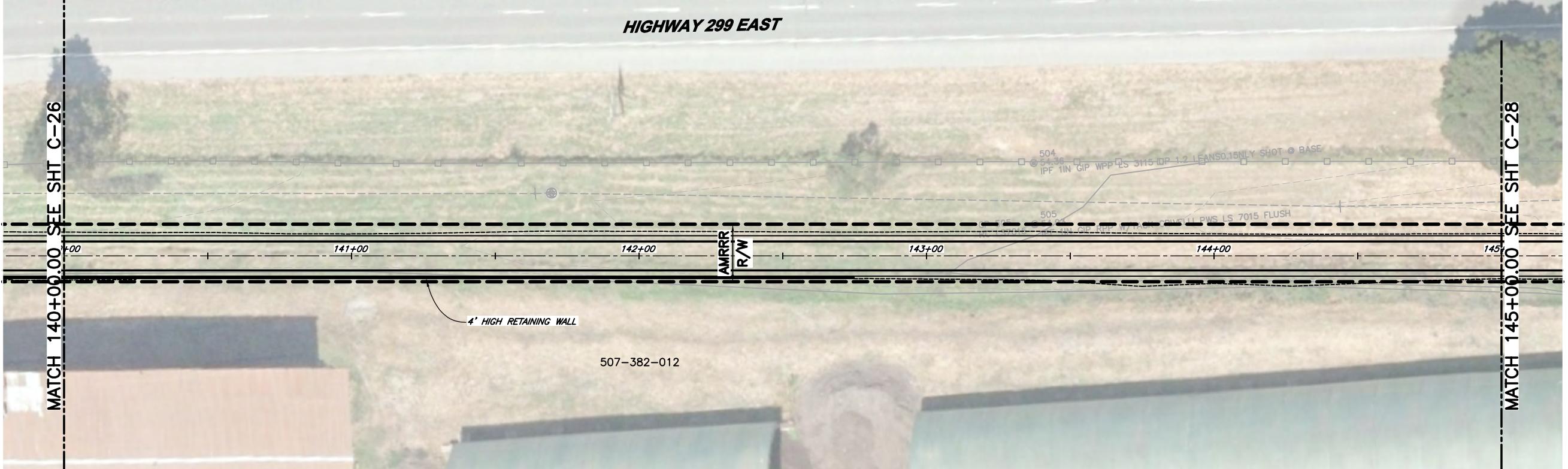
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CITY OF ARCATA
 ANNIE AND MARY RAIL
 TRAIL
 ARCATA, CALIFORNIA

PLAN AND PROFILE

HIGHWAY 299 EAST



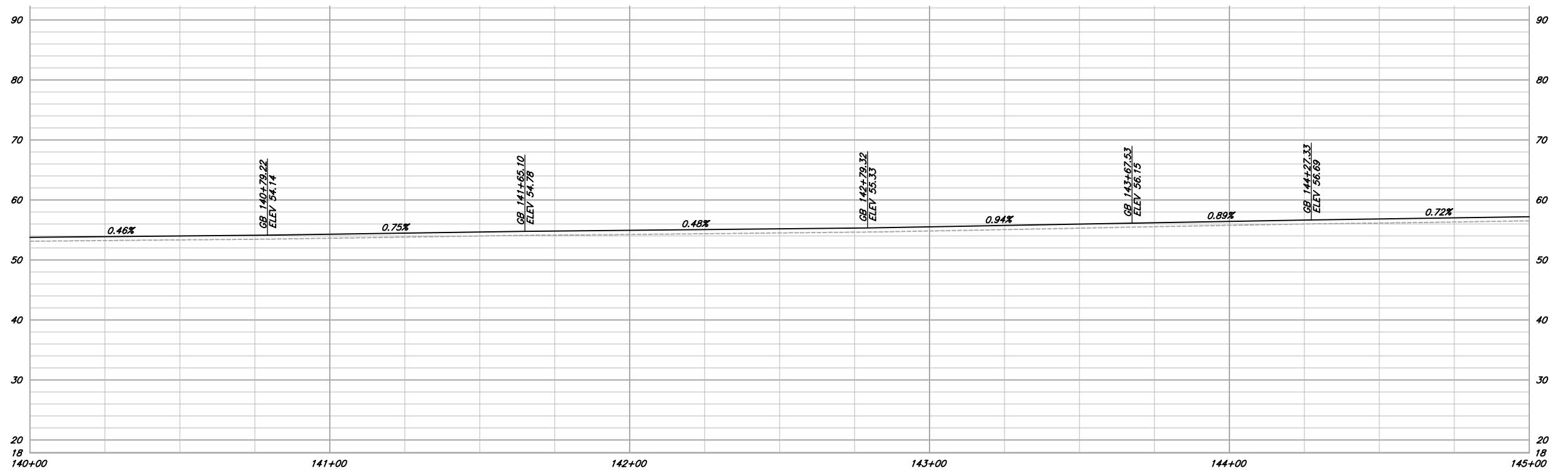
507-382-012

PLAN

1"=20'

LEGEND

- TRAIL ALIGNMENT CENTERLINE
- EDGE OF PAVED TRAIL
- EDGE OF TRAIL GRAVEL SHOULDER
- PRELIMINARY RAILROAD RIGHT-OF-WAY



PROFILE

SCALE: 1"=20' H
1"=10' V

NOTE:

SEE PRELIMINARY RIGHTS OF WAY NOTE ON SHEET G-1.

PRELIMINARY

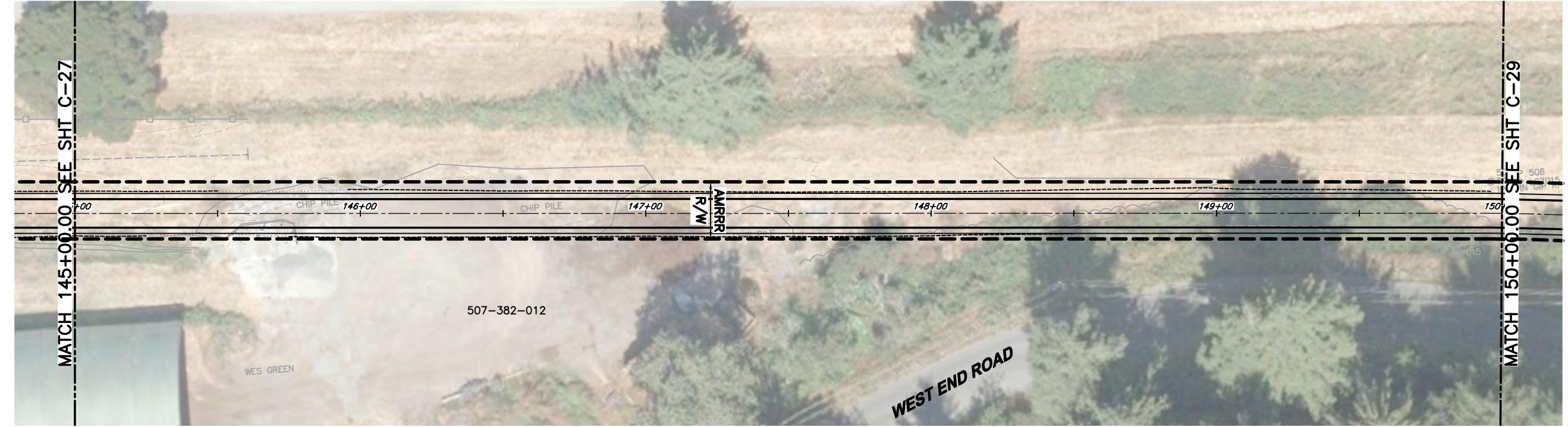
SHEET	C-27
SEQ	
DATE	12/2019

PROJ. NO.
018218

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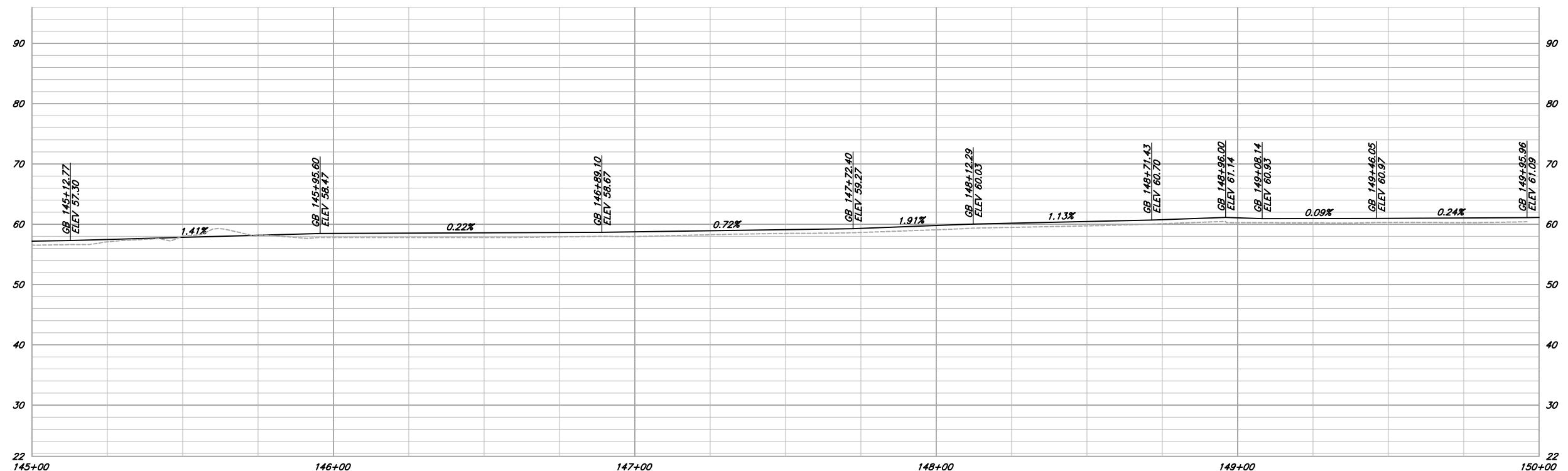


PLAN

1"=20'

LEGEND

- Trail Alignment Centerline
- Edge of Paved Trail
- Edge of Trail Gravel Shoulder
- Preliminary Railroad Right-of-Way



PROFILE

SCALE: 1"=20' H
1"=10' V

NOTE:

SEE PRELIMINARY RIGHTS OF WAY NOTE ON SHEET G-1.

PRELIMINARY

SEQ	C-28
DATE	12/2019
PROJ. NO.	018218

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ANNIE AND MARY RAIL TRAIL	DR	CDN
ARCATA, CALIFORNIA	CHK	JSO
PLAN AND PROFILE	APVD	
	NO.	DATE
	REVISION	BY

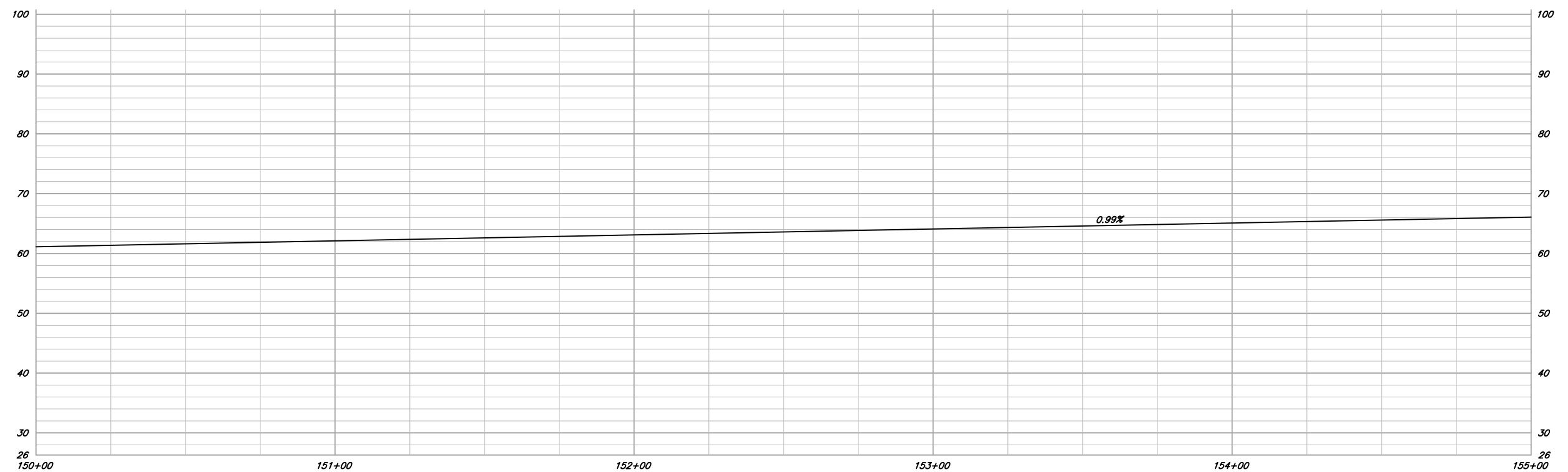


PLAN

1"=20'

LEGEND

- Trail Alignment Centerline
- Edge of Paved Trail
- Edge of Trail Gravel Shoulder
- Preliminary Railroad Right-of-Way



PROFILE

SCALE: 1"=20' H
1"=10' V

NOTE:

SEE PRELIMINARY RIGHTS OF WAY NOTE ON SHEET G-1.

PRELIMINARY

SHEET
C-29
SEQ
DATE 12/2019
PROJ. NO.
018218

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SAVED: 12/19/2019 3:16 PM CNEWELL, PLOTTED: 12/19/2019 3:58 PM CHRIS D. NEWELL
Eureka Projects 2018/018218-COA-Annemary_Divas 018218-PNP.dwg

This aerial photograph shows a road alignment with survey data overlaid. The alignment consists of a dashed line for the centerline and solid lines for the right-of-way (R/W). Key survey points are marked with vertical callouts and elevations:

- Match 155+00.00 SEE SHT C-29
- 156+00
- 157+00
- 158+00
- 159+00
- 160+00.00 SEE SHT C-31

Other labels include:

- AMRRR R/W 160
- 514 51083 11 P VJC JS 5963

A callout from the 155+00 point points to a white box containing the text:

POTENTIAL FENCING/GATES TO
PROVIDE PRIVACY, SECURITY,
AND ACCESS AS DETERMINED
BY PROPERTY OWNERS

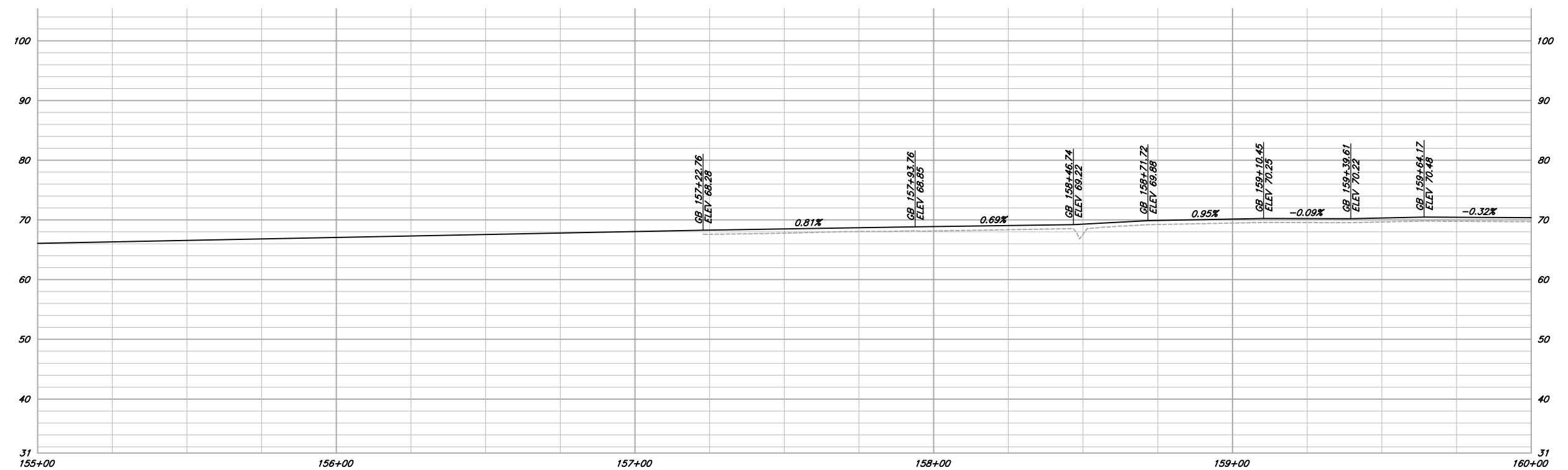
Survey reference numbers 504-181-025 and 504-201-018 are visible in the upper right and lower center respectively.

PLAN

PLAN
1"=20'

LEGEND

— — — — — TRAIL ALIGNMENT CENTERLINE
— — — — — EDGE OF PAVED TRAIL
— — — — — EDGE OF TRAIL GRAVEL SHOULDER
— — — — — PRELIMINARY RAILROAD RIGHT-OF-WAY



PROFILE

SCALE: 1"=20' H
1"=10' V

NOTE:

NOTE. SEE PRELIMINARY RIGHTS OF WAY NOTE ON SHEET G-1.

PRELIMINARY

SHEET
C-30
SEQ
DATE 12/2019
PROJ. NO.
018218

VERIFY SCALES

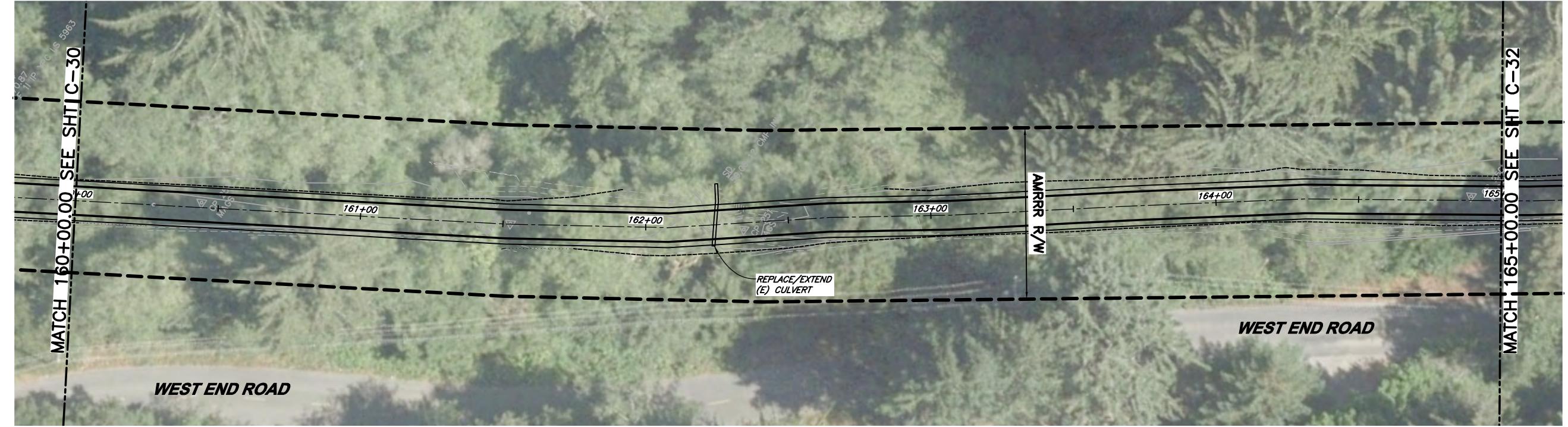
**BAR IS ONE INCH ON
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O [REDACTED] 1"

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SCALES ACCORDINGLY**

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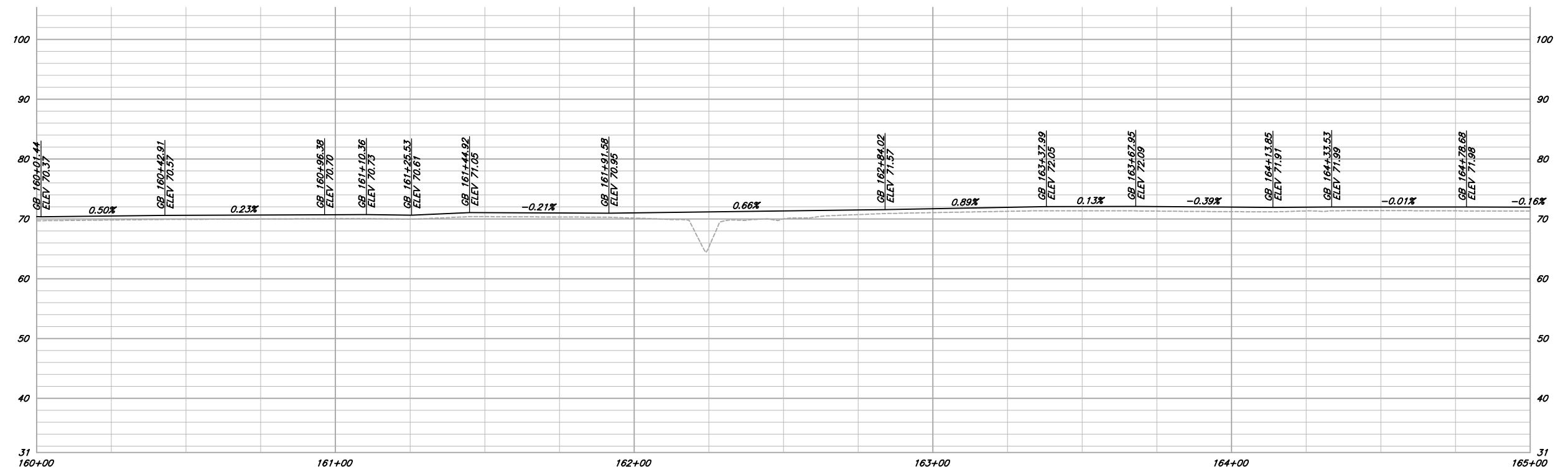


PLAN



LEGEND

- Trail Alignment Centerline
- Edge of Paved Trail
- Edge of Trail Gravel Shoulder
- Preliminary Railroad Right-of-Way



PROFILE

SCALE: 1"=20' H
1"=10' V

NOTE:

SEE PRELIMINARY RIGHTS OF WAY NOTE ON SHEET G-1.

PRELIMINARY

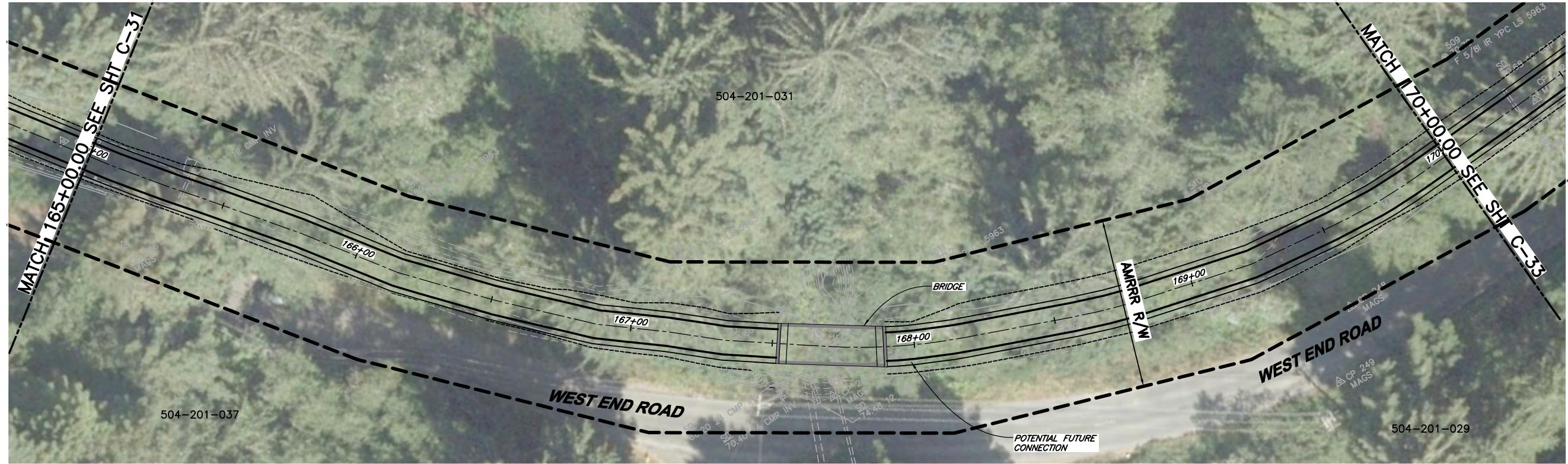
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DATE	12/2019
PROJ. NO.	018218

VERIFY SCALES
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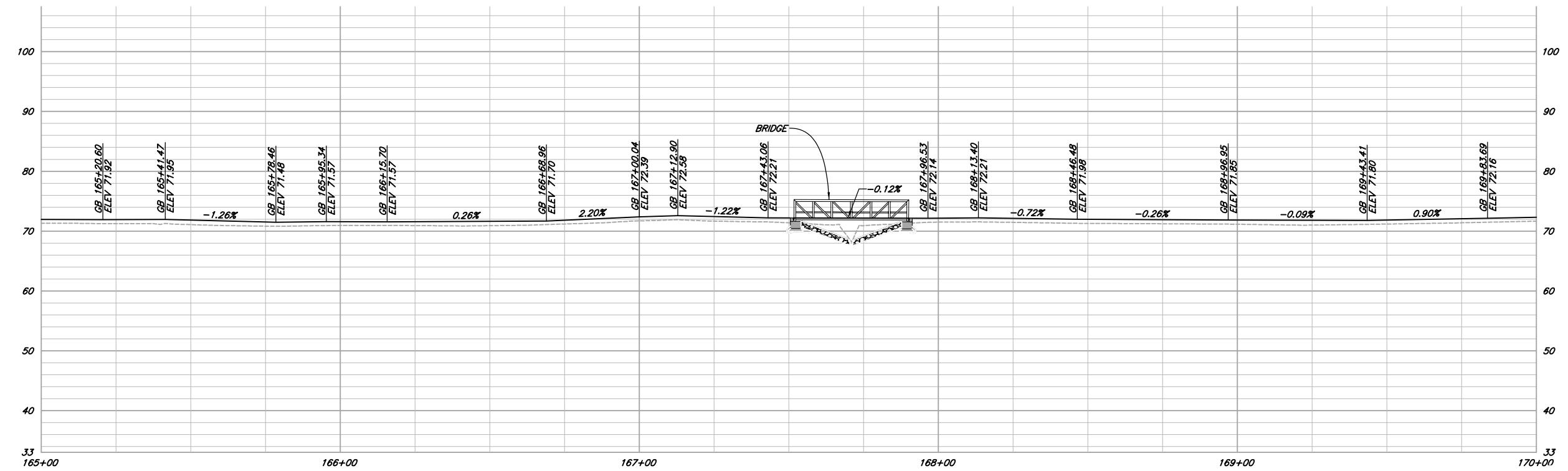
CITY OF ARCATA
ANNIE AND MARY RAIL
TRAIL
ARCATA, CALIFORNIA
PLAN AND PROFILE



PLAN
 $1''=20'$

LEGEND

- Trail Alignment Centerline
- Edge of Paved Trail
- Edge of Trail Gravel Shoulder
- - - Preliminary Railroad Right-of-Way



PROFILE
 SCALE: $1''=20' H$
 $1''=10' V$

NOTE:
 SEE PRELIMINARY RIGHTS OF WAY NOTE ON SHEET G-1.

PRELIMINARY

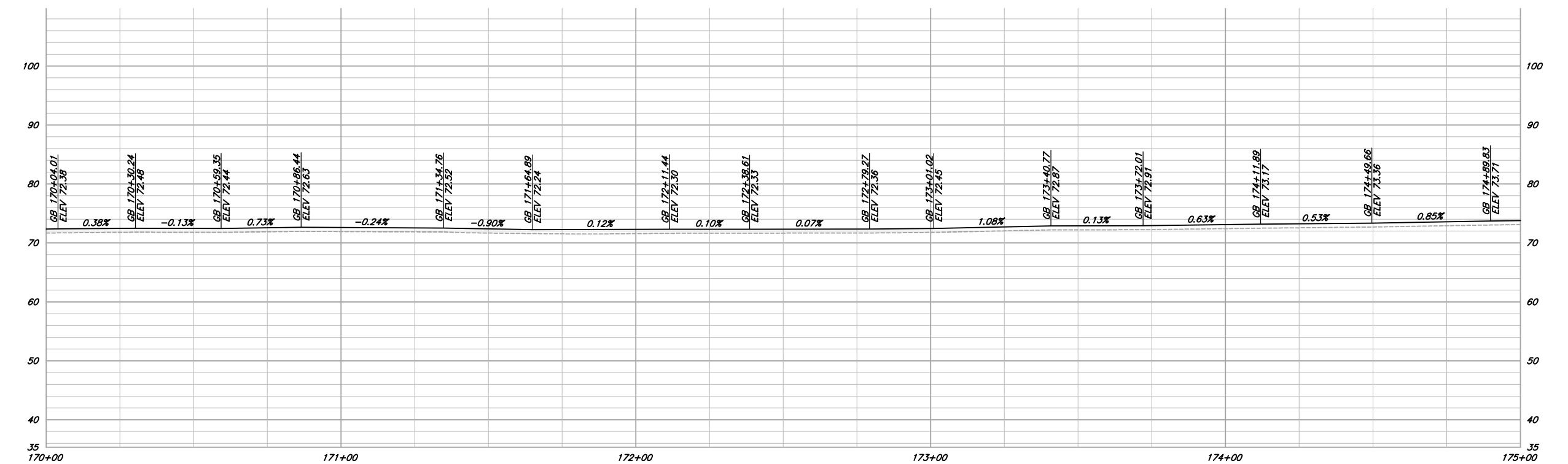
CITY OF ARCATA
 ANNIE AND MARY RAIL TRAIL
 ARCATA, CALIFORNIA
PLAN AND PROFILE

Sheet C-32
 SEQ 1
 DATE 12/2019
 PROJ. NO. 018218

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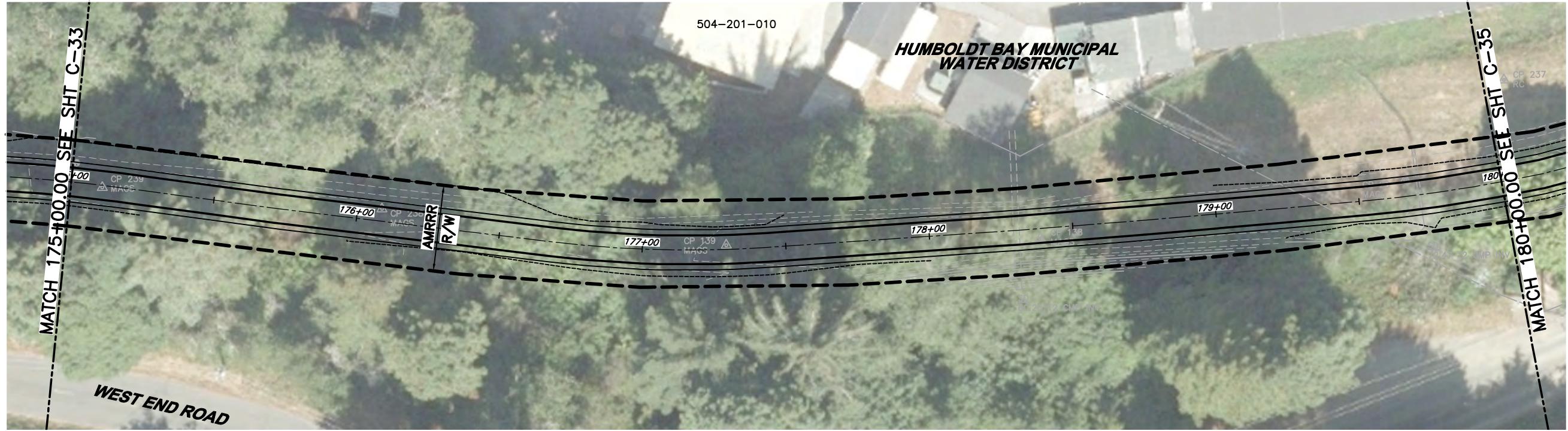
NOTE:
 SEE PRELIMINARY RIGHTS OF WAY NOTE ON SHEET G-1.

PRELIMINARY

SEQ	CITY OF ARCATA ANNIE AND MARY RAIL TRAIL ARCATA, CALIFORNIA	PROJ. NO.	DATE	REVISION
C-33		018218	12/2019	By

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504-201-01

HUMBOLDT BAY MUNICIPAL WATER DISTRICT

WEST END ROAD

PLAN

$$1'' = 20'$$



LEGEND

— — — TRAIL ALIGNMENT CENTERLINE
— — — EDGE OF PAVED TRAIL
— — — EDGE OF TRAIL GRAVEL SHOULDER
— — — PRELIMINARY RAILROAD RIGHT-OF-WAY



PROFILE

SCALE: 1"=20' H
1"=10' V

NOTE:

SEE PRELIMINARY RIGHTS OF WAY NOTE ON SHEET G-1.

PRELIMINARY

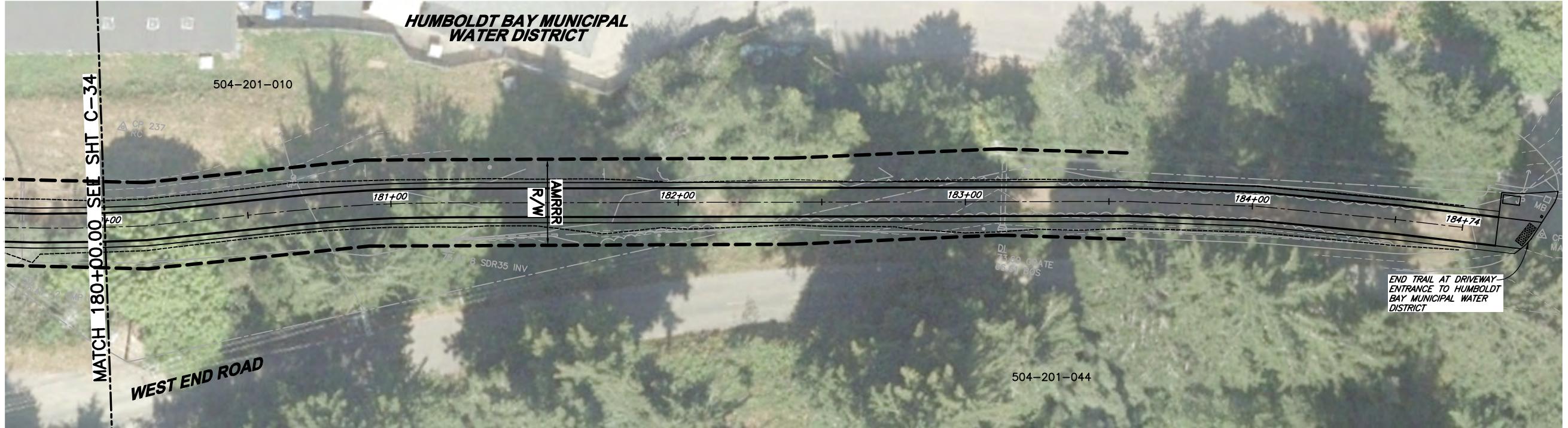
SHEET
C-34
SEQ
DATE 12/2019
PROJ. NO.
018218

VERIFY SCALES
BAR IS ONE INCH ON
ORIGINAL DRAWING
O _____ 1"
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THIS SHEET, ADJUST
SCALES ACCORDINGLY

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SAVED: 12/19/2019 3:16 PM CNEWELL, PLOTTED: 12/19/2019 4:02 PM CHRIS D. NEWELL
Eureka Projects 2018\018218-COA-AnnieMar\DWG\018218-PNP.dwg

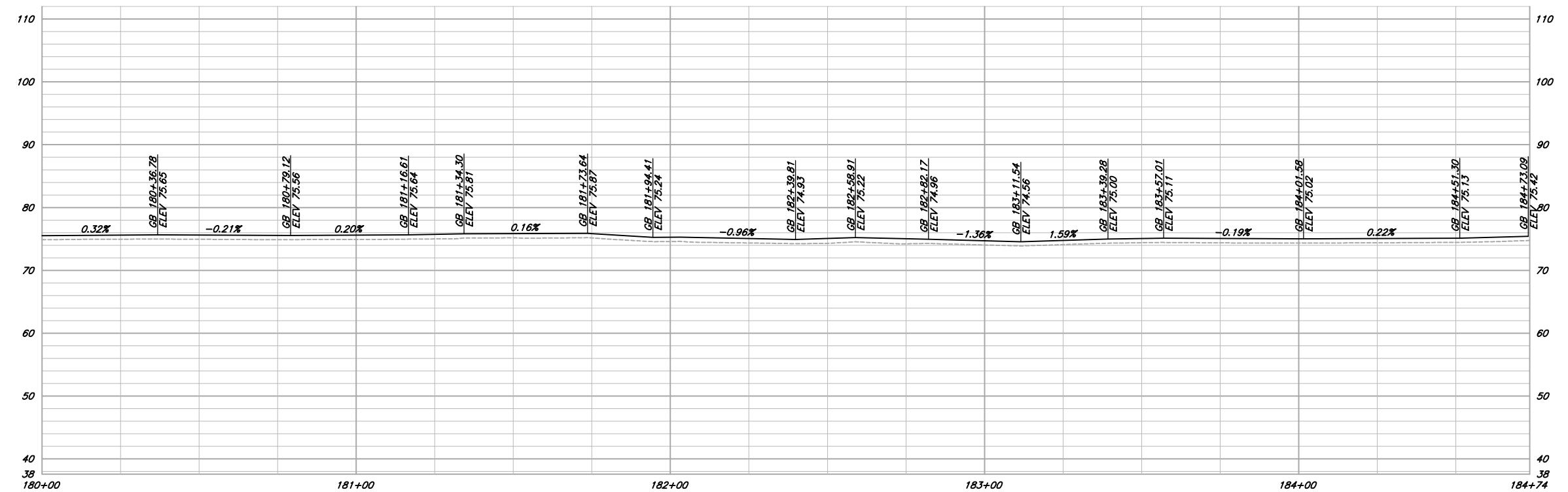


PLAN

1"=20'

LEGEND

- TRAIL ALIGNMENT CENTERLINE
- EDGE OF PAVED TRAIL
- EDGE OF TRAIL GRAVEL SHOULDER
- PRELIMINARY RAILROAD RIGHT-OF-WAY



PROFILE

SCALE: 1"=20' H
 1'=10' V

NOTE:

SEE PRELIMINARY RIGHTS OF WAY NOTE ON SHEET G-1.

PRELIMINARY

SEQ	C-35
DATE	12/2019
PROJ. NO.	018218

VERIFY SCALES
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CITY OF ARCATA
 ANNIE AND MARY RAIL TRAIL
 ARCATA, CALIFORNIA
PLAN AND PROFILE



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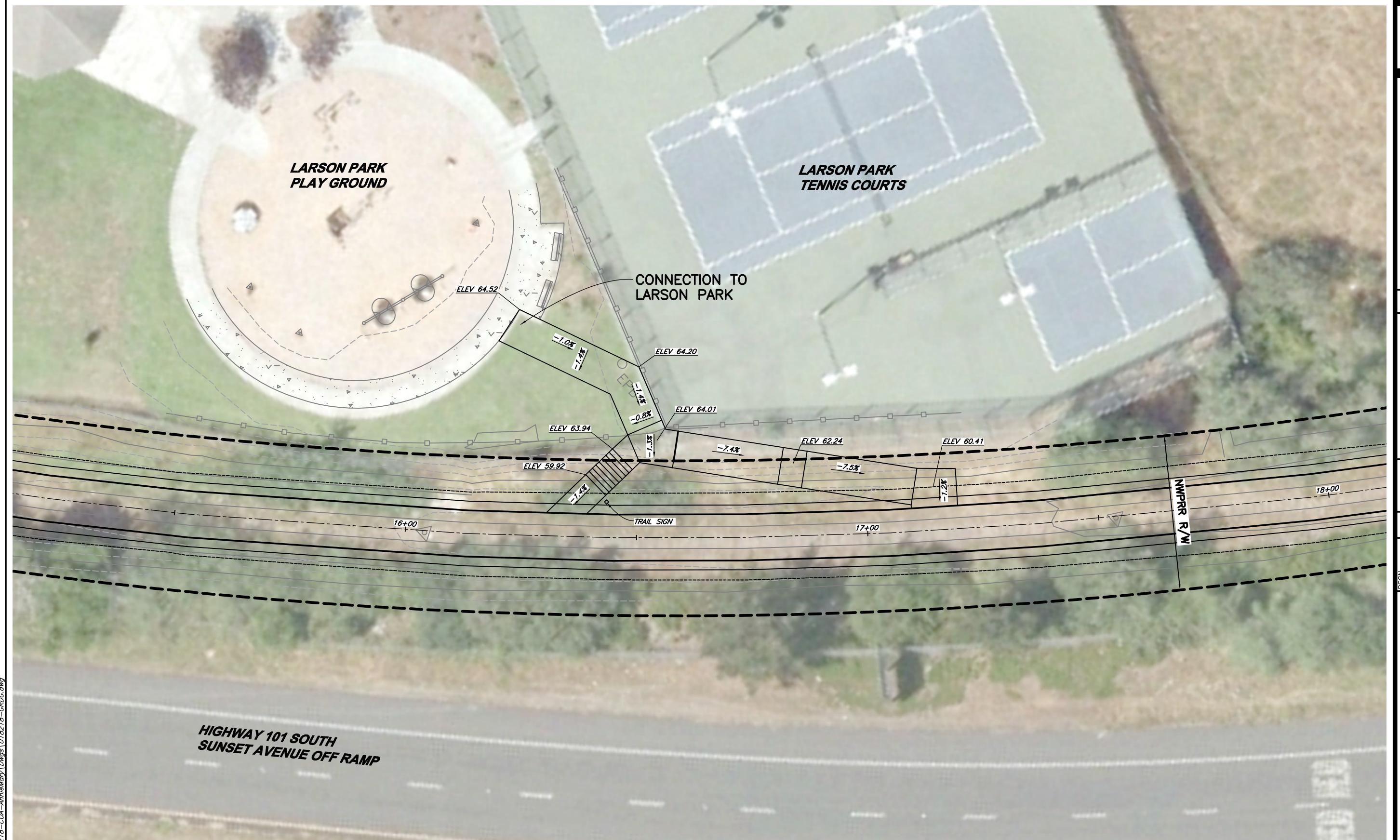
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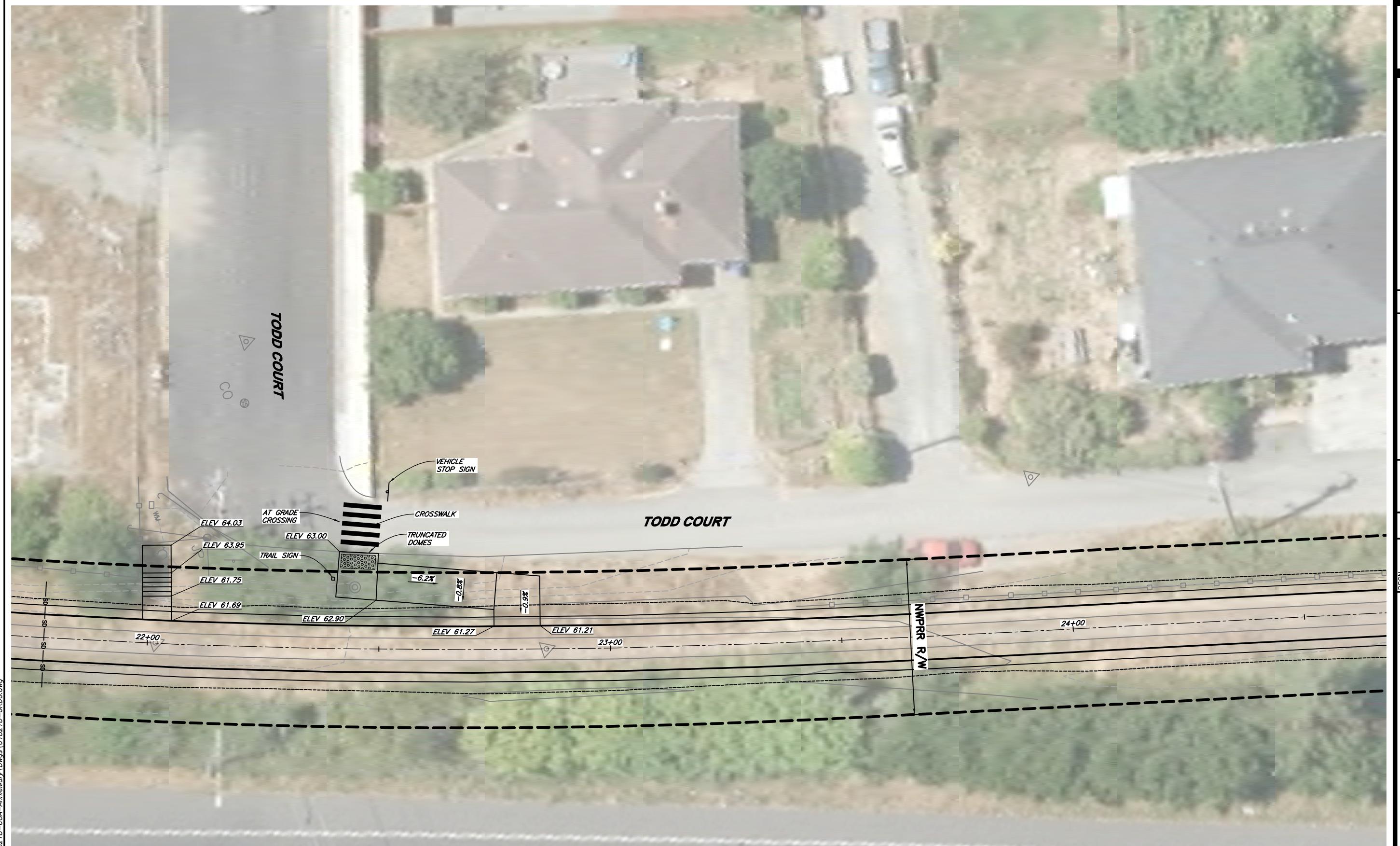
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CITY OF ARCATA
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NOTE:

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CITY OF ARCATA
ANNIE AND MARY RAIL TRAIL
ARCATA, CALIFORNIA
TODD COURT TRAIL ACCESS



LEGEND

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CITY OF ARCATA
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NOTE:

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CITY OF ARCATA
ANNIE AND MARY RAIL TRAIL
ARCATA, CALIFORNIA

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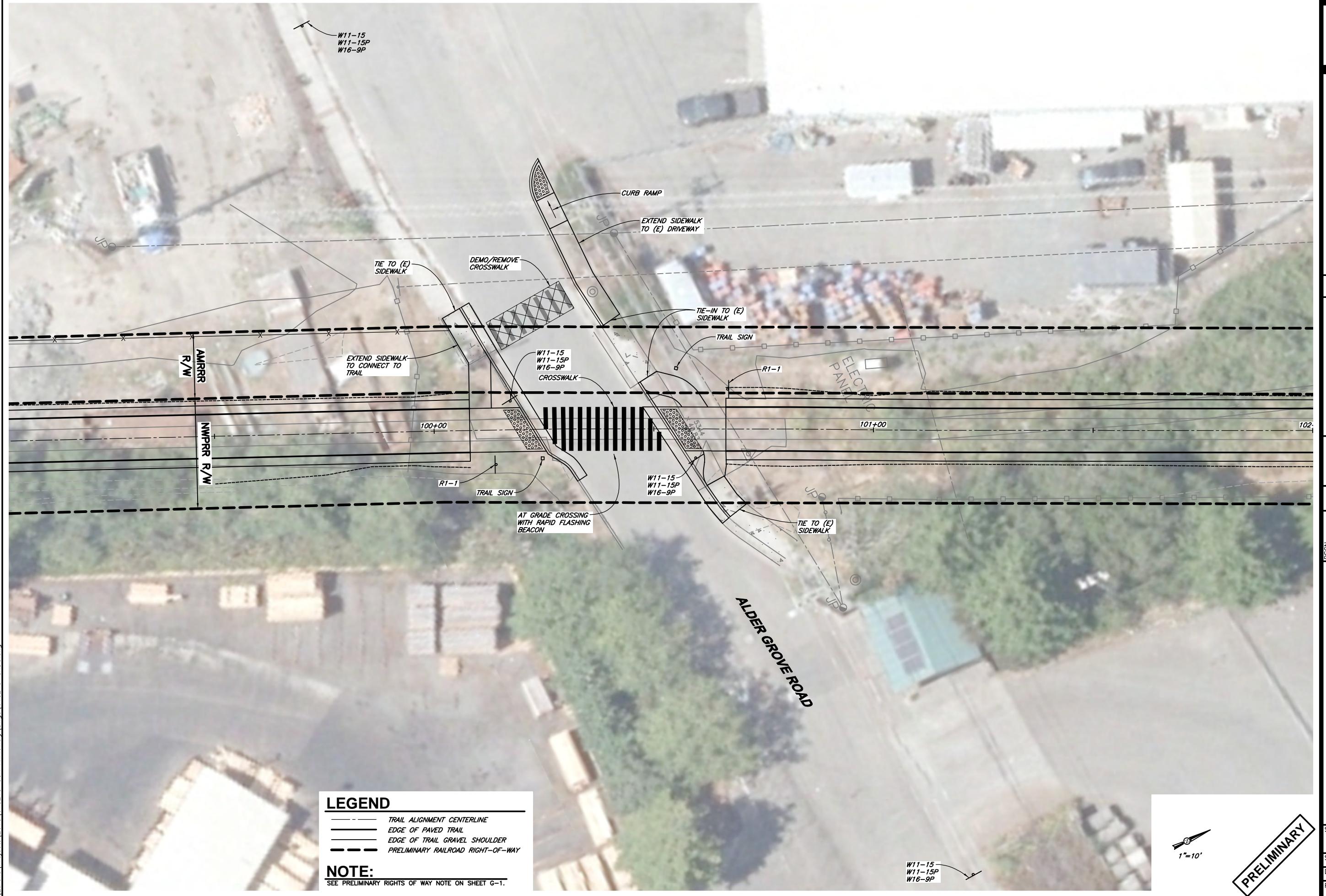
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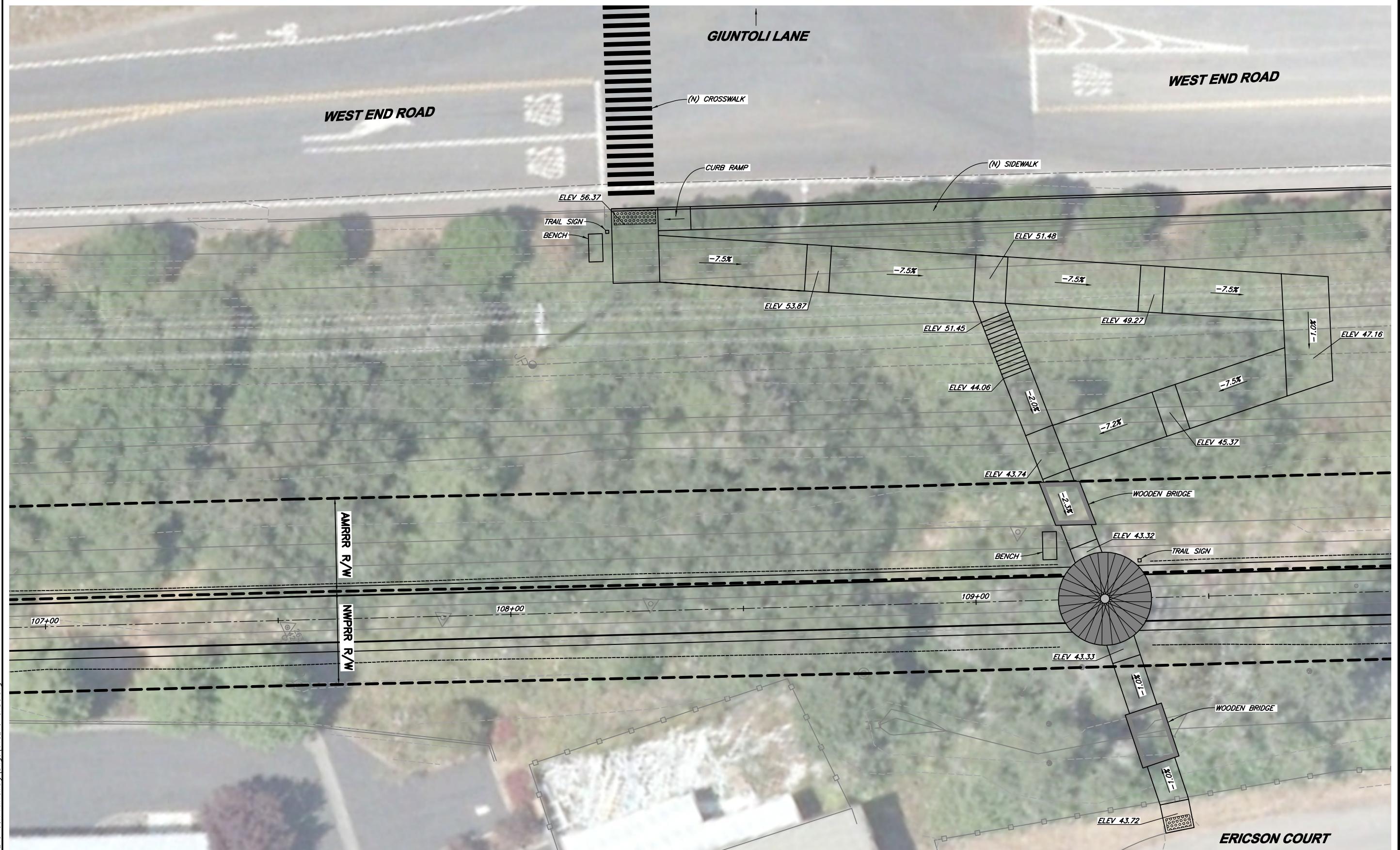
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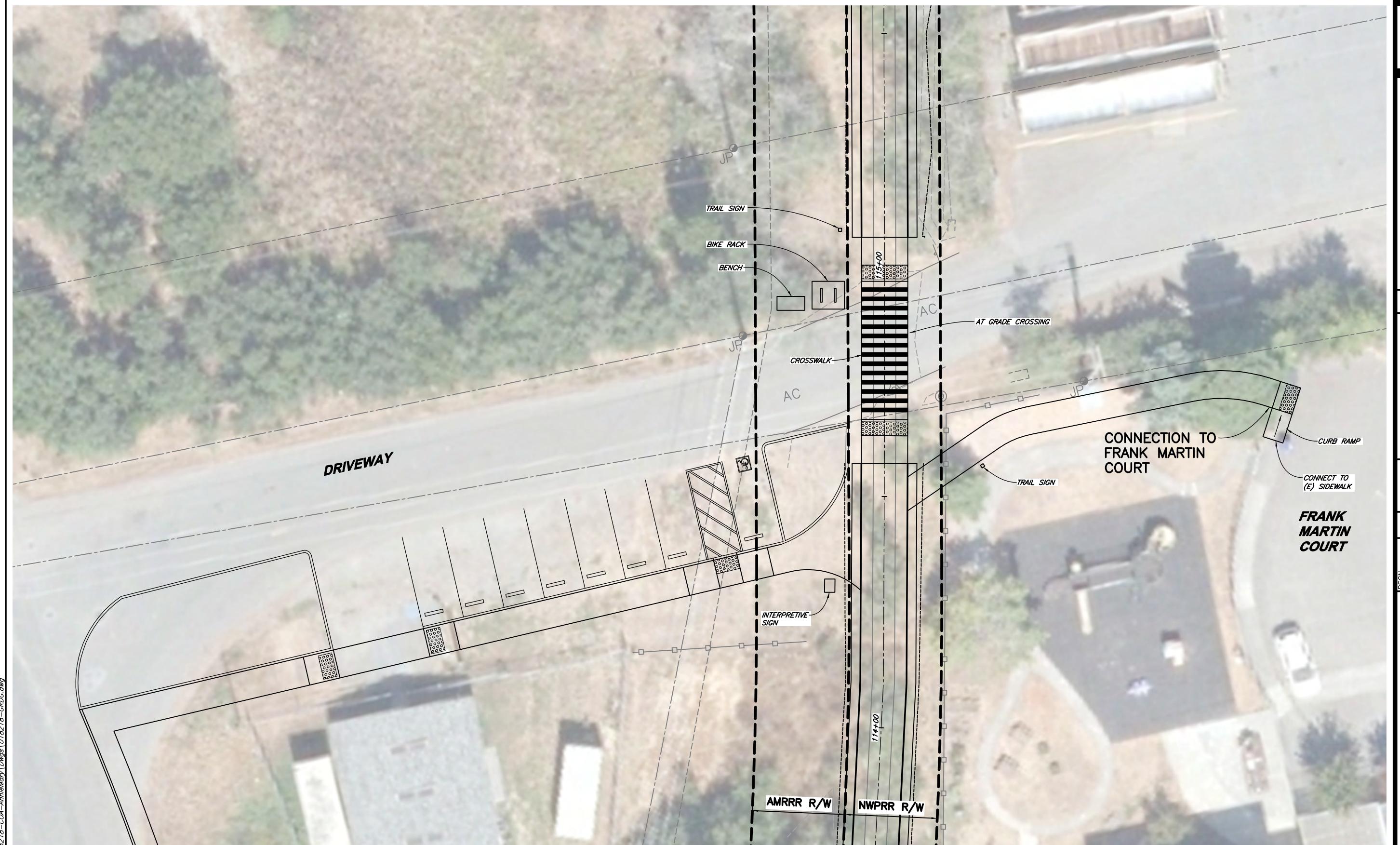
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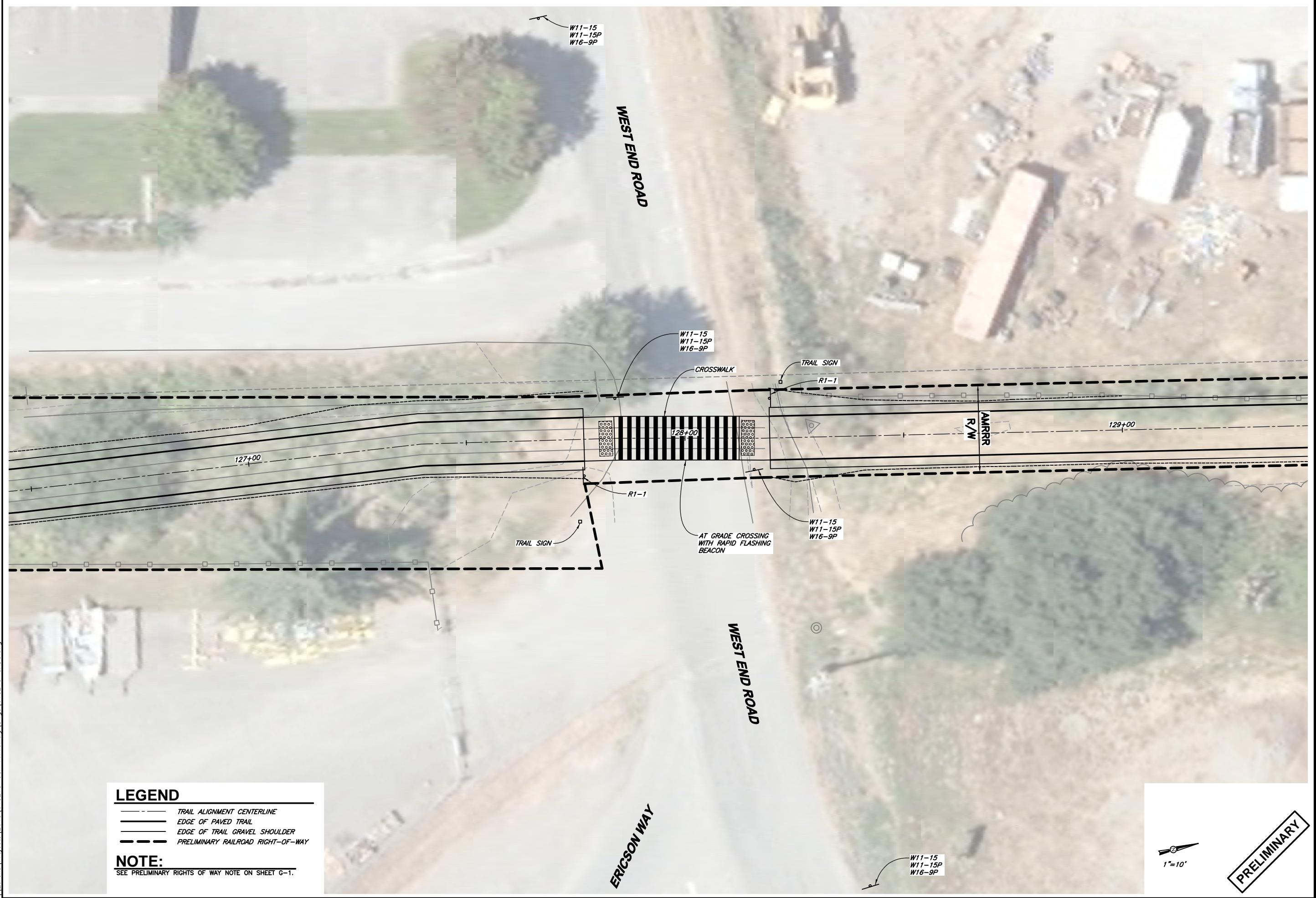
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PROJ. NO.	018218



LEGEND

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NOTE:

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CITY OF ARCATA
ANNIE AND MARY RAIL TRAIL
ARCATA, CALIFORNIA

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City of Arcata

Annie & Mary Trail Connectivity Project

Final

Project Report

APPENDIX B

Memo: Existing Policies, Plans, & Proposed Improvements

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December 18, 2019

TrailPeople & SHN

City of Arcata

Annie & Mary Trail Connectivity Project

Memo:

**Existing Policies, Plans,
& Proposed Improvements**

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Annie & Mary Trail Connectivity Project

Existing Policies, Plans, & Proposed Improvements

Contents

Currently Proposed Developments in the Project Vicinity.....	1
Sunset Terrace.....	2
The Village Housing Project.....	5
Canyon Creek Apartments	11
Arcata Elementary Safe Routes to School Active Transportation Project.....	13
Cannabis Innovation Zone (CIZ).....	15
Arcata Rail with Trail Connectivity Project (a.k.a. Humboldt Bay Trail North).....	17
Background Planning Documents.....	19
Humboldt Regional Bicycle Plan Update (2018)	20
Regional Transportation Improvement Program (2018).....	20
West End Specific Plan (2018 Draft)	21
Regional Transportation Plan for Humboldt County (VROOM - Variety in Rural Options of Mobility) (2017)	22
Arcata Pedestrian and Bicycle Master Plan (2010)	23
Arcata Parks and Recreation Master Plan (2010).....	24
Humboldt County Corridor Preservation Report (2010).....	24
Humboldt County Regional Trails Master Plan (2010)	25
Arcata General Plan (2008).....	25
Humboldt County Regional Pedestrian Plan (2008).....	26
Annie and Mary Trail – Next Steps (2008).....	26
Annie and Mary Trail Feasibility Study (2003).....	26
References	27

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Currently Proposed Developments in the Project Vicinity

Several proposed developments in the project area have the potential to impact the Annie & Mary Trail Connectivity Project. These include proposed housing projects that may add users and the associated roadway improvements that may be required as part of those housing projects. These also include other roadway or transportation-related improvements in the project vicinity. The development that is proposed in the City's Cannabis Innovation Zone (CIZ) is also collectively discussed since it surrounds the northern section of the trail alignment. Due to its relation to the Annie & Mary Trail Connectivity Project, the Arcata Rail with Trail Connectivity Project is also discussed. **Table 1**, below, presents a list of the projects that have been reviewed as part of this study. A more detailed description of each of the projects is included after the table.

Table 1: Summary of Proposed Developments in the Project Vicinity

Project Name	Project Type	Location
Sunset Terrace	Multi-family residential	1301 Sunset Avenue; between Sunset Avenue and Foster Avenue.
The Village Student Housing Project	Multi-family residential	At the end of St. Louis Road on the Craftsman's Mall site.
Canyon Creek Apartments	Multi-family residential	On Todd Court, adjacent to Larson Park.
Arcata Elementary Safe Routes to School Active Transportation Project	Ped/Bike Safety Education and Sidewalk and Intersection Improvements	Within the Sunset and Westwood Neighborhoods from Alliance Road to Arcata Elementary School and Stromberg Avenue to Foster Avenue.
Cannabis Innovation Zone (CIZ)	Commercial Cannabis	Within and surrounding the Aldergrove Business Park along West End Road.
Arcata Rail with Trail Connectivity Project (a.k.a. Humboldt Bay Trail North)	Multi-use trail	Along the North Coast Railroad Authority (NCRA) right-of-way (ROW), a portion of Highway 101 corridor, City-owned ROW, and private property. The trail alignment occurs from the Highway 101 and Bracut intersection to Larson Park in the City of Arcata.

Sunset Terrace

The Sunset Terrace Project is a multi-family development of 142, 1-bedroom residential units located to the west of the southern terminus of the Annie & Mary Trail Connectivity Project.

Figure 1, below, is from the CEQA document prepared for the project and shows the location of the project site. The project is nearing the end of construction and is anticipated to be fully operational in 2019. **Figure 2**, below, is from the City's website and shows the Sunset Terrace Project during the construction phase.

Figure 1: Location Map for the Sunset Terrace Project



Figure 2: Construction of the Sunset Terrace Project



All vehicular access to the development will be from Foster Avenue along the south side of the property and all required parking will be developed onsite. Foster Avenue is a 20-foot wide arterial with 4 foot and 6 foot wide bike lanes on either side of the vehicular travel lanes. The project site is approximately 400 feet from an Arcata & Mad River Transit System (AMRTS) bus stop, is approximately 0.5 miles from Humboldt State University (HSU), less than 1.5 miles from downtown Arcata, and less than 0.5 miles from the Westwood shopping center. The project is directly north of Shay Park and the Arcata Rail with Trail, which generally follows Foster Avenue through the project area. The Arcata Rail with Trail is a 10-foot wide, Class I, multi-use trail that links the Sunset neighborhood to the north end of Humboldt Bay. The project also includes bike storage shelters to encourage the use of alternative transportation modes (City of Arcata, 2016b).

As discussed in the CEQA document prepared for the project, a Traffic Analysis was prepared (W-Trans Sunset Traffic Analysis, April 7, 2016) that contained recommendations to mitigate traffic impacts to both vehicular and non-vehicular users of the circulation system. The Traffic Analysis recommended the following measures be in place prior to issuance of a Certificate of Occupancy for the Sunset Terrace Project:

- 1) The Alliance Road approaches shall be restriped to provide a southbound left-turn lane and through/right-turn lane and the northbound approach modified to provide a right-turn lane and left-turn/through lane. The restriping of the Alliance Road approaches occurred in Summer 2017.
- 2) A raised crossing like a speed table or other device marked for pedestrian crossing, with appropriate signage in both directions, shall be developed from the project across Foster Avenue connecting to the Rail with Trail and Shay Park. The exact location shall be determined by the City Engineer. Visibility and speeds shall be taken into consideration. **Figure 3**, below, shows the Foster Avenue pedestrian crossing that was installed to provide access from the Sunset Terrace project site to the Arcata Rail with Trail and Shay Park.
- 3) A pedestrian pathway shall be provided within the Sunset Terrace project that connects Sunset Avenue to Foster Avenue. The exact location and suitable materials shall be determined by the City Engineer. As noted above, construction of the project is nearing completion, including the development of this pedestrian pathway. The pathway will consist of concrete stairs providing access to Sunset Avenue and sidewalks throughout the site connecting to Foster Avenue.

Although not identified as a mitigation measure in the Traffic Analysis, the development of a northbound left-turn lane on LK Wood and Sunset Avenue was identified as an interim measure that would greatly improve existing operations at that intersection. The applicant has agreed to develop this improvement and will work with Humboldt State Facilities staff on achieving this goal. The roadway is actually owned by HSU, which has the ultimate control over activities and improvements that occur there.

The Sunset Terrace Project will provide housing for a minimum of 142 residents who may use the Arcata Rail with Trail to access the Annie & Mary Trail Connectivity Project and ultimately the West End Road/Giuntoli/Valley West area.

Figure 3: Foster Avenue Pedestrian Crossing Near Sunset Terrace Project



The Village Housing Project

The Village Housing Project (formerly the Village Student Housing Project) was a multi-family student housing development that originally proposed 240-units on the Craftsman's Mall site at the end of St. Louis Road. During the entitlement process, the project went through several revisions and was eventually reduced to a 152-unit project. **Figure 5**, below, is the original site design proposed for the project (KLA Landscape Architecture, 2016). **Figure 6**, below, is the revised site design proposed for the project (KLA Landscape Architecture, 2018). Despite the revisions to the Village Student Housing Project (e.g., reduction of project to 152 residential units), the project was ultimately denied by the City Council in August 2018.

In February 2019, the applicant presented a revised project design to the City Council that included a combination of student and open-market apartment units. That proposal for the project would have provided housing for 651 residents. **Figure 7**, below, shows the site design proposed for the project in February 2019 (Humphreys & Partners Architects, L.P., 2019). The project is currently under review by City staff. As such, there is still the potential for a large multi-family residential development to be constructed on the site in the foreseeable future. It is anticipated that any future development on the site would include many of the pedestrian/bicycle improvements that were originally proposed by or required of the Village Student Housing Project. Future development of the site has the potential to provide housing for hundreds of residents who may use the Annie & Mary Trail Connectivity Project to access Humboldt State University, Downtown Arcata, the Arcata Rail with Trail, and the West End Road/Giuntoli/Valley West area.

Figure 4, below, is from the City of Arcata Parcel Finder and shows the location of the project site. The NCRA railroad ROW runs along the eastern boundary of this site.

Figure 4: Location Map of the Village Student Housing Project



Figure 5: Original Site Design for the Village Student Housing Project

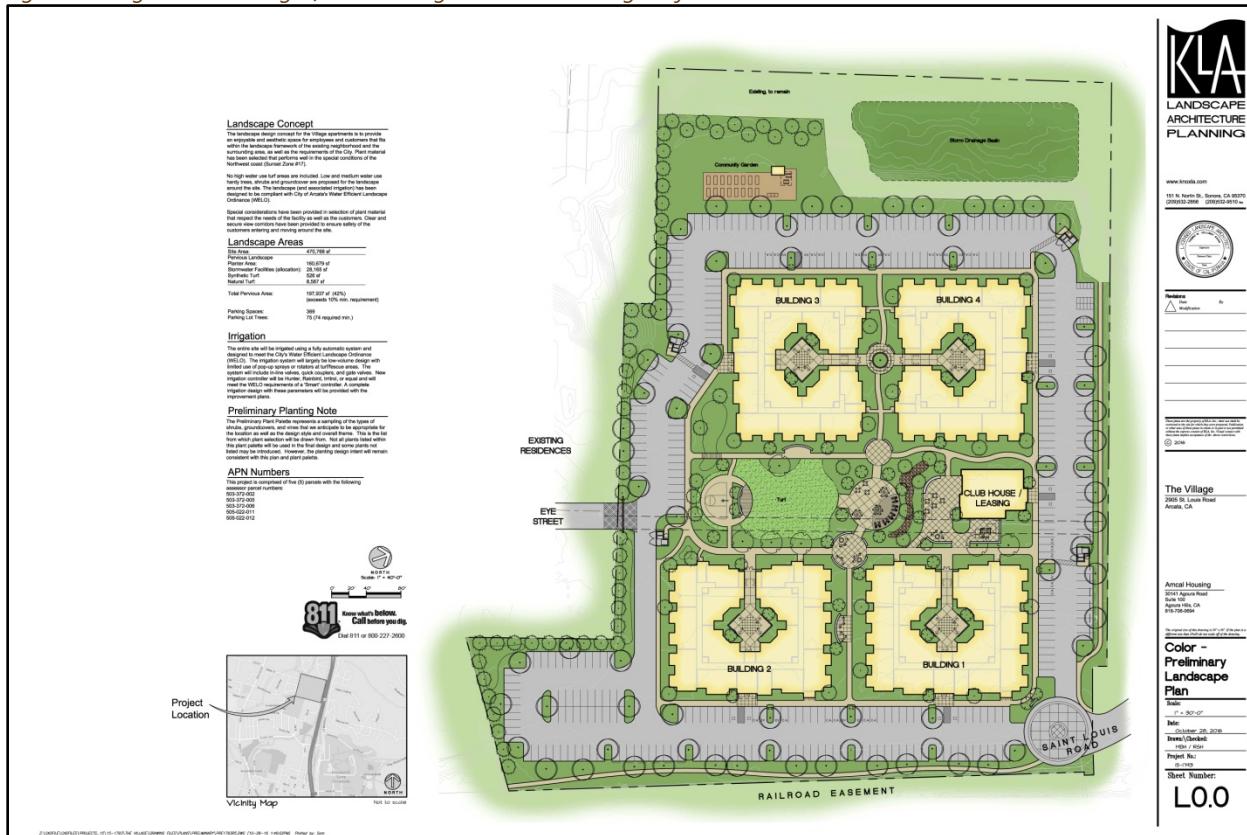


Figure 6: Final Site Design for the Village Student Housing Project



Figure 7: Current Site Design for the Village Student Housing Project

Vehicular access to the project site would be provided from St. Louis Road. There are currently two gated access roads to the site off of St. Louis Road. The portion of St. Louis Road on the eastern boundary of the project site would be vacated and incorporated into the site design as access, parking, and landscaping. This would include development of a traffic circle in the northeast corner of the project site. The project design would include residential structures in the central portion of the site with vehicular access and parking located around the perimeter. Other vehicular access improvements proposed as part of the project included a gated emergency access to Eye Street.

The City of Arcata commissioned W-Trans to conduct an areawide traffic study to address the cumulative impacts associated with the potential development of six projects located in central Arcata (W-Trans, 2017). These projects included the Village Student Housing Project and the Canyon Creek Apartments Project.

To mitigate the potential traffic impacts of these projects, the Traffic Study and City Engineer recommended several near-term and future transportation improvements including the following:

- 1) Sunset Avenue/LK Wood Boulevard Re-Striping (Near-term).
- 2) Re-Stripe Alliance Road & Foster Avenue Approaches (Near-term).
- 3) Roundabout at Sunset Avenue/LK Wood Boulevard Intersection (Future)
- 4) Roundabout at Foster Avenue/Alliance Road Intersection (Future)

In order to fund these transportation improvement projects, a Traffic Impact Mitigation Fee Collection Program or equivalent will be established by the City of Arcata. The projects analyzed in the Traffic Study will be responsible for paying a fair share proportion of the near term and future transportation improvements, which will be collected via conditions of approval or through development agreements. The near-term improvements, including re-striping at both the Alliance Road/Foster Avenue and Sunset Avenue/LK Wood Blvd intersections, were completed in Summer 2017. As discussed in the CEQA document prepared for the Village Student Housing Project, the future transportation improvements listed above may not be constructed for several years. Since the timing of implementation of improvements cannot be guaranteed, impacts from the larger housing projects proposed in the Sunset area are would be significant and unavoidable.

To comply with Policy T-5 (Bicycle and Pedestrian Facilities) of the Arcata General Plan Transportation Element, the Arcata Pedestrian & Bicycle Master Plan (2010), and the recommendations of the W-Trans Traffic Study (2017), the project proposed to construct new on-site pedestrian/bicycle improvements throughout the development. This included the following pedestrian/bicycle trails:

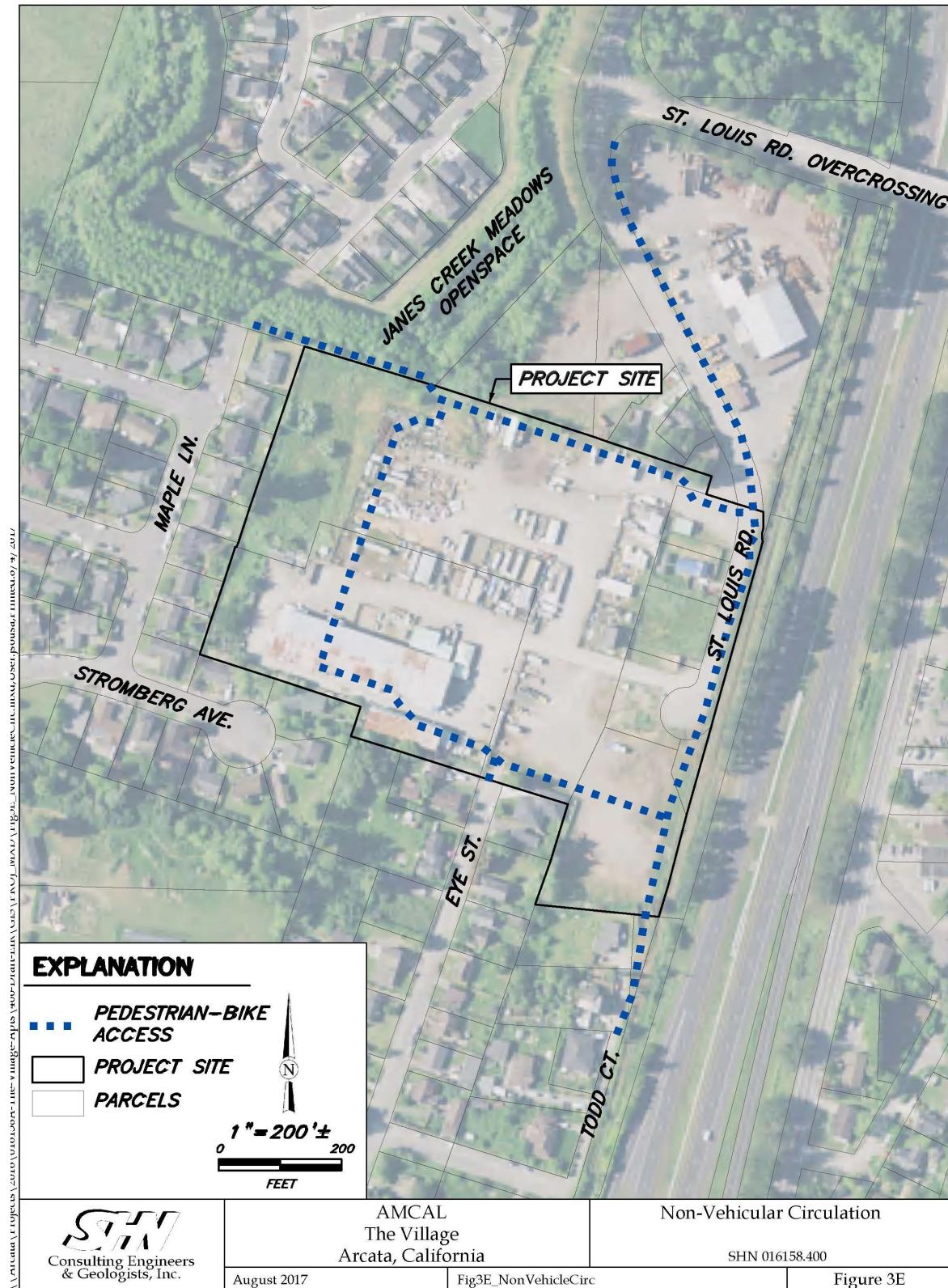
- 1) An approximate 675-foot section of the Annie & Mary Trail Connectivity Project along the eastern edge of the project site from the northeast corner of the site to the southeast corner.
- 2) An approximate 500-section of trail along the north property line of the project site from the northeast corner of the site to the northern central portion of the site. This trail would connect to the City-owned Janes Creek Meadows Openspace area and ultimately provide access to Maple Lane.
- 3) Sidewalk and pedestrian trails throughout the project site as illustrated on the Landscape Plans prepared by KLA Landscape Architecture (2016 and 2018) and the Site Plan prepared by Humphreys & Partners Architects, L.P. (2019)(see **Figures 5-7**).

The applicant also proposed to work with the City to develop offsite improvements that would improve pedestrian/bicycle access including the following:

- 1) An approximate 200-foot section of the Annie & Mary Trail Connectivity Project from the southeast corner of the site to the northern end of Todd Court. This section of the trail would be developed through parcels 505-042-003 and 505-042-022.
- 2) An approximate 700-section of sidewalk from the northeast corner of the site to the existing sidewalk at the St. Louis Road overcrossing.

Figure 8, below, is from the CEQA document prepared for the Village Student Housing Project and shows the connectivity that would have been created by the various pedestrian/bicycle trails that were proposed as part of the project.

Figure 8: Non-Vehicular Connectivity Proposed by the Village Student Housing Project



As shown in **Figure 8**, the proposed pedestrian/bicycle improvements would have resulted in connecting the project site to the St. Louis Road overcrossing to the north, Maple Lane to the west, and Todd Court to the south. These improvements would have provided connectivity to the existing trail systems in the project area, Humboldt State University, and to regional trails in the Humboldt Bay area including the Arcata Rail with Trail and the Humboldt Bay Trail: Arcata to Eureka segment. As recommended in the W-Trans Traffic Study, pedestrian and bicycle traffic would have been directed toward Eye Street and Todd Court until such time that this section of the Annie & Mary Trail Connectivity Project is completed to Sunset Avenue.

