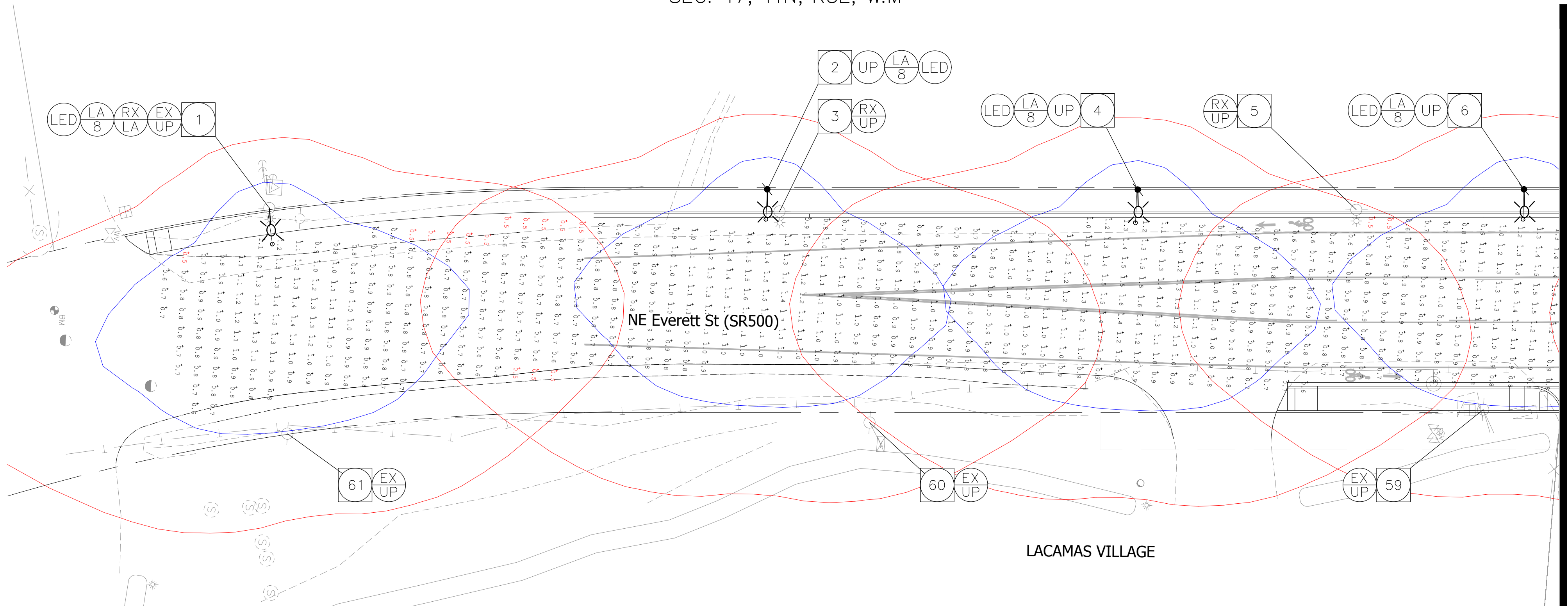


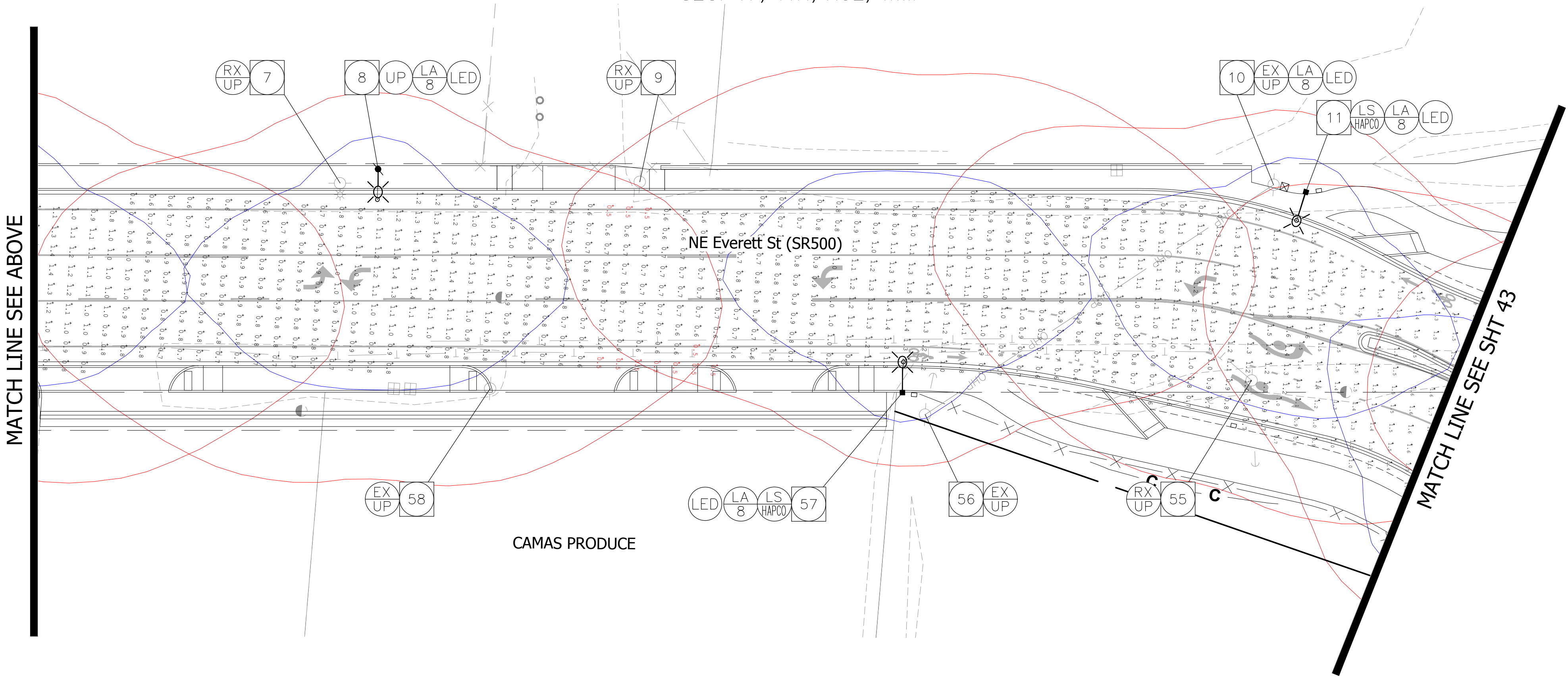
Exhibit 8
SHOR19-03

SEC. 47, T1N, R3E, W.M

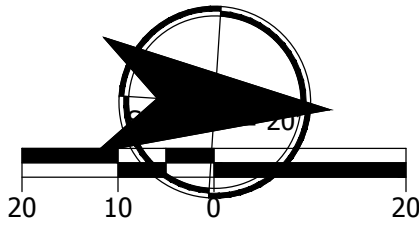


LACAMAS VILLAGE

SEC. 47, T1N, R3E, W.M



CAMAS PRODUCE



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LEGEND

- # POLE NUMBER (#) SHOWN, SEE POLE SCHEDULE.
- LS HAPCO INSTALL DECORATIVE HAPCO LIGHTING STANDARD (SEE GENERAL NOTES)
- LA X INSTALL (X)' LUMINAIRE ARM
- RX LA REMOVE EXISTING LUMINAIRE ARM AND LUMINAIRE
- LED INSTALL LED LUMINAIRE. SEE LUMINAIRE SCHEDULE FOR DETAILS, SHEET IL-05.
- UP WOOD UTILITY POLE TO BE INSTALLED BY PUD.
- EX UP EXISTING WOOD UTILITY POLE TO REMAIN.
- RX UP EXISTING WOOD UTILITY POLE TO BE REMOVED BY PUD
- EX LP EXISTING LIGHT POLE POLE TO REMAIN
