Mountain View Whisman School District

Site Lighting Community Process Summary

June 3, 2021

Mountain View
Whisman
School District

Where are We Now

Guiding Information

- Safety of students and staff
  - Feedback during the Master Facilities Planning process indicated that for safety reasons, lighting for pathways was needed.

Your Measure T dollars at work at Bubb Elementary School

The bond passed in 2020 prioritizes:

- **Safety/Operational Efficiency**
- **Short-Term Growth**

To receive future updates about these Measure T projects, please sign up here: http://mvw.sd/ConstUpdates

Get in Touch

facebook.com/MVWSD/

#MVWSD

MVWSD.org/construction

Para este anuncio en español, por favor vaya a www.mvwsd.org/construction Feb 2021

Mountain View Whisman School District
1400 Montecito Ave.
Mountain View, CA 94043

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Your Measure T dollars at work at Bubb Elementary School

MEASURE T PROJECTS
TOUCH EVERY SCHOOL
SEE WWW.MVWSD.ORG/CONSTRUCTION

Projects starting this year

Solar
Bubb will get two solar arrays near the playground structures. Not only will these structures support solar panels to save the district $600,000 annually in electrical costs, they will provide much-needed shade
Project start: Summer 2021

HVAC
Replacement of existing old equipment with new, efficient systems and upgraded controls to increase efficiency.
Project start: Summer 2021

Perimeter controls
Bubb will have perimeter fencing that connects existing fencing and added gates to completely enclose campus and fields in order to secure campuses during school hours. The public will continue to have access to fields outside school hours. Fencing and gates will be ornamental metal to match existing at campus frontage and 6' high chain link fencing and gates at property lines and back of campus.
Project start: Summer 2021

Lighting
New lights and/or bollard style light posts to illuminate pedestrians' path of travel between campus and parking lots. The areas of need are determined by photometric data. This additional lighting is an important safety measure for staff members and guests using the campus in the evenings and winter late afternoons.
Project start: Fall 2021

LIGHTING INFO MEETING

Learn more about the lighting project

Tuesday, May 18 at 4 p.m.
On Zoom: http://mvw.sd/lighting1

Community Meetings

- Castro/Mistral May 13
- Stevenson and Theuerkauf May 17
- Bubb, Huff, Landels May 18
- Graham, Crittenden May 18
- Vargas and Monta Loma May 19

- Principals also gathered feedback at their School Site Council Meetings, ELAC, and Principal Coffees

Notification of Community Meetings

- Postcards were directly mailed to residents within each school's boundaries
- Posters at each site with links and QR codes to register for meetings
- Social media posts
- Notification to the City
- School/ Supt newsletters
- Marquee sign announcements

Mountain View
Whisman
School District

The Design Process

Design Considerations

- Identify deficiencies within existing lighting in parking areas and to/from campus.
- Provide directional LED lighting to eliminate light transfer to neighboring areas or properties.
- Standards are to be operated by photocell and timers.

Proposed Light Standards

d⠿series

D-Series
LED Bollard

Buy American

Specifications

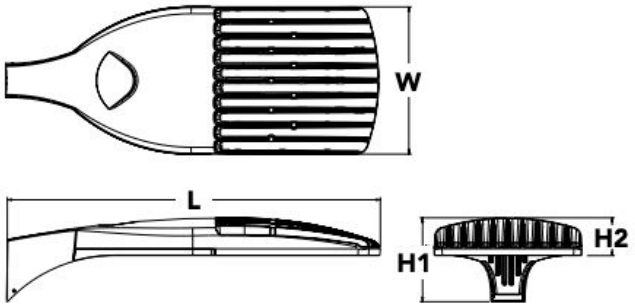
Diameter:	8″ Round (20.3 cm)
Height:	42″ (106.7 cm)
Weight (max):	27 lbs (12.25 kg)