As discussed in the CEQA document prepared for the Village Student Housing Project, the project proposed several other improvements or programs to encourage the use of alternative modes of transportation or reduce vehicle miles traveled including the following:

- 1) The applicant proposed to provide 505 bicycle parking spaces, which is more than four times the City's minimum requirement.
- 2) A car and bike share program would be implemented that would be available to the residents of the student housing community.
- 3) A bus stop would be developed on the project site, in a location satisfactory to the City Engineer, and the project would receive bus service from the Arcata & Mad River Transit System.

Canyon Creek Apartments

The Canyon Creek Apartments Project is a multi-family development of 89 residential units that is proposed directly north of Larson Park and the southern terminus of the Annie & Mary Trail Connectivity Project. The City's website indicates that the project application is currently being processed and that public hearings have not yet been scheduled (City of Arcata, 2019). Similar to the Village Student Housing Project, the NCRA railroad ROW runs along the eastern boundary of this site. **Figure 9**, below, is from the City of Arcata Parcel Finder and shows the location of the project site.

Figure 9: Location Map of the Canyon Creek Apartments Project



Vehicular access to the project site will be from Todd Court and Grant Avenue. As shown in **Figure 10**, below, the project includes residential structures on the western portion of the site with vehicular access and parking on the eastern and southern portions (LACO Associates, 2015).

As noted above, W-Trans prepared a Traffic Study to address the cumulative impacts from the development of six projects located in central Arcata (W-Trans, 2017), including the Canyon Creek Apartments Project. Similar to the Village Student Housing Project, the Canyon Creek Apartments Project will be required to pay a fair share proportion of the near-term and future transportation improvements recommended in the Traffic Study. In addition, the Traffic Study also recommended that the portion of the Annie & Mary Trail Connectivity project between Todd Court and Sunset Avenue should be constructed to provide adequate access for pedestrians and bicyclists to the project site. As noted in the Site Plans for the project, the development would include 39 bicycle parking spaces.

The Canyon Creek Apartments Project will provide housing for a minimum of 101 residents who may use the Annie & Mary Trail Connectivity Project to access Humboldt State University, Downtown Arcata, the Arcata Rail with Trail, and the West End Road/Giuntoli/Valley West area.

Figure 10: Site Design for the Canyon Creek Apartments Project



Arcata Elementary Safe Routes to School Active Transportation Project

The Arcata Elementary Safe Routes to School Active Transportation Project proposes to focus on pedestrian and bicycle safety education in addition to sidewalk and intersection infrastructure improvements. The proposed improvements were installed in the summer of 2019 in the Sunset and Westwood Neighborhoods from Alliance Road to Arcata Elementary School and from Stromberg Avenue to Foster Avenue. **Figure 11**, below, is from the City of Arcata Parcel Finder and shows the project area.

Figure 11: Location Map of the Arcata Elementary Safe Routes to School Active Transportation Project



The pedestrian and bicycle safety education programs are currently being implemented by Redwood Community Action Agency (RCAA) and BikesThere, a local business dedicated to teaching lifelong pedestrian and bicycle safety skills. As part of the program, second graders receive pedestrian safety education in the classroom with the opportunity to practice the skills they learn outside in the community. Fourth grade students are being taught bicycle safety, with curriculum focusing on the importance of wearing helmets to avoid traumatic brain injury. Students are also being taught how to check bicycle tires, brakes, and chains before riding. Some of the pedestrian improvements that are proposed as part of the Arcata Elementary Safe Routes to School Active Transportation Project include the following:

- 1) Constructing new sections of sidewalk where there are currently gaps.
- 2) Installing new crosswalks in areas that receive high volumes of pedestrian traffic.
- 3) Improvement of the pedestrian crossing at the intersection of Alliance Road and Stromberg Avenue including an LED enhanced crossing sign.

These accessibility and safety improvements will make it safer for Arcata Elementary School students to walk and bike to school. **Figure 12** and **Figure 13**, below, show the proposed design

for some of the improvements that would be installed in close proximity to the Annie & Mary Trail Connectivity Project (City of Arcata, 2018b). Construction of the improvements will begin in March 2019 and are scheduled to be completed by July 2019. After construction is complete, the City proposes to conduct counts to determine if the number of pedestrians and bicyclists increased as a result of the improvements.

Figure 12: Improvements Proposed at Grant Avenue, Eye Street, and Jay Street

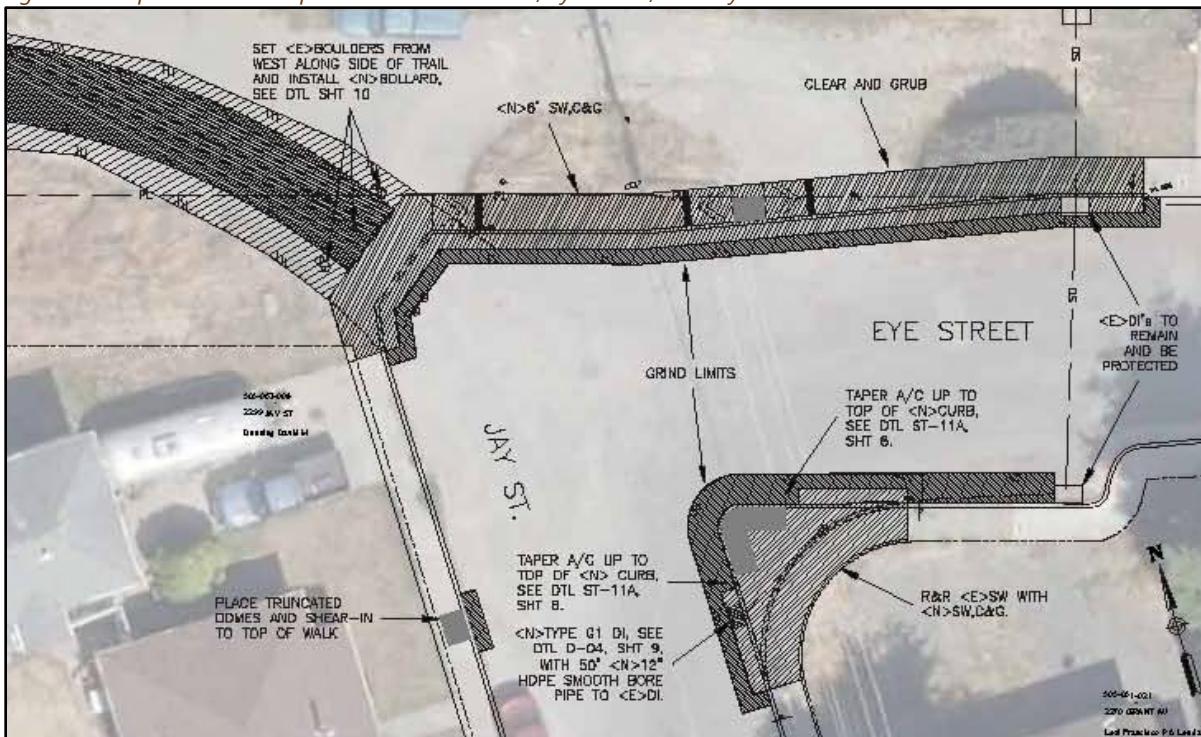
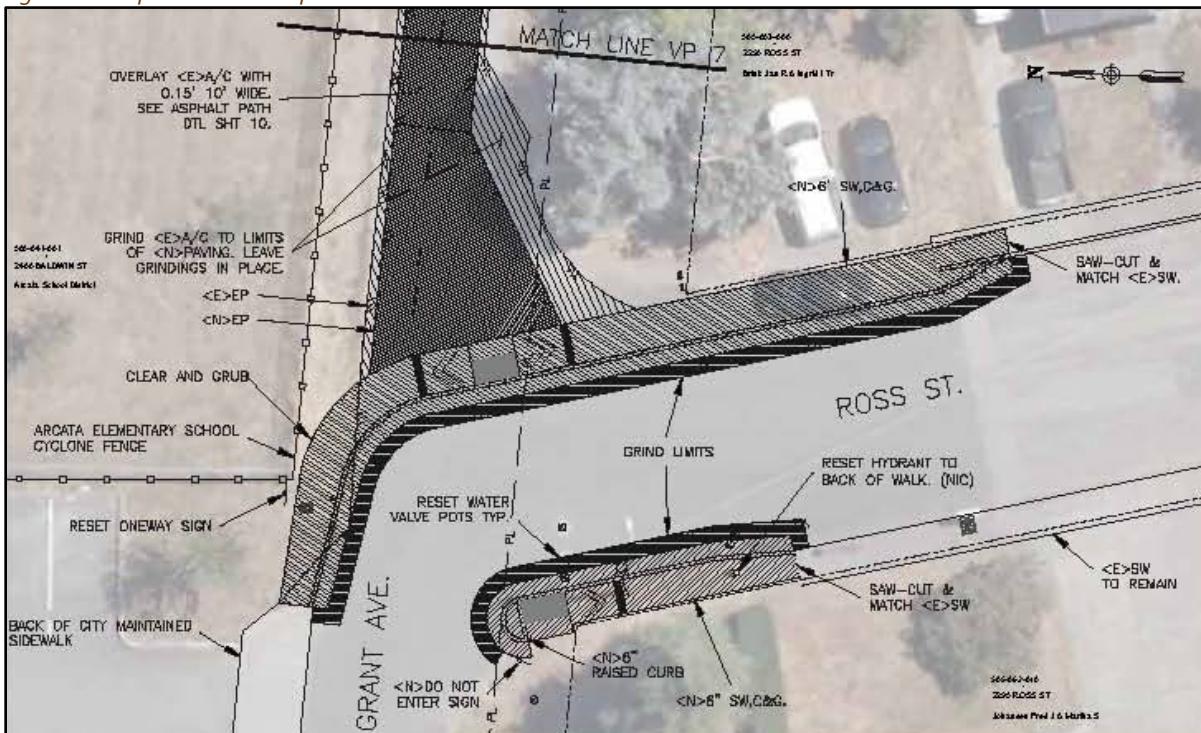


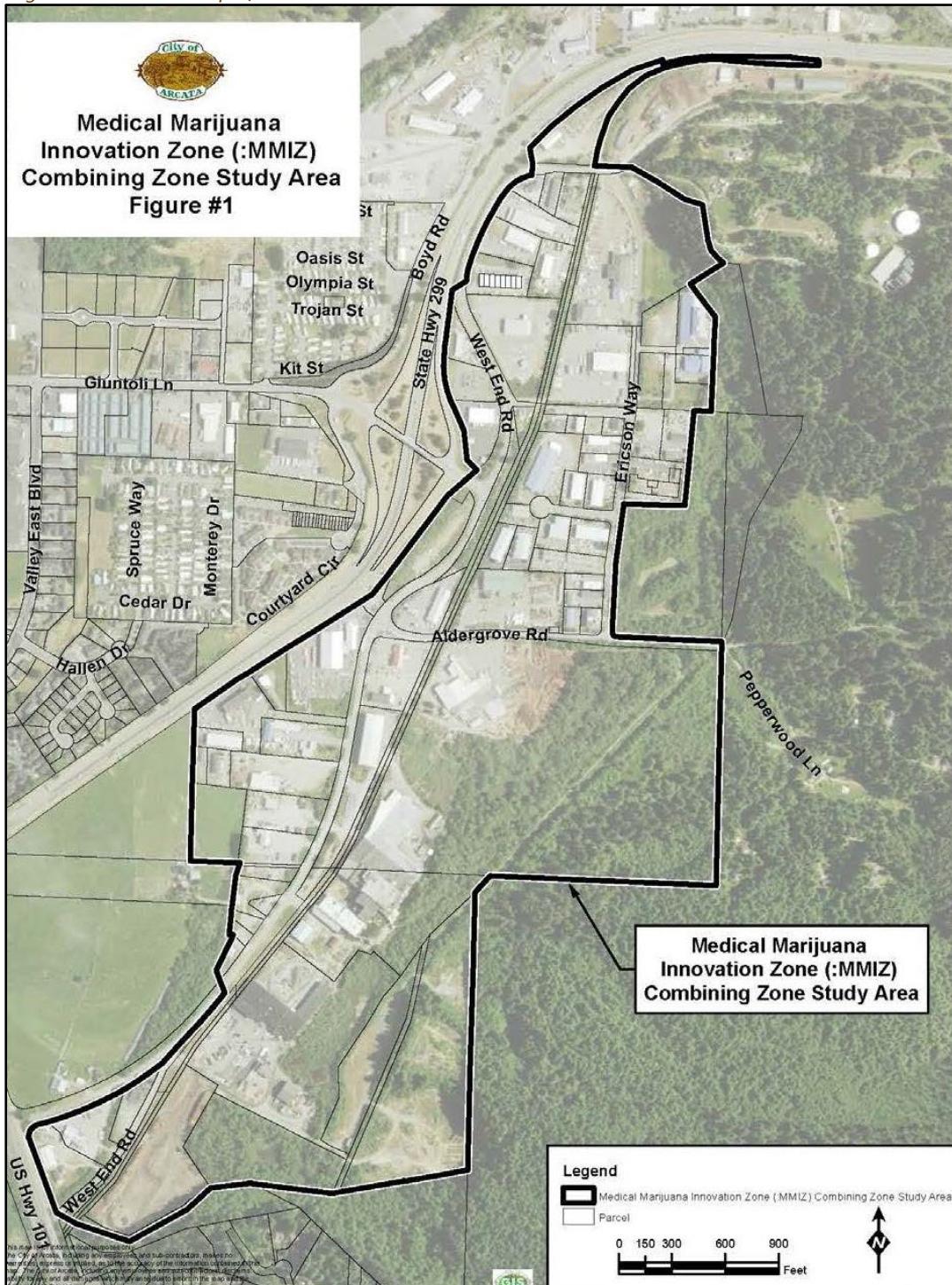
Figure 13: Improvements Proposed at Grant Avenue and Ross Street



Cannabis Innovation Zone (CIZ)

In 2016, the City of Arcata adopted the Medical Marijuana Innovation Zone (MMIZ) Combining Zone, which was later renamed the Cannabis Innovation Zone or CIZ. The northern segment of the Annie & Mary Trail Connectivity Project runs through the CIZ area. **Figure 14**, below, is from the CEQA document prepared for creation of the MMIZ combining zone and shows the location of the CIZ area (formerly MMIZ area).

Figure 14: Location Map of the Cannabis Innovation Zone Area



The CIZ was created to allow an area where niche manufacturing businesses could provide cannabis related products including edibles, oils, tincture sprays, lotion and a variety of other products. The CIZ also allows cultivation, processing, warehousing, research, testing, and new cannabis product development. The CIZ establishes special local standards to address the unique legal, social, security, enforcement, and environmental concerns that have been well documented to be associated with cannabis production, while maintaining compatibility with the other uses that either currently exist or are likely to exist in the area (City of Arcata, 2016).

The CIZ area is located within an existing industrial area that formerly supported large heavy industrial uses related to the timber industry. Although some lumber processing still occurs, the timber extraction industry has waned and the larger lumber processing sites are changing to other light industrial uses (City of Arcata, 2016). In addition to allowing a location for cannabis uses to occur, one of the main goals of the CIZ is to encourage the redevelopment of the deteriorated industrial properties in the CIZ area.

Access to the CIZ area is provided by West End Road, which is classified as a minor arterial and designated as a truck route in the General Plan Transportation Element (City of Arcata, 2008). West End Road from Giuntoli Lane to Spear Avenue and Giuntoli Lane from Heindon Road to West End Road are designated as Class II bike lanes. The CIZ area also has one bus stop which is located just north of the West End Road and Aldergrove Road intersection. Historically, there has been very heavy semi-truck traffic within the CIZ area at levels substantially higher than are anticipated to occur in the future when the area is redeveloped for cannabis uses.

Currently, there are a number of cannabis projects in the CIZ area that are either operating, being constructed, or going through the permitting process. Several of these projects are located directly adjacent to the Annie & Mary Trail Connectivity Project corridor. It is anticipated that upon construction of the Annie & Mary Trail Connectivity Project, that the trail will be used for commuting and recreation by the employees of the existing and proposed businesses in the CIZ area.

Arcata Rail with Trail Connectivity Project (a.k.a. Humboldt Bay Trail North)

In 2004, the City of Arcata developed the Arcata Pedestrian and Bicycle Master Plan, which identified the NCRA railroad ROW as a corridor of significant potential for development as a non-motorized trail. In 2007, the Humboldt Bay Trail Feasibility Study was developed, which studied the feasibility of a non-motorized trail between Arcata and Eureka (Winzler & Kelly, 2010).

In 2009, the City received grant funding from the California Coastal Conservancy to complete planning, design, and permitting for a "Rails-with-Trails" facility. "Rails-with-Trails" is an arrangement in which an established shared-use trail runs parallel to a rail line that is either functional or has the capacity to become functional in the future. In such projects, the trail is designed and developed to operate in the railroad ROW in such a way as to avoid interference with the functionality of the adjacent rail line (Winzler & Kelly, 2010).

In 2010, the City began the planning, design, and permitting process for the Arcata Rail with Trail Connectivity Project, which proposed the construction, operation, and maintenance of an approximately 4.5 mile long Class I, ADA accessible, non-motorized, multiuse, paved trail. The northern 3.25 miles of the trail is located in the City of Arcata and the southern 1.25 miles is located in the County of Humboldt south of the City.

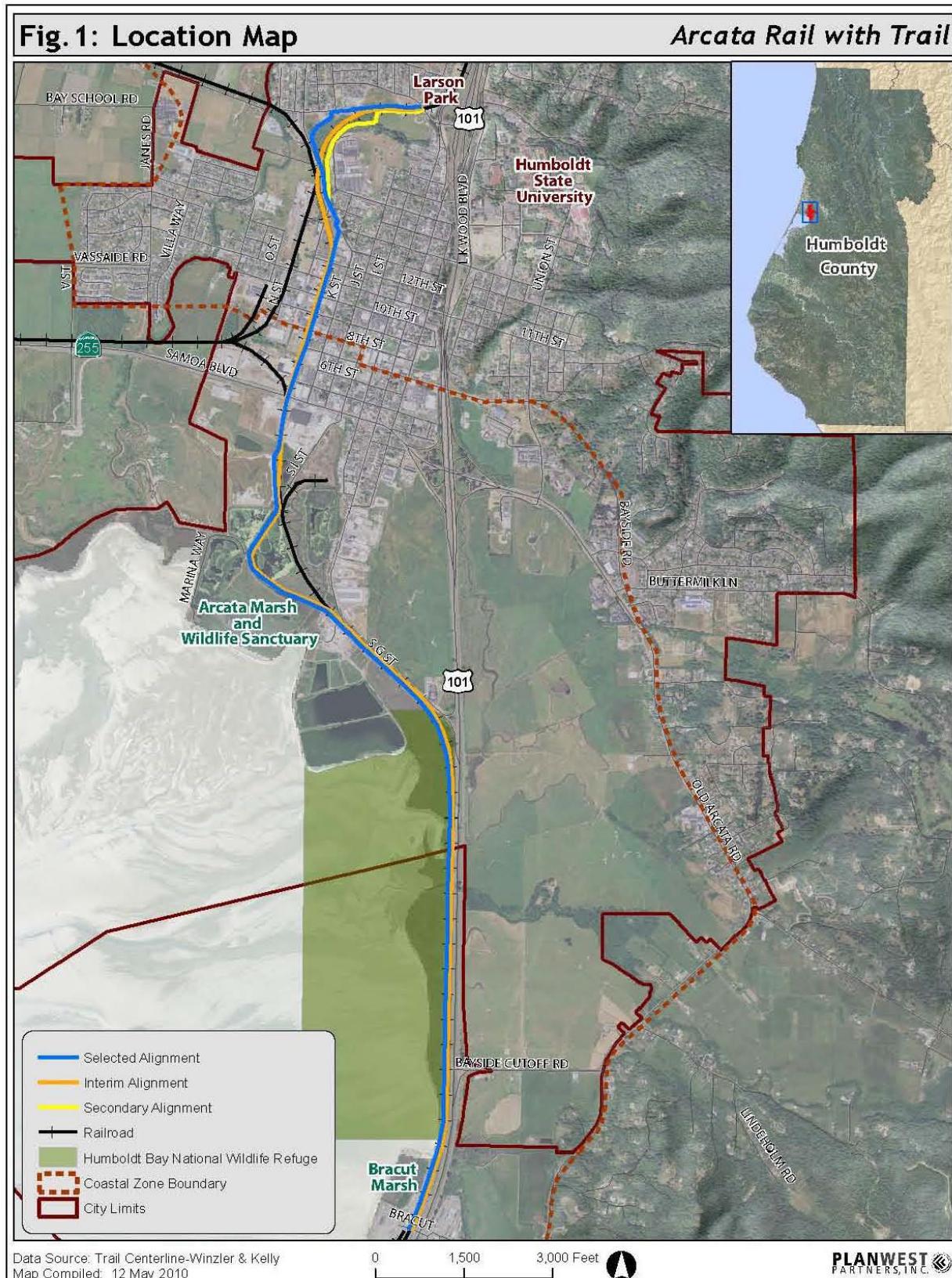
Figure 15, below, is from the CEQA document prepared for the project and shows the selected trail alignment. As shown in **Figure 15**, the trail corridor runs from northern Arcata at Larson Park (near Sunset Avenue and the Arcata Skate Park), through the City of Arcata and the Arcata Marsh, and along the eastern edge of Humboldt Bay south to the Highway 101 and Bracut intersection. Proposed features of the trail included trailheads at the north and south end of the trail, parking, yellow centerline striping, warning signage and striping approaching intersections with existing roads and railroad crossings, fencing and/or physical barriers where appropriate, interpretive signage, bridge crossings, and viewing platforms.

The northern portion of the trail from Larson Park to Samoa Blvd was completed in 2015. The southern portion of the trail from Samoa Blvd to the Highway 101 and Bracut intersection was completed in 2017. The southern portion of the trail is also referred to as the Humboldt Bay Trail North. The Arcata Rail with Trail provides increased opportunities for non-motorized travel within the City, as well as for commuters traveling to and from Eureka.

From 2001 to 2017, the City of Eureka developed a waterfront trail system between the Elk River Slough and the Eureka Slough. It is ultimately planned to connect the Eureka waterfront trail system to the Arcata Rail with Trail, which would form a continuous 14-mile, non-motorized trail from central Arcata to the southern end of Eureka. This trail system, which is referred to as the Humboldt Bay Trail, has an approximately 4-mile gap between Arcata and Eureka that was recently recommended for funding through the state's 2019 Active Transportation Program.

The Annie & Mary Trail Connectivity Project would provide a connection between the northern end of the Humboldt Bay Trail in central Arcata (Larson Park) to the western end of the proposed Annie & Mary Trail at the northern boundary of Arcata City limits. These projects are part of a planned regional trail system that will ultimately provide non-motorized trails between the cities of Arcata, Blue Lake, Eureka, and the unincorporated community of McKinleyville.

Figure 15: Location Map for the Arcata Rail with Trail Connectivity Project



Background Planning Documents

The Arcata Annie & Mary Trail Connectivity Project includes review of pertinent prior studies and plans for the project area to reflect planned transportation-related improvements and re-examine prior proposals against current needs, ideas, and criteria. **Table 2** presents a list of the project area documents that were reviewed. Further description of these documents is included after the table.

Table 2: Summary of Background Documents Reviewed

Document	Year	Agency
Humboldt Regional Bicycle Plan	2018	HCAOG*
Draft 2018 Regional Transportation Improvement Program	2018	HCAOG*
West End Specific Plan	2018(Draft)	City of Arcata
Variety in Rural Options of Mobility (VROOM)	2017	HCAOG*
Arcata Pedestrian and Bicycle Master Plan	2010	City of Arcata
Arcata Parks and Recreation Master Plan	2010	City of Arcata
Humboldt County Corridor Preservation Report	2010	HCAOG*
Humboldt County Regional Trails Master Plan	2010	HCAOG*
Arcata General Plan	2008	City of Arcata
Humboldt County Regional Pedestrian Plan	2008	HCAOG*
Annie and Mary Trail – Next Steps	2008	HCAOG*
Annie and Mary Rail-Trail Feasibility Study	2003	SCC**

*Humboldt County Association of Governments

**State Coastal Conservancy

Humboldt Regional Bicycle Plan Update (2018)

The Humboldt Regional Bicycle Plan is a regional plan intended to facilitate projects and programs that will help build a bikeway system that makes bicycling throughout Humboldt County a safe, convenient, and practical means of transportation for all residents and visitors. Priority infrastructure projects will link adjoining jurisdictions' bicycle routes and thereby build a regional bicycle network. The Bike Plan's recommended projects and programs have the potential to considerably increase the number of bicycle trips in Humboldt County (HCAOG, 2018).

The Humboldt Regional Bicycle Plan discusses projects completed in recent years in the City of Arcata that improve bicycle access such as the Foster Avenue Extension (2016) and Humboldt Bay Trail North (2017), as well as planned trails that would provide connections to Arcata including the Annie & Mary Rail Trail.

Known colloquially as the Annie & Mary Railroad, the Arcata and Mad River Railroad corridor traverses 6.8-miles from Arcata, through Glendale and Blue Lake, and ends in the town of Korbel. Because trains have not run on this line since 1992 and may not run for some time, there is wide community and jurisdictional support for railbanking the railroad corridor for interim use as the Annie & Mary Trail. The Annie & Mary Rail-Trail Feasibility Study (prepared for HCAOG in 2003) recommended railbanking the corridor for it to be used for non-rail purposes. The Annie & Mary Trail—Next Steps study (prepared for HCAOG in 2008) concluded that the next two key tasks were: (1) Applicant must secure an "interest in the property"; and (2) complete environmental review to comply with CEQA/NEPA. Both of these documents are discussed later in this section. HCAOG and the County of Humboldt have been proceeding with due diligence efforts to determine railroad ROW and assess environmental conditions over the last several years.

As indicated in the Bike Plan, the County of Humboldt is responsible for the 3.4-mile section of the Annie & Mary Rail Trail between Arcata city limits and Blue Lake city limits. The City of Blue Lake is responsible for a 1.2-mile section of the trail in the City of Blue Lake from Chartin Road to Hatchery Road. The current Annie & Mary Trail Connectivity Project, which is identified as a high priority proposed bikeway project in the Bike Plan, would provide a connection between the northern end of the Arcata Rail with Trail in central Arcata (Larson Park) to the western end of the proposed Annie & Mary Trail at the northern boundary of Arcata City limits.

As discussed in the Bike Plan, there are significant challenges to bicyclists in the City of Arcata including navigating US 101 over-crossings and access from outlying neighborhoods such as Sunny Brae and Valley West. The Annie & Mary Trail Connectivity Project would provide a multi-use trail from Sunset Avenue to Arcata's northern City limits. This trail would provide non-motorized access for residents of the Valley West Area to major destinations in Arcata including Humboldt State University and the Arcata Plaza and Downtown Area as well as parks, elementary and high schools, and other trail systems.

Regional Transportation Improvement Program (2018)

The State Transportation Improvement Program (STIP) is comprised of two elements, a Regional Transportation Improvement Program (RTIP) and an Interregional Transportation Improvement

Program (ITIP). The Humboldt County Association of Governments (HCAOG), as the Regional Transportation Planning Agency for Humboldt County, has prepared the 2018 RTIP consistent with Caltrans Draft 2018 ITIP, and the California Transportation Commission's 2018 State Transportation Improvement Program (STIP) Guidelines and 2018 Fund Estimate (HCAOG, 2017b).

The Regional Transportation Improvement Program (RTIP) is a program of highway, local road, transit and active transportation projects that a region plans to fund with State and Federal revenue programmed by the California Transportation Commission in the State Transportation Improvement Program (STIP). The program of projects in the RTIP is a subset of projects in the Regional Transportation Plan (RTP), a federally mandated master transportation plan which guides a region's transportation investments over a 20- to 25-year period. The most recent update of the HCAOG RTP (2017), entitled "Variety in Rural Options of Mobility (VROOM)," is discussed later in this section. The RTP is based on all reasonably anticipated funding, including federal, state, and local sources. Updated every 4 years, the RTP is developed through a public participation process in the region and reflects the unique mobility, sustainability, and air quality needs of each region (HCAOG, 2017b).

In September 2013, the California Coastal Commission conditionally concurred with the consistency certification submitted by HCAOG and Caltrans for the Eureka-Arcata Highway 101 Corridor Improvement Project. This concurrence included a condition that construction of the highway improvements will not commence until adequate commitments are in place to assure that a separate trail parallel to Route 101 will be constructed. The portion of the Humboldt Bay Trail along the Highway 101 corridor between Arcata and Eureka is proposed to be developed in two phases (HCAOG, 2017b). As indicated above, the northern portion of the trail (Humboldt Bay Trail North) was completed in 2017 using multiple funding programs, including the Active Transportation Program. Funding for the environmental and design phases for the southern section was programmed into the 2014 STIP. As noted above, the southern portion of the Humboldt Bay Trail was recently recommended for funding through the state's 2019 Active Transportation Program. Once completed, the Humboldt Bay Trail would form a continuous 14-mile, non-motorized trail from central Arcata to the southern end of Eureka. The Annie & Mary Trail Connectivity Project would provide a connection between the northern end of the Humboldt Bay Trail in central Arcata (Larson Park) to the western end of the proposed Annie & Mary Trail at the northern boundary of Arcata City limits.

West End Specific Plan (2018 Draft)

The City was awarded assistance funds for site designs and market studies for the Happy Valley Industrial Park and the Aldergrove Industrial Business Condo projects. The Happy Valley Industrial Park includes former wood processing lands that are currently vacant. The Aldergrove Industrial Park was established in the 1980s and is nearly built out, motivating the City to look for future opportunities with emerging manufacturing industries. The West End Specific Plan combines the two proposed market studies to create a comprehensive planning tool that evaluates future manufacturing opportunities, the barriers for manufacturing growth, and creates the planning framework for the West End / Aldergrove neighborhood. In addition, the Plan will update and link several economic development and planning documents such as: the City's 1979 West End Road Industrial Area Master Plan, the original catalyst for the success in

the manufacturing sector; the City's former redevelopment agency's Arcata Community Development Project Area Implementation Plan: 2010-2014; the Economic Development Strategic Plan 2010-2014; the Arcata Gateway Project: Valley West; and the City's General Plan and zoning ordinance (City of Arcata, 2017).

Through the West End Specific Plan, the City will create a vision for the West End industrial area that incorporates multi-model transportation and other amenities for the industrial work force that emulates the core values of the community's vision (City of Arcata, 2017). As discussed in the Plan, there is an existing Class II bike lane on West End Road from Giuntoli Lane to Spear Avenue; however pedestrians must walk in the bike lane along this route where there are no sidewalks. There are some sidewalks in the Specific Plan area, including near the bus stop on West End Road, along the north side of Aldergrove Road, and along a portion of the east side of Ericson Way. A gravel parking area on West End Road provides access to the northern terminus of the Arcata Ridge Trail, which generally follows the Plan area's southern-most boundary and continues south through the Arcata Community Forest. There is also an existing pedestrian trail along the southern boundary of the Aldergrove Marsh. There are no pedestrian/ bike facilities, other than the roadway shoulders, to get from the Plan area across SR 299 to the Valley West neighborhood, where the closest commercial area is located (City of Arcata, 2018b).

As described in the Plan, pedestrian and bicycle network improvements, including continuous sidewalks, improved intersection crossings, increased lighting, signage, and new pedestrian and bicycle routes are proposed for the Specific Plan area. As indicated in the Plan, the West End area provides the linkage between the Arcata bike and trail system and the Annie & Mary Trail connection to the City of Blue Lake. The Annie & Mary Trail Connectivity Project will develop an important multi-use trail through the center of the Specific Plan area that will provide non-motorized access to major destinations in the City of Arcata as well as a future connection to the rest of the Annie & Mary Trail to the east.

Regional Transportation Plan for Humboldt County (VROOM - Variety in Rural Options of Mobility) (2017)

Under its authority as the Regional Transportation Planning Agency (RTPA) for Humboldt County, the Humboldt County Association of Governments (HCAOG) is required to adopt and submit an updated Regional Transportation Plan (RTP) to the California Transportation Commission (CTC), and Caltrans, every five years. The most recent updates of the HCAOG RTP were completed in 2014 and 2017 and are entitled "Variety in Rural Options of Mobility (VROOM)." The policies in the RTP serve to guide the development of a safe, efficient, coordinated, balanced regional transportation system. The RTP is intended to identify and document specific actions necessary to address the region's needs for connectivity, mobility, accessibility, and goods movement for the next 20 years (HCAOG, 2017a).

The 2017 RTP identifies regional transportation plan projects that have been completed by the City of Arcata since 2014 and planned projects including the Annie & Mary Trail and the Arcata Rail with Trail. Although, referred to as the Annie & Mary Trail Connectivity Project in this document, the RTP identifies this project as a portion of the Arcata Rail with Trail. The Arcata Rail with Trail is listed in the Commuter Trails Element of the 2017 RTP as a project identified as a high priority by agency staff, public and private stakeholders, and community members. As

noted in the RTP, the Arcata Rail with Trail project would link the Annie & Mary Trail with the Humboldt Bay Trail. Implementation of the Annie & Mary Trail Connectivity Project would provide an important trail section for completion of the regional trail system identified in multiple HCAOG plans.

Arcata Pedestrian and Bicycle Master Plan (2010)

The vision for the Pedestrian and Bicycle Plan arises from the Arcata General Plan Transportation Element, which contains Policy T-1 that encourages a balanced transportation system for vehicular and non-vehicular modes. The purpose of the Plan is to provide a tool for helping the City to achieve its vision of making Arcata a place where walking and bicycling are the preferred mode of travel. The primary goal of the Plan is to "Work towards achieving 50% of all trips that begin and end in Arcata being made by the non-motorized modes by the year 2020." The Plan is also intended to set priorities and make the City eligible for certain funding sources (City of Arcata, 2010a).

The Plan identifies specific improvements needed in the City to improve accessibility for pedestrians and bicyclists, several of which have been completed since the Plan was developed. In the Plan, the Annie & Mary Trail Connectivity Project is identified as the Annie & Mary Rail Trail Project. As stated in the Plan (City of Arcata, 2010a):

"Incorporating a trail within the Annie & Mary rail corridor in Arcata would undoubtedly attract large numbers of users, as it would offer 6.8-miles of a non-motorized, shared-use path...It would serve as an ideal recreation and transportation/commuter trail. The route would pass through the Aldergrove Industrial Park and West End Road industrial sites, as well as lead to Shay Park. It also would join with other planned trails in the area, including the Humboldt Bay Trail, Hammond Trail (a part of the California Coastal Trail), and the Annie & Mary Trail to Blue Lake."

At the time that the Plan was developed, the railroad operator indicated that the railroad line may resume carrying freight along this corridor. For that reason, the Plan states that the City would wait for more certain railroad operating conditions before continuing major trail planning for this corridor. As discussed in the Plan, Annie & Mary Rail-Trail Feasibility Study (NRS/RCAA, August 2003) concluded that the Annie & Mary corridor should be railbanked (i.e., preserve the rail corridor for future rail use while allowing interim use and maintenance). As noted in the Plan, the NCRA Board of Directors is not opposed to bike and pedestrian paths on its right of way. The Plan also notes that another option would be to develop the trail on a City waterline easement adjacent to the railroad corridor through town (City of Arcata, 2010a).

The current Annie & Mary Trail Connectivity Project includes the planning, design, and public outreach efforts for the development of the Annie & Mary Rail Trail Project as identified in the Pedestrian and Bicycle Master Plan. As noted above, this project is now referred to as the Annie & Mary Trail Connectivity Project. As part of these efforts, alternative design options will be analyzed for the proposed trail section. The conclusion of these efforts will result in a design for the trail that will assist the City in obtaining implementation funding.

Arcata Parks and Recreation Master Plan (2010)

In the fall of 2007, the City of Arcata began updating its Parks & Recreation Master Plan to identify the park, facility, and open space needs of the community through the year 2020. This revision, based on the foundation set in the 1979 Plan and the 1994 technical update, makes recommendations for meeting future recreation needs, and presents an implementation strategy for parks and recreation system improvement and use (City of Arcata, 2010b).

The Plan contains a description of trends that influence recreation participation, community desires for recreation, and park and facility needs throughout Arcata. As noted in the Plan, trends show that participation in trail related recreation has been increasing locally, regionally, and nationally. Most communities are responding to an increasing desire to enhance community connectivity by providing trails that link key destinations within a city. Promoting walking, biking, and other forms of non-motorized transportation will also support the health and wellness of Arcata residents and the environment (City of Arcata, 2010b).

The Plan recommends developing a trail system that connects parks and natural areas with business, commercial, industrial, and residential sections of town. As noted in the Plan, northeast Arcata is not served by basic recreation amenities. The majority of land east of Highway 299 is zoned General or Limited Industrial. This area is not expected to develop in such a way that a neighborhood park is needed; however, recreational amenities such as picnic areas, walking trails, and par courses would serve the large workforce in this area. As part of addressing this need, the Plan specifically recommends connecting the proposed Annie & Mary Trail in northeastern Arcata to the Arcata Rail with Trail corridor (City of Arcata, 2010b).

The Annie & Mary Trail Connectivity Project will assist in implementation of the Parks and Recreation Master Plan by providing a new trail corridor from central Arcata to the northern City limits. This will partially address the need for additional recreation amenities in northeast Arcata.

Humboldt County Corridor Preservation Report (2010)

Under its authority as the Regional Transportation Planning Agency (RTPA) for Humboldt County, the Humboldt County Association of Governments (HCAOG) is required to develop a Regional Transportation Plan (RTP). The most recent update of the HCAOG RTP (2017), entitled "Variety in Rural Options of Mobility (VROOM)," is discussed above. The Corridor Preservation Report is a source document for the RTP and provides guidance for regional policy makers when defining and/or selecting transportation corridor for preservation, future use, or improvements. The Report identifies benefits of corridor preservation and strategies for preserving, acquiring, and utilizing public transportation corridors for multi-modal uses (HCAOG, 2010a).

As noted in the 2010 HCAOG Regional Trails Master Plan (see below), a regional trail system is envisioned for Humboldt County that will provide for continuous travel between communities (HCAOG, 2010b). As noted in the Report, the City of Arcata will serve as a hub for several regional trail systems, including the Humboldt Bay Trail, Hammond Trail, California Coastal Trail, and the Annie & Mary Rail Trail (HCAOG, 2010a). In the Report, the Arcata Rail with Trail is defined as the corridor from Samoa Blvd to the northern City limits in the West End area, which includes the current Annie & Mary Trail Connectivity Project.

As noted above, the current Annie & Mary Trail Connectivity Project includes the planning, design, and public outreach efforts for the development of the northern portion (Larson Park to northern City limits) of the Arcata Rail with Trail Project. The conclusion of these efforts will result in a design for the trail that will assist the City in obtaining implementation funding. Once implemented, this project will result in the preservation of this section of corridor for non-motorized use.

Humboldt County Regional Trails Master Plan (2010)

The purpose of the 2010 Humboldt County Regional Trails Master Plan is to promote the development of a regional active transportation system. The Plan compiles information on existing trails and active transportation planning in the region and provides a long-range plan for active transportation connections within and between communities to ensure safe and equitable access for non-motorized users (HCAOG, 2010b).

The Regional Trails Master Plan identifies the desire for a regional transportation system that connects multiple jurisdictions including the cities of Arcata, Blue Lake, Eureka, Trinidad, and the community of McKinleyville. The Arcata Rail with Trail and Annie & Mary Rail-Trail are identified as important trail segments that define the regional trail system. In the Plan, the Arcata Rail with Trail is defined as the corridor from Samoa Blvd to the northern City limits in the West End area, which includes the current Annie & Mary Trail Connectivity Project.

As noted above, the current project includes the planning, design, and public outreach efforts for the development of the northern portion (Larson Park to northern City limits) of the Arcata Rail with Trail Project. This project is now referred to as the Annie & Mary Trail Connectivity Project. The conclusion of these efforts will result in a design for the trail that will assist the City in obtaining implementation funding. Once implemented this project will result in providing one of the key connections to development of the regional trail system.

Arcata General Plan (2008)

The Arcata General Plan contains policies that support bicycle and pedestrian facilities in several General Plan elements. The Land Use Element encourages walking and bicycling by emphasizing mixed-use neighborhoods and infill developments. The Transportation Element promotes transportation choices, striving to de-emphasize dependence on the automobile. The Open Space Element supports developing trails and other non-motorized corridors that link to open space, recreation areas, and coastal access. The Resource Conservation and Management Element recommend foot trails leading to and along the Humboldt Bay.

One of the primary policies in the General Plan that is supportive of non-motorized transportation is Policy T-1 (Balanced Transportation System with Choice of Modes) which has the following objective:

"Create and maintain a balanced transportation system with choice of bus transit, bicycle, and pedestrian as well as private automobile modes. Reduce the percentage of trips that are made by automobile and provide the opportunity and facilities to divert trips from automobiles to other modes."

Projects such as the Annie & Mary Trail Connectivity Project directly implement General Plan policies that promote the development of pedestrian and bicycle facilities and a greater reliance on alternative mode of transportation.

Humboldt County Regional Pedestrian Plan (2008)

The Humboldt County Regional Pedestrian Plan guides future development and pedestrian infrastructure in the county. The Plan aims to make walking an integral transportation mode in Humboldt County by proposing improvements to the pedestrian network. Additionally, the plan includes maps illustrating proposed improvements to the pedestrian network, and information on public awareness and education programs, funding sources, accessibility guidelines and design treatments (HCAOG, 2008a).

The Plan identifies pedestrian improvement projects completed since the 2003 update and lists the Annie & Mary rail corridor (Aldergrove Industrial Park to Arcata March) as an "additional location for consideration." As discussed in this document, other planning documents developed after this Plan have elevated this trail corridor to a high priority project.

Annie and Mary Trail – Next Steps (2008)

The Annie and Mary Trail – Next Steps report was prepared to identify the "next steps" in the development of the Annie & Mary Trail project. The report summarizes the ownership history of the corridor and the process of "railbanking" the corridor in order to preserve it for future railroad or trail use (HCAOG, 2008b).

Annie and Mary Trail Feasibility Study (2003)

The Annie and Mary Rail-Trail Feasibility Study documents the opportunities and constraints relative to the development of a multiple-use trail on the Arcata & Mad River (or Annie & Mary) rail corridor, which stretches from the Arcata to Korb. The study explores trail alignment alternatives, design, costs, and management and maintenance issues, and develops trail alignment recommendations based on adjacent land use conflicts (SCC, 2003).

One of the first actions the study recommends is rail banking the corridor so it is useable for non-rail related purposes. Although renovating existing trestles and bridges will require a significant budget, some sections of trail on the corridor can be implemented relatively easily. A trail developed along this corridor will provide a tremendous recreational asset to the Humboldt Bay area and a commuting asset to the Blue Lake and Arcata areas (HCAOG, 2008).

References

City of Arcata. 2008. *Arcata General Plan and Local Coastal Land Use Plan*. Amended Oct. 2008.

City of Arcata. 2010a. *Pedestrian & Bicycle Master Plan*. April.

City of Arcata. 2010b. *Parks and Recreation Master Plan*. October.

City of Arcata. 2013. *Initial Study and Draft Mitigated Negative Declaration for the Arcata Rail with Trail Connectivity Project*. February.

City of Arcata. 2016a. *Initial Study and Draft Negative Declaration for the City of Arcata Medical Cannabis Regulatory System: 1) Land Use Code amendment to create a Medical Marijuana Innovation Zone (MMIZ) Combining Zone; 2) Non planning- Commercial Cannabis Activity Permit*.

City of Arcata. 2016b. *Initial Study & Negative Declaration for the Sunset Terrace Multi-Family Development*. June.

City of Arcata. 2017. *Stakeholder Meetings Announcement for the West End Specific Plan*. February.

City of Arcata. 2018a. *Final Environmental Impact Report for the Village Student Housing Project*.

City of Arcata. 2018b. *West End Specific Plan (Draft)*. July.

City of Arcata. 2018c. *Safe Routes to School Sidewalk and Pedestrian Safety Improvements*. September.

City of Arcata. 2019. *City Website – Major Development Projects*.
<https://www.cityofarcata.org/704/Major-Development-Projects>.

HCAOG (Humboldt County Association of Governments). 2008a. *Humboldt County Regional Pedestrian Plan*. June.

HCAOG. 2008b. *Annie and Mary Trail – Next Steps*.

HCAOG. 2010a. *Humboldt County Corridor Preservation Report*. May.

HCAOG. 2010b. *Humboldt County Regional Trails Master Plan*.

HCAOG. 2017a. *20-Year Regional Transportation Plan – Variety in Rural Options of Mobility (VROOM)*.

HCAOG. 2017b. *2018 Regional Transportation Improvement Program*. Adopted November 2017.

HCAOG. 2018. *Humboldt Regional Bicycle Plan*. June.

Humphreys & Partners Architects, L.P. 2019. *Revised Site Plan for the Village Project*. January 28.

KLA Landscape Architecture. 2016 and 2018. *Preliminary Landscape Plans for The Village, 2900 St. Louis Road, Arcata, CA*. October 2016 and June 2018.

LACO Associates. 2015. *Site Plans for the Canyon Creek Apartments Project*. November.

State Coastal Conservancy (SCC). 2003. *Annie and Mary Rail-Trail Feasibility Study*.

Winzler & Kelly. 2010. *Attachment A: Project Information, City of Arcata, Rail-with-Trail Connectivity Project*. June.

W-Trans. 2017. *Central Arcata Areawide Traffic Impact Study*. March 13.

City of Arcata

Annie & Mary Trail Connectivity Project

Final

Project Report

APPENDIX C

Railroad Interpretation Examples

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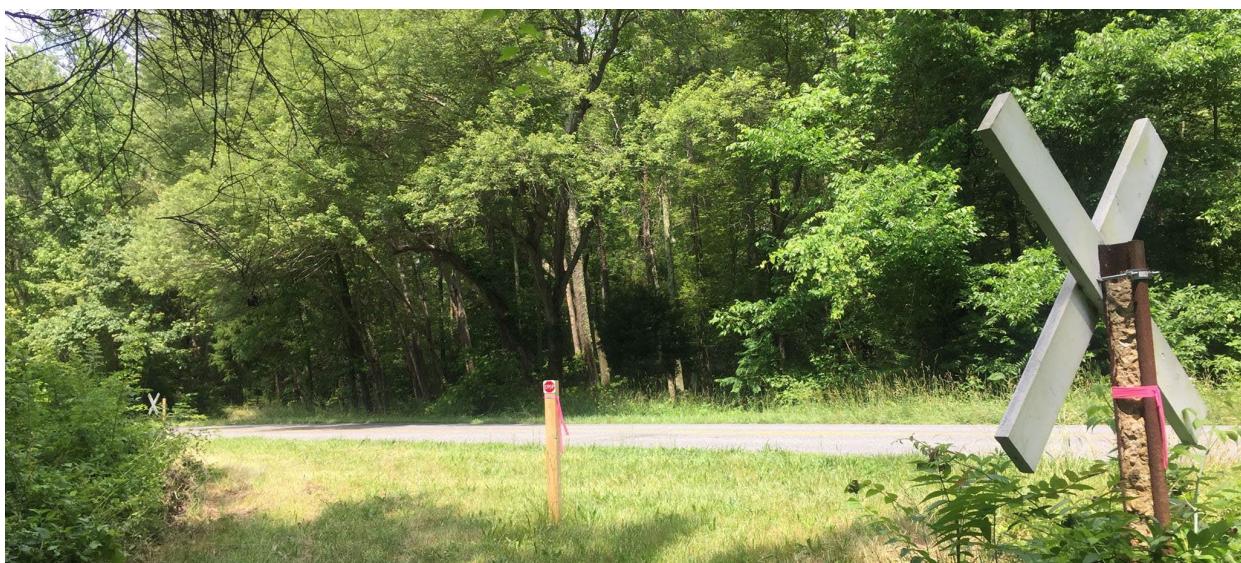
Trail	Assabet River Rail-Trail
Location	Massachusetts
Source	RTC/goike
Features/Notes	Switch arm, rail lines, rail car at bench rest area



Trail	Assabet River Rail-Trail
Location	Massachusetts
Source	Streetview
Features/Notes	Rail line embedded in trail to indicate city limit line



Trail	n/a (Oklahoma Dental Office)
Location	Oklahoma
Source	Yves Zsutty
Features/Notes	Replica crossing arm



Trail	Dahlgren RR Heritage Trail
Location	Massachusetts
Source	RTC/perrywinkletiger
Features/Notes	Replica crossing sign with trail name.



Trail	Danvers River Trail
Location	Massachusetts
Source	Danvers River Trail
Features/Notes	Interpretive panels installed on Girl Scout-installed posts. Note from Danvers River Trail Advisory Committee: "Basically two rails were cut to the right height, were set in concrete footings, made level, and the sign then attached."



Trail	Danvers River Trail
Location	Massachusetts
Source	Danvers River Trail
Features/Notes	Eagle Scout built railroad inspired Footbridge



Trail	Danvers River Trail
Location	Massachusetts
Source	Danvers River Trail
Features/Notes	Eagle Scout-built benches using railcar wheels. Note from Danvers River Trails Advisory Committee: "heavy but very nice looking".



Trail	N/A (Grove Shopping Center)
Location	Los Angeles, CA
Source	Yves Zsutty
Features/Notes	Tracks embedded in bricks. Pedestrian-only area.



Trail	N/A
Location	Unknown
Source	Yves Zsutty
Features/Notes	I-beam bench. Railroad-inspired, but not using railroad materials.



Trail	Tennessee Central Heritage Rail-with-Trail
Location	Tennessee
Source	
Features/Notes	Rails used to hold donor plaques.



Trail	Iron Ore Heritage Trail
Location	Michigan
Source	RTC/bkn94
Features/Notes	Rails used as mile markers; silhouettes and numbers cut from steel and welded to posts.



Trail	Iron Ore Heritage Trail
Location	Michigan
Source	RTC/crocusflower50
Features/Notes	Rails used as supports. Steel Silhouettes for frames and logo.



Trail	Monterey Bay Trail
Location	Monterey, CA
Source	Yves Zsutty
Features/Notes	Railroad crossing sign aesthetically repurposed.



Trail	Monterey Bay Trail
Location	Monterey, CA
Source	Yves Zsutty
Features/Notes	Boxcars recreated/repurposed along the trail. Pedestrian accessible.



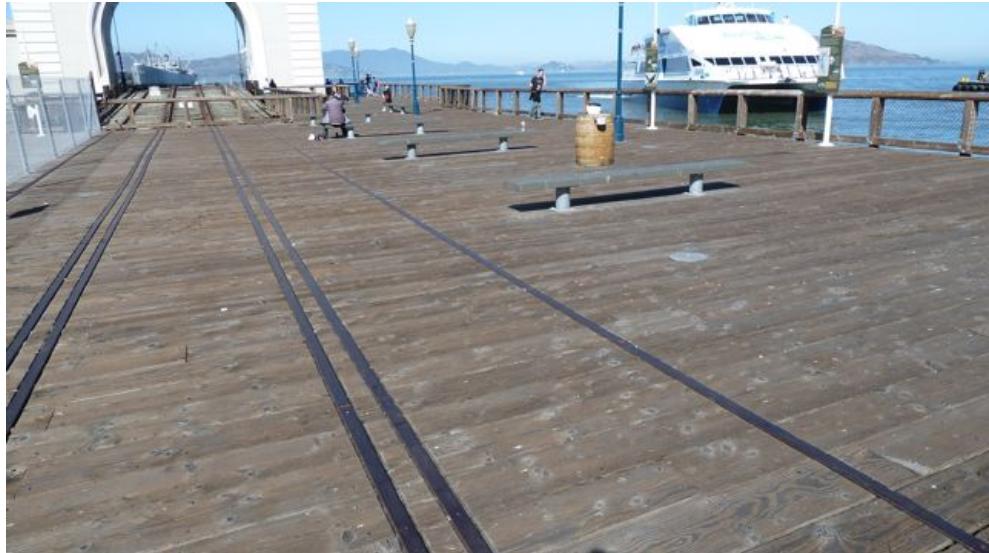
Trail	Monterey Bay Trail
Location	Monterey, CA
Source	Yves Zsutty
Features/Notes	Rails paved for trail pathway.



Trail	Monterey Bay Trail
Location	Monterey, CA
Source	Yves Zsutty
Features/Notes	Rails paved for trail pathway.



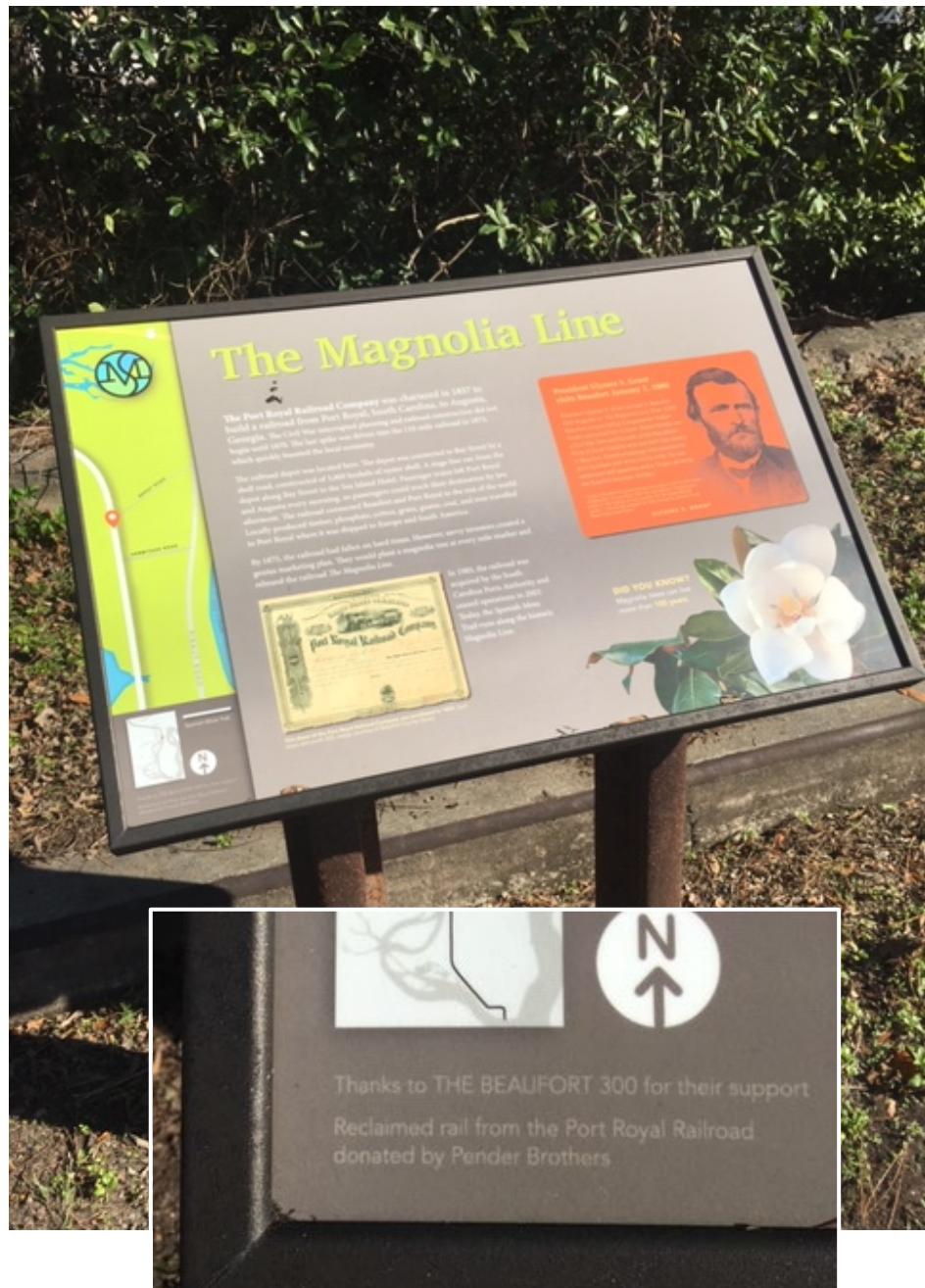
Trail	Pinellas Trail
Location	Florida
Source	Google Streetview
Features/Notes	Railroad sustained on trail and used as a trail roundabout.



Trail	San Francisco (SF) Bay Trail
Location	SF Waterfront
Source	Yves Zsutty
Features/Notes	Rails paved for trail pathway.



Trail	Spanish Moss Trail
Location	Beaufort, SC
Source	RCAA Emily Sinkhorn
Features/Notes	Old railroad sign used as mile tracker signage.



Trail	Spanish Moss Trail
Location	Beaufort, SC
Source	RCAA Emily Sinkhorn
Features/Notes	Reclaimed rails from the Port Royal Railroad.



Trail	Pedestrian Walkway
Location	Venice, CA
Source	Sofia Zander
Features/Notes	Reclaimed rails used as bollards.

City of Arcata

Annie & Mary Trail Connectivity Project

Final
Project Report

APPENDIX D

Memo: Existing Conditions, Opportunities, and Constraints

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City of Arcata

Annie & Mary Trail
Connectivity Project
& Northern Extension

Memo:

**Existing Conditions,
Opportunities, and Constraints**

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Contents

1. Introduction	1
1.1 Project Description.....	1
a) Project Objectives	3
b) Community Participation & Outreach.....	4
2. Regional Context	5
2.1 City of Arcata.....	5
2.2 Valley West Community.....	5
2.3 Humboldt State University.....	5
2.4 Other Surrounding Communities	7
2.5 Regional Trails.....	7
a) Annie & Mary Trail.....	7
b) Hammond Trail	8
c) Humboldt Bay Trail.....	8
d) Great Redwood Trail (envisioned)	9
e) Arcata Ridge Trail.....	9
2.6 Transportation Networks.....	10
a) Highways (101 & 299).....	10
b) Transit System	10
c) Bike & Pedestrian Network	11
3. Project Opportunities and Constraints	12
3.1 Key Destinations	12
3.2 Crossings and Connections	14
a) Key Crossings and Connections	15
b) Additional Crossings and Connections.....	16
3.3 Collisions Involving Bicycles or Pedestrians	21
3.4 Site Constraints.....	25

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1. Introduction

1.1 PROJECT DESCRIPTION

The City of Arcata has obtained funding from the Caltrans Sustainable Communities Program to plan the next section of the City's trail system. This segment of the trail will occur along the Annie & Mary rail alignment, and will connect the Sunset Avenue/ Larson Park area to Valley West, West End Road area, Aldergrove Industrial Park (see **Figure 1**), and the Humboldt Bay Municipal Water District (HBMWD) Park 1.

The Arcata Annie & Mary Trail Connectivity Project (the Project) will involve an assessment of current opportunities and constraints for walking and biking in the project study area. The Project will also include the development of concept design alternatives for a trail and/or on-street facility for safe walking and biking connectivity in the study area.

The final report of this study will include:

1. Three concept alternatives for walking and biking connectivity within the project area
2. Avenues for potential future funding for project implementation.
3. Support for City's efforts to reduce greenhouse gas emission, increase mode share by walking and biking consistent with adopted plans, and ensure equity in transportation opportunities throughout Arcata.



A&M Railroad Corridor south of St Louis Road

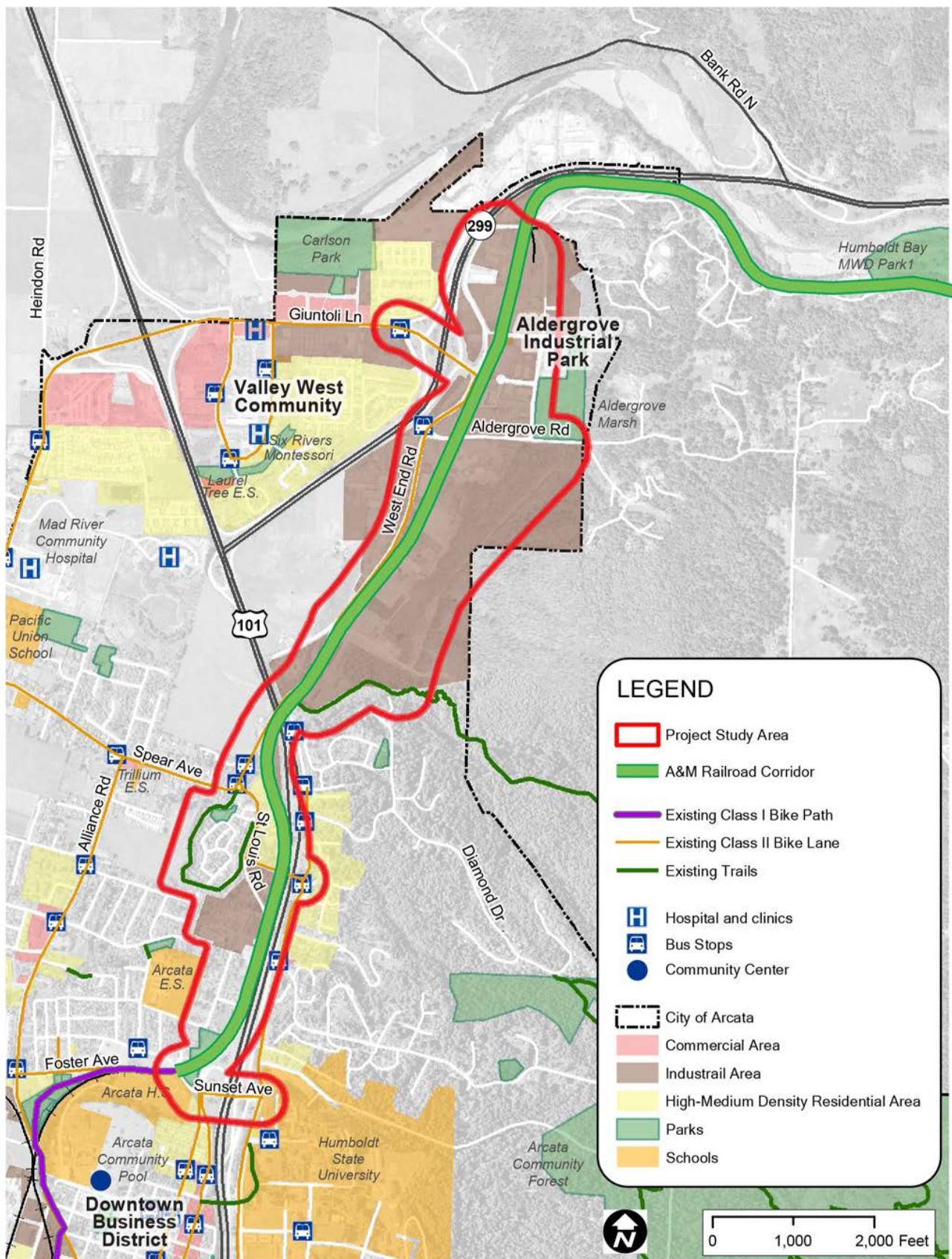


Figure 1: Project Area Map

a) Project Objectives

1. Enhanced Safety & Connectivity

- Enhanced safety for all modes traveling between Valley West, West End Road, Aldergrove Industrial Park, downtown Arcata, Humboldt State University, and HBMWD Park 1.

2. Robust Community Engagement

- Robust engagement of diverse Arcata residents, students, businesses and community organizations through public workshops, small group walking tours, one-on-one engagement, visual preference surveys and online engagement
- Consideration of environmental justice in the planning process so that all residents have an opportunity for meaningful involvement with respect to the environment and community health outcomes
- Involvement of school-aged youth in providing input and feedback on pedestrian and cyclist needs (e.g. Laurel Tree Charter School, Six Rivers Montessori)



Community Site Walk, August 2018

3. Environmental & Community Benefits

- Reduction of greenhouse gases through improved safety for and encouragement of non-motorized transportation modes
- Increased commuting by walking and bicycling within the City

4. Enhanced Trail Design

- Identification of three conceptual design alternatives for walking and biking connectivity within the project area
- Utilization of best practices in context-sensitive “complete streets” design for small town streetscapes
- Application of low-impact development design features where possible
- Identification of priority project components for further study and implementation

5. Preparation for Trail Implementation

- Identification of potential implementation funding sources
- Preparation of preliminary design plans ready for final engineering

b) Community Participation & Outreach

Resident, student, and local business participation is integral to the success of this project. The Project Team of the City of Arcata, Redwood Community Action Agency (RCAA), TrailPeople and SHN are conducting public outreach efforts to engage the community, and receive input to understand the diverse needs of the community and also to solicit input on the development of the alternatives.

Project Task Force

The City of Arcata formed a Project Task Force (PTF) comprised of key stakeholders in the project area and transportation officials. The purpose of the PTF is to provide feedback on the project approach and insight for community outreach strategies. The PTF will discuss the project's goals and provide insight in its initial stages, prior to a broader public outreach effort which will take place in early spring of 2019.

PTF will convene for three meetings in 2019, the purpose of which will be to:

1. Provide feedback on the project approach and insight for community outreach strategies (completed in January, 2019)
2. Review draft trail alignment concepts that arise from the first round of public outreach
3. Review the draft Project Plan (August 2019).

Project Task Force Members

- Humboldt Bay Bicycle Commuters Association
- Tri-County Independent Living
- Arcata Transportation Safety Committee
- Humboldt County Association of Governments
- Humboldt State University
- Caltrans
- Humboldt Bay Municipal Water District
- Humboldt Transit Authority
- DHHS Public Health Healthy Communities
- McKinleyville Family Resource Center
- Valley West resident advocate
- Humboldt Trails Council
- Friends of the Annie & Mary Rail Trail

Valley West CPBST Recommendations Report

In August, 2019, members of the Valley West community participated in a Community Pedestrian and Bicycle Safety Training (CPBST) workshop. The CPBST program is a joint project of UC Berkeley SafeTREC and California Walks intended to train residents throughout California on how to improve pedestrian and bicycling conditions in their community. The Valley West workshop was focused on the entire Valley West community, including the Giuntoli, Highway 299, and West End Road area of the Annie & Mary Trail Connectivity Project.

Key recommendations related to the Project include:

- Safer bike and pedestrian access on Giuntoli Lane and West End Road, including sidewalks, marked crossings, and bike facilities.
- Pedestrian-scale lighting.
- Improved bike- and pedestrian-scale wayfinding signage.
- Improved landscaping and shade trees

2. Regional Context

The Project Area is primarily located within the City of Arcata and connects the central Humboldt State University with the Valley West Community on the north end of Arcata.

2.1 CITY OF ARCATA

Arcata is situated in Humboldt County on California's North Coast, approximately 275 miles north of San Francisco. The city is bordered by the Humboldt Bay on the south, the Pacific Ocean to the west, the Mad River on the North, and the Arcata Community Forest to the east. Most of Arcata sits on a coastal terrace – a flat setting ideal for walking and bicycling.

The City of Arcata has approximately 18,000 people. Arcata, like the surrounding communities, was historically a waypoint for logging operations. Arcata is home to Humboldt State University. One key feature of the town is the town square, with destinations such as coffee shops, bookstores and music venues frequented by tourists, college students and locals alike.



Source: City of Arcata

2.2 VALLEY WEST COMMUNITY

The Valley West community sits at the north end of Arcata within the City limits, and is surrounded by a triangle of automobile arteries: Highways 101 to the west, Highway 299 to the east, and Giuntoli Lane to the north. These three high volume roadways are the only transportation links into Valley West. Due to the current configuration of these roadways, safe (and legal) bicycle and pedestrian access into and out of Valley West is limited to the shoulder of Giuntoli Lane. The area is divided north-south by Valley West Boulevard and Valley East Boulevard. To the west are several hotels and a shopping center. Residential housing, including several mobile home parks, is on the east.

2.3 HUMBOLDT STATE UNIVERSITY

Humboldt State University is the northernmost campus in the California State University system. Founded in 1913, the University is located on the east side of Arcata, separated from downtown by Highway 101. Roughly 8,000 students attend the university, which is adjacent to the Arcata Community Forest.



Source: Google Streetview

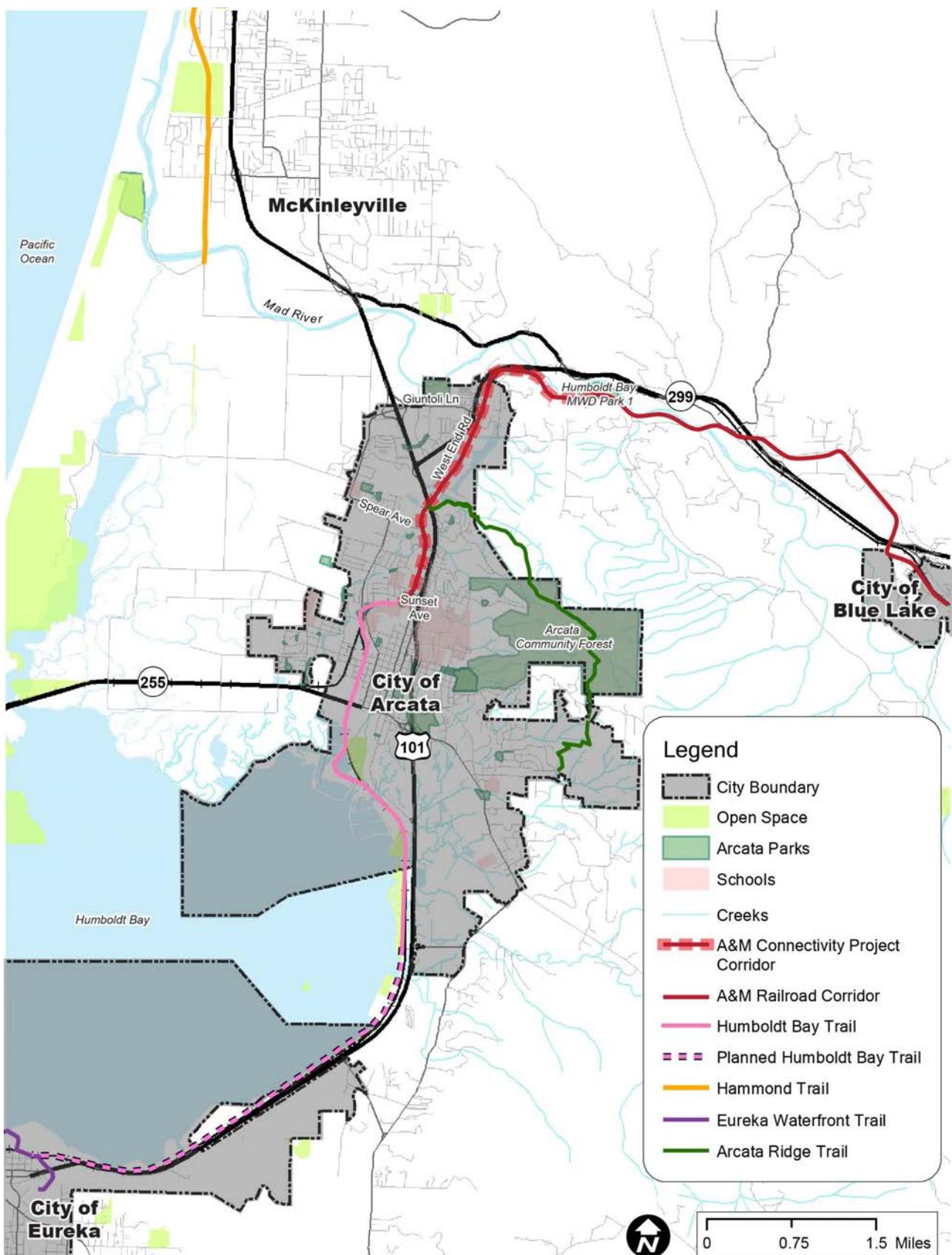


Figure 2: Regional Map

2.4 OTHER SURROUNDING COMMUNITIES

Eureka sits on a coastal plain on the southeast side of Humboldt Bay. With a population of over 27,000, Eureka is the largest city in Humboldt County. It has historically been the main port serving the North Coast for logging, fishing and mining operations. Eureka's economy remains tied to the fishing and lumber industries today.

The unincorporated community of McKinleyville lies five miles north of Arcata, nestled between forested mountains to the east and the Pacific Ocean to the west. The town is home to over 15,000 people. It is home to the Arcata-Eureka Airport, is the third largest populated area in Humboldt County, and is growing as a bedroom community. The Hammond Trail, described below, connects Arcata to the west side of McKinleyville.

Blue Lake is a small incorporated city to the east of Arcata. The city lies largely on the north side of the Mad River. Ultimately, the Annie & Mary Trail will connect from Arcata to Blue Lake. A segment of the Annie & Mary Trail in Blue Lake is currently in the design stages.



Source: City of Blue Lake

2.5 REGIONAL TRAILS

a) Annie & Mary Trail

The Annie & Mary Trail is envisioned as a Class I facility connecting the cities of Arcata and Blue Lake. The proposed trail would utilize sections of the northernmost branch line of the Northwestern Pacific Railroad, historically known as the Arcata & Mad River (or Annie & Mary) line. The branch line leaves downtown Arcata to the north, and runs east along the Mad River and through the communities of Glendale and Blue Lake and ending in the mill town of Korbel. The corridor is under the purview of the North Coast Railroad Authority (NCRA) and runs through jurisdictions of Humboldt County, City of Arcata, City of Blue Lake, Blue Lake Rancheria, and Caltrans. Parts of the corridor are on private property.

The 6.8-mile line is one of the oldest lines on the west coast, but has not been used by trains since 1995. In some places rails and ties have been removed. The corridor's physical state has deteriorated: six timber trestles need to be renovated and two bridges need to be replaced. Until recently, the NCRA retained the right to resume future rail service along the corridor. There is significant support for a multipurpose use trail along this route and as a result was identified as a prospective rail-with-trail project over 20 years ago. In 2008, NCRA passed a resolution allowing multimodal use on the Annie & Mary branch line.



Trail feasibility studies conducted on this corridor by the State Coastal Conservancy in 2003 established that a trail would be possible along this corridor with railbanking or other lease agreements. Railbanking is an agreement between a railroad company and a trail agency to use an abandoned railroad as a trail until the railroad company needs the corridor again for service. The Annie & Mary Trail is part of the envisioned Great Redwood Trail (GRT). State legislation was recently approved to facilitate the creation of the GRT, a 300-mile trail along the northern California coast that will capitalize on unused railroad right-of-way (see Great Redwood Trail below for more information).

b) Hammond Trail



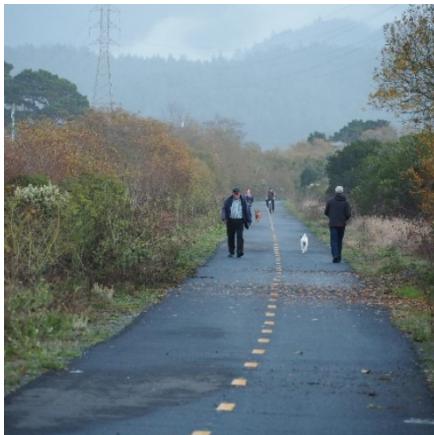
The Hammond Trail is a 5.5-mile trail that stretches from the Arcata Bottoms and the Hammond Trail Bridge northward to Clam Beach County Park in McKinleyville, with shared use, low-traffic roadways connecting to the bike network within Arcata city limits. The trail is ADA-accessible and accommodates hiking, biking, and equestrian users. The trail is a segment of the California Coastal Trail and Pacific Coast Bike Route, and is a combination of Class I (bike path), multi-use, pedestrian only, and shared road facilities. The Hammond Trail is an important community resource that provides local and regional connectivity, as well as recreational and educational opportunities.

Source:

visitredwoods.com

The trail is managed by the County of Humboldt, was developed through a collaborative effort by the County, State Coastal Conservancy, and RCAA. It was made possible with easements from several private and public groups and funding from many project partners. The trail was initiated in the 1980's and the most recent segment was finished in 2007.

c) Humboldt Bay Trail



The Humboldt Bay Trail is a network of trails that will eventually be a continuous 14-mile trail from central Arcata to the southern end of Eureka. It includes the Arcata City Trail, Arcata's Humboldt Bay Trail North, and the Eureka Waterfront Trail. As of 2018, the trail is nearly complete, with a four-mile gap remaining between the terminus of the Humboldt Bay Trail North near the Bracut Industrial Park and the Eureka Waterfront Trail. The final four miles of the Humboldt Bay Trail, Humboldt Bay Trail South, has been recommended for full construction funding through the Active Transportation Program Cycle 4. The County anticipates construction of Humboldt Bay Trail South to occur in 2021.

From Arcata, the trail follows the existing NCRA right-of-way and the California Department of Transportation's (Caltrans) US Highway 101 corridor on the east side of Humboldt Bay.

d) Great Redwood Trail (envisioned)

The Great Redwood Trail is a proposed trail that would run the length of Northern California from Marin to Humboldt through the coastal redwoods, the Eel River Canyon, and other stunning landscapes. The North Coast Rail Closure and Transition to Trails Act (Senate Bill 1029) was passed by state legislature and signed by Governor Brown in 2018 after much negotiation. The bill calls for dissolving the North Coast Railroad Authority and developing a plan to create the Great Redwood Trail. Currently, the State Transportation Agency and the California Natural Resources Agency have until mid-2020 to develop the plan for dissolving the NCRA and adopting a plan to transfer the NCRA assets, including the 300-mile long right-of-way.

The vision for the right-of-way is that it would be divided into northern and southern Segments. The Northern Segment, from Willits to Arcata, would be transferred to a newly created Great Redwood Trail Agency, which would begin railbanking the right-of-way and work with local jurisdictions to plan the trail, including a significant community input process. The Southern Segment, from Willits to Marin, would be transferred to the Sonoma Marin Area Rail Transit, which is expected to be tasked with creating the southern portion of the trail.

e) Arcata Ridge Trail

The Arcata Ridge Trail is a 4-mile off-road gravel trail running from West End Road to Buttermilk Lane, crossing through the Sunny Brae Community Forest and the Arcata Community Forest. The Arcata Ridge Trail allows hikers, bikers and equestrians to travel from the north to south of the City limits without leaving scenic redwood forested hillsides. Once complete, the Annie & Mary Trail will provide direct access to the Ridge Trail at West End Road.



2.6 TRANSPORTATION NETWORKS

a) Highways (101 & 299)

Highway 101 and State Route (SR) 299 both run through the project area. Highway 101 is the longest state route in California, stretching from Mexico to Oregon. Through the area of study, Highway 101 has two lanes in both directions, and runs north to south. The railroad corridor runs along the west side of the highway from downtown Arcata until it crosses under the highway near West End Road. Several bridges/overpasses cross over Highway 101 to connect western neighborhoods, including downtown Arcata, with HSU on the east side.

SR 299 is the third longest highway in California, stretching from Arcata to Nevada. SR 299 begins at the interchange with Highway 101 in northern Arcata. The highway continues northeast briefly, before turning due east to cross the Mad River, which it then follows for roughly four miles until the City of Blue Lake.



View of Giuntoli Overpass from Highway 299. Source: Google

b) Transit System

The City of Arcata oversees the Arcata & Mad River Transit Service (A&MRTS), which is the public bus system that serves Arcata. A&MRTS offers two routes that run Monday – Friday, and a combined route on Saturday. The Arcata City Council initiated A&MRTS in 1975, and operates it through the Public Works Department. The Gold Line offers a circular route that encompasses the Arcata downtown, HSU and loops up to Valley West before returning to downtown. The Blue Lake Rancheria Transit System operates a transit route that connects Blue Lake to Arcata (with partial funding from the City of Blue Lake). The Willow Creek-Arcata route is operated by Humboldt Transit Authority (HTA) and connects Arcata with Willow Creek 40 miles to the east via Highway 299. The Redwood Transit System is the core regional public transit service that travels north-south and connects the major cities in Humboldt County, from Scotia to Trinidad, with stops throughout Arcata.



A&MRTS Bus

c) Bike & Pedestrian Network

As of 2000, 5% of Arcata bikes to work, and 17% of the population commutes via walking. These figures are far greater (both roughly five times greater) than the national average, and about three times greater than the Humboldt County average. Arcata also supports a culture of active transportation, holding the popular Kinetic Sculpture Grand Championship Race in town each Memorial Day.

Arcata's 2010 *Pedestrian and Bicycle Master Plan* identifies infill sidewalks, crosswalks and traffic calming measures on large boulevards as key to improving access around the City. Improving the design standards, right of way, and continuity of the Arcata's bike lanes were also identified as goals in the Arcata General Plan: 2020.

Arcata has been awarded a Silver ranking as a Bicycle Friendly Community by the League of American Bicyclists.



Arcata City Trail along Foster Ave.

3. Project Opportunities and Constraints

This project will cover the planning and scoping stage and will result in conceptual alternatives and potentially a preferred plan to support future design, right-of-way engineering, environmental analysis, permitting, and implementation.

The first stage of the study includes analyzing opportunities and constraints for walking and biking connectivity within the project area. This analysis includes assessing existing facilities and multimodal traffic conditions, and identifying significant safety concerns, gaps in the multimodal network, public right-of-way (ROW) availability, and high-level environmental constraints. This analysis is informed by the criteria for the Active Transportation Program (ATP) grants, which are the primary source of funding for bicycle and pedestrian improvements in California.