- RX LS REMOVE EXISTING LIGHTING STANDARD ON UTILITY POLE

GENERAL NOTES

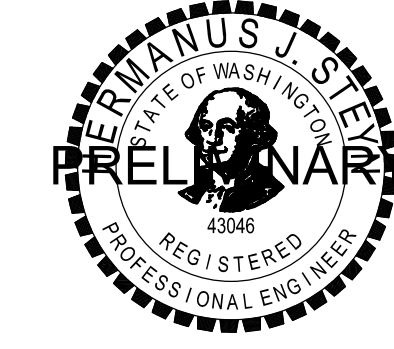
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- STREET LIGHT LUMINAIRE SHALL BE ATBM-P05-MVOLT-R3-BK-PCLL. THIS LIGHT IS A MULTI-VOLT 120-277V.
- LIGHTING POLES SHALL BE 34' DECORATIVE LIGHTING POLES.
- UTILITY POLE RELOCATION TO BE COMPLETED BY CPU.
- LIGHTS LOCATED ON UTILITY POLES TO BE INSTALLED BY CPU.
- CPU TO UNDERGROUND UTILITIES NORTH OF POLE 13. POLE LOCATIONS ARE SUBJECT TO CHANGE.

LEGEND

- 0.5 Fc DESIGN ISOLINE (DIRECT ILLUMINANCE)
 - 0.15 Fc DESIGN ISOLINE (DIRECT ILLUMINANCE)
- CALCULATION POINTS IN RED ARE MINIMUMS FOR CALCULATION AREA.
 - DESIGN ISOLINES AND POINTS SUBJECT TO CHANGE AS DESIGN IS REFINED.