d⠿series

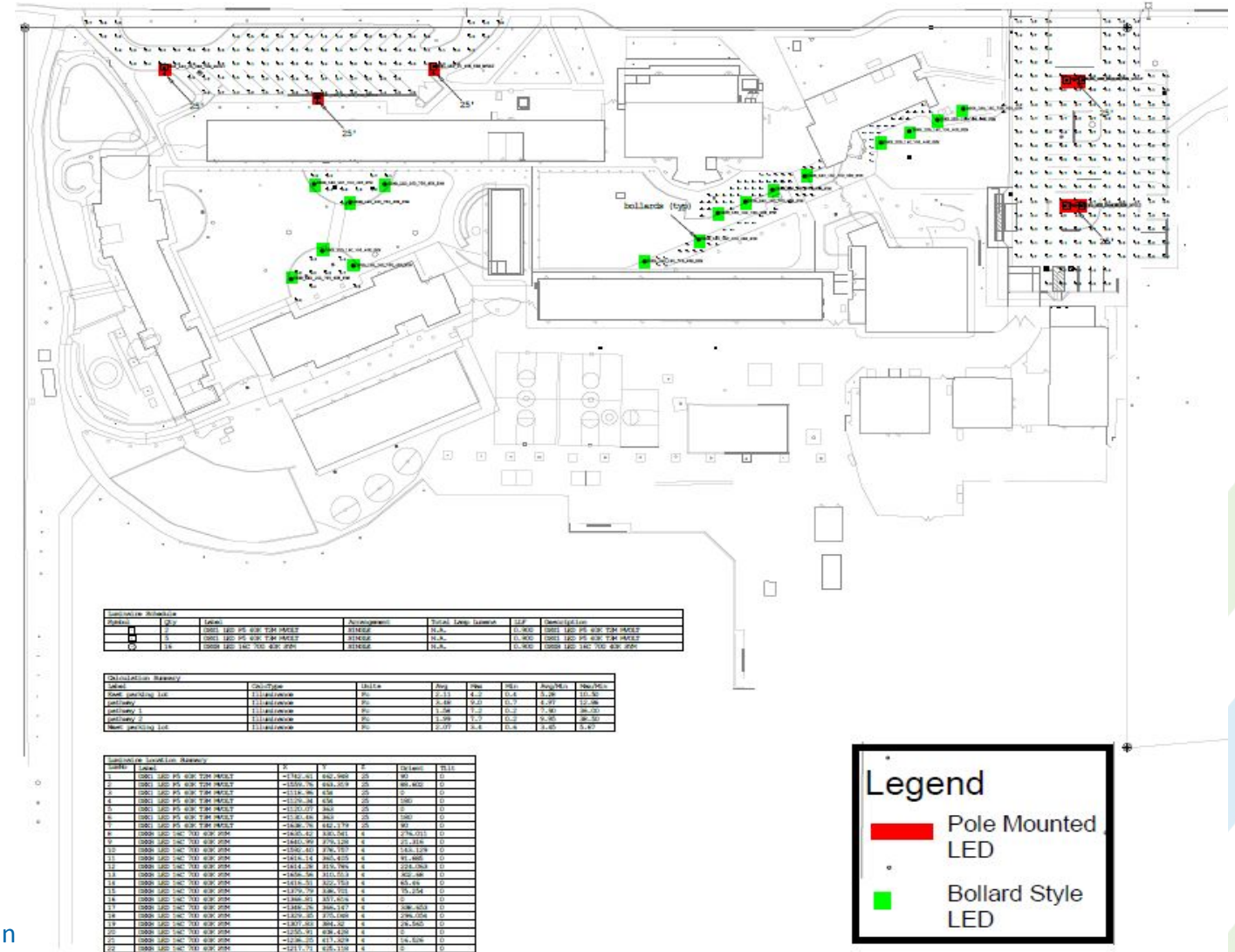
D-Series Size 1
LED Area Luminaire

Specifications

EPA:	1.01 ft² (0.09 m²)
Length:	33″ (83.8 cm)
Width:	13″ (33.0 cm)
Height H1:	7-1/2″ (19.0 cm)
Height H2:	3-1/2″
Weight (max):	27 lbs (12.2 kg)



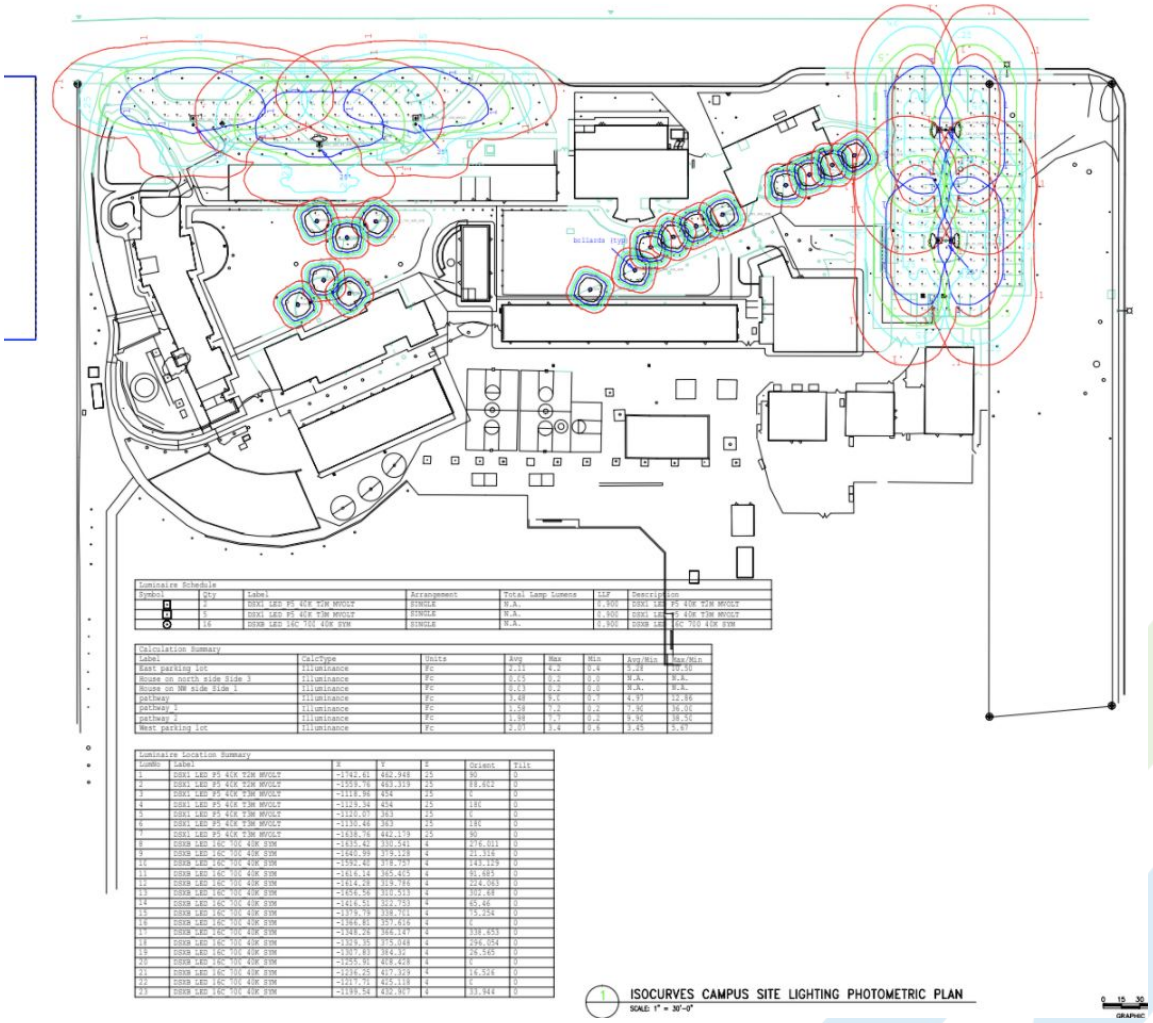
Theuerkauf Elementary School



Iso-Curve Diagrams

- The diagram is a visual representation of the light diffused by a luminaire
- Each curve/circle represents a value of light measured in foot candles
- For reference 1 foot candle is approximately equivalent to light from a full moon on a clear night

Theuerkauf Elementary School Iso Diagram



Luminaire Schedule

Symbol	Qty	Label	Arrangement	Total Lamp Lumens	LLF	Description
	17	DSX1 LED P5 40K T3W MVOLT	SINGLE	N.A.	0.900	DSX1 LED P5 40K T3W MVOLT
	5	DSX1 LED P5 40K T3W MVOLT	SINGLE	N.A.	0.900	DSX1 LED P5 40K T3W MVOLT
	16	DSXB LED 16C 700 40K SYM	SINGLE	N.A.	0.900	DSXB LED 16C 700 40K SYM