3.1 KEY DESTINATIONS

One of the primary criteria for ATP projects and general benefits of bicycle and pedestrian trails is helping people use them to get to key community destinations. Key destinations include schools, parks, residential neighborhoods (especially denser housing that tends to accommodate lower income residents and/or students), commercial/shopping areas, public service buildings, hospitals and medical offices, and employment areas. Key destinations also include transit stops and connections to significant local and regional trails and on-street bike and pedestrian travel routes. **Figure 3** shows key destinations in relation to the study area.



Students at HSU



Valley West (Source: Google Streetview)



Humboldt Bay MWD Operations and Control Center and Park 1 (Dog Park)

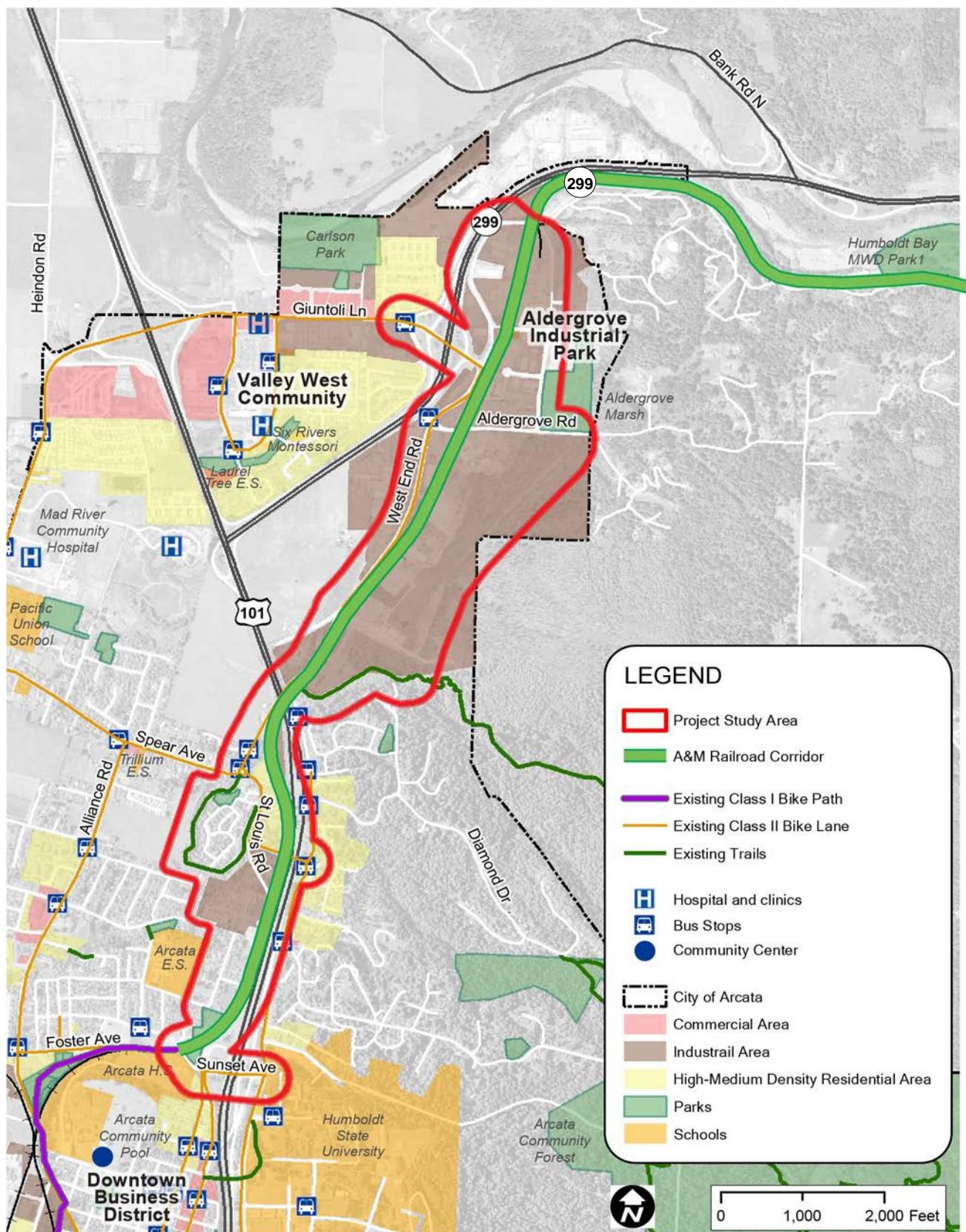


Figure 3: Key destinations

3.2 CROSSINGS AND CONNECTIONS

Design of the trail itself is important, but safe, comfortable connections to the trail are also critical to make it useful for local travel and recreation. Road, highway, interstate, driveway, trail, and park crossings and connections were inventoried and evaluated as shown in **Figure 4** and summarized below.

Any project within a Caltrans right-of-way or receiving Caltrans funding will need to meet Caltrans requirements and work in close consultation with Caltrans staff. More information regarding work within Caltrans jurisdictions is included in the Design Standards and Best Practices Memo.

Where applicable, the Caltrans Functional Units that will need to be consulted for work at a specific location are listed with the connection description below. The abbreviations for the Caltrans Functional Units used in the table below are:

ADA	ADA Compliance/Design	RWE	Right of Way Engineering
ENV	Environmental	SMI	Structures, Maintenance, and Investigations
HYD	Hydraulics	STR	Structures
PMT	Permits	TOP	Traffic Operations
P/RW	Permits/Right of Way	TSF	Traffic Safety



Giuntoli Ln US 101 crossing, looking east (Connection 6)

a) Key Crossings and Connections

Key crossings and connections are shown as numbers in **Figure 4**. These are crossings or connections that are critical for the project success, community connection, and user comfort and safety.

- 1** **Sunset Avenue** – The Sunset Avenue overcrossing of Highway 101 provides the main connection from downtown and neighborhoods in western Arcata to Humboldt State University. This connection is further described below. (TSF, ENV, P/RW, TOPS, SMI)
- 2** **Larson Park** – This park is currently accessible only from Eye Street and a trail connection would add access from the Sunset Avenue side as well.
- 3** **St. Louis Road** – Providing a connection to St. Louis Road and the St. Louis Road overcrossing opens access to Spear Avenue west of the project area, and LK Wood Blvd to the east. Connection "d", described below, is a potential alternative and/or additional connection at this point. Both would offer a connection to planned future housing developments in the area.
- 4** **LK Wood Blvd (north)** – A short distance and approximately six feet of elevation separate the rail corridor from the north end of LK Wood Blvd. A connection at this point would provide convenient access for the residential neighborhood to the southeast. This connection would require crossing private property. (ENV, P/RW, TOPS, TSF, ADA)
- 5** **Industrial Driveways along West End Road** – Existing driveway crossings and industrial uses at this location present potential hazards for trail users.
- 6** **Giuntoli Lane** – The connection to Giuntoli Lane and over Highway 299 will provide the main connection from the project location to the Valley West neighborhood. This connection is described further below. (ENV/PMT, RWE, TOP, TSF, & Maint. Agreement with City)
- 7** **West End Road at North Coast Laboratories** – The crossing of West End Road will provide access along the trail to the east. This is also a potential interim terminus of the trail until funding can be obtained to continue east toward Blue Lake.
- 8** **HBMWD Park 1** – An extension of this connectivity project would provide a connection to the water park at the Humboldt Bay Municipal Water District pump station.

b) Additional Crossings and Connections

Additional crossings and connections are shown as letters in **Figure 4**. These are crossings or connections that are important and will support the success of the project.

- a** **Downtown Arcata** – G Street and H Street provide the most direct access from the project terminus at Sunset and the downtown area.
- b** **Arcata City Trail/Humboldt Bay Trail** – The existing Arcata City Trail portion of the Humboldt Bay Trail ends at Sunset Avenue. The proposed project would provide a direct connection to this trail
- c** **Todd Court** – This connection would support access to and from Arcata Elementary School and the residential neighborhood.
- d** **St Louis Road** – This would be a potential alternative and/or additional connection to Saint Louis Road as described in Connection "3" above.
- e** **Janes Creek Subdivision/Meadows Park** – This would be a connection to the existing neighborhood and park.
- f** **Highway 101 Undercrossing** – The trail would need to cross under Highway 101 either along West End Road or following the existing rail alignment. (STR, ENV, PMT, RWE, TOP, HYD)
- g** **Arcata Ridge Trail** – An existing trailhead provides access to the Arcata Ridge Trail at this point. This connection would be maintained
- h** **Commercial Driveways** – The trail crosses three driveways in this area.
- i** **West End Road** – The trail parallels West End Road in this area, providing potential locations for connections to the road or alternative routes for the trail.
- j** **Aldergrove Road** – The rail corridor crosses this two-lane paved road at an angle.
- k** **Driveway & Ericson Court** – The rail corridor crosses a two-lane commercial driveway just north of Frank Martin Court. The City-owned property at the end of Ericson Court presents an opportunity to connect through to Ericson Court.
- l** **CIZ** – The trail corridor crosses through the Cannabis Innovation Zone (CIZ), a potential draw for tourism and employment.

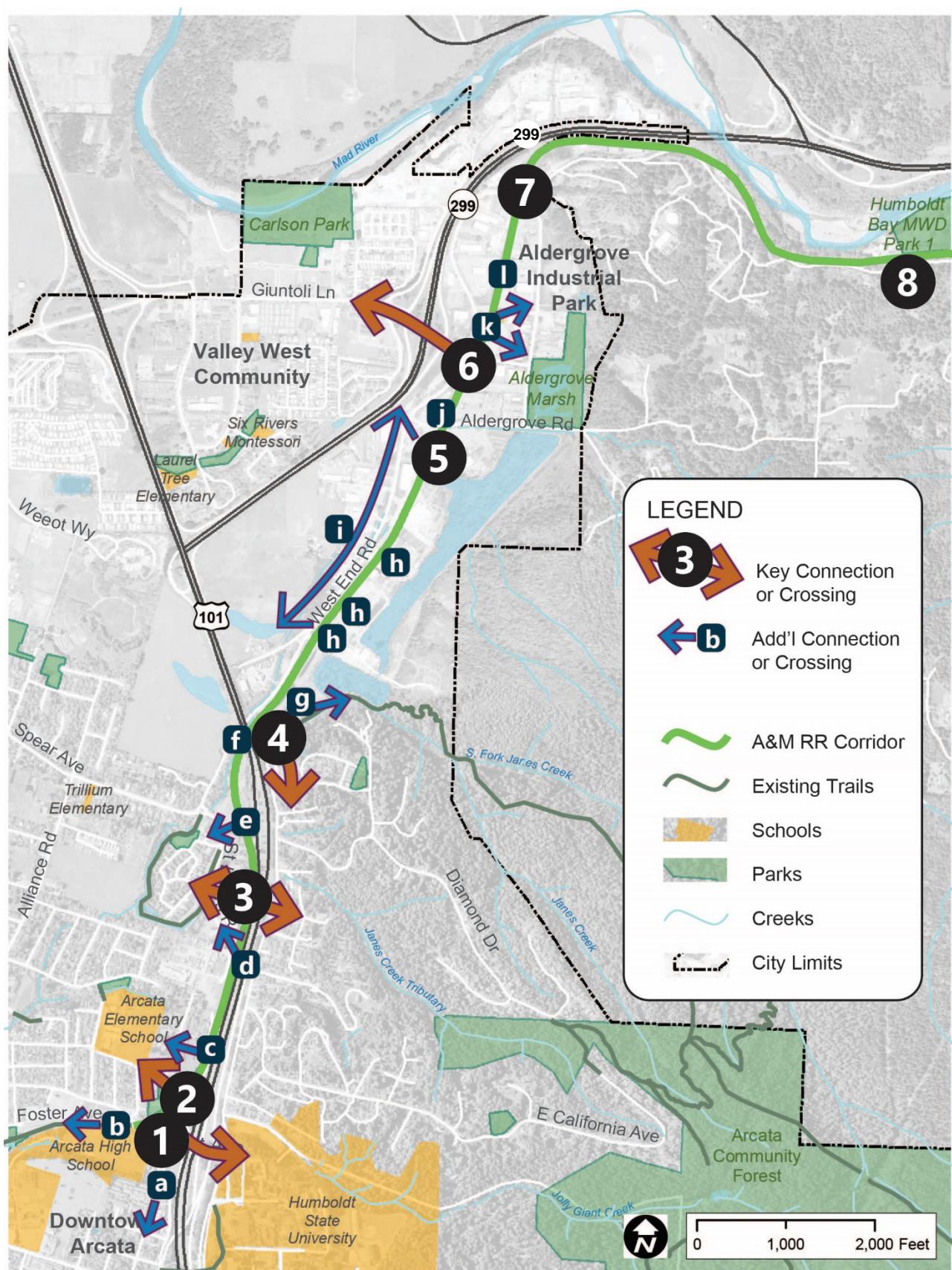


Figure 4: Map of Crossings and Connections

Sunset Avenue Connection

Sunset Avenue is one of the two main constraints for the trail with respect to connecting to key destinations. The Sunset Avenue overcrossing provides the important connection to HSU.

The Sunset overcrossing of Highway 101 and interchanges with G Street and LK Wood Boulevard comprise a complex and challenging route for bicyclists and pedestrians, with long exposed crosswalks, particularly on the east end, and traffic crossing to and from the on- and off- ramps. **Figure 5** shows the existing cross-section on the bridge, which features a wide sidewalk and parking on the south side, and bike lanes on both sides.

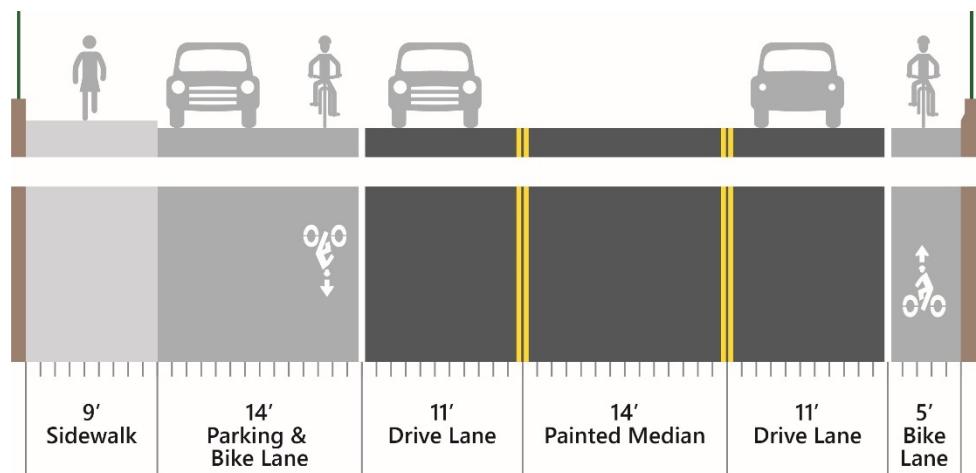


Figure 5: Existing Sunset Avenue Overcrossing Cross Section



Figure 6: Aerial view of the Sunset Avenue Overcrossing



Figure 7: Aerial view of western end of Sunset Avenue Overcrossing & Interchange

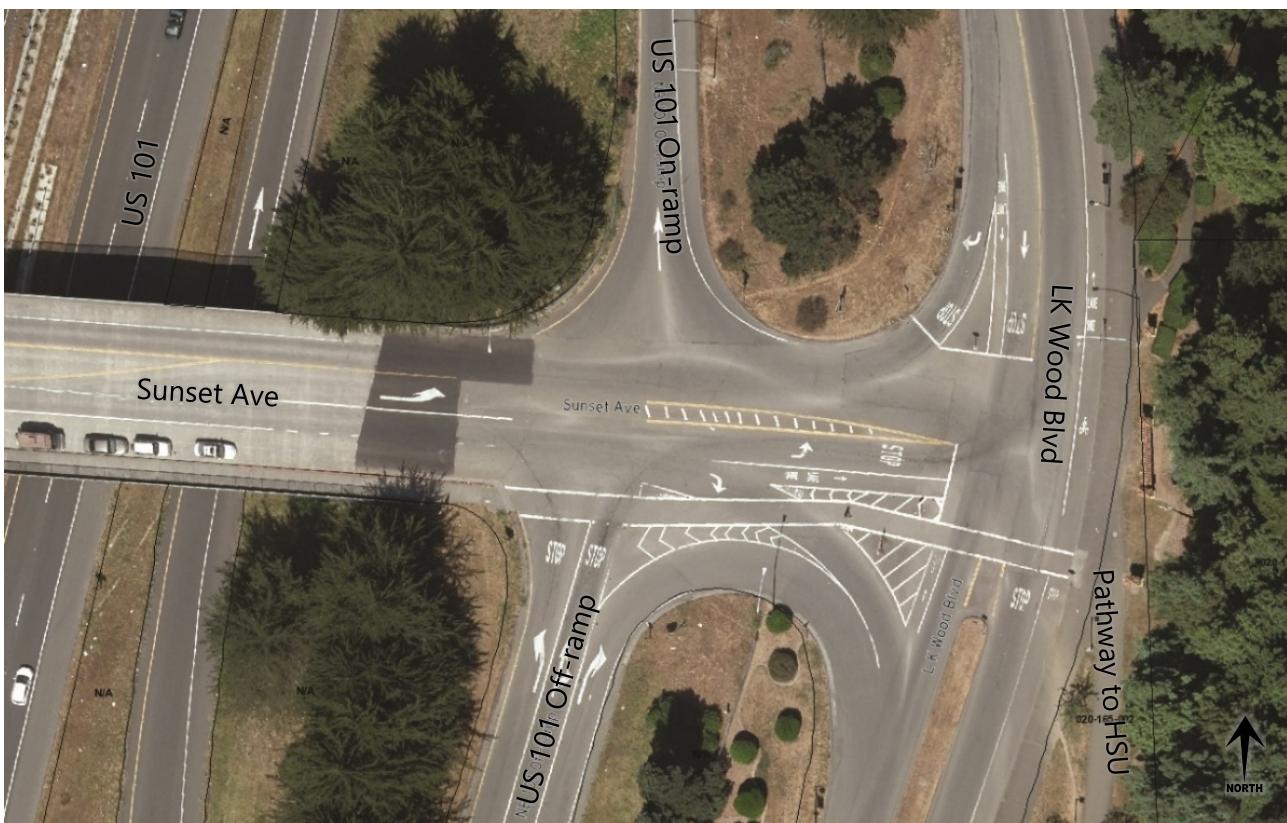


Figure 8: Aerial view of eastern end of Sunset Avenue Overcrossing & Interchange

Giuntoli Lane Connection

Giuntoli Lane is the other of the two main constraints for the trail with respect to connecting to key destinations. The Giuntoli overcrossing provides the important connection from the future trail to the Valley West neighborhood.

The Giuntoli interchange with SR 299 requires bicyclists and pedestrians to negotiate a series of wide on- and off-ramps and a T intersection to reach the rail corridor, but there is an intervening steep slope between the T at West End Road and the rail line. **Figure 9** shows the existing cross section of the bridge over Highway 101, which has shoulders but no sidewalks.

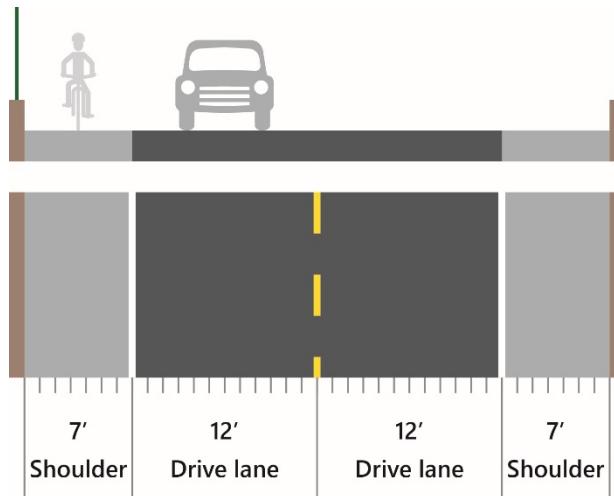


Figure 9: Existing Giuntoli Lane Overcrossing Cross Section

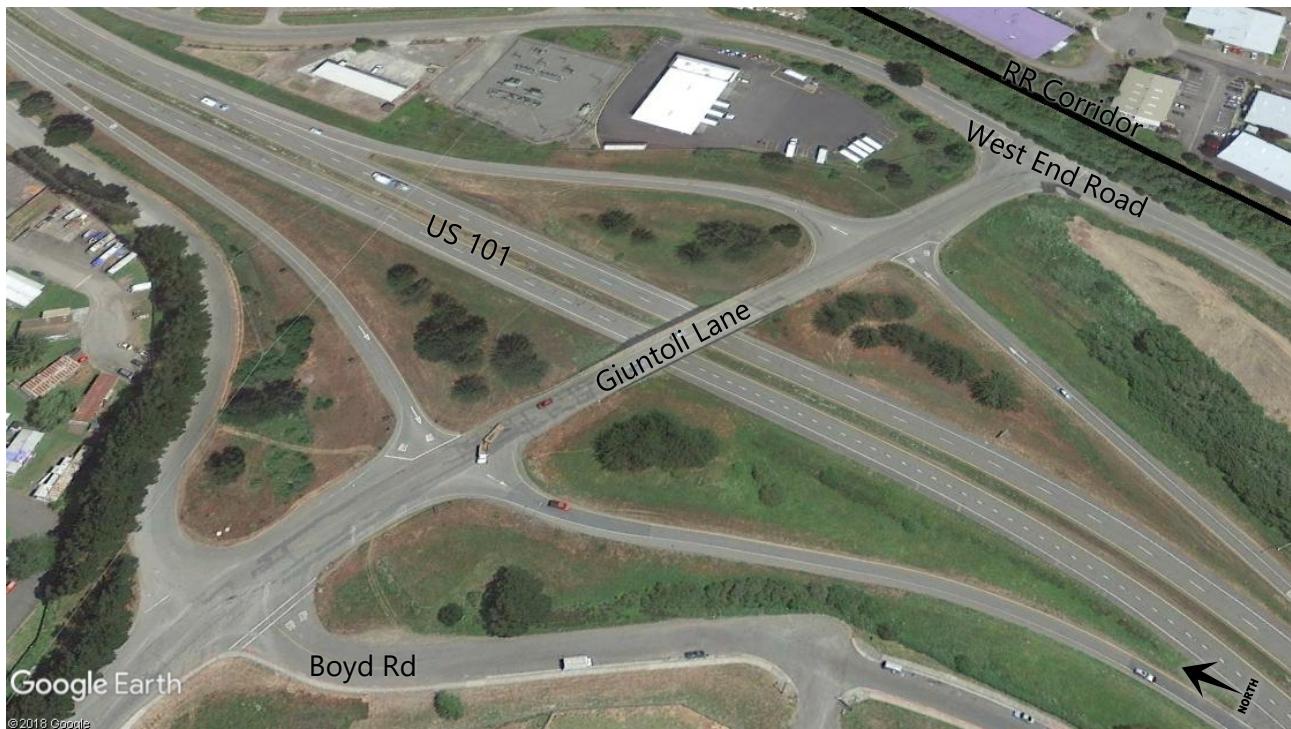


Figure 10: Aerial view of the Giuntoli Lane Overcrossing

3.3 COLLISIONS INVOLVING BICYCLES OR PEDESTRIANS

Based on the Statewide Integrated Traffic Records System (SWITRS), there were 47 recorded collisions in the study area from 2006 through 2017 (the latest date data is available). Of those collisions, 14 involved a pedestrian and/or a cyclist.

Figure 11 and 12 show the location of these collisions, coded by severity and type.

Of the collisions involving a cyclist or pedestrian,

- 4 involved a solo cyclist;
- 6 involved a cyclist and a motor vehicle;
- 1 involved a pedestrian and a cyclist;
- 3 involved a pedestrian and a motor vehicle;
- 8 occurred in an intersection;
- 12 occurred on local roads (2 occurred on US 101);
- Collision severity was: 2 severe injury, 8 visible injury, and 4 complaint of pain;
- None were fatal.

The solo cyclist incidents typically involved the cyclist colliding with a fixed object or running off the road. This highlights the importance of trail design that reduces the likelihood of a collision with a fixed object such as a bollard, light post, or fence.

Pedestrian or bicycle collisions involving vehicles typically fell into the category of the vehicle failing to give right-of-way to the cyclist or pedestrian or vice versa. In more than one case it appears that vehicles and bicyclists did not have sufficient room to operate together.

Three of the collisions occurred when either the motor vehicle or the bicycle was turning. This highlights the importance of good, clear intersection design for all users.

SWITRS Collision Severity Scale

- 1 – Fatal
- 2 – Injury (Severe)
- 3 – Injury (Other Visible)
- 4 – Injury (Complaint of Pain)

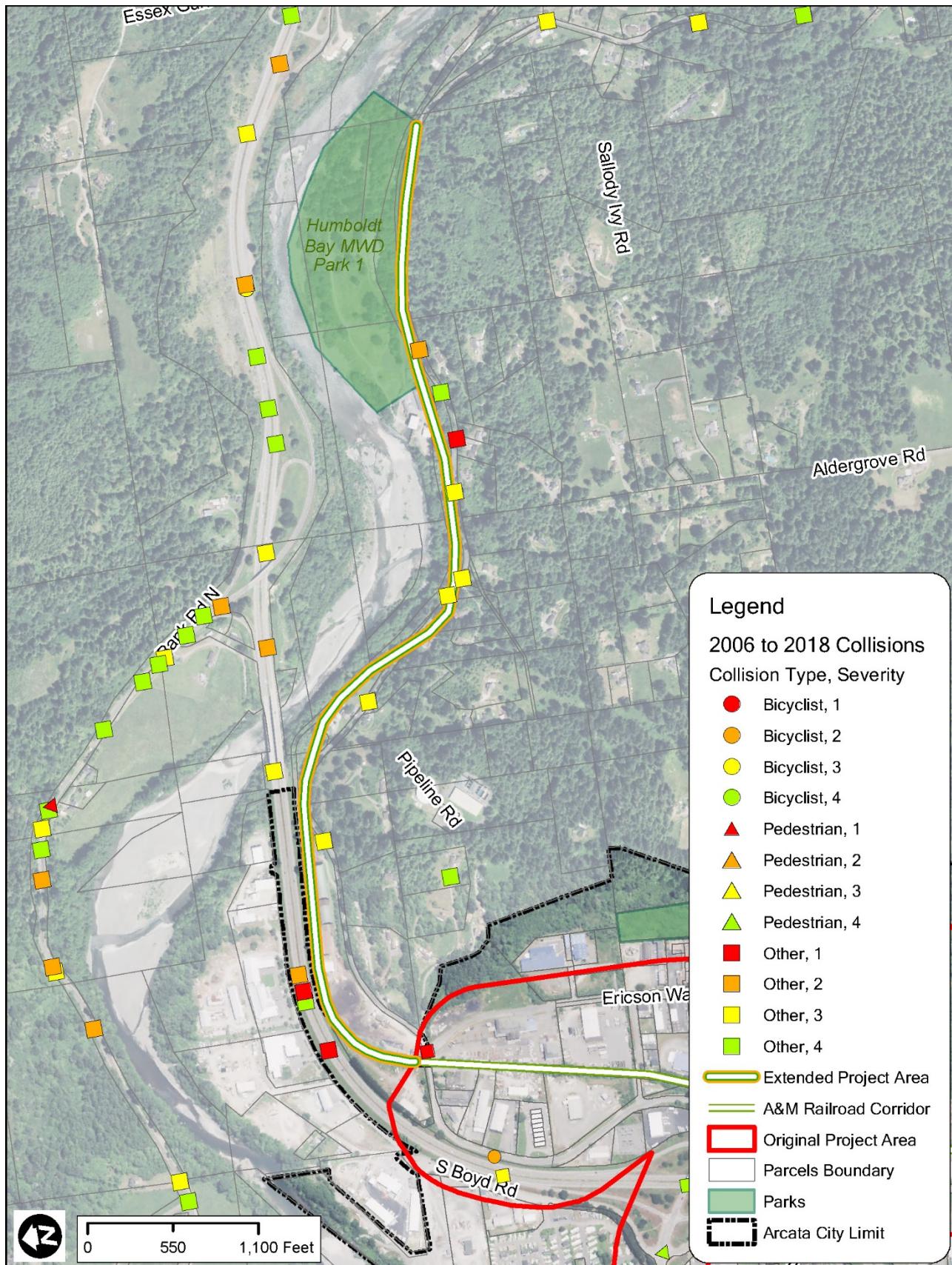


Figure 11: Collisions from 2006 to 2018 (part 1 of 3)

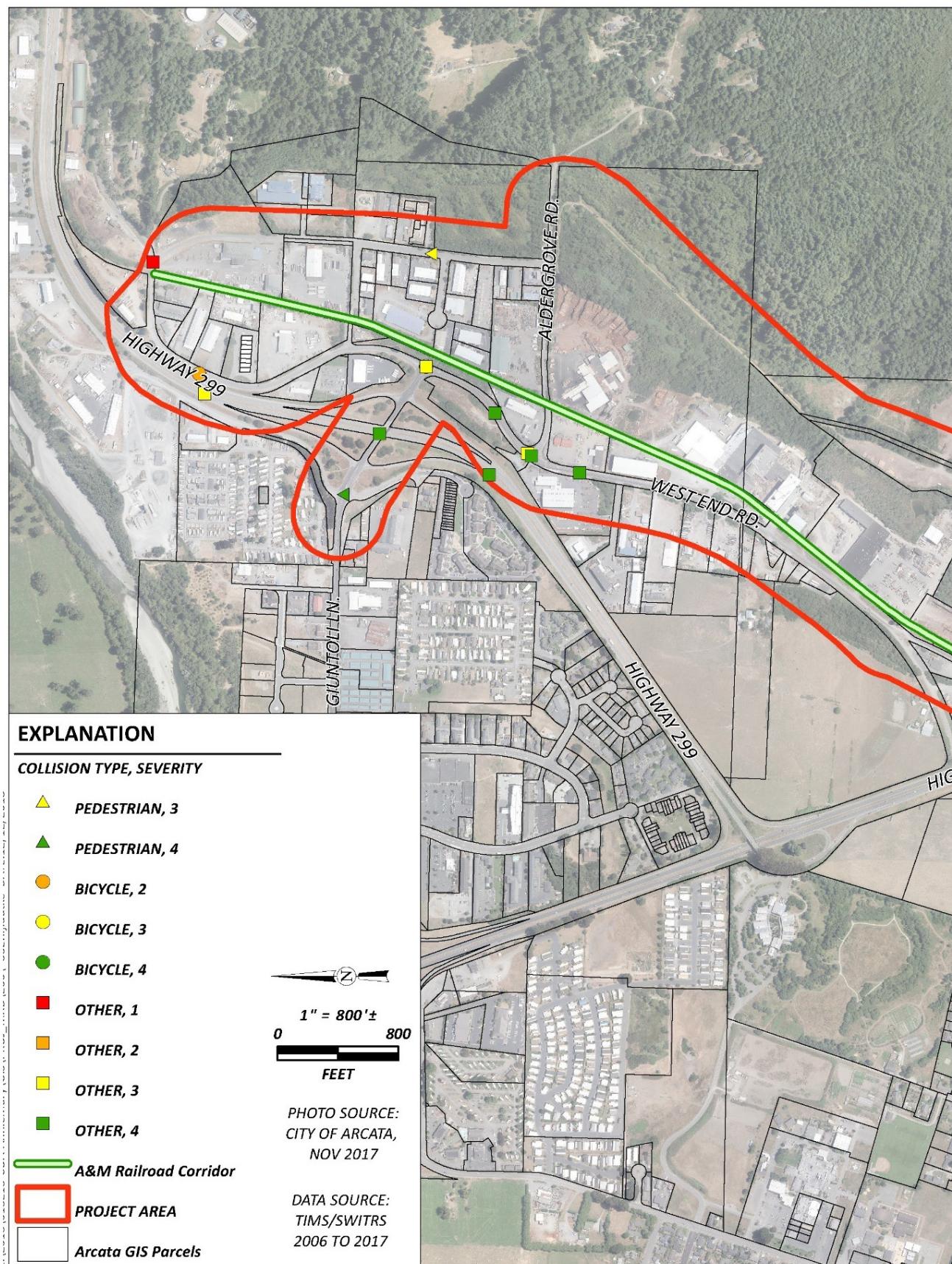


Figure 12: Collisions from 2006 to 2017 (part 2 of 3)

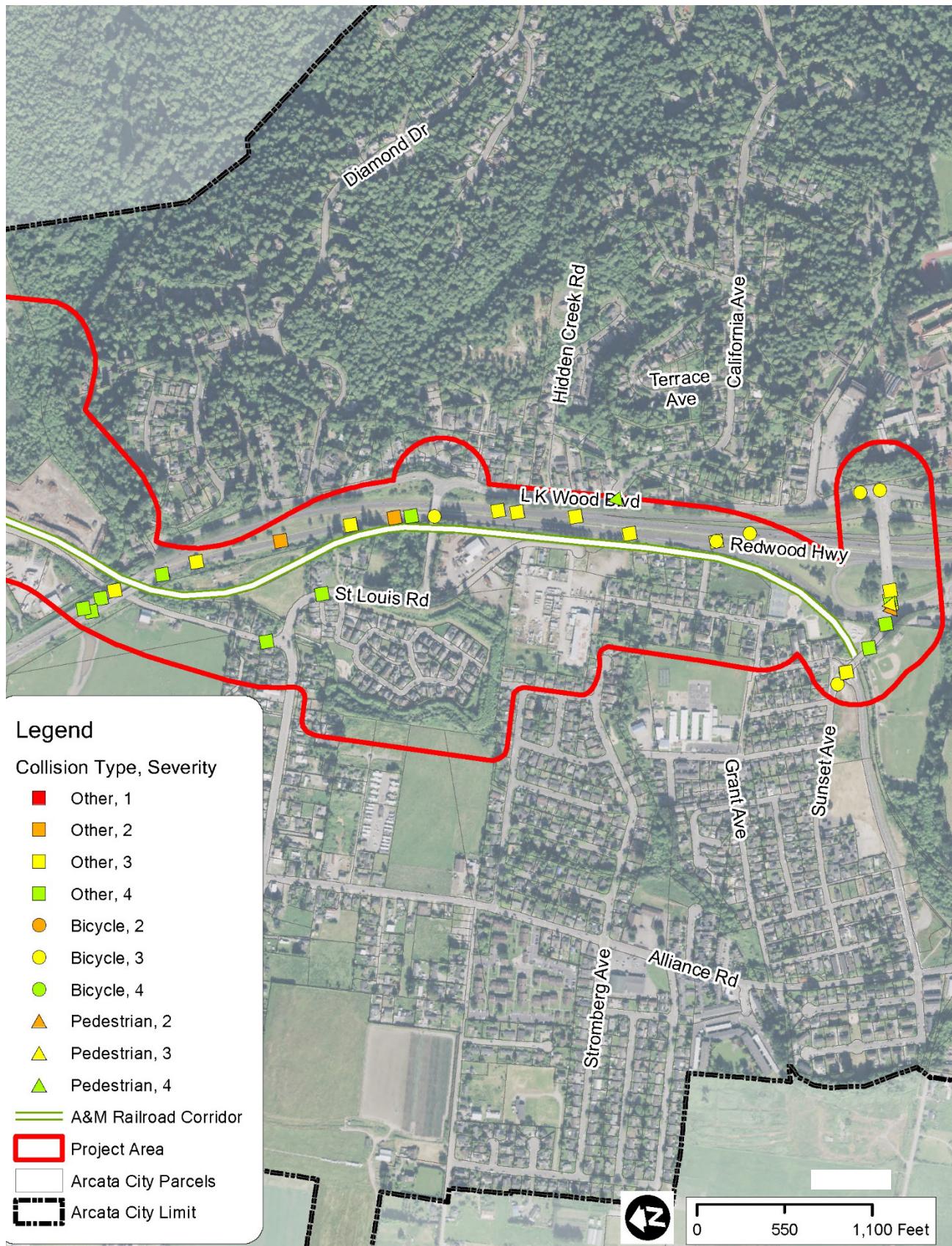


Figure 13: Collisions from 2006 to 2017 (part 2 of 3)

3.4 SITE CONSTRAINTS

Site constraints are important to understand to ultimately address the details that will make the trail successful. This includes:

- Consideration of available rail and public road right-of-way (ROW), City-owned parcels, and private property access if pertinent;
- Space limits and geometry to preserve the future railroad use of the corridor in conjunction with the trail (with the passage of Senate Bill 1029, this constraint may no longer be applicable);
- Ramps, retaining walls, and structures to address topographic constraints;
- Grading, drainage, utilities, and lighting requirements;
- Trail access design for bikes and pedestrians and ADA compliance in relation to traffic safety, capacity;
- Environmental and cultural resource impact avoidance, mitigation, and permit implications;
- Trail amenities, such as maps and wayfinding, to make it easier for people to use the trail.

The opportunities and constraints described below are a first step in defining the requirements for successful trail design. **Figures 13 through 18** show the constraints in context with the alignment.



A segment of the rail line with ditches on both sides.

Wetlands and Biological Resources

Creeks and wetlands and habitat for special status species can be significant constraints for creating trails and connections. SHN biologists reviewed existing data and did preliminary site reconnaissance to complete a high-level assessment of biological resources (see complete report in **Appendix A**). The constraints maps in this section show the significant resource constraints.

Slopes and Embankments

Where there are significant slopes adjacent to the rail line this may create constraints for constructing the trail, especially if the rails are left in place as opposed to removing them and locating the trail in the rail bed. Slopes can also create constraints for connecting the main trail to other trails and routes, such as at Giuntoli Lane. Slopes may limit access to the trail in some areas.

Right-of-Way and City-Owned Lands

The rail corridor is generally assumed to be available for use for the trail, but constraints such as wetland ditches, embankments, or the desire to preserve the rails in place might constrain space for the trail. Where there are parallel City roads, or City-owned land, or alternative public trail or on-street routes these may be opportunities to address these space constraints.

Cultural Resources

Archaeological and historical resources along the route are also potential constraints for construction of the trail and connections. The rail line itself is a recognized historic resource and its removal may require mitigation through relocation and historical interpretation, for example. DZC



Signs indicating water transmission lines buried near the rail corridor.

Cultural Resources Consulting prepared a preliminary assessment of resources based on review of available records (**see Appendix B**). Cultural resources are not publicly mapped in order to protect them, but the information will inform the conceptual design of the trail.

Utilities

A major water transmission line and gas line run parallel to the rail corridor in the vicinity of West End Road. While construction above these lines is possible, it is not recommended due to the increased cost, coordination, and maintenance issues.

Adjacent Uses

North of the Highway 101 undercrossing, the railroad right of way enters an area dominated by industrial uses. Most of these uses are separated from the rail corridor by fencing and vegetation. Even in these areas, though, the driveway crossings represent a potential point of conflict with trail users.

A section of the corridor south of Aldergrove Road runs directly through an active industrial site with no separation between the active use and the rail corridor. The potential for conflict between trail users and the existing use of the site is high.

Additionally, the Aldergrove Industrial Park area has been designated a Cannabis Innovation Zone (CIZ). Cannabis-related uses have begun to move into the Industrial Park and it is expected that more will come. While there is no specific conflict between these uses and the trail, there is the potential for the cannabis-related organizations to need additional security or have concerns about trail users adjacent to their facilities.



Active industrial use along portions of rail corridor

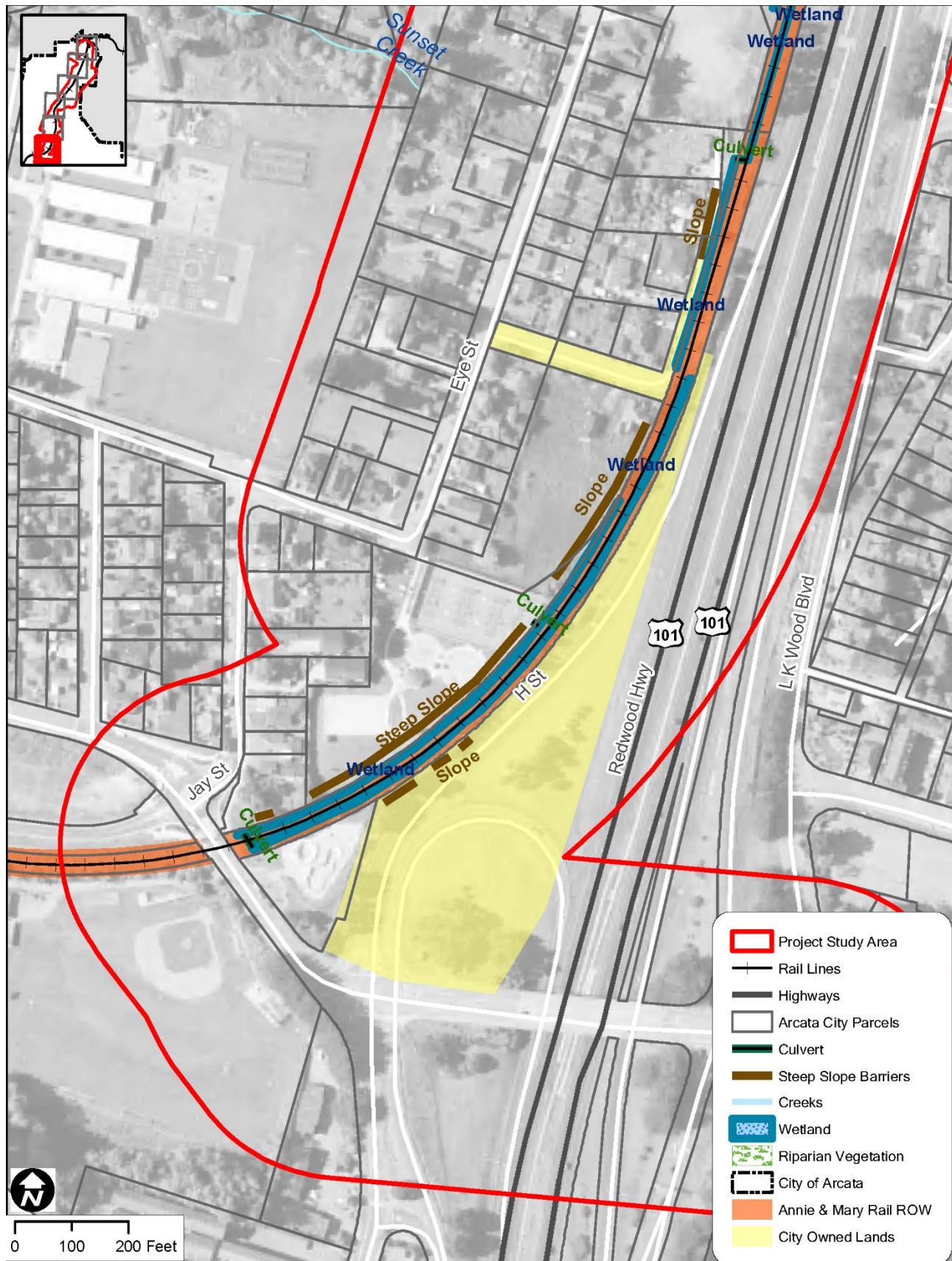


Figure 14: Constraints Map 1 of 6

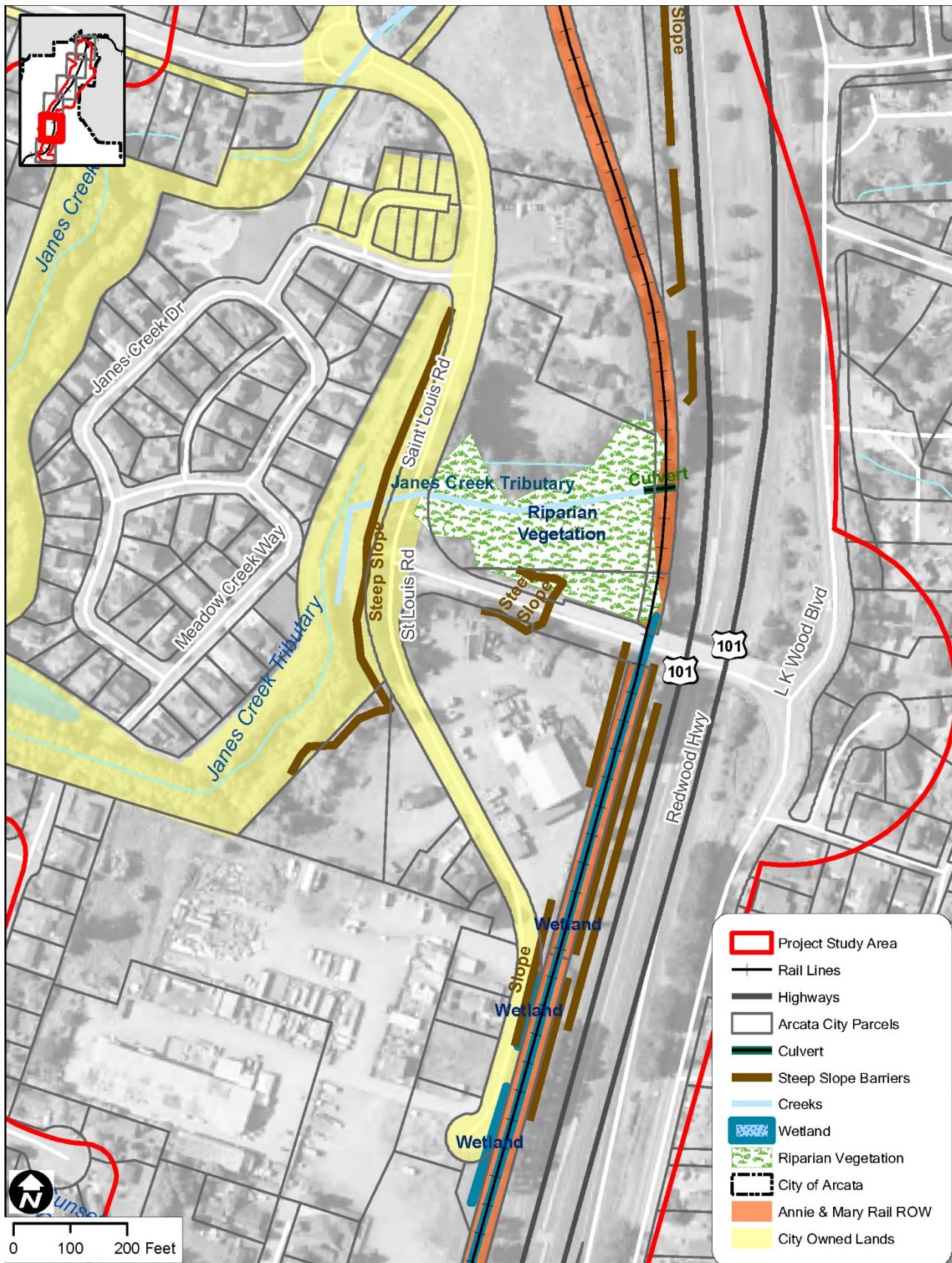


Figure 15: Constraints Map 2 of 6

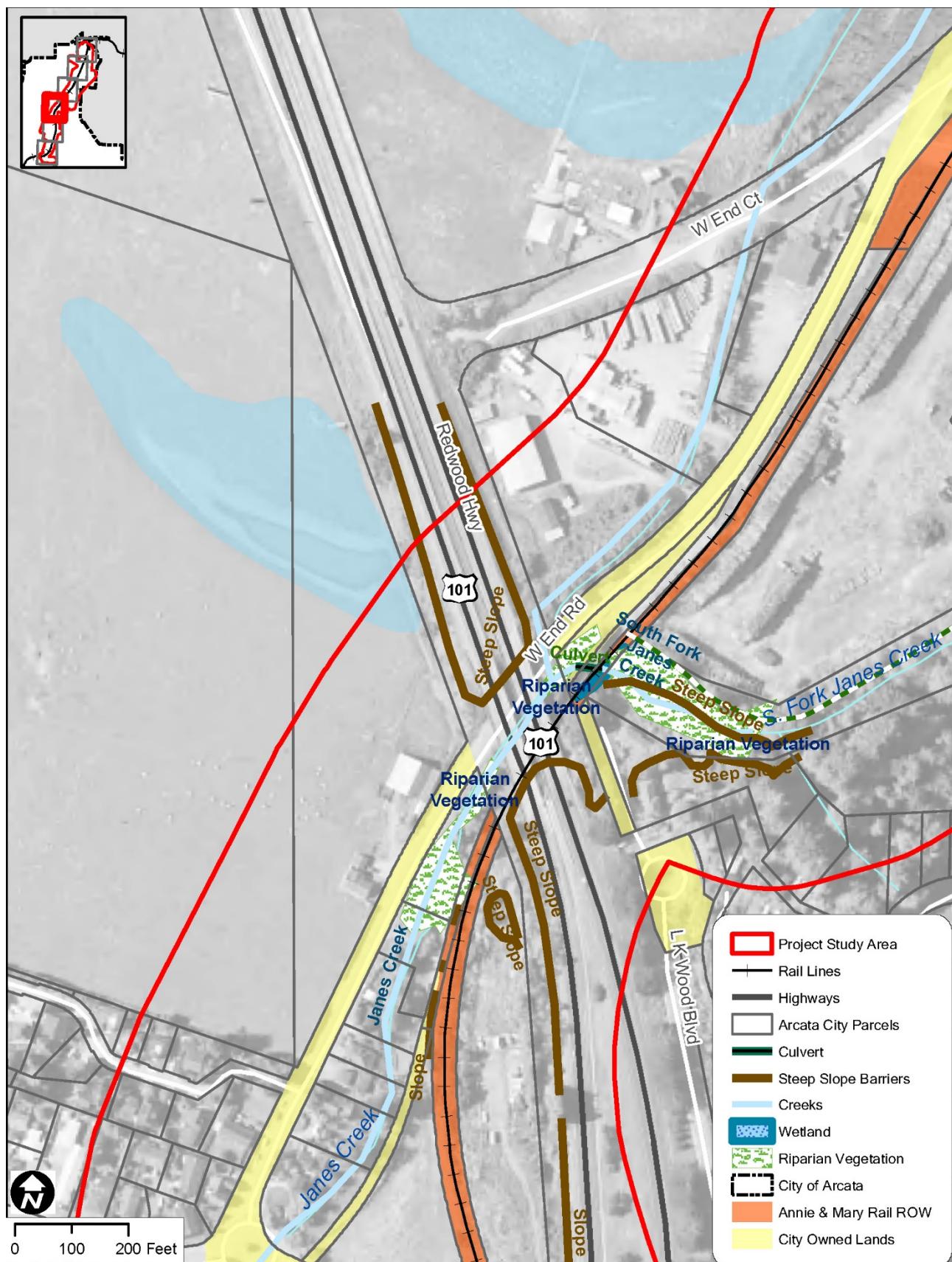


Figure 16: Constraints Map 3 of 6

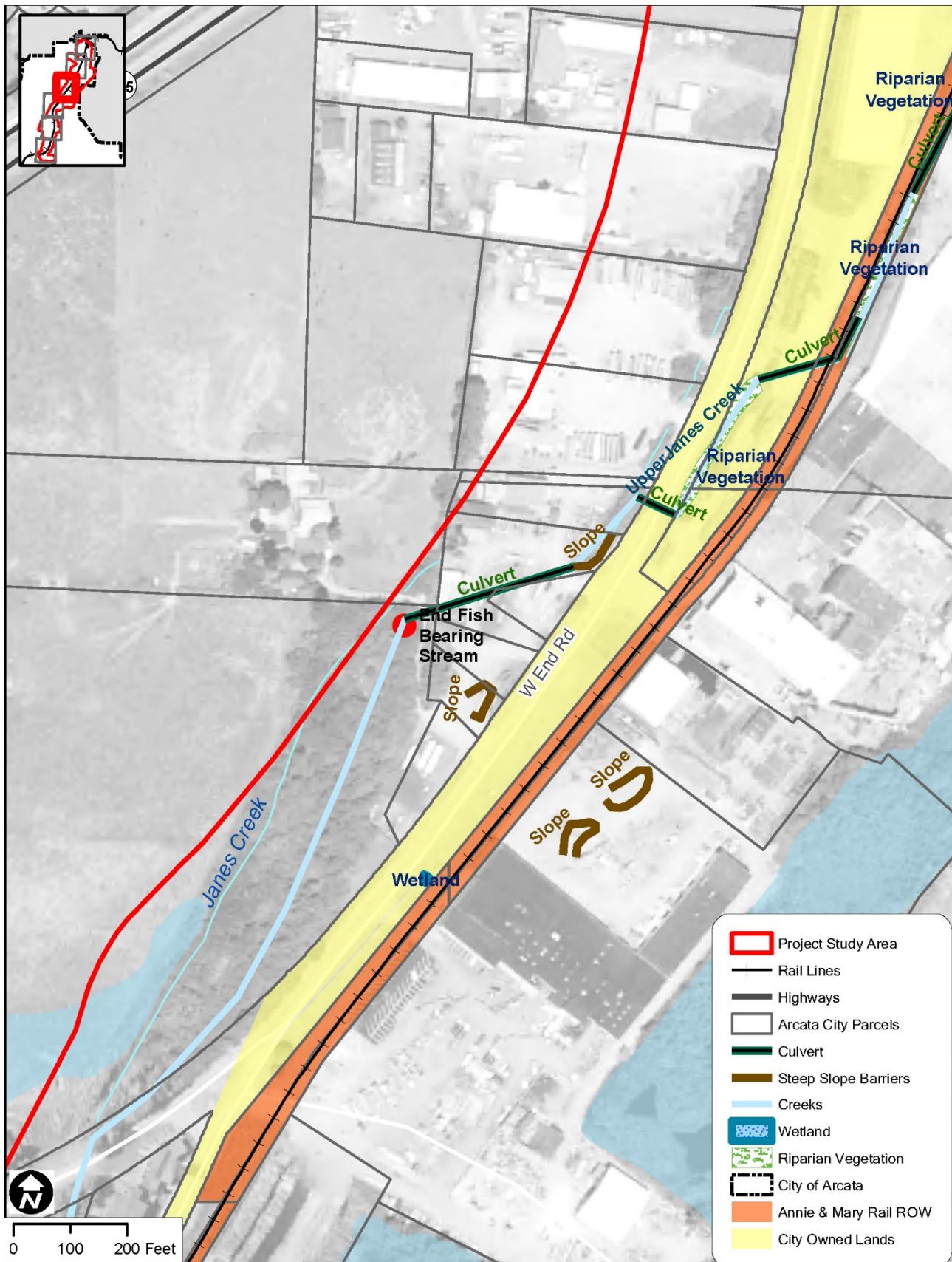


Figure 17: Constraints Map 4 of 6

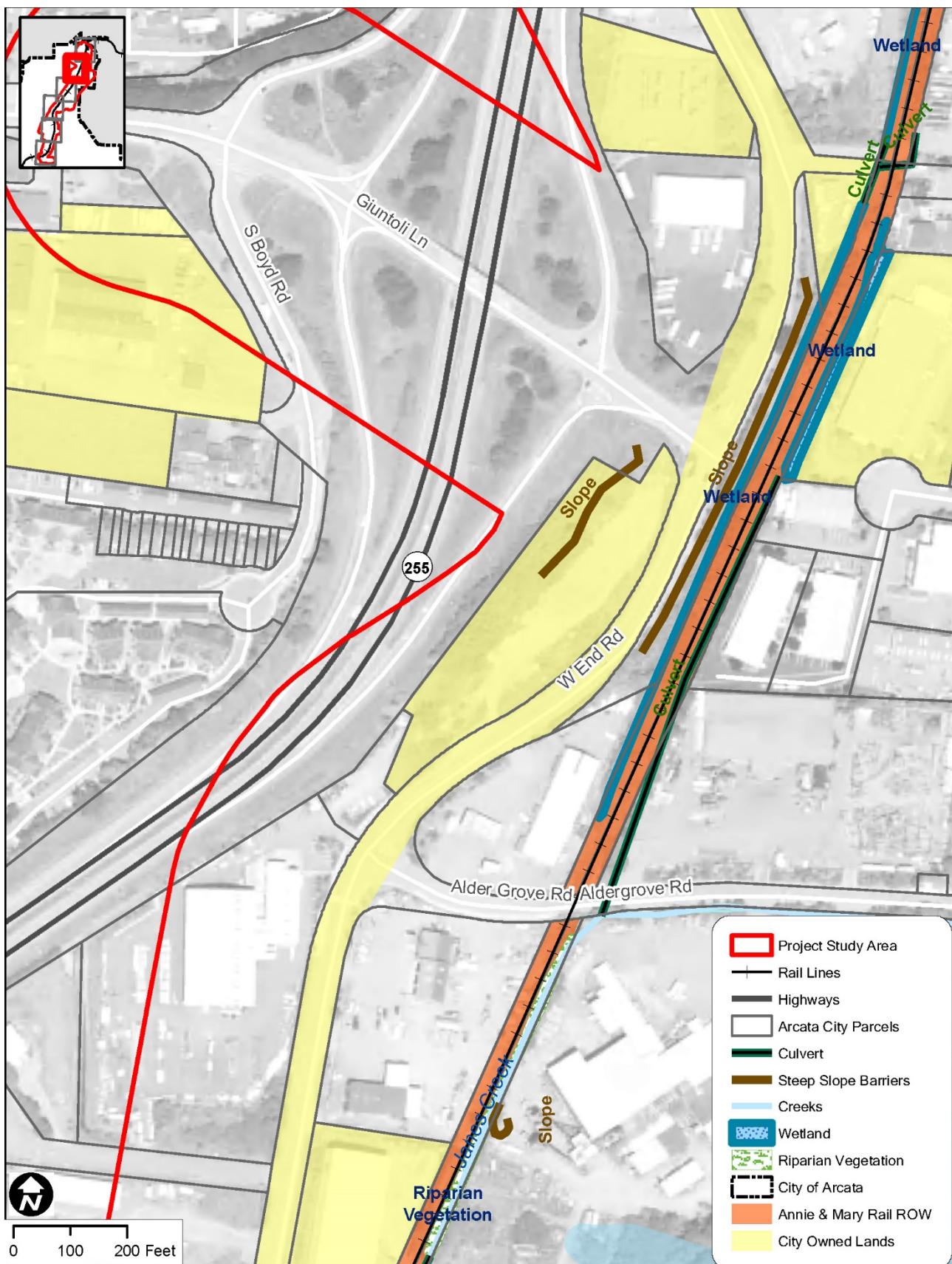


Figure 18: Constraints Map 5 of 6

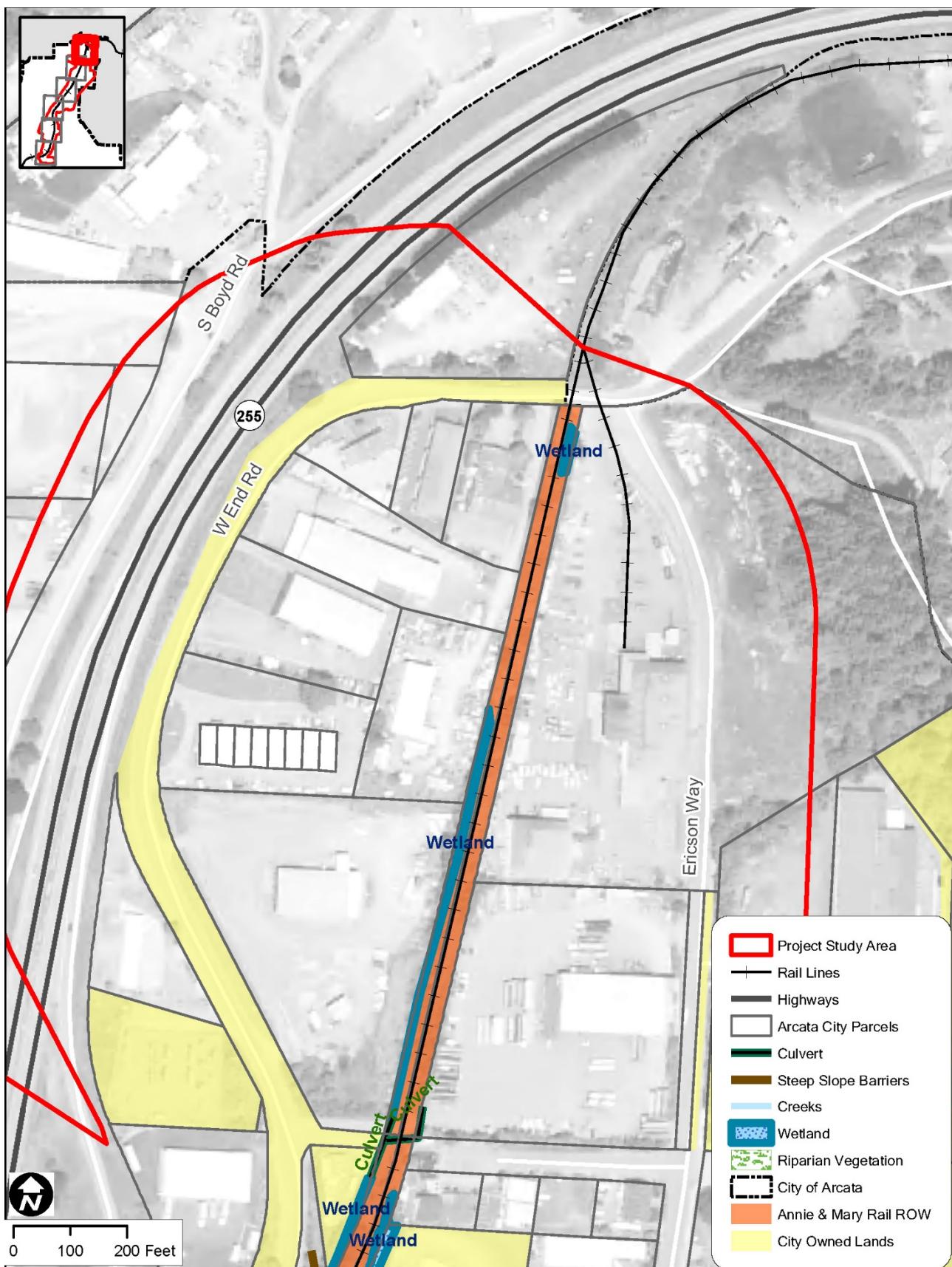


Figure 19: Constraints Map 6 of 6

City of Arcata

Annie & Mary Trail Connectivity Project

Included as part of
Final Project Report APPENDIX D

APPENDIX A

Wetland & Botanical Constraints Assessment

Memo:

**Existing Conditions,
Opportunities, and Constraints**

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Reference: 018218.200

January 31, 2019

Wetland and Botanical Constraints Assessment

Annie and Mary Trail

West End Road to Sunset Avenue

Introduction

The project consists of the development of a trail system through the City of Arcata from West End Road to Sunset Avenue on the existing Railroad Right of Way (ROW). This study is intended to ascertain potential wetland and listed plant locations within the limits of the proposed trail corridor along the Railroad ROW; it is not intended to delineate wetland or sensitive species population locations. The results of this study will be used in the early planning stages of the trail so as to minimize or prevent impacts to wetland and botanical resources present within the proposed trail alignment (see Appendix 1, Figure 1).

Existing Conditions

The project area consists of 2.25 miles of existing railroad infrastructure that has remained idle for 22 years. Railroad tracks remain in place; however large portions of the ROW are densely covered in shrub, bramble, or young tree growth, reflecting the years since they were last used. Botanical species are primarily non-native with Cotoneaster (*Cotoneaster lacteus* and *Cotoneaster franchetii*), Himalayan blackberry (*Rubus armeniacus*), pampas grass (*Cortaderia jubata*), Spanish heather (*Erica lusitanica*), and other non-native herbaceous species as the primary dominants, however there are some areas where native species are dominant, specifically hooker willow (*Salix hookeriana*), red alder (*Alnus rubra*), and California blackberry (*Rubus ursinus*).

The rail bed is composed of coarse, well-drained gravels, typically elevated above the surroundings. The majority of the soils within the study area have been manipulated and as such, are best described as urban/industrial soils (UI). Drainage ditches alongside the rail bed harbor wetlands along large portions of the study area (see Appendix 1, Figures 2-4). Along the 2.25-mile project area, the Railroad ROW crosses three streams, two of which are Class I streams (Janes Creek and South Fork Janes Creek), and another which is a Class II stream (Janes Creek tributary). Portions of these streams support riparian vegetation, which is habitat for several special status botanical species.

Methods

The National Wetlands Inventory (NWI), City of Arcata web GIS, California Natural Diversity Database (CNDB BIOS) and California Native Plant Society (CNPS) rare plant inventory were briefly reviewed prior to conducting field work. In order to assess wetland and habitat conditions, SHN's soil scientist and botanist walked the majority of the proposed trail alignment along the Railroad ROW on November 27, 2018. Potential wetland areas, special status botanical species habitat and vegetation communities were noted, along with dominant species. A summary of the findings is included in Appendix 1, Figures 2-4. An area between St. Louis Road and the Highway 101 overpass was initially uncleared and was not walked, however the area has been recently cleared and subsequently walked on January 30, 2019.

Wetland and Botanical Constraints Assessment

January 31, 2019

Page 2

A wetland delineation and protocol level botanical survey were not conducted as part of this study. Potential wetland areas were noted based on the observed dominance by wetland vegetation and wetland hydrology. Special status botanical habitat was assessed based on dominant vegetation, or the presence of wetland, riparian, or other potential habitat requirements noted in the area. Results from the wetland and botanical assessment are recorded below.

Results

Wetlands

Many potential wetlands occur within the Railroad ROW adjacent to the rail bed (see Appendix 1, Figures 2-4 and Appendix 2, Photos). Potential wetland areas were observed primarily within drainage ditches alongside the rail bed; however, additional potential wetlands were observed associated with Janes Creek and its tributaries (see Appendix 1, Figures 2-4).

Potential wetlands within drainage ditches were mostly Freshwater emergent wetlands, dominated by hydrophytic annual and perennial herbaceous species. The most common species observed within the potential drainage ditch wetlands included the common rush (*Juncus effuses* ssp. *pacificus*), spreading rush (*Juncus patens*), and lady fern (*Athyrium filix-femina* var. *cyclosorum*). In perennially wet areas, panicle bulrush (*Scirpus microcarpus*) was present.

Potential wetlands associated with Janes Creek and its tributaries were mostly Freshwater forested/shrub wetlands. Dominant species within these riparian wetlands included hooker willow, red alder, and less frequently, pacific willow (*Salix lasiandra* var. *lasiandra*). These areas represent higher quality habitat necessary for the health of streams and riparian-dependent species such as salmonids. Potential freshwater forested/shrub wetlands were most extensive in the northern portion of the proposed trail alignment, specifically between the defunct Humboldt Flakeboard plant and Alder Grove Road, and on the western edge of the rail bed between Alder Grove Road and Frank Martin Court (see Appendix 1, Figures 2-4).

Sensitive Habitat Areas

Sensitive habitat and potential habitat for special status botanical species were observed within the study area, mostly associated with wetlands in drainage ditches and Janes Creek and its tributaries. Highest quality sensitive habitat was observed along South Fork Janes Creek east of Highway 101, and along a Janes Creek Tributary just north of St. Louis Road and west of Highway 101. Both of these areas were dominated by mature red alder riparian forest, an S2.2 vegetation community. These riparian areas are potential habitat for several special status botanical species, the most likely being the pacific golden saxifrage (*Chrysosplenium glechomifolium*), marsh pea (*Lathyrus palustris*), Howell's montia (*Montia howellii*), leafy-stemmed miterwort (*Mitella straccalescens*), and maple-leaved checkerbloom (*Sidalcea malachroides*). Open, herbaceous species-dominated wetlands potentially provide habitat for additional special status species. The most likely to occur in these areas include northern clustered sedge (*Carex arctata*), Buxbaum's sedge (*Carex buxbaumii*), bristle-stalked sedge (*Carex leptalea*), and northern meadow sedge (*Carex praticola*). Additional special status species could occur within the proposed trail alignment. With the exception of the red alder riparian forest and wetland habitat, no additional sensitive habitats were observed along the proposed trail alignment.

Wetland and Botanical Constraints Assessment

January 31, 2019

Page 3

Conclusion

Potential two- and three-parameter wetlands are present in drainage ditches and streamside habitat within the proposed trail alignment. The majority of these potential wetlands are severely disturbed and are dominated by non-native species. The average width of potential drainage ditch wetlands is between 2 and 4 feet wide, with an average of 20 feet of upland rail bed between potential wetland ditches. Potential wetlands associated with riparian habitat are of much higher quality and should be considered for protection and enhancement, including invasive species removal, garbage cleanup, and native vegetation planting. In addition, culvert replacement could occur where perennial streams are crossed by the rail bed to allow increased fish passage.

Historic use, disturbance, and heavy cover by invasive species makes it unlikely that special status species occur within the proposed trail alignment. The heavy cover by invasive species should be addressed and managed for removal as part of this project. Should the project move forward, protocol-level botanical surveys should be conducted prior to ground-disturbing activity. Riparian areas should be specifically avoided to reduce impacts associated with the project.

Appendices

1. Project Figures 1-4
2. Project Area Photos
3. National Wetlands Inventory Maps - South, Mid, and North

Project Figures 1

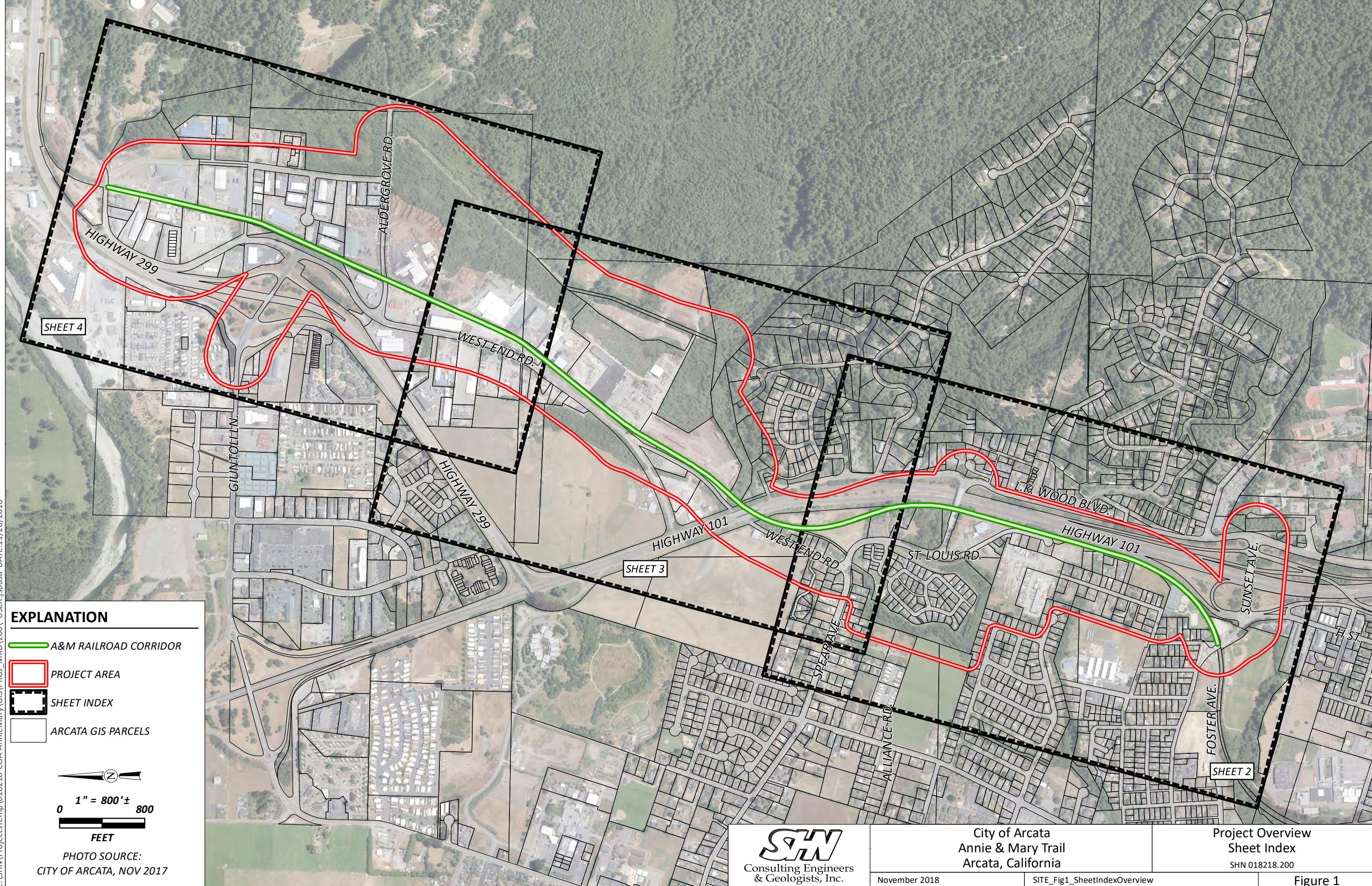




Figure 2 South





Figure 3 Mid



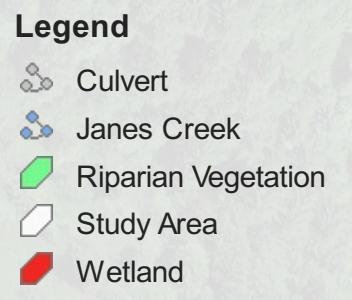


Figure 4 North



Project Area Photos

2



Photo 1: Freshwater emergent drainage ditch wetland between Highway 101 and railbed, looking southeast. Wetland is approximately 2 feet wide and abruptly transitions to upland on either side of the wetland.



Photo 2: Typical conditions within the southern portion of the proposed trail alignment, looking north. Note wetland in ditch on right side of tracks. Also note invasive species dominance on both sides of the rail bed.



Photo 3: Freshwater forested/shrub wetland along the rail bed, looking northwest. Note drainage ditch 2- and 3-parameter wetland approximately 3 feet wide, tree and shrub growth much wider. Invasive pampas grass prevalent in this area.



Photo 4: Freshwater forested/shrub wetland along the railbed, looking west. Note drainage ditch 2- and 3-parameter wetland approximately 3 feet wide, tree and shrub growth much wider.



Photo 5: Typical conditions along the northern portion of the proposed trail alignment, looking north. Note Freshwater forested/shrub wetland (ditch 2-3 feet wide) on left hand side of photo. Pampas grass dominant within upland rail-bed.



Photo 6: Conditions within the proposed alignment just north of the St. Louis Road overpass, looking north. Note riparian woodland in background. Mixed native California blackberry/Himalayan blackberry thicket dominant, many transient camps present.



Photo 7: Recent vegetation clearing reveals cross section of conditions. Note wetland conditions in ditch, here approximately 3 feet wide. The remaining area is upland rail bed dominated by pampas grass.



Photo 8: Typical conditions within freshwater forested/shrub wetland. Note Himalayan blackberry, and pampas grass in upland areas along the edges.

National Wetlands Inventory Maps

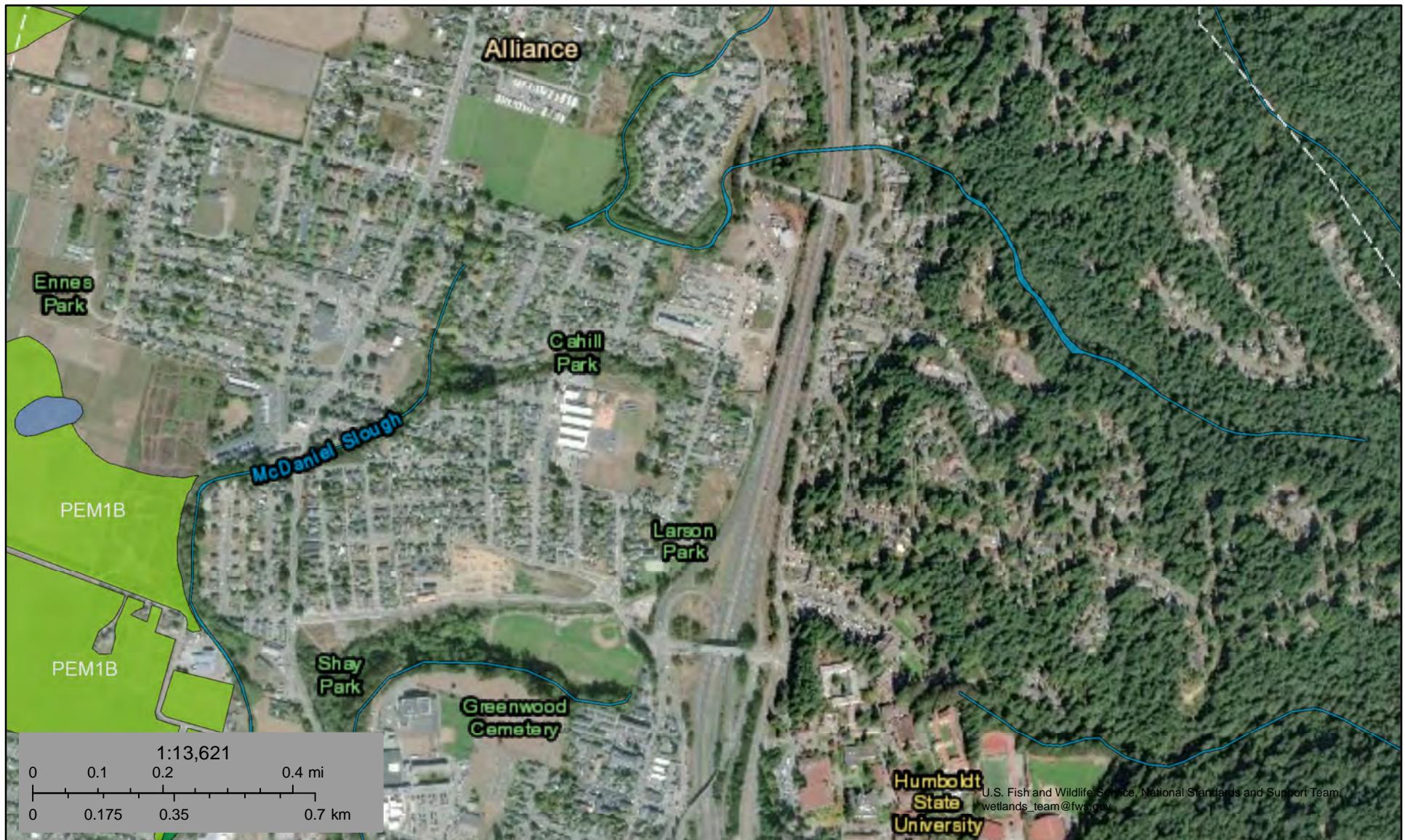
3



U.S. Fish and Wildlife Service

National Wetlands Inventory

A+M Arcata South NWI



November 26, 2018

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.



U.S. Fish and Wildlife Service

National Wetlands Inventory

A+M Arcata Mid NWI



November 26, 2018

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.



U.S. Fish and Wildlife Service

National Wetlands Inventory

A+M Arcata North NWI



November 26, 2018

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

City of Arcata

Annie & Mary Trail Connectivity Project

Included as part of
Final Project Report APPENDIX D

APPENDIX B

Cultural Resource Current Conditions Report

Memo:

**Existing Conditions,
Opportunities, and Constraints**

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A Cultural Resource Current Conditions Report For the Annie & Mary Trail Connectivity Project Arcata, Humboldt County, California

Submitted to:

The City of Arcata
736 F Street
Arcata, California 95521

Prepared for:

TrailPeople
919 First Street, Suite 1
Benicia, CA
94510

And

SHN Geologists & Engineers
812 Wabash Ave
Eureka, CA, 95501

Prepared By:

Dmitra Zalarvis-Chase, RPA
Elizabeth Hodges, BA



455 I Street, Suite 204
Arcata, CA 95521

April 2019

A Cultural Resource Current Conditions Report

For the Annie & Mary Trail Connectivity Project

Humboldt County, California

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PREPARED FOR:

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Eureka, CA
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PREPARED BY:



Dimitra Zalarvis-Chase M.A., R.P.A.
Elizabeth Hodges, B.A.

April 2019

USGS 7.5-Minute Series Quadrangle:
Township 6 North, Range 1 East, Sections 15, 16 20, 21, 28 & 29
487 -acre study area

Keywords: Arcata & Mad River Railroad/Annie & Mary Railroad, Northwest Pacific Railroad, St. Louis Farm, Camp Curtis, Wiyot, Arcata, Current Conditions Assessment

DISCLAIMER

This document has been altered to remove confidential information that was included in the original document. The full report may be viewed at the City of Arcata.

City of Arcata
736 F Street, Arcata, CA 95521

LIMITATIONS STATEMENT

This report has been prepared based on certain key assumptions made by DZC Archaeology & Cultural Resource Management Consulting that substantially affect the conclusions and recommendations of this report. These assumptions, although thought to be reasonable and appropriate, may not prove to be true in the future. The conclusions and recommendations of DZC Archaeology & Cultural Resources Management Consulting are conditioned upon these assumptions.