CAMAS PUBLIC WORKS
DEPARTMENT
NE LAKE ROAD & NW EVERETT STREET
(SR-500) INTERSECTION IMPROVEMENTS
ILLUMINATION ANALYSIS



CAMAS PROJECT NUMBER T1011	
STATUS ☒ DRAFT ☐ CONSTRUCTION ☐ AS-BUILT	PAGE 1 OF X
CAMAS DRAWING NUMBER IL-01	
CAMAS CATALOG NUMBER	

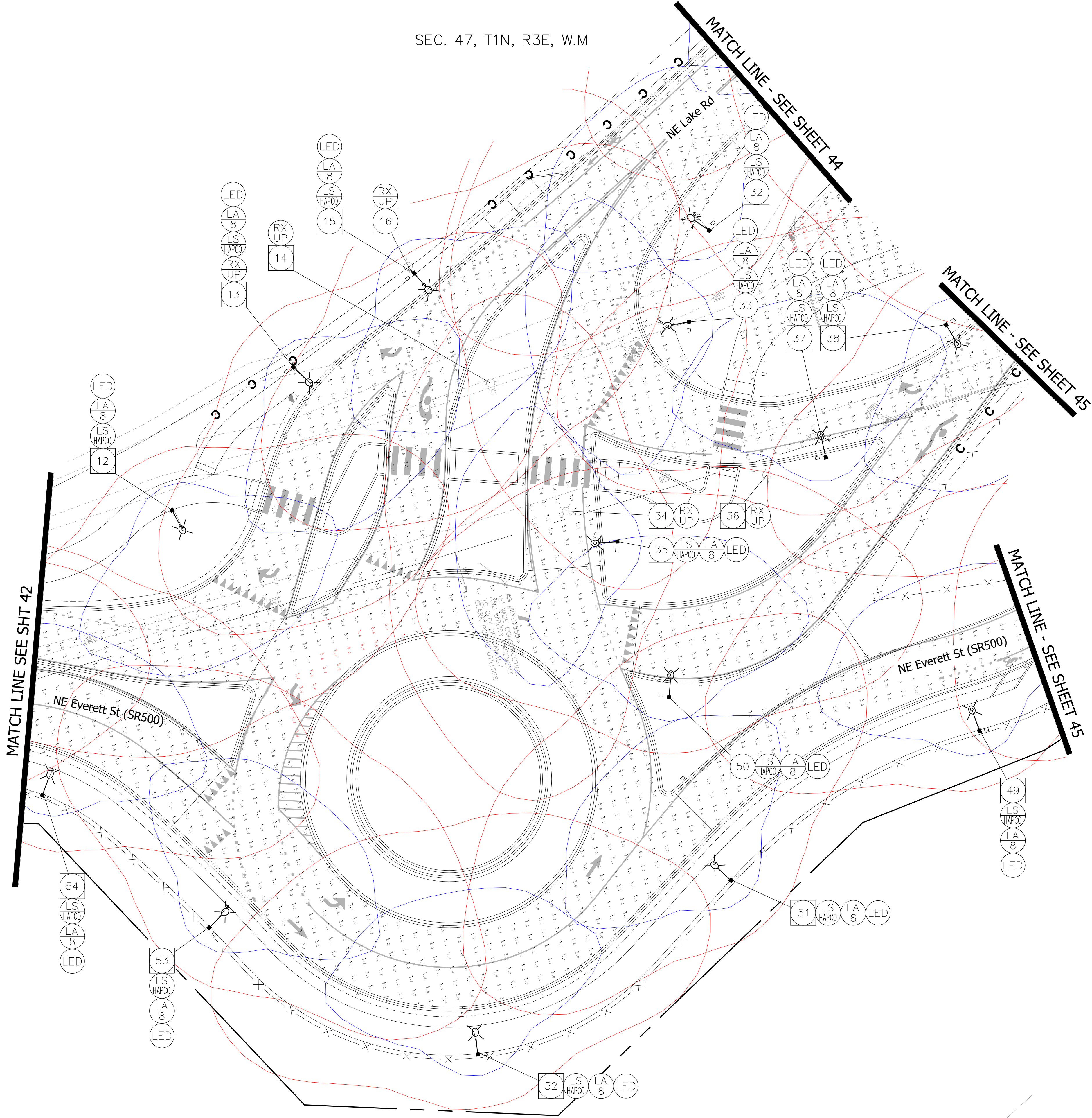
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DATES DESIGN DATE: AUGUST 2019 AS-BUILT DATE:		SCALES HORIZONTAL: AS SHOWN VERTICAL: N/A	
CONTACTS DESIGNED BY: JBK		APPROVED BY: HJS	
PROJ. ENGR: HJS			