Calculation Summary

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
East parking lot	Illuminance	Fc	2.11	4.2	0.4	5.28	10.50
House on north side Side 3	Illuminance	Fc	0.05	0.2	0.0	N.A.	N.A.
House on NW side Side 1	Illuminance	Fc	0.03	0.2	0.0	N.A.	N.A.
pathway	Illuminance	Fc	3.48	9.6	0.7	4.97	12.86
pathway 1	Illuminance	Fc	1.58	7.2	0.2	7.90	36.00
pathway 2	Illuminance	Fc	1.98	9.6	0.2	9.90	48.00
West parking lot	Illuminance	Fc	2.07	3.4	0.6	3.45	5.67

Luminaire Location Summary

LumNo	Label	X	Y	Z	Orient	Tilt
1	DSX1 LED P5 40K T2W MVOLT	-1742.61	462.948	25	90	0
2	DSX1 LED P5 40K T2W MVOLT	-1559.76	462.319	25	89.812	0
3	DSX1 LED P5 40K T3W MVOLT	-1118.96	454	25	0	0
4	DSX1 LED P5 40K T3W MVOLT	-1129.34	454	25	180	0
5	DSX1 LED P5 40K T3W MVOLT	-1126.07	383	25	0	0
6	DSX1 LED P5 40K T3W MVOLT	-1130.46	383	25	180	0
7	DSX1 LED P5 40K T3W MVOLT	-1638.76	442.179	25	90	0
8	DSXB LED 16C 700 40K SYM	-1635.42	330.541	4	276.011	0
9	DSXB LED 16C 700 40K SYM	-1640.99	375.128	4	21.326	0
10	DSXB LED 16C 700 40K SYM	-1592.48	378.737	4	143.129	0
11	DSXB LED 16C 700 40K SYM	-1616.14	365.465	4	91.885	0
12	DSXB LED 16C 700 40K SYM	-1614.29	319.786	4	224.053	0
13	DSXB LED 16C 700 40K SYM	-1656.56	330.513	4	302.68	0
14	DSXB LED 16C 700 40K SYM	-1616.51	322.753	4	65.46	0
15	DSXB LED 16C 700 40K SYM	-1379.79	398.701	4	39.254	0
16	DSXB LED 16C 700 40K SYM	-1366.81	357.616	4	0	0
17	DSXB LED 16C 700 40K SYM	-1348.26	366.147	4	338.653	0
18	DSXB LED 16C 700 40K SYM	-1329.35	315.048	4	296.054	0
19	DSXB LED 16C 700 40K SYM	-1307.83	384.32	4	29.565	0
20	DSXB LED 16C 700 40K SYM	-1255.91	408.428	4	0	0
21	DSXB LED 16C 700 40K SYM	-1236.25	417.329	4	16.526	0
22	DSXB LED 16C 700 40K SYM	-1217.71	425.118	4	0	0
23	DSXB LED 16C 700 40K SYM	-1199.54	432.967	4	33.944	0