These assumptions include confidential information provided by the Northwest Information Center on November 26, 2018, and other information that is generally applicable as of April 7, 2019. The conclusions and recommendations herein are therefore applicable only to that timeframe. Information obtained from these sources in this timeframe is assumed to be correct and complete. DZC Archaeology & Cultural Resource Management Consulting will not assume any liability for findings or lack of findings based upon misrepresentation of information presented to the project team or for items not visible, made available, or accessible through the archival record, or for resources present at the site at the time of publication.

MANAGEMENT SUMMARY

At the request of Trail People, and on behalf of the City of Arcata, DZC Archaeology & Cultural Resource Management Consulting prepared a cultural resource current conditions assessment in support of the Annie & Mary Trail Connectivity Project in Arcata, Humboldt County, California. The Project proposes the placement of a multi-user, all access trail over a preexisting railroad grade. The original study area included a 3.0-mile trail beginning at the intersection of Sunset Avenue and Foster Avenue in Arcata and extending north along the railroad ROW to .05-mile east of the intersection of Erickson Way and West End Road (Figure 1). While this study was in process, the City of Arcata requested the area be extended east approximately .5-mile, resulting in a new terminus east of the Humboldt Bay Municipal Pump Station No. 1 on West End Road. The original study area and the study area extension are depicted on Figure A-2 (Appendix A). For the purposes of this report, both areas are collectively referred to as the “Study Area” that is approximately 3.5 miles in length.

The 487-acre Study Area is located in Township 6 North, Range 1 East, Sections 15, 16, 20, 21, 28, and 29 on the Arcata North 7.5-Minute United States Geologic Survey Quadrangle of the Humboldt Base Meridian.

Construction of the trail project is subject to the California Environmental Quality Act (CEQA), which requires the Lead Agency, the City of Arcata, to take into account the potential for substantial adverse change to historical resources from project activities. As the City of Arcata is the Lead Agency, the project is also subject to the City of Arcata Historic Preservation Element.

The investigative portion of the review determined that ten previously recorded historical resources, two unrecorded historical resources, and ten cultural resource inventory reports are documented within the Study Area. The Study Area is within the traditional aboriginal territory of the Batawat division of the Wiyot people. Blue Lake Rancheria (Batawat District), the Wiyot Tribe of Table Bluff (Wiki District), and the Bear River Band of the Rohnerville Rancheria are Federally and State recognized Native American Tribes with affiliations with Wiyot people and Wiyot ancestral territory.

One precontact archaeological site, an ethnographic Wiyot village location, was identified in the SA. The nine historical era resources in the SA represent economic development and settlement activities related to farming, railroad logging, manufacturing, and transportation in Arcata. Two of these resources are California Historic Landmarks (No. 215 Camp Curtis & No. 842 The Arcata & Mad River Railroad) and are listed in the CRHR.

Prior cultural resource inventory reports for the Study Area were found to have been initiated by local agencies and private developers; all were authored by professional archaeologists. Numerous

historical maps confirmed and illustrated various aspects of historic development, land ownership, and land use within the Study Area from 1855 to 2018.

The summary portion of the review determined that 12-percent of the Study Area has been subject to prior archaeological survey but the majority of the surveys are over 20 years old, which is considered outdated by current industry standards. The study also found evidence of good-faith efforts by archaeologists to engage in communication and coordination with local Native American Tribes and Wiyot people during these prior studies. California Department of Parks and Recreation 523 site record forms were found for most of the resources.

The research and literature review determined that the Northwest Pacific Railroad, the Arcata Mad River Railroad (CHL No. 842) Camp Curtis (CHL No. 215), and Wiyot village, *Gerari*, also known as “Site L” (Loud 1918) lack sufficient recordation and study, constituting a substantial data gap for these resources. As such the current information available regarding these resources is inadequate to make a determination of effect to historical resources in accordance with the California Environmental Quality Act and the City of Arcata Historic Element. The review also determined that the remaining seven historical resources in the Study Area would not be affected by the proposed project.

Both determinations are contingent upon the implementation of the resource specific recommendations and Cultural Conditions (CUL#) in Section 4.4.3 of this document. Project management and resource-specific implementation recommendations include additional archaeological survey, Tribal Coordination and coordination, and resource recordation.

This study was completed by Dimitra Zalarvis-Chase, M.A., a Registered Professional Archaeologist (RPA) who meets the Secretary of Interior’s Professional Qualifications Standards for Archaeology (Title 36 Code of Federal Regulations Part 61, and 48 Federal Regulation 44716), and Elizabeth Hodges, BA.

CONTENTS

Statement of Confidentiality	ii
Limitations Statement	ii
MANAGEMENT SUMMARY	iv
LIST OF FIGURES	vii
LIST OF TABLES	viii
LIST OF ABBREVIATED TERMS	x
1. INTRODUCTION	1
1.1 Current Conditions Study Purpose.....	1
1.2 Project Location and Study Area (SA)	1
1.3 Document Organization.....	2
2. REGULATORY SETTING.....	3
2.1 California Environmental Quality Act (CEQA)	3
2.1.1 Assembly Bill 52 (AB52) Native American Consultation & CEQA.....	4
2.2 County of Humboldt	4
2.3 City of Arcata Historical Preservation Element.....	6
3. METHODS	6
3.1 Archival Research.....	7
3.1.1 Cultural Resources within the SA	7
3.1.2 Caltrans Bridge Inventory	14
3.1.3 Prior Cultural Resource, feasibility, and Right-of-Way Studies within the SA..	14
3.1.4 Historical Maps	16
3.1.5 Parcel Specific Aerial Photographs.....	17
3.1.6 Native American Context.....	18

4. EXISTING CONDITIONS SUMMARY	21
4.1 Evaluation of Prior Cultural Resource and Supplemental Reporting	21
4.2 Evaluation of Archaeological survey to date	22
4.3 Summary Of Archaeological Themes & Initial Resource Risk Assessment.....	22
4.3.1 Resources Not At Risk for Effects from Project Activities	23
4.3.2 Resources with Low Potential to Incur Effects from Project Activities	23
4.3.3 Resources At Risk for Less Than Significant Effects From Project Activities ..	24
4.4 Recommendations and Comments for Project Advancement	24
4.4.1 7.1 CEQA - Finding of No Effect	24
4.4.2 City of Arcata Historical Preservation Element.....	24
4.4.3 Resource Specific Recommended Cultural Conditions (CUL#).....	25
5. REFERENCES	28

APPENDICES

APPENDIX A – Public Project Maps

APPENDIX B – CONFIDENTIAL Resource Location Maps **NOT INCLUDED FOR PUBLIC DISTRIBUTION PURPOSES**

APPENDIX C – NWIC Correspondence

APPENDIX D – CONFIDENTIAL Cultural Resource Records **NOT INCLUDED FOR PUBLIC DISTRIBUTION PURPOSES**

LIST OF FIGURES

Figure 1 Southern most trail terminus at the intersection of Foster Avenue and Sunset Avenue, Arcata (Appendix A, Figure A-3, Segment 5).....	2
Figure 2 (Above) Historic photo of Camp Curtis on the Janes Farm (Photo courtesy of www.militarymuseums.org)	9
Figure 3 3 (Below) The “Old Janes Farm” residence on St. Louis Road; the house is the same as the one in Figure 2; the A&MRR runs behind the residence)	9
Figure 4 Morell-St.Louis Barn (Van Kirk 2006, CONFIDENTIAL Appendix D).....	10
Figure 5 Example of mortis-and-tenon joinery at the Morell-St.Louis Barn; no nails (Van Kirk 2006, CONFIDENTIAL Appendix D).....	11

Figure 6 Railroad corridor adjacent to the Arcata Manufacturing Company industrial yard (Appendix A, Figure A-3, Segment 5).....	12
Figure 7 Annie & Mary Railroad grade hardware along West End Road (Appendix A, Figure A-3, Segment 1).....	13
Figure 8 Detail of a switching point between tracks located in the Korblex mill complex (left); with an overview of the same location at right.....	18
Figure 9 Examples of railroad ties and tie plates and a turn-out switch arm. Both are items that may be purposefully re-used in the educational and interpretation aspects of the trail.....	27

LIST OF TABLES

Table 1 Table 1 Previous Recorded Resources within the SA	7
Table 2 Previous Cultural Resource Studies within the SA	14
Table 3 Supplementary Trail Reports	15
Table 5 Archaeological Survey Figures for the SA	22

LIST OF ABBREVIATED TERMS

A&M	Annie & Mary Trail
A&MRR	Arcata & Mad River Railroad; Annie & Mary Railroad
CEQA	California Environmental Quality Act
The City	The City of Arcata
CFR	Code of Federal Regulations
CHL	California Historical Landmark
CHRIS	California Historical Resources Information System
CRHR	California Register of Historical Resources
CUL#	Cultural Conditions
DCE	Deed on Conservation Easement
DZC	DZC Archaeology & Cultural Resource Management Consulting
GLO	General Land Office
HPE	Historic Preservation Element
LORS	Laws, Ordinances, Regulations, & Statutes
NCA	Neighborhood Conservation Area
NETR	National Environmental Title Research
NRHP	National Register of Historic Places
NWIC	Northwest Information Center
NWPRR	Northwest Pacific Railroad
PRC	Public Resource Code
SA	Study Area
SHN	SHN Engineers & Geologists, Inc.
TCR	Tribal Cultural Resource
USGS	United States Geological Survey

1. INTRODUCTION

1.1 CURRENT CONDITIONS STUDY PURPOSE

The Annie & Mary Trail is a proposed regional trail with three segments connecting the cities of Arcata and Blue Lake. This study addresses The Annie & Mary Trail Connectivity Project and represents the southernmost segment of the trail plan. The comprehensive trail plan proposes to follow the Northwest Pacific Railroad and Arcata & Mad River Railroad Company corridors connecting the two towns, with alternate alignments as needed based on geographic constraints. The Annie & Mary Trail is a collaborative effort among Humboldt County, City of Blue Lake, City of Arcata, Caltrans, Humboldt County Association of Governments (HCAOG), Blue Lake Rancheria, Redwood Community Action Agency, and Friends of the Annie & Mary Rail-Trail. Collectively this collaboration of agencies and organizations aims to develop a network of bicycle and pedestrian facilities between Arcata and Blue Lake.

The City of Arcata (The City) is the Lead Agency for this Project. The City and Trail People have partnered with DZC Archaeology to prepare an analysis of current conditions and constraints to project objectives with regard to the protection and incorporation of historical resources within and adjacent to this segment of the A&M Trail alignment.

This Study is limited to a review and analysis of existing confidential archaeological records and reports from the California Historical Resources Information System (CHRIS), prior Right-of-Way and feasibility studies, information derived from existing historical literature or maps, and persons having first-hand knowledge or a direct relationship with, the land and its cultural or traditional resources. This Study did not entail any archaeological survey, nor any ground disturbing activities.

This report was prepared by Dimitra Zalarvis-Chase, a Registered Professional Archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards in Precontact and Historic Archaeology. DZC is a cultural resource management and consulting firm with over 10 years of experience with projects throughout northern California. DZC conducts cultural resource studies in accordance with the Secretary of the Interior's standards and in compliance with all applicable federal, state, and local codes, acts, regulations, and orders relating to cultural resources, where applicable.

1.2 PROJECT LOCATION AND STUDY AREA (SA)

The Annie & Mary Trail Connectivity Project is located in northwestern California in the City of Arcata (Appendix A, Figure A-1). The 487-acre Study Area (SA) overlays parcels within the City limits and parcels in unincorporated areas. The legal location of the SA is Township 6 North, Range 1 East, and Sections 15, 16, 20, 21, 28, and 29 of the Arcata North 7.5-Minute United States Geological Survey Quadrangle, of the Humboldt Bay Meridian (Appendix A, Figure A-2).

When completed, it is estimated the 3.5 mile long proposed trail corridor within the SA will occupy approximately 10 acres. The substantially larger SA was chosen to allow the consideration of multiple design alternatives. This analysis is based around the preferred design at this time, which

Figure 1 Southern most trail terminus at the intersection of Foster Avenue and Sunset Avenue, Arcata (Appendix A, Figure A-3, Segment 5)



proposes to follow portions of the Northwest Pacific Railroad (NWP RR) and the Arcata & Mad River (A&MRR) railroad corridors. The preferred alignment would begin at the intersection of Sunset Avenue and Foster Avenue, proceeding north to one mile east of the intersection of Erickson Way and West End Road, and terminate at the Humboldt Bay Municipal Pump Station No. 1 on West End Road (Appendix A, Figure A-3).

1.3 DOCUMENT ORGANIZATION

This document is structured to inform the reader on applicable laws, ordinances, regulations, and statutes applicable to the analysis, summarize past archaeological survey and recordation of known cultural resources within the SA; characterize historical Native American consultation for previous projects in the SA, identify potential effects and concerns to cultural resources; and to present management and administrative options that comply with applicable laws and project goals.

Archaeological location information is confidential. General and public project maps are located in Appendix A. Maps illustrating specific cultural resource locations are included in CONFIDENTIAL Appendix B. Appendix C is correspondence from the Northwest Information

Center that is part of the California Historic Resources Inventory System (CHRIS). Cultural Resource Records are included in CONFIDENTIAL Appendix D.

CONFIDENTIAL Appendix B and CONFIDENTIAL Appendix D should be shared only on as-needed basis and in accordance with state and federal confidentiality laws regarding the locations of cultural resources.

2. REGULATORY SETTING

State and local legislation, ordinances, regulations, and statutes (LORS) govern the identification and treatment of cultural resources and inform the analysis of project related effects to those resources. This report is prepared for compliance with State and County LORS and the City of Arcata Historical Preservation Element.

2.1 CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

The Lead Agency for this project is the City of Arcata. CEQA requires a lead agency to determine whether a project may have a significant effect on historical resources (Section 21084.1). If it can be demonstrated that a project will cause damage to resources Eligible for or Listed in the California Register of Historic Resources (CRHR), Tribal Cultural Resources (TCRs) and other resources on local County or Local lists, or those determined by the lead agency to be significant. The lead agency may require reasonable efforts be made to permit any or all of the resources to be preserved in place or left in an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required (Section 21083.2[a], [b], and [c]).

Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- 1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
- 2) Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
- 3) Is directly associated with a scientifically recognized important prehistoric or historic event or person.

A historical resource is a resource listed in, or determined to be eligible for listing, in the CRHR (Section 21084.1), a resource included in a local register of historical resources (Section 15064.5[a][2]), or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (Section 15064.5[a][3]).

PRC Section 5024.1, Section 15064.5 of the CEQA Guidelines, and PRC Sections 21083.2 and 21084.1 were used as the basic guidelines for this cultural resources study. PRC Section 5024.1 requires an evaluation of historical resources to determine their eligibility for listing in the CRHR. The purpose of the register is to maintain listings of the state's historical resources and to indicate

which properties are to be protected from substantial adverse change. The criteria for listing resources on the CRHR were expressly developed to be in accordance with previously established criteria developed for listing in the National Register of Historic Places (NRHP), enumerated below.

According to PRC Section 5024.1(c) (1–4), a resource is considered historically significant if it (i) retains “substantial integrity,” and (ii) meets at least one of the following criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region or method of installation, or represents the work of an important creative individual, or possesses high artistic values;
4. Has yielded, or may be likely to yield, information important in prehistory or history.

Impacts to significant cultural resources that affect the characteristics of any resource that qualify it for the NRHP or adversely alter the significance of a resource listed on or eligible for listing in the CRHR are considered a significant effect on the environment. These effects could result from “physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired” (CEQA Guidelines, Section 15064.5 [b] [1], 2000). Material impairment is defined as demolition or alteration “in an adverse manner [of] those characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for inclusion in, the California Register...” (CEQA Guidelines Section 15064.5[b] [2] [A]).

2.1.1 ASSEMBLY BILL 52 (AB52) NATIVE AMERICAN CONSULTATION & CEQA

In 2016, CEQA established a consultation process with all California Native American Tribes, including both federally and non-Federally recognized Tribes that are historically connected and culturally affiliated with the project location. This Bill established the Tribal Cultural Resources (TCR) classification and requires consideration of Tribal Cultural Values in determination of project effects and mitigation, requires Tribal notice, and requires meaningful consultation.

In accordance with Public Resource Code (PRC) RC 21080.3.2(b), consultation ends when either both parties agree to mitigation measures, other agreements to avoid a significant effect on TCR's, or, when a party, acting in good faith and after reasonable effort concludes that mutual agreement cannot be reached.

2.2 COUNTY OF HUMBOLDT

Approved by the County in May of 2012, Section 10.6 of the General Plan, Cultural Resources of the Humboldt County Conservation and Open Space Element Chapter, provides general guidance for the protection of cultural and paleontological resources within the County. Section 10.6.3 outlines the goals and policies of the County:

Goals

CU-G1: Protection and Enhancement of Cultural Resources. Protected and enhanced significant cultural resources, providing heritage, historic, scientific, educational, social and economic values to benefit to present and future generations.

Policies

CU-P1: Identification and Protection. The potential for significant effects to cultural resources shall be identified during ministerial and discretionary permit review, assessed as to significance, and if found to be significant, protected from substantial adverse change.

CU-P2: Consultation. Native American Tribes (as defined), historical organizations, other interested parties, and applicable agencies shall be consulted during discretionary project review for the identification, and protection and mitigation of adverse effects to cultural resources. Consultation on ministerial permits shall be initiated if it has been determined the project may create a substantial adverse change in the significance of a cultural resource. At their request, Tribes shall be afforded the opportunity to review and provide comments to the County early in project review and planning (screening) about known or potential significant Native American cultural resources located in project areas within their respective tribal geographical area of concern.

CU-P3: Avoid Loss or Degradation. Projects located in areas known to have historic or prehistoric ruins, burial grounds, or archeological sites shall be conditioned and designed to avoid loss or substantial degradation of these resources, including standard provisions for post-review inadvertent discoveries of archaeological or Native American remains.

CU-P4: Findings Necessary for Loss or Destruction. Cultural resources shall not be knowingly destroyed or lost through a ministerial or discretionary action unless:

1. The site or resource has been found not to be of significant value after consultation by representatives of the cultural resources community and relevant experts; or
2. There is an overriding public benefit from the project, and compensating mitigation to offset the loss is made part of the project.

CU-P5: Mitigation. Mitigation measures shall be required for any permitted project or County action that would adversely affect significant cultural resources

The General Plan includes recommendations for implementation of these goals and policies:

1. Adopt procedures for review and approval of all City-permitted projects involving ground disturbance and all building and/or demolition permits that will affect buildings, structures, or objects “identified as historically significant” (City of Eureka 1997b:5-8).
2. Adopt preservation incentive programs, including the Mills Act, Historic Preservation Easement program, and Certified Local Government Program.

3. “Preparation, adoption, and implementation of a cultural resources ordinance that provides definitions and standards for identification and protection of cultural resources and provides penalties for their disturbance” (City of Eureka 1997b:5-8).
4. Preparation and updating of a citywide cultural resource database.

The General Plan also designates Neighborhood Conservation Areas (NCAs) within the city of Arcata as areas that are historically noteworthy where review is conducted to assure that new construction, modifications or alterations are harmonious with the existing character of the neighborhood.

2.3 CITY OF ARCATA HISTORICAL PRESERVATION ELEMENT

The City of Arcata General Plan (2010) includes a Historical Preservation Element (HPE) which includes a City of Arcata Historic Landmarks List and Neighborhood Conservation Areas, The Project is subject to compliance with the HPE. The Guiding Principles and Goals of the HPE are the following:

- A. Promote preservation of structures and sites that are representative of the various periods of the city's social and physical development.
- B. Preserve the historical character of the Plaza and the surrounding commercial district.
- C. Encourage owners of eligible structures to seek historic landmark status and to invest in restoration efforts.
- D. Conserve the many examples of early residential building styles found in the city's older neighborhoods, from Bayside to Arcata Heights.
- E. Assure that new construction and additions to existing historically-designated buildings maintain the character and livability of the historic neighborhoods.
- F. Promote interest in and appreciation of the value of Arcata's history and its heritage of historic buildings.
- G. Encourage tourism and economic development through historic resource preservation.
- H. Prevent destruction of archaeological and cultural resources and assure that any artifacts receive proper disposition.

3. METHODS

Research entailed the examination of multiple archival sources to obtain historical background and archaeological site type data. Historical and archival information was retrieved from the following repositories and agencies:

- The Northwest Information Center (NWIC) of the CHRIS at California State University, Sonoma
- The Blue Lake Museum
- The Blue Lake Rancheria
- Streamline Consulting
- Redwood Community Action Agency

- The City of Arcata
- SHN Consulting Engineers
- William Rich & Associates
- Caltrans District 1

Sections 3.1 and 3.2 summarize the data received and synthesized from all sources.

3.1 ARCHIVAL RESEARCH

A Record Search was conducted at the NWIC of the CHRIS at Sonoma State University on November 26, 2018. The search included only the initial SA for previously recorded archaeological sites and previous survey (Appendix A, Figure A-2).

The following documents were reviewed at the NWIC:

- National Register of Historic Places – Listed and Determined Eligible Properties (NRHP, 2012)
- California Register of Historical Resources (CRHR, 2012)
- California Points of Historical Interest (2012)
- California Inventory of Historic Resources (1976)
- California Historical Landmarks (2012)
- Handbook of North American Indians, Vol. 8, California (1970)
- Historic Spots in California (2002)

3.1.1 CULTURAL RESOURCES WITHIN THE SA

The record and literature search revealed ten cultural resources within the SA. Table 1 summarizes the resource type and indicates resource status as relevant to inclusion in a local, state, or national register of historic resources.

Table 1 Table 1 Previous Recorded Resources within the SA

Site Identifier	Resource Description; Author & Date	California Historical Resource Status Code	NRHP Status
1 California Historical Landmark No. 215	Historical Interpretive Marker for Camp Curtis; California Office of Historic Preservation	1CL – CRHR Listed; CHL No. 215	7 -Unevaluated
2 P-12-000815 California Historical Landmark No. 842	Historic Linear Feature; the Arcata & Mad River Railroad (J. Eidsness 1987)	CRHR Listed; CHL No. 842; and 5S2 – Local Property that is eligible for Local listing or designation	7 -Unevaluated

Site Identifier		Resource Description; Author & Date	California Historical Resource Status Code	NRHP Status
3	P-12-002988	Historic Building; Morrell-St. Louis House (S.Van Kirk 2006)	5S3 - Appears to be individually eligible for Local listing through field survey	6Z – Found Ineligible through survey evaluation
4	P-12-002989	Historic Building; Morrell-St. Louis Barn (S.Van Kirk 2006)	3CS - Appears eligible through survey evaluation for the CRHR and Local listing	3s -Appears eligible through survey evaluation
5	P-12-002990	Historic Building; Morrell-St. Louis Milking Parlor (S.Van Kirk 2006)	5S3 - Appears to be individually eligible for Local listing through field survey	6Z – Found Ineligible through survey evaluation
6	P-12-003590	Historic Building; Arcata Manufacturing Company - Warehouses #1 and #2; Other - Arcata Manufacturing Company Warehouse (W.Rich 2016)	6Z – Found Ineligible through survey evaluation	6Z – Found Ineligible through survey evaluation
7	P-12-003591	Historic Building; 2765 St. Louis Road, Arcata; Other - Flynn House (W.Rich 2016)	6Z – Found Ineligible through survey evaluation	6Z – Found Ineligible through survey evaluation
8	P-12-003592	Historic Building; 2905 St. Louis Road, Arcata; Other - Arcata Manufacturing Office (W.Rich 2016)	6Z – Found Ineligible through survey evaluation	6Z – Found Ineligible through survey evaluation
9	<i>Gerari</i> Site "L"	Ethnographic Wiyot Village Location (Loud 1918)	7 –Unevaluated & Unrecorded	7 –Unevaluated & Unrecorded
10	Northwest Pacific Railroad	Historic Linear Feature; unrecorded	7 –Unevaluated & Unrecorded	6y – Determined ineligible for the NR through the Section 106 Process

California Historical Landmark No. 215 Camp Curtis

Camp Curtis was designated a State Historical Landmark on June 20, 1935 (Figure2). The camp served as the headquarters of the Mountain Battalion from 1862 to 1865, but there are indications that it was active as early as 1858 and used as well as the base for the California Volunteer Infantry assisting in “protection of the white settlers” (Rich 2016). The marker for CHL No. 215 is posted at the end of L.K. Wood Blvd in Arcata, but does not accurately reflect the actual location of Camp Curtis. According to a report by Douglas (1985) the actual location of Camp Curtis is unknown. Research by D. Cardiff (2016), Caltrans District 1 Archaeologist, suggests the location of the former military camp to be in Arcata on the old Janes Farm, between St. Louis Road and the railroad alignment (Figure 3), which is adjacent to the planned trail alignment.



Figure 2 (Above) Historic photo of Camp Curtis on the Janes Farm (Photo courtesy of www.militarymuseums.org)

Figure 3 (Below) The "Old Janes Farm" residence on St. Louis Road; the house is the same as the one in Figure 2; the A&MRR runs behind the residence (Appendix A, Figure A-3, Segment 4)



California Historical Landmark No. 842; P-12-000815 Arcata & Mad River Railroad Segment

California Historical Landmark No. 842 (historical resource P-12-000815) is a segment of the Arcata Mad River Railroad. The railroad and its associated features are registered as California Historical Landmark No. 842 (1970), and listed on the California Register of Historic Resources. This resource is approximately 5 miles long and extends to Chartin Lane in the City of Blue Lake, however only 1.9 miles of the resource is in the SA. The DPR 523 form describes this feature as “a 5 mi portion of the Arcata & Mad River Railroad connecting the communities of Arcata and Blue Lake”; the line was formally abandoned in 1983 due to safety concerns. The recorded segment includes roughly 5 mi of intact railroad track on-grade, four wooden trestles at water crossings, and one steel bridge trestle crossing the Mad River. Field survey by Eidsness (1987) indicates that this feature is well maintained, retains a high integrity, and is eligible for the National Register of Historic Places. The planned trail alignment will directly coincide with and inhabit the ballast prism of the railroad.

P-12-002988, P-12-002989, and P-12-002990 Morell-St. Louis Farm Complex

Resources P-12-002988 (house), P-12-002989 (barn), and P-12-002990 (milking parlor) collectively represent the last remaining elements of the Morell-St. Louis farmstead. Originally built in 1906, the house retains excellent integrity and is a fine example of 1900-1910 architecture, illustrating the transition from 19th century Victorian architecture to 20th century modern. The barn predates the house by at least 30 years. Built with axe hewn boards and mortis and tenon joints it is directly associated with the house and early agricultural operations in the Arcata Bottom.

Figure 4 Morell-St.Louis Barn (Van Kirk 2006, CONFIDENTIAL Appendix D)



Although it has had one addition (1890s), it remains an excellent and sound example of early settler craftsmanship. The milking parlor was built around 1950 and retains its original elements of indoor plumbing and electrical wiring and association to the changing methods of dairying enacted mid-century. Through field survey by Van Kirk (2006) all three resources are recommended as a City of Arcata Historical Landmark; the barn is additionally recommended for the CRHR (Eidsness 2007).

P-12-003590 Arcata Manufacturing Company & P-12-003592 (Winslow Residence)

Resources P-12-003590 is a warehouse complex associated with the Arcata Manufacturing Company, at St. Louis Road on the west side of U.S. 101 in Arcata, California. Opened in 1948 by Elmer W. Spalding, this mill and manufacturing plant operated until 1959. Resource P-12-003590 is the warehouse building for this mill. Field survey by Rich (2016) indicates the building has undergone substantial modifications and does not retain substantial integrity. Resource P-12-003592 (Winslow) is described as a single family residence of 800 square feet. This building has been relocated to within the current property boundaries and has been substantially modified. Field survey by Rich (2016) indicates the structure lacks integrity with regard to materials, workmanship, design, feeling, and association and has been physically moved from its original location. Neither resource appears eligible for listing on the NRHP, the CRHR, nor as an Arcata Historical Landmark.

P-12-003591 (Flynn Residence)

Resource P-12-003591 (Flynn) is described as a 1,000 square foot single family residence built shortly after 1941 but before 1948, and has suffered extensive modifications. Resource P-12-003592 (Winslow) is also described as a single family residence of 800 square feet. This building has been relocated within the property boundaries and has been substantially modified. Field survey by Rich (2016) indicates P-12-003591 retains its original setting and location but lacks integrity with regard to materials, workmanship, design, feeling, association, and location. This resource does not appear eligible for listing on the NRHP, the CRHR, nor as an Arcata Historical Landmark.

Figure 5 Example of mortis-and-tenon joinery at the Morell-St.Louis Barn; no nails (Van Kirk 2006, CONFIDENTIAL Appendix D)

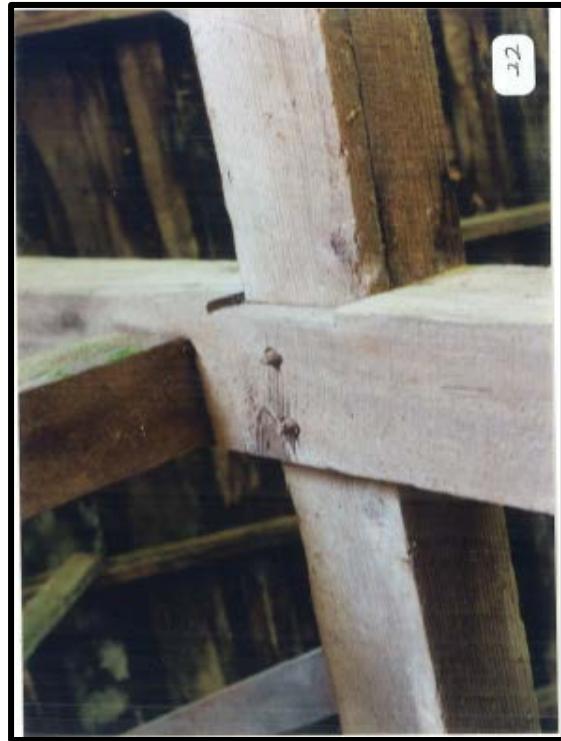




Figure 6 Railroad corridor adjacent to the Arcata Manufacturing Company industrial yard (Appendix A, Figure A-3, Segment 5)

Gerari “Site L”

The Wiyot village or camp known as Gerari is a precontact site noted as “Site L” in Loud’s 1918 publication on the Wiyot (Loud 1918). The first mention of Site L is on Loud’s list of village and campsite names that were given by Wiyot informants Tom Brown and Aleck Sam, who lived on Mad River, and by Dandy Bill, who resided at the end of south bay.

Site L is first mentioned in the section titled Places of Mythological Interest (Loud 1918:281). On this list Site L is known as *Gerari* (*gerari-dersiskawin*, *gerari-desiskadawin*), meaning “young unmarried woman”. The following is excerpted from Loud and describes the location and the meaning of the place-name:

“*Site L, geriiri-dersiska,dawin.*-At this place, located near a county bridge on Mad River, there is a big rock in the river bed, with peculiar natural markings across its top. There was a young unmarried woman, *Gerari*, who came from a faraway country, and who had a baby by a man living at this place. The child matured at a phenomenal rate. Then the young woman was homesick. The man tried to persuade her to stay, but she was obstinate; so he pressed her down into the river and made her stay there.” (Loud 1918; 283)

The second instance of Site L appears in the section titled Wiyot Geographical Names. The sub-listing is Wiyot villages or camps that are noted as either 1. Not visited [by Loud] or, 2. If visited,



**Figure 7 Annie & Mary Railroad grade hardware along West End Road
(Appendix A, Figure A-3, Segment 1)**

were found to contain no noticeable archaeological remains (Loud 1918:287). On this list, the site is identified as “yāhōtkete-ten”.

This site is also plotted on Loud’s map of Wiyot villages (Loud 1918: Plate 1). Accounting for scale, mapping nuances, and DZC internal records, Site L is mapped as intersecting the A&MRR in the vicinity of West End Road. This site is located in the proposed SA Extension that has not yet been subject to a record search at the NWIC or consultations with Wiyot people.

Northwest Pacific Railroad

The segment of the NWP RR which traverses the SA is unrecorded. Report S-48291 (Rich 2016) best describes the current information on a small portion of the NWP RR along the southern segment of St. Louis Road as a peripheral discussion to an adjacent subject parcel under study:

By 1896 the Eureka and Klamath River Railroad, later to become the Northwestern Pacific Railroad, passed along the eastern margin of the project area (Carranco 1988) [...] During the early 1940s, St. Louis Road was constructed, providing access and development of residential properties. The Arcata Manufacturing Company constructed a lumber mill with railroad siding in 1947 and homes had been built along the west side of St Louis Road. [...] Air photo analysis indicates that sawn lumber was allowed to air dry in the open before being loaded into box cars on the rail spur entering the mill from the south east corner. By 1952 a long rectangular 123 x 40 foot warehouse had been constructed between the south property line and the rail spur. This

building was originally had an of center gable (salt-box) like roof shape with open walls on the north side facing the railroad spur (Rich 2016:21-22).

3.1.2 CALTRANS BRIDGE INVENTORY

A review of the Caltrans Bridge Inventory found no bridges listed on the Local or State Bridge Inventory List within the SA.

3.1.3 PRIOR CULTURAL RESOURCE, FEASIBILITY, AND RIGHT-OF-WAY STUDIES WITHIN THE SA

The record and literature search revealed ten previous archaeological reports within and adjacent to the SA, one feasibility study, and one Right-of-Way study. Table 4 lists the cultural surveys and Table 5 lists the additional studies. Appendix A, Figure A-4, denotes previous survey associated with the following reports.

Table 2 Previous Cultural Resource Studies within the SA

NWIC Report Number or Identifier		Report Title, Author, & Year	Survey in the SA?	Resources in the SA?
1	S-000886	Humboldt Bay Wastewater Authority, Regional Water Pollution Control Board Facility, Archaeological Resource Analysis: Archaeological Reconnaissance of the Humboldt Bay Area (J. Benson, D. Fredrickson, & K.C. McGrew 1977)	No	None
2	S-007492	Archaeological Survey Report for the Proposed Woodland Heights Subdivision and Annexation, City of Arcata, California (B. Douglas 1985)	Yes	None
3	S-009574	An Initial Cultural Resources Study for the Glendale Wastewater Management System, Humboldt County, California (J.P. Eidsness 1987)	Yes	12-000815
4	S-009576	Archaeological Survey of Portions of West End Road and Warren Creek Road, Near Arcata, Humboldt County, California (J.P. Eidsness 1987)	Yes	12-000815
5	S-14209	An Archaeological Investigation of the Proposed Britt Apartments Development, Assessor's Parcel Numbers 505-012-04 and 505-011-04, Arcata, California (J. M. Roscoe 1991)	Yes	None
6	S-41918	A Cultural Resources Study of Assessor's Parcel Number 507-092-31, 507-071-04 and 505-012-01 the Cliff Sorensen Property, Located in Arcata, Humboldt County, California (E. Taylor & J. Roscoe 1988)	Yes	12-002988, 12-002989, 12-002990
7	S-42413	Initial Cultural Resources Study for Janes Creek Affordable Housing Project, (APN 507-511-003) in Arcata, Humboldt County, California (J.P. Eidsness 2007)	Yes	12-002988, 12-002989, 12-002990

NWIC Report Number or Identifier		Report Title, Author, & Year	Survey in the SA?	Resources in the SA?
8	S-43208	Historic Property Survey Report, proposed extension of Foster Avenue eastward to Sunset Avenue, City of Arcata, Project #965100 3 ENVR (J.P. Eidsness 2009)	Yes	None
9	S-48291	A Cultural Resources Investigation for the Village Student Housing Project, Located at 2905, 2725 and 2765 St. Louis Road, Arcata, Humboldt County, California (W.Rich & L.Mullen 2016)	Yes	12-003590, 12-003591, 12-003592
10	N/A	Camp Curtis. Compiled by Darrell Cardiff December 2016	No	CHL

Reports S-00886, S-009574, and S-009576 were produced in support of proposed expansions to wastewater treatment facilities between Arcata and Blue Lake. Both reports included archaeological survey in a small portion of the SA and discuss the recorded segment of the Arcata & Mad River Railroad in the northern portion of the SA. Both reports recommend that the line be preserved in-situ. Additionally, Report S-00886 contains a very thorough Wiyot ethnographic synthesis by David Fredrickson.

Reports S-007492, S-14209, S-042413, S-48291, and S-41918 were conducted in support of private housing developments including general residences, low-income housing, and student housing. All five reports documented survey within the SA

Report S-43208 was for a proposed roadway expansion and extension of Foster Avenue initiated by the City of Arcata. Survey for this report occurred within the SA.

Table 3 Supplementary Trail Reports

Report Title, Author, & Year	
1	Annie & Mary Rail-Trail Feasibility Study. Natural Resources Division of Redwood Community Action Agency (2003)
2	Preliminary Surveying Analysis of Railroad Right-of-Way; Arcata & Mad River Railroad Co. Arcata to Blue Lake

The feasibility study (RCAA 2003) examined issues surrounding the potential for this trail project resulting in an initial analysis of community interest, resources issues, land use, public access, jurisdiction, easements, trail construction options, possible alignments, and management constraints. The Right-of-Way study documents Deeds of Easement from Korplex to Blue Lake

and is an excellent example of chain of title research. The two reports together also provide a summary historic context of the A&MRR.

DZC typically incorporates historic parcel ownership and affiliated family surname research into a current conditions report. With respect to this kind of research, linear projects present unique challenges as they can span numerous landholdings and dozens of property owners. It is the opinion of DZC that a historical synopsis of every family or persons affiliated with the SA is beyond the scope of this report and that a detailed study of that nature is best reserved for the final trail alignment.

Additionally, prior to the request for a report from DZC and under the assumption that the RR corridor is the likely recipient of the final trail alignment, Streamline Consulting executed a detailed Railroad Right-of-Way study (Streamline 2014). This excellent research document indexes many original General Land Office patents, Deeds related to the physical location of the RR, Deed acquisition, ROW easement acquisition, and a time-line of major events shaping the RR corridor. The accompanying maps and scans of original Deeds form an excellent archival base from which to synthesize further historic contextual discussions. It must be noted that this study covers only Korblex to Blue Lake, and does not cover the portion of the trail from Korblex to the southern terminus.

3.1.4 HISTORICAL MAPS

The 1850 Map of California Counties (citation) depicts the SA as part of Trinity County. Maps of California counties (citation) places the SA in the County of Humboldt from 1855 through present day.

The General Land Office (GLO) map of 1855 reflects the initial Section survey of the town of Union and ephemeral bits of the surrounding topography; the A&MRR is not mapped as present. The GLO map of 1866 depicts only those lands identified as “Swamp and overflow” within the relevant Township and Range. The township is listed as “Union Township”.

A.J. Doolittles 1865 “Official Township Map of Humboldt C. Cal.” Places the SA in the Township of Union and depicts only the A&MRR wharf extending into Humboldt Bay and does not reflect the remainder of the RR line through Arcata which was present at that time. Camp Curtis (CHL 215) is shown as located in the southeast quarter of the northwest quarter of Section 21; the current historic marker for Camp Curtis is placed in southwest quarter of the northwest quarter of Section 21. The surrounding town is now listed as Arcata and is shown as a grid of streets and blocks.

Elliot’s 1881 Map of Humboldt County reflects the A&MRR as extending from the wharf in the south, northward along the east side of Union (Alliance Road/K Street area), then arcing west along the south bank of the Mad River. At approximately West End Road, the line arcs steeply south towards Jacoby Creek. Due to the scale of the map, it is unclear if this represents both the A&MRR and Isaac Minor Line, or just the A&MRR.

The Stanley Forbes Map of 1886 reflects the extended length of the A&MRR all the way to the town of Blue Lake; the southern curvature at the West End Road area, presumably Isaac Minor Line, is no longer mapped as a part of the A&MRR.

Lentell's 1914 Map of Humboldt County reflects an extensive railroad network. The NWP RR encircles Humboldt Bay from Fields Landing to Arcata and back down to Samoa, with a stem line running north through Arcata, crossing to the north bank of the Mad River, and then proceeding north up Lindsey Creek to support logging operations. The H.N. Ry RR line extends into the Arcata Bottom while the Isaac Minor and A&MRR lines run the south bank of the Mad River. The Minor line turns southward to serve Minors Quarry on Jacoby Creek while the A&MRR continues eastward with one spur line terminating at Korbel, and another continuing further south and east along Mad River to facilitate logging operations. And although a RR line is mapped that aligns with the proposed trail corridor (Segments 1 through 5 on Map A-3) ownership of the RR is not noted. The area of Alliance is shown as an outlying community to Arcata.

The Belcher Atlas of 1922 depicts three lines through the town of Arcata. The A&MRR maintains its alignment from the wharf, northward along Alliance where it intersects and is crossed by the H.N.RY RR and the Northwest Pacific RR. The A&MRR and the NWP RR diverge to the west and east, respectively encircling Sunset and Greenwood, coming together again at St. Louis Road where they continue to run parallel to West End Road. The A&MRR continue towards Warren Creek and onto Blue Lake. At a point between Giuntoli and Warren Creek, the line parallel to the A&MRR becomes the Isaac Minor RR, turning south at Warren Creek and terminating at Minors Granite Quarry on Jacoby Creek.

Utilizing the National Environmental Title Research (NETR) website, DZC reviewed the United States Geologic Survey (USGS) topographic maps of the LAMWPU. The USGS maps are hereby referred NETR (1942, 1948, 1953, 1966, 1969, 1974, 1988, 2012, and 2015).

From 1933 through 1948 the rail corridors and city limits are consistent with Belcher (1922). Alliance and Arcata are still distinctive areas and the Korblex area is depicted as marshlands. The 1953 topographic map reflects an increasing amount of structures in the St. Louis & Korblex areas, and the establishment of large mill ponds at Korblex. By 1960, mill ponds are present all throughout Korblex, the rail lines are mapped as present, and the city limits of Arcata have expanded to include Alliance and the St. Louis Road area. These last changes remain consistent through 1988 with no other major changes noted. By 2015, the mill ponds have been decommissioned and railroad lines are not represented at all within the SA.

3.1.5 PARCEL SPECIFIC AERIAL PHOTOGRAPHS

DZC also examined aerial photos of the LAMWPU, from NETR (1956, 1972, 1989, 2005, 2009, 2010, 2012, and 2014). Aerial photos from 1956 1972 reflect industrial developments at the south end of St. Louis Road, while agricultural lands are still present at the north end of St. Louis Road. The complex and extensive mill pond systems at Korblex is clearly visible with predominantly agricultural lands to the north. The railroad alignments are visible. Between 1952 and 1976 the Giuntoli-West End interchange was built, significantly expanding the width of the highway. The

scale and resolution make it difficult to confirm, but it appears that this expansion removed the NWPRR alignment west of the A&MRR alignment at Korblex. By 1989, the agricultural lands at West End Road have been developed as industrial in the southern portion and residential in the northern portion with more residences appearing towards the Pump Station and Warren Creek Road. By 2005 the mill ponds at Korblex are decommissioned and more residential buildings have consumed the agricultural lands along St. Louis Road. Rail alignments are visible from Arcata proper to St. Louis undercrossing, but not discernable from Korblex northward. No additional major changes are evident between 2005 and 2014.



Figure 8 Detail of a switching point between tracks located in the Korblex mill complex (left); with an overview of the same location at right

3.1.6 NATIVE AMERICAN CONTEXT

The SA lies in the ethnographic territory of the Wiyot people (Figure 1). Ethnographic accounts of the Wiyot are derived primarily from Loud (1918) and Kroeber (1925) with summaries by Heizer (1971) and Elsasser (1978). The interpretation, and thus the reliability, of these sources vary and the modern descendants of the Wiyot ancestral territory generally favor the work completed by Loud (1918).

The Wiyot resided in and around the area encompassing the lower Mad and lower Eel Rivers, and the estuaries of Humboldt Bay. According to Kroeber, the designation as "Wiyot" actually refers to the lower Eel River area, with proper names for the Humboldt Bay and lower Mad River districts noted as Wiki and Batawat, respectively (Kroeber 1976; 112). Kroeber defines the Wiyot territory as

...just south of Little River, at whose mouth stood the Yurok town of Metsko. On Mad River, near Blue Lake, near the forks, was still Wiyot. The north fork was without villages and is in doubt. The Wiyot owned at least half the lower portion...and the whole of the drainage has been assigned to them. From Mad River south to Eel River Wiyot territory extended to the first range inland. Jacoby, Freshwater, and Salmon Creeks, Elk River and Boynton Prairie were thus Wiyot....On Eel River the boundary came at Eagle Prairie near Rio Dell. Southwest of Eel River, the Bear River Mountains

separated the Wiyot from another Athabascan division, the Mattole. The spurs of this range reach the sea at Cape Fortunas, between Guthrie and Oils Creek (1976; 113).

Wiyot ancestral territory encompasses approximately 525 square miles comprising ocean dunes, riverine and estuarine lands, foothills, open prairies, and wooded mountains. The first systematic and most comprehensive to-date reconnaissance of the Wiyot area was conducted by L.L. Loud in 1913, followed by his publication on the Wiyot in 1918. Loud (1918) estimates the pre-contact aboriginal population to be between 800 to 1,000 Wiyot among the three districts. Geographically, the location is restrictive and considered culturally insular. The SA is located in the Batawat District.

Located at the southernmost terminus of the Pacific-Northwest cultures, the Wiyot shared many traits with their immediate neighbors. The Wiyot were bound to the north by the Yurok, to the northeast by the Chilula, the east by the Whilkut, to the southeast by the Nongatl and Sinkyone, and to the south by the Mattole (Kroeber Fig. 10; 1976).

The Wiyot exhibited clothing (Loud 1918), armor, weaponry (projectile points, single-backed bow), exchange systems of dentalium and resources (Hughes 1978), twined basketry (Kroeber 1908), food processing methods (mortar/hopper/pestle, mano/metate), and dwellings that incorporated elements common to their neighbors to the far north (Loud 1918, Kroeber 1976).

The Wiyot language is a member of the Ritwan group, and linguistically related to the Algonquin language of the Algic family (Golla 2011), which has roots in central and eastern North America (Gruhne 1988). For a complete discussion of structural composition and comparison see Haas (1967), Sapir (1913), and Voegelin (1942); for taxonomy see Haas (1964 and 1967), Teter (1964), and Michelson (1914); for sociolinguistics see Durbin (1967), Gruhn (1988), and Kinkade & Powell (1976); for dialects and language family see and Frachtenberg (1918), and Dixon & Kroeber (1913). The Wiyot language is currently undergoing a renewal with new research, documentation, and digital interactive language tools.

According to Loud (1918), there were no formal chiefdoms, but instead families of distinction, as pronounced by their wealth and standing in their districts. For further discussion on geography and migration in relationship to social structure and development see Rodgers et al (1990), Nichols (1997), Milke et al (1949), and Kroeber (1908).

The Wiyot religion incorporates dualities and contrasting creators (Gayton 1935), natural sprits of good and evil (Nomland 1931, Loud 1918), and the use of shaman to heal and to remove “pains”, both spiritual and physical (Sparkman et al 1908). Unique to the Wiyot and their Karuk, Yurok, Hupa, and Tolowa neighbors, is the World Renewal Ceremony, which incorporates the concepts of prehuman immortals, spoken formulas creating power, a fixed ceremonial calendar, geographic places of power, seasonal rites, and prescribed ceremony (Kroeber & Gifford 1949). For further discussion on cultural development, kinship structures, and burial practices, see Burton et al (1996), Fenenga (1968), Loud (1918), and Radcliffe-Brown (1935).

Like their neighbors, as different food resources became available throughout the year, the Wiyot broke into small family bands and traveled to various locations within their territory to fish, hunt, and gather edible and medicinal plants. Subsistence patterns tended to follow both seasonal and socially conscripted routines (Loud 1918). The Wiyot subsistence economy comprised vegetal resources including nuts (acorn, pine), seeds from wild grasses, roots, tubers, wild onions, parsley, and berries (huckleberry, strawberry); game including deer, elk, squirrels, and rabbit; waterfowl (ducks and geese); fish (especially salmon) taken with both nets and woven traps; shellfish, and sea mammals including sea lion and harbor seals (Loud 1918). These seasonal rounds took them to outlying areas where they established seasonal base camps and a series of radiating temporary camps and task-related activity stations.

The Wiyot bands today retain the traditional districts as represented by federally recognized indigenous governments at the Blue Lake Rancheria (Batawat District); the Wiyot Tribe of Table Bluff (Wiki District); and the Bear River Band of the Rohnerville Rancheria (Wiyot District). Tribal members are still present in the region and are manifesting a cultural resurgence within their cultural territory (Seidner 1999).

A review of previous cultural resource inventory reports indicates that Native American consultation and coordination for previous projects generally involved project notifications, requests from comments, informal interviews, and email chains and copies of notification letters. No records of conversations were included with one exception.

J. Eidsness (1997) engaged numerous interviewees in her efforts to locate *Gerari* (Site L) as recorded by Loud in 1918. Investigations by Eidsness determined that residents in the vicinity had not observed any “prehistoric or archaeological remains” and that tribal members could not confirm the existence of any contemporary ethnographic locations in the vicinity. Her list of interviewees included the following residents and tribal representatives:

- Sylvia Daniels, Chairperson Blue Lake Rancheria
- Cora Harris, Blue Lake Rancheria
- Alfred Moon, Blue Lake Rancheria
- Lee and Charlene Orteneir, Blue Lake Rancheria
- Joy Sundberg, Northwest Indian Protective Association
- Mary Lehmen (intersection of Warren Creek Road and West End Road)
- Janis Peteresen (Warren Creek Road)
- Diane Susmilch (Warren Creek Road)
- Merle Williams (West End Road)

4. EXISTING CONDITIONS SUMMARY

4.1 EVALUATION OF PRIOR CULTURAL RESOURCE AND SUPPLEMENTAL REPORTING

Portions of the SA are addressed in ten cultural resource reports and two non-archaeological reports.

The cultural reports were generated between 1974 and 2018 with a total of four reports prepared at the request of municipal agencies, five prepared on behalf of private developments, and one prepared as a personal research project.

All archaeological reports were prepared by professional archeologists. Of note is the 1977 publication by Benson, Fredrickson & K.C. McGrew that presents a detailed synthesis of the ethnographic context and precontact history of Wiyot ancestral territory. The remaining reports provide small insights into the historical development of northern Arcata, the A&MRR, the NWPRR, and the development of some of the industrial trends that shaped the region. Only a small portion of each of these reports relate directly to the SA. Factual summaries can be found for points of interest along the proposed corridor for the old Arcata Manufacturing Warehouse area and the vicinity of St. Louis Road (Janes Farm and Camp Curtis). The reader is referred to these documents as a source by which to understand some of the historic development of immediate area.

While the non-archaeological feasibility study provides a brief history of the A&MRR, the ROW study is notable in providing an in-depth and detailed record of Deed of Easements for the A&MRR that not only identifies the landowners involved in the deeding and the executors of the railroad, but also defines the temporal association of each segment of the A&MRR.

While these cultural and trail reports combined provide social and economic snapshots of the SA and information about specific cultural resources in and near the SA, a significant data gap remains regarding Camp Curtis, the A&MRR, and the Wiyot Village of *Gerari* (Site L).

Additional research may be needed in order to confirm the location of Camp Curtis adjacent to the proposed trail alignment (Cardiff 2016).

The historical accountings of the A&MRR are piecemeal, with no singular document comprehensively addressing the physical, social or economic aspects of this resource. A comprehensive report and DPR resource record would serve two purposes; first it would gather under one umbrella the full history of the A&MRR and second, it would inform the interpretive appurtenances along the A&M Trail. Such a report is possible and desirable.

Although limited documentation about the Wiyot village of *Gerari* (Site L), exists, it appears that no consultations or Tribal communications regarding this village have occurred since the late 1980s (Eidsness 1988). Therefore it is possible that new information resides with the local Tribes that are affiliated with Wiyot ancestral territory. Also the record search at the Northwest Information Center did not cover the area where the village may be located due to the extension of the SA by the City of Arcata midway through this study.

4.2 EVALUATION OF ARCHAEOLOGICAL SURVEY TO DATE

A review of the reports associated with the SA indicated that only a small portion of the SA has undergone archaeological survey. The SA is approximately 487 acres, of which only 53 acres (12 percent) has been subject to prior archaeological survey.

Table 4 Archaeological Survey Figures for the SA

Archaeological Survey Review Results	Totals
Acreage of the SA	487
Acreage of Survey within the SA	54
Approximate acreage of the SA with no previous archaeological survey	433

Additionally, it is the opinion of DZC that 74 percent of the survey that has been conducted in that 53 acres is outdated (more than 20 years old). The longevity of a survey is subjective and is relative to the rapidity of change associated with the area under discussion. The SA cannot be considered as subject to impacts by intense weather, as can be the case in a more dynamic and natural landscape, but the SA can be considered to be subject to rapid development-based landscape changes. As such, twenty years pushes the threshold of acceptable duration for a survey to remain valid in the SA, especially for the purpose of licensing and permitting.

For the purposes of project implementation, survey recommendations are best focused on the actual and final trail alignment that will be significantly smaller (approximately 10.6 acres) than the current alternatives combined.

Under the assumption that the proposed trail will exclusively follow the rail-line ROW, the following survey statement applies. Approximately 1.9 miles of the 3.5-mile trail alignment has been subject to prior archaeological survey. This survey occurred in 1987 and occurred only along the recorded portion of the A&MRR. Substantial cultural resources data gaps have been identified for the trail alignment, therefore, it is recommended that an archaeological inventory survey be conducted over the entirety of the final selected trail alignment.

4.3 SUMMARY OF ARCHAEOLOGICAL THEMES & INITIAL RESOURCE RISK ASSESSMENT

Ten cultural resources are present within the SA (8 sites, 2 linear features) and represent both precontact and historic eras. The sole precontact site recorded within the SA is associated with Wiyot ancestral territory and religious beliefs while the historic sites reflect economic development of agricultural, timber, and social expansion via the railroad.

Under the assumption that the proposed trail will remain within the railroad ROW, and the background discussion for each resource examined, the following statements can be applied with regard to the potential for effects to resources from proposed project activities:

4.3.1 RESOURCES NOT AT RISK FOR EFFECTS FROM PROJECT ACTIVITIES

The following resources are not at risk for direct or indirect effects from project activities (CONFIDENTIAL Appendix B, Figure B-2).

1. These resources are approximately 100 feet from the proposed trail alignment and are not at risk for direct or indirect effects from project activities
 - o P-12-002988 Morrell-St. Louis House
 - o P-12-002989 Morrell-St. Louis Barn
 - o P-12-002990 Morrell-St. Louis Milking Parlor
 - o P-12-003591 Flynn House
2. These resources are located approximately 420 feet away from the railroad corridor with a dirt lot and industrial warehouse yard situated between the two features. Therefore these structures are not at risk for direct or indirect effects from project activities.
 - o P-12-003590 Arcata Manufacturing Company
 - o P-12-003591 Flynn-Lininger House

4.3.2 RESOURCES NEEDING ADDITIONAL INFORMATION TO DETERMINE EFFECTS FROM PROJECT ACTIVITIES

The following resources are in or adjacent to the proposed trail alignment. Additional research, Tribal consultation and communication, and archeological survey are needed to determine potential effect of the proposed trail to these resources. (CONFIDENTIAL Appendix B, Figure B-2 and B-3).

1. Precontact Resource “Gerari - Loud Site L” –
 - o This prehistoric archaeological resource is mapped as intersecting the trail alignment on West End Road (Loud 1918) (Appendix B, Figure B-3).
 - o This resource has not been formally relocated, recorded, or evaluated
 - o As the actual location has not been ground truthed, the potential for project related effects is unknown.
2. California Historical Landmark No. 215 Camp Curtis
 - o This ill-defined historic resource is the former military outpost of Camp Curtis.
 - o Although the marker for this landmark is posted on L.K. Wood Drive, recent research by Caltrans Archaeologist Darrell Cardiff places the actual location on the old Janes Farm and near the trail alignment at St. Louis Road.
 - o This resource has not been formally located or recorded (Appendix B, Figure B-2).
 - o As the actual location has not been ground truthed, potential for project related effects is unknown.

3. California Historical Landmark No. 842; P-12-000815 Arcata & Mad River Railroad Segment
 - This historic linear feature covers 2.45 miles of the northern portion of the planned trail. A portion of this feature in the SA (1.9 miles) is recorded, surveyed, and is a Listed historic resource.
 - A smaller segment in the SA (.5 miles) is unrecorded, unsurveyed, and unevaluated (Appendix B, Figures B-2 & B-3)
 - The planned trail alignment will directly coincide and inhabit the ballast prism of the railroad.

4.3.3 RESOURCES AT RISK FOR LESS THAN SIGNIFICANT EFFECTS FROM PROJECT ACTIVITIES

The following resources are determined at-risk for direct, but less than significant, effects from project activities (CONFIDENTIAL Appendix B, Figure B-2).

1. Northwestern Pacific Railroad

- This linear feature is a segment of the Northwestern Pacific Railroad (NWP RR).
- It has been evaluated by Caltrans as Not Eligible for the CRHR nor for the NRHP for the portion stemming from Bucksport through the City of Arcata. Caltrans has received SHPO concurrence on this Determination of Eligibility.
- This. 9 mi. long feature in the southern portion of the SA remains unrecorded & unsurveyed.
- The planned trail alignment will directly coincide and inhabit the ballast prism of the railroad. Under the current preferred alignment, there is a likelihood of direct but less than significant effects to this resource.

4.4 RECOMMENDATIONS AND COMMENTS FOR PROJECT ADVANCEMENT

The following recommendations are aligned with applicable LORs and the City of Arcata Historic Element Policy.

4.4.1 7.1 CEQA - FINDING OF NO SIGNIFICANT ADVERSE EFFECT

Cultural resources are present within the SA. With the implementation of ALL of the Cultural Conditions (CUL#) in Section 4.4.3 there will be No Significant Adverse Effect to any cultural, tribal, or historic resources from this project.

4.4.2 CITY OF ARCATA HISTORICAL PRESERVATION ELEMENT

With implementation of the recommendations in Section 4.4.3 the Project will conform to the City of Arcata Historical Preservation Element Goals and Policies (H-1 through H-7).

Additionally, the removal of ties and rails from the A&MRR and NWP RR lines may be subject to review by the City of Arcata Historic Element Policy under the following sections:

City of Arcata – Chapter 5:2; Historic Element; Policy H-5 Controls on Demolitions of Structures

- H-5a Discretionary Review Required. No building within the City shall be demolished, in whole or in part, without review and approval by the Historical Landmarks Commission prior to issuance of a Demolition Permit. A Notice of Proposed Demolition shall be provided to all property owners within a 300-foot radius and to the Historical Sites Society of Arcata.
- H-5b Waiting period for demolition of designated landmarks. Any approved demolition permit for designated historical landmarks shall be automatically subject to a delay of 180 days before the building permit for demolition may be issued by the City.
- H-5c Deconstruction of older buildings. In those instances where demolition is authorized, it is encouraged that the buildings be deconstructed and that building components, fixtures, and materials be salvaged for future re-use.

4.4.3 RESOURCE SPECIFIC RECOMMENDED CULTURAL CONDITIONS (CUL#)

1. CUL-1: “Gerari -Louds Wiyot Village Site “L”

Concern: This site has not been formally located and is mapped as near the trail alignment. Ground disturbance in the approximate location may reveal Native American resource remnants.

Recommendations

- a. Tribal consultation with the Blue Lake Rancheria, Wiyot Tribe, and Bear River Band of the Rohnerville Rancheria is recommended, including project notification, solicitation of comments, discussion for collaborative approaches to survey and/or project implementations.
- b. Archaeological survey within the project alignment, near the supposed location, prior to any project implementation (*Arcata Historic Element Policy H-7b*).
- c. If the site is relocated and is at-risk for impacts from ground-disturbing project activities, the project should be re-designed to avoid impacts, or, an archaeological and/or Tribal monitor shall be present during *ground-disturbing* project activities (*Arcata Historic Element Policy H-7d*).

2. CUL-2: CHL No.215 (Camp Curtis)

Concern: This site has not been formally located. Ground disturbance in the approximate location may reveal historic resource remnants.

Recommendations:

- a. Archaeological survey within the project alignment, near the supposed location, should occur prior to any project implementation (*Arcata Historic Element Policy H-7b*).
- b. If the site is relocated and is at-risk for impacts from ground-disturbing project activities, the project should be re-designed to avoid impacts, or, an archaeological monitor should be present during *ground-disturbing* project activities (*Arcata Historic Element Policy H-7d*).

3. CUL-3: Northwestern Pacific RR (southern portion of the SA)

Concern: This is an unrecorded segment of a larger rail system. As elements of it will be dismantled for project development, the current state of the resource should be captured for the historic record.

Recommendations:

- a. Archaeological survey within the SA (*Arcata Historic Element Policy H-7b*)
- b. Recordation on DPR 523 forms (historic linear feature record) prior to dismantling (*Arcata Historic Element Policy H-5a*)

4. CUL-4: CHL No. 842 Arcata & Mad River RR (northern portion of the SA)

Concern: This linear resource has not been fully surveyed or recorded

Recommendations:

- a. Archaeological survey (*Arcata Historic Element Policy H-7b*)
- b. Recordation on DPR 523 forms (historic linear feature record) prior to dismantling (*Arcata Historic Element Policy H-5a*)
- c. Nomination to the City of Arcata Historical Landmark list (*Arcata Historic Element Policy H-1a*)

5. CUL-5: CHL No. 842 Arcata & Mad River RR (northern portion of the SA)

Concern: potential impacts to the remaining elements of historical significance (location, setting, feeling, design, and association)

Recommendations:

- a. Preserving design: The earthen grade should be left intact and improved *in-kind* to provide longevity and stability.
- b. Preserving Location & Setting: The trail should adhere to the original railroad alignment to preserve integrity of location and setting
- c. Preserving Feeling and Association: Railroad related appurtenances (switches, signposts, lights, etc.) should be left in-situ to preserve feeling and association; obvious exceptions are those impeding sound engineering or access issues related to Americans with Disabilities Act compliance.

6. CUL-6: Interpretation and Education

- a. Railroad related elements (ties, rails, spikes, switches) which are removed from the line to accommodate construction should be purposefully re-used for interpretive purposes. (*Arcata Historic Element Policy H-6*). Examples may include, but are not limited to, incorporating ties or rails into the structural elements such as fences, gates, directional or interpretive signage, or refashioning spikes as mile markers. To echo recommendations by William Rich (Rich 2016) regarding the Blue Lake to Glendale portion of the A&M Trail, design considerations should include

“incorporating steel rails into the surface, or stamping the surface with the resemblance of the top of railroad rails, with correct rail size and width”

Figure 9 Examples of railroad ties and tie plates (left and a turn-out switch arm (right). Both are items that may be purposefully re-used in the educational and interpretation aspects of the trail



5. REFERENCES

Carranco, L., and J.T. Labbe. 2003. Logging the Redwoods. Caxton Press. Caldwell Idaho

City of Arcata. 2010. Arcata General Plan: 2020 Amended October 2008 Historical Preservation Element 5.5; Design and Historical Preservation, Page 5-21

Dixon, and A.L. Kroeber. 1913. Linguistic Families in California. *American Anthropologist*, New Series, Vol. 15, No. 4 (Oct. – Dec., 1913), pp. 647-655

Durbin. 1967. Language. *Biennial review of Anthropology*, Vol. 5 (1967), pp. 209-251. Published by Bernard Siegal.

Eidsness, Janet. 1988. Archaeological Test Excavations of the CA-HUM-351-/H for the Community Park and Sports complex Project, City of Arcata, Humboldt County, California. Draft report on file at the Humboldt Room, HSU Library.

Frachtenberg. 1918. Comparative Studies in Takelman, Kalapua and Chinookan Lexicography, a Preliminary Paper. *International Journal of American Linguistics*, Vol 1, No. 2 (May, 1918), pp. 175-182. University of Chicago Press.

Fenenga, Franklin. 1968. Review of University of California Archaeological Survey, No. 62, University of California. Archaeological Research Facility, Department of Anthropology, University of California, Berkeley.

Golla, Victor. 2011. *California Indian Languages*. University of California Press, Ltd. Berkeley and Los Angeles, California

Gruhne, Ruth. 1988. *Man*, New Series, Vol. 23, No. 1 (Mar., 1988), pp. 77-100. Royal Anthropological Institute of Great Britain and Ireland

Haas, Mary. 1964. *Thumbnail Sketch of Wiyot*. Excerpt with commentary from *The Wiyot Language*

Haas, Mary. 1967. *Language and Taxonomy in Northwestern California*. *American Anthropologist*, New Series, Vol. 69, No. 3 & 4 (Jun. - Aug., 1967), pp. 358-362

Hughes, Richard. 1978. *Aspects of Prehistoric Wiyot Exchange and Rank*. *Journal of California Anthropology*, the 5(1). University of California, Davis.

Kinkade, M. Dale, and J.V. Powell. 1967. *World Archaeology*, Vol. 8, No. 1, Archaeology and Linguistics (Jun., 1976), pp. 83-100. Taylor and Francis Ltd.

Kroeber, Alfred L. 1908. *The Archaeology of California*. The Torch Press, Cedar Rapids, Iowa.

Kroeber, Alfred L. 1976. *Handbook of the Indians of California*. Reprinted. Dover Publications, New York. Originally published 1925, Bulletin No. 78 of the Bureau of American Ethnology, Smithsonian Institution, Washington D.C.

Kroeber, A.L., and E.W. Gifford. 1949. *World Renewal. A Cult System of Native Northwest California*. *Anthropological Records*, Vol. 2, No. 1, University of California Press, Berkeley and Los Angeles.

Michelson, Truman. 1974. *American Anthropologist*, New Series, Vol. 16., No. 2 Apr.-Jun., 1914), pp. 361-376. American Anthropological Association.

Milke, Wilhelm, C.D. Chretien, and A.L. Kroeber. 1949. *American Anthropologist*, New Series, Vol. 51, No. 2 (Apr. – Jun., 1949), pp. 237-252. American Anthropological Association.

Nomland, Gladys A. 1931. A Bear River Shamans's Curative Dance. *American Anthropologist*, New Series, Vol. 22, No. 1 (Jan.-Mar., 1931), pp 38-41. American Anthropological Association

NETR – National Environmental Title Research.

1942 United States Geologic Survey. Canyon Dam Quadrangle, 7.5 Minute. Online database. Accessed December 2018. <https://www.historicaerials.com>.

1948 United States Geologic Survey. Arcata North Quadrangle, 7.5 Minute. Online database. Accessed 2018. <https://www.historicaerials.com>.

1953 United States Geologic Survey. Arcata North Quadrangle, 7.5 Minute. Online database. Accessed 2018. <https://www.historicaerials.com>.

1966 United States Geologic Survey. Arcata North Quadrangle, 7.5 Minute. Online database. Accessed December 2018. <https://www.historicaerials.com>.

1969 United States Geologic Survey. Arcata North Quadrangle, 7.5 Minute. Online database. Accessed December 2018. <https://www.historicaerials.com>.

1974 United States Geologic Survey. Arcata North Quadrangle, 7.5 Minute. Online database. Accessed December 2018. <https://www.historicaerials.com>.

1988 United States Geologic Survey. Arcata North Quadrangle, 7.5 Minute. Online database. Accessed December 2018. <https://www.historicaerials.com>.

2012 United States Geologic Survey. Arcata North Quadrangle, 7.5 Minute. Online database. Accessed December 2018. <https://www.historicaerials.com>.

2015 United States Geologic Survey. Arcata North Quadrangle, 7.5 Minute. Online database. Accessed December 2018. <https://www.historicaerials.com>.

1956 Aerial photograph. Arcata, California. Online database. Accessed December 2018. <https://www.historicaerials.com>.

1972 Aerial photograph. Arcata, California. Online database. Accessed December 2018. <https://www.historicaerials.com>.

1989 Aerial photograph. Arcata, California. Online database. Accessed December 2018. <https://www.historicaerials.com>.

2005 Aerial photograph. Arcata, California. Online database. Accessed December 2018. <https://www.historicaerials.com>.

2009 Aerial photograph. Arcata, California. Online database. Accessed December 2018. <https://www.historicaerials.com>.

2010 Aerial photograph. Arcata, California. Online database. Accessed December 2018. <https://www.historicaerials.com>.

2012 Aerial photograph. Arcata, California. Online database. Accessed December 2018. <https://www.historicaerials.com>.

2014 Aerial photograph. Arcata, California. Online database. Accessed December 2018. <https://www.historicaerials.com>.

Radcliffe-Brown. 1935. *American Anthropologist*, New Series, Vol 37, No.3, Part 1 (Jul-Sep., 1935), pp. 530-535

RCAA (Redwood Community Action Agency). 2003. *Annie and Mary Rail-Trail Feasibility Study*.

Rodgers, Richard A., Larry D. Martin, and T. Dale Nicklas. 1990. Ice-Age Geography and the Distribution of Native North American Languages. *Journal of Biogeography*, Vol. 17, No. 2 (Mar., 1990), pp.131-143

Rich, William. 2016. A Cultural Resources Survey for the Proposed Annie and Mary Trail Project, Blue Lake, Humboldt County. On file at the Northwest Information Center of the California Historic Resource Information System, Sonoma State University, California.

Rich and L. Mullen 2016

Sapir, Edward.1913.Wiyot, Yurok, Algonkin Languages of California. *American Anthropologist*, Vol. 15, No. 4 (Oct-Dec., 1913), pp. 617-646. American Anthropological Association.

Seidner, Cheryll.1999.Price of Gold. Original Voices, online exhibit. Accessed October 24, 2015. Ink People Center for the Arts, Eureka, California.

Sparkman, P.S., A.L. Kroeber, Thomas Waterman, and Edward Sapir.1908.Notes on California Folklore. *The Journal of American Folklore*, Vol. 21, No. 80 (Jan.-Mar., 1908), pp. 35.42. American Folklore Society.

Streamline Consulting. 2014. Preliminary Surveying Analysis of Railroad Right-of-Way. Arcata and Mad River Railroad Co. Arcata to Blue Lake. January 28, 2014.

Appendix A

Public Project Maps



Figure A-1 Project Vicinity

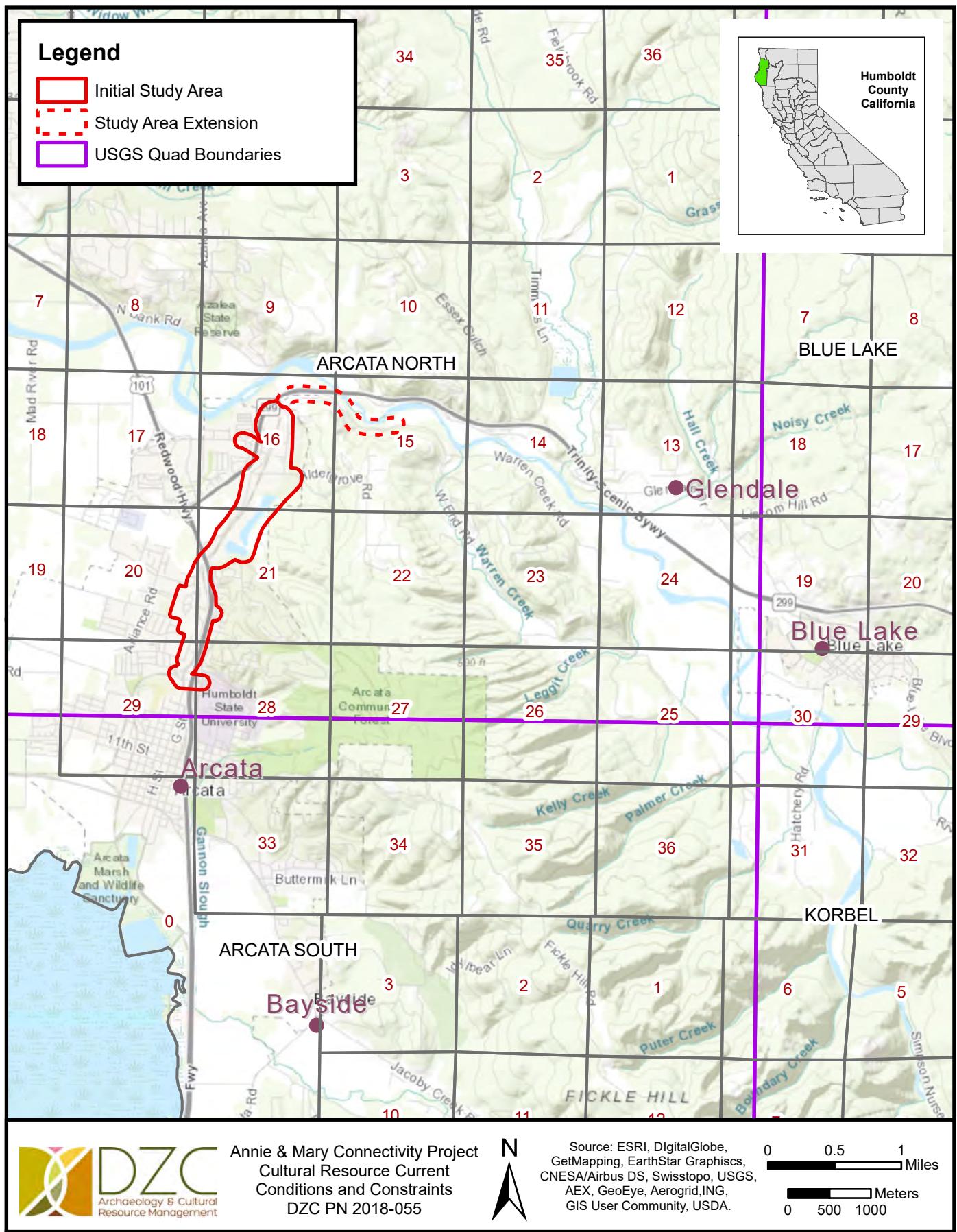


Figure A-2 Project Location & SA

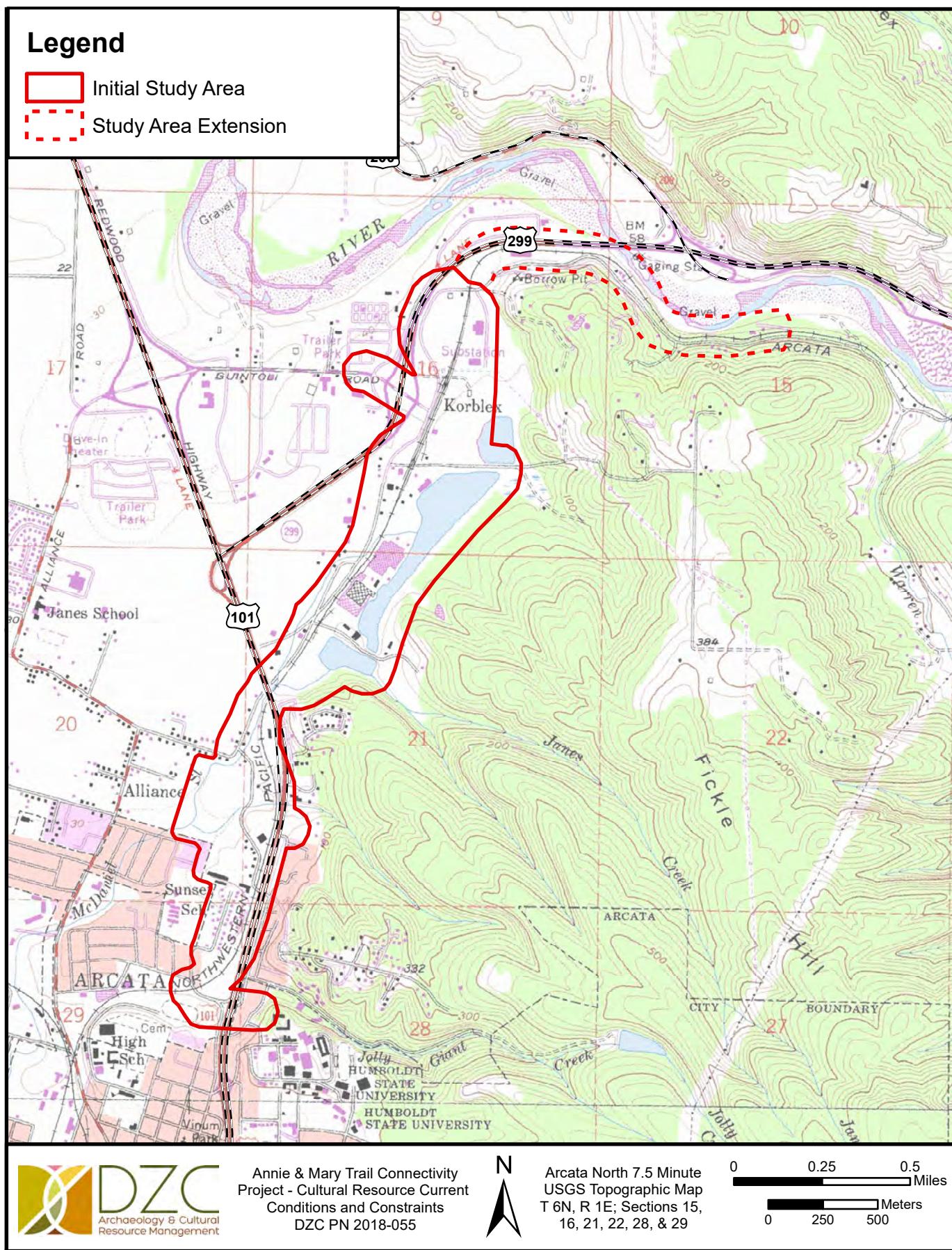


Figure A-3 Proposed Trail Alignment Detail

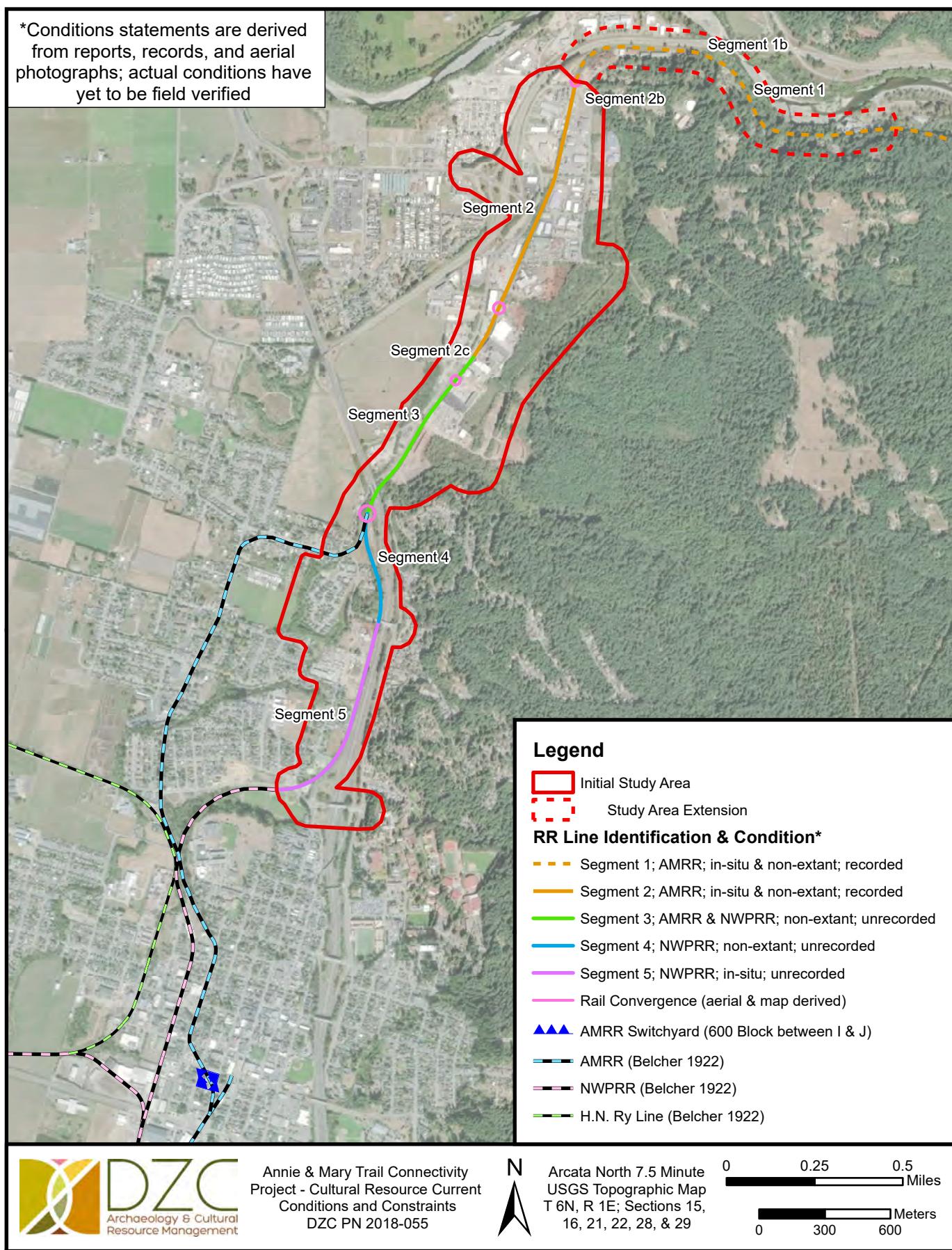
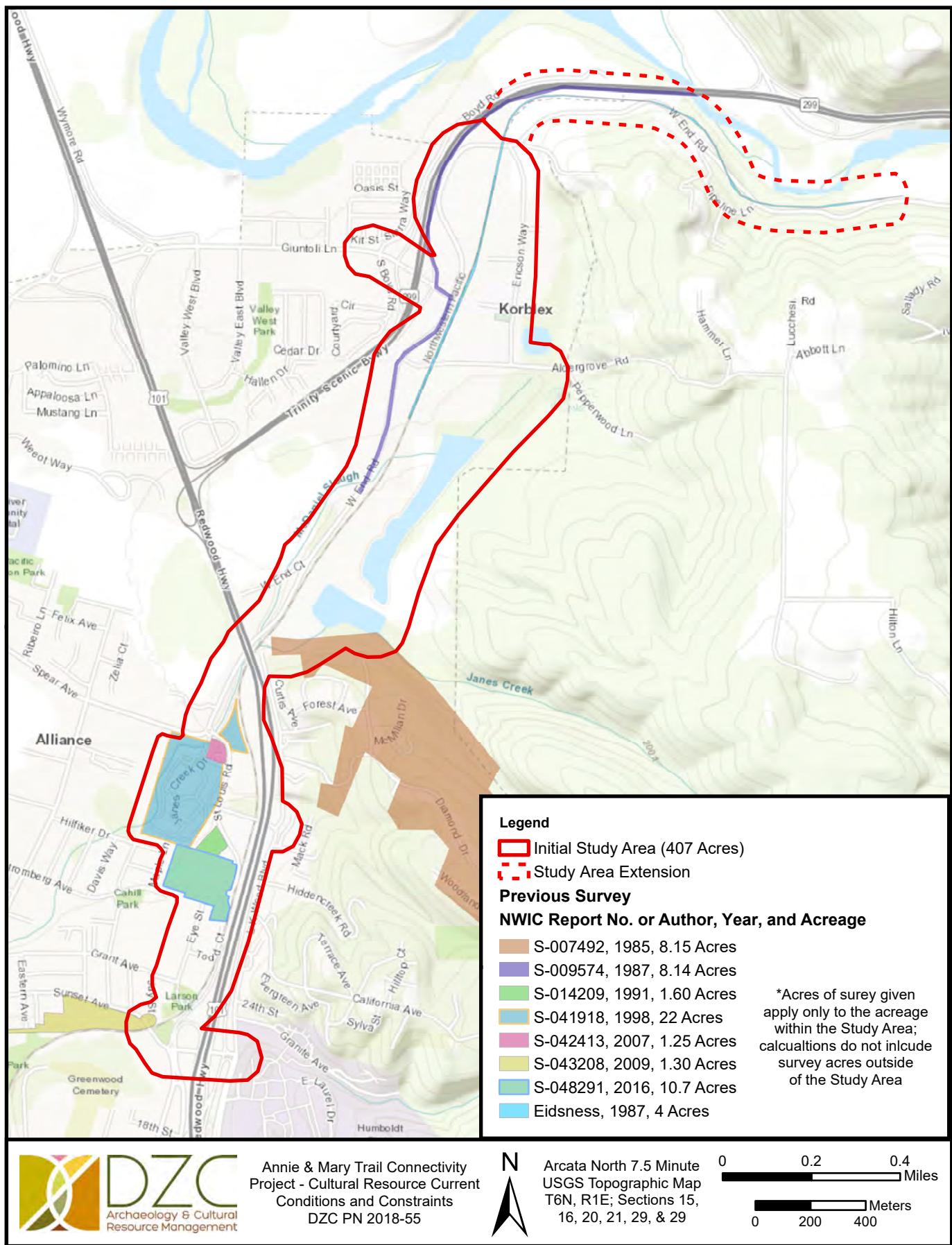


Figure A-4 Previous Survey



Appendix B, pages 51-56 have been taken out for Public Distribution purposes.