SEC. 47, T1N, R3E, W.M



LEGEND

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- INSTALL DECORATIVE HAPCO LIGHTING STANDARD (SEE GENERAL NOTES)
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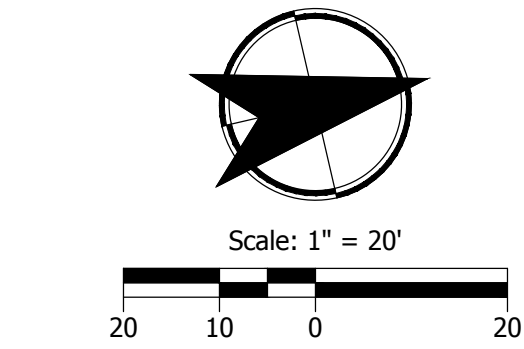
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DESIGN DATE: AUGUST 2019	SCALES: AS SHOWN	HORIZONTAL: N/A	CONTACTS: JIBK	DESIGNED BY: HJS	APPROVED BY: HJS	PROJ. ENGR.: HJS
AS-BUILT DATE:	VERTICAL: N/A	CONTACTS: JIBK	DESIGNED BY: HJS	APPROVED BY: HJS	PROJ. ENGR.: HJS	

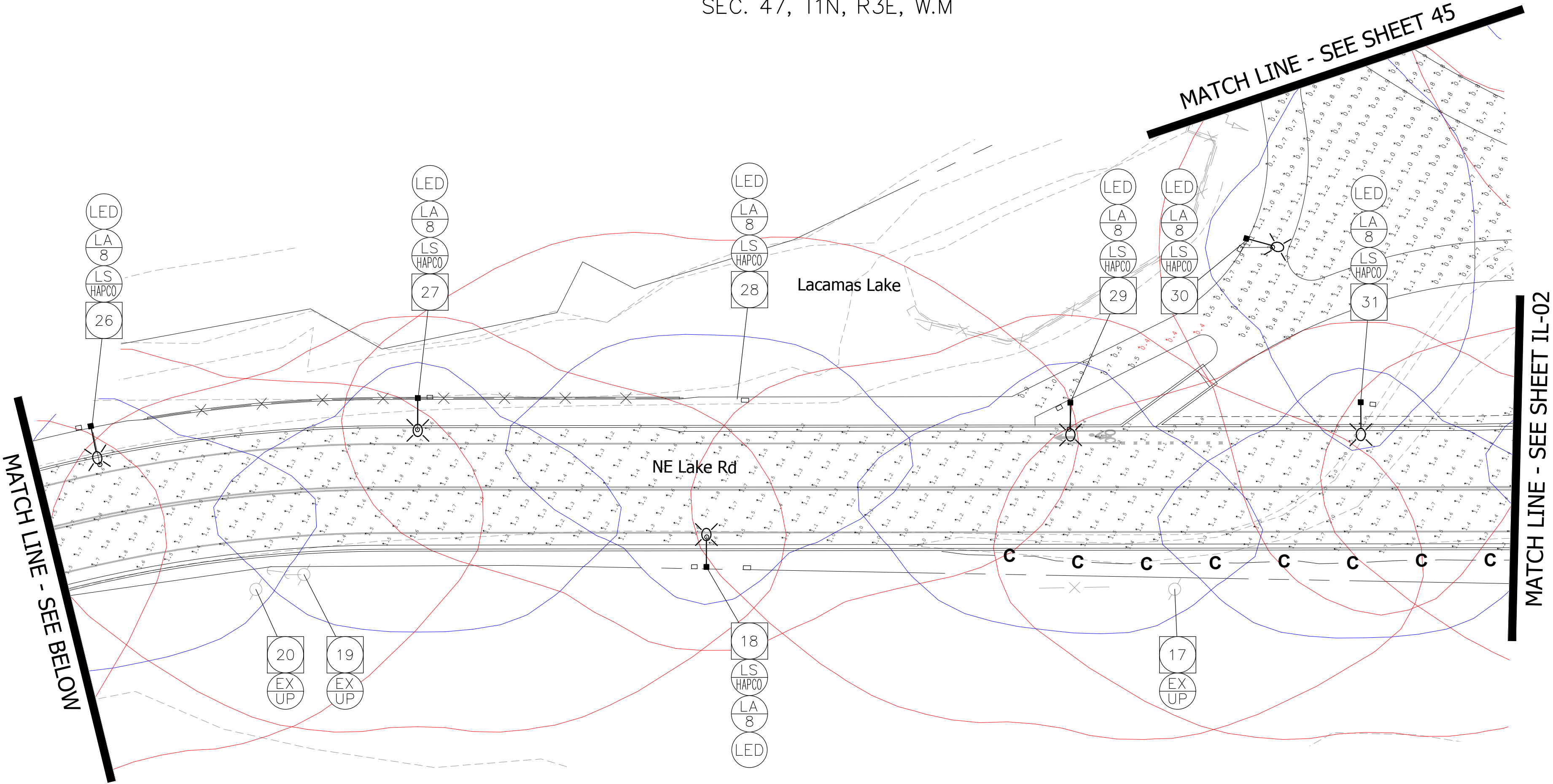
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CAMAS, WA 98607
PH: (360) 817-1561