1 ISOCURVES CAMPUS SITE LIGHTING PHOTOMETRIC PLAN
SCALE: 1" = 30'-0"

Bubb Elementary School

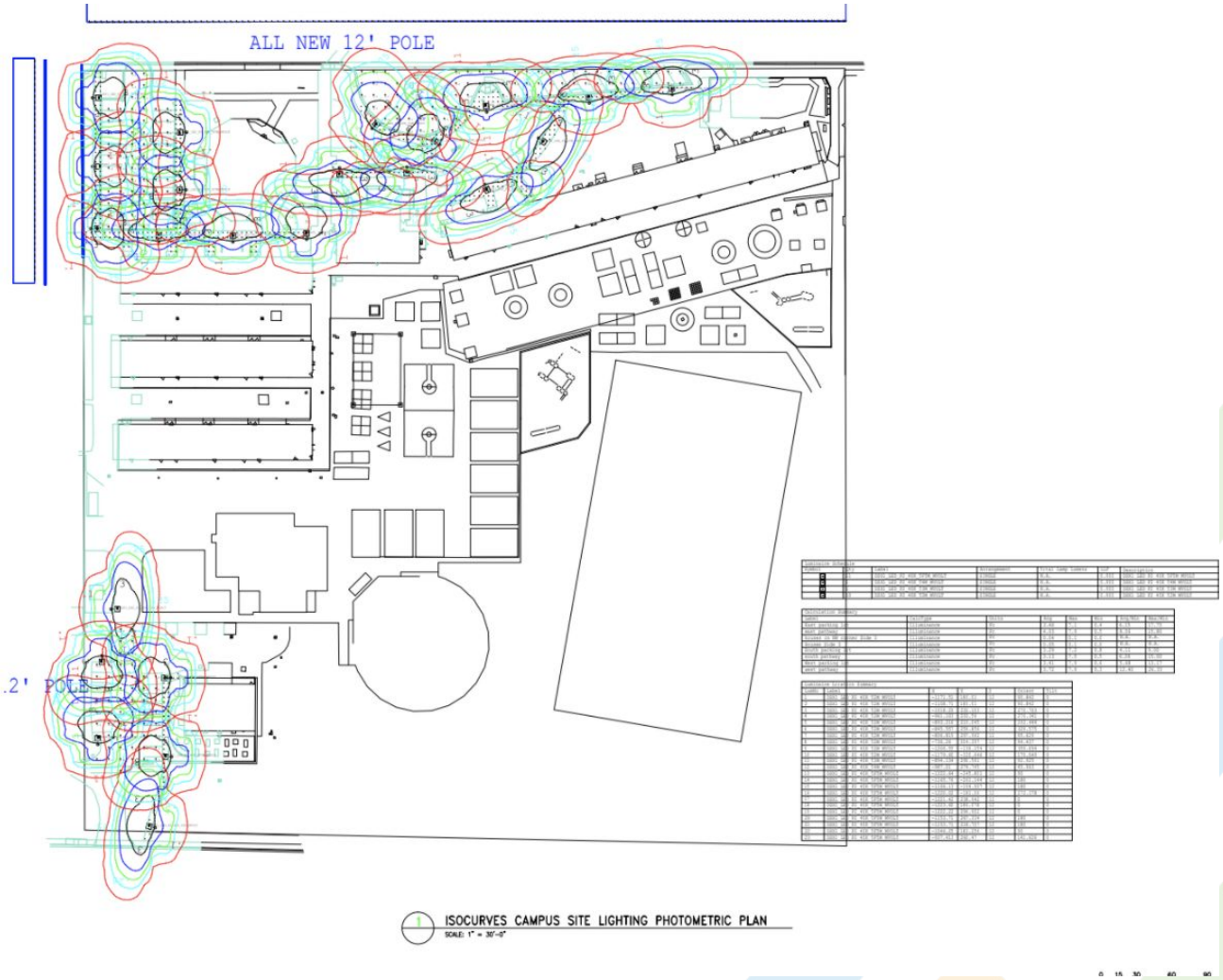
Legend

Pole Mounted LED