Appendix C

Northwest Information Center Correspondence



Report List

Annie & Mary Resource Report Results

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
S-000668		1976	Barbara Arnold and Jim Benson	N.I.C.P.A. Field Inspection Reports: St. John, Pedrotti, Bushmin, French, Miller, Hendricks, Honeydew Land Unit #1, Weber, Henning, Wilkerson, Fortuna Plywood, Reardon, & Kaufman Subdivisions; Yukonich, Medina, Ramey, Blue Lake Fire, Gallach Drainage Disposals; Mitchell Road Water System	N.I.C.P.A.	12-000368
S-000886		1977	James R. Benson, David A. Fredrickson, and Karen C. McGrew	Humboldt Bay Wastewater Authority, Regional Water Pollution Control Board Facility, Archaeological Resource Analysis: Archaeological Reconnaissance of the Humboldt Bay Area	Northwest Indian Cemetery Protective Association; Anthropology Department, California State College, Sonoma; Winzler & Kelly Laboratory	12-000068, 12-000069, 12-000070, 12-000071, 12-000074, 12-000082, 12-000086, 12-000103, 12-000105, 12-000135, 12-000137, 12-000151, 12-000159, 12-000365
S-000886a		1977	James R. Benson	An Archaeological Reconnaissance of the Proposed Wastewater Interceptor and Treatment Facilities	Northwest Indian Cemetery Protective Association, Inc.	
S-007492		1985	Barry Douglas	Archaeological Survey Report for the Proposed Woodland Heights Subdivision and Annexation, City of Arcata, California.		
S-009574		1987	Janet P. Eidsness	An Initial Cultural Resources Study for the Glendale Wastewater Management System, Humboldt County, California		12-000815, 12-000816, 12-000817
S-009576		1987	Janet P. Eidsness	Archaeological Survey of Portions of West End Road and Warren Creek Road, Near Arcata, Humboldt County, California		12-000815
S-014209		1991	James M. Roscoe	An Archaeological Investigation of the Proposed Britt Apartments Development, Assessor's Parcel Numbers 505-012-04 and 505-011-04, Arcata, California		
S-041918	Voided - NCoLC S-24153	1998	Eric Taylor and James Roscoe	A Cultural Resources Study of Assessor's Parcel Number 507-092-31, 507-071-04 and 505-012-01 the Cliff Sorensen Property, Located in Arcata, Humboldt County, California	Roscoe & Associates, Archaeological Consulting	12-002988, 12-002989, 12-002990
S-041918a		1998	Susie Van Kirk	The Morell-St. Louis Farmstead	Historic Resources Consultant	
S-042413	Voided - NCoLC S-24585	2007	Janet P. Eidsness	Initial Cultural Resources Study for James Creek Affordable Housing Project, (APN 507-511-003) in Arcata, Humboldt County, California	Heritage Resources Management	12-002988, 12-002989, 12-002990

Report List

Annie & Mary Resource Report Results

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
S-042413a		2006	Susie Van Kirk	Janes Creek Community Homes Affordable Housing Project, Arcata, California; Morrell-St. Louis Barn and House, Section 106 Compliance		12-003037, 12-003038
S-043208	Caltrans - #965100 3 ENVR	2009	Janet P. Eidsness	Historic Property Survey Report, proposed extension of Foster Avenue eastward to Sunset Avenue, City of Arcata, Project #965100 3 ENVR	Consultant in Heritage Resources Management, with Roscoe & Associates	
S-043208a		2008	Janet P. Eidsness	Historic Property Survey; Historical Resources Evaluation Report (HRER) for the Proposed Foster Avenue Extension Project, City of Arcata, Humboldt County, California	Consultant in Heritage Resources Management, with Roscoe & Associates	
S-043208b		2008	Janet P. Eidsness	Archaeological Survey Report (ASR) for Proposed Foster Avenue Extension Project, City of Arcata, Humboldt County, California	Consultant in Heritage Resources Management, with Roscoe & Associates	
S-048291		2016	William Rich and Lynette Mullen	A Cultural Resources Investigation for the Village Student Housing Project, Located at 2905, 2725 and 2765 St. Louis Road, Arcata, Humboldt County, California	William Rich and Associates	12-003590, 12-003591, 12-003592

Resource List

Annie & Mary Trail Resource Results

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-12-000815	CA-HUM-000827H	Resource Name - Arcata and Mad River Rail Road Company; CHL - SHL-0842 1CL; OTIS Resource Number - 640552; OHP Property Number - 090162; OHP Property Number - 005026; OHP PRN - 5525-00106-00007R; OHP PRN - 5525-0001-00003S; Other - Union Plank Walk, Rail Track, and Wharf Company; Other - GD-1H; Other - Arcata and Mad River Rail Road;	Structure, Site	Historic	AH07; AH15	1987 (Janet P. Eidsness, [none])	S-009574, S-009576, S-015201, S-016171, S-030202, S-040944, S-041990, S-048789
P-12-002988	FEMA_2015_0811_001	6Y	Building	Historic	HP02	2006 (Susie Van Kirk, Historic Resources Consultants)	S-041918, S-042413
P-12-002989	Resource Name - Morrell-St. Louis House		Building	Historic	HP04	2006 (Susie Van Kirk, Historic Resources Consultant)	S-041918, S-042413
P-12-002990	Resource Name - Morrell-St. Louis Barn		Building	Historic	HP04	2006 (Susie Van Kirk, Historic Resources Consultants)	S-041918, S-042413
P-12-003590	Resource Name - Morrell-St. Louis Louis Milk House		Building	Historic	HP08	2016 (William Rich, William Rich and Associates)	S-048291
P-12-003591	Resource Name - Arcata Manufacturing Company - Warehouses #1 and #2; Other - Arcata Manufacturing Company Warehouse Road, Arcata; Other - Flynn House	St. Louis	Building	Historic	HP02	2016 (William Rich, William Rich and Associates)	S-048291
P-12-003592	Resource Name - 2765 St. Louis Road, Arcata; Other - Arcata Manufacturing Office	St. Louis	Building	Historic	HP02	2016 (William Rich, William Rich and Associates)	S-048291

Appendix D, pages 63-111 have been taken out for Public Distribution purposes.

City of Arcata

Annie & Mary Trail Connectivity Project

Final

Project Report

APPENDIX E

February Outreach Results Summary

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Annie & Mary Trail Connectivity Project

February Outreach Results Summary

Community outreach for the Annie & Mary Trail Connectivity Project commenced in mid-January 2019 as the project team utilized media, social media and community networks to spread the word about upcoming input opportunities. The project team utilized the following outlets and methods to reach community members in the project area and the greater Humboldt Bay area:

- Visually appealing flyer in English and Spanish posted in dozens of community destinations (see Attachment 1, starting on page E-6)
- Recorded radio PSAs for local stations + radio interviews on KHUM and KHSU
- PSA postings on local community calendars
- Press release through the City of Arcata that was included in local print and online media outlets
- Project website
- Letters with optional questionnaire to adjacent property owners and businesses along the proposed trail route
- Direct outreach to partner organizations and stakeholders plus through partner's social media
- Emails and surveys to schools located in the project area
- In-person outreach and surveying in Valley West and along the Humboldt Bay Trail North
- Surveying at community events with the Friends of the Annie & Mary Rail Trail

After learning about the Annie & Mary Trail planning project, hundreds of community members provided their input, ideas and concerns through a variety of outlets including:

- Completing the community survey in both English and Spanish available online and in print (available January 15 – February 18, 2019)
- Attending the Kick-off Community Workshop on the evening of Monday, February 4th
- Completing the adjacent landowner questionnaire
- Having one-on-one conversations with project team staff
- Providing input to the project at a District-level English Learner Advisory Committee (DELAC) meeting at Pacific Union School

Community Survey Results

In total, 370 people completed the community survey (see Attachment 2, starting on page E-8), including 13 responses to the Spanish-language survey. 91% of survey respondents would be interested in utilizing a completed Annie & Mary Trail for fun/exercise/recreation. Survey respondents also indicated they would use the trail for shopping/errands (37%), neighborhood transportation (24%), and getting to and from work (19%). 90% of survey respondents voiced they would use the trail regularly (daily, a couple times a week, or a couple times a month). Survey respondents do currently travel through the project area for a myriad of reasons (e.g. to get to work, to recreate in the Arcata Community Forest, to cycle between Blue Lake and Arcata), but most voiced concern about traveling by foot or bike through this area. Survey respondents' safety concerns in the project area included both transportation safety and personal safety concerns – current roadways being too narrow with little separation from fast traffic and also a lack of lighting and a high prevalence of homeless individuals in the area. Survey respondents also desired the Annie & Mary Trail to be extended beyond city limits eastward towards Blue Lake and specifically to the Humboldt Bay Municipal Water District Park 1 located on the Mad River. While comments mostly on improving walking and biking safety and connectivity, at least eight respondents indicated the desire for equestrian use as the Arcata Community Forest and a popular horse pasture on Aldergrove Road are located in the project area. Survey results are further detailed in Attachment 2, starting on page E-8.

Adjacent Landowner Questionnaire

City of Arcata staff received five responses to the questionnaire sent to adjacent landowners and businesses. A couple landowners whose property could adjoin the future Annie & Mary Trail corridor were interested in fencing and other interventions to ensure privacy. An industrial business in Aldergrove was interested in ensuring the trail would not impact this important industrial and manufacturing hub. Several businesses in the Aldergrove area were excited about increased walking and biking connectivity to their business for their employees.

Bilingual Pacific Union School Parent Meeting

On February 4th, bilingual staff from RCAA attended Pacific Union School's DELAC (District-level English Learner Advisory Committee) monthly meeting to speak about the Annie and Mary Trail Connectivity Project and to complete surveys with the parents in attendance. Many families that attend Pacific Union live in the Valley West neighborhood, including many Latino families. The DELAC group is made up almost entirely by Spanish-speaking parents and some staff. The DELAC group advises the staff and principal on

programs/services for English learners. The connection to DELAC was made through Lucy Salazar, an Annie & Mary Trail Project Task Force member, who asked if project staff would be interested in attending the DELAC meeting to hear parents' concerns and ideas. There were about 20 parents in the audience and many more children in the kids' corner. About 15 of the parents took the survey. We provided the survey in English and in Spanish. Some parents took the survey in English to practice their English. Many parents had concerns about the Giuntoli overpasses over Highway 299 and Highway 101 (the later not in the current project area) and less concerns about the future trail itself. Many live in the Valley West area and they would like to feel comfortable letting their kids walk to school but do not feel it is currently a safe option for their kids. Overall, the parents are very excited about having a new nearby trail where they will feel safe walking with their kids. Many said that they would definitely use the new trail and are looking forward to it.

Kick-Off Community Workshop

The Kick-Off Community Workshop attracted over fifty people on a blustery, winter evening. The workshop including multiple methods for gathering people's ideas and concerns including:

- Open-ended questions on Open House displays
- One-on-one conversation with project team staff
- Comment cards
- Community surveys
- Small group mapping exercise

The workshop began with 20 minutes of informal conversation and feedback and perusing open house displays followed by a brief overview presentation of the project. Then participants were encouraged to join one of six small group tables for an exercise to map issues and challenges in the project area and design potential improvements. Large format aerial maps of the project area were included on each small group table as well as photos of example trail design features and bike/ped infrastructure. Participants worked with a table facilitator for 40 minutes discussing issues and opportunities, writing on the maps, and identifying their top concerns and ideas.

Feedback from the Open House questions and comment cards focused on the desire for a Rail to Trail facility separated from traffic, connectivity for walking, biking and equestrian use to the Arcata Ridge Trail, Park 1 on the Mad River as a future trail destination, improved lighting, and the need to improve the Giuntoli/Highway 299 overpass. Many people commented on potential trail design features such as lighting, bike racks, a separated pedestrian zone or gravel/natural surface part of the trail, and the need for connectivity to nearby neighborhoods.

The small group mapping exercise crowdsourced participants' local knowledge of the specific challenge areas in the project area for walking and biking and encouraged participants to think of what walking and biking improvements would best fit in the project area. Individual map comments are detailed in Attachment 3 starting on page E-34.

Common safety concerns included:

- There was much concern about the Sunset and Giuntoli overpasses. All groups were concerned that these are dangerous bridges to cross as a cyclist and a pedestrian.
- Another safety concern that was common amongst all the groups was the Sunset Avenue and L K Wood intersection.
- West End Road was another big concern. Many wrote down that it is a difficult road to bike on because of narrow shoulders, large potholes, blind curves, large trucks, no lighting, and speeders who make it even more dangerous.
- Residents with adjacent properties to the potential trail are concerned about privacy and safety. Many suggested a solid fence will help with both of these concerns. Fencing along industrial zone or routing the trail away from industrial businesses was also suggested. Property owners want continued outreach throughout the project.
- Many comments suggested that the trail should have right of way at intersections with roads for safety.
- Many groups recommended to install pedestrian-scale lighting and call boxes along the trail to make it feel safer.
- Many comments mentioned concerns about encampments and homeless people along the railroad/trail. Reducing vegetation and increasing sight distance was a suggestion that could help this. People would like to see patrolling and removal/cleaning of encampments.
- Most groups suggested pedestrian-activated flashing beacons at crosswalks where trail crosses a road.

Opportunities and trail design features suggested:

- Ensure connections from the trail to Valley West neighborhoods, St. Louis Rd, L K Wood, Todd Ct, Frank Martin Ct, Ericson Ct
- Create safe connections to nearby schools and family-friendly recreational facilities.
- The parking is too limited at Larson Park for it to be a trailhead was a concern amongst some of the groups.
- Several groups suggest to extend the trail to the Humboldt Bay Municipal Water District Park 1 which has access to the Mad River
- Trail mile markers were a popular idea
- Many suggested rail to trail wherever possible.
- A few people suggested building micro parks under St. Louis Rd

- Install secure bike lockers and bike racks at popular trailheads.
- Many suggested to connect the trail to future development in the Happy Valley area
- Paint green bike lanes and a separate lane for pedestrians.
- Build ramps for wheelchair access at all trailheads.
- Many suggested to have a mix of surfaces on the trail, not just asphalt. Perhaps have gravel/natural path along the trail.
- Many want to see art along the trail and/or gateway art.
- The comments also recommended to have educational signage along the trail including interpretive signage about the historic Annie & Mary Rail line.
- Keep equestrians in mind during the planning process.
- Limit lighting near wetlands to reduce impact to wildlife.
- Provide bike education to the community and PSA's about the rights of cyclists.
- There needs to be dog stations, garbage cans, water fountains, etc along the trail

ATTACHMENT 1: Workshop flyers page E-6

ATTACHMENT 2: Community Survey Input page E-8

ATTACHMENT 3: Workshop Comments on Project Area Maps page E-34

ATTACHMENT 4: Workshop Photos page E-43

ATTACHMENT 1: Workshop flyers



The flyer features a light blue background with decorative black scrollwork in the corners. At the top, the title "Arcata Annie & Mary Trail" is displayed in a large, bold, serif font. Below the title, a message from the City of Arcata invites input to create a vision for the Annie & Mary Trail and improve walking and biking connections through north Arcata. The middle section contains two ovals: one for a community workshop and one for survey information. The workshop oval is light blue and contains text about the event: "Share your ideas at a Community Workshop" on Monday, Feb. 4th 6 - 8 PM at the D Street Community Center, 1301 D Street Arcata. The survey oval is light blue and contains text: "Complete a survey and get more info at: <https://tinyurl.com/ArcataA-M>". To the right of the ovals is a photograph of a paved trail with people walking and a person riding a bicycle. At the bottom, there are logos for the City of Arcata, SHN Engineering & Geologists, Redwood Community Action Agency, and TrailPeople Landscape Architects and Planners.

Arcata Annie & Mary Trail

The City of Arcata invites YOUR input to create a vision for the Annie & Mary Trail and improve walking and biking connections through north Arcata!

Share your ideas at a
Community Workshop

Monday, Feb. 4th 6 - 8 PM
D Street Community Center
1301 D Street Arcata

Complete a survey
and get more info at:
<https://tinyurl.com/ArcataA-M>



City of Arcata
Engineering & Geologists

SHN
Engineering & Geologists

redwood community action agency

TrailPeople
Landscape Architects and Planners

Arcata Annie & Mary Trail

¡La ciudad de Arcata invita la aportación de USTED sobre el Annie & Mary Trail para mejorar las conexiones para pasear a pie y en bicicleta por el norte de Arcata!

Comparte tus ideas en el Taller Comunitario

Lunes, El 4 de Febrero 6 -8 PM
Centro Comunitario en la Calle
1301 D Street Arcata

Completa una Encuesta:
y para mas información:
<https://tinyurl.com/ArcataA-M>



ATTACHMENT 2: Community survey input



Arcata Annie & Mary Trail Connectivity Project Community Survey

Please help the City of Arcata plan the multiuse Annie and Mary trail in Arcata. The trail will connect the Sunset Avenue/ Larson Park area via the railroad corridor and West End Road to the Aldergrove Industrial Park, Valley West, and eventually Blue Lake. Your comments on this short survey will be used to guide the planning and design options for the project, which is funded by the Caltrans Sustainable Communities Program. A map of the project area is attached for you to review as you fill out the survey.

1) Why do you/ your family travel along West End Road, over the Sunset Avenue or Giuntoli overpasses, or to Valley West or the Aldergrove Industrial Park? Please check all that apply:

- I live in the area described.
- I attend/take my K-12 grade child(ren) to school in the area described.
- I travel in the area to go to work.
- I travel in the area to go to HSU.
- I visit parks, trails and recreation facilities in the area.
- I travel in the area to do my shopping/ visit stores.
- Other (work/recreation/etc) – Please specify _____

2) How frequently do you walk (whether for commuting or recreation) or jog/ run in the project area?

Daily Couple of times a week Couple of times a month Rarely Never

If so, to where? (optional)

3) How frequently do you bike, scooter, skate, or other non-motorized mode of transport (whether for commuting or recreation) in the project area?

Daily Couple of times a week Couple of times a month Rarely Never

If so, to where? (optional)

4) How frequently do you drive in the project area?

Daily Couple of times a week Couple of times a month Rarely Never

If so, to where? (optional)

5) If you do not regularly walk, bike or roll in the project area, why is that?

- I do not feel safe (list reason) _____
- Distance is too great/takes too long
- I have other family transportation needs
- Weather can be unpredictable
- I do not travel frequently to north Arcata

6) If Arcata's section of the Annie & Mary Trail were completed with links from the Sunset Avenue/ Larson Park area to, West End Road, Valley West and Aldergrove Industrial Park, in what ways do you estimate that you would use it?

- I would use the trail for neighborhood transportation in the vicinity of my home.
- I would bike, walk or roll on the trail for fun/exercise/recreation.

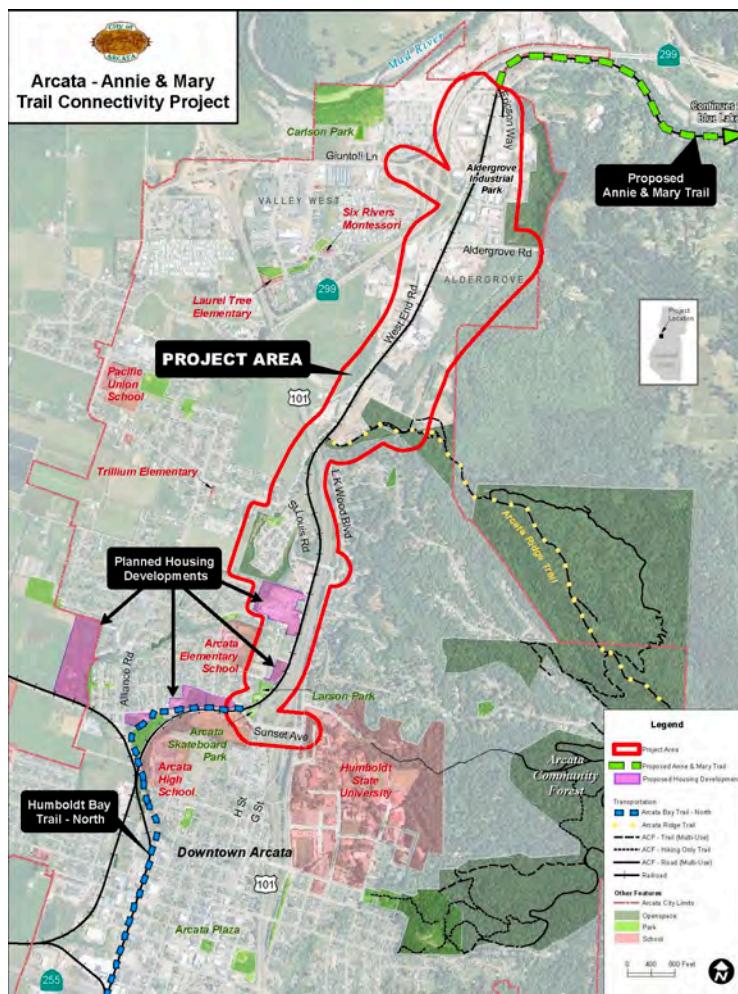
- I would take my K-12 grade child(ren) to school via the trail/ I would go to and from my K-12 school via the trail.
- I would use the trail to travel to/ from work.
- I would use the trail to travel to/ from HSU.
- I would use the trail to travel to/ from recreational facilities or adjoining parks/ open spaces.
- I would use the trail to travel in the area to do my shopping/ visit stores.
- Other (work/recreation/as a tourist, etc) – Please specify _____

7) If Arcata's section of the Annie & Mary Trail were completed with links from the Sunset Avenue/ Larson Park area to, West End Road, Valley West and Aldergrove Industrial Park, how often do you estimate that you would use the trail?

Daily Couple of times a week Couple of times a month Rarely Never

8) Do you have any additional comments about the proposed Annie & Mary Trail or transportation safety concerns in the project area?

The Project Team of the City of Arcata, Redwood Community Action Agency, TrailPeople and SHN greatly value your input provided in this survey, and invite your participation in all upcoming outreach events! Please visit <http://www.cityofarcata.org/831/Annie-Mary-Trail-Connectivity-Project> for additional event notices and project information. A community workshop will be held on Monday, February 4 from 6:00 to 8:00 p.m. at the D Street Community Center to focus on understanding current challenges and opportunities in the project area.



Encuesta Sobre el Proyecto Comunitario de Conectividad Para el Annie & Mary Trail [Sendero de Annie y Mary] de Arcata

Favor de ayudar a que la Ciudad de Arcata planee el Annie & Mary Trail de uso múltiple en Arcata. El sendero conectaría el área de Sunset Avenue/Larson Park por la línea de ferrocarril y West End Road al Aldergrove Industrial Park [Zona Industrial de Aldergrove], Valley West, y finalmente a Blue Lake. Sus comentarios en esta breve encuesta se usarán para guiar las opciones de planificación y diseño del proyecto, que está solventado por Caltrans Sustainable Communities Program [Programa de Caltrans Para Comunidades Sostenibles]. Un mapa del área del proyecto se adjunta para que Usted pueda revisar al llenar la encuesta.

1) ¿Por qué viaja Usted/su familia por West End Road, cruzando por los pasos elevados de Sunset Avenue o Giuntoli, o hasta Valley West o Aldergrove Industrial Park? Favor de indicar todos que se aplican:

- Vivo en el área descrita.
- Asisto/llevo a mi(s) hijo(s) del grado Kinder hasta 12 a la escuela en el área descrita.
- Viajo en el área para ir al trabajo.
- Viajo en el área para ir a HSU.
- Visito parques, senderos, y facilidades de recreo en el área.
- Viajo en el área para ir de compras/visitar tiendas.
- Otro (trabajar/recreo/etcétera) – Favor de especificar:

2) ¿Cada cuándo pasea Usted a pie, caminando o corriendo (o para ir/volver del trabajo o recreo) en el área del proyecto?

Diario Unas veces a la semana Unas veces al mes Raras veces Nunca

Si sí, ¿adónde? [opcional]

3) ¿Cada cuándo pasea Usted en bicicleta o scooter/ patineta (o para ir/volver del trabajo o recreo) en el área del proyecto?

Diario Unas veces a la semana Unas veces al mes Raras veces Nunca

Si sí, ¿adónde? [opcional]

4) ¿Cada cuándo maneja Usted en el área del proyecto?

Diario Unas veces a la semana Unas veces al mes Raras veces Nunca

Si sí, ¿adónde? [opcional]

5) Si Usted no pase consistentemente a pie ni en bici por el área del proyecto, ¿por qué no?

- No me siento seguro [indica razón]_____
- Demasiado lejos/cuesta demasiado tiempo
- Tengo otras necesidades de transporte familiar
- Tiempo puede ser imprevisible
- No viajo frecuentemente al norte de Arcata

6) Si la sección del Annie & Mary Trail en Arcata se cumpliera con enlaces del área de Sunset Avenue/Larson Park hasta West End Road, Valley West, y Aldergrove Industrial Park, ¿cuáles son las maneras en que Usted cree que lo usaría?

APPENDIX Earía el sendero como transporte por la vecindario cerca de mi casa. **PAGE E-11**

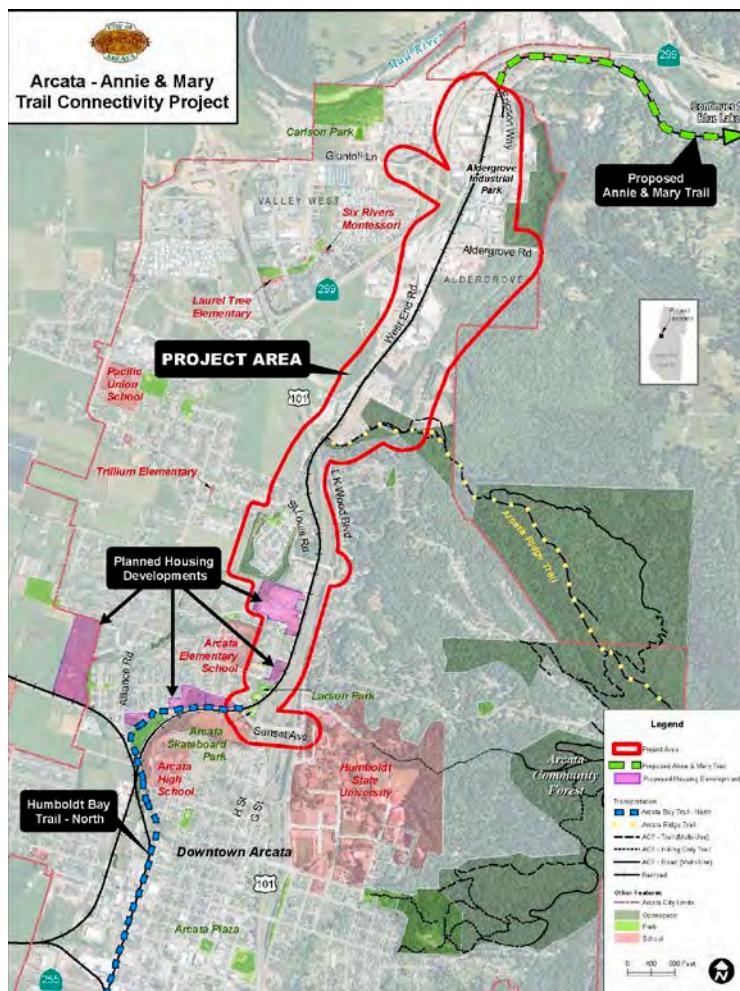
- ◊ Yo pasearía en bici, a pie, o por ruedas en el sendero como diversión/ejercicio/recreo.
- ◊ Llevaría a mi hijo (s) de grado K-12 a la escuela a través del sendero / Iría a mi escuela K-12 desde y hacia el sendero.
- ◊ Yo usaría el camino para viajar a / desde el trabajo.
- ◊ Yo usaría el sendero para viajar a / desde HSU.
- ◊ Yo usaría el sendero para viajar hacia / desde instalaciones recreativas o parques / espacios abiertos contiguos.
- ◊ Yo usaría el sendero para viajar en el área para hacer mis compras / visitar tiendas.
- ◊ Otro (trabajo / recreación / como turista, etc.) - Especifique _____

7) Si la sección del Annie & Mary Trail en Arcata se cumpliera con enlaces del área de Sunset Avenue/Larson Park hasta West End Road, Valley West, y Aldergrove Industrial Park, ¿con qué frecuencia estima que usaría el sendero?

Diario Unas veces a la semana Unas veces al mes Raras veces Nunca

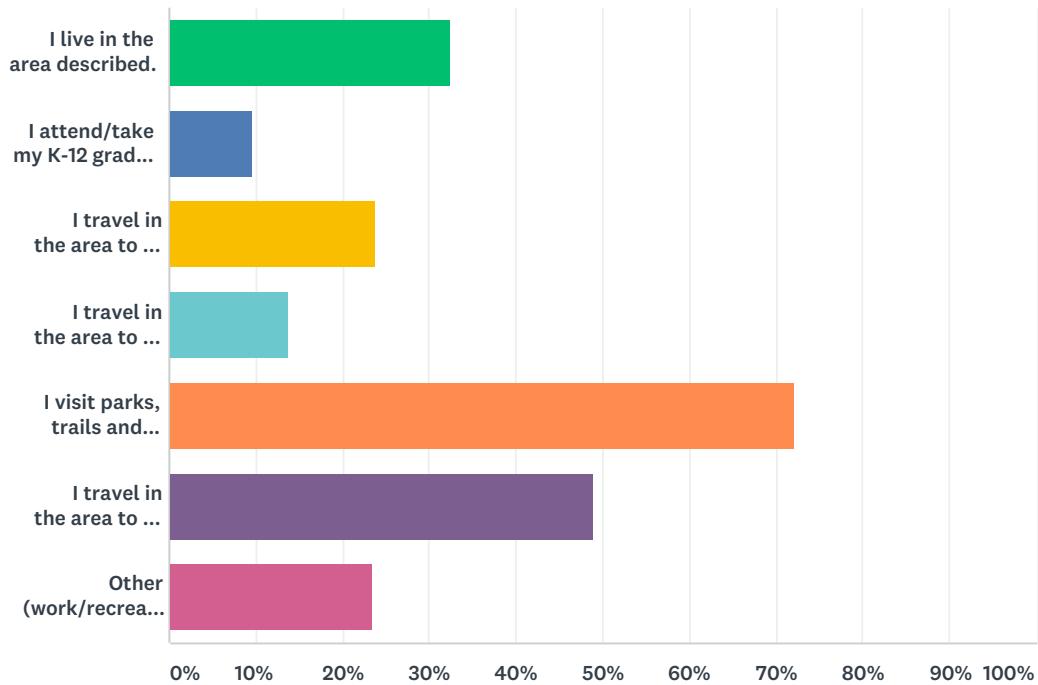
8) ¿Tiene más comentarios sobre este camino o sobre problemas de seguridad en el transporte en el área del proyecto?

El Equipo de Proyecto de la Ciudad de Arcata, Redwood Community Action Agency, TrailPeople, y SHN valoran enormemente su aportación en esta encuesta e invitan a participar en todos los próximos eventos de divulgación. Asista a un taller Lunes el 4 de Febrero desde las 6:00 hasta las 8:00 p.m. en el D Street Community Center [Centro Comunitario en la Calle D]. Si Usted no puede venir en persona al evento, obtener más información en <http://www.cityofarcata.org/831/Annie-Mary-Trail-Connectivity-Project>.



Q1 Why do you/ your family travel along West End Road, over the Sunset Avenue or Giuntoli overpasses, or to Valley West or the Aldergrove Industrial Park? Please select all that apply:

Answered: 364 Skipped: 6



ANSWER CHOICES	RESPONSES
I live in the area described.	32.42% 118
I attend/take my K-12 grade child(ren) to school in the area described.	9.62% 35
I travel in the area to go to work.	23.90% 87
I travel in the area to go to HSU.	13.74% 50
I visit parks, trails and recreation facilities in the area.	72.25% 263
I travel in the area to do my shopping/ visit stores.	48.90% 178
Other (work/recreation/etc) – Please specify	23.35% 85
Total Respondents: 364	

Question 1 - "Other" responses:

For recreation

To bike West End Road between Arcata and Blue Lake

To get home, to work or for errands

For horseback riding in Arcata Community Forest and to horse pasture off Aldergrove

For dog walking

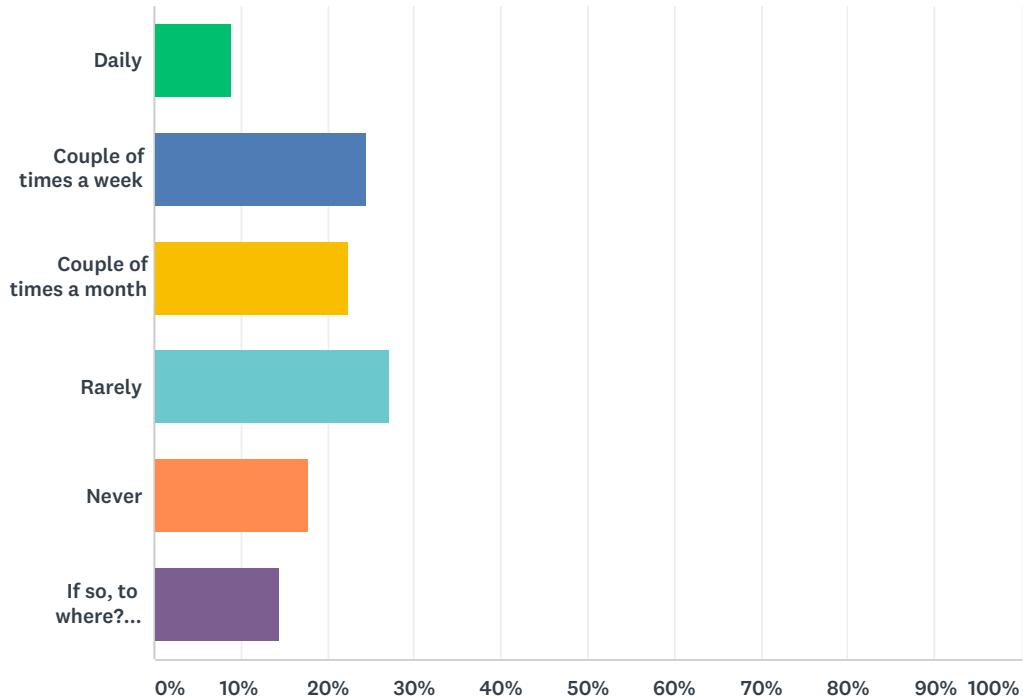
To get to Arcata Headstart

To walk to work

To visit friends

Q2 How frequently do you walk (whether for commuting or recreation) or jog/run in the project area?

Answered: 367 Skipped: 3



ANSWER CHOICES	RESPONSES	
Daily	8.99%	33
Couple of times a week	24.52%	90
Couple of times a month	22.34%	82
Rarely	27.25%	100
Never	17.71%	65
If so, to where? (optional)	14.44%	53
Total Respondents: 367		

Questions 2-4 - "If so, to where?" responses:

West End Road

Valley West

Arcata Ridge Trail + Arcata Community Forest

Pump Station (Park 1)

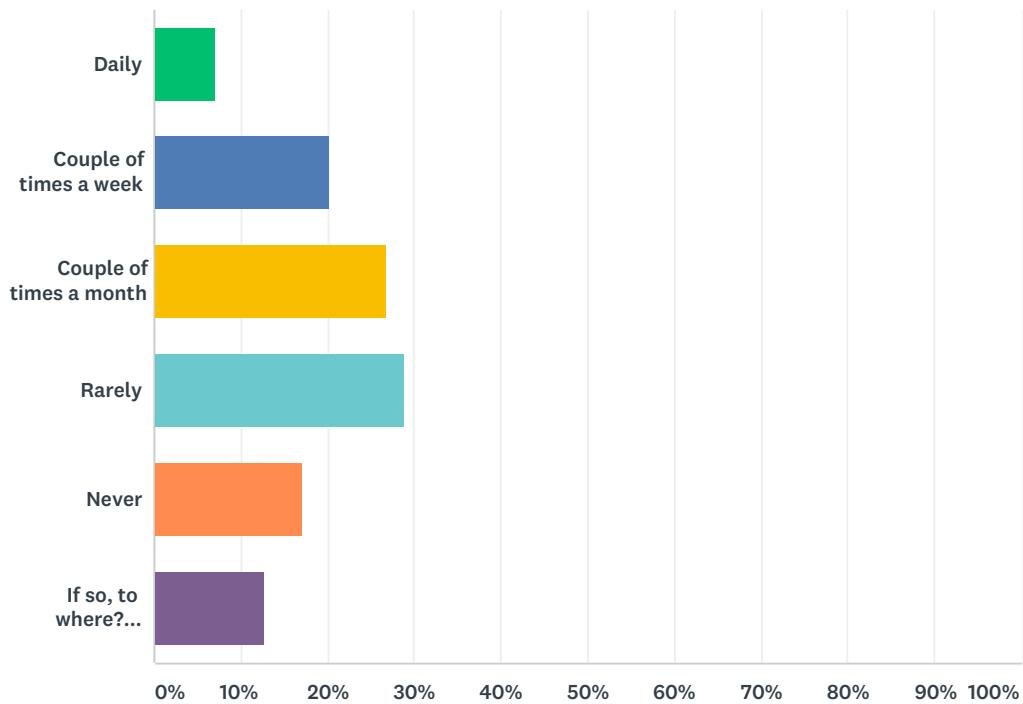
Current trails...Hammond, Humboldt Bay Trail, Arcata Marsh

Arcata Elementary School + Skate Park + HSU

Downtown Arcata

Q3 How frequently do you bike, scooter, skate, or other non-motorized mode of transport (whether for commuting or recreation) in the project area?

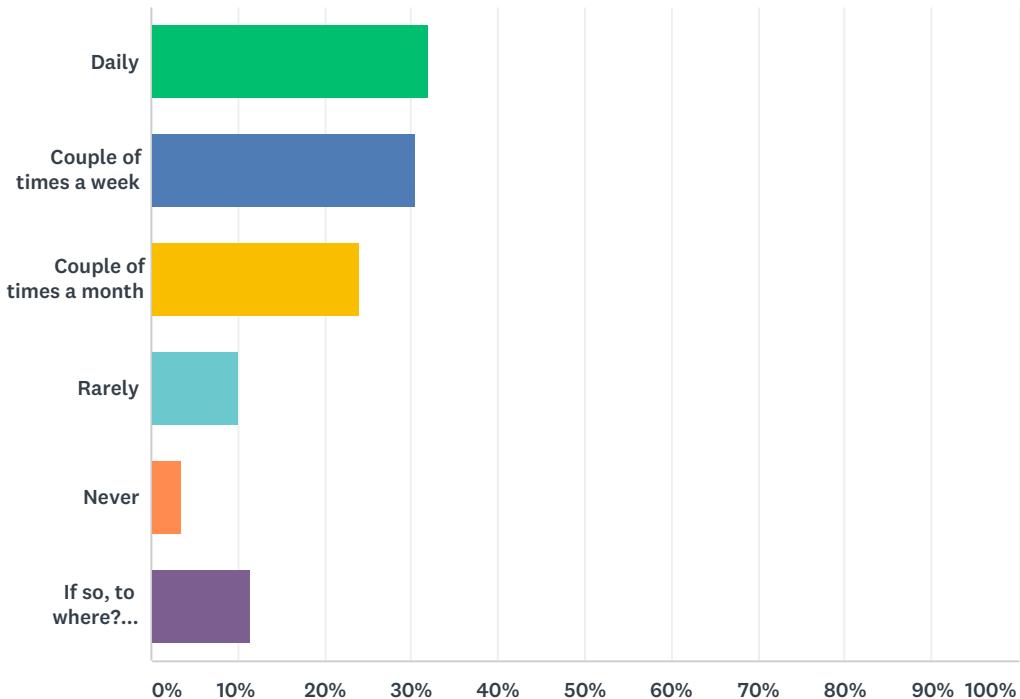
Answered: 366 Skipped: 4



ANSWER CHOICES	RESPONSES	
Daily	7.10%	26
Couple of times a week	20.22%	74
Couple of times a month	26.78%	98
Rarely	28.96%	106
Never	17.21%	63
If so, to where? (optional)	12.84%	47
Total Respondents: 366		

Q4 How frequently do you drive in the project area?

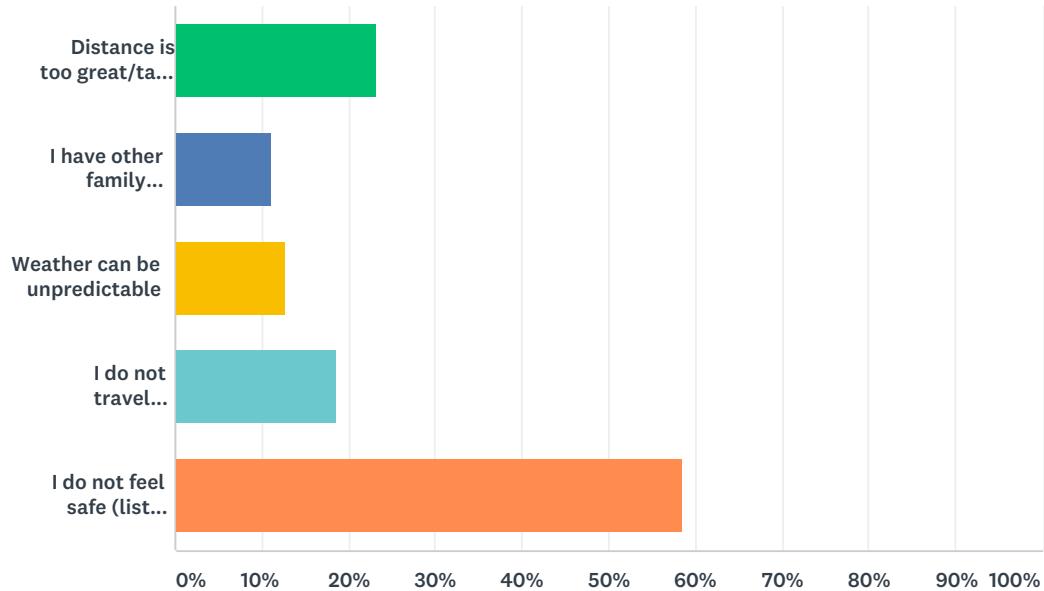
Answered: 366 Skipped: 4



ANSWER CHOICES	RESPONSES	
Daily	31.97%	117
Couple of times a week	30.60%	112
Couple of times a month	24.04%	88
Rarely	10.11%	37
Never	3.55%	13
If so, to where? (optional)	11.48%	42
Total Respondents: 366		

Q5 If you do not regularly walk, bike or roll in the project area, why is that? Please select all that apply.

Answered: 236 Skipped: 134



ANSWER CHOICES	RESPONSES
Distance is too great/takes too long	23.31% 55
I have other family transportation needs	11.02% 26
Weather can be unpredictable	12.71% 30
I do not travel frequently to north Arcata	18.64% 44
I do not feel safe (list reason)	58.47% 138
Total Respondents: 236	

Question 5 - "I do not feel safe (list reason)" responses

I do not let my children walk through valley west for the homeless people who walk around there.

no shoulder, fast drivers, dark roads

car traffic

bad bike

Concern about homeless in the area

West End Road is dangerous and not appropriate for recreation use

I do not always feel safe biking with my children while using the overpass and West end road as access routes to the greater Arcata area

There are no adequate bike or hiking paths that are free of cars.

Not enough lighting and no call boxes. Trails don't connect. Need patrols & night lighting

Moved

a little freaked out when traveling with two small kids

needs trail

There is no other way of transportation other than the bus but if the trail opens, it makes it more accessible for me visit the are or walk to commute.

Traffic has increased tremendously in Arcata do to their pro-development/ infill spike.

transient population, large trucks on the roadways, no sidewalks

West End Road has not felt safe as a bicyclist.

Biking in traffic is dangerous

High number of transient camps

Road is too small..no room for my dog to come too. Cars go too fast on west end road. Feel like I'll get hit.

Haven't checked it out yet. Need to see if it goes past any sketchy pot farms, if homeless frequent the area and if any druggies use it. Humboldt needs more everything when it comes to mental health and coming across someone not treated in what I believe is isolated areas is fearful to me because of their possible unstableness due to lack of outreach for mental health. Also, with the recent dealings with needles being dropped wherever and this could be a to and fro area away from authorities druggies could start leaving them along the trail. As a woman, I fear a sexual attack due to possible areas for a predator to hide.

Traffic

Narrow shoulder/bike lane and fast traffic

Homeless encampments

I don't like walking or biking on a direct roadway.

w. end is often cited as bike friendly. it's not, barely one lane in places, bline curves, careless drivers crosssing lanes, inconsiderate cyclists wearing headphones and riding side by side... lived on w.end for 6 year, can't believe nobody has been killed. it could have been me last sunday, after the snow, i was clearing fallen trees and brush so the emegency vehicles and pg&e could pass... almost hit twice.

Hey 299 to get to Giuntoli seems dangerous for bikes

This will be a tweaker trail

Traffic

loose dogs, inattentive drivers,

Homeless population near Valley West is unpredictable.

Cars drive too fast on West End Road.

Cars drive too fast without safe area for pedestrians

If there is a homeless population

too many transients

Question 5 - "I do not feel safe (list reason)" responses

Traffic on West End Road

West end road is a death trap for non-motorized

Traffic on 299

There is not a trail at the moment. There are many turns and I don't feel safe with drivers.

Traffic

No shoulders or bike lanes.

Homeless

I kept the south railroad track to Christie ranch open for years to commute safely with my horses, I let it grow back!!!

To many transients were using it to access our ranch, theft, camping, garbage all negatives

Too many aggressive homeless in the area, including Valley West Shopping Center

west end rd is too narrow and has no traffic enforcement

Fast cars, no sidewalks, low visibility

Cars too fast, not enough room in road

The overpasses are not safe for bikes or pedestrians

We'd love to ride bikes (and with our kids) to more parts of Arcata if it felt safer for cyclists

Homeless people and drug addicts

Not pedestrian or bike safe for me and especially unsafe if my kids are with me

Traffic

Valley West area is kind of creepy area with a lot of crime and the Industrial Park is plagued with big trucks and an ugly industrial look. I wish we could get these businesses to improve their properties and plant some trees and get rid of the invasives. These areas are not the most inviting part of Arcata, etc.

I don't like sharing the road as a cyclist on West End Road or the overpass

Too much traffic on the road and no shoulder.

Lots of druggies

W. End Rd is very narrow in spots.

Walking and biking along west end road can be dangerous because of cars

Riding my bike on the shoulder is dangerous

Trucks on 299, small shoulder, garbage + transient's unpleasant debris, on West End shoulder can be problematic

Discontinued sidewalks, poor lighting, sidewalks/driveways uneven surface.

Traffic and tricky crossing at guitar

No- West end rd too narrow

West End can be unsafe on a bike

Need a trail, once built I will use it.

homeless, transients, lack of lighting

homeless

transients

Traffic/busy streets

Car, traffic conflicts

Question 5 - "I do not feel safe (list reason)" responses

Vehicles going to fast to feel safe and the homeless

Unsafe roads and intersections.

traffic

Cars

Cars drive too fast on narrow, winding road

Cars drive to fast, not wide enough space to walk, bike or ride horses at a safe distance from the road

I used to walk for exercise but I no longer feel safe. Too many homeless/scary people asking me for money or food.

traffic and little to no shoulder

I'm terrible on a bike and there are no designated bike lanes that I can recall in the area.

no answer

Cars drive too fast, no safe enough route/ bike lane/ trail

I live on the other side of the River and have to use the 299 to get to West end and the hwy doesn't feel safe to ride on, especially for a child

sketchy vibe

The drug addicts /transients scare me and my children

Parts of the area are unsafe to bike or walk in, due to the lack of bike lanes and/or sidewalks. This is especially true for walking/riding with children.

Walk/ride Warren Creek only as West End is not safe at all for pedestrians.

Too much vehicle traffic, crazy add drivers, homeless panhandling!

Feels unsafe biking with kids across overpass to Giuntoli

no trails

unsafe bicycle infrastructure

The access to west end rd by foot, bicycle, or transit is difficult

Narrow Shoulder/Bike Lane, No street lights

Traffic and road obstacles

car traffic

We love to ride off road trails, but don't feel safe in bike lanes next to cars

I want to bike there more, but i don't like riding on those streets

traffic

I like to bike with my kids, but not here because it's with cars. We like paths aways from cars.

People drive too fast on West End Rd., not just logging trucks but regular people. I like to ride bikes with my daughter but I'm worried about her safety on the road.

Seem to have more tents around Carlson Park

Transients and other populations living along tracks.

West end rd isn't safe for bikers or walkers

I carry pepper spray bcuz of all the transients/camps along the trail. You need to cut the overgrowth back and have police patrols. Period

Separation between bikes and large trucks needed.

I would absolutely love to ride my bike to the Mad River or Blue Lake, but West End Road is narrow with many blind turns, and simply is not safe for bikes or pedestrians.

Question 5 - "I do not feel safe (list reason)" responses

I am a little anxious about sharing the road with cars if I bike or run. I follow correct traffic laws as a cyclist or runner but it's too frequent that drivers opt to ignore me/my rights as a fellow road user.

Aggresive driving behaviors make West End Road and the overcrossing intersections of Sunset & Giuntoli uncomfortable to negotiate.

West end road is too scary

traffic too congested at roundabouts, no clear road lines, logging trucks, high speed, unsafe for biking with children

The roadways can be a bit tough with traffic and glass

Narrow roads with no shoulder. Many folks speed on this road.

Safety

Dark and rainy in winter

No protection from vehicles

I do not feel safe walking here as a woman.

To many vagrants!

hit by car, riding in dark, creepy people, etc

West End Road unfriendly to pedestrians

West End Rd. isn't safe for cyclists or pedestrians. Sunset overpass is difficult to negotiate on a bike.

Roads are too small for both vehicles and bikes, especially with my children.

west end road and warren creek road should stay private

No designated bike Lanes, I'd start on West end today where there's not even a shoulder.

Not enough room on the road. Very dangerous for cars when people are on the road. They wave you on to pass on blind turns and get upset when you don't. They should not be on west end. It is not safe for anyone involved

I run on existing trails in town, Arcata Community Forest, and the Arcata Marsh.

Local streets are too narrow for bikes, traffic on 101 is too fast.

Some of these areas are not pedestrian/bike friendly.

Lack of shoulder and driver visibility during the rain

I have to go either 299 or West End from Blue Lake and don't feel safe

There is no sidewalk or shoulder where I can safely walk or bike with my young son.

No shoulder or path

The traffic on the roundabout is not safe for biking.

The trail would change this for me

it is too dangerous at the 101 underpass, because people drive at high rates of speed and often they drive large vehicles. Also the dust is easily kicked up into your eyes.

Transients, homeless infest Valley West area many are aggressive and menacing to others seems no law enforcement presence there AT ALL

Existing walking options involve most streets which do not tend to have sidewalks or shoulders (especially West End Road).

The overpasses in Valley West are intimidating.

Until the trail is complete from Blue Lake to Arcata I doubt I'll ride back and forth much. I do bring my bike to Arcata to take advantage of the Hammond Trail and the bay trail.

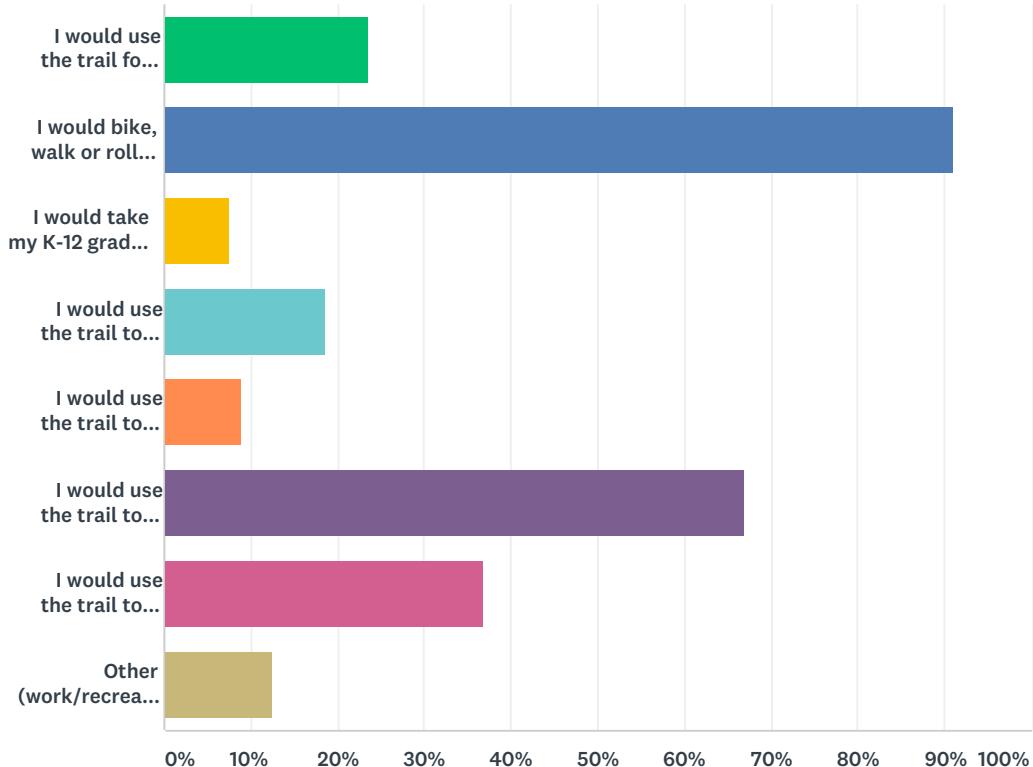
Equal focus on not feeling safe because of homeless/transient people in the area

and current roadways are narrow and have little separation from fast traffic

Desire for more enforcement, lighting and call boxes

Q6 If Arcata's section of the Annie & Mary Trail were completed with links from the Sunset Avenue/ Larson Park area to, West End Road, Valley West and Aldergrove Industrial Park, in what ways do you estimate that you would use it? Please select all that apply.

Answered: 359 Skipped: 11



ANSWER CHOICES	RESPONSES	
I would use the trail for neighborhood transportation in the vicinity of my home.	23.68%	85
I would bike, walk or roll on the trail for fun/exercise/recreation.	91.09%	327
I would take my K-12 grade child(ren) to school via the trail/ I am a K-12 student who would go to school via the trail.	7.52%	27
I would use the trail to travel to/ from work.	18.66%	67
I would use the trail to travel to/ from HSU.	8.91%	32
I would use the trail to travel to/ from recreational facilities or adjoining parks/ open spaces.	66.85%	240
I would use the trail to travel in the area to do my shopping/ visit stores.	36.77%	132
Other (work/recreation/as a tourist, etc) – Please specify	12.53%	45
Total Respondents: 359		

Question 6 - "Other (work/recreation/as a tourist, etc) – Please specify" responses

Bird watching

Use trail to access other equestrian trails

My responses assume a quality trail.

I would not use it at all.

I would never use the trail in the current location

Recreation

Wouldn't use it, would likely have more transient camps

this project is a big waste of money. get us a trail over west end road so we can go to the water pumps safely. there are bike lanes in almost all of the "project area." jeeszopete.

i would not use it here. i would use it from altergrove to the pump stations or blue lake

If it feels safe I'll commute on my bike to work

I would be afraid to walk the trail

Pony carting if possible would be fun!

I would want to horseback ride on the trail.

If it were connected further east, I could do family rides from home.

I would ride my horses on the trail often

I would not use it. It would not be safe.

Pleasure walking with dogs.

I would not use it

As an occasional visitor to the area, I would ride or drive my horse on the trail.

If trail provided a bridge over the mad river to connect Glendale Dr and west end rd I would use it daily to get to/from work.

no

Especially if it goes through the disk golf course

horseback

Social visits

Travel to deep seeded farm

As of right now not planning on using the trail because of hoping to have it all fenced off

Roll with my pony and cart

Rec Cycling

Recreational cycling

My son could get to his school in valley west from his dads in arcata

If the city dismantled the giant homeless camp off West End near corner of Guintoli I just might use that trail

It would make preschool more accessible to low income families with limited transportation.

Equestrian access, pony carting.

recreation

Absolutley! Family bike rides, walks, and the employees at our site would greatly benefit from it. Over 900 employees at our location

Would share with visitors

As one of the race directors of a local Boston Qualifying marathon, which draws runners from all over the country, I would also like to be able to consider the new trail as a possible race course. These kinds of events draw attention to the trail and have the potential to raise ongoing funds for maintenance too.

Recreation development in the dolly varden pond/alder groveareas would improve birding and wildlife observation opportunities inthe area. That area SHOULD be a recreation area, those log ponds should be cleaned, the infill development in upper Janes Creek is unacceptable. Remove the hideous flakeboard plant or convert it to a recreation facility but NO NEW BUILING or impervious surfaces in upper Westend.

I will oppose warren creek - the RR crosses private land

This would be contingent on the A&R trail making West end Rd safe too.

to enjoy nature along the trail.

may never use

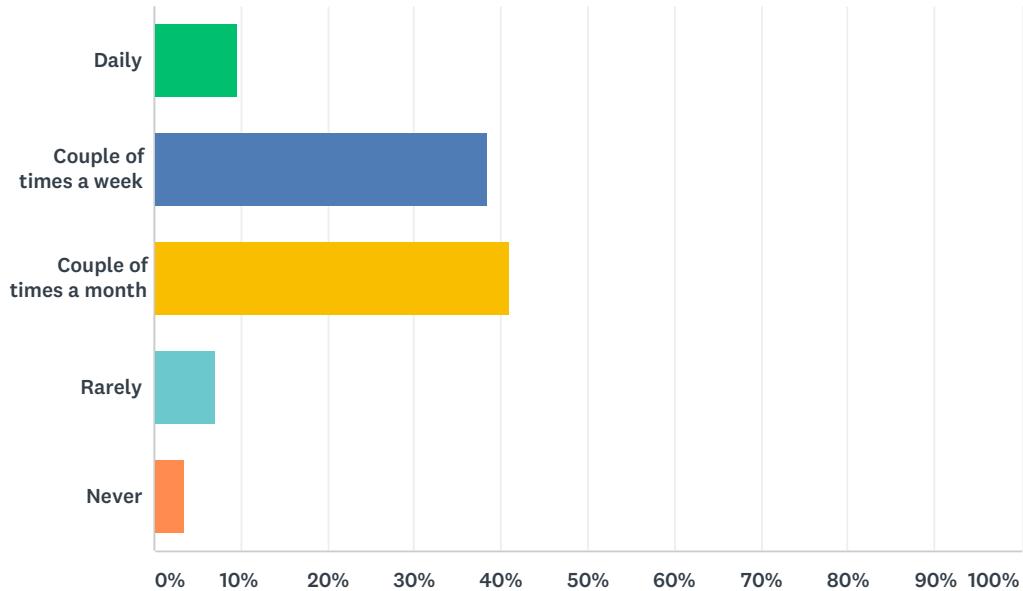
Running, cycling, dog walking etc

Travel to visit friends

Again, my goal is to be able to ride my bike from Blue Lake to Pump Station, to Valley West, to downtown Arcata

Q7 If Arcata's section of the Annie & Mary Trail were completed with links from the Sunset Avenue/ Larson Park area to, West End Road, Valley West and Aldergrove Industrial Park, how often do you estimate that you would use the trail?

Answered: 363 Skipped: 7



ANSWER CHOICES	RESPONSES	
Daily	9.64%	35
Couple of times a week	38.57%	140
Couple of times a month	41.05%	149
Rarely	7.16%	26
Never	3.58%	13
TOTAL		363

Q8 Do you have any additional comments about the proposed Annie & Mary Trail or transportation safety concerns in the project area?

Answered: 205 Skipped: 165

Question 8: "Do you have any additional comments about the proposed Annie & Mary Trail or transportation safety concerns in the project area?" responses

The bridge connecting Pacific Union and Valley West is dangerous for children to walk. Maybe a traffic light so they can cross more safely.

Make the road wide

Connect the trail as close as possible to Valley West.

It would be great!

I am very hopeful this project will finally begin! It is much needed and will help the livability of our area so much! Thanks to all who are working to make this happen. It will be a huge asset to our communities!!

It would make a great difference!

I love trails! Thank you!

Looking forward to completion

Separate bike/ped from car traffic. We need dedicated trails!

Can't wait until it's completed!

Great place for a trail!!

Please make it equestrian accessible

Providing safer non-vehicular routes allows more families to teach diverse ways of travel.

This trail needs to reach Blue Lake with a better branch to McKinleyville. This is an important first step.

The trail should be on the RR right away

Awesome project- Thanks! No safety concerns.

With texting, bike commuting ha become so much more dangerous. This could save lives

run it all the way to blue lake!!!

It would be good to look at all trail route options when the Glendale/Blue Lake Community Plan is being done later this year. Looking at a comprehensive plan for the entire area based on the communities vision may identify better options than simply traveling along the Cal Trans R/W.

If people want to volunteer their time and money for a trail, great, more power to them. On the other hand, to use the power of taxation, the power to destroy, robbing one person to satisfy the whims and pleasures of others, has gone far off the rails. It is long past time that the City Of Arcata returned to a limited and proper role.

DO IT!! Build it and this obese nation will come!!

How would this impact surrounding environmental areas, and are they any birds in the area?

Lots of wetlands exist on the northern end of the trail. These wetlands are already quite fragmented in the industrial zone. The trail should minimize impacts and perhaps enhance degraded wetland habitats where possible; especially to benefit amphibians and othe native aquatic fauna. The north end of the trail should end at a public space so a destination is something of value and safe.

I strongly support the trail.

The safety issues are a major concern. This is through the currently zoned "medical marijuana cultivation zone" as well as would go through areas that are not conducive to trails - mills, construction companies, heavy industries - sheet metal shops. Seems like a poor idea to put a trail through such businesses.

I cannot wait for this to happen! I love outdoor enthusiasts on this road but it is dangerous to everyone. I probably have 1 close call every week (I drive this road 7 days a week).

Can't wait for it to connect to Blue Lake!

Excellent project! It will make our communities safer and healthier. Also an excellent use of public funds.

Funds would be better spend dealing with existing problems instead of creating new one.

yea, save this money for a trail where there isn't already safe roads. please and thank you.

Would the Annie Mary part have some type of security present?

Hoping this all comes to fruition and appreciate all the work that goes into it.

Homeless camps-

Are there any plans to develop a trail along Fieldbrook Rd for a connection between Blue Lake and McKinleyville?

Question 8: "Do you have any additional comments about the proposed Annie & Mary Trail or transportation safety concerns in the project area?" responses

The existing trails in our communities (Hammond/Bayfront/Marsh etc.) are fabulous. I am so excited to see this project come to completion. Thanks for all your work. What a gift to our communities!

i feel like the goal should be to use the trail from around wes greens to warren creek or blue lake.. so cyclists and walkers didn't have to dodge cars on w.end.

I have lived in blue like most of my life. I am concerned I'll be a lot more foot traffic and possible theft and homeless coming to our town. How are the securities concerns I have been addressed will there be additional security assigned to this project for our small town?

I would like to see trails constructed. We live a bit further away, so would only use the described portions occasionally.

Looking forward to it! Thank you.

Link it to blue lake and I would use it every day. Its dangerous to commute via bike from blue lake to valley west.

This will bring more drugs thieves and homelessness to Blue Lake

i am so happy this is moving forward

I live out Jacoby Creek Rd so am not up north a lot but would definitely use the trail for biking and walking if it were there.

Great plan! We can't have enough trails! Good for our community!

My teen and I love to hike with our dog. Any safe trails are welcome.

Our family would use this area for recreation much more often if it was safer to bike.

It will be wonderful

I live in Blue Lake, so I don't recreate in Arcata, except to ride horses in the park. I might cart a pony on that stretch, though.

Crossing private property even using the existing railroad that would bring a lot of people, including transient campers, too close to many private properties.

I would use this much more if it connected to Blue Lake, where I live.

Please build this, been waiting 25 years and I am getting old!!!

Please make it horse friendly.

Equine friendly would be perfect!

My home getting broken into.

Please keep in contact with Christe Ranch, we are not potters produce as shown on some maps 707 601 2611 jbarrelracer85@gmail.com thank you

Would like to see it extended out to Water Pump Park on West End Road so that we could hike and ride horses.

How are you going to provide security and safety for the businesses located in these areas? This project is going to attract the many homeless in our area and facilitate their travel. I have seen this in other trail projects and am very saddened that we waste money to provide recreation to our community and the homeless ruin it for us. Are you going to have police on bikes patrolling this trail? Are you going to provide security to the businesses along this trail? Those are the important questions.

please remove the old rails and fix the road surface on West End rd. by Wes Green. These rails cause a major bump in the road that is dangerous if hit at high speeds and damaging to vehicle suspension at moderate speed

Would also like to see a dog park in that area someday

I very much look forward to this trail!

This would be life changing

I'm really looking forward to being able to bike to Blue Lake more safely.

This is greatly needed!

Finish the whole thing to Blue Lake!

How much I use it will depend on the layout, might not be efficient for me

I think it's a great idea and will be used by many bicyclists, joggers and commuters. I live in Blue Lake, so it's not my neck of the woods. I am, however, concerned that the proposed trail on Railroad Avenue in Blue Lake is going to absorb much needed parking on that street. Also, not fond of that street becoming one-way.

Design and construct it better. While nice to have, the other recent trails in town are not well developed, conceived or constructed. Just having them doesn't mean they are well done. Having something that is well designed and constructed to last in the long term will help bring the overall costs to the community down. Upkeep over the next 20 years will cost more than initial construction if poorly constructed.

You're going to make a homeless highway into my neighborhood

Question 8: "Do you have any additional comments about the proposed Annie & Mary Trail or transportation safety concerns in the project area?" responses

I am in total support. We moved out of easy reach of the bike path through the creamery/ marsh and miss it. It was the most positive and safe way for me to bike with my three children (ages 7, 5, and 5). There is a lot of stress on the road, and trails allow us to all relax and enjoy our environment.

Please allow dogs on the trail.

I would like the trail to not be so marked up with paint markings and signs like the Bay Trail. Those trails looks like mini-highways and are very unattractive. Use minimal markings (such as markings that say "Stay to Right" instead of painting bright yellow stripes onto the trail. Let's make the bike trail aesthetically pleasing.

The way it is now, just the bike lane, is pretty good, though just having it be wider, or replaced with one of those separated by a curb lanes, would be enough of an upgrade..

I can't wait for it to come out farther and go to Blue Lake. I will use it regularly.

I would LOVE to have a bike trail that would connect Arcata and Blue Lake. Our family would ride that a lot for exercise and to access the rivers. This would be a dream come true!

As a child, I rode my horse and played on the adjoining roads. Please provide a safe option for the next generation and for former inhabitants visiting their place of birth.

Blue Lake access!

I am excited about this! The more trails we have, the healthier and happier we will be.

I live off of Warren Creek Rd., and some neighbors have expressed concerns about the transient/homeless people traveling through more if the trail is completed. There are also concerns about potential impacts to the Mad River.

Make it as scenic as possible and away from cars. Have an area where young children learning to ride can practice. Take necessary ongoing garbage cleanup into account. Utilize stops at the mad river for recreation. Glendale/Essex residents need to be able to cross the river to avoid riding on hwy 299.

no

Do it!!!

Safety and Privacy for homeowners on the RR line that may be used. I speak for everyone/homeowners on West end rd (x spear xst. louis) if the path does use RR. As a resident along west end rd. using the rail would be preferred over using the HBWD water way because that would literally be people in backyard at least the rails sit up above our backyards.

LETS BUILD IT! To Connect Arcata! It just makes sense!

please do it. our lives depend on safe travel. my household has 1 car and 4 bikes.

Build it before I die! Please :)

Use Rail corridor for horses from N. Ridgetrail to Aldergrove ultimately to west end rd. and pump station park. Gravel between tracks for foot and horse. pave side for bikes

Multi-use trails should be wider than 16 ft near populations where recreational use is heavy and once you leave the heavy use and transition to commuter use it should be closer to 10' or greater in width.

It's important to have a separated pedestrian lane in an urban trail like this. It's also important to give trail users the right-of-way at intersections to ensure safe and comfortable bicycle use.

A trail along West End Rd. would be great and much safer. As an equestrian, would love to see dirt/gravel/ or grass alongside paved path, and not all pavement.

Lighting is a big issue for walking/biking- not only along the proposed trail but especially bypasses.

One reason I like W. end rd is that it's relatively safe, slow car speeds, low traffic volumes. What I don't like about Hammond Trail are the dog walkers, small children etc. Ultimately, I'd like a safe bicycle route to blue lake because N. Bank Rd and West End beyond aldergroce park seem very narrow and dangerous.

It will be a great new route for pedestrians and bikers to get to valley west

The railroad bed is my first choice in designing a trail if possible. Rails to Trails

I have been waiting for this trail since I was a young child!

Add a bike rack (to lock bikes) at redwood community park trailhead on west end rd. Then I can lock my bike and hike the lower Janes Creek Loop. And Yes! Extend to County Pump Station. I go there often!

I fully support having a trail built at least from skate park to HBMWD Pump Station Park

The area near Sunset roundabout can be tricky for bikes and pedestrians, as well as other high traffic areas. Bike lanes painted green can help by making them more visible to both drivers and bikers and improve safety.

Please build it soon.

Looking forward to safe bike ped walk to the Mad River park at the HBMWD connect closer to valley west area

Exciting

In the Arcata area, there is not enough safe corridors and bike path well maintained bike paths separate from roads for non motor transportation

Question 8: "Do you have any additional comments about the proposed Annie & Mary Trail or transportation safety concerns in the project area?" responses

Please include connectivity to all other parks and neighborhoods

Could the trail be moved further east towards the freeway through this residential area? What is the city going to do to protect and preserve our privacy? How is the city planning on keeping people off our property? How is the city planning on addressing drainage? I would like to be involved in what effects my property on 3390 West End rd., Arcata. My concerns about this project is maintaining our privacy, safety. How will it be patroled? Will it be lite at night?

I'm pleased with the way the various sections of trail are really happening.

Will the trail be useable with 10 feet of sea level rise?

Thank you for working on this.

I would like to see as much separation from motorized vehicles as possible for pedestrians and bicyclists who use the trail.

It would be nice to see a map of this plan and future blue lake plan so respondents could see any impacts to their residences, etc

Equine friendly is very important to me and my family

How are you going to fund the constant clean up & how are you going to keep it safe for families or joggers? Law enforcement can't possibly maintain the entire

Hope it goes all the way to blue lake. I would use it for biking, horse riding, horse driving and hiking.

Just do it.

I would like to know exactly what improvements are being discussed and exactly where they would be situated.

This trail will be a great addition to north Arcata.

I love this trail idea

great connection to help people stay off hwy

100%

Just do it! Please

Yes Please! Sooner is better!

I live in Eureka, otherwise I'd use this method of transportation for many more of the things listed above

There needs to be a safe passage for bicycles from glendale drive along the 299 to connect with the proposed annie and mary trail!!!

It would be wonderful to link Arcata to Blue Lake!!!

Include Clean signage of NO CAMPING, also have a maintenance schedule in place - Shay parks a lawsuit waiting to happen

Safe pedestrian & bike trails would help families attending the Arcata Head Start programs operating in the Aldergrove Industrial Park. The lack of sidewalks in the area is concerning. The Sunset/101 N / G street overpass/ LK Wood intersection is very scary for pedestrians.

Crossing 6 lanes of traffic is really not safe there. I think that intersection should be a top priority for HSU and the City.

I fully support completion of the trail to increase non car usage and have more recreational biking/walking opportunities for our community.

Just do it!

Excited to hear it's in the works! Thank you!

looking forward to link to Blue Lake.

Make it EQUESTRIAN friendly!! Get APD to dedicate a Valley West Officer full time to CLEAN UP VALLEY WEST!!

Thanks for working on this. Looking forward to a recreational ride to Blue Lake!

Question 8: "Do you have any additional comments about the proposed Annie & Mary Trail or transportation safety concerns in the project area?" responses

great project. good luck.

increase my use of the area, shopping, restaurants, gas, etc.

safety concerns due to existing transient encampments in this area

I think it's fantastic!

This trail would greatly enhance the industrial zone out by west end rd. access is difficult right now if you don't have a vehicle. The trail location (along the tracks) is great for us. special amenities like food/ drink trucks along the trail may entice people to use it. How fast can you get it usable? need it now!

Street lights along west end road from spear ave. to Giuntoli

Garbage cans, benches and outhouses are needed

We love riding historical rail trails and can't wait to ride between Arcata and Blue Lake

I think this trail makes MUCH more sense than the one going to eureka, which it will be under water within, oh, 3 to 5 yrs! Plus, i think people will use this one MUCH more!

I love that this is happening. The Valley West neighborhood needs improvements desperately.

get it done

Yaaaaaaaaaaaaay!!!!

This is SO EXCITING!

I think it is a higher priority to link the north end of the ridge trail to the Mad River pump station park via rail corridor

This trail name is exactly why minorities do not feel comfortable here. What natives are named Annie and Mary? What minorities can identify with those names as a reputation of their culture? The trail name is a testament to white culture, white culture in our City, white culture in business, white culture in the names used and glorified in this area. Thank you for the Annie and Mary trail a trail that expresses micro aggressions in the community.

I live in Eureka and work in central Arcata, I would probably not use the trail much unless it was well publicized, very accessible, quiet, safe and attractive. I'd only use it as a lunch break location. So I'm not the idea survey person ;)

A connection from Foster to Foster would be really nice...super sketchy "trail" there now, would love for kids to be able to ride bikes through there safely!

Unsafe, unhygienic with homeless living on tracks. I don't feel safe and don't want to walk through feces, urine and garbage that is strewn about. Must be cleaned up and monitored.

Thank you make sure it has lightening trash receptacles and a public toilet

Cut back all the overgrown noxious weeds so transients stop camping along it.

I would really really love to be able to bike all the way to Blue Lake on a safer route. I feel taking west end road, the only current option, is too unsafe and panic inducing. I would also appreciate and utilize a safer route to the giuntoli business area. Thank you!

Greatly support additional pedestrian/bike trails separate from vehicles. Completing the trail to Blue Lake would be amazing!

It would be great to connect the "rails to trails" bike path, which begins on Foster Ave and goes all the way through the Arcata Marsh to the bay trail, with a trail that goes north all the way to Blue Lake. Currently, riding your bike on any street in Arcata is dangerous due to heavy parking needs and hidden (small and unpainted) driveways. Biking/walking/jogging on the new bike paths is the safest way to get around town (hopefully soon "towns"), without a car.

I have no safety concerns. See my comments in #6. And finally, I having a network of trails to connect our local small communities for safe non-motorized travel is the kind of asset that keeps me feeling optimistic about Humboldt County. Trails are among the things that people are looking for when bright, healthy, engaged people are considering where to live and work.

This would really create a useful and direct non-motorized route connecting Larsen Park to Aldergrove Industrial Park. Still needed is a low stress connection into Valley West. Thank you!

I'm in favor of building the trail ASAP

More trails everywhere! Driving is getting more frustrating all the time around here

Because this area is a portion of the historic Arcata and mad river railroad, I just hope that the project does justice to the history of the line.

We need to make sure that people know that this line was the first railroad in California.

I'm not in the arena often, but I think this trail would greatly benefit the community. I think it would be a great step in making the Valley West neighborhood more vibrant and safe for those who live, work or attend school in the area. I hope it works out!

It will be an important addition to our area and attract more tourists.

All for it!!

Please make this trail happen

Will there be any police patrols along the trail especially at night? I'm concerned it will become a trail for criminals to scoot out houses to rob and have an easy getaway.

Go trails! This is exciting!

I had no idea this was in the works. This will be huge. Finally.

Build it!

This would be a great asset to our area. I've lived in this area for 60+ years and I would definitely take advantage of an expanded trail system. The safety concerns I have are related to NOT having an alternate trail system available to travel on by non-motorized means. I've been an avid cyclist for most of my adult life and I've never been more concerned for my safety on the roads than now. The A&M Trail would provide a link that would tie in wonderfully with the Humboldt Bay Trail (when completed) and don't forget the Hammond Trail. Then it would be possible to link south Eureka, Arcata, McKinleyville/Clam Beach and Blue Lake with minimal interaction with motorized traffic. Keep the momentum going!

Thank you! I am excited about this trail. If you need volunteers please let us know

Please get it done soon

Question 8: "Do you have any additional comments about the proposed Annie & Mary Trail or transportation safety concerns in the project area?" responses

No

Thanks for your work in pursuing this

Arcata trails are being abused by electric motorized recreation and this poses a risk to all users of the trails; please do not allow electric motors on trail system

No More In Fill Development on Upper Janes Creek, Clean the ponds and convert the area for recreation and habitat conservation. Parks, plants wildlife and people can happily coexist if we are more considerate for the land

The entire project is sadly dependent on a river crossing which I do not believe will ever be feasible, given the condition of the bridge across the Mad River at Lindsay Creek. Why, why, why is this not being acknowledged or addressed? The sooner an alternative plan is conceived of, the better off this whole project will be. One cannot put a bike trail across a bridge that is being undermined by the river!!! The water district went under the river with the new pipeline! Wake up!

I would like to see a trail access point by Ericson court in the mid industrial park area. This would allow me not to have to use alder grove road on my bike. A welcoming extension would also be traffic calming street measures for more friendly bicycle use on Ericson way.

Please no!!! We don't need anymore transients on west end road or Warren Creek. Please don't do this!

make sure it allows horses!