CAMAS PUBLIC WORKS
DEPARTMENT
NE LAKE ROAD & NW EVERETT STREET
(SR-500) INTERSECTION IMPROVEMENTS
ILLUMINATION ANALYSIS

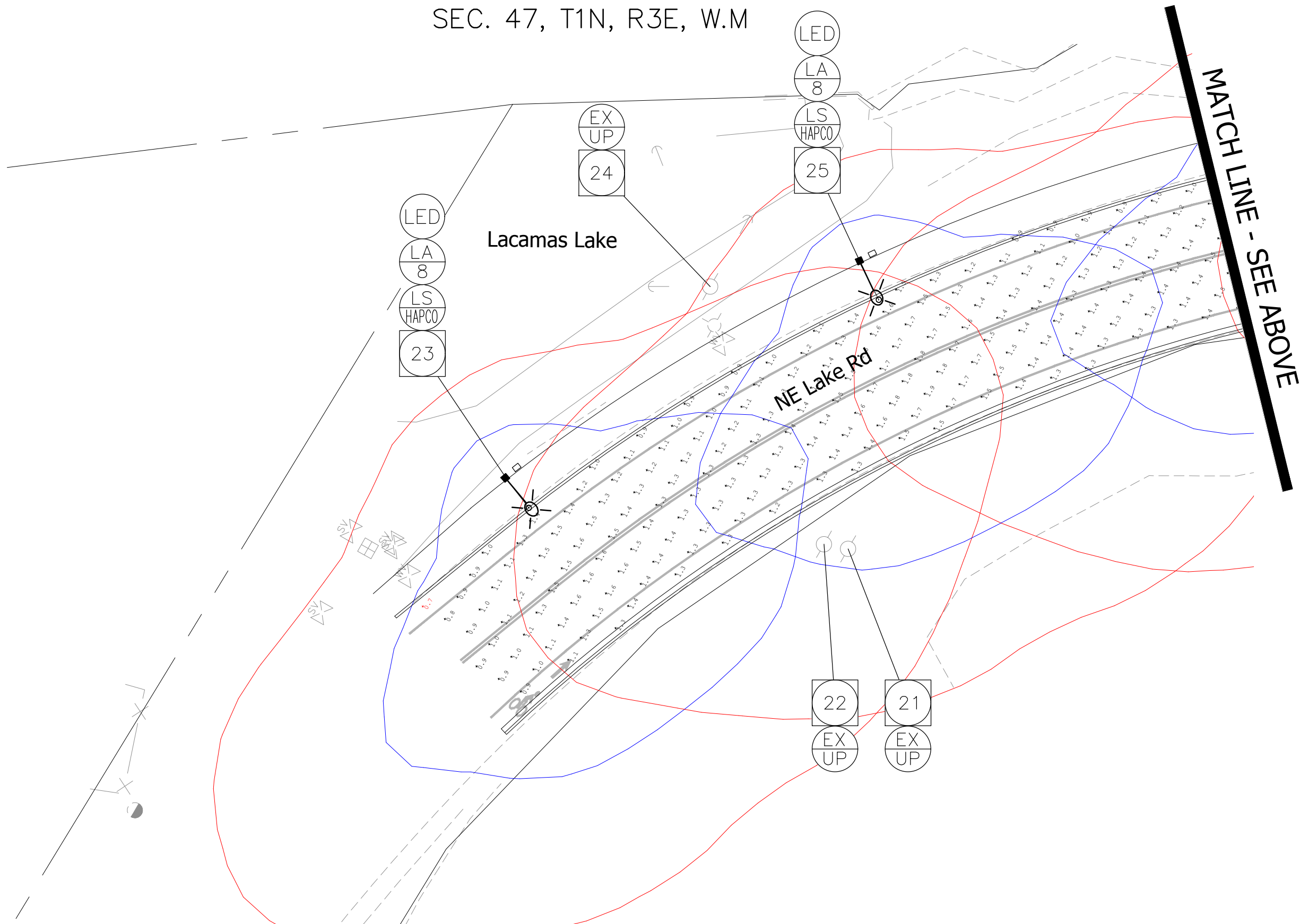
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CAMAS PROJECT NUMBER T1011	
STATUS ☒ DRAFT ☐ CONSTRUCTION ☐ AS-BUILT	PAGE 2 OF X
CAMAS DRAWING NUMBER IL-02	
CAMAS CATALOG NUMBER	