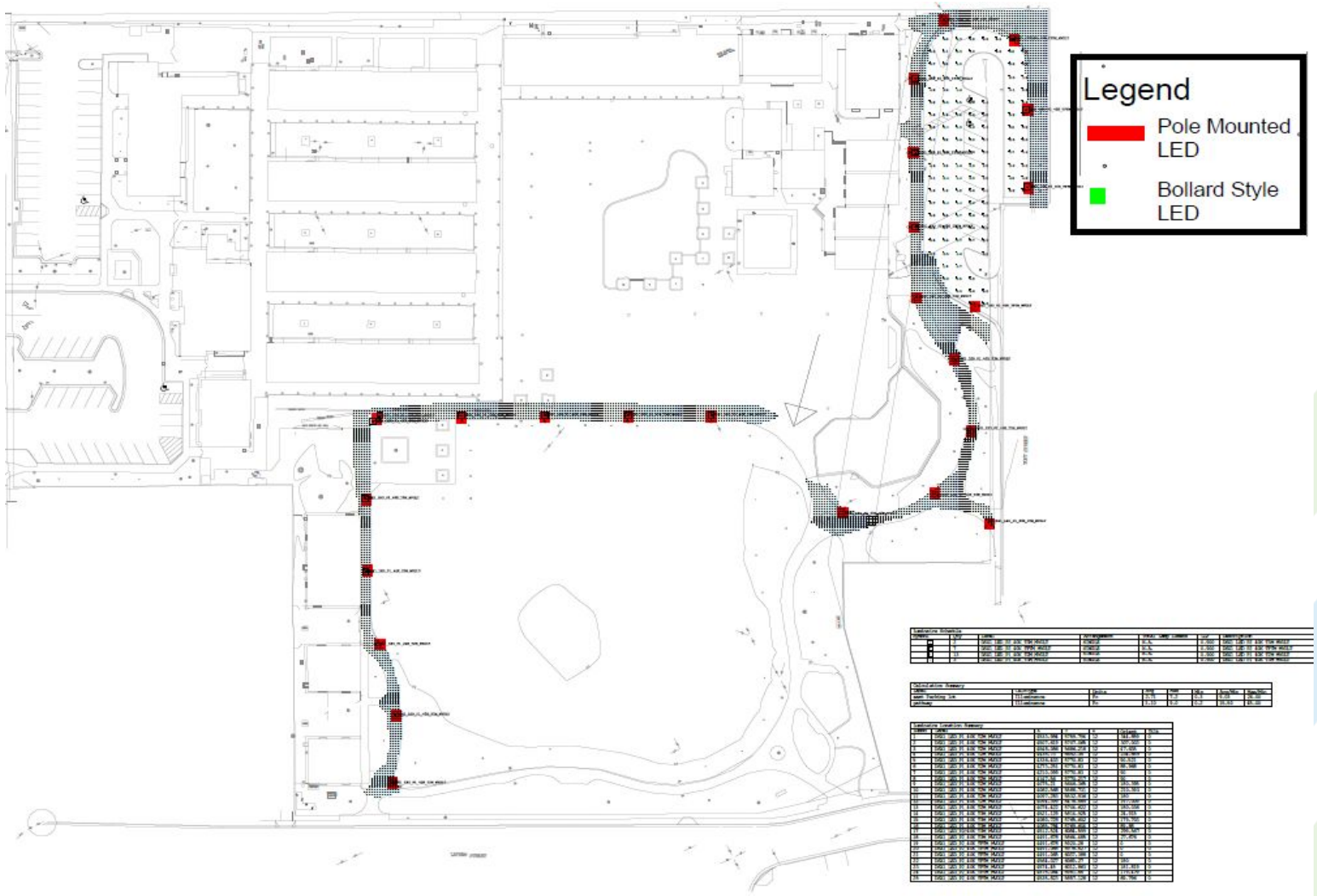
Bollard Style LED

SITE LIGHTING PHOTOMETRIC PLAN

Bubb Elementary Iso Diagram



Castro Mistral Elementary School



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