It will be amazing!! Having a designated trail, that is historical and for recreation. Is a great idea. This needed to be done much sooner. Better late than never. Please make the completion of this trail a reality. As alternative transportation is needed and necessary in our expanding community.

Cant be built fast enough

I live south of that area in Arcata, but if there was a trail for non-motorized vehicles and pedestrians I'd visit that part of town a lot more often.

make a safer freeway route to glendale road

I really hope it happens!

Love the idea. Would use it regularly.

Excited about the possibility of having this trail!

In Full Support

I think any time we enhance our community with biking and walking trails, we are making for a practical environment for getting from place to place safely, whether walking to school, shopping, hiking, running, visiting neighbors, or commuting to and from work.

This is a great idea. I love using the trails in the area near my home.

The more non-vehicular trails we have, the better. Thank you.

always concerned for safety given the transient population in our area and the limited resources for policing.

Make it safe for walking and cycling, please.

I am soooo excited to have this trail! It would improve our lives. We want to travel by bike and foot and cannot currently do that from our house, but this trail would make it possible.

I feel like I could get hit by a car every time I bike West End Road.

This is a long overdue project. I'm so happy it's moving forward.

I'm looking forward to riding my bike on the new trail!

If it connected to a Mad River access, it would be a game changer for family bike rides

This is a major improvement, residents and visitors will reap benefits of the trail and provide a balance to the blighted area that is much needed

I have a BIG concern. I don't want people or their dogs walking into or seeing me in my backyard. My backyard is my sanctuary. My front yard is not. We don't have a sidewalk and drivers speed by our house everyday. Now, there will be people able to watch me in my backyard as I garden or barbecue etc..?! There are 3 homes on West End X St Louis (mine being one of them),whose backyard touches the RR tracks/easement. Today I heard chainsaws north of my property and was told, next week the vegetation along the tracks on our block will be cut?! Talk about uninformed and short notice. We just got the letter informing us of this project yesterday (Jan 10th) !? I feel a bit angry because you have asked for our input, but your actions are telling me you really don't seem to care about the well being of the people whose property touches the designated area. It's one thing if it was happening in our front yard. At least our house would be facing the trail and our front door would be locked. Some homes on the Hammond trail, Julie Neander's being one of them, the trail is in her front yard and her house faces it. She has a road out front and then the trail. There is a buffer. We will not be able to see who is out there when we are in our house. Who knows, one of the Arcata "Traveler" might see our sweet spot out back and think "What a perfect place to camp for the night. There's a fire pit and vegetable garden...cool" Perhaps if you put up a fence or provide a thicket between the trail and our backyard, we can maintain a sense of privacy and peace that we deserve as tax payers. That would be greatly appreciated. It's the least you can do since you are moving forward regardless of our input.

This project sounds like a wonderful addition to help make improvements in the Valley West neighborhood.

Working together on trail connectivity. separating riders from high speed cars

As a BOD member for Friends of the Annie & Mary Rail Trail we hope that this piece with Blue Lake section at the other end of the Annie & Mary Trail, we are advancing the entire Annie & Mary Trail

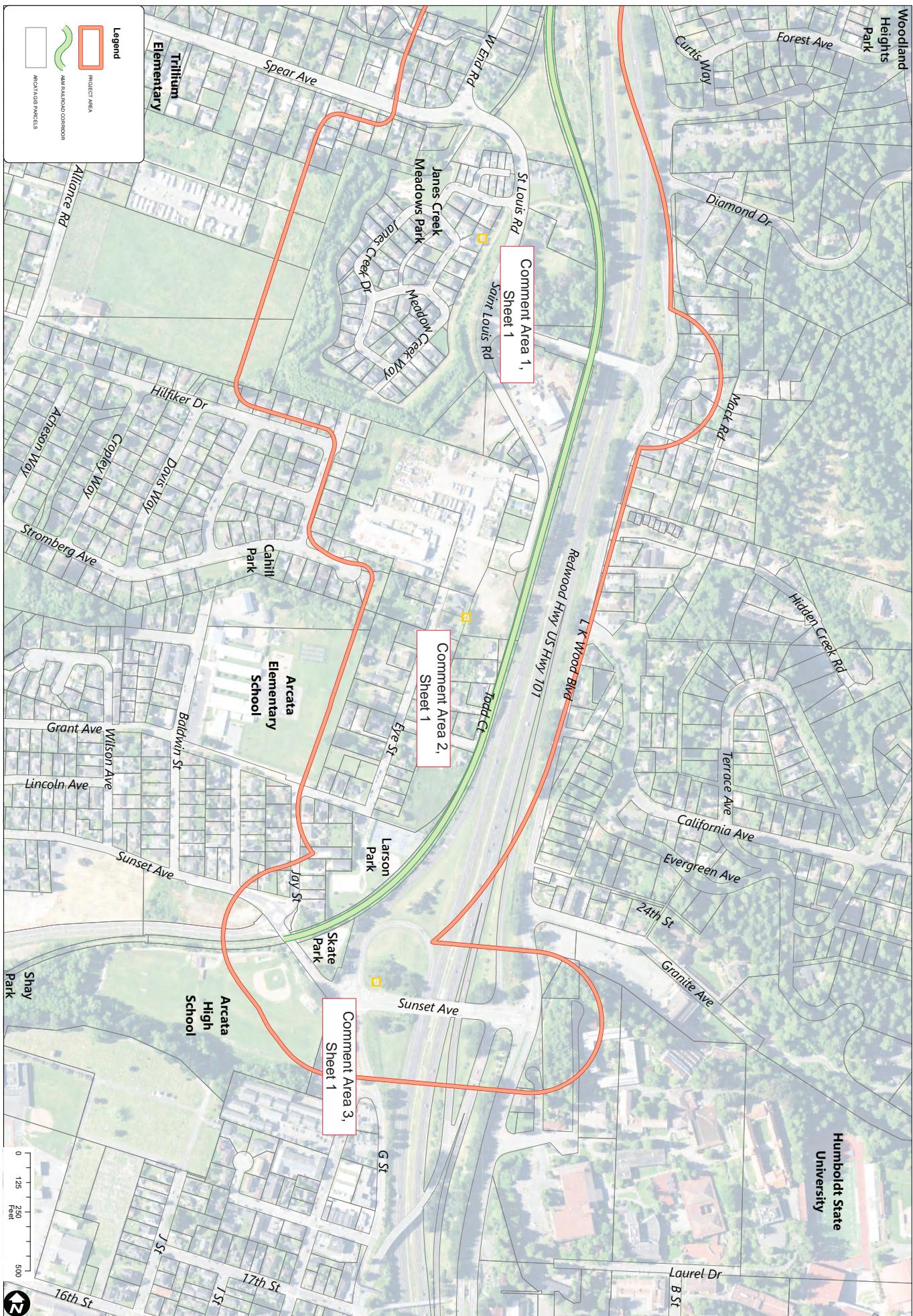
Looking forward to riding safely through Arcata to Bayside or Eureka

no

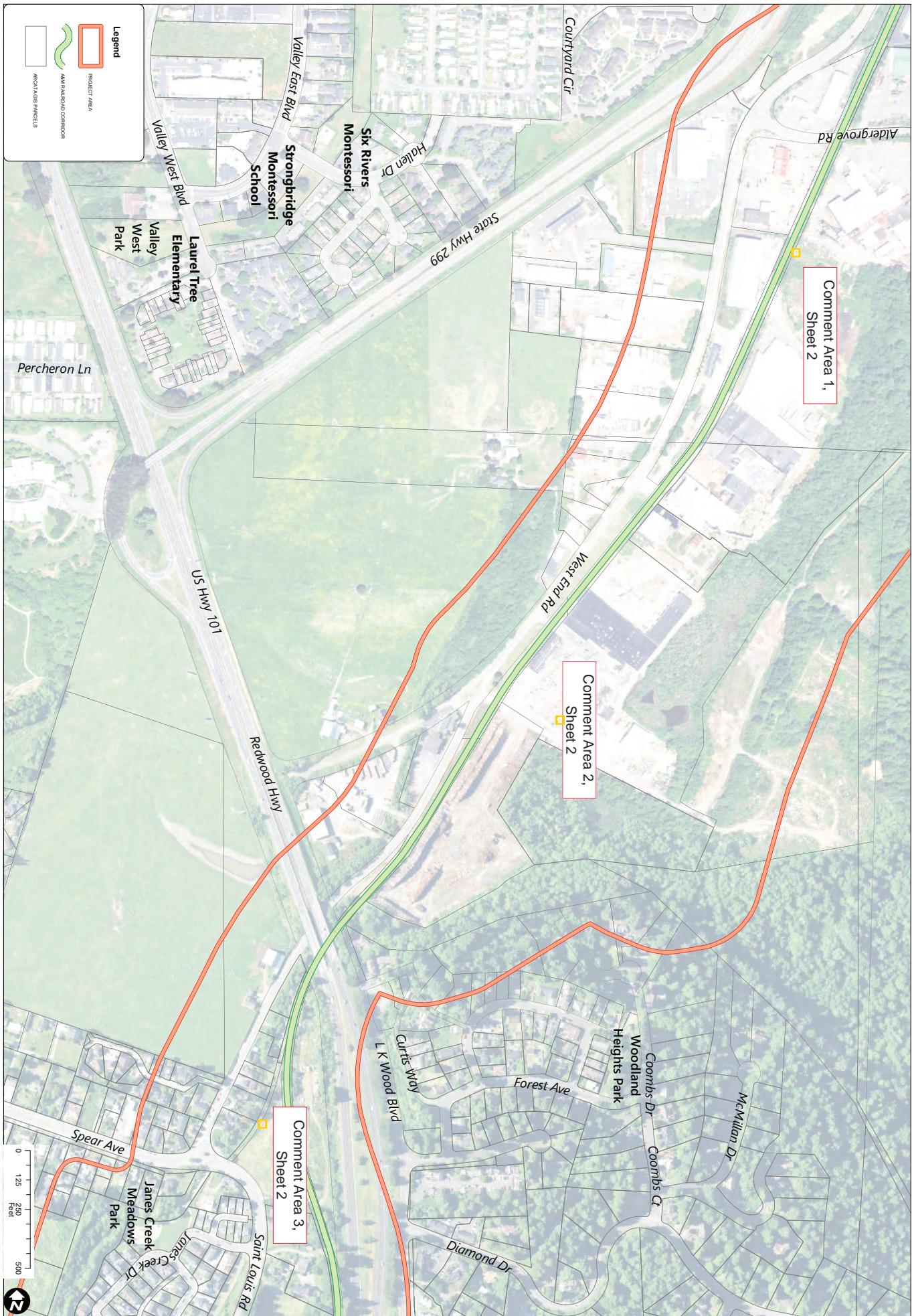
No

Though I no longer live in that neighborhood, I feel like the trail would be a huge boon for people in the neighborhood with regards to ease and safety of non-motorized transport.

ATTACHMENT 3: Workshop comments on project area maps

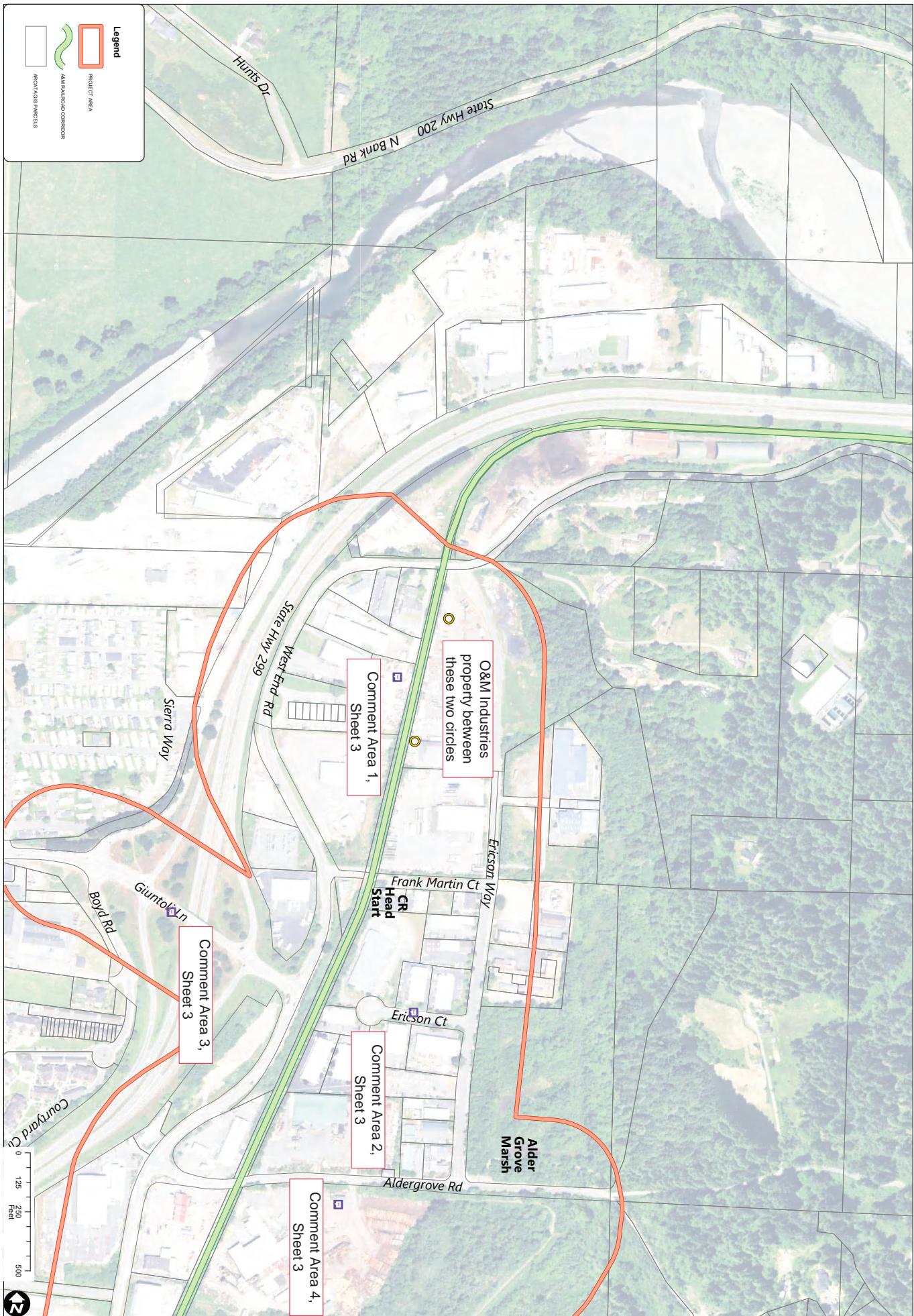


Arcata Annie and Mary Map Comments Sheet 1		
Comment Area 1	Comment Area 2	Comment Area 3
Have ramps on neighborhood connections	Leave greenbelt to separate trail from hwy 101	Sunset Bridge is dangerous for pedestrians and cyclists x 3
Make the Janes Creek neighborhood connection accessible to bikes	Wider area with slow zone	The intersection at LK Wood and Sunset is horrible for peds nad bikers x6 (most dangerous)
Need a connection to trail from St. Louis x3	Make designated section for slow riding for learners	Detours: LK wood and Pd bridge
Signs limiting uses like mopeds	Use Lkwood as bypass to sunset	Needs better lighting x2
Connect Bridge at St. Louid Rd	Connectivity at Todd ct? with parking x2	Lower lkwood is too steep
Lots of camping under St.Louis overpass	Wheelchair access throughout	Direct people to overpass?
Connect to Diamond drive neighborhood	Expand bike lanes on lk wood	Eliminate Parking on overpass
Conect to Mack Rd neighborhood	prioritize dense housing along trail	Sunset/LK Wood turning movements sketchy
Potential to be very scenic in St. Louis Area	Adding bicycle parking at popular destinations	A lot of wrong way bike riding and riding on the sidewalk of sunset bridge
No lighting at wetlands. Filtration zones near wetlands to reduce runoff rate	Rail to Trail	What will impacts of new housing on west side of 101 be on sunset bridge circulation.
micropark under bridge		Parking limited at Larson Park to be trailhead x3
Need garbage and dog stations		Gateway art
Rail into Trail		Why isn't the sunset bridge included?
		Utilize pedestrian bridge
		Need load/unload zone for cars dropping off students at Arcata High
		Foster Sunset roundabout crossing is very challenging and dangerous for parents dropping off kids at Arcata high field. Need more of a turn out for vehicles to pull over
		Connect to HSU
		Ped activated light beacon on sunset/lkwood x2
		Access to Larson Park



Arcata Annie and Mary Workshop Comments Sheet 2

Comment Area 1	Comment Area 2	Comment Area 3
Large Trucks crossing	Have bike lane go behing aldergrove rd	Parking? Restroom. Dog bags, food trucks
Potential safety issue. Highly industrial	Connect future happy valley to trail or what goes through it	Connection to LK Wood x5
Motorized vehicles ie bikers? skateboards?	Install microparks	Bike rack at the connection with LK Wood
Design for intersections to be safe for active transport	Riding West end rd is difficult- ahh! X2	Formal trailhead with parking and facilities for trail/
Not having stops for active commuters	West End b/w spear and wes green is scariest section	Consider fencing in this area
Flashing light crosswalks where road intersects trail on aldergrove x4	Reduce encampments. helps feelings of safety	Concerns about rail being close along rail corridor
Wider Trail capacity for ped/cycle/scooter/bike	environmental concerns from encampments	Drainage concerns along Janes Creek
Lots of traffic here at aldergrove xing	Current encampment on ridge trail	Put in battery charging station along trail.
Would be cool to access ridge trail from water line easement	Large Trucks here	Wherever possible put bike trail right on old rr grade and not next to it
	Debris on shoulder	Pedestrian safety over bicycle safety
	Currently not inviting for active tranport	If there are bridges in the project. Make the bridges more natural looking. The bridges at the Arcata marsh don't fit in and are very loud. Especially when a skateboard runs over it. Look at Santa Cruz trail bridges for examples.
	Rali to Trail. Save time and \$. Prefer this.	Potential alignment for trail can be closer to the 101.
	Very narrow existing space for bikes and trucks fo fast	Water line would be even more intrusive to the west end rd. residents. It would be literally opening a front door to trail the railroad would be better.
	Need Parking for ridge trail	Need trail patrol. Mckinleyville got grant for atvs
	Overpassn RR is a safe place to travel as road is narrow	Solid high fencing by the trail that guards private residences. We are afraid people will come off the trail and use our property to access west end rd
	Design for slowing motor traffic (eg, narrower car lanes, adding curves)	Privacy concerns especially at night. If no way to move trail-need solid fencing and vegetation
	Open foliage (pruning) increase sight distance. reduce vegetation.	
	Trailhead at Happy Valley	
	City needs to do direct contact with adjacent property owners	
	Paint Ped on Ped line and Paint Bike on Bike lane	
	Neighborhood connection to trail from apts.	
	Clearing of RR rail has increased drainage problems	



Arcata Annie and Mary Map Comments Sheet 3

Comment Area 1	Comment Area 2	Comment Area 3	Comment Area 4
End of project is not much of a destination	Direct access to trail from three way stop to ericson ct and trail. Direct access to Frank Martin Court as well x2	Giuntoli Area + Valley West and East are dark	Heavy logging trucks on Aldergrove Rd.
Trail mileage markers please x2	Lots of Families walk from west end rd to Frank Martin Ct to get to Head Start. It's dangerous.	Unsafe Crossing x4	Narrow on West End Rd
Extend to Pump Station Park x2	Lots of students and families walking	No Bollards	Bike rack for trail
Not any lighting currently dark on road and rail corridor		Peds/Bike near high volume+ speed traffic	Consider Water Pipe Alignment
People have cut through fence clearing brush improved access.		Possible roundabout @ Giuntoli /Boyd Rd	Challenge is trail on rail through industry areas. McCullough
Security Concerns along back of property (O&M property). A to B (See PDF Map)		Dangerous Heavy traffic. Can take 15 minutes to get opening	Connectivity to Marsh and Recreation here
Fencing along sections that are close to industrial businesses		Limited visibility for cars turning left coming in from 299 south and 299 north	
Move from Rail corridor to West End @ Frank Court		Really challenging for everyone	
Very risky route for bikes, peds - 1.5 lane road		Disarray in 3-way stop (selfish driving)	
Horrible pothole where Ericson way meets West End Rd.		High speed traffic	
Debris on 299 shoulder. Call city to sweep shoulders		More fast driving begins here	
West End Rd past Project Area has No shoulder, no bike lane, narrow roads, dangerous blind curves, Fast traffic, Large trucks, people drive fast, has potholes.		Bike Lane ends here	
		Stop sign for bikes going straight is not really needed at the 3-way stop on West End Rd and Giuntoli	



Arcata Annie and Mary Workshop Map Comments Sheet 4	
Comments	
A lot of people walk on west end rd	
Need good trail destination for this place	
Connect Arcata to the River	

Attachment 4: Workshop photos



City of Arcata

Annie & Mary Trail Connectivity Project

Final

Project Report

APPENDIX F

April & May 2019 Outreach Results Summary

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Annie & Mary Trail Connectivity Project

April & May 2019 Outreach Results Summary

Community outreach for the Annie & Mary Trail Connectivity Project continued into April and May (with outreach messages running throughout March as well) as the project team utilized media, social media and community networks to spread the word about upcoming input opportunities. The project team utilized the following outlets and methods to reach community members in the project area and the greater Humboldt Bay area:

- Visually appealing flyers in English and Spanish posted in dozens of community destinations (see Appendix A)
- Recorded and distributed radio PSAs to multiple stations
- Event information postings on local community calendars
- Press release through the City of Arcata that was included in local print and online media outlets
- Project website maintained with updated information for community members to access
- Meeting with Project Task Force
- Additional follow-up letters to adjacent property owners and businesses along the proposed trail route
- Direct outreach to partner organizations and stakeholders plus through partners' social media and newsletters

More than 130 community members provided their input in April and May, providing ideas and concerns at the following events or public input opportunities:

- Project Task Force meeting on April 10th
- Pop-up Infrastructure Demonstration at the Arcata Skatepark/ Sunset Ave Roundabout on Monday, April 22nd from noon – 6 pm
- Community Workshop and Open House showcasing alternative alignments, conceptual trail renderings, and preliminary options for the trail, on the evening of Tuesday, April 23rd at the Hampton Inn Sequoia Room in Valley West
- Information table during open house of the third Humboldt Trails Summit on Saturday, May 4th
- Information booth in the Aldergrove Industrial Park area/northern project area on Tuesday, May 14th from 11 am – 2 pm
- Via one-on-one conversations with project team staff, including City of Arcata staff

Project Task Force Meeting

The Project Task Force (PTF) met on April 10th to review the draft materials for April public outreach, provide input and help the project team improve clarity and understanding of the materials. The PTF, which consists of many representatives of trail user groups and decision-making organizations, also provided their input during the meeting about the proposed alternatives and design concepts. Project maps, visuals and

concepts were refined following feedback from the PTF to ensure clarity for participants at upcoming workshops.

Pop-up Infrastructure Demonstration

On April 22nd, the project team set up a pop-up infrastructure demonstration at Sunset Ave/ the Arcata Skate Park/ southern terminus of the project. The pop-up consisted of a 30 foot long temporary paved trail that was 10 feet wide with one 2-foot wide gravel shoulder and one 4-foot gravel shoulder, a large image rendering of what the trail would look like if it continued beyond the first 30 feet, a tent and bus stop bench to simulate a new proposed bus stop, a parking-protected bike lane temporarily painted, and a variety of informational materials and maps about the project. The pop-up was held throughout the day on a busy weekday, resulting in a lot of interest and engagement with passers-by, users of the Arcata Skate Park, and neighbors who live in the immediate project area.

When asked about trail configuration, the majority of people who showed a preference were in favor of a trail with a wide shoulder on at least one side, with a few preferring a minimum-width trail with a center stripe. In addition to comments from visitors to the pop-up, 5 passing bicyclists and motorists gave a big thumbs up when going by!

Appendix C includes all of the comments received.

Common themes included plentiful enthusiasm for the trail, interest in seeing the trail located on the railroad corridor, interest in a bus stop at/ near the Arcata Skate Park, and interest in lighting, trail patrols, safety and security measures for both trail users and nearby properties.

Community Workshop and Open House

The project's second Community Workshop and Open House was planned in the northern area of the project in the Valley West community to be closer to Valley West residents whose input was desired for the project, and who would be directly affected by it. The event was held on Tuesday, April 23rd at the Hampton Inn Sequoia Room in Valley West. The workshop was attended by about 20 people. Two of the attendees live in the Valley West neighborhood, and several more live immediately adjacent to the proposed trail.

The workshop included multiple methods for gathering people's ideas and concerns including:

- Displays of maps, conceptual alternatives, and trail renderings
- An introductory presentation including outreach conducted to date, project timeline and goals, an explanation of the maps, visuals and alignments, and other opportunities to be involved
- Comment cards
- Q&A with project staff

Appendix C includes a complete compilation of comments from the community workshop and open house.

Common themes included support for the railroad corridor alignment alternative, concerns about safety and sense of security, interest in a soft or rubberized shoulder, interest in supportive multiple modes of travel, and opposition to the “hybrid alternative” in a few key locations from immediate neighbors.

Information table during the open house of the Humboldt Trails Summit

Local organizations and trail advocates in conjunction with State Senator Mike McGuire hosted the third Humboldt Trails Summit on Saturday, May 4th in the Kate Buchanan Room at Humboldt State University in Arcata. Local jurisdictions and organizations tabled during the open house portion of the summit to share trail updates. The City of Arcata hosted a table to share information about the Arcata Annie & Mary Trail Connectivity Project and to solicit feedback from participants. Many people stopped by the table to look at project maps and renderings. The few written comments that were received were that horses and buggies have a right to access too and that the cable is a dumb idea.

Information Booth in the Aldergrove Industrial Park

After the community workshop and pop-up, the project team met to discuss what kind of input was lacking or not robust enough. The team agreed that more information was still needed about the northern project area, and in particular, the West End Road/ Aldergrove Industrial Park business community. The team discussed options for getting more input from these community members, and determined that a mid-day informational booth on a weekday along Ericson Way would be a good option. This was selected because there are many businesses in the area, and many employees who walk in the area during their breaks. Project staff from Redwood Community Action Agency visited more than 40 businesses in the West End Road and Aldergrove Industrial Park area in person and distributed flyers about the project to these businesses. Many businesspeople provided input on the spot, since staff brought project information and maps to each business while flyering.

Project staff delivered flyers for the info booth in May directly to businesses, including:

- Danco
- Kokatat
- Humboldt Educare
- Head Start
- Tofu Shop
- Humboldt Termite
- Wolf Construction
- Foodworks Culinary, left flyers for at least 6 food businesses in this building
- Crestmark
- Up North Distribution and 5 other businesses in the same building
- Bettendorf Trucking
- Alves
- North Coast Fabrications
- The Mill Yard
- Arcata Forest Products

- Renner
- Arcata Cabinets
- Arcata Countertops
- Arcata Millworks
- McKeever Electric
- California Department of Fish and Wildlife offices
- North Coast Laboratories
- Wes Green
- A variety of unnamed/ unsigned businesses in the area (some cannabis businesses, some unclear what kind of business they are)

Feedback from flyering in Aldergrove Industrial Area on 05/02/19:

- Excited to have a beautiful place to go for a walk on breaks and lunch break. x2
- Please keep maintenance up on the trail once built
- This is really cool, haven't heard about it before but I'm looking forward to it.
- I like the railroad option. x2

Feedback from flyering along West End Road on 05/06/19:

- Multiple individuals at Bettendorf Trucking were excited about the project, and said "it looks better than it does now" (referring to the rendering on the flyer)
- Arcata Millworks owner would use the trail daily for bike rides, dog walking, etc
- Multiple unmarked businesses said they would use it daily, but would like security features such as lighting, fencing and possibly video surveillance
- One person preferred the West End Road option
- Liked the railroad option x 6
- Liked the railroad options AND all of the options shown on the map x 2 (didn't want to choose, thought it all seemed equally important)
- Liked the railroad options PLUS all the yellow/ orange neighborhood connections shown x 3
- Will come to the info booth and encourage coworkers/ employees to come x 2
- Thank you for coming directly to us x 3
- Desire for maintenance of trailside vegetation and some amount of policing directly on the trail – bike cops?
- Would use the trail to commute to work by skateboard – please make the surface smooth enough to skateboard

The team set up an information booth at the intersection of Ericson Way and Ericson Court on Tuesday, May 14th from 11 am – 2 pm, and was able to speak with more than 30 individuals who work in the project area. Most had not seen project maps or materials before.

Comments received at the information booth included:

- I love this project. I love all trails, the more the better.
- Revegetation with low-maintenance native only plants: pink flowering currant, twinberry, red twig dogwood, red columbine, orange bush monkey flower, lace phraelia, dune buckwheat, western azalea, vine maple, pearly everlasting, California aster, California poppies, creambush, toyon

- Re-vegetation – is there a plan to introduce native propagules (seeds, plugs, transplanting) directly after construction to prevent or discourage a wide scale takeover of invasive plant species? This was an issue on the Bay Trail and would be an easy problem to prevent at low cost.
- Like the railroad option x 8
- Walk every day, would use it
- Low level downcast lighting – lots of wetlands in the area and need to consider red-legged frogs
- Kokatat employees ride into Arcata for lunch
- Aldergrove/ West End Road intersection is crazy in the morning
- Most dangerous part of bike commute is the traffic circle at Spear Ave
- Yay, like the Happy Valley Trail option
- Current bike lane on West End Road feels narrow because of all the debris in the lane
- Safety on West End Road is a personal priority – transportation safety
- Some Kokatat staff don't have cars and end shifts at 8 pm – have a "permanent carpool" set up
- A lot of Kokatat's 180 employees would bike more! West End Road is scary. People use Bay Trail now.
- Would use trail to walk during lunch. Check out upper Newport Beach trail for a good multi-use trail example.
- Check out the solar train
- More bike racks on buses
- Any trail as long as it's built!
- Riding on roads isn't a safe feeling – dodging drivers, road condition issues
- Would like to volunteer to help!
- 16th Street trail to connect to Alliance is very dangerous for bikes
- Have clear signage for trail throughout
- Would be okay with purple hybrid alternative in the West End Road area
- Most excited about the connection to the river x 2
- Current Giuntoli overpass is unsafe for walking and families
- Sketchy for kids riding bikes/ no cars to get to school from here
- Water District recreation ordinance does not include equestrian access, need to fix this
- Some sketchy characters – want to be sure brush is cleared, trail patrol exists, there is visibility x 2
- Prefer separated path/ trail away from the road x 4
- Ericson and Aldergrove plus ponds provides a good walking loop, this trail would add more to this loop/ another route
- Need to clean the surface of West End Road for cyclists
- Homeless folks don't gather as much on trails, use will help
- Families at the preschool would use the trail!

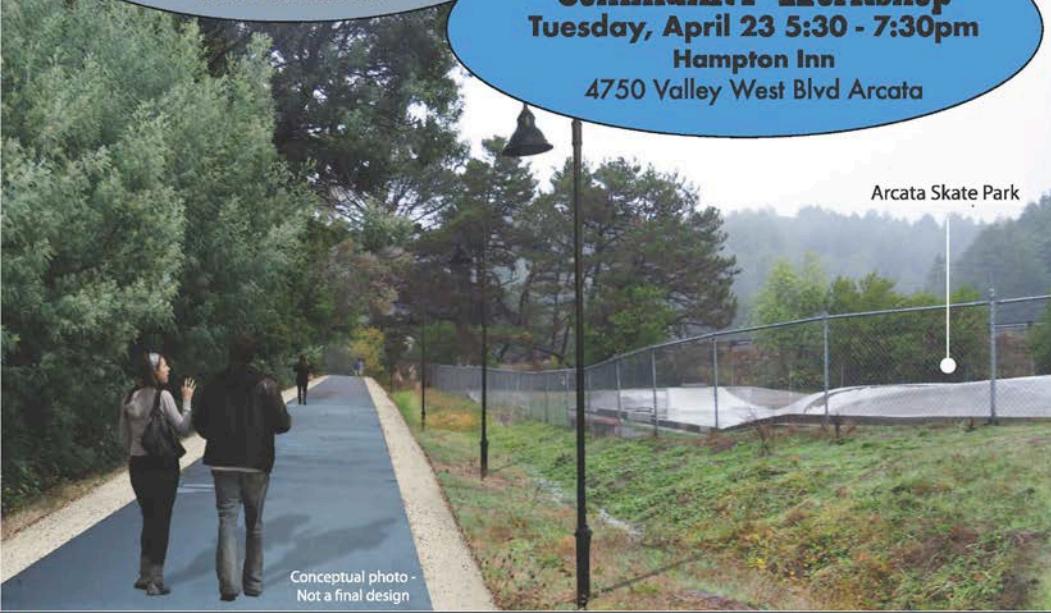
APPENDIX A: Workshop, pop-up demonstration and informational booth flyers

Arcata Annie & Mary Trail

Give your input on potential trail designs to improve walking and biking connections through north Arcata!

Pop-Up Trail Demo
Monday, April 22 12 - 6pm
Arcata Skatepark
1090 Sunset Ave

Community Workshop
Tuesday, April 23 5:30 - 7:30pm
Hampton Inn
4750 Valley West Blvd Arcata


Conceptual photo -
Not a final design

Arcata Skate Park



Arcata Annie & Mary Trail

Dé su opinión sobre posibles diseños de senderos para mejorar las conexiones para caminar y andar en bicicleta en norte Arcata!

Demostración física del sendero

Monday, April 22 12 - 6pm
Arcata Skatepark
1090 Sunset Ave

Taller Comunitario

Tuesday, April 23 5:30 - 7:30pm
Hampton Inn
4750 Valley West Blvd Arcata



Arcata Annie & Mary Trail

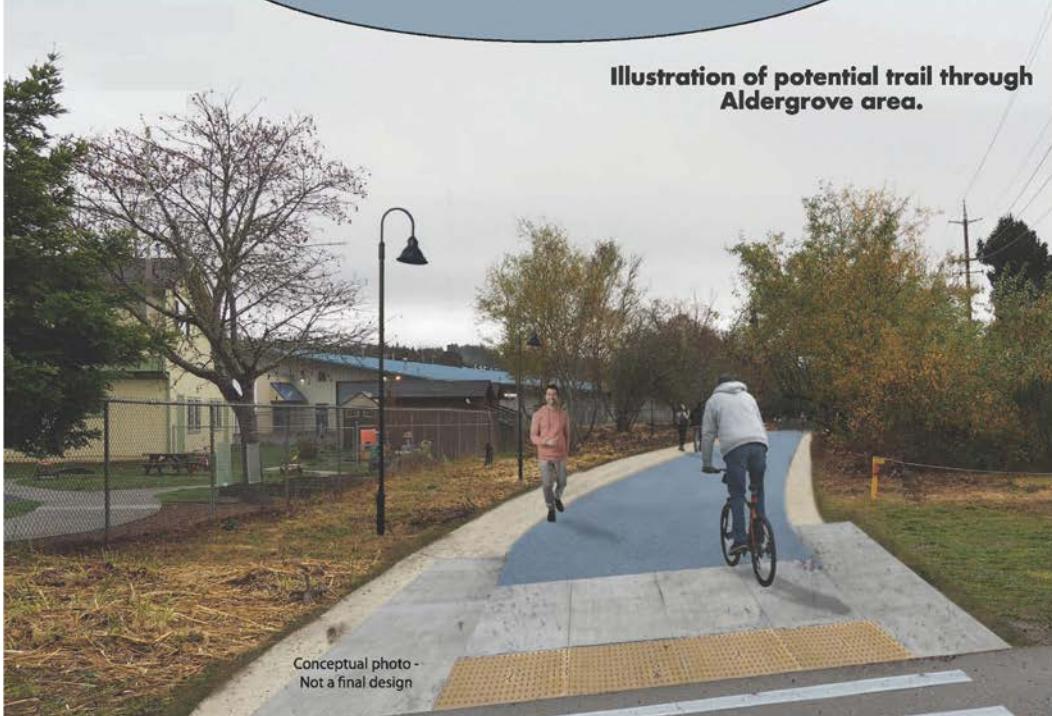
Give your input on potential trail designs to improve walking and biking connections through north Arcata!

Stop by on
your lunch
break!

Info Booth
Tuesday, May 14 11am - 2pm
@ Ericson Way & Ericson Court

Free
Snacks!

Illustration of potential trail through
Aldergrove area.



Conceptual photo -
Not a final design



Engineers & Geologists



redwood
community action
agency



TrailPeople
Landscape Architects and Planners

For more information visit:
www.cityofarcata.org/831/Annie-Mary-Trail-Connectivity-Project

Arcata Annie & Mary Trail

Dé su opinión sobre posibles diseños de senderos para mejorar las conexiones para caminar y andar en bicicleta en norte Arcata!

¡Pare en su
hora de
almuerzo!

¡Botanas
Gratis!

Puesto informativo

**Martes 14 de mayo de 11 a 2pm
@ Ericson Way & Ericson Court**

Ilustración del sendero potencial a
través del área de Aldergrove.



Foto conceptual -
no el diseño final



Para más información visite:
www.cityofarcata.org/831/Annie-Mary-Trail-Connectivity-Project

APPENDIX B: Pop-up Infrastructure Demonstration comments received on 04/22/19

What do you LIKE about the design alternative for this section of the project area?

- Parks being connected- Larson and Skate Park
- Rail corridor alternative - Yes!
- I would love a bus stop because I live on Jay St. on the roundabout and it would be convenient
- I would like a bus stop because it would make student accessibility better
- Bust stop is great
- Bus stop would be kind
- Bus stop will make Foster Ave/ Sunset Ave less impacted. Keep Foster busy but Safe!
- Like trail on RR! Help keep trash out of there, Great for HSU students!
- Bus stop is a huge plus! ✓ ✓ ✓ ✓
- Lives in Janes Creek Meadows- would be perfect connection!
- Into the trail- along the RR
- Trail on RR and bus stop- great idea!
- Disability Community- use trail!
- Yes to trail on RR- would be fun to skate on it!
- Ok to make trail same width as marsh trail- I ride and walk it often and it is a perfect width

What do you NOT like about the design alternatives for this section of the project area?

- Need lights on Sunset overpass and pedestrian overpass ✓ ✓
- City placed lights for ped overpass today!
- Arcata needs trailheads where people can park and get their bikes together to ride to Eureka
- Hard for bikes/peds/wheelchairs to navigate existing traffic circle xing.
- Concerns about wheelchair access to open door; safety traffic circle; need to slow traffic.

Additional Comments @ Pop-Up

- Bicyclist: excited to go to West End Rd. and river on separated trail. Currently bikes but it's scary and narrow.
- Skateboarder: would walk or skate trail, sounds cool
- Pedestrian/Student who lives nearby: would like to use trail with dog, safer for everyone and would decrease inappropriate uses, concerned about loss of visible tracks and erased history
- BMXer: would be very helpful to have trail to neighborhoods along alliance
- Need lights on the bridge, more brightness
- Need lights along trail! LED
- Lights like on Foster Trail
- Downside: need to plan for that - patrol, lights, clear sight distance for women walking home, bike cops
- Patrolling will need to happen
- Arcata is missing trailheads

- Need ways to access trailheads from neighborhoods to use the trail!
- Needs trailheads (Larson Park)
- Raised Islands please on Sunset Ave
- Good connectivity for students
- Like RR option but also St. Louis for connections to housing
- Rail to trail would be best with good connections from neighborhoods
- Want trail to be completely away from cars for bike riding but have well signed side connections to housing/ businesses with mileage to the connection
- Connect to Hammond Trail
- Have connections to any new housing like the village
- Village Dev't access to trail on rail corridor would be best
- Have connection to Arcata Elementary School
- St Louis Rd Trail would be a better/ quicker connection from Stromberg
- Access to Larson would be awesome
- Plan trail for everyone- wide enough for this
 - Centerline is good reminder that it is 2-way trail traffic
 - Wider gravel road would be good for equestrians
- Center-stripe helps peds remember to stay on one side
- No center stripe
- Like the idea of 4ft shoulders
- Make wide enough to drive for maintenance- like through the marsh
- Trail through marsh is wide enough
- Rail to trail idea- Yes!
- Supportive of trail!
- Super supportive of rail trail
- Full support!
- Very supportive!
- Love the trail idea
- Yes, trail here!
- DO IT!
- Housing developments should pay for trail section that goes past development
- Housing Dev'ts pay into this to support trail- Match for ATP?
- Sunset Ave @ LKwood intersection scary!
- Sunset overpass has been scary for 30 years
- Commute from Fieldbrook to Aldergrove Industrial Park
 - Giuntoli overpass is challenging
 - Please have better access from Valley West to the planned trail
 - Way supportive of effort
 - A lot of potential for commuting to Aldergrove
- Likes trail- look for places to highlight the historic nature of the RR tracks- Show trails if possible/ expand suitable side walk xing and implements signage/ merge in West End but make sure use flat RR area rather than West End Rd as overpass. This could make biking to West End Rd faster than driving
- It's a drag to walk on West End Rd
- Any of the options would be better than what we currently have
- Love the trails you have and like the idea j more. Especially to the ridge trail

- Very happy about the trail- bike etiquette is important: Some bikers are not aware trail etiquette also important/ love new trail in Arcata and want to do what we need to see more folks outside
- I like separated and protected bike path
- Need bike racks on the trail through marsh, Arcata ridge trail, skatepark, and river access point
- I like gravel for walking
- Will the new housing pay for part of the trail? Consider
- Property tax solely for trails
- AHS practice field across sunset- people/youth could access sunset. Do we need a different/separate crossing location? Perhaps shift crosswalk at roundabout east to be along rail crossing
- Get rid of rail crossing!!
- St Louis Rd: no sidewalks, needs them
- Concern about work on the overpasses, displace transient campers to other less visible places
- Pump track along the trail? Or under the St Louis overpass. Get input from Ampt, Ramp Art
- In someone's name dedicate the trail
- Josiah Lawson Trail? - include bio/info along trail. Especially as trail goes past Spear/ St Louis
- Nearby neighbor: Hell no. Get a lot of homeless people throwing trash into yard. Not in favor
- Neighbor: Don't have an entrance to Larson Park from the trail! I don't mind the trail past the park to Valley West though.
- Need weed fabric under gravel if have wider shoulders. Concerned about low maintenance
- Need maintenance on future trail
- More foot and bike traffic is good
- We want to attract riders from elsewhere
- I like that Annie & Mary Trail is named after two women!
- Ensure e-bike access on trail

Overview Map Comments:

- Bike Racks at the Skate Park would be great.
- Lighting around sunset area needs improvement
- Bus stop on St. Louis
- Giuntoli: Bridges are not very walkable
- Love the idea of RR corridor and LKwood connection!!
- Restrooms at trailheads
- Yes! To railroad corridor alignment! Also like connections to "spinny park" and Spear Ave area.
- Live on West End Rd. and bike to work daily, dangerous to bike on West End.

APPENDIX C: Community Workshop and Open House comments received on 4/23/19

Map Comments

April 23rd Annie and Mary Workshop

Overview Map Comments:

- Don't like "g" connection- right through yard, beautiful old tree

Railroad Corridor Alternative: 10 Sticker votes

- Refer to future housing development in this plan to increase competitiveness for funding. Happy Valley housing development and zoning
- Some trail sections on RR corridor could feel isolated esp. At night and people might not use them ✓
- Nice fencing and foliage for all residential area that touches trail on West End and Jay
- Have a clear mileage signage to next trail/ road crossing so users know where trail goes!
- Wayfinding signage throughout
- Good idea to make this the first rail to trail project and make it easier for others to follow

West End Road Alternative

- Would like to see improvements on West End AND RR Rail Trail. Both

Hybrid Alternative: 1 Sticker vote

No comments

Trail Configuration Options:

- As a ped, I like a soft shoulder but paved when on a bike
- Rubberized pavement to be softer? Could be recycled rubber
- Rubberized pavement! Yes!

Focus Area Map Sunset Ave Larson Park Area:

- Continue Class I bikeway across Sunset and existing. ✓

Focus Area Map LK Wood and St Louis Rd Area:

- Green paint bike
- Straighten class II bike lane NB St Louis Rd across LK Wood
- White lines for ped crosswalk

Focus Area Map Giuntoli Lane Area

- I like using the railroad and safety for pedestrians/ bikes away from the traffic
- "YES!" "Yes!" to the Sidewalk + Bike Lanes Configuration on Giuntoli Overcrossing. With 5' sidewalk and two 5.5' bike lanes

West End Rd Area:

- Too close for comfort. Would leave all homeowners backyards altered and create safety issue. Maybe connect aR4. Preferred route with fencing and foliage

CIZ Area

- The Hybrid Alternative takes folks way off the path
- Don't like this: Ericson Way Detour
- Lighting
- Preference for RR alignment
- Access to Giuntoli to RR trail- bike friendly

Sunset to Spear: Area Map 1

- Possible police buttons in more secluded areas
- For driveway and road crossings, prioritize the trails
- I like the connections in this Area and the different ways to get to trail access

Future roundabout in design phase at Sunset/ LK wood

- Roundabouts can be scar for peds
- North or south on LKwood
- 2-way cycle track seems great through roundabout because it's further away
- What do you do on a bike if southbound on Lkwood? Approach roundabout

Focus Area Map Detail St Louis Rd Intersection:

No Comments

Focus Area Map Detail St Louis Rd and LK Wood Intersection:

No Comments

Focus Area Map Detail Sunset Ave & LK Wood Intersection

No Comments

Focus Area Map Detail West End Rd Intersection:

- Truck Traffic is an extremely important concern for me
- I like the ramps and improved bike lane and sidewalks. Some barrier is important

Northern Project Extension

No Comments

Arcata Annie and Mary Trail Likes and Dislikes from April 23rd Workshop

Sunset Avenue:

Like:

- Many students want more lighting
- Rail Corridor does not have crossing/conflict points!
- Any new improvements ASAP
- Use centerline striping on class I path to reduce conflicts between users. Solid stripe on corners, especially when sight distance is limited

Not Like

- Where rail corridor is more secluded- concerned about visibility/ safety
 - Are there other ways to open up sight distance/ visibility along rail corridor b/w St. Louis and West End Rd- besides lighting?
 - Mileage markers, park under St Louis overpass
- Do not like Hybrid Alternative 3a because of it going through field on West End- don't mind R3 prefer West End Rd dark blue/purple

North Project Extension:

Like:

- Access to water park
- Thrilled about the additional funding- Yeah!
- My husband loves to fish at the HBMWD
- Pretty, wooded setting
- Good destination for people of all ages- kids, college students, dog owners

Not Like: None

St Louis Overpass:

Like:

- Serves a student rich neighborhood
- Sidewalks!
- Shorter crossing distances
- I like the buffers between traffic and pedestrians/bikers

Not Like:

- Want bikes to not have to stop going right/westbound from overpass to St. Louis, not clear if they have a stop on that curve

Giuntoli:

Like:

- I like the design option of the connection from Giuntoli to Ericson Ct. And to HeadStart. I like the 2nd West End Rd. Alternative too
- All bike lanes painted green would be great
- 3a) Stairway with ramp would have itself the ramp on which you roll your bike as you walk up/down the stairs. Yes!

Not Like: None

Southern West End Road Area:

Like:

- I don't mind the #2 alternative on West End Rd because that is how I travel now. As a homeowner, it keeps the traffic and impact in my front yard where it already is- more backyard privacy
- A connection to LK Wood from R4 would be a great option for multiple neighborhoods (Tanglewood, Diamond Dr., California, Etc.) And be more direct from the Granite Ave Area of HSU. I like the lights along the trail- A must!

- I like the R5 and R6
- Prioritize shared use path at intersections and driveways! Make cars yield!
- Minimize use of stop signs on path! Use yield signs wherever possible!
- Love Art under bridge! More welcoming!

Not Like:

- On R3 definitely do not like the spur (Future magenta) from St. Louis to Corridor/RR our backyard privacy would be violated. We already have a busy road in front yard and that magenta line would come right into our only quiet spot and have the potential to chop down largest hawthorn tree. My family would not feel safe with people having that access plus the wildlife that uses that area would also be displaced. This connections to RR Trail could happen on R4 or near St. Louis overpass- 3310 West End Resident
- 3390 West End Owner- Would prefer the blue line being the trail to the front of our homes. Don't like the R3 connection agree could use the R4 to access trail. If the red line is used would like a very tall wooden fence that can't be climbed. Our privacy is violated at this point and it needs to be restated. Also, need to discuss erosion. The trail should be lighted for safety
- For R4- make sure there's lots of lighting for safety
- Like that there is parking at R4

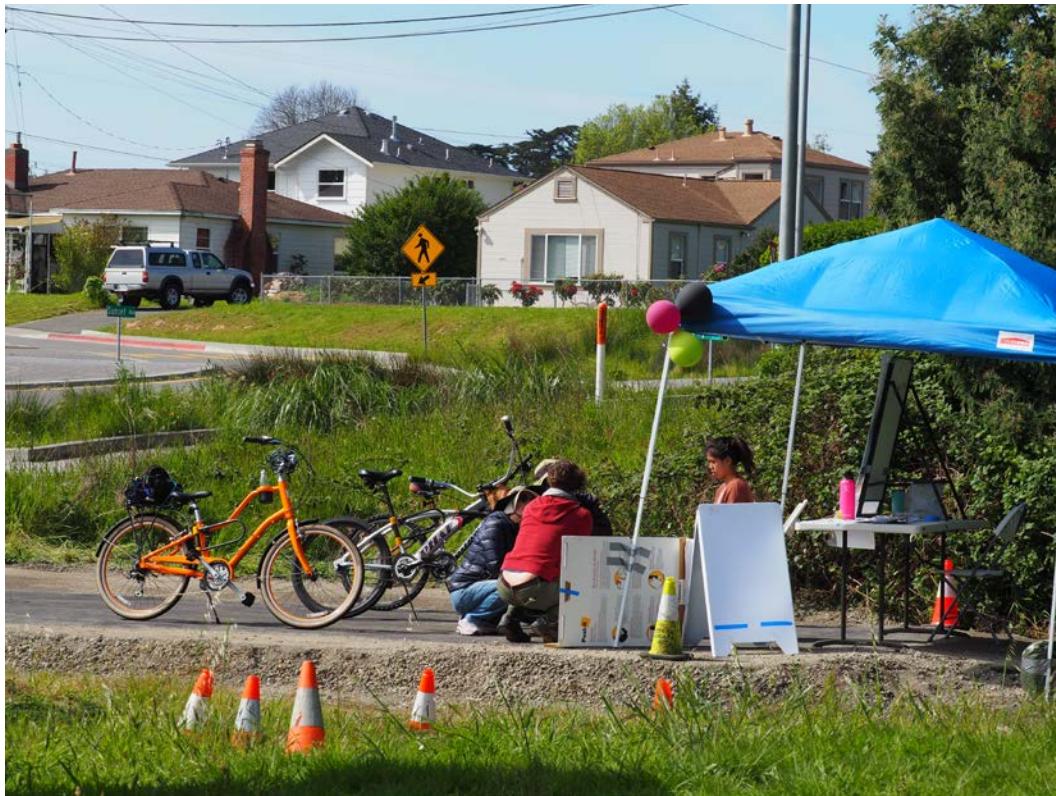
General Comments From Workshop:

- Thank you for prioritizing safety. Designating a "lane" for equestrian use would make me feel , esp when walking. Outside the box idea: Designating a 3 mile (or so) portion primarily pedestrians- where rubberized pavement was used? Painting all bike lanes green, esp when they are on traffic roads. Thank you for the thorough and top-notch work. The pictures and pop-ups have been especially helpful
- Not a fan of the Ericson Way Detour
 - Too many crossings
 - Disconnects trail segments
- Make Giuntoli Bike Connections Bike Friendly-corners not too steep
- Lighting is Key-Especially in Industrial Area and undercrossings
- Residence in R3
 - A lot more drainage has started coming on to the property since the trail corridor was cleared. Design will need to improve drainage
 - Privacy fence is critical
- Trail design needs to consider the pedestrian just as much as the bicyclists. People walking on the trails don't enjoy having bicyclists pass them (shouting "on your left")
- Giuntoli Overpass- Need physical barriers separating Bike/Ped from vehicles
- Reduce stop sign crossings where trail users have to stop
 - RR corridor is the best way to do this
- Want space for horses and horse carts

APPENDIX D: Outreach photos from April – May



Above: Photos from the April 10 Project Task Force meeting



Above: Photos from the April 22 Pop-up Infrastructure Demonstration



Above: More photos from the April 22 Pop-up Infrastructure Demonstration



Above: Two photos from the April 23 Community Workshop



Above: Photos from the Ericson Way Trail Information Booth on May 14

City of Arcata

Annie & Mary Trail Connectivity Project

Final
Project Report

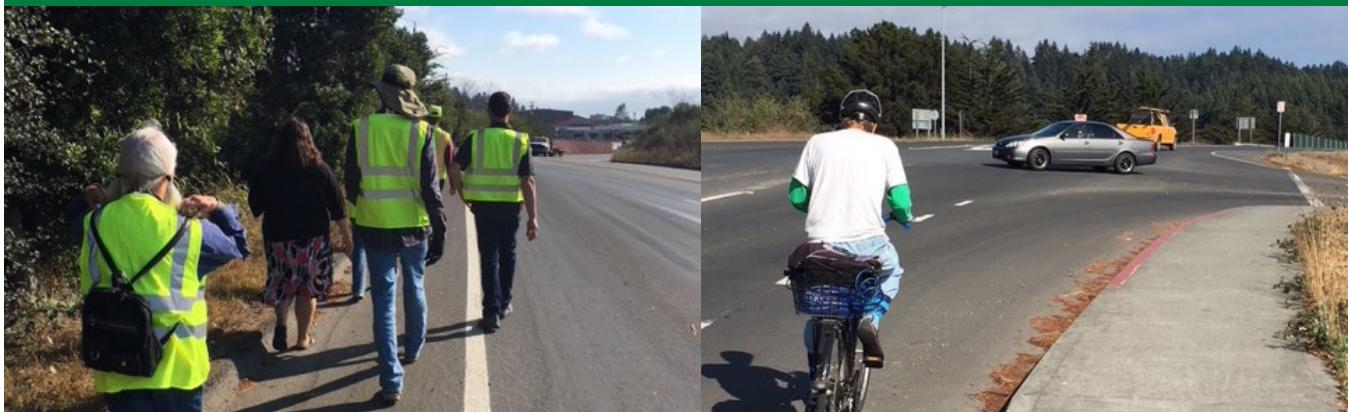
APPENDIX G

**Recommendations to Improve Pedestrian & Bicycle Safety for
the Valley West Community in Arcata**

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Recommendations to Improve Pedestrian & Bicycle Safety for the Valley West Community in Arcata



October 2018



Berkeley SafeTREC

SAFE TRANSPORTATION RESEARCH AND EDUCATION CENTER



Acknowledgements

Planning Committee

Netra Khatri	City of Arcata, Engineering Division
Julie Neander	City of Arcata, Recreation Division
Emily Sinkhorn	Redwood Community Action Agency
Jennifer Weiss	Redwood Community Action Agency
Areli Cupp	Humboldt County, Department of Health and Human Services
Elaine Hogan	Humboldt County, Department of Health and Human Services
Michael Reardon	Humboldt County, Department of Health and Human Services
Robin Baker	McKinleyville Resource Center
Jayne McGuire	Humboldt State University, Department of Kinesiology & Recreation Administration
Melissa Lazon	Arcata Public Safety Task Force
Janine Mahoney	River Community Homes
Camellia Preciado	The Courtyards
Lucy Salazar	Valley West Citizen Advocate

We would like to thank the Planning Committee for inviting us into their community and for hosting the Community Pedestrian and Bicycle Safety Training in the Valley West community of Arcata.

We would like to thank the McKinleyville Family Resource Center for providing food and refreshments, the City of Arcata for providing childcare, Elaine Hogan for providing English-to-Spanish interpretation in support of this training, and the Valley West Red Roof Inn for hosting the workshop.

We would like to acknowledge the many community members, organizations, and agencies present at the workshop and their dedication to pedestrian and bicycle safety. Their collective participation meaningfully informed and strengthened the workshop's outcomes.

Funding for this program was provided by a grant from the California Office of Traffic Safety, through the National Highway Traffic Safety Administration.

Table of Contents

Acknowledgements	2
Planning Committee	2
Introduction	4
Background	5
Planning Process	5
Existing Conditions	6
Pedestrian & Bicycle Collision History	6
Equity Concerns	7
Walkability & Bikeability Assessment Reflections	8
Key Opportunities to Improve Walking and Biking Safety	15
Community Recommendations	15
Cal Walks/SafeTREC Recommendations	17
Appendix A	19
Appendix B	24

Recommendations to Improve Pedestrian & Bicycle Safety for the Valley West Community in Arcata

By Mihaela Tomuta, Daniel Gonzalez, Tony Dang, California Walks;
Katherine Chen, UC Berkeley Safe Transportation Research & Education Center

Introduction

At the invitation of the City of Arcata, California Walks (Cal Walks), the University of California at Berkeley's Safe Transportation Research and Education Center (SafeTREC), and the Planning Committee collaboratively planned and facilitated a Community Pedestrian and Bicycle Safety Training (CPBST) for the Valley West community of Arcata on August 29, 2018. The CPBST is a community-driven pedestrian and bicycle safety action-planning workshop aimed to improve walkability, and bikeability across California.

Cal Walks and SafeTREC (Project Team) facilitated the workshop on August 29, 2018 from 4:00 p.m. to 7:30 p.m. at the Valley West Red Roof Inn. Dinner, childcare, and simultaneous English-to-Spanish interpretation were provided to maximize community participation. Thirty-eight (38) individuals attended the workshop, including the Mayor of Arcata and representatives from the City of Arcata Community Development Department; Recreation Division; Engineering Division; Transportation Safety Committee; Police Department; and Humboldt County, Department of Health and Human Services; AmeriCorps; Caltrans District 1; Humboldt Bay Bicycle Commuters Association; Redwood Community Action Agency; GHD Engineering; Bikes There; and residents.



Source: Jennifer Weiss

The three and a half (3.5) hour training consisted of: 1) an overview of multidisciplinary approaches to improve pedestrian and bicycle safety using the intersectional 6 E's framework including: Equity & Empowerment, Evaluation, Engineering, Education, Encouragement, and Enforcement; 2) three walking assessments along three key routes; and 3) small group action-planning discussions to prioritize recommendations for Arcata Valley West's active transportation efforts.

Background

The CPBST is a joint project of Cal Walks and SafeTREC that aims to leverage a community's existing strengths to develop a community-driven pedestrian and bicycle safety action plan and to identify pedestrian and bicycle safety priorities and actionable next steps in collaboration with community partners. For each training, the program convenes a local multi-disciplinary Planning Committee to tailor the training focus and curriculum to meet the community's needs. Cal Walks and SafeTREC conduct pre-training site visits to collect on-the-ground observations of existing walking and biking conditions to adapt the CPBST curriculum and to provide context-specific strategies for the community's existing conditions.

Planning Process

The Arcata Valley West CPBST planning process started in April 2018. The planning process consisted of:

- **Community Plans and Policies Review:** Cal Walks conducted a review of current community planning documents to inform the training with local context and prepare to build off existing efforts. The following documents were reviewed prior to the site visit:
 - [Humboldt County Transit Development Plan](#), 2017
 - [2018 Regional Transportation Improvement Program](#), 2017
 - [Humboldt County Association of Governments Regional Transportation Plan](#), 2017
 - [Humboldt County Regional Bike Plan Update](#), 2012
 - [City of Arcata Pedestrian and Bicycle Master Plan](#), 2010
 - [Arcata General Plan 2020 -Transportation Element](#), 2008
 - [Humboldt County Regional Pedestrian Plan](#), 2008
- **Analysis and Mapping of Pedestrian and Bicycle Injury Data:** SafeTREC used the Statewide Integrated Traffic Records System (SWITRS) and the Transportation Injury Mapping System (tims.berkeley.edu) to analyze pedestrian and bicycle injury data in Valley West, as well as Census data to create collision rates based on population. Patterns of injury collisions, victim characteristics, and demographics were analyzed to inform the planning process for the CPBST.
- **Identification of Priority Discussion Topics for Training:** The Planning Committee identified the Valley West community as the focus of the workshop in order to: 1) evaluate the active transportation needs of Valley West residents; 2) explore opportunities to improve pedestrian and bicycle safety and access in Valley West; and 3) explore opportunities to provide safe

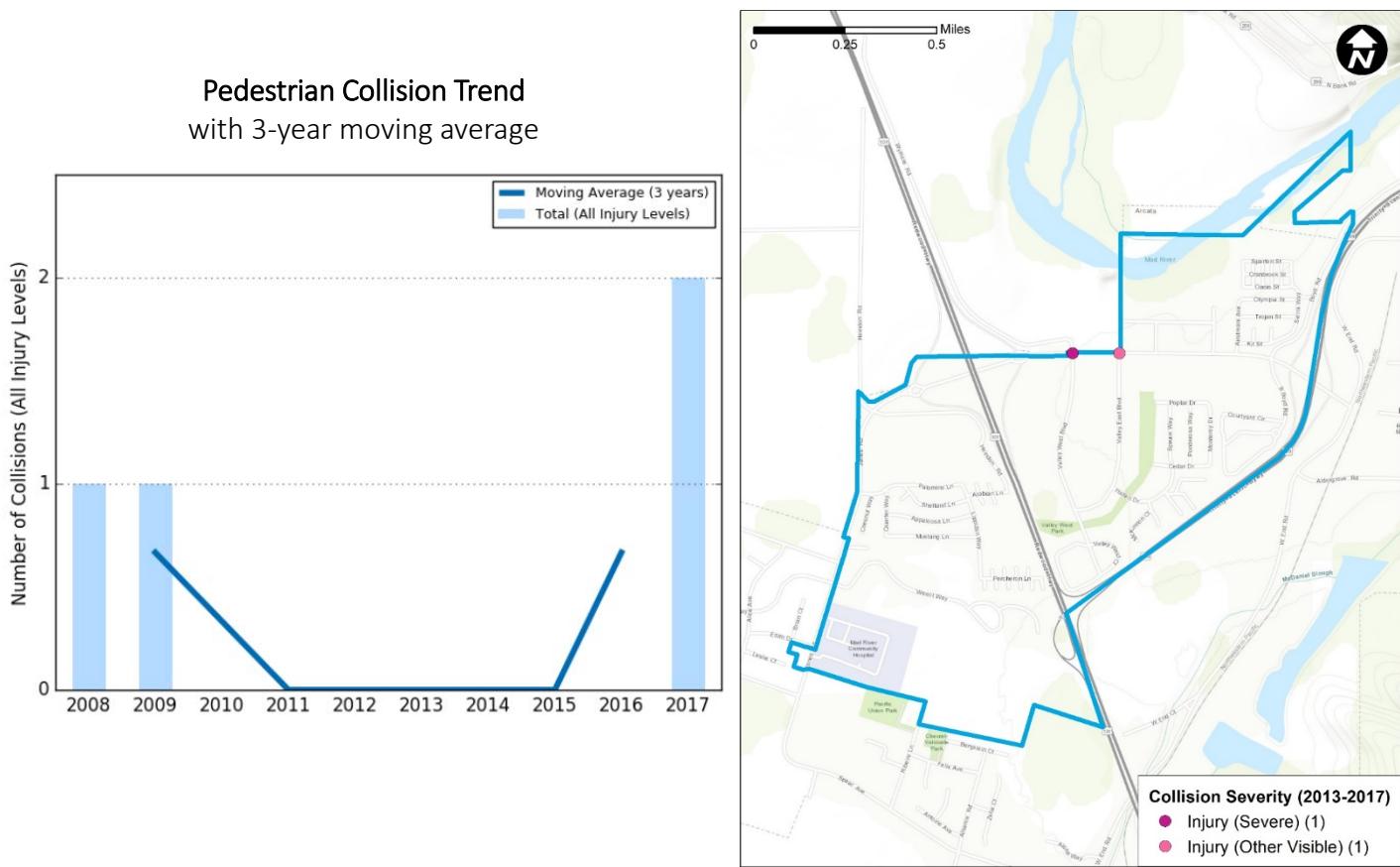
walking and bicycle connectivity between the Valley West neighborhood and Downtown Arcata.

- **Site Visit:** The Project Team conducted an in-person site visit on May 23, 2018 to 1) collect qualitative data based on in-person observations of existing conditions and travel behaviors and; 2) conduct preliminary walking assessments of the focal neighborhood. The Project Team used the site visit findings to develop the workshop presentation, including featuring local infrastructure examples and developing the walking/biking assessment route maps.

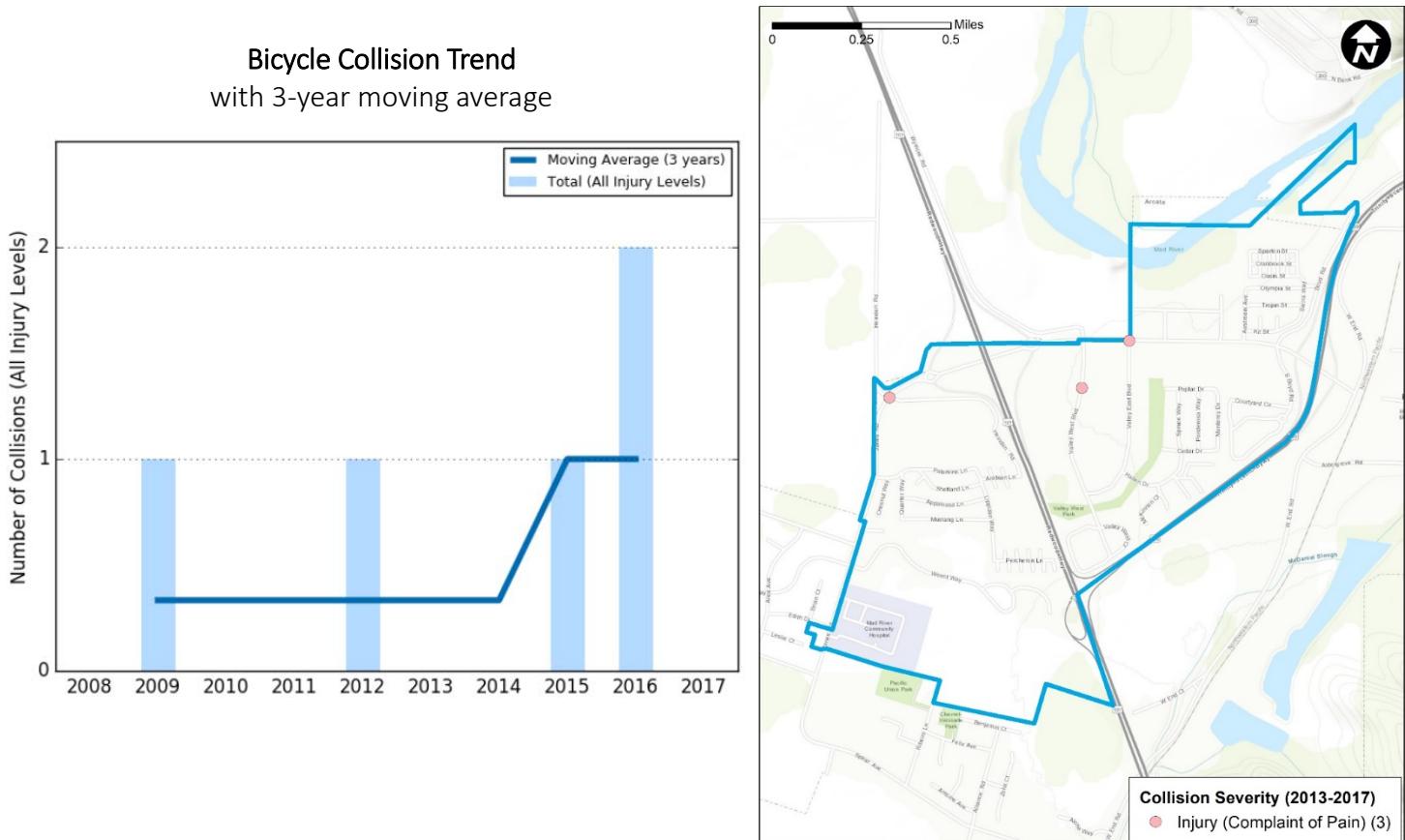
Existing Conditions

Pedestrian & Bicycle Collision History

Between 2013-2017, there were two (2) pedestrian collisions, including one (1) severe injury in Valley West. Collisions in this time period occurred on Giuntoli Lane. Both (100%) pedestrian victims were male. Over the 10-year period between 2008-2017, pedestrian collisions appear to be on an upward trajectory.



Between 2013-2017, there were three (3) bicycle collisions, including three (3) visible injuries in Valley West. Collisions in this time period occurred on Giuntoli Lane. The three (3) bicycle collision victims were male between the ages of 15-34. Over the 10-year period between 2008-2017, bicycle collisions appear to be on an upward trajectory.



A full discussion of the pedestrian and bicyclist collision data prepared by UC Berkeley SafeTREC can be found in Appendix A.

Equity Concerns

Nationwide, pedestrian fatality rates in lower-income communities are generally higher—sometimes more than twice as high¹—when compared to higher income communities. State funding programs generally define Census tracts at or below 80% of the statewide median household income (\$51,026) as disadvantaged communities. Valley West is a predominantly Latino community with a median household income of \$35,000 or below according to the U.S. Census Bureau. The community is also geographically separated and isolated from the rest of the City by CA-101 and SR-299 and is one of the lowest income neighborhoods in Arcata where many residents experience homelessness and housing insecurity. Additionally, many residents must travel on foot or by bicycle on a daily basis for transportation.

¹ Pedestrian Deaths in Poorer Neighborhoods Report," Governing, August 2014.

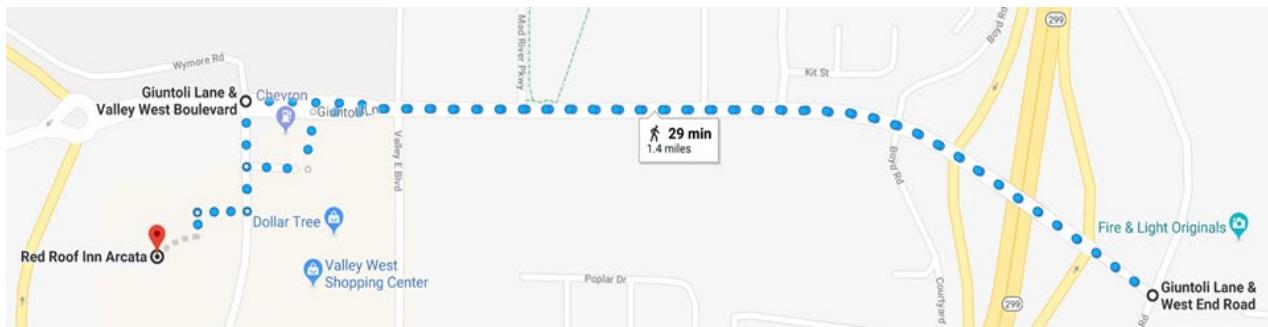
Available at <http://www.governing.com/gov-data/pedestrian-deaths-poor-neighborhoods-report.html>

Walkability & Bikeability Assessment Reflections

Participants were asked to 1) observe infrastructure conditions and the behavior of all road users; 2) assess the qualitative and emotional experience of walking or biking along the route; 3) identify positive community assets and strategies which can be built upon; 4) consider how the walking and biking experience might feel different for other vulnerable users. Workshop participants conducted walking and biking assessments along three key routes:

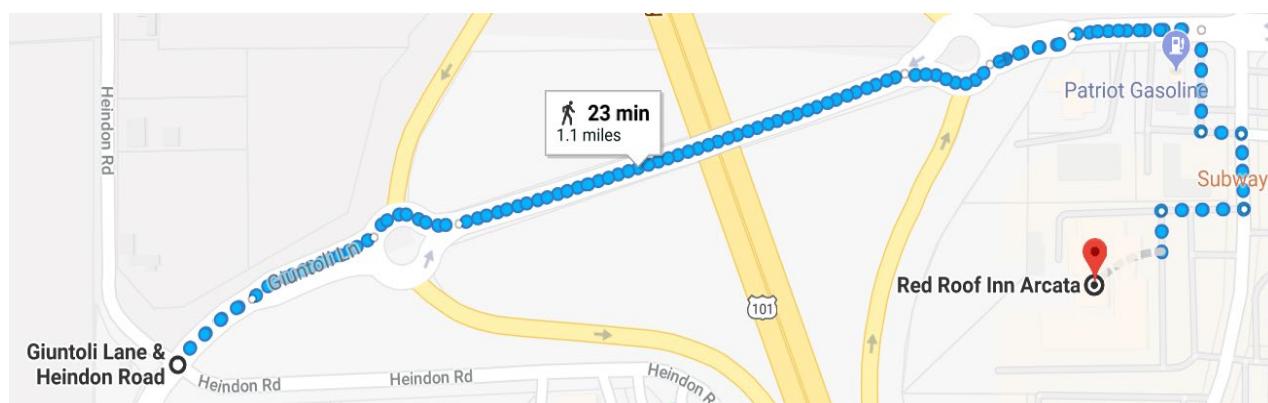
Route 1: Giuntoli Lane to West End Road

The first assessment route focused on Giuntoli Lane from Valley West Boulevard to West End Road. The route is the main ingress and egress into the Valley West community and used by community members and visitors to access both US State Route 101 (US 101) and California State Route 299 (SR 299) and the shops, gas station, and other amenities along Giuntoli Lane. Starting the walk assessment at the Red Roof Inn, the group of observers walked north on Valley West Boulevard, east on Giuntoli Lane to West End Road, and returned to the Red Roof Inn along Giuntoli Lane. Observations were conducted at several locations along Giuntoli Lane including the Valley East Boulevard, the transit bus stop near the SR 299 onramp, and at West End Road.



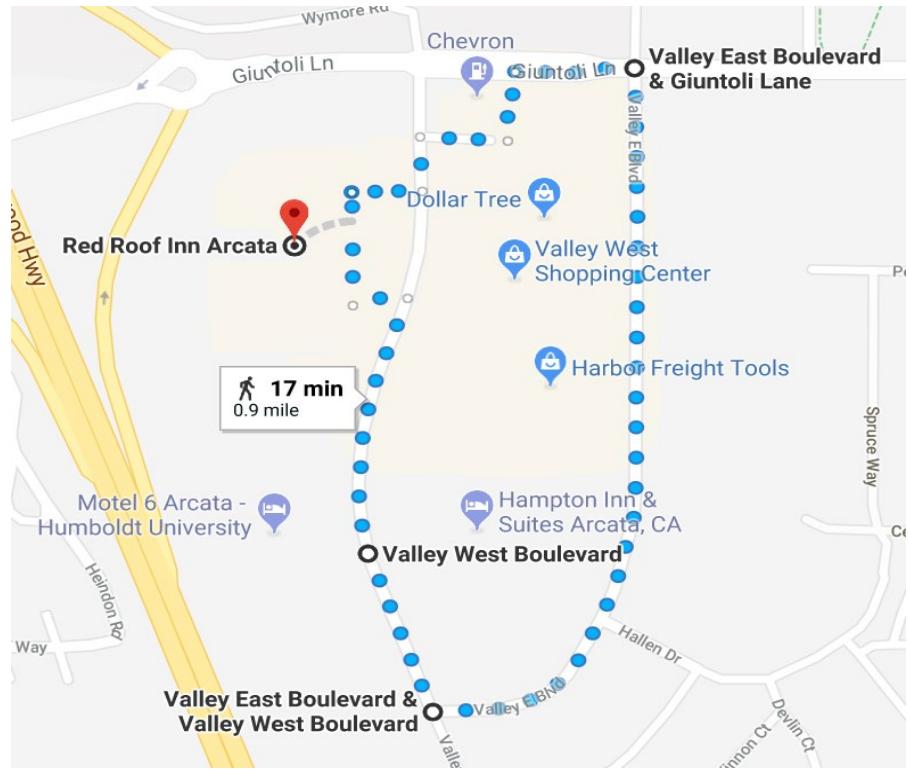
Route 2 – West on Giuntoli Lane to SR 101 to Heindon Road

The second assessment route focused on Giuntoli Lane going west to Heindon Road over SR 101. The Planning Committee selected this route due to the numerous crossing challenges at roundabouts the on- and off-ramps of SR 101, particularly for bicyclists. Starting the walking assessment at Red Roof Inn, participants walked north on Valley West Boulevard, then west on Giuntoli Lane crossing the two roundabouts at the SR 101 ramps, and ending at the Giuntoli Lane/Heindon Road intersection before returning to the Red Roof Inn.



Route 3 – Valley West & Valley East

The third assessment route focused on Valley West Boulevard and Valley East Boulevard. Starting the walk assessment at Red Roof Inn, this group walked south on Valley West Boulevard, east on Valley East, a slight detour onto Hallen Drive before continuing north on Valley East Boulevard, west on Giuntoli Lane, and south on Valley West Boulevard.

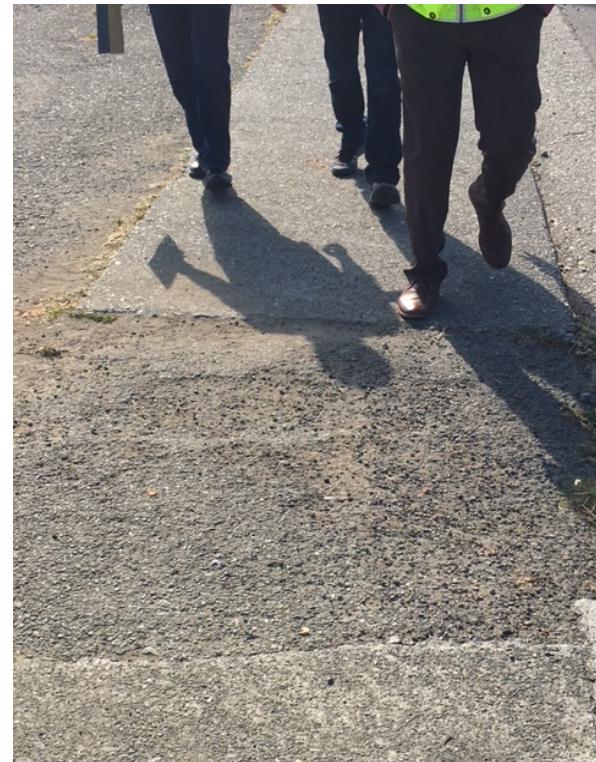


Following the walking and biking assessment, the participants shared the following reflections:

- **Missing Sidewalks and Various Sidewalk Conditions:** Though sidewalks are present on the Valley East and West Boulevard loop, many areas in the community lack sidewalks, most notably, sections of Giuntoli Lane. Participants identified missing sidewalks on Giuntoli Lane from Boyd Road to West End Road; the entire north side of Giuntoli Lane heading west from Valley West Boulevard; and on West End Road south toward Alder Grove Road. Participants also noted that where sidewalks exist, the widths and maintenance conditions of the sidewalks varied throughout the community. Participants on Route 3 noted that the sidewalks along Valley West Boulevard and Valley East Boulevard are narrow and challenging to navigate, particularly for individuals using assisted mobility devices and the elderly. Participants also experienced a number of sidewalk obstructions (e.g., utility poles, overgrown vegetation) and tripping hazards (e.g., large cracks in the sidewalk, gravel) on some segments of sidewalks along Giuntoli Lane and Valley East Boulevard near the Stonebridge Montessori Academy.



Workshop participants walk on a dirt path along Giuntoli Road towards West End Road



Rough and gravelly sidewalks along Giuntoli Lane.

- **Additional Roadway and Wayfinding Signage:** Participants noted a lack of signage in the community, including pedestrian crossing signage, bicycle lane and bicycle wayfinding signs, and landmark signs identifying the Valley West community. Participants on Route 1 noted a lack of signage and road markings identifying the bike lane along Giuntoli Lane, especially at the SR 299 on- and off- ramps. Workshop participants also identified a need for wayfinding signage to direct bicyclists to nearby destinations such as parks, schools, and nearby trails, similar to wayfinding signage present in other parts of Arcata. Participants on Route 3, for example, were excited to experience Valley West Park for the first time—many participants were not aware of the park’s location despite living in the neighborhood. Participants also shared that advanced pedestrian crossing warning signage at Boyd Road may help signal to motorists to expect pedestrians in the marked crosswalk on the southside of Giuntoli Road.



A bicyclist rides along Giuntoli Lane and Boyd Road where the bicycle lane markings end.



Playground at Valley West Park at Hallen Drive is not easily found by both residents and non-residents.

- **Challenging Marked and Unmarked Crossings:** Though sidewalks do not exist on Giuntoli Lane or West End Road near the SR 299 on- and off-ramps, participants on Route 1 shared that residents regularly walk in this area. Accordingly, participants expressed that they would feel safer walking in the area with marked crosswalks as a short-term improvement, while the City, County, and Caltrans work toward installing sidewalks in the long-term. Participants on Route 2 appreciated the high-visibility crosswalk at the Heindon Road/Giuntoli Lane intersection but noted that the existing street configuration and markings were not sufficient. The high-visibility crossing that goes across Heindon Road is skewed to accommodate a very wide turning radius for drivers turning right onto Giuntoli Lane, thereby creating a longer crossing distance for pedestrians. Additionally, participants observed that there are no crosswalks across Giuntoli Lane at this intersection that would enable residents to access the regional Hammond Trail and Mad River on foot or by bike. Participants supported the addition of a high-visibility marked crossing across Giuntoli Lane with enhancements, such as pedestrian refuge islands and rectangular rapid flashing beacons to increase the visibility of pedestrians.