SEC. 47, T1N, R3E, W.M



SEC. 47, T1N, R3E, W.M



LEGEND

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UTILITY POLE

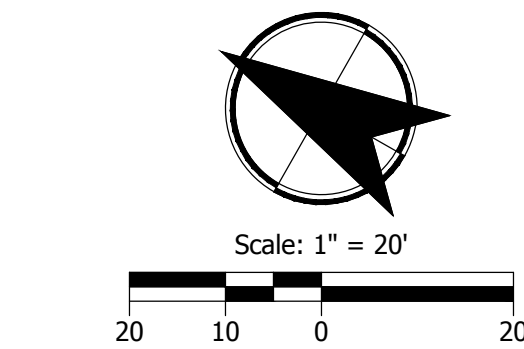
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DESIGN DATE: AUGUST 2019	SCALES: AS SHOWN	HORIZONTAL: N/A	CONTACTS: JIBK	APPROVED BY: HJS	PROJ. ENGR.: HJS
AS-BUILT DATE:	VERTICAL:	DESIGNED BY:	APPROVED BY:	PROJ. ENGR.:	

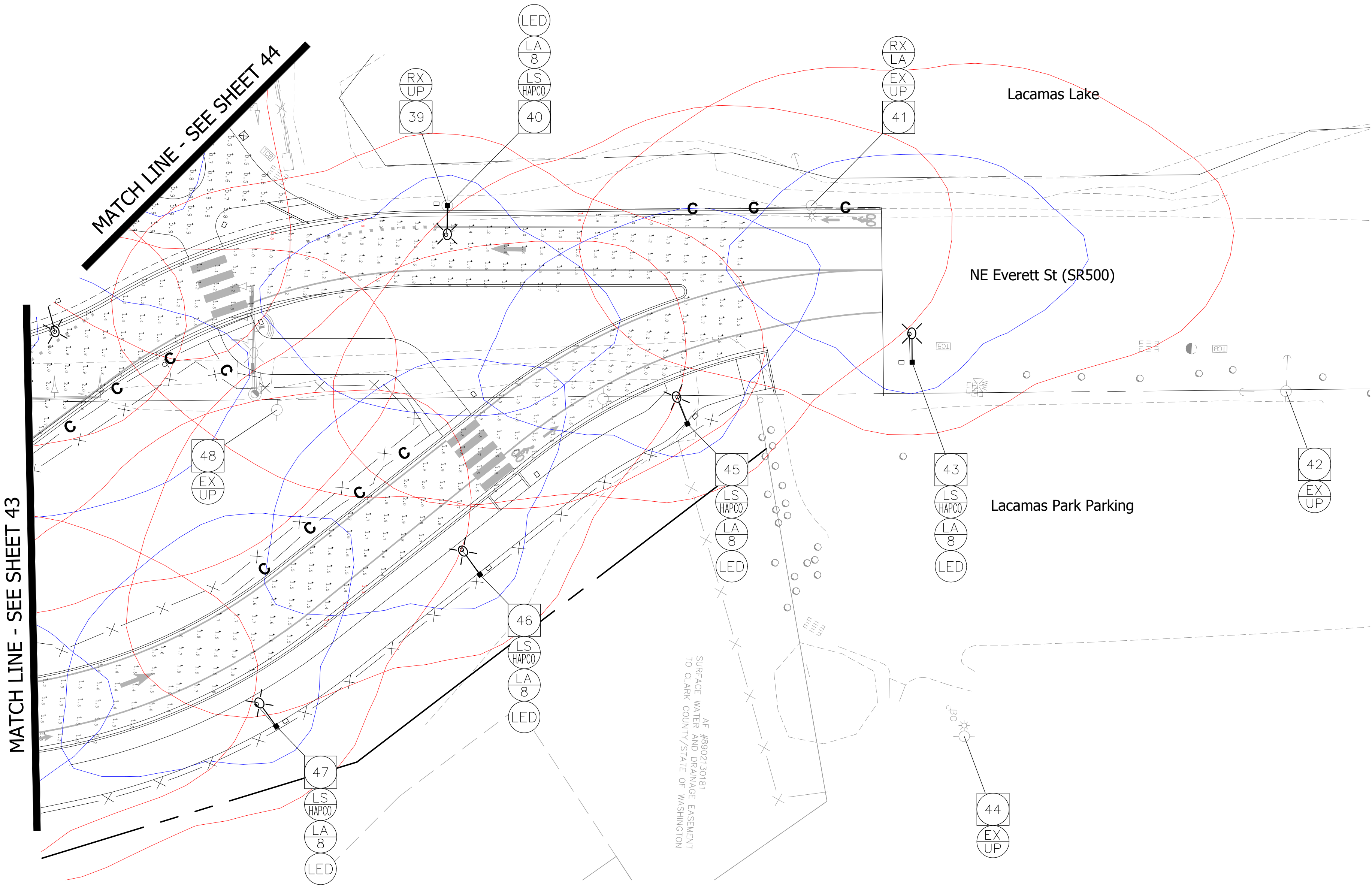
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CAMAS PUBLIC WORKS
DEPARTMENT