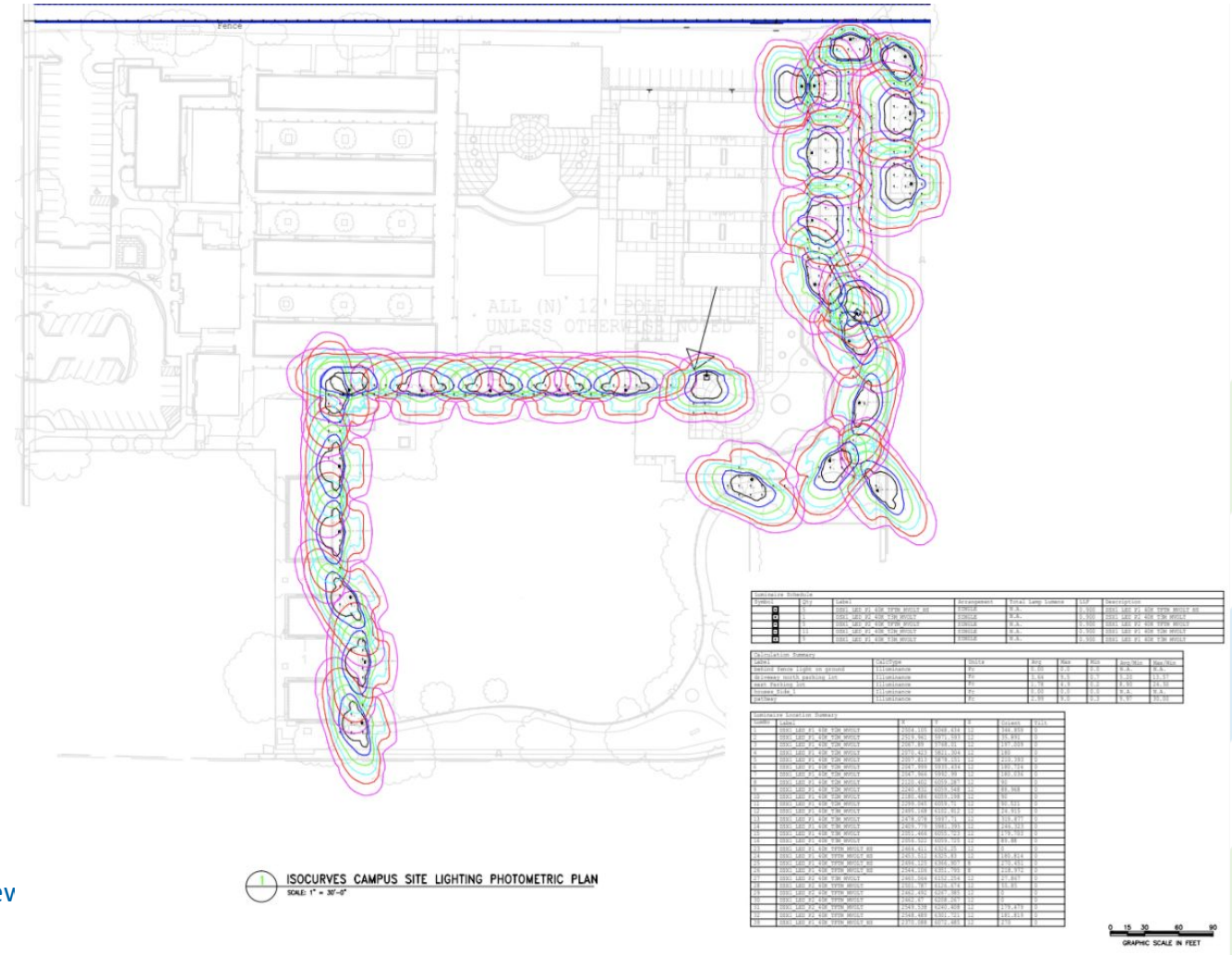
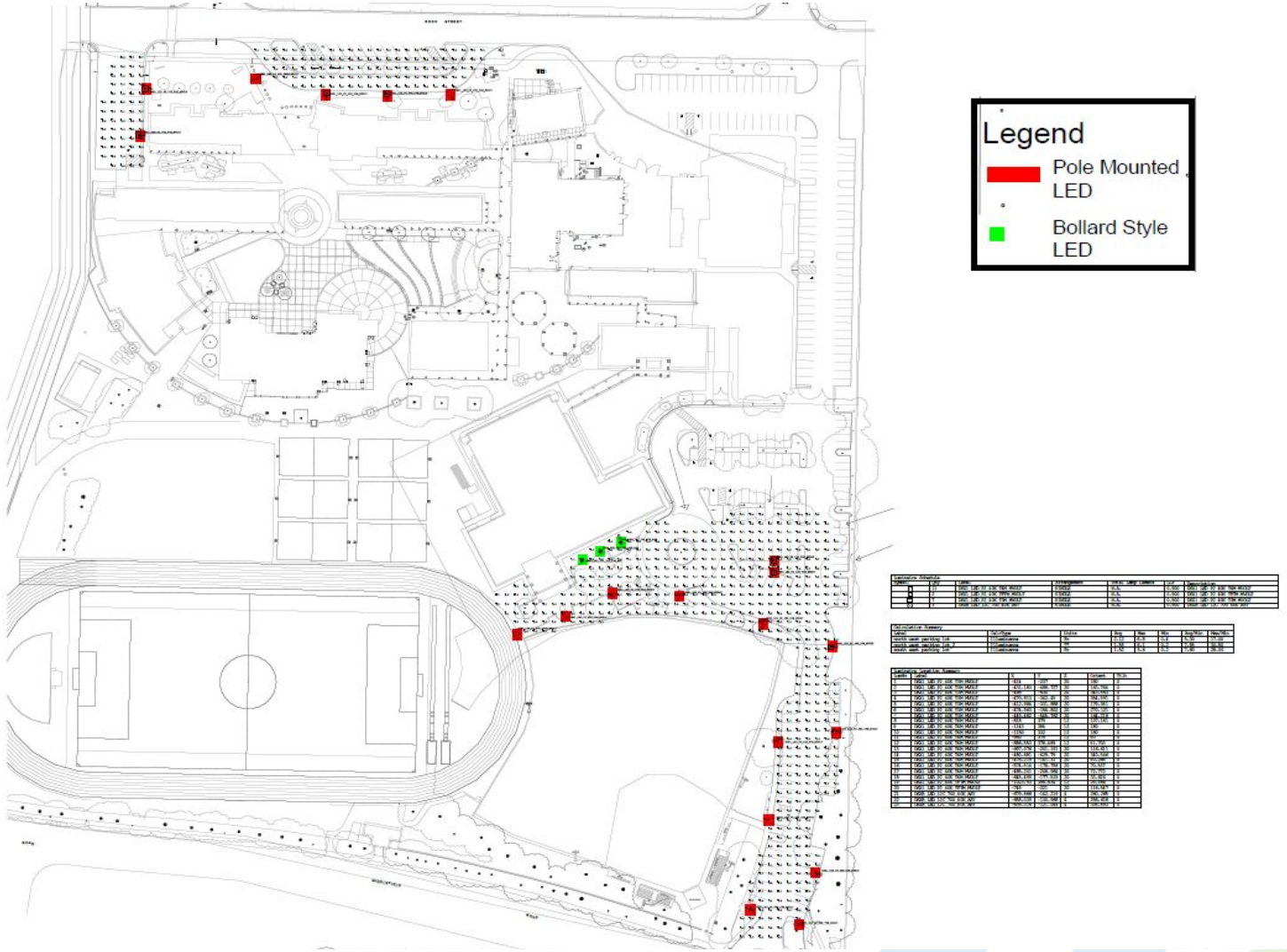
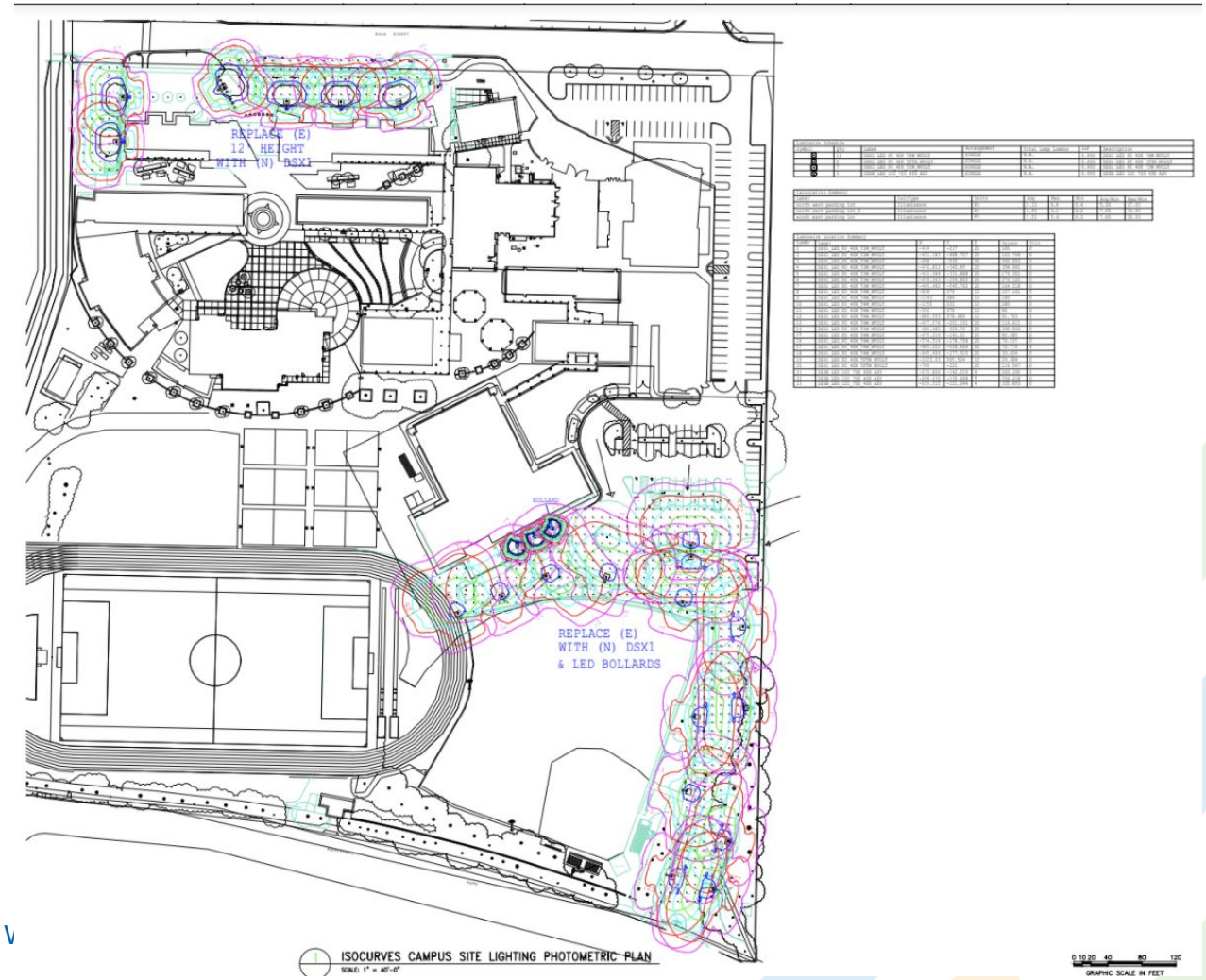
Castro Mistral Elementary Iso Diagram