- **Inadequate Street Lighting:** Participants identified limited nighttime visibility for and of pedestrians and bicyclists as a major safety challenge. While the neighborhood has some lighting, most street lights are directed at the roadway and largely illuminate the driving lanes only. In general, the neighborhood lacks pedestrian-scale lighting along most sidewalks, at pedestrian crossing locations, at transit stops, and at Valley West Park. Participants highlighted that the lack of pedestrian-scale and street lighting on Giuntoli Road between Valley West Boulevard and West End Road and the presence of many driveways along Giuntoli Road are safety barriers that makes it difficult to navigate at night. Participants on Routes 1 and 3 shared that they will not leave their homes or walk at night along Valley West Boulevard and Valley East Boulevard once the sun sets because of the missing street lighting, limited visibility, and fear that they will not be seen by motorists.



Giuntoli Lane in the late afternoon, looking west from the transit stop towards CA US 101 has long stretches with limited streetlights.

- **Challenging Roundabouts for All Users:** Participants in Route 2 observed and evaluated two roundabouts that cross SR 101. Participants identified two major challenges with the current roundabouts and user behaviors. When pedestrians cross at the designated marked crosswalks, drivers generally tend to yield the right-of-way to pedestrians. However, this has the unintended consequence of causing drivers to come to a full stop in the roundabout. Because roundabouts are generally designed to facilitate free-moving traffic, drivers are not expecting other drivers to stop in roundabouts, and participants shared that during peak traffic times, many rear-end collisions occur.

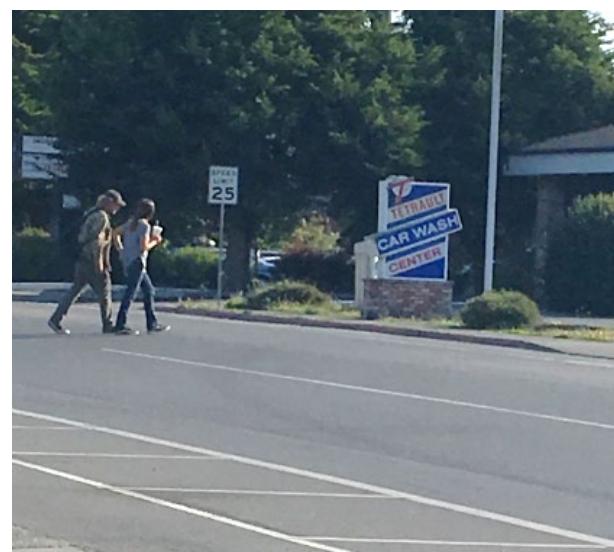
The second major challenge is related to how a bicyclist is expected to navigate this roundabout. Though a bike lane exists on the south side of Giuntoli Lane, the eastbound bike lane abruptly ends as it approaches the roundabout. Participants deduced that eastbound bicyclists are expected to ride onto an unmarked curb ramp, navigate on the sidewalk to clear the roundabout, and then descend another unmarked curb ramp to re-merge into traffic. Participants found this design to be confusing and unintuitive for bicyclists and for drivers who may not be expecting bicyclists to merge into traffic from the sidewalk. Moreover, the current roundabout design is inconsistent for westbound bicyclists who must bike along the north side of Giuntoli Lane with no bike lanes and navigate through the roundabout as a driver would.

- **Bus Shelters:** Not all transit stops in the community have bus shelters to protect riders from the elements, especially during the rainy season. Participants on Route 3 who travel by bus shared that some transit stops are in disrepair with trash adjacent to them and missing lighting and benches. On Route 3, a bus rider was observed sitting on the sidewalk waiting for the bus in front of the former Little Learners Center along Valley East Boulevard.



Bus shelter without a bench on Valley East Boulevard. Bus transit user awaits bus on sidewalk due to missing bus bench.

- **Unsafe Road User Behavior:** Participants noted a number of unsafe road user behaviors, including drivers traveling at speeds above the posted speed limits and failing to share the road with bicyclists; pedestrians crossing mid-block outside of marked or unmarked crossings; and bicyclists riding on the sidewalk and failing to yield at stop signs and marked crosswalks. On Route 3, participants observed pedestrians walking in the street in the bike lanes and crossing outside of marked and unmarked crosswalks. Participants on all routes also agreed that some drivers traveling along Giuntoli Lane, Valley West Boulevard, and Valley East Boulevard appeared to be traveling above the posted speed limits. Participants shared they do not feel safe crossing the street, even in the marked crosswalks along Valley West due to high vehicle speeds and drivers often failing to yield to pedestrians at marked crosswalks, particularly at Giuntoli Lane/Boyd Road.



Pedestrians cross Valley West Boulevard midblock and outside a crosswalk.

- **Individuals Experiencing Homelessness and Housing Insecurity:** Participants noted that the number of individuals experiencing homelessness is increasing in the community, particularly in empty lots and neighborhood park. Participants shared that community members experience housing insecurity often live in recreational vehicles (RVs) that are parked along the Valley West loop, which limits visibility between motorists, bicyclists, and pedestrians along Valley West Boulevard and Valley East Boulevard. Participants on Route 1 shared that there are Humboldt State University (HSU) students living in the community who are experiencing housing insecurity. As of April 2018, 19% of HSU students reported being housing insecure at least once in the last twelve months.²
- **Overgrown Vegetation and Lack of Shade Trees:** Participants shared that overgrown bushes and low hanging tree branches block visibility and access for pedestrians using the sidewalk along Giuntoli Lane, Valley West Boulevard, and Valley East Boulevard.



Narrow sidewalk with light post and overgrown tree roots creating barriers for pedestrians along Valley West Boulevard (left). Overgrown shrubbery limits walkability along Valley East Boulevard (right).

² An Unprecedented Look at CSU Students' Food and Housing Insecurity. Humboldt State Now. April 2018. Accessed September 30, 2018.

Key Opportunities to Improve Walking and Biking Safety

Following the walking and biking assessment, the Project Team facilitated small-group action planning discussions where participants prioritized and preliminarily planned infrastructure projects and community programs aimed at reducing the number of injuries and fatalities, as well as increasing the number of people and the frequency of walking and biking in Valley West.

Through a voting process during the training, participants chose to focus on and preliminarily plan for crossing enhancements and temporary demonstrations, a bicycling education campaign, and a neighborhood speed watch program. Participants self-selected which project they wanted to collaborate on with their fellow participants to develop a plan and discussed:

- The problem the infrastructure project/community program is intended to solve;
- The people, organizations and agencies that should be involved to implement the infrastructure project/community program;
- Resources needed to implement the infrastructure project/community program; and
- Short-term and long-term action steps to implement the infrastructure project/community program.

Community Recommendations

Workshop participants provided the following priority recommendations and next steps for overall pedestrian and bicyclist safety improvements in the workshop area and throughout the Jackson Academy community.

Community Programs, Policies, and Campaigns

- **Bicycle Educational Campaign:** Participants were interested in creating a comprehensive bicycle education program targeting youth and their parents, adults, and college students as a means to improve bicyclist behaviors in the community and create a safer environment for bicyclists and drivers. Participants in this group planned to outreach to and partner with the Arcata School District and HSU to create educational materials, such as pamphlets, a service directory, and signage throughout the community for students from K-12, parents, and university students with the premise that bicycling education begins at home and is a valuable life skill.

The partnership between the Arcata School District and Humboldt State University envisions HSU students educating youth through presentations, bike rodeos, and group bike rides. In order to see these projects through to fruition, the participants identified the Arcata School District, HSU, Humboldt State University Police, Arcata Police Department, the City of Arcata, local bicycle organizations, local bicycle shops, and parents as key partners for implementation. Participants committed to forming a group of community leaders who conduct outreach to HSU students to participate in the creation of educational tools to distribute in the community and to begin

organizing presentations, bike rodeos, and group bike rides. Participants hope to form a community group and begin conducting outreach to students and the district by the end of 2018. They also hope to develop educational materials and host one bike rodeo within a year of the CPBST.

- **Neighborhood Speed Watch and Education Program:** Participants were interested in implementing a neighborhood speed watch and education program utilizing handheld speed radar devices and roadway speed feedback signs as a strategy to reduce high vehicle speeds in the community. Participants identified Giuntoli Lane, Valley West Boulevard, and Valley East Boulevard as the target corridors for the program. The main goals of the program are to increase drivers' awareness of how fast they are traveling and to alert drivers when they are traveling at excessive speeds through the use of speed radar devices and warning letters issued by the California Department of Motor Vehicles (DMV) office in Eureka. In order to start the program, participants identified developing relationships with the DMV office in Eureka and the City of Arcata to assess the feasibility of the program and any support the two agencies can offer. Participants expected the program would require volunteers, signage, speed radar devices, and DMV collaboration to being the program and hoped to develop specific educational material to provide drivers. Cal Walks committed to e-mailing the group information on [Sacramento County's Neighborhood Speed Watch Program](#) to review and to scheduling a planning call in late October 2018 to discuss the program and identify next steps.

Infrastructure Concerns & Priorities

- **Crossing Enhancements and Temporary Demonstrations:** Participants were very interested in improving crossings in the neighborhood, particularly at intersections that currently lacked any marked crossings. Participants identified geographic proximity to parks, mobile home parks, bus stops, schools, and commercial developments (e.g. along Valley East Boulevard) as criteria for prioritizing the installation of new crosswalks. Additionally, this group identified some specific locations that sorely needed marked crosswalks, including all legs of the Wymore Road/Valley West Boulevard/Giuntoli Lane intersection and across Giuntoli Lane at the intersections east of Valley East Boulevard. Participants identified the key stakeholders for implementing these crossing enhancements as the City of Arcata, Humboldt County, Caltrans District 1, Humboldt County Public Health, residents, and local businesses. In particular, participants noted that residents will be crucial for collecting qualitative safety data to help in the prioritization of new crosswalk locations and enhancements. Additionally, improved interagency communications between the City, County, and Caltrans will help streamline implementation of the crosswalk enhancements. In terms of specific crosswalk enhancements, participants voiced support not only for high-visibility crosswalk markings, pedestrian-scale lighting, rectangular rapid flashing beacons, and fluorescent crossing signage but also for more greening and aesthetic-focused safety improvements, such as landscaped medians that could also serve as pedestrian refuge islands.

Recognizing that many of these improvements will require a longer time frame to implement, this group also discussed hosting a temporary demonstration of crossing enhancements in May 2019 as a way to build momentum and sustain engagement with residents. The group identified the need for establishing a project team to oversee the temporary demonstration and set a goal of October/November 2018 to recruit project team members, as well as to gauge interest from City staff, particularly from the Public Works Department. Participants also discussed the importance of evaluating before and after conditions with the temporary demonstrations to measure success and impact on pedestrian and bicycle safety. The group also identified the following preliminary tasks that would need to be completed but left the target completion dates to be determined by the project team:

- Identify location(s), dates, and times for demonstration(s);
- Secure donations for the event, including spray paint, hay bales, traffic safety cones, chalk, webcam or GoPro camera;
- Recruit volunteers to help set up demonstration(s), conduct outreach, and assist with traffic control and evaluation activities;
- Promote demonstration event(s);
- Secure permit(s) and/or permit fee waivers from City or County as needed; and
- Develop evaluation plan and/or survey for before and after data collection, including, but not limited to, driver speeds, number of people walking, number of people crossing and driver yield rates to pedestrians crossing.

Cal Walks/SafeTREC Recommendations

California Walks and SafeTREC also submit the following recommendations for consideration by the Planning Committee:

- **Expand Zagster Bikeshare to the Valley West Neighborhood:** Participants during the workshop repeatedly communicated that Valley West neighborhood is isolated from the rest of the City and felt that many Arcata residents do not view Valley West as part of the larger Arcata community. The Project Team **recommends that the City of Arcata explore the feasibility of expanding the existing Zagster Bikeshare system to the Valley West Neighborhood.** Expansion of the current bikeshare system beyond its current focus around HSU and Downtown Arcata can help to foster a shared sense of community identity, while also encouraging more travel between Valley West and the other neighborhoods of Arcata. Given the lower-income and demographics of the Valley West neighborhood, **any expansion of the system would require Spanish-language outreach and educational materials and include proactive strategies to enable people with low incomes, without credit cards, and with old or no smartphones to be able to access the system.** Potential strategies that may work in Valley West that have been implemented in other bikeshare systems include:

- Reduced fares or membership discounts for residents receiving state welfare or other assistance;
- Enabling access to the system with cash payments that can be loaded onto membership cards in person; and
- Enabling access to the system via text message to unlock a bike, ride, and end a trips. This strategy would enable riders without smartphones to be able to fully use the bikeshare system.

- **Lighting Assessment:** The Project Team encourages and recommends the Planning Committee and workshop participants to collaboratively conduct a community-wide street lighting assessment focused on pedestrian and bicycle lighting needs around Giuntoli Lane, Valley West Boulevard, Valley East Boulevard, and Valley West Park. Proper street lights provide safety and security as well as improve the overall well-being of road users. A lighting assessment can be used to identify and inventory nighttime pedestrian-scale lighting needs in areas of high nighttime pedestrian activity. A nighttime assessment will also identify lighting fixtures in need of repair or replacement, and with an inventory, the City can develop a proactive and equitable plan for streetlight maintenance that is not complaint-driven. Lighting should be uniform and consistent to increase visibility.
- **Valley West Park Wayfinding and Additional Signage:** Residents participating in the workshop were unaware of Valley West Park, a linear park located along Valley East Boulevard behind the apartment complexes from Poplar Drive to Valley West Boulevard and bisected by Hallen Drive. The park has a community playground along Hallen Drive. Although the park is listed on the [City of Arcata, Arcata Parks and Playground](#) map, participants did not see any entrance signage identifying the park. The Project Team **recommends the addition of an entrance sign at Hallen Drive** near the park parking lot (at Poplar Drive) and interpretative signage explaining the park floods during rainy season. Participants shared that while the playground can be used year-round, some portions of the park flood. The Project Team also **recommends the City explore the possibility of adding a trail or sidewalk through the park** to allow residents a safe, comfortable and pleasant place to walk. Several older residents shared they walk regularly in the community and would like to have additional places to walk away from vehicle traffic.

Appendix A

Pedestrian and Bicycle Collision Data Analysis
Workshop Handout

2013-2017 ARCATA VALLEY WEST DATA ANALYSES

Community Pedestrian and Bicycle Safety Training Workshop August 29, 2018

The goal of the Community Pedestrian and Bicycle Safety Training (CPBST) is to make communities safer and more pleasant for walking and bicycling. This workshop will train local residents and safety advocates in pedestrian and bicycle safety as well as create opportunities for collaboration with local officials and agency staff.

This fact sheet highlights some of the most recent pedestrian and bicycle collision data available for Arcata Valley West to help the community better prioritize recommendations that emerge from this workshop.



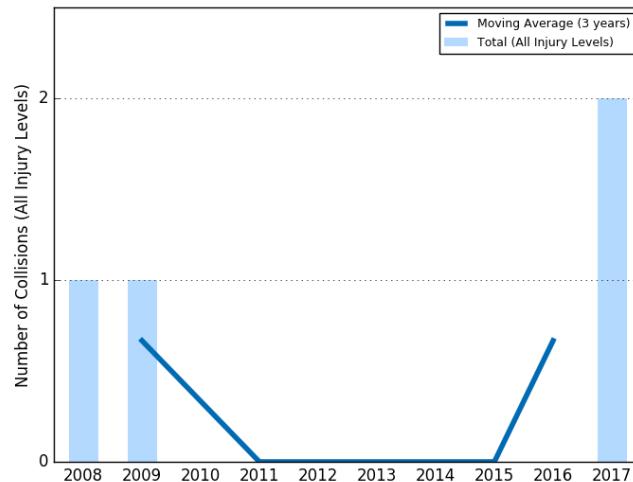
4 people were injured in **4** pedestrian collisions in the last 10 years (2008-2017).

The **three-year moving average** line shows an **upward trend** in pedestrian collisions.*

There were **0** pedestrian collisions in 2016, but an average of **2** pedestrian collisions per year for the 3-year rolling average between 2015 and 2017.

*This line is useful for tracking change over time, especially when the number of collisions changes a lot between years. Data points are at the midpoint of the three years of data specified.

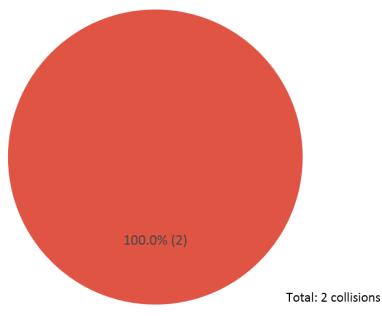
PEDESTRIANS



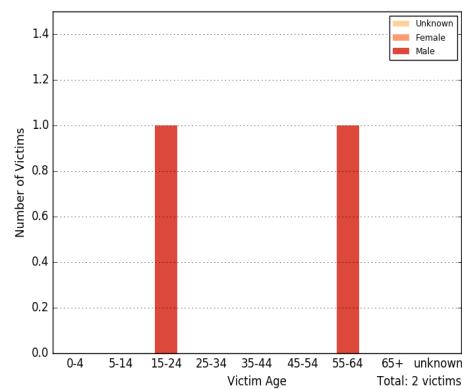
100% driver violations

VS.

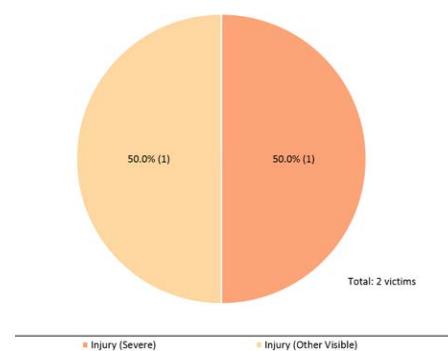
0% pedestrian violations



* Note: There were only 2 collisions in the last 5 years (2013-2017).



100.0% of victims were male



50.0%
of victims (or 1 person) was
SEVERELY INJURED

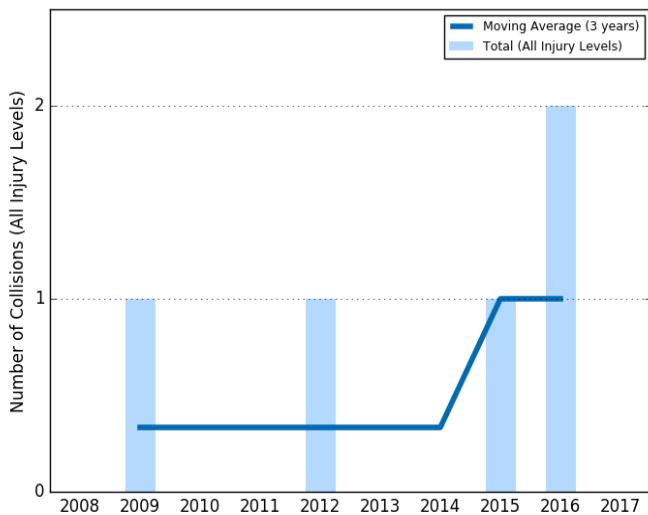
BICYCLES



5 people were killed or injured in 5 bicycle collisions in the last 10 years (2008-2017).

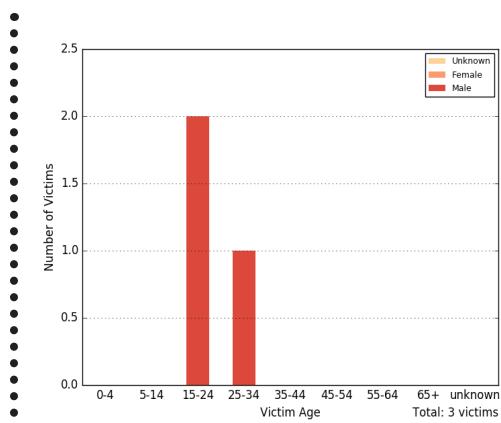
The **three-year moving average line** shows **no change** in bicycle collisions.*

There were **2** bicycle collisions in 2016, but an average of **1** bicycle collisions per year for the 3-year rolling average between 2015 and 2017.

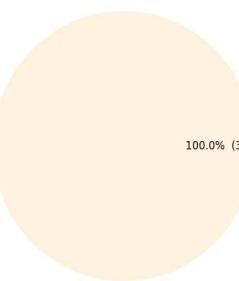


* This line is useful for tracking change over time, especially when the number of collisions changes a lot between years. Data points are at the midpoint of the three years of data specified.

Bicycles must follow all the same rules of the road as vehicles. As a result, we cannot break down violations by driver vs. bicyclist.



100.0% of victims were male
100.0% of victims were age 19-29



100.0%
of victims (or 3 people) had
MINOR INJURIES

SUMMARY



37.8 pedestrian fatalities & injuries per 100,000 population over the last five years, which is **15.6% less than** Humboldt County and **5.3% more than** California



60.1 bicyclist fatalities & injuries per 100,000 population over the last five years, which is **65.1% more than** Humboldt County and **80.5% more than** California

	Yearly Population Rate of Fatalities & Injuries per 100,000 Population Calculated Over a 5-year Period*	
	Pedestrian	Bicyclist
Arcata	37.8	60.1
Humboldt	44.8	36.4
California	35.9	33.3

Source: U.S. Census Bureau, Population Division (intercensal population data for 2016).

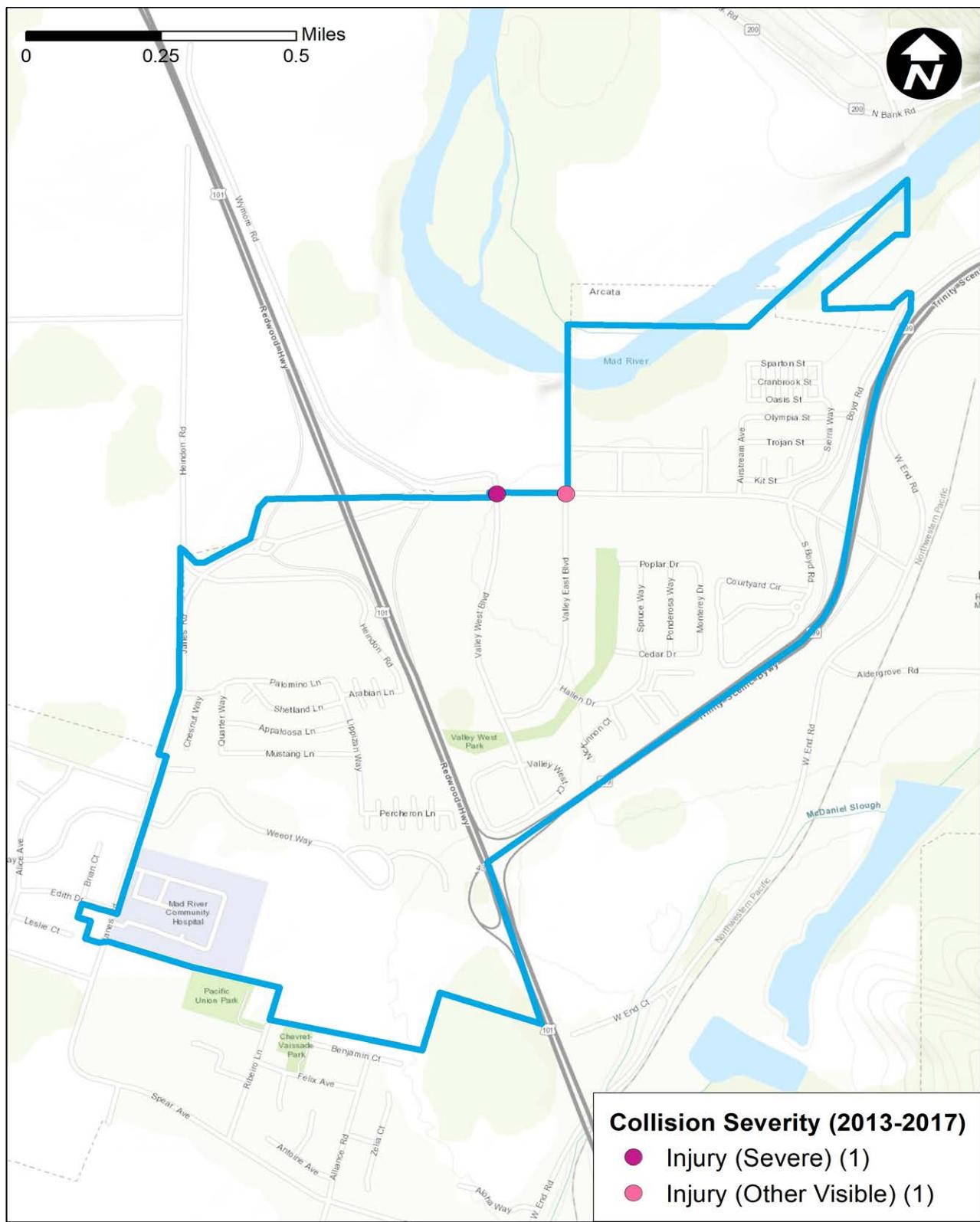
* The rate per population is calculated by adding the number of fatalities and injuries from 2012 to 2016 divided by five times the population in 2016.

Berkeley SafeTREC



Pedestrian Collisions 2013-2017

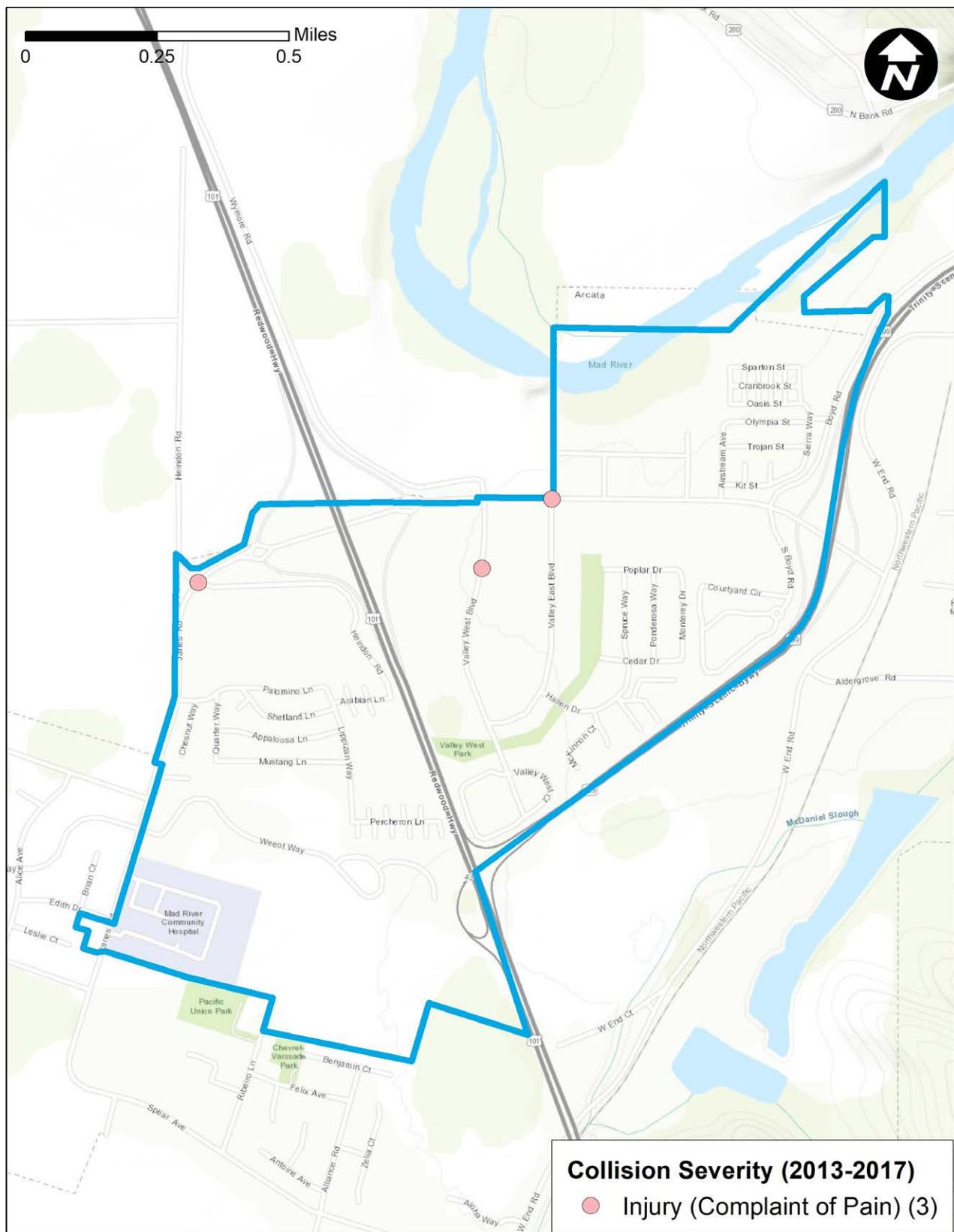
2 collisions mapped in the Valley West area of Arcata, CA.



Data Source: California Statewide Integrated Traffic Records System (SWITRS). Collision data for 2016 and 2017 are provisional.

Bicyclist collision locations, 2013-2017

3 collisions mapped in the Valley West area of Arcata, CA.



Data Source: California Statewide Integrated Traffic Records System (SWITRS). Collision data for 2016 and 2017 are provisional.

Appendix B

Pedestrian and Bicycle Collision Data Analysis
Site Visit Presentation

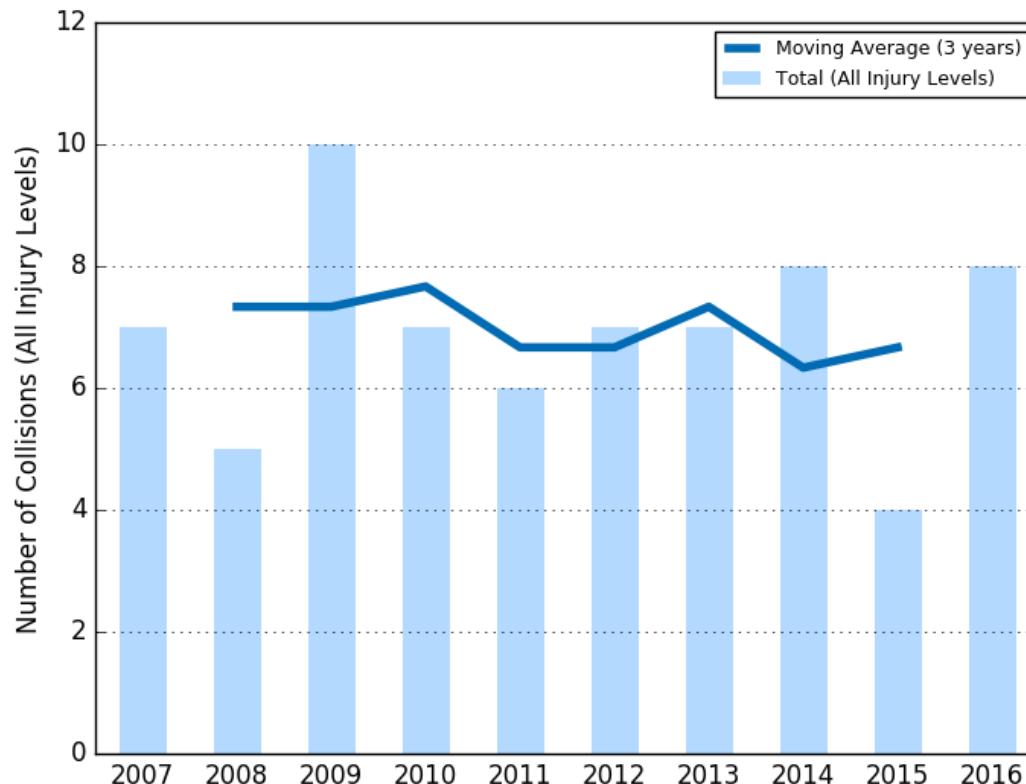
Community Pedestrian and Bicycle Safety Workshop - Data

Arcata, CA

6/27/18

Pedestrian Injury Collision Trend

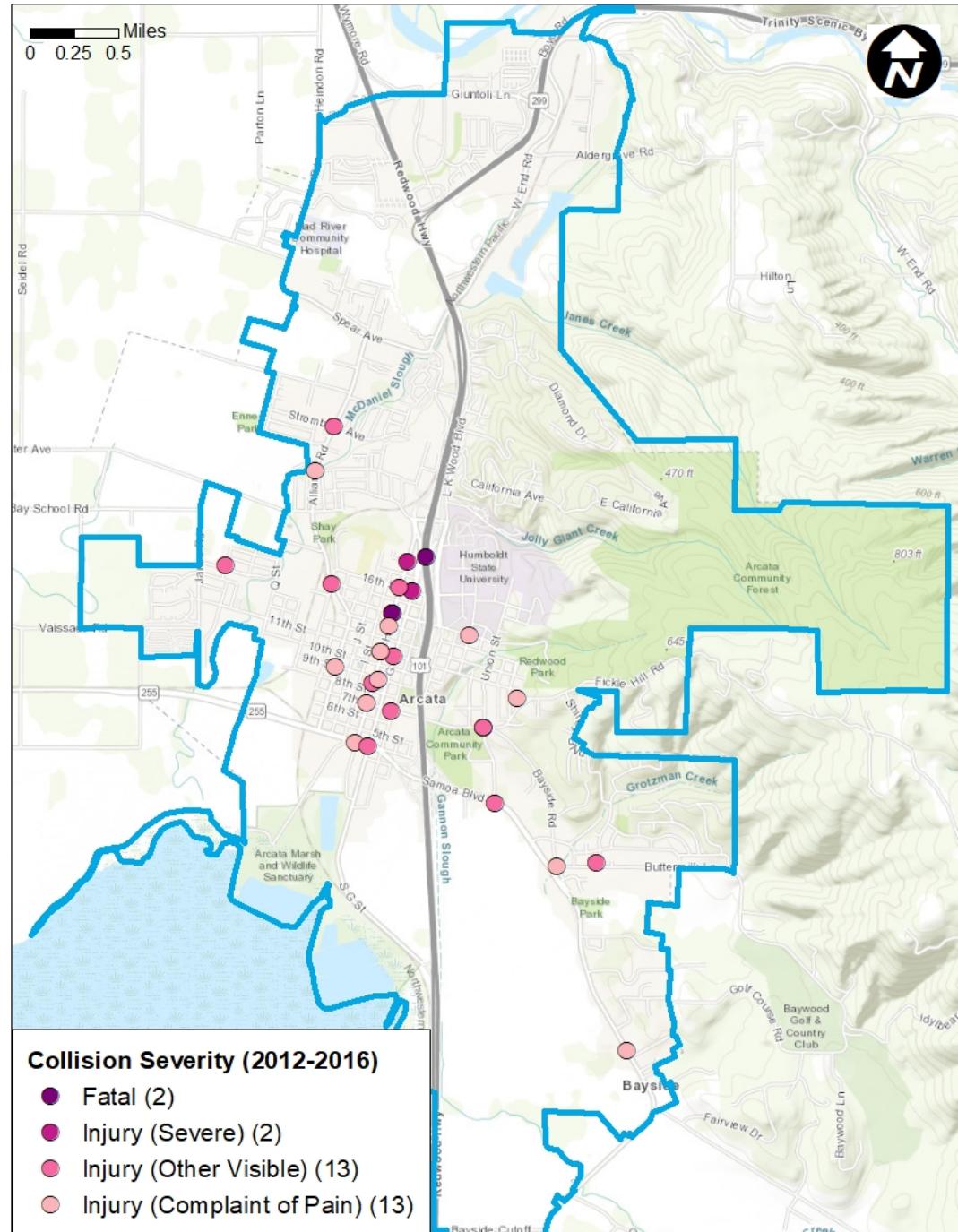
with 3-year moving average



Source: Statewide Integrated Traffic Records System (SWITRS), 2007-2016;
2015 and 2016 SWITRS are provisional as of November 2017.

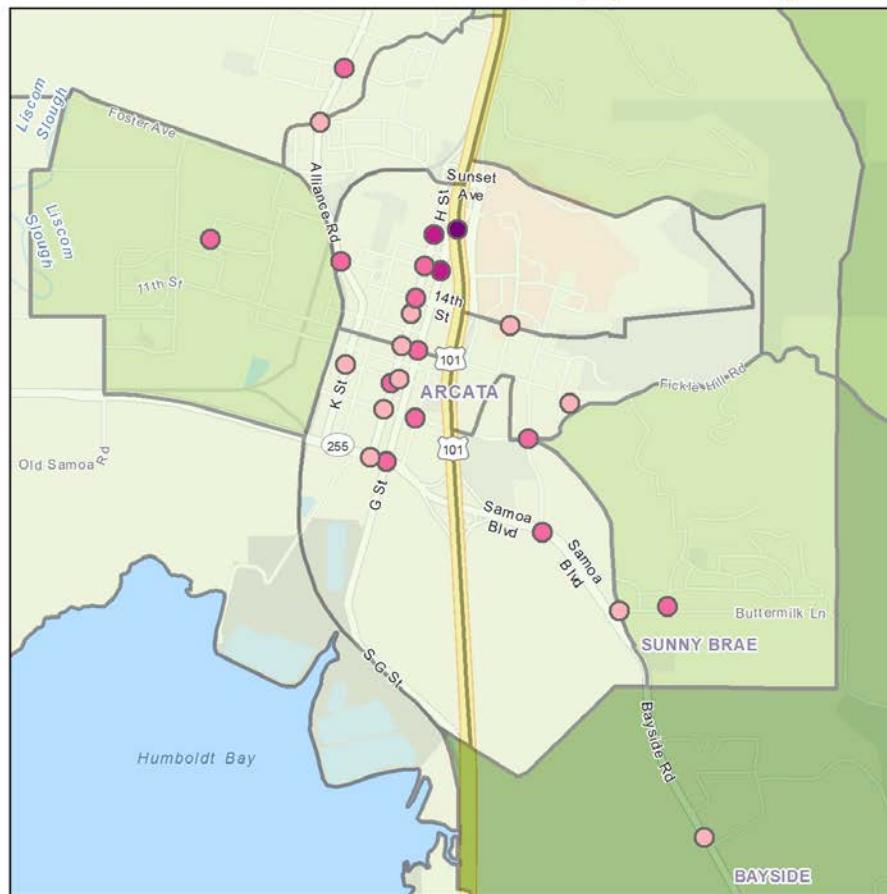
Pedestrian Injury Collisions 2012-2016

Only 30 of 34 collisions are mapped.



Source: SWITRS, 2012-2016; 2015 and 2016 SWITRS are provisional as of November 2017.

Arcata Pedestrian Collision Map (2012 - 2016)



Collision Severity (2012-2016)

- Fatal (2)
- Injury (Severe) (2)
- Injury (Other Visible) (13)
- Injury (Complaint of Pain) (13)

2017 Median Household Income

- < 35K
- 35K - 50K
- 50K - 75K
- > 75K

Pedestrian Injury Collisions by Time of Day and Day of Week

Total: 34 collisions

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
09:00PM-11:59PM	1	0	1	0	0	1	0
06:00PM-08:59PM	2	2	1	1	1	0	1
03:00PM-05:59PM	1	1	1	4	2	0	1
Noon-02:59PM	0	1	1	1	0	0	0
09:00AM-11:59AM	0	1	2	0	2	0	1
06:00AM-08:59AM	1	0	0	0	1	0	0
03:00AM-05:59AM	0	0	0	0	0	0	0
Midnight-02:59AM	0	1	0	0	0	1	0

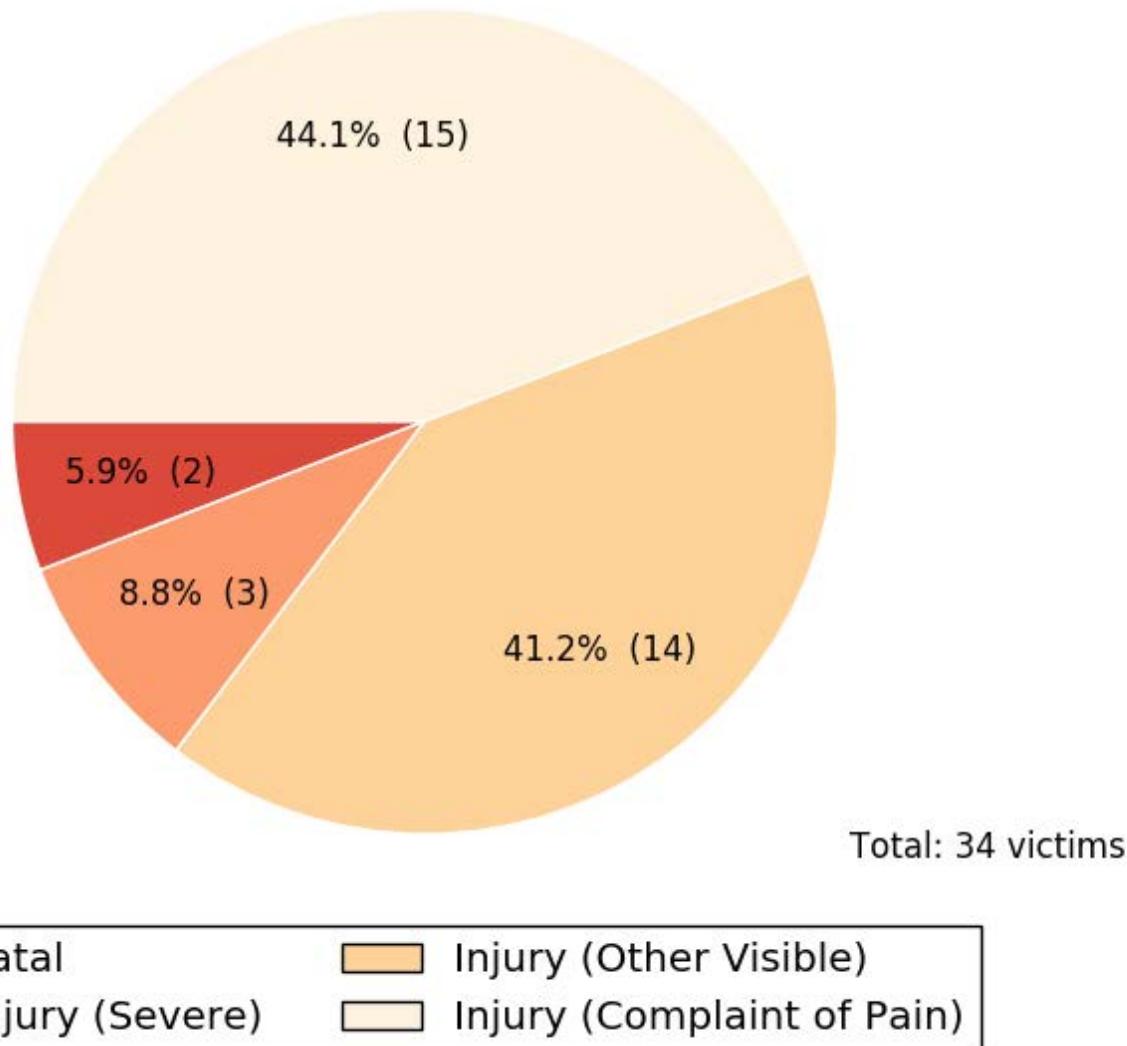
*The colors in this graph refer to how frequently a collision occurs at that time & day.

Top Violations in Pedestrian Injury Collisions

Total: 34 collisions

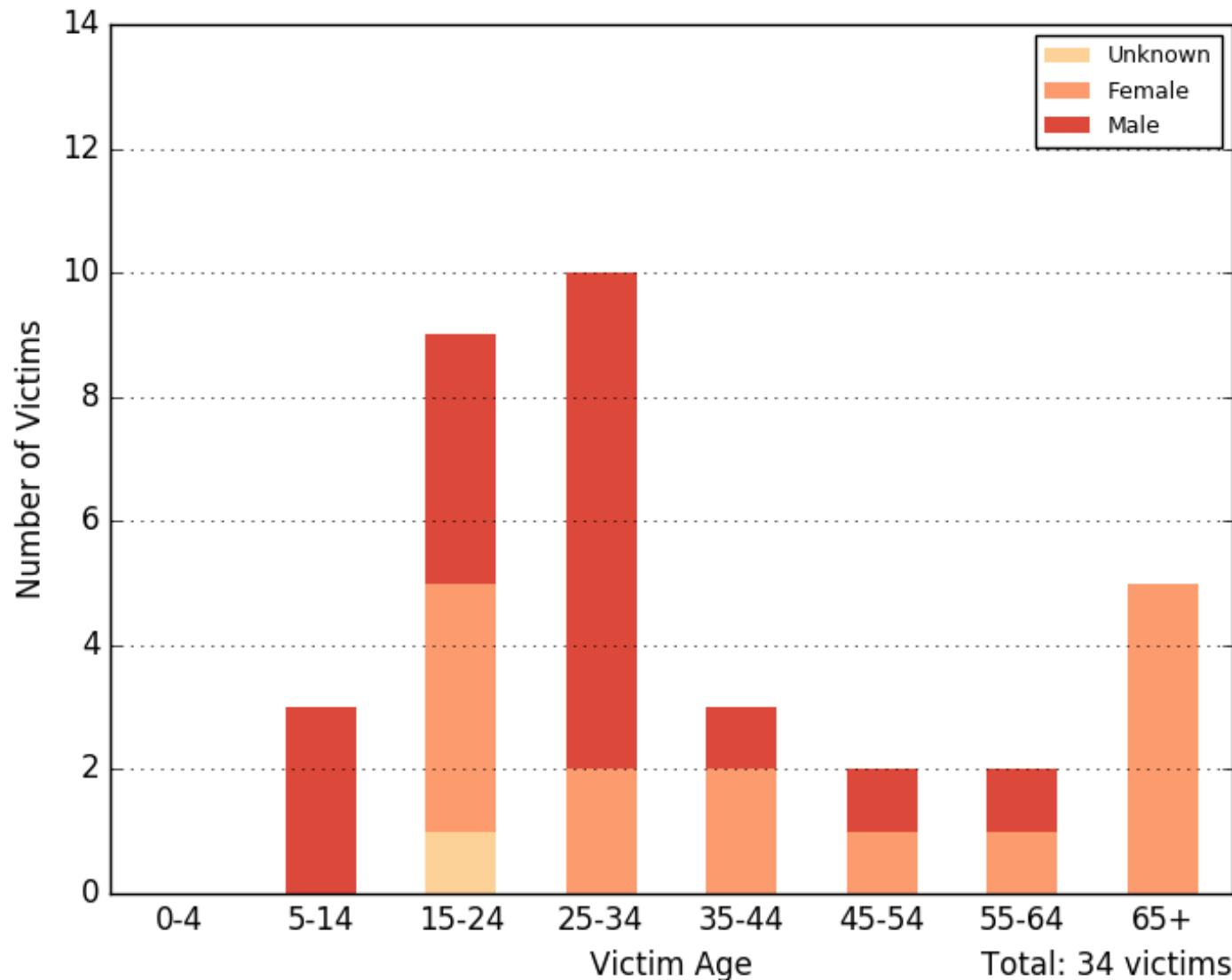
CVC No.	Description	No.	%
21950	Driver failure to yield right-of-way to pedestrians at a crosswalk	17	50.0%
0	Unknown	4	11.8%
21954	Pedestrian failure to yield right-of-way to vehicles	3	8.8%
22107	Unsafe turning with or without signaling	2	5.9%
22350	Speeding on the highway	2	5.9%
22106	Unsafe starting or backing of vehicle	2	5.9%
23152	Driving under the influence of alcohol	2	5.9%
21956	Pedestrian failure to walk close to the edge of the roadway when there is no sidewalk present	1	2.9%
21235	Failure of motorized scooter operator	1	2.9%
Total		34	100.0%

Pedestrian Victim Injury Severity



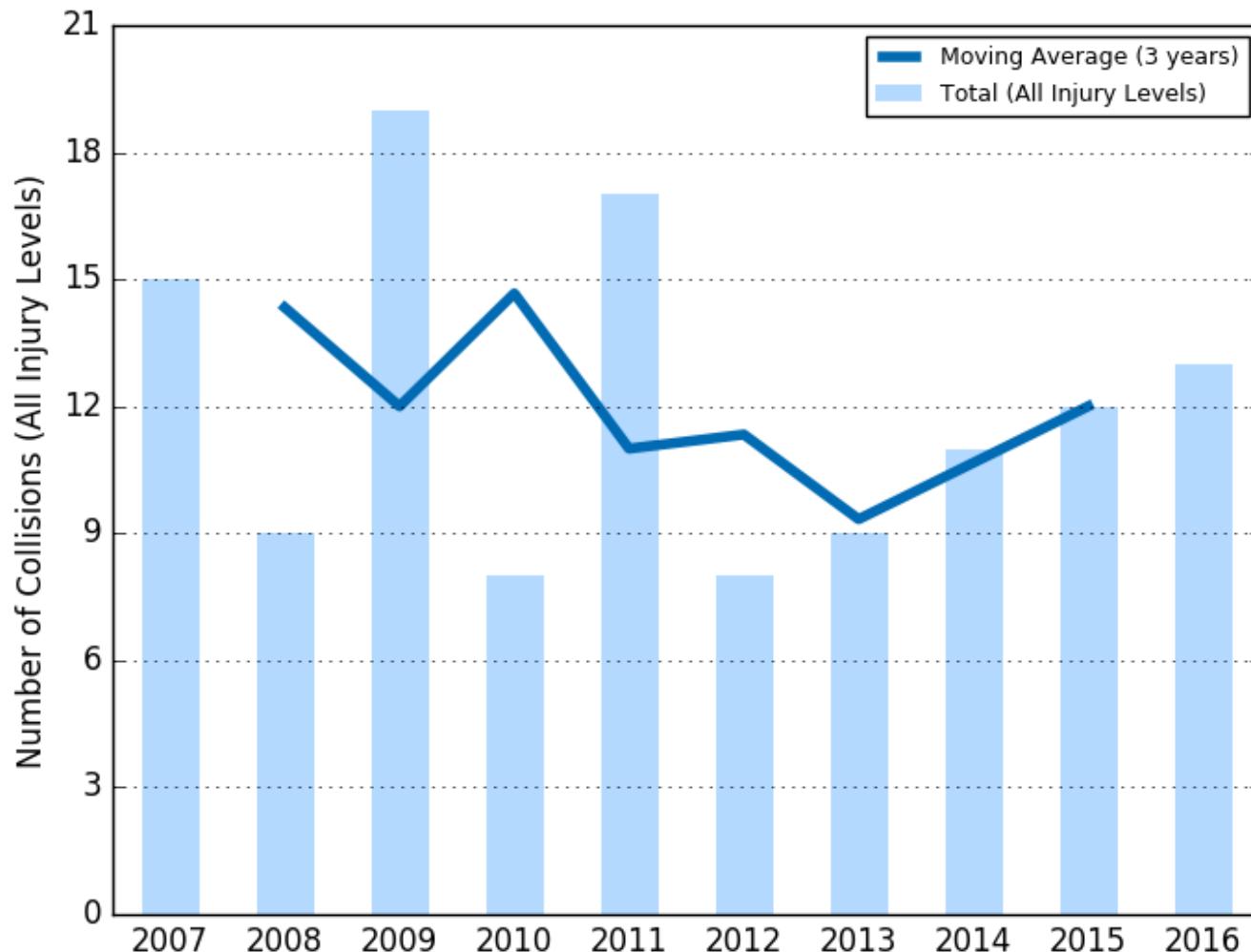
Source: SWITRS, 2012-2016; 2015 and 2016 SWITRS are provisional as of November 2017.

Pedestrian Victims by Age and Gender



Source: SWITRS, 2012-2016; 2015 and 2016 SWITRS are provisional as of November 2017.

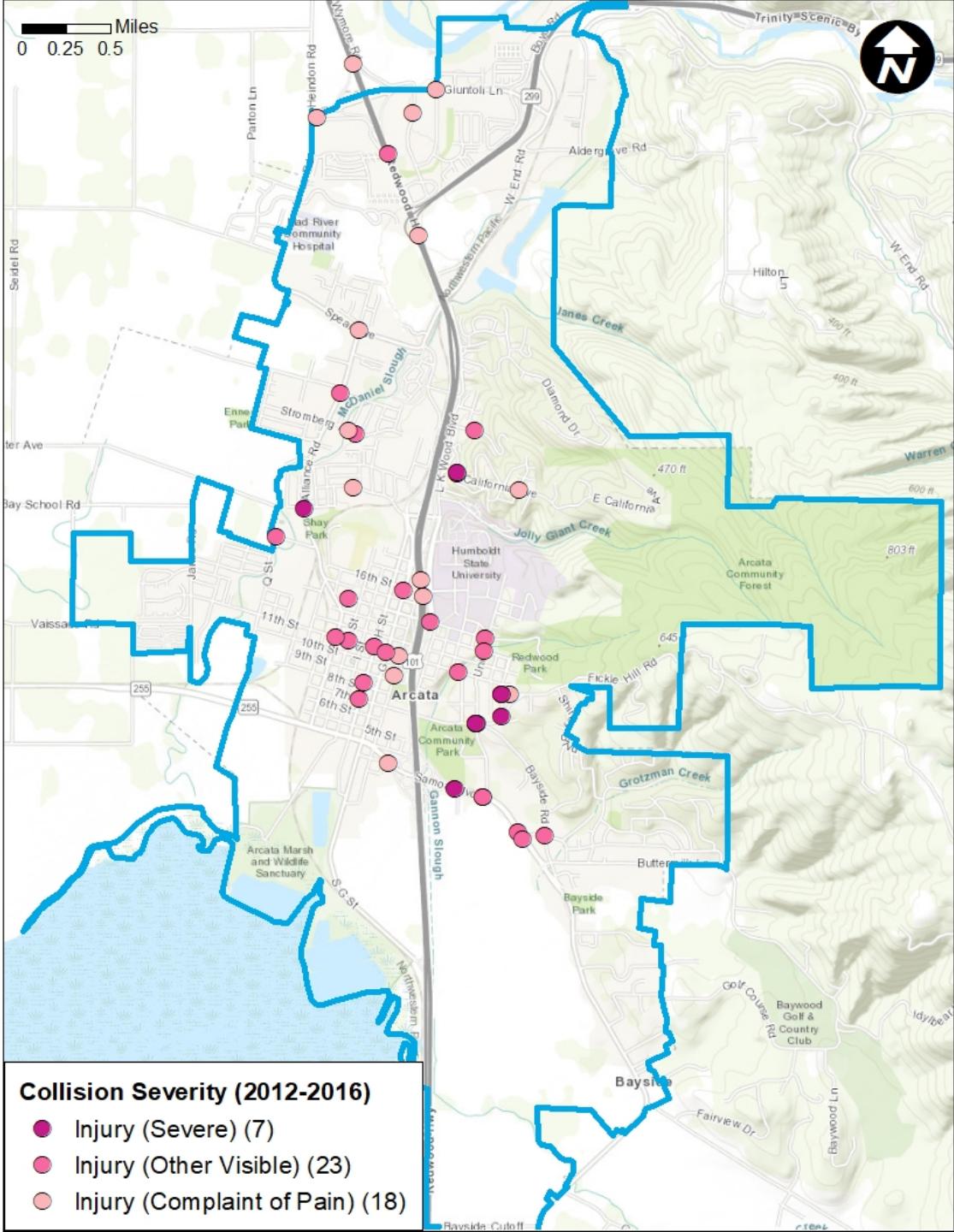
Bicycle Injury Collision Trend with 3-year moving average



Source: SWITRS, 2007-2016; 2015 and 2016 SWITRS are provisional as of November 2017.

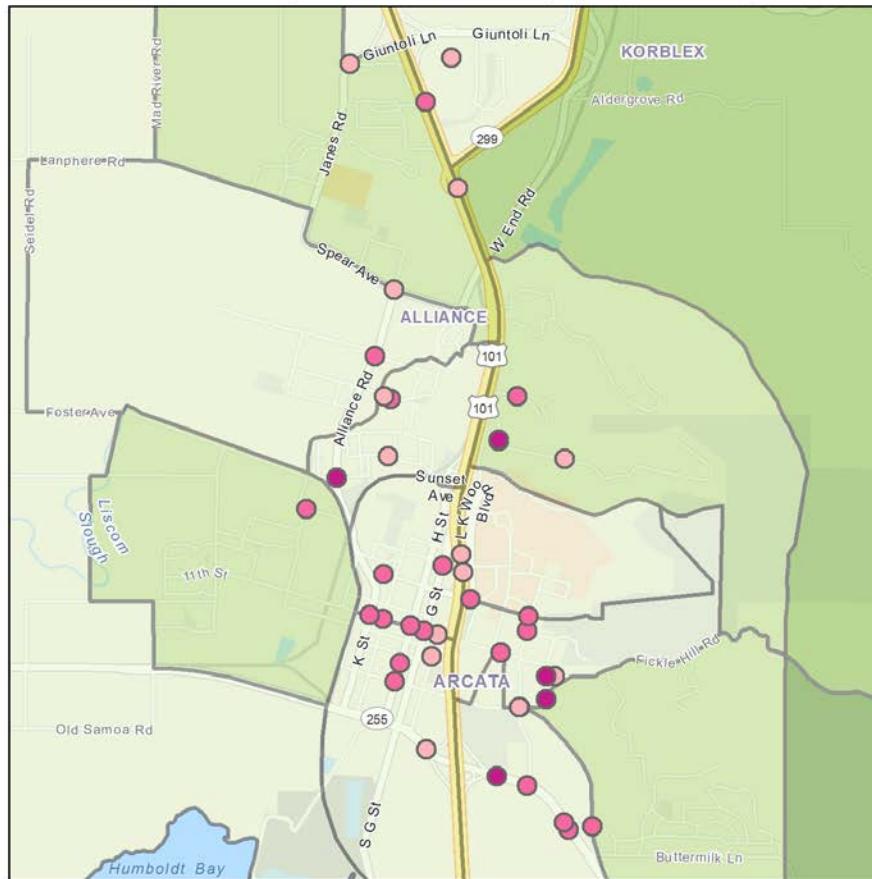
Bicycle Injury Collisions 2012-2016

Only 48 of 53 collisions are mapped.



Source: SWITRS, 2012-2016; 2015 and 2016
SWITRS are provisional as of November 2017.

Arcata Bicycle Collision Map (2012 - 2016)



Collision Severity (2012-2016)

- Injury (Severe) (7)
- Injury (Other Visible) (23)
- Injury (Complaint of Pain) (16)

2017 Median Household Income

- < 35K
- 35K - 50K
- 50K - 75K
- > 75K

Bicycle Injury Collisions by Time of Day and Day of Week

Total: 53 collisions

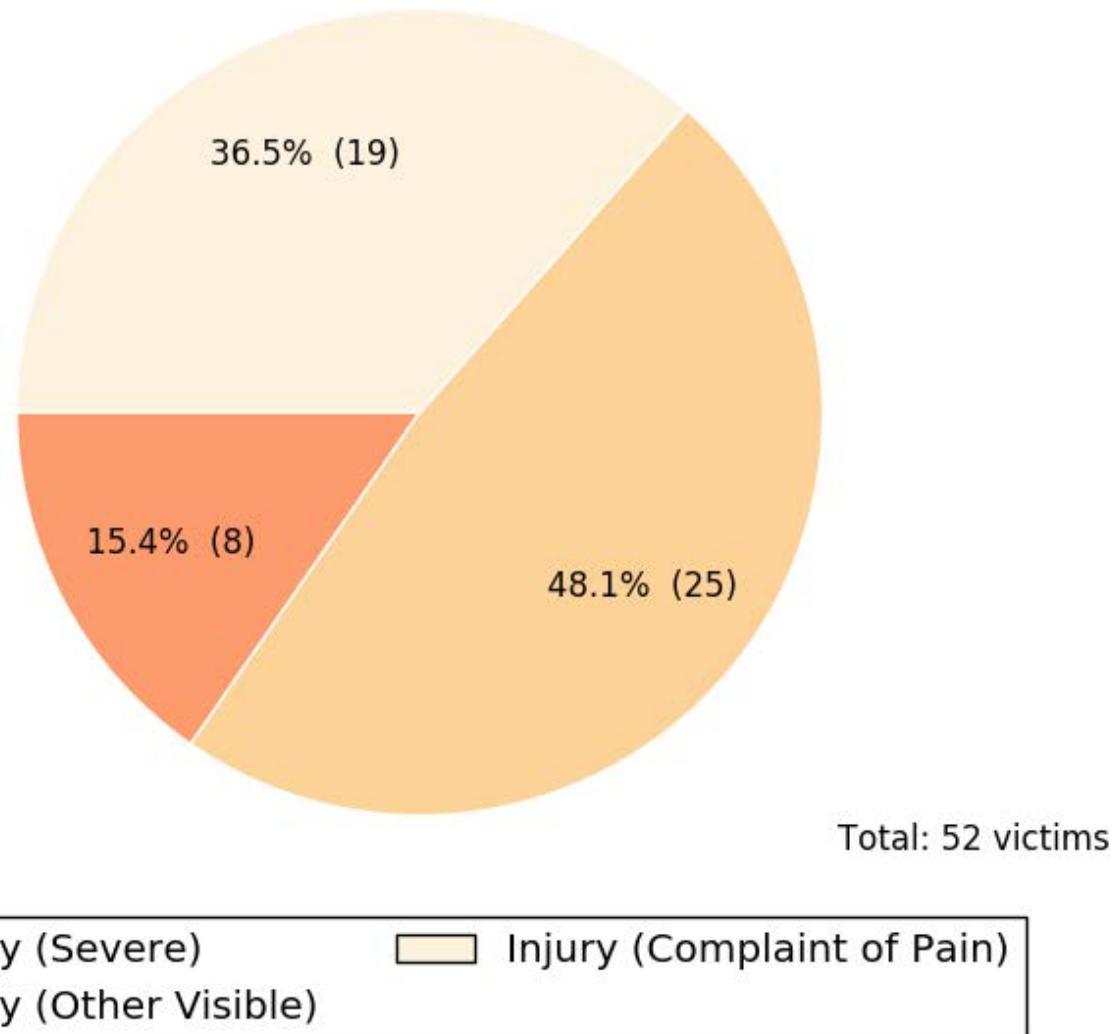
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
09:00PM-11:59PM -	0	0	0	0	0	0	0
06:00PM-08:59PM -	2	2	2	1	2	1	2
03:00PM-05:59PM -	2	2	2	3	1	2	0
Noon-02:59PM -	0	2	1	2	2	2	1
09:00AM-11:59AM -	0	3	1	1	1	2	1
06:00AM-08:59AM -	1	1	2	1	2	0	1
03:00AM-05:59AM -	0	0	0	0	0	0	1
Midnight-02:59AM -	0	0	0	0	1	0	0

*The colors in this graph refer to how frequently a collision occurs at that time & day.

Top Violations in Bicycle Injury Collisions

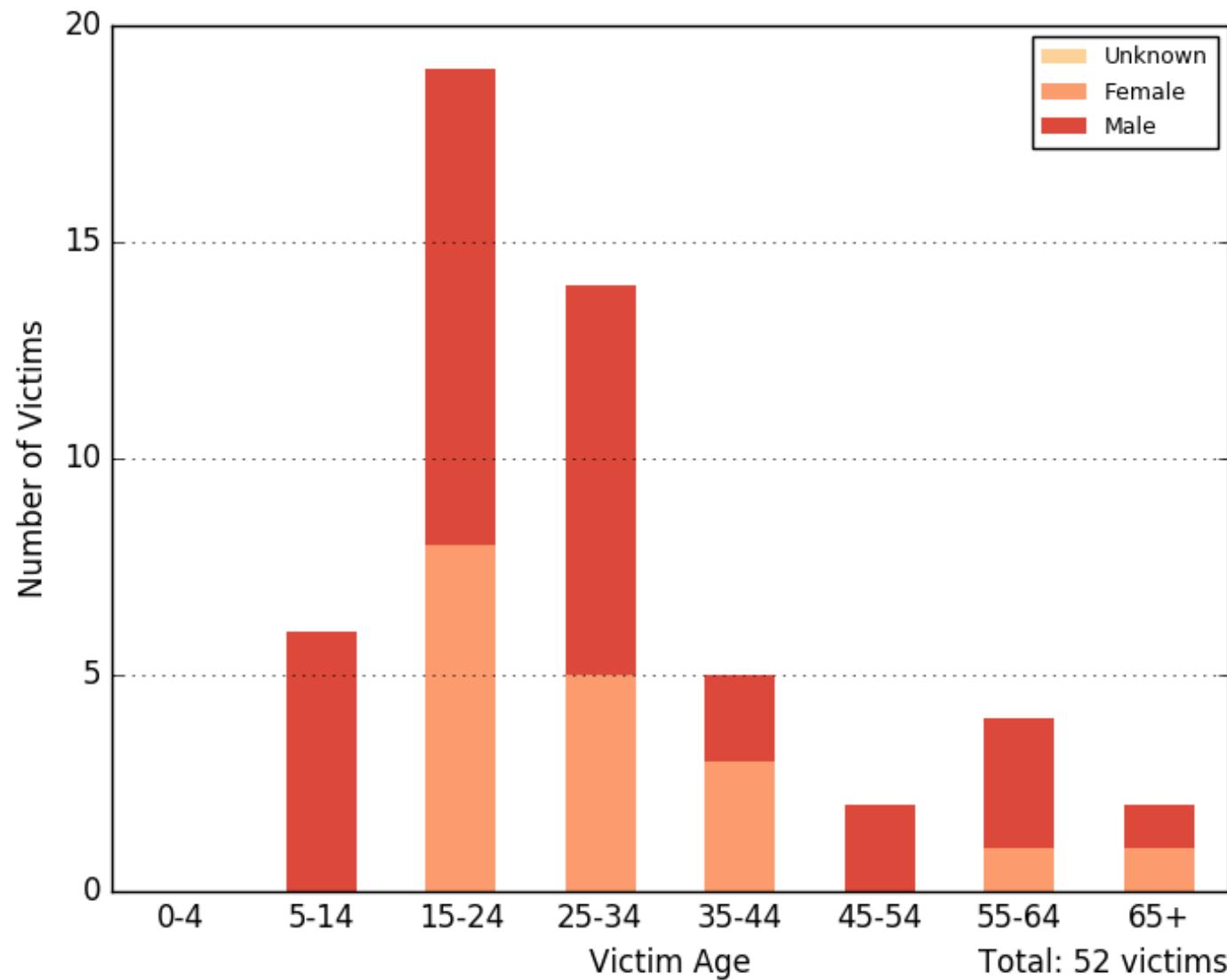
CVC No.	Description	No.	%
22350	Speeding on the highway	9	17.0%
0	Unknown	8	15.1%
22107	Unsafe turning with or without signaling	7	13.2%
21200	Bicyclist failure to follow same rights and laws on the road as drivers	5	9.4%
21650	Failure to drive/ride on right half of the roadway (with some exceptions)	4	7.5%
22450	Driver failure to stop at a limit line or crosswalk at a stop sign	4	7.5%
21800	Failure to yield right-of-way at intersection	3	5.7%
21802	Failure to stop or yield right-of-way at a stop sign.	3	5.7%
21202	Bicyclist failure to ride on right edge of roadway if riding below the normal speed of traffic	2	3.8%
21760	Driver failure to pass bicyclists under safe conditions	2	3.8%
Total		47	88.7%

Bicycle Victim Injury Severity



Source: SWITRS, 2012-2016; 2015 and 2016 SWITRS are provisional as of November 2017.

Bicycle Victims by Age and Gender



Source: SWITRS, 2012-2016; 2015 and 2016 SWITRS are provisional as of November 2017.

Laurel Tree Charter

4555 Valley West Blvd | Arcata | Humboldt
County | CDS: 12626870124263

Types of Collisions:

Bicycle Pedestrian

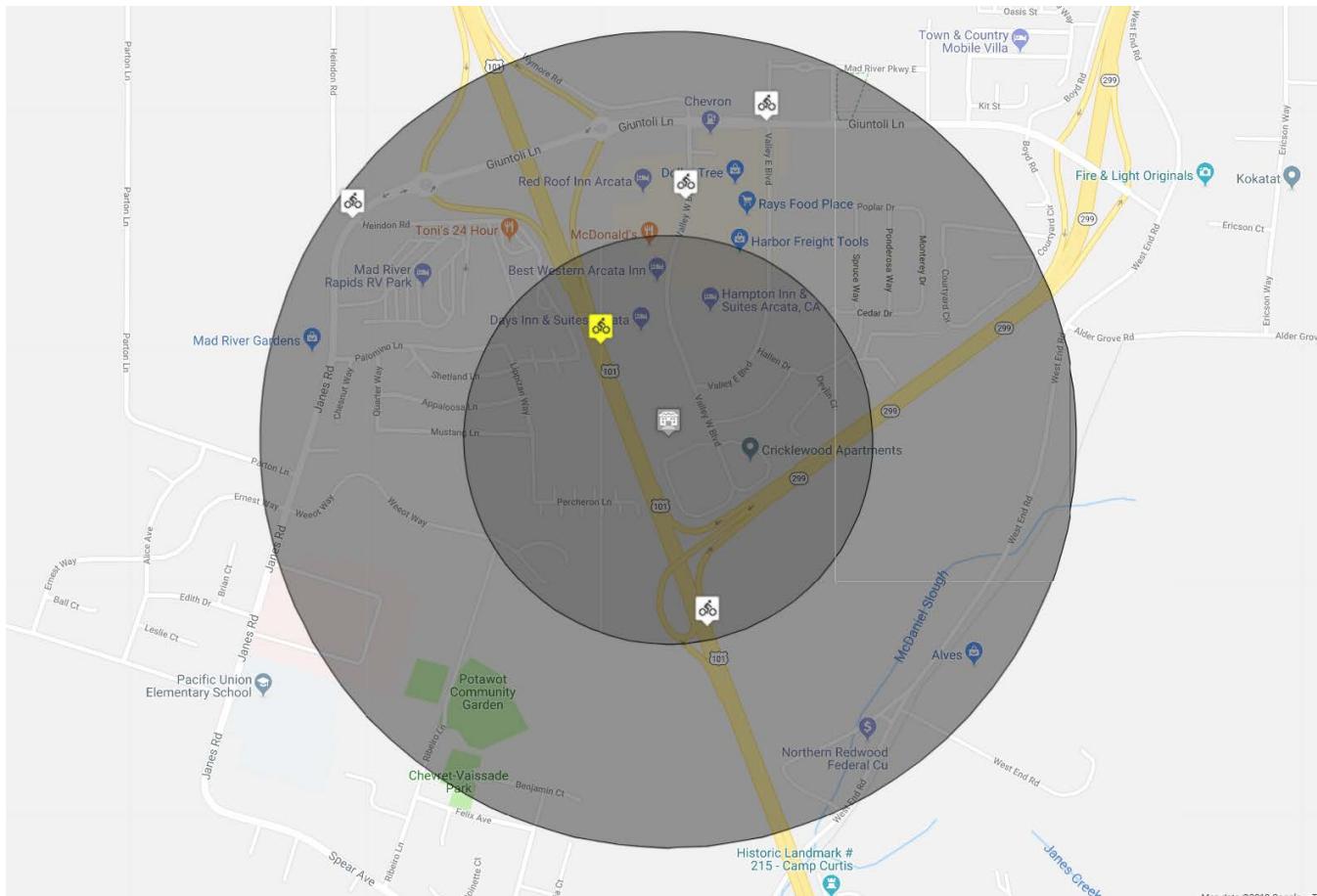
Collision Severity:

Fatal Severe Injury Other Visible Injury Complaint of Pain

Years:

2006 2007 2008 2009 2010 2011 2012 2013 2014 2015* 2016*

* 2015 - 2016 data is provisional and subject to change.

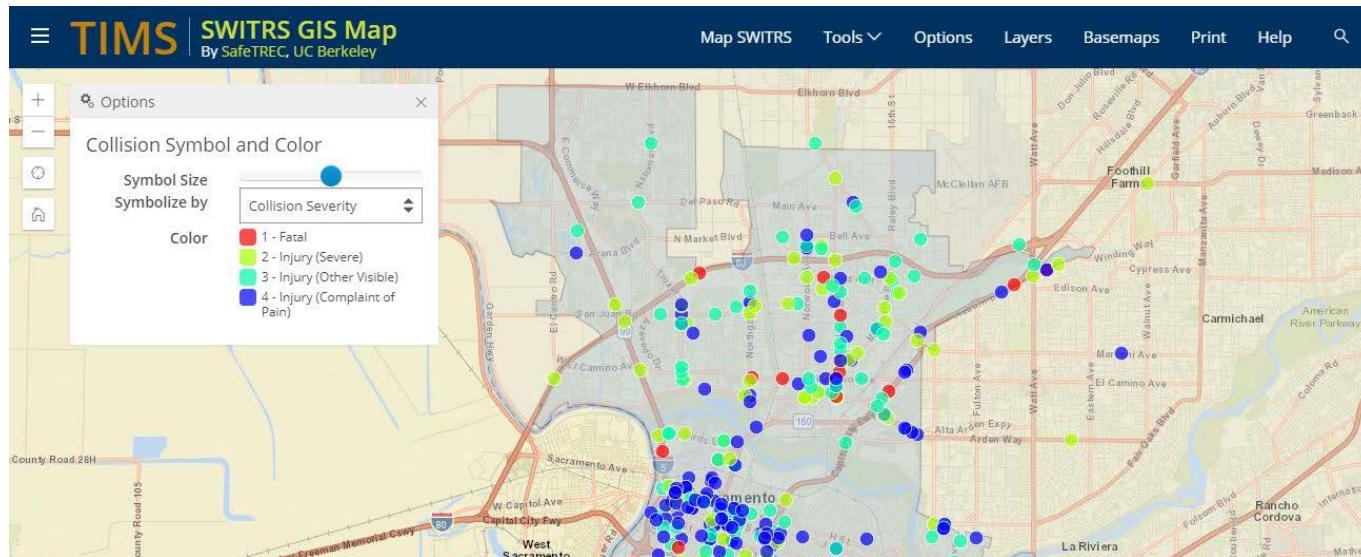


Radius	Fatal	Severe Injury	Visible Injury	Complaint of Pain	Pedestrian	Bicycle	Total
<1/4 mi.	0	0	1	1	0	2	2
1/4 - 1/2 mi.	0	0	0	3	0	3	3
Total	0	0	1	4	0	5	5

The Transportation Injury Mapping System (TIMS) is a web-based tool that allows users to analyze and map data from California's Statewide Integrated Traffic Records System (SWITRS).

To further explore collision data, register for a free account to access the tools and resources on TIMS.