NE LAKE ROAD & NW EVERETT STREET
(SR-500) INTERSECTION IMPROVEMENTS
ILLUMINATION ANALYSIS

CAMAS PROJECT NUMBER T1011	
STATUS ☒ DRAFT ☐ CONSTRUCTION ☐ AS-BUILT	PAGE 3 OF X
CAMAS DRAWING NUMBER IL-03	
CAMAS CATALOG NUMBER	

SEC. 47, T1N, R3E, W.M



LEGEND

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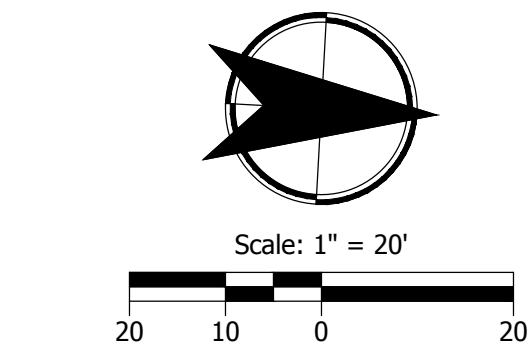
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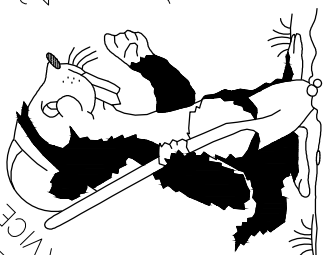
CLARK COUNTY UTILITIES COORDINATING COUNCIL

DESIGN DATE: AUGUST 2019	AS-BUILT DATE:	SCALES	HORIZONTAL: AS SHOWN	VERTICAL: N/A	CONTACTS	DESIGNED BY: JIBK	APPROVED BY: HJS	PROJ. ENGR.: HJS
CAMAS PUBLIC WORKS DEPARTMENT			NE LAKE ROAD & NW EVERETT STREET (SR-500) INTERSECTION IMPROVEMENTS ILLUMINATION ANALYSIS					
CAMAS PROJECT NUMBER T1011								
STATUS			PAGE					
☒ DRAFT			4 OF X					
☐ CONSTRUCTION								
☐ AS-BUILT								
CAMAS DRAWING NUMBER IL-04								
CAMAS CATALOG NUMBER								

LIGHTING TABLE					
Roadway Segment or Intersection	Roadway or Intersection Classification		Average Maintained Illuminance (Fc)	Uniformity (AVE:MIN)	Max Veiling Luminance Ratio (Cd/SqM)
NE LAKE ROAD AND NE Everett St	HIGHWAY WITHOUT FULL ACCESS INTERSECTION (MEDIUM PEDESTRIAN AREA CLASSIFICATION)	RECOMMENDED	≥0.9	≤4:1	<0.3:1
		DESIGN	1.3	2.3:1	_*
NE LAKE ROAD (WEST OF ROUNDABOUT)	HIGHWAY WITHOUT FULL ACCESS MAIN LINE (MEDIUM PEDESTRIAN AREA CLASSIFICATION)	RECOMMENDED	≥0.9	≤4:1	<0.3:1
		DESIGN	1.4	2.0:1	0.14
NE Everett St (SOUTH OF ROUNDABOUT)	HIGHWAY WITHOUT FULL ACCESS MAIN LINE (MEDIUM PEDESTRIAN AREA CLASSIFICATION)	RECOMMENDED	≥0.9	≤4:1	<0.3:1
		DESIGN	0.9	2.9:1	0.11
NE Everett St (NORTH OF ROUNDABOUT SOUTHBOUND SEGMENT)	HIGHWAY WITHOUT FULL ACCESS MAIN LINE (MEDIUM PEDESTRIAN AREA CLASSIFICATION)	RECOMMENDED	≥0.9	≤4:1	<0.3:1
		DESIGN	1.4	1.7:1	_*
NE Everett St (NORTH OF ROUNDABOUT NORTHBOUND SEGMENT)	HIGHWAY WITHOUT FULL ACCESS MAIN LINE (MEDIUM PEDESTRIAN AREA CLASSIFICATION)	RECOMMENDED	≥0.9	≤4:1	<0.3:1
		DESIGN	1.7	1.3:1	_*
PEDESTRIAN AREA OF NE LAKE ROAD AND NE Everett St	OTHER ILLUMINATED FEATURES SIDEWALKS, WALKWAYS, & SHARED USED PATHS	RECOMMENDED	≥0.8	≤4:1	<0.3:1
		DESIGN	0.8	2.0:1	_*