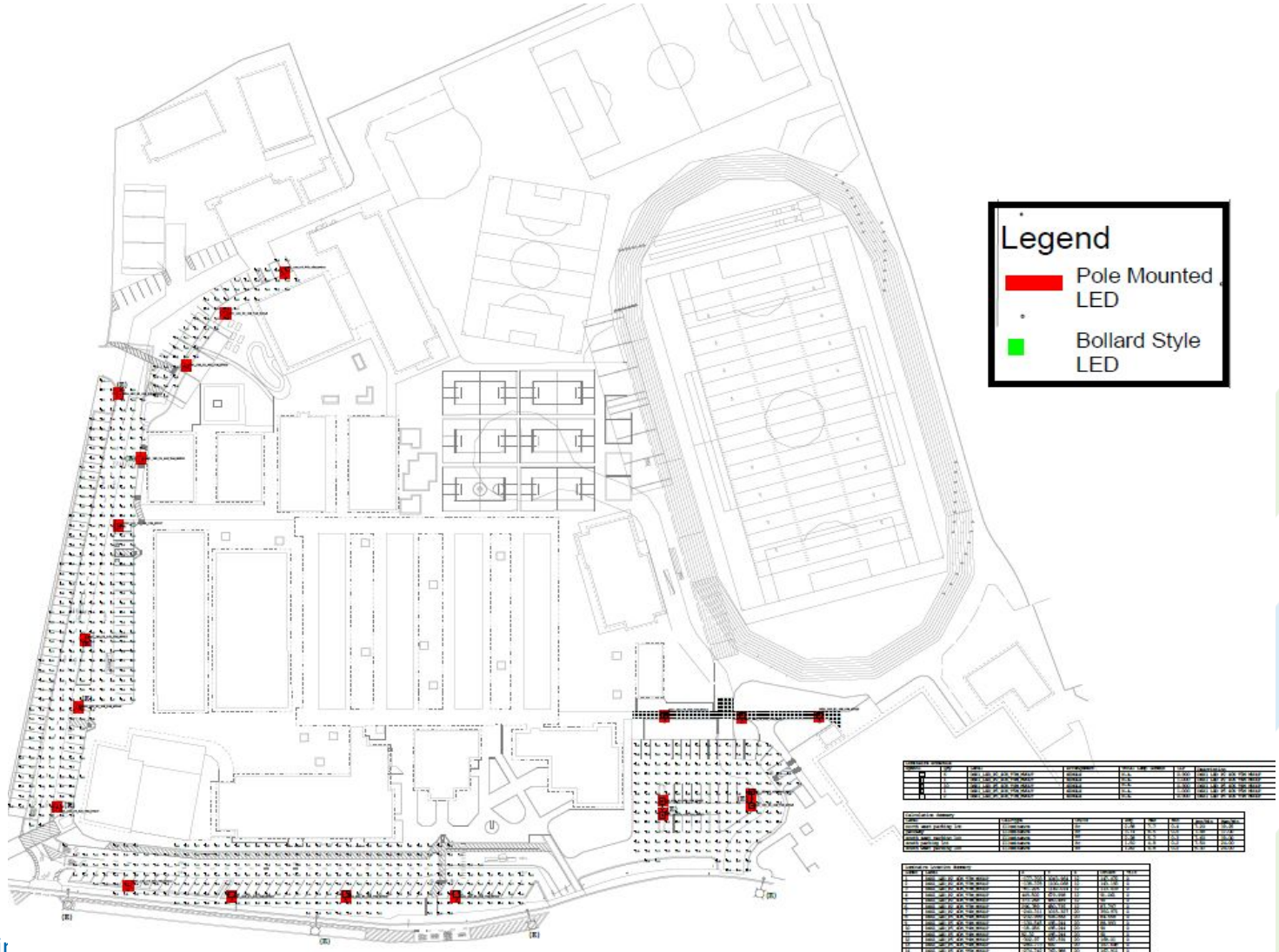
Crittenden Middle School



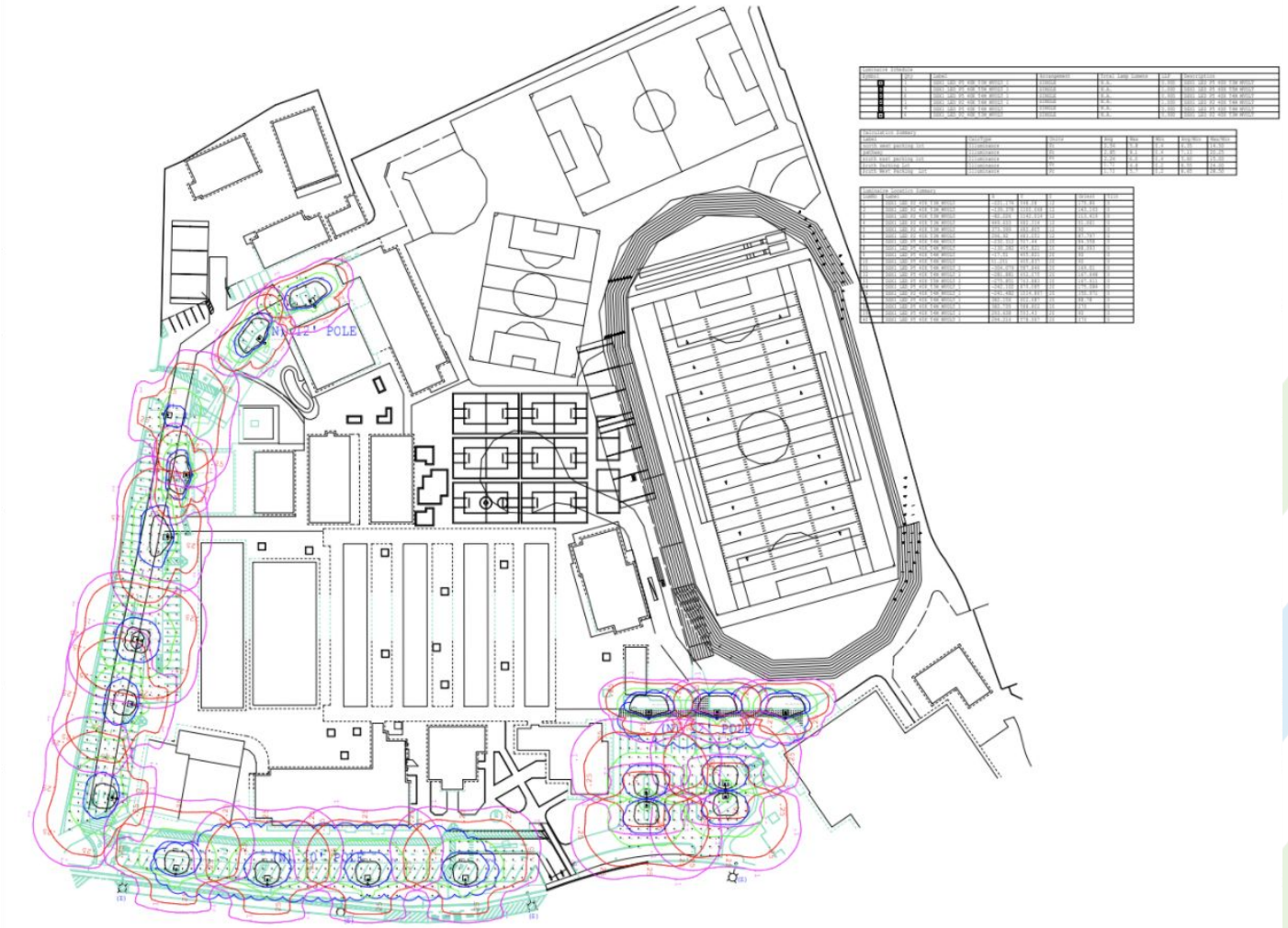
Crittenden Middle School Iso Diagram



Graham Middle School

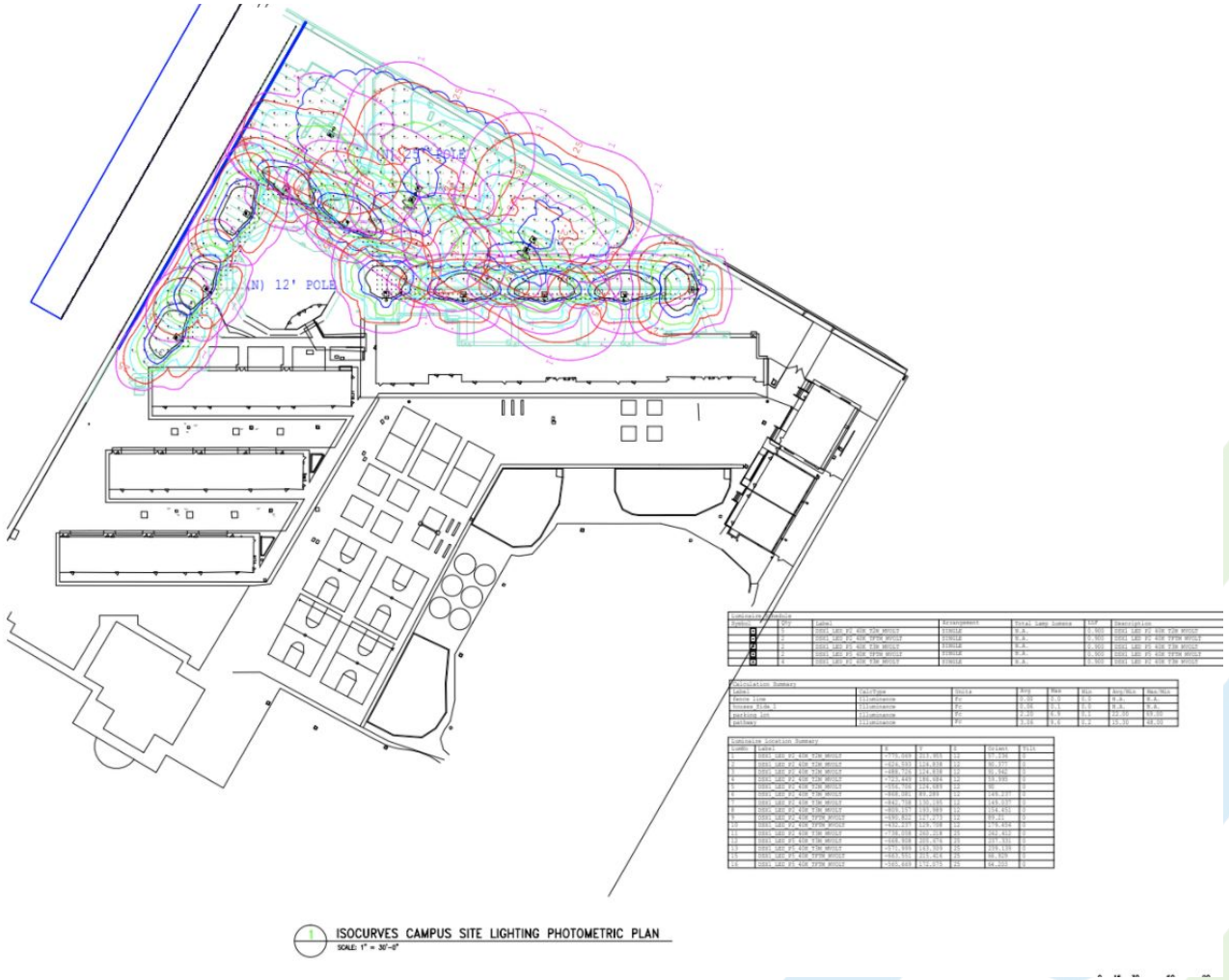


Graham Middle School Iso Diagram

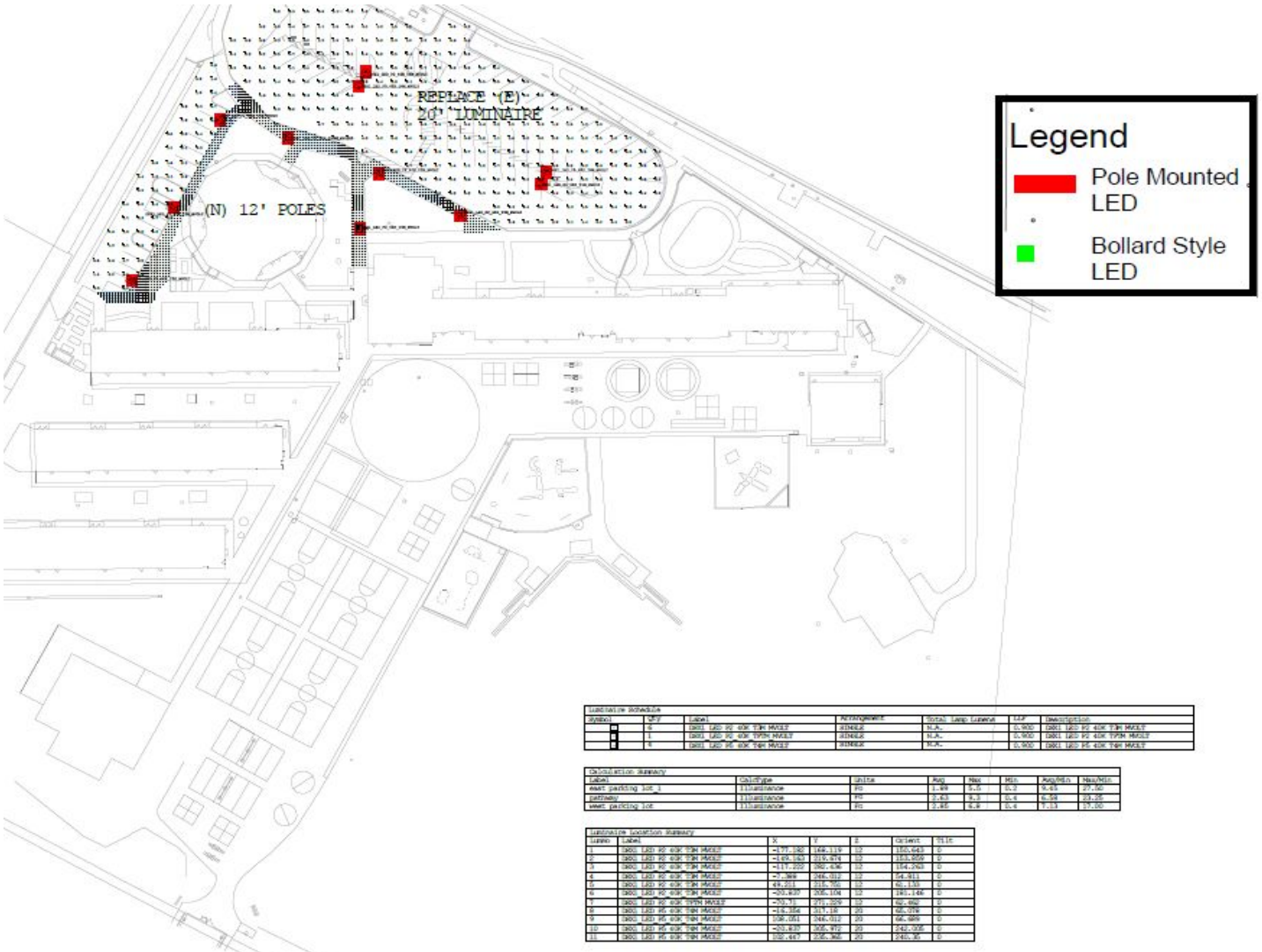


Huff Elementary School

Huff Elementary Iso Diagram



Landels Elementary School