<https://tims.berkeley.edu/>



Berkeley SafeTREC

City of Arcata

Annie & Mary Trail Connectivity Project

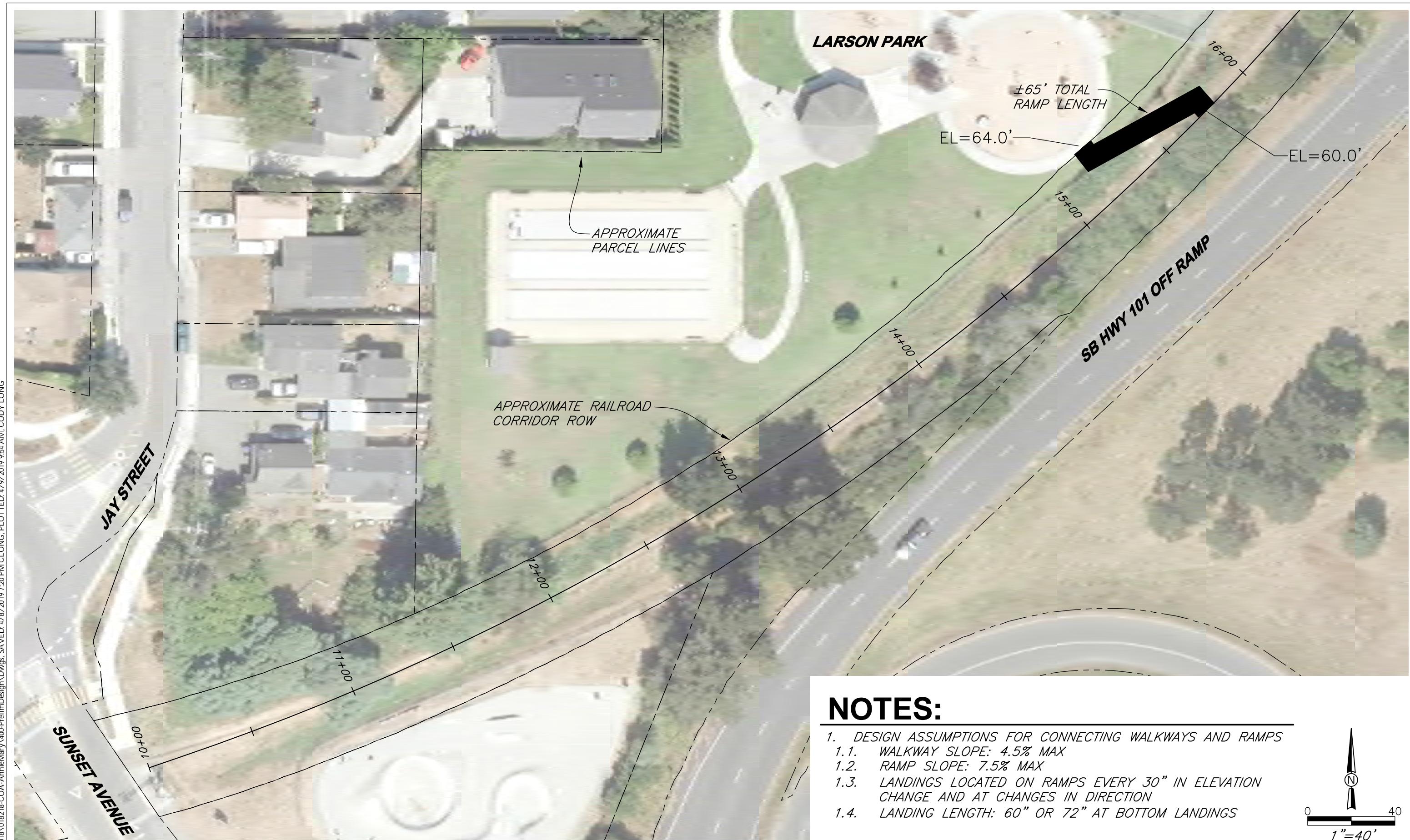
Final

Project Report

APPENDIX H

Ramp Connection Concept Diagrams

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City of Arcata
Annie and Mary Trail
Arcata, California

April 2019

018218-FIGS

Aerial View

SHN 018218

Figure 1



City of Arcata
Annie and Mary Trail
Arcata, California

April 2019

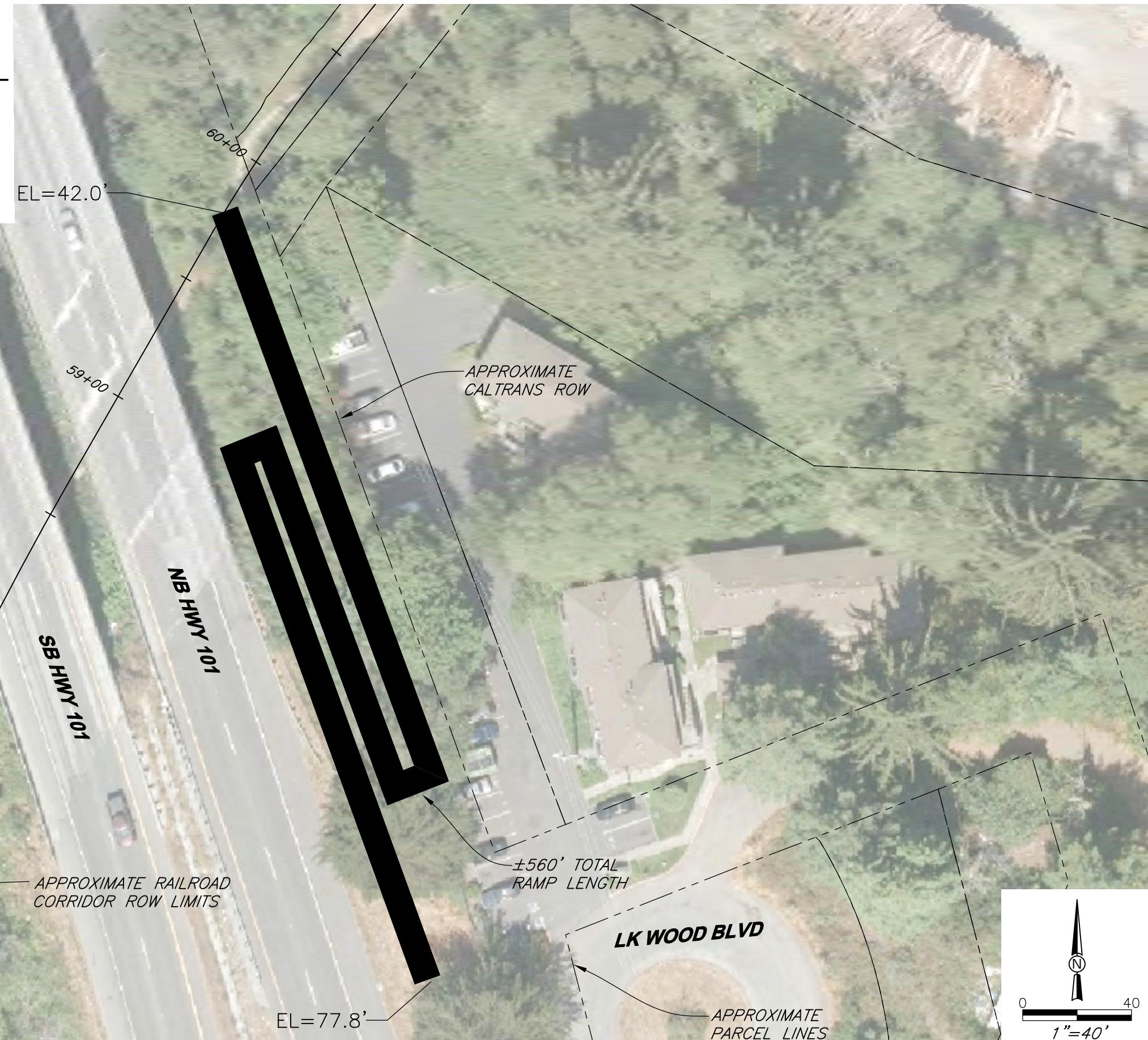
018218-FIGS

Aerial View
SHN 018218

Figure 2

NOTES:

1. DESIGN ASSUMPTIONS FOR CONNECTING WALKWAYS AND RAMPS
 - 1.1. WALKWAY SLOPE: 4.5% MAX
 - 1.2. RAMP SLOPE: 7.5% MAX
 - 1.3. LANDINGS LOCATED ON RAMPS EVERY 30" IN ELEVATION CHANGE AND AT CHANGES IN DIRECTION
 - 1.4. LANDING LENGTH: 60" OR 72" AT BOTTOM LANDINGS



City of Arcata
Annie and Mary Trail
Arcata, California

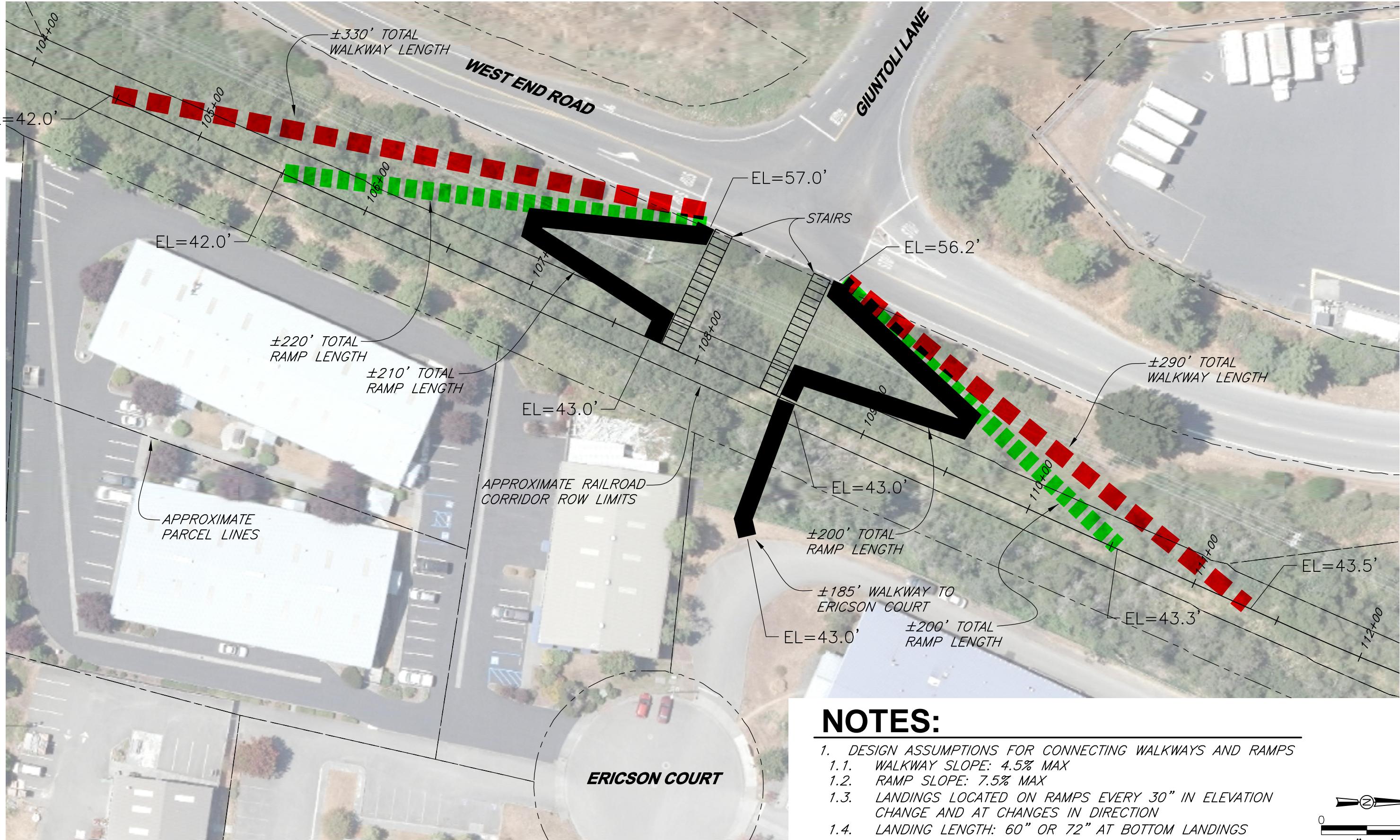
April 2019

018218-FIGS

Aerial View

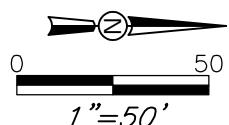
SHN 018218

Figure 3



NOTES:

1. DESIGN ASSUMPTIONS FOR CONNECTING WALKWAYS AND RAMPS
 - 1.1. WALKWAY SLOPE: 4.5% MAX
 - 1.2. RAMP SLOPE: 7.5% MAX
 - 1.3. LANDINGS LOCATED ON RAMPS EVERY 30" IN ELEVATION CHANGE AND AT CHANGES IN DIRECTION
 - 1.4. LANDING LENGTH: 60" OR 72" AT BOTTOM LANDINGS



City of Arcata
Annie and Mary Trail
Arcata, California

April 2019

Aerial View
SHN 018218

018218-FIGS

Figure 4

City of Arcata

Annie & Mary Trail Connectivity Project

Final
Project Report

APPENDIX I
Conceptual Photo Renderings

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R1 View North at Skate Park
Minimum Trail Width Conceptual Rendering



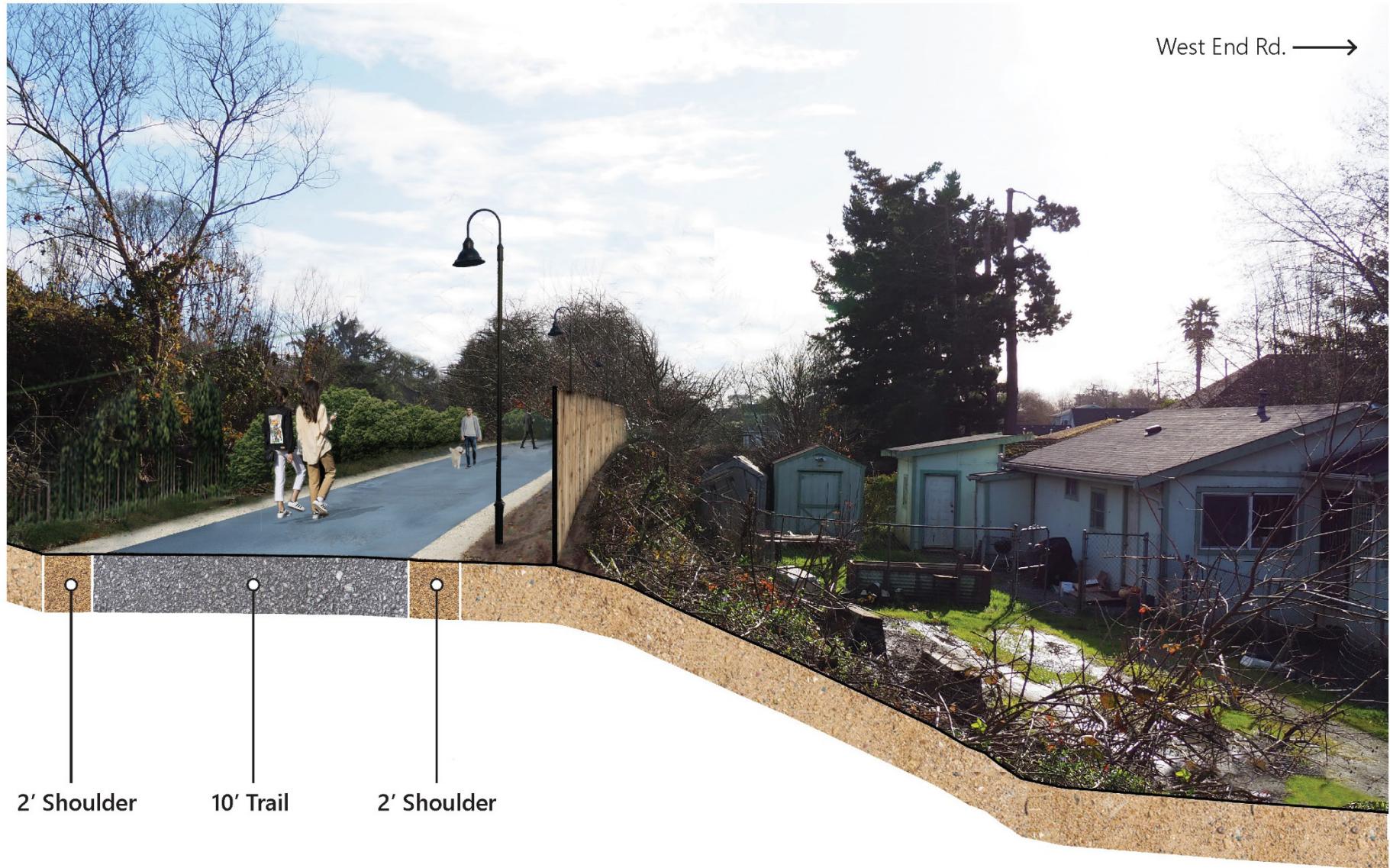
Railroad Corridor Alternative
West End Road Alternative on Railroad Corridor
Hybrid Alternative on Railroad Corridor



R2 View North at Larson Park
Minimum Trail Width Conceptual Rendering



Railroad Corridor Alternative
West End Road Alternative on Railroad Corridor
Hybrid Alternative on Railroad Corridor



R3 View South near West End Road Residences
Minimum Trail Width Conceptual Rendering



Railroad Corridor Alternative
Hybrid Alternative on Railroad Corridor

Annie & Mary Trail Connectivity Project
City of Arcata, California



R4 View South at Highway 101 Undercrossing
Minimum Trail Width Conceptual Rendering



Railroad Corridor Alternative
Hybrid Alternative on Railroad Corridor

Annie & Mary Trail Connectivity Project
City of Arcata, California



R5 View South at West End Road near West End Court
Wide Shoulder Trail Width Conceptual Rendering

Railroad Corridor Alternative





2' Shoulder

2' Shoulder

10' Trail

2' Shoulder

R6 View South near Former Flakeboard Property
Minimum Trail Width Conceptual Rendering



Railroad Corridor Alternative

Annie & Mary Trail Connectivity Project
City of Arcata, California



2' Shoulder

10' Trail

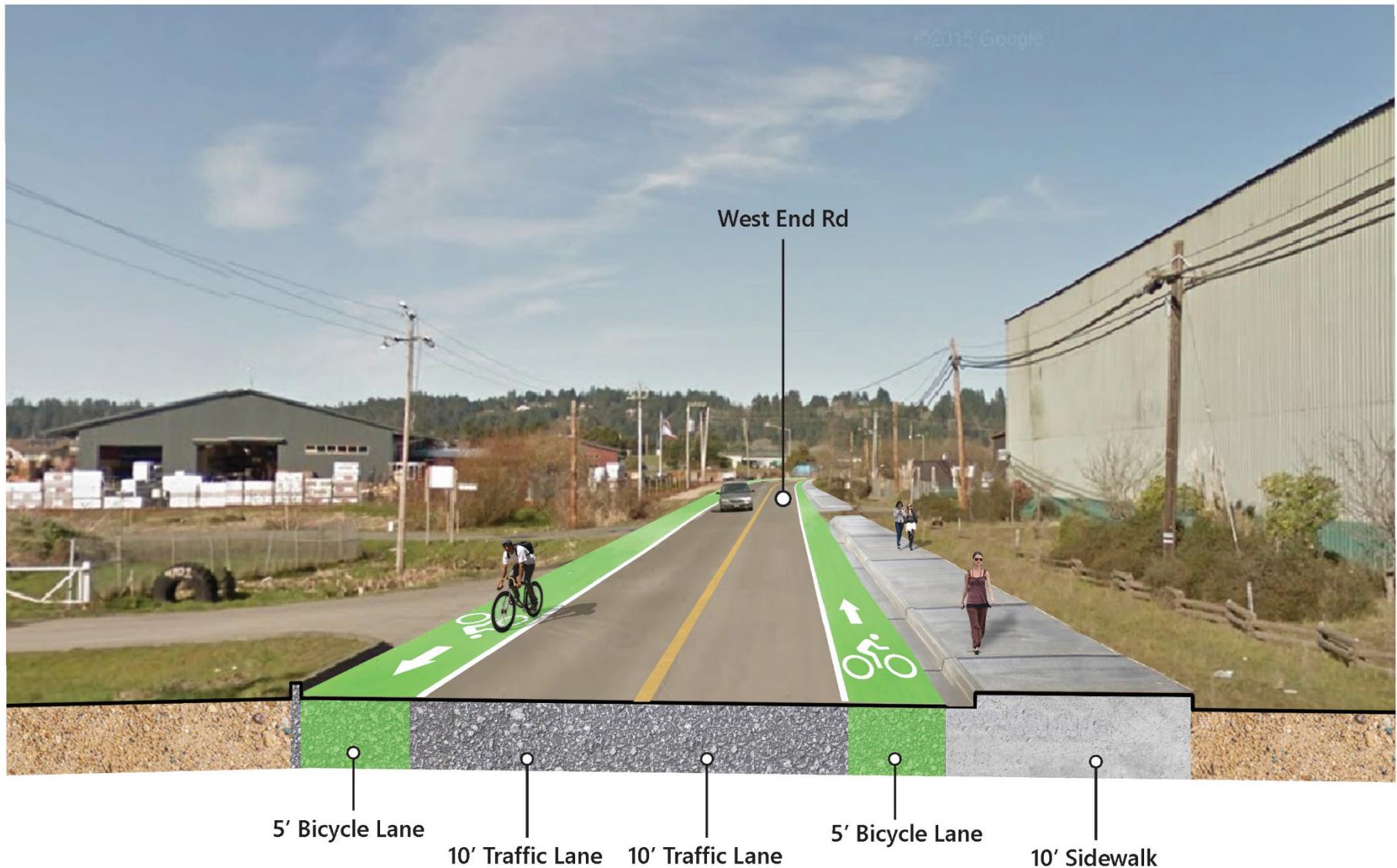
2' Shoulder

R7 View North along West Road Class I Trail
Minimum Trail Width Conceptual Rendering



West End Road Alternative

Annie & Mary Trail Connectivity Project
City of Arcata, California



R8 View North along West End Road Sidewalk Alternative
Bike Lane + Widened Sidewalk Width Conceptual Rendering



West End Road Alternative

Annie & Mary Trail Connectivity Project
City of Arcata, California



R9 View North at Alder Grove Road
Minimum Trail Width Conceptual Rendering



Railroad Corridor Alternative



R10 View South near Frank Martin Court
Wide Shoulder Trail Width Conceptual Rendering



Railroad Corridor Alternative



R11 South at West End Road
Wide Shoulder Trail Width Conceptual Rendering



Railroad Corridor Alternative



R12 View East near HBMWD
Minimum Trail Width Conceptual Rendering



Northern Project Extension

Annie & Mary Trail Connectivity Project
City of Arcata, California

City of Arcata

Annie & Mary Trail Connectivity Project

Final
Project Report

APPENDIX J
Memo: Best Practices for Context-Sensitive
Complete Streets Design and Trails

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City of Arcata

Annie & Mary Trail Connectivity Project



Memo:

**Best Practices for Context-Sensitive
Complete Streets Design and Trails**

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Contents

1. Introduction	1
1.1 Improvements in Caltrans ROW or Funded by Caltrans	1
2. Reference Standards and Guidelines	2
2.1 ADA and the Access Board	2
2.2 Federal Guidelines.....	2
2.3 State Guidelines	3
a) Caltrans Class I, II, III, & IV Bikeways.....	4
2.4 Local and Regional Guidelines	4
3. Design Best Practices.....	6
3.1 Trail Accessibility.....	6
3.2 Trail Amenities	7
3.3 Trail Crossings.....	11
a) Railroad Crossings	11
b) Roadway Crossings.....	11
c) Driveway Crossings.....	11
d) Traffic Signals and Warning Beacons	12
e) Vehicular Turn Lanes.....	12
3.4 Highway Access Ramp Crossings	13
a) At-Grade Crossings	13
b) Grade-Separated Crossings	13
3.5 Rail with Trail Design.....	14
3.6 Separated Pathway & Multi-Use Trail Design	15
a) Shared-Use Paths.....	15
b) Sidepaths.....	16
c) Class I Bikeway	17
3.7 Sidewalk, Shoulder, Bike lane, & Bike Route Design.....	18
a) Sidewalks & Widened Sidewalks.....	18
b) Class II Bikeway or Bike Lane	19
c) Class III Bikeways.....	20
d) Shoulders	21
e) Shoulders on Rural Roads.....	21
f) Advisory shoulder	22
3.8 Roundabouts.....	23
4. Typical Diagrammatic Trail Cross-Sections.....	24

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1. Introduction

An important consideration in selecting improvements is whether they meet roadway design standards. The standards are determined by the project funding source (federal, state, local, or other) as well as the location of the improvements.

The first section of this chapter summarizes standards and guidelines that are used when designing various pedestrian and bicycle facility improvements.

The second section of this chapter details the various types of improvements that are available when making roadway design changes. This section is divided by subject, ranging from trail amenities, to parking standards and intersection design.

1.1 IMPROVEMENTS IN CALTRANS ROW OR FUNDED BY CALTRANS

Improvements in Caltrans right-of-way (ROW) or funded by Caltrans must be based on Caltrans' policies, procedures and design standards, as outlined in the Caltrans Highway Design Manual (HDM) and the California Manual on Uniform Traffic Control Devices (CA MUTCD). Projects receiving state funding may also be subject to review by the California Division of State Architect (DSA), which is mandated to review most state-funded projects for compliance with accessibility standards. Accessibility standards are discussed further in **Section 2.1**.

Caltrans' primary objective is to maintain a safe and functional highway. In addition to facility design standards, feasibility must consider the constructability, including the type of existing facilities, hydrological (drainage) requirements, site constraints, construction equipment access, geotechnical parameters, height of fill/cover requirements, and other construction considerations.

Caltrans has a formal review process, which overlaps their Feasibility Study process. Most projects will use a basic Caltrans form called a Project Study Report (PSR). This report will contain information from the prior Feasibility Study and other documentation required by Caltrans to complete the process to determine the extent of technical and environmental studies to be completed in the next phase: Project Approval/Environmental Documentation (PA&ED). The PA&ED phase will result in selection of preferred alternative(s) for the project, and ultimately approval from Caltrans.

Upon completion of the PA&ED phase, the design phase, known as Plans, Specifications and Estimate (PS&E), provides the detailed design of the improvements, and preparation of contract documents. The final phase is putting the project out for public bidding, signing a contract with the selected contractor, and construction of the project, which may be done in phases.

Note about Federal Funding: In addition to the above requirements, projects receiving federal funding must meet federal funding requirements, including, but not limited to, the requirements of the National Environmental Policy Act (NEPA). These projects must still comply with the California Environmental Quality Act (CEQA).

2. Reference Standards and Guidelines

Some guidelines apply to multiple types of transportation facilities. Multiple documents were reviewed for relevance to this project. These documents are summarized below with more information provided where appropriate. Specific design guidance provided in these documents is included in the following section.

2.1 ADA AND THE ACCESS BOARD

The Americans with Disabilities Act (ADA) of 1990 had major significance for those who plan and design any type of publicly-used facility, including trails. The Architectural and Transportation Barriers Compliance Board (Access Board) is responsible for developing accessibility guidelines for new construction and alterations of facilities subject to the Americans with Disabilities Act, which applies to state and local government facilities, places of public accommodation, and commercial facilities – virtually every type of facility that is open to the public, including bicycle and pedestrian facilities, paths, and trails.

The Access Board has developed accessibility guidelines for public rights-of-way, including walkways and sidewalks, shared-use paths, parking areas, and associated features, as well as Outdoor Recreation Areas, including Outdoor Recreation Access Routes between developed facilities, and trails. These guidelines are contained in the following documents:

- Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way, July 26, 2011.
- Final Guidelines for Outdoor Developed Areas, November 25, 2013.
- Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way; Shared-Use Path, Supplemental Notice, February 13, 2013.

2.2 FEDERAL GUIDELINES

AASHTO Design Guidelines

The American Association of State Highway and Transportation Officials (AASHTO) Guidelines for the Development of Bicycle Facilities is the leading national document with guidelines for designing on-street bicycle facilities and shared-use paths. The most recent version of this nationally recognized document is the 4th Edition, dated 2012.

AASHTO Guidelines provide specifications on dimensions and requirements for transportation pathways including recommended widths, symbol guidelines, clearance, intersection design, bicycle parking, and more.

Small Town and Rural Multimodal Networks

This Federal Highway Administration (FHWA) guideline for rural networks, published in 2016, provides specific guidance for non-urban transportation settings. Separated pathways are covered in Chapter 4, with detailed measurement information on paved shoulders, paths, and sidewalks.

Manual of Uniform Traffic Control Devices (MUTCD)	<p>The MUTCD defines the standards used by road managers nationwide to install and maintain traffic control devices on all public streets, highways, bikeways, and private roads open to public traffic. The MUTCD is published by the FHWA under 23 Code of Federal Regulations (CFR), Part 655, Subpart F. The MUTCD is a compilation of national standards for all traffic control devices, including road markings, highway signs, and traffic signals. It is updated periodically to accommodate the nation's changing transportation needs and address new safety technologies, traffic control tools and traffic management techniques.</p> <p>Caltrans has adopted the California MUTCD (CA MUTCD), described below.</p>
NACTO Bikeway Design Guide	<p>National Association of City Transportation Officials (NACTO) Urban Bikeway Design Guidelines provide updated guidelines on how to design bike lanes and interchanges to align with best practices and achieve safe transport for all modes. These guidelines confirm and expand on the FHWA MUTCD. The most recent edition was published in 2013.</p>
NCHRP Report 672 Roundabouts: An Informational Guide	<p>This 2010 report by the National Cooperative Highway Research Program (NCHRP) updates the 2000 FHWA guide on roundabouts. It provides detailed information about roundabout design. Chapter 6 provides information specific to geometric design for pedestrian and bicycle use.</p>

2.3 STATE GUIDELINES

California Vehicle Code	<p>The State of California's Vehicle Code addresses legal obligations of right of way and duties for vehicles, pedestrians and bicyclists. The Rules of the Road can be found in Division 11 with Chapters 4 and 5 describing the laws associated with Right-of-Way and Pedestrians' Rights and Duties, respectively.</p>
California MUTCD	<p>The California MUTCD (CA MUTCD) is published by Caltrans and is issued to adopt uniform standards and specifications for official traffic control devices in California. Traffic control devices are defined as all signs, signals, markings, and other devices used to regulate, warn, or guide traffic, placed on, over, or adjacent to a street, highway, pedestrian facility, or bikeway by authority of a public agency or official having jurisdiction, or, in the case of a private road, by authority of the private owner or private official having jurisdiction. The CA MUTCD is not applicable to privately owned and maintained roads or commercial establishments in California, unless the particular city or county enacts an ordinance or resolution to this effect.</p> <p>The CA MUTCD incorporates the FHWA's MUTCD and all policies on traffic control devices issued by Caltrans that have been issued as well as and other editorial, errata, and format changes that were necessary to update the previous documents.</p>
Caltrans Highway Design Manual (HDM)	<p>The State of California, Department of Transportation (Caltrans) Highway Design Manual (HDM) is used by Caltrans staff and non-Caltrans project managers and planners proposing designs for projects within the Caltrans right-of-way. The design standards cover a wide array of design focus areas including drainage, pavement, and basic design policies.</p>
Caltrans Highway Design Manual, Chapter 1000 Bikeway Planning and Design	<p>Chapter 1000 of the Caltrans HDM specifically focuses on bikeway planning and design. Any trail designated to encroach into or travel within Caltrans right-of-way must be designed per Chapter 1000 of the Caltrans Highway Design Manual, or the project must apply for Design Exemption.</p>

California Building Standards Code (CBC)

The CBC is a set of construction codes adopted by the State of California and the City of Arcata. The codes cover a wide range of topics, including accessibility and construction materials, and final design will be required to comply with the current edition of the CBC.

a) Caltrans Class I, II, III, & IV Bikeways

Chapter 1000 of the Caltrans HDM defines three types of bikeways, commonly referred to as Class I, Class II, and Class III bikeways. The recent addition of a fourth classification, Class IV, can be found in the Caltrans bikeways classification manual and has been described below. These four types of bikeways are summarized below. Specific design guidance for each is included in **Section 3 Design Best Practices**, below.



Class I Bikeways

Class I bikeways are known as bike paths or shared-use paths. These are separate paths for bikes and pedestrians only.



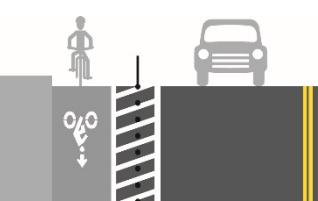
Class II Bikeways

Class II bikeways are also known as bike lanes. They are defined by pavement striping and signs on existing roads.



Class III Bikeways

Class III bikeways are also known as bike routes. They indicate a preferred route for bicyclists, but do not designate a separate location for bicyclists.



Class IV Separated Bikeway

Class IV Separated Bikeways are also referred to as cycle tracks or protected bike lanes. They are bike lanes that are physically separated from motor traffic with a vertical feature.

2.4 LOCAL AND REGIONAL GUIDELINES

Humboldt County Association of Governments Variety in Rural Options of Mobility Report (HCAOG VROOM)

The complete streets element of this regional report provides essential guidance on design standards and lists specific projects locations as top priorities to target for complete streets treatment. Included in this list is the current study of the Annie & Mary Trail, where it outlines the need for Class I rail-trail, sidewalks, bridges, and traffic calming. VROOM was updated/adopted in 2017.

Bike Parking Guidelines & Sourcebook	In 2015 HCAOG published two documents to facilitate quality bicycle parking in Humboldt: "Countywide Bicycle Parking Guidelines: Recommended Policies & Requirements" and "Bike Parking Sourcebook: Sample Policies, Municipal Codes, & Programs." This sourcebook provides advice and guidelines on how to implement improved bicycle facilities. It provides examples from successful biking communities, most notably Arcata. These requirements and existing models will be useful in development of bike parking facilities.
North Coast Rail Authority's Rail with Trail Policy	<p>The Rail with Trail policy document outlines the procedural processes required to complete a trail on NCRA right of way. NCRA has the sole authority to approve, approve with conditions, or deny proposals made by any public agency. In 2009 the NCRA published a policy outlining how trails in the railroad right-of-way would be handled. Specifications outlined in this document that relate to the current trail project include fencing, drainage, grading, clearances, and access.</p> <p>Note that as of Fall 2018 the NCRA is in the process of being dissolved after the passage of The Great Redwood Trail Act (Senate Bill 1029). The State Transportation Agency and the California Natural Resources Agency have until mid-2020 to develop the plan for dissolving the NCRA and a plan for the transfer of the NCRA assets, including the 300-mile long right-of-way from Marin County to Humboldt County.</p>
Humboldt County General Plan, Development Element	The General Plan developed by Humboldt County, adopted in 2017, is used to guide the growth and land development of the community. The General Plan establishes policies and procedures intended to achieve the overall goals of the community. Chapter 7.0, the Circulation Element, describes the objectives and policies for the development of bikeways, sidewalks, pedestrian paths, parks and other recreational facilities. In this element, the designation of rail right of way from Arcata to Blue Lake for the explicit purpose of the development of the Annie & Mary Trail is identified under Implementation Measure C-IM16: Mapping of Rail Rights-of-Way as Railroad.
City of Arcata General Plan	The Development Element of the City of Arcata's General Plan articulates the City's vision for transportation. It specifically identifies the Annie & Mary Trail as a key transportation connector.
City of Arcata Pedestrian and Bike Master Plan	The City of Arcata Pedestrian and Bicycle Plan, adopted in 2010, is used to outline facilities, programs and projects both in existence and in need of implementation. The plan highlights design standards and signage standards for the City. The report identifies goals for the City of Arcata over the ensuing 10 years. In the report, the Annie & Mary Trail is identified as a priority bikeway project.
City Standard Details	The City of Arcata's Engineering Division maintains a set of standard plans for construction details. Many of these may be applicable to the final design of the Annie & Mary Trail, including, but not limited to: Drainage Standard Plans, Landscaping Standard Plans (tree protection and planting), and Streets Standard Plans (curbs, curb cuts, striping, etc.).
Basis of Design Report for Trail Width	<p>This 2016 analysis concluded that the preferred width for the Humboldt Bay Trail North segment would be a ten-foot wide trail with two-foot wide shoulders.</p> <p>The analysis used several factors to determine the preferred width, including: projected trail use, comparable trail use, wetlands impact, and trail design standards included in Caltrans HDM Chapter 1000, AASHTO Guide for the Development of Bicycle Facilities, the Humboldt County Coastal Trail Implementation Strategy, and FHWA Shared-Use Path Level of Service Calculator. The document was prepared by Humboldt County Department of Public Works.</p>

3. Design Best Practices

3.1 TRAIL ACCESSIBILITY

Trails must meet certain accessibility requirements depending on the planned use and the agencies with jurisdiction over the funding, design, or maintenance of the trail. **Table 1** summarizes the key federal standard dimensions for the various types of trail, bicycle, and pedestrian facilities.

Table 1: Key Standards for Trail, Bicycle and Pedestrian Facilities, Aggregated from the Access Board ADA Guidelines

	Width	Gradient (Running Slope)	Cross-slope	Surface	Handrails
Shared-Use Path	10' w/ 2' shoulders ideally 8' min in low use areas	< 5% (< 1:20) any length 5-6% (1:20-16.7) up to 800' 7% (1:14.3) up to 400' 8% (1:12.5) up to 300' 9% (1:11.1) up to 200' 10% (1:10) up to 100' 11+% (1:9.1) up to 50'	2% max	Smooth, paved	--
Pedestrian Access Route	48" min with 60" min. passing space every 200' or less	1:20 (5%) max – any steeper treated as a ramp <i>Note: Sidewalks abutting a roadway may be as steep as the roadway.</i>	2% max	Smooth, paved	--
Ramp	60" min	8.33% (1:12) max Max 30" rise/ 30' length between landings Landings at top, bottom: 60" x 60", max 2% gradient; Landings at change in direction: 72" long x 60" wide	2% max	Smooth, paved	Required on both sides of any ramp w/ rise greater than 6"
Outdoor Recreation Access Route *	36" min. with 60" min. passing space every 1,000' or less	1:20 (5%) any length 1:12 (8.33%) up to 50' 1:10 (10%) up to 30' with resting intervals 60" long, as wide as trail and max 1:33 (3.33%) gradient	1:33 max (3.33%) or up to 1:20 (5%) where required for drainage	Firm and stable; there are specific standards	--
Trail **	36" min. with 60" min. passing space every 1,000' or less	1:20 (5%) any length 1:12 (8.33%) for up to 200' 1:10 (10%) for up to 30' 1:8 (12.5%) for up to 10' w/ resting intervals 60" x trail width, max 1:20 (5%) <30% of the total trail length may exceed 1:12	5% max	Firm and stable; there are specific standards	--

* Outdoor Developed Area facilities may be exempted under the following conditions (ABA §1019):

1. Compliance is not feasible due to terrain.
2. Compliance cannot be accomplished with the prevailing construction practices.
3. Compliance would fundamentally alter the function or purpose of the facility or the setting.
4. Compliance is precluded by the: Endangered Species Act; National Environmental Policy Act; National Historic Preservation Act; Wilderness Act; or other Federal, State, or local law the purpose of which is to preserve threatened or endangered species; the environment; or archaeological, cultural, historical, or other significant natural features.

** Additional exceptions to ABA §1019 apply to an entire trail as identified in §1017.1

3.2 TRAIL AMENITIES

The first interaction a trail user has with the trail is with at the trail access point. This may be a formal trailhead with extensive facilities, or a simple access point with no facilities provided. Once on the trail, users will also need signage and amenities along the trail.

Note that all fixed objects adjacent to a trail can become a hazard to trail users. To reduce this hazard, signs or other elements should be located a minimum of two feet clear of the trail shoulder. Fixed objects may also be reflectorized for enhanced visibility at night and in inclement weather. Elements that are intended to encourage users to linger, such as an interpretive sign or a bench, should be located further from the trail shoulder to allow the users to remain fully off the trail and not interfere with trail traffic.

Table 2: Recommended location for trail amenities

	Location		
	Formal Trailhead/Staging Area	Trail Access Point	On-Trail
Trail Amenity	Trailhead Information Kiosk	✓	(✓)
	Trailhead Signs	✓	✓
	Trail Sign Posts	✓	✓
	Interpretive Signs	✓	(✓)
	Toilet Facilities	✓	
	Drinking Fountains	✓	(✓)
	Waste Receptacles	✓	(✓)
	Dog Waste Facilities	✓	(✓)
	Benches	✓	(✓)
	Picnic Facilities	✓	(✓)
	Bicycle Parking	✓	(✓)
	Vehicular Parking	✓	(✓)
	Fencing	✓	(✓)
	Gates	✓	(✓)
	Lighting	✓	(✓)

✓ Amenity frequently used at this location

(✓) Amenity sometimes used at this location



Trailhead Information Kiosks

Trailhead Information Kiosks provide a signboard to display trail maps and helpful information, such as warnings or trail closures. Kiosks provide a convenient and recognizable location for people to get information or access the trail.



Trailhead Signs

Trailhead signs are simple identification signs at trail access points. They may include trail name or destination information as well as symbols indicating acceptable use and managing agency.



Trail Sign Posts

On-trail signs, such as trail sign posts, provide trail and identification and directional information for trail users. Trailhead and on-trail signs should be consistent in design and regularity. These signs should be consistent sign posts that clarify respective street crossings, access points, destinations, and trail boundaries.



Roadway Junction Signs

Off-trail signs directing drivers, transit riders, pedestrians, or cyclists to trails can increase the visibility of the trail network, encouraging use and increasing safety for trail users.



Interpretive Signs

Interpretive or informational signs can enhance the user experience, highlight points of interest, and increase visitor's connection and understanding of the area. These signs should generally be set back from the travelled way by three to six feet to allow users to stand clear of the path while reading the sign.



Toilet Facilities & Drinking Fountains

Toilets facilities are sometimes provided at major access points, when funding allows. Drinking fountains often accompany these types of facilities, though they can also be dispersed with regularity throughout the trail to support those using the trail.



Waste Receptacles & Dog Waste Facilities

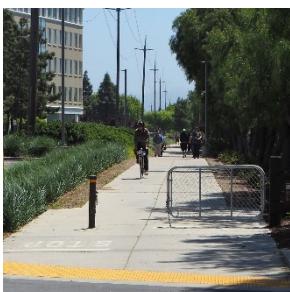
Frequent waste receptacles can increase the cleanliness of the trail, reduce the amount of trail maintenance required in the future, and increase the positive experience of trail users. Dog waste facilities should be placed at trailheads to support removal of dog waste and to provide materials for pet owners to use in this process. All facilities should be located to be easily accessible to maintenance staff and/or vehicles.



Benches & Picnic Facilities

Benches make trails more usable and comfortable by providing resting places. Picnic facilities may include benches, tables, waste receptacles, and, if necessary, an overhead shelter to protect user from weather. Picnic facilities encourage usage of the trail by families and provide destination points for users looking to rest along the trail.

Benches and picnic facilities may be located at a trail access point, at regular intervals along the trail, and/or at points of interest along the trail. The additional corridor width needed for these facilities may be limited in the project area.



Gates & Bollards

Gates, bollards, and other similar features provide points of access and restriction for a trail. Some typical gates used on multi-use trails include:

- Locked gates – provide selective access and are best used at interim points along a fenced trail to provide emergency or maintenance access.
- Self-closing gates – provide trail user access while restricting livestock or other access.
- Road closure gates – gates that are typically left open except when needed to close access to all or a portion of the trail.
- Vehicle restriction gates (bollards or fencing) – gates, bollards, or fencing placed to restrict access by motor vehicles but not bicycles or pedestrians. These must be carefully placed so as not to create a hazard for cyclists. An alternative is to split the trail at these access points providing two narrower access points.



Fencing

Fencing can provide protection to trail users by keeping other elements off the trail or preventing users from accessing dangerous locations. Fencing can also provide protection to nearby features by preventing trail users from accessing those locations.

Some fencing simply provides guidance to trail users, creating a visual barrier or direction.

Fencing over six feet can feel overwhelming to trail users, creating a towering effect. Tall fencing on both sides of a trail can cause a "canyon" effect, which is uncomfortable for trail users. In all cases, fencing should be placed at least two feet clear of the trail.



Lighting

Trail lighting can increase the safety and comfort of trail users after dark, where such use is permitted.

Lighting should be installed at a pedestrian scale, which generally means the lights should be lower and closer together than typically placed on roadways. As with all fixed objects, light posts should be placed at least two feet clear of the trail. Where lighting the entire trail is not desired or feasible, lighting should focus on critical points, such as crossings, trailheads, and signage.



Bicycle Parking

Bike parking facilities at access points allow bicyclists to disembark and store their bicycle while using the trail by foot. It also encourages users riding along the trail to feel comfortable stopping along the trail and exploring the surrounding area via an access point.

Generally, one generic bicycle parking space should be six feet long by two feet wide, with at least seven feet of vertical clearance. Adequate clearance around a rack ensures that cyclists have enough space to maneuver and lock their bikes, without obstructing adjacent activity.



Vehicular Parking

Vehicular parking supports trail users travelling from a distance to use the trail. On-road parking and parking lots typically require a formal trailhead with amenities as users who drive to the trail may not be well versed in the layout or regulations of the trail.

3.3 TRAIL CROSSINGS

A critical point in trail design is any point where trail users must cross vehicular or train traffic. A successfully designed crossing increases the safety and comfort for both trail users and vehicle drivers. Various types of trail crossings are described below.

a) Railroad Crossings

Where the trail must cross rail lines, whether in active use or not, attention must be paid to the design of the crossing. The main hazard for an inactive rail crossing is potential for a bicycle wheel to be stuck in recessed rails. Active rail lines have the additional hazard of train and trail user collisions.

The preferred design includes a 90-degree crossing, although according to NACTO, 60-degrees is the minimum allowable. The 90-degree crossing reduces the likelihood of a bicycle wheel getting lodged and also increases visibility for both the trail users and the trains.

To make the perpendicular crossing safest, the trail should first bend away from the rail line, then turn back to the rail line. This allows for gradual turns and increased ease for trail users navigating the crossing.

b) Roadway Crossings

Typically, a trail crossing a roadway would be located either near an existing intersection, particularly if it is one where motorists would already be expected to stop, or at a location completely out of the influence of any intersection to allow adequate opportunity for trail users to see turning vehicles. In mid-block types of crossings, the right of way should be assigned using devices on both the roadway and the trail. Devices used may include things such as yield signs, stop signs, or traffic signals. See below for more information on signals and warning beacons.

c) Driveway Crossings

Driveways present another point of conflict between trail users and vehicles. In many cases, driveway crossings may be treated similarly to a low-volume roadway crossing. Warning signs or control devices similar to what might be used at a roadway crossing may be appropriate for both the driveway traffic and the trail traffic.



Figure 1: A driveway crossing on the Arcata City Trail

d) Traffic Signals and Warning Beacons

Where trail use and vehicular traffic is high, traffic signals or warning beacons may be required to assure a safe crossing for trail users. **Table 3** outlines four common signals and beacons and outlines when they may be beneficial.

Note that excessive use of warning and control devices may reduce the effectiveness of any of the devices and may cause drivers to ignore all similar devices.

Table 3: Signals and Warning Beacons

	Description	When to Use	Benefit	Drawback	What to Consider
Traffic Signal	Visual signal to control the flow of traffic and let pedestrians know when to cross the street	Best used at intersections with high volume of pedestrians and vehicles	Has clear pedestrian signal, with countdown	Can create traffic	Impact on traffic cueing, speed of traffic, volume of pedestrians
Pedestrian Hybrid Beacon	Overhead beacon that uses red and amber lights to warn vehicles of pedestrians, requires vehicles to stop	Best used on high speed or volume roads with reliable occasional pedestrian use (e.g. school or trail crossing)	Does not impeded traffic as heavily as signal	Only effective at a mid-block location	Can confuse drivers, impact on traffic
Rectangular Red Flashing Beacon (RRFB)	Irregularly flashing beacon that warn drivers of pedestrians presence, requires vehicles to yield to pedestrians	Best used with median, or on two lane road	More effective than static signs,	Less effective than signals	
Crosswalk	Painted area of street, typically at end of block, designating crossing location for pedestrians	Best used when demand for pedestrian crossing exceeds 20 ped/hour	Provides visual cue for vehicles to stop for pedestrians	Does not provide vehicles with lighted cue to stop	

Source: *Small Town and Rural Multimodal Networks Design Guide 2016*

e) Vehicular Turn Lanes

For on-street bike facilities, such as bike lanes, vehicular turn lanes present a different type of potential conflict since vehicles would need to merge through the bike lane. To reduce potential conflicts, when approaching an intersection with a right turn a best-case design allows bicyclists and motorists to handle one conflict at a time, in a predictable manner.

FHWA recommends three possible options:

- Encourages cyclists to share the optional through-right-turn lane with motorists.
- Guide cyclists up to the intersection in a dedicated bike lane.

- Allow cyclists to choose a path themselves (this design is the AASHTO recommendation—simply dropping the bike lane prior to the intersection).

Specific recommendations for right turn lane dimensions are:

- Bike transition lane has dashed line preferred 6' wide (minimum 4').
- Use symbol or arrow on ground to designate lanes.
- Through bike lane should be placed on left side of turn lane.
- Dotted right turn lane shall begin a minimum of 50' before the intersection.

3.4 HIGHWAY ACCESS RAMP CROSSINGS

A common issue at highway access ramps is that the acute angles created by the ramps may limit line of sight for bikers, pedestrians, and cars, and may force cars and bicyclists to merge quickly.

The undefined area created by a typical right-lane merge at a highway ramp is difficult for bicyclists to traverse because motor vehicles are often accelerating to merge into traffic and the speed differential between cyclists and motorists is high.

Where there is not adequate space for a bicycle facility through an interchange area, the designated bike lane should be placed on the sidewalk. In this case, ramps should be provided for a smooth transition, and signs should alert pedestrians to the presence of bicycles.

a) At-Grade Crossings

Highway access ramps connected to local streets at a right angle are easiest for bicyclists to negotiate. The main advantages are:

- The distance that pedestrians and bicyclists must cross at the ramps is minimized.
- Signalized intersections stop traffic.
- Visibility is enhanced. If these configurations are unavoidable, mitigation measures should be sought. Special designs should be considered that allow pedestrians and bicyclists to cross ramps in locations with good visibility and where speeds are low.

b) Grade-Separated Crossings

Where it is not possible to accommodate pedestrians and bicyclists with at-grade crossings, grade separation should be considered. However, grade-separated facilities are expensive and add out-of-direction travel for pedestrians and cyclists, which may result in low usage if the added distance is too great. This can create problems if pedestrians and bicyclists ignore the facility and try to negotiate the interchange at grade with no sidewalks, bike lanes, or crosswalks.

To ensure proper use by bicyclists, structures must be open, with good visibility (especially underpasses).

3.5 RAIL WITH TRAIL DESIGN

Where a trail is constructed adjacent to an active, or potentially active, rail line, additional precautions are necessary to ensure the safety and comfort of all users. Because of the very recent passage of SB 1029 (see above), this project may not be required to be designed as a Rail *with* Trail, but rather may be a Rail *to* Trail project. Rail *with* Trail design guidelines are included below, should the project maintain the potential for active rail use adjacent to the trail.

The City of Arcata Pedestrian and Bicycle Master Plan (2010) guidelines define the requirements for a constrained Rail with Trail corridor as:

- 15' from the center of the railroad track to the trail shoulder
- Barrier must be at least 5' tall, can be fence or dense vegetation that constrains visibility.
- 2' buffer from barrier to trail
- Shared-use trail is recommended to be 12' wide, 10' minimum

Where a trail must cross a rail line, care must be taken to reduce the potential hazards for bicycle wheels catching in the tracks, as well as increase visibility for trail users. A best practice is to have the trail approach the railroad crossing at a perpendicular angle. The trail should bend away from the railroad crossing slightly before the crossing before turning back across the tracks to increase visibility and comfort for rider. Crossings should be at least as wide as the approach.

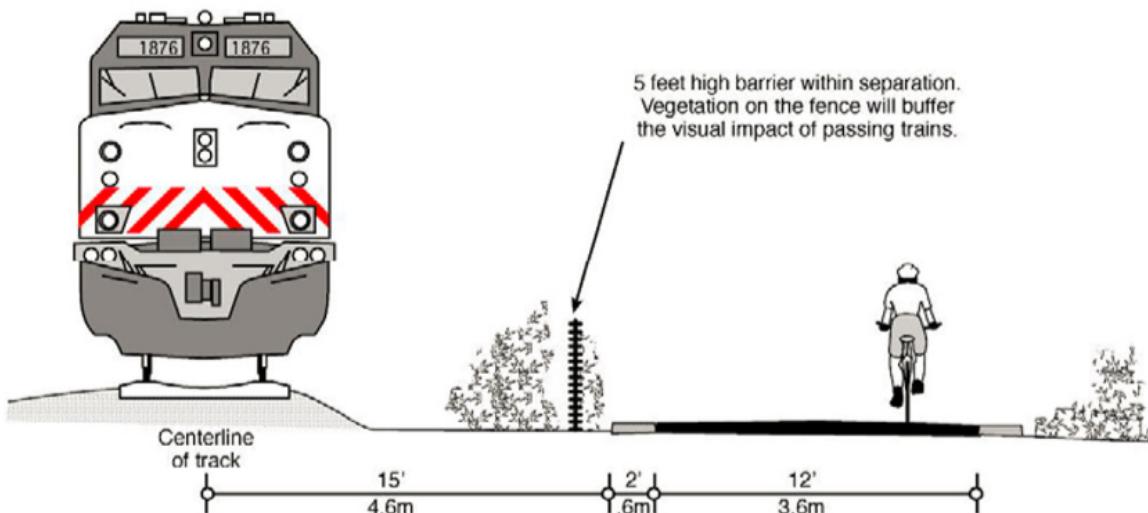


Figure 2: Diagram of a Rail-with-Trail; Source: Arcata Bike and Ped Plan

3.6 SEPARATED PATHWAY & MULTI-USE TRAIL DESIGN

Separated pathways, also referred to as multipurpose or multi-use trails, include any bike or pedestrian facility that is physically separate from vehicular traffic. The pathway may be separated by distance or a vertical barrier. Common types of separated pathways are described below, along with typical design standards.

Multipurpose trails can take several forms, including shared use paths and sidepaths. Multipurpose trails should be clearly designated as such, to avoid high speed bicycling or motor vehicles. On high-use corridors, separate trails or additional width, signing and pavement markings should be used to minimize conflicts between users. Horses should have a bridle trail separate from any multipurpose trail when possible.

a) Shared-Use Paths

A shared-use path is simply any path that allows for two-way, off-street bicycle and pedestrian use, and typically refers to a path that does not follow a roadway network. These facilities are frequently found in parks, along rivers, beaches, and in greenbelts or utility corridors where right-of-way exists and there are few conflicts with motorized vehicles. A shared-use path may be referred to as a Class I Bikeway where it functions as a separated bike facility. Standards for Class I Bikeways are included separately.

AASHTO Design Guidelines for Shared-Use Paths

AASHTO Design Guidelines recommend that shared-use paths be 12 feet or wider in areas with high use. A minimum of ten feet is recommended in low-use areas, with 8 feet acceptable for short distances where there are physical constraints. To accommodate all users, a maximum running slope of 5% is recommended.

In all cases, there must be two feet or more horizontal clearance from the edge of the path. Ideally, this would be 2-foot wide shoulders on each side, with less than 2% cross slope.

Overhead clearance should be 10 feet, or 8 feet for short distances where necessary.



Figure 3: Cyclists and Pedestrians on the Humboldt Bay Trail

b) Sidepaths

A sidepath is a shared-use path located immediately adjacent and parallel to a roadway. It is similar to a sidewalk, except that it explicitly allows bicycles and is physically separated from the roadway by distance or physical barrier. AASHTO provides guidelines for the appropriate use of sidepaths but states that a "pathway adjacent to the road is generally not a substitute for the provision on on-road accommodation such as paved shoulders or bike lanes." Sidepaths may be considered under the following conditions:

- The path will generally be separated from all motor vehicle traffic.
- Bicycle and pedestrian use is anticipated to be high.
- To provide continuity with an existing path through a roadway corridor.
- The path can be terminated at each end onto streets with good bicycle and pedestrian facilities, or onto another well-designed path.
- There is adequate access to local cross-streets and other facilities along the route.

AASHTO Design Guidelines for Sidepaths

A sidepath should satisfy the same design criteria as shared-use paths in independent corridors. A minimum 5-foot separation between the sidepath and a high-speed roadway is recommended. Where the separation is less than 5 feet, a physical barrier or railing should be provided.



Figure 4: Cyclist on Arcata City Trail adjacent to Foster Avenue

c) Class I Bikeway

Class I Bikeway is a specific designation used by Caltrans for bicycle transportation facilities that are separate from roadways and may be shared with pedestrians. See **Section 2 Reference Standards and Guidelines** for more information about Caltrans Bikeway classifications.

Design Guidelines for Class I Bikeway

Bike paths closer than 5 feet from shoulder edge should have physical barrier between bicycles and automobiles. The maximum grade rate recommended for bike paths is 5 percent. It is desirable that sustained grades be limited to two percent if a wide range of riders is to be accommodated. Steeper grades can be tolerated for short segments (e.g., up to about 500 feet).

Low barriers (e.g., dikes, raised traffic bars) next to a highway are not recommended because bicyclists could fall over them and into oncoming automobile traffic. In instances where there is danger of motorists encroaching into the bike path, a positive barrier (e.g., concrete barrier, steel guard railing) should be provided.

- The minimum paved width for a two-way bike path shall be 8 feet.
- The minimum paved width for a one-way bike path shall be 5 feet. A minimum 2-foot wide graded area (shoulders) shall be provided adjacent to the pavement; 3-feet is recommended
- The vertical clearance to obstructions across the clear width of the path shall be a minimum of 8 feet
- The minimum design speed for bike paths shall be 25 miles per hour, with few exceptions

If wide enough (greater than 13 feet), shared-use pathways should have designated markings for two-way bicycle paths and a single pedestrian path on the side. If the width is not great enough for this, the pathway should bear no markings in order to encourage safe sharing of the path and de-emphasize the path as a "bike highway".

3.7 SIDEWALK, SHOULDER, BIKE LANE, & BIKE ROUTE DESIGN

a) Sidewalks & Widened Sidewalks

If a shared-use trail must be placed along a roadway, widened sidewalks may be the preferred option over placing the trail in a shoulder. Signage is required to make clear that the sidewalk is a shared space to encourage pedestrians to be alert and bicyclists to ride slowly.

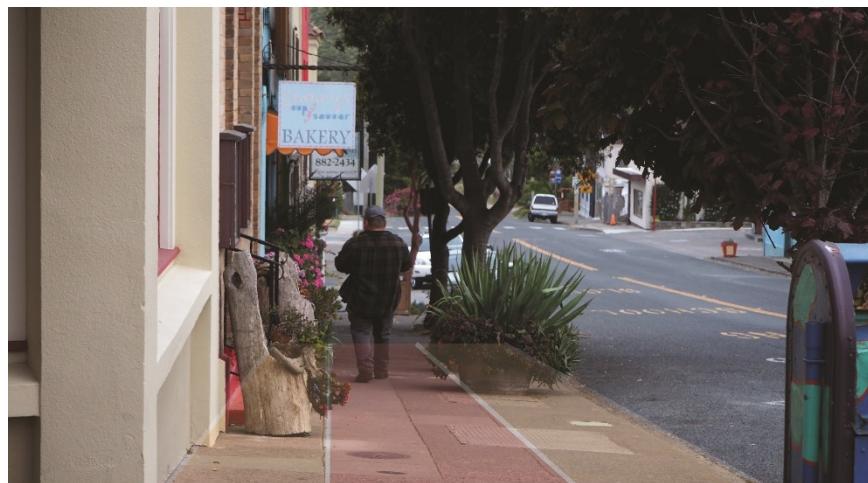
The minimum recommended pedestrian-only sidewalk dimensions are shown in **Figure 6**.

Sidewalks that are expected to accommodate bicycles as well as pedestrians should have sufficient additional width to provide the same through clearance as a shared-use path. In many cases, four to five additional feet may be all that is needed.

Note that in the most constrained of locations, a minimum of four feet of completely unobstructed pathway is required to meet accessibility requirements.



Figure 5: Widened sidewalk along Alliance Road



	Frontage Zone	Pedestrian Through Zone	Furnishings Zone	Total Width
Preferred Minimum	2'	6'	4'	12'
Constrained Minimum	1'	5'	2'	8'

Figure 6: Recommended Sidewalk Dimensions

b) Class II Bikeway or Bike Lane

Class II Bikeway is a specific designation used by Caltrans for bicycle transportation facilities that are on-roadway striped lanes. See **Section 2 Reference Standards and Guidelines** for more information about Caltrans Bikeway classifications.

When paired with an adequate sidewalk, a bike lane, can provide bike and pedestrian routes where a shared-use trail is not feasible.

Design Guidelines for Class II Bikeway or Bike Lane

Bike lanes are one-way facilities defined by pavement striping and signage to delineate a portion of the roadway for bicycle travel. They are typically 5 feet wide, but may be reduced to 4 feet where there is no parking or curb with gutter.

Right turn lanes that intersect these lanes should be dashed to make clear the shared nature of these zones. If a bike lane is required to use the shoulder of a road at any point, it is helpful to paint an additional white line on the opposite side of the road to create a lane, regardless of how narrow it is.



Figure 7: Class II Bike Lane on Saint Louis Road

c) Class III Bikeways

Class III Bikeway is a specific designation used by Caltrans for bicycle transportation facilities that are on-roadway facility shared with vehicles and indicated by bicycle route signage. Bike Boulevards are a subset of Class III bikeways on low volume residential roads. Bike Boulevards are often indicated with sharrows (shared lane markings) to indicate the shared-use nature of the roadway.

Class III bike lanes are the less preferable to other Class routes because they are less safe. They should primarily be used when no other alternative is viable, such as to connect Class I facilities through constrained locations, such as the Arcata City Trail location shown in Figure 8.

Design Guidelines for Class III Bikeway

When used, sharrows should be placed in the center of the lane.

Bike Routes are indicated by bicycle route signage and do not require, but may have optional pavement markings. In some instances, a 4-inch white edge stripe separating the traffic lanes from the shoulder can be helpful in providing for safer shared-use. This practice is particularly applicable on rural highways and on major arterials in urban areas where there is no vehicle parking.



Figure 8: A Class III Bikeway with sharrow on L Street

d) Shoulders

In areas where the trail must be placed in a roadway and a bike lane or widened sidewalk is not feasible, another option for a pathway may be on the shoulder of the existing roadway. To ensure safety for bicyclists and pedestrians, shoulders should be appropriately wide enough to travel along them without being endangered by traffic. Generally, higher traffic volume, higher traffic speeds, and higher truck usage all require wider shoulders. In addition to making shoulders wider, it is advised to make the roadways adjacent to them wider when possible to avoid drivers encroaching on shoulder space when passing cars in the opposite direction.



Figure 9: Shoulders in Capay, CA

e) Shoulders on Rural Roads

Adding or improving paved shoulders on rural roadways with higher speeds or traffic volumes has many safety benefits for motorists, bicyclists, and pedestrians. Expanded shoulders provide space for maintenance operations, to escape potential crashes, or for temporary storage of disabled vehicles. They extend the service life of the road by reducing edge deterioration and further improve sight distances in areas with curves and cut sections. Paved shoulders can benefit pedestrians and cyclists as well by providing a place for them to travel in locations where there is no sidewalk or bike lane and the current roadside condition is unsuitable for walking or bicycling.



Figure 10: A minimum shoulder on Highway 1 near Elk, CA

In all cases, paved shoulders should be at least four feet wide, and eight feet is the preferred width. Where physical space is limited, additional width for shoulders may be gained by restriping roadways to decrease the width of vehicle travel lanes.

f) Advisory shoulder

An advisory shoulder is a very rarely used option on narrow, very low volume roadways where there is not space for a separate trail, widened sidewalk, or even dedicated shoulder space. On these types of roadways, advisory shoulders can allow for all modes of transportation fit on the road. Advisory shoulders are intended to be used by bicyclists and pedestrians, while allowing vehicles to enter the shoulder when passing oncoming traffic. The design maximizes space on rural roadways with a 10- to 18-foot unmarked center region for two-way travel by vehicles, and a 4-6 foot shoulder on both sides of the roadway. This design recognizes that two-way traffic will be required to enter into the advisory shoulder when passing oncoming traffic, and it expects vehicles to yield to bicyclists in these instances.

Note that because advisory shoulders are not common, they may cause additional confusion for all road users.



Figure 11: An advisory shoulder in Edina, MN showing vehicle shifting to give additional room for cyclist; Source: Small Town and Rural Design Guide

3.8 ROUNDABOUTS

Roundabouts, if used appropriately, can provide multiple benefits. Typically, there are fewer collisions, lower speeds, and increased safety for all users in roundabouts, while also improving traffic flow.

Pedestrian crossing locations must balance pedestrian convenience, pedestrian safety, and roundabout operations. As with other crossings, the crossing distance should be minimized, and the location should allow for clear sight lines and adequate stopping distances. The splitter island can provide a pedestrian refuge if it is a minimum of 6-feet wide.

Crossings located at least one vehicle-length (20-feet) from the roundabout circulation allow drivers to make one decision at a time. Speed tables, or raised crosswalks, can also be used at the crossing to increase pedestrian safety.

Sidewalks should also be set back from the roundabout to clarify the pedestrian route around, and not through, the circle.

At roundabouts, bicycles are usually best served by providing the rider a choice of proceeding through the roundabout in the roadway or on the sidewalks. In the first case, if a bike lane is present before the roundabout, that bike lane should be terminated approximately 100 feet before the roundabout to allow the cyclist to safely merge into vehicular traffic. Where bicycles are expected or permitted to use the sidewalk, the sidewalk should be widened and appropriate ramps and signage should be provided to clarify the use.

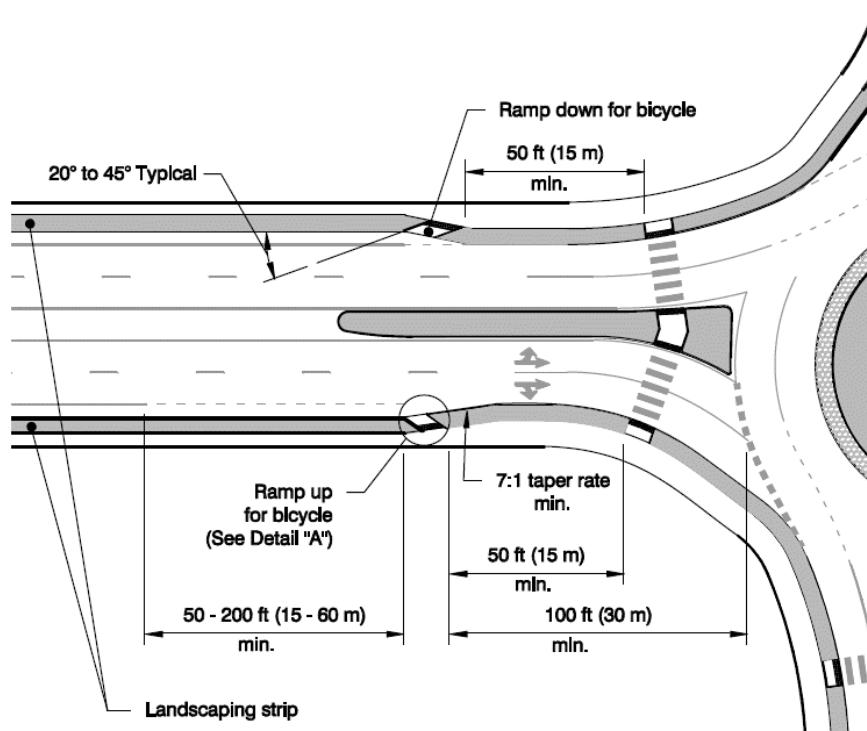
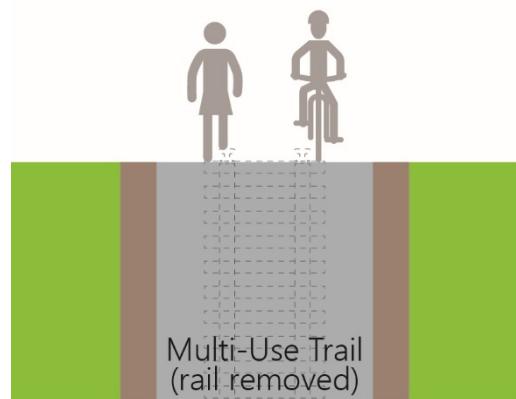


Figure 12: Possible treatments for bicycles at a roundabout;
Source: NCHRP Roundabouts: An Informational Guide.

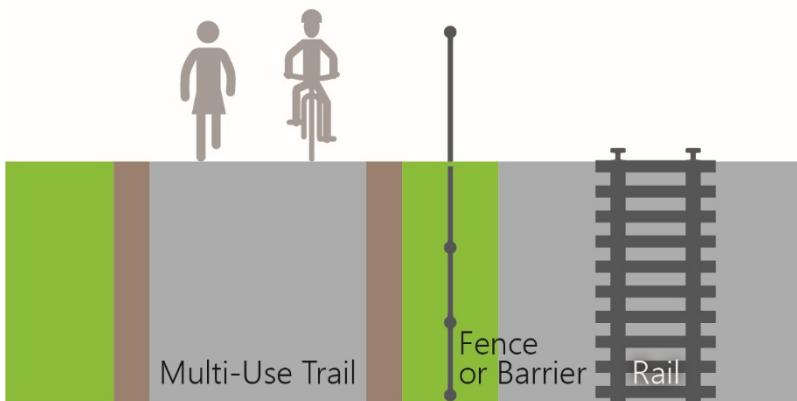
4. Typical Diagrammatic Trail Cross-Sections

The sections below are intended to illustrate typical trail sections that may be appropriate for use in the Annie & Mary corridor. Trail, shoulder, and setback dimensions, as well as slope and curve geometry would conform to the appropriate standards depending on the local conditions.



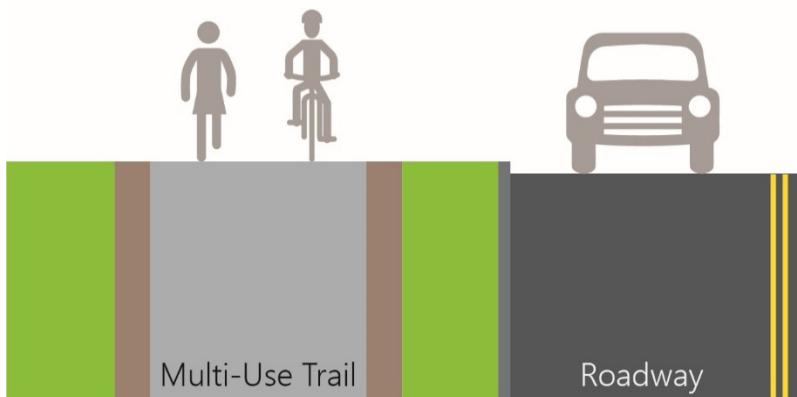
Rail-to-Trail

A rail-to-trail layout places the new trail in such a way that it precludes use of the rail line by trains. This is typically because the rails and ties have been removed and replaced by the trail. Future rail use may be restored, but would require removal or redesign of the trail.



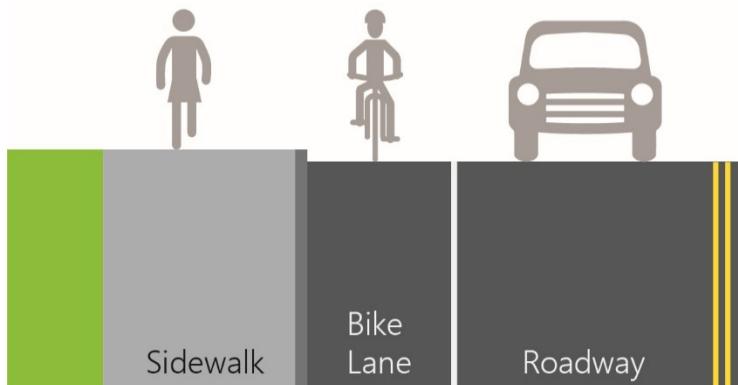
Rail with Trail

A rail with trail layout preserves any existing rails and ties and places the trail in such a way that it would not interfere with potential future rail use.



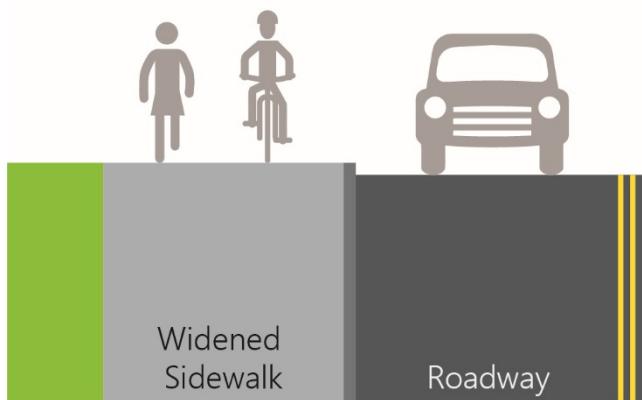
Class I Trail (not in Rail ROW)

A Class I Trail, or separated multi-use trail, would be a trail outside of the rail corridor, but separated from the roadway network.



Bike Lane with Sidewalk

Where a separated multi-use trail is not feasible, a sidewalk for pedestrian use and a Class II or Class IV bike lane for cyclists may be considered.



Widened Sidewalk

Where there is not sufficient room for separate bike and pedestrian facilities, a widened sidewalk with explicit direction for cyclists use may be considered.

City of Arcata

Annie & Mary Trail Connectivity Project

Final
Project Report

APPENDIX K
Funding Opportunities

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APPENDIX K

1.1 FUNDING OPPORTUNITIES

The funding opportunities described below outline various sources of funding focused on the construction of multi-use paths that would be applicable and available to Arcata. They include state, regional, and local sources of funding. A combination of funds from these sources along with direct funding from partner agencies should be considered.

Name	Description	Applications Due
Funding for Large Projects (typically in the \$millions)		
Active Transportation Program (ATP)	This program funds active transportation (focused on walking and bicycling) projects that lead to a mode shift, enhance safety, reduce greenhouse gasses, and addresses equity issues. Grants prioritize infrastructure. www.dot.ca.gov/hq/LocalPrograms/atp	Annually in July
Green Infrastructure Grant Program	This program funds projects that acquire, create, enhance or expand community parks and green spaces including acquisition, design and construction of projects. http://resources.ca.gov/grants/green-infrastructure	
Land and Water Conservation Fund Program (LWCF)	This fund provides for the acquisition and development of recreation facilities such as trails. The fund is a state-administered program of the National Park Service and provides up to \$3 million per project. www.parks.ca.gov/lwcf	
Recreational Trails and Greenways Grant Program	This grant provides nonmotorized infrastructure development that promote access to parks. Funding is available for trails, non-motorized bridges, and land acquisition for trails. A 20% match is required unless the project serves severely disadvantaged communities. http://resources.ca.gov/grants/trails	Annually in July
Regional Park Program (RPP)	This new program will fund projects that create, expand, or renovate parks and park facilities such as trails (with preference given to multi-use trails), regional trail networks and interpretive facilities. www.parks.ca.gov/rpp	
Rural Recreation, Tourism and Economic Enrichment Investment Program (RTT)	This new program will fund projects that provide new recreational opportunities in support of economic and health-related goals in rural communities that have demonstrated deficiencies and a lack of outdoor infrastructure. www.parks.ca.gov/rrt	
Solutions for Congested Corridors Program (SCCP)	This program provides funding to achieve a balanced set of transportation, environmental, and community access improvements and is funded annually at \$250 million. Preferred projects provide transportation choice while preserving local community character. https://catc.ca.gov/programs/sb1/solutions-for-congested-corridors-program	
Urban Greening Grant Program	This program funds projects that reduce commute vehicle miles traveled by constructing bicycle paths that provide safe routes for travel between residences, workplaces, commercial centers, and schools. http://resources.ca.gov/grants/urban-greening	Spring

Humboldt County Headwaters Fund Grants (Community Investment Fund) (FCP)	This program funds projects with long-term, tangible impacts that facilitate community and economic development in Humboldt County. Projects can include transportation systems and those that support tourism such as trails. Funding may be provided in the form of loans. https://humboldtgov.org/2190/Grant-Programs
Coastal Conservancy Grants	The Coastal Conservancy accepts grant applications on an ongoing basis for projects that benefit public access, natural resources, and climate resiliency on the California coast. https://scc.ca.gov/grants/
Integration into Larger Projects	Many federal or state-funded capital projects (such as roadways and transit) require or recommend the inclusion of safe walkways and bikeways. Integrating trail infrastructure into larger projects typically marginally increases overall costs while reducing project costs by taking advantage of economies of scale and coordinating acquisition and construction.

Funding for Small Projects

Humboldt County Headwaters Fund Grants (Mini Grants)	For smaller trail-related projects, this fund awards grants for community events and innovative projects which positively impact Humboldt's economy. Awards are usually in the \$1,000 to \$1,500 range. http://humboldtgov.org/266/Headwaters
Adopt-A-Trail Programs	These programs recognize individuals, families or businesses who contribute funding or maintain a segment of the trail most often with a plaque along the trail.
Memorial Funds	Funds provided by family and friends on behalf of a loved one who has passed are often provided for trail development or trail-side amenities.

Active Transportation Program (ATP)

California Department of Transportation (Caltrans)

www.dot.ca.gov/hq/LocalPrograms/atp

This program funds active transportation (focused on walking and bicycling) projects that lead to a mode shift, enhance safety, reduce greenhouse gasses, and address equity issues. Grants are available for planning and education programs, but prioritize small and large infrastructure (\$250k to over \$7 million) projects.

Eligible Recipients: Cities, counties, tribes, MPOs, transit agencies, school districts, and nonprofits (recreational trails only).

Typical Funding Amount: \$250k - \$7 million

Application Date: Annually in July

Contact:

State of California

Department of Transportation

Chief, Office of Active Transportation & Special Programs

Division of Local Assistance

P.O. Box 942874, MS-1

Sacramento, CA 94274-0001

Mary.Hartegan@dot.ca.gov

Green Infrastructure Grant Program

California Natural Resources Agency

<http://resources.ca.gov/grants/green-infrastructure>

This program funds projects that acquire, create, enhance or expand community parks and green spaces. A competitive project will reduce greenhouse gas (GHG) emissions, incorporate green infrastructure, decrease air and water pollution, reduce the consumption of natural resources and energy, and increased adaptability to climate change. Projects must benefit a disadvantaged community. This program funds the acquisition, design and construction of projects and includes green streets, tree planting, parks, and commuter trails, among others.

Eligible Recipients: Local agencies, nonprofit organizations, non-governmental land conservation organizations, Native American tribes.

Typical Funding Amount: min \$50,000 - max \$3 mil

Contact:

Becki Abrams

(916) 651-2482

Becki.Abrams@resources.ca.gov

Land and Water Conservation Fund Program (LWCF)

California Department of Parks and Recreation (DPR)

www.parks.ca.gov/lwcf

This program funds the acquisition and development of outdoor recreation areas and facilities such as trails. Property acquired or developed under the program must be retained in perpetuity for

public outdoor recreation use. The fund is a state-administered program of the National Park Service.

Eligible Recipients: Counties, cities, recreation and park districts, state agencies, special districts focused on public parks and recreation.

Typical Funding Amount: max \$3 mil

Contact:

Natalie Bee

Natalie.Bee@parks.ca.gov

Recreational Trails and Greenways Grant Program

California Natural Resources Agency

<http://resources.ca.gov/grants/trails>

This fund provides nonmotorized infrastructure development that promote access to parks and waterways to encourage health-related transportation and opportunities to reconnect with nature. Funding is available for trails, non-motorized bridges, and land acquisition for trails. A 20% match is required unless the project serves severely disadvantaged communities.

Eligible Recipients: Local agencies, state conservancies, federally recognized Native American tribes, nonfederally recognized California Native American tribes listed on the California Tribal Consultation List maintained by the Native American Heritage Commission, joint powers authorities, and nonprofit organizations.

Typical Funding Amount: max \$4 mil

Match Requirement: 20% match (unless project serves severely disadvantaged communities)

Application Date: July

Contact:

Evelyn Maginnity

evelyn.maginnity@resources.ca.gov

bondsandgrants@resources.ca.gov

(916) 653-2812

Regional Park Program (RPP)

California State Parks

www.parks.ca.gov/rpp

This program will fund projects that create, expand, or renovate parks and park facilities such as trails (with preference given to multi-use trails), regional trail networks and interpretive facilities.

Eligible Recipients: Regional park districts, counties, and regional open-space districts, open-space authorities, joint powers authorities, and eligible nonprofit organizations

Typical Funding Amount: Maximum and minimum grant amounts to be determined through public hearing process.

Contact:

Office of Grants and Local Services

State of California Department of Parks and Recreation

P.O. Box 942896

Sacramento, CA 94296-001

(916) 653-7423

Natalie.Bee@parks.ca.gov

Rural Recreation, Tourism and Economic Enrichment Investment Program (RTT)

California State Parks

www.parks.ca.gov/rrt

This program will fund projects that provide new recreational opportunities in support of economic and health-related goals in rural communities that have demonstrated deficiencies and a lack of outdoor infrastructure.

Eligible Recipients: Cities, counties and districts in nonurbanized areas.

Typical Funding Amount: Maximum and minimum grant amounts to be determined through public hearing process.

Contact:

Office of Grants and Local Services

State of California Department of Parks and Recreation

P.O. Box 942896

Sacramento, CA 94296-001

(916) 653-7424

Richard.Rendon@parks.ca.gov

Solutions for Congested Corridors Program (SCCP)

California Transportation Commission (CTC)

<https://catc.ca.gov/programs/sb1/solutions-for-congested-corridors-program>

This program provides funding to achieve a balanced set of transportation, environmental, and community access improvements to reduce congestion throughout the state. This program allocates \$250 million annually for projects that are part of a comprehensive corridor plan by providing more transportation choices while preserving the character of local communities and creating opportunities for neighborhood enhancement. Eligible project elements within the corridor plans may include improvements to state highways, local streets and roads, rail facilities, public transit facilities, bicycle and pedestrian facilities, and restoration or preservation work that protects critical local habitat or open space.

Eligible Recipients: Regional transportation planning agencies, county transportation commissions and Caltrans are eligible to apply for program funds through the nomination of projects. All projects nominated must be identified in a currently adopted regional transportation plan and an existing comprehensive corridor plan.

Contact:

Teresa Favila

Associate Deputy Director

California Transportation Commission

teresa.favila@catc.ca.gov

(916) 653-2064

Urban Greening Grant Program

California Natural Resources Agency

<http://resources.ca.gov/grants/urban-greening>

This program funds projects that reduce commute vehicle miles traveled by constructing bicycle paths, bicycle lanes or pedestrian facilities that provide safe routes for travel between residences, workplaces, commercial centers, and schools. It also funds tree planting projects which convert hardscapes into green space and projects which acquire, create, enhance, or expand community parks and green spaces.

Eligible Recipients: City, county, special district, nonprofit organizations.

Typical Funding Amount: \$500,000 - \$4 mil

Application Date: Spring

Contact:

urbangreening@resources.ca.gov

(916) 653-2812

Humboldt County Headwaters Fund Grants (Community Investment Fund) (FCP)

County of Humboldt (Headwaters Fund)

<https://humboldtgov.org/2190/Grant-Programs>

<http://humboldtgov.org/266/Headwaters>

This program funds projects with long-term, tangible impacts that facilitate community and economic development in Humboldt County. Projects can include transportation systems and those that support tourism such as trails. Funding may be provided in the form of loans.

Eligible Recipients: Non-profit and governmental entities.

Contact:

Headwaters Fund Coordinator, 520 E Street,

Eureka, CA 95501

headwaters@co.humboldt.ca.us

(707) 445-7745

Coastal Conservancy Grants

The Coastal Conservancy, State of California

<https://scc.ca.gov/grants/>

The Coastal Conservancy accepts grant applications on an ongoing basis for projects that benefit public access, natural resources, working lands, and climate resiliency on the California coast.

Contact:

California State Coastal Conservancy

1515 Clay Street, 10th Floor

Oakland, CA 94612-1401

(510) 286-1015

Integration into Larger Projects

Many federal or state-funded capital projects (such as roadways and transit) require or recommend the inclusion of safe walkways and bikeways. Integrating biking and walking infrastructure into larger projects typically marginally increases overall costs while reducing project costs by taking advantage of economies of scale and coordinating acquisition and construction.

Humboldt County Headwaters Fund Grants (Mini Grants)

County of Humboldt (Headwaters Fund)

<https://humboldtgov.org/2190/Grant-Programs>

<http://humboldtgov.org/266/Headwaters>

This program provides small grants in support of community events and innovative projects which positively impact Humboldt's economy. Awards are usually in the \$1,000 to \$1,500 range.

Eligible Recipients: Non-profit organizations and government entities located in Humboldt County are eligible to apply. Private businesses with a project idea are encouraged to contact the Headwaters Executive Director for connections to potential public partners.

Application Date: Mini-grant requests are accepted on an ongoing basis.

Contact:

Headwaters Fund

520 E Street

Eureka, CA 95501

headwaters@co.humboldt.ca.us

(707) 445-7745

Adopt-A-Trail Programs

These programs recognize individuals, families or businesses who contribute funding or maintain a segment of the trail most often with a plaque along the trail. Adoptees typically commit to a year of maintenance or a specific amount of funding. Amenities such as benches can be adopted as well.

Memorial Funds

Funds provided by family and friends on behalf of a loved one who has passed are often provided for trail-side amenities such as benches, but can also fund landscaping or sections of trail, among others. Plaques are often used a memorial dedications.

City of Arcata

Annie & Mary Trail Connectivity Project

Final

Project Report

APPENDIX L

Public Draft Report Comments

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APPENDIX L

1.1 PUBLIC DRAFT REPORT COMMENTS

The Public Draft of the Annie & Mary Trail Connectivity Project Report was released on August 21, 2019. The report was posted to the project website and hard copies of the report and maps detailing alternative trail alignments were made available at the City of Arcata Recreation Office, Arcata Library, and the Arcata Marsh Interpretive Center. The Public Draft was available for two weeks prior to a presentation about the project at the Arcata City Council on September 4, 2019.

The Project Task Force reviewed a draft iteration of the public draft report at their final meeting on August 8 and helped refine the Public Draft. Project Task Force feedback included suggestions to reference the Great Redwood Trail vision in the beginning of the report and refine the description of proposed infrastructure improvements at the Giuntoli Bridge and the Sunset Ave/LK Wood overcrossing.

Once the Public Draft was released, the project team received several comments that were used to refine the final Annie & Mary Trail Connectivity Project Report:

- A comment about trail/road crossing design recommending that the trail be designed to limit the need for users to stop unnecessarily at road crossings, since several roads crossing the proposed trail may even have less volume of vehicle traffic than the trail has users.
- A comment to ensure that equestrian users are explicitly included as potential users of the Annie & Mary Trail particularly from the West End Road trailhead for the Arcata Community Forest to the Northern Project Extension.