DESIGNED TO WSDOT DESIGN MANUAL LIGHT LEVELS AND UNIFORMITY RATIOS PER EXHIBIT 1040-22 (JULY 2018).
Measument did not meet minimum 272 feet of tangent as described in AGi32 Basics for WSDOT Highway Lighting

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CLARK COUNTY UTILITIES COORDINATING COUNCIL

DATES
DESIGN DATE: AUGUST 2019
AS-BUILT DATE:

SCALES

HORIZONTAL: AS SHOWN
VERTICAL: N/A

CONTACTS

DESIGNED BY: JBK
APPROVED BY: HJS
PROJ. ENGR.:

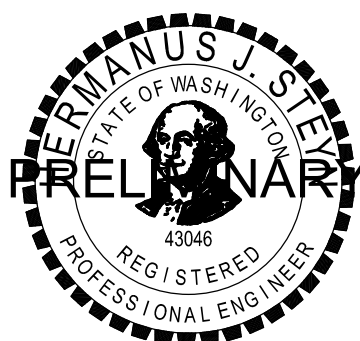
HJS



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CAMAS PUBLIC WORKS
DEPARTMENT

NE LAKE ROAD & NW EVERETT STREET
(SR-500) INTERSECTION IMPROVEMENTS
ILLUMINATION ANALYSIS



CAMAS PROJECT NUMBER
T1011

☒ DRAFT
☐ CONSTRUCTION
☐ AS-BUILT

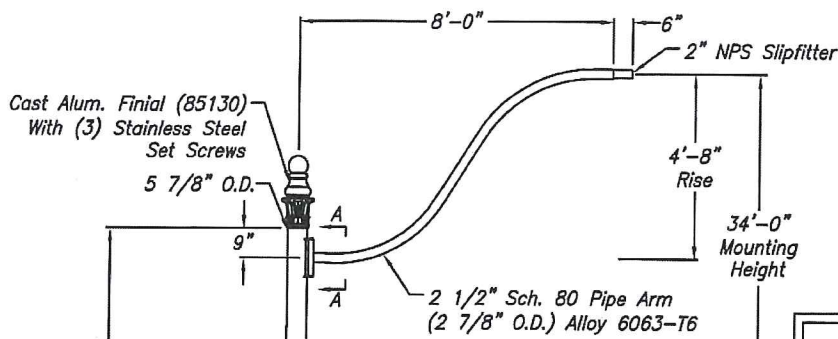
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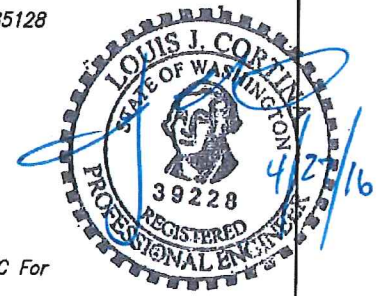
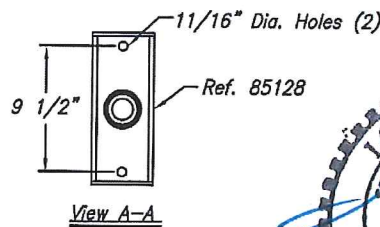
5 OF X

CAMAS DRAWING NUMBER
IL-05

CAMAS CATALOG NUMBER



NE Camas NW 6th & Norwood
PO# S7133305
Quote# F1603-21-2026

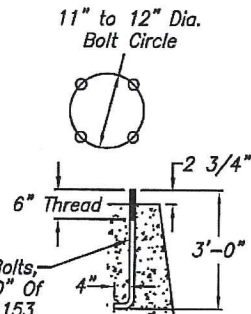


B29350

Notes:

- 1) Shaft And Bracket Heat Treated To -T6 Temper After Welding.
- 2) Pole Designed To Meet AASHTO, 2001 Edition (Except Breakaway) For A 90 mph Wind Velocity And A Maximum Luminaire Size Of 2.0 ft² E.P.A. And 50 lbs. And Twin 3 1/2' x 5' Banners On Banner Saver Arms.
- 3) Poles To Be Powder Coated Per Textured Black per Hapco Specification 73737-T01. When Ordering Specify 29350P1.

- (4) 1"-BNC Galv. Stl. Anchor Bolts, AASHTO M314-90 Grade 55, 10" Of Threaded End Galv. Per ASTM A153.
- (4) 1"-BNC Galv. Stl. Hex. Nuts
- (4) 1" Galv. Stl. Lockwashers
- (4) 1" Galv. Stl. Flatwashers



Ref: 86264

WARNING: DO NOT INSTALL LIGHTING POLES WITHOUT LUMINAIRES

NO.	REVISIONS	DATE

hapco
Abingdon, Va.

TITLE 34' DECORATIVE LIGHTING POLE	
CUSTOMER NW 38th Ave. Phase II	
SCALE 32	DATE 02/27/2013
BY TNB	DWG. NO.
CHK'D	B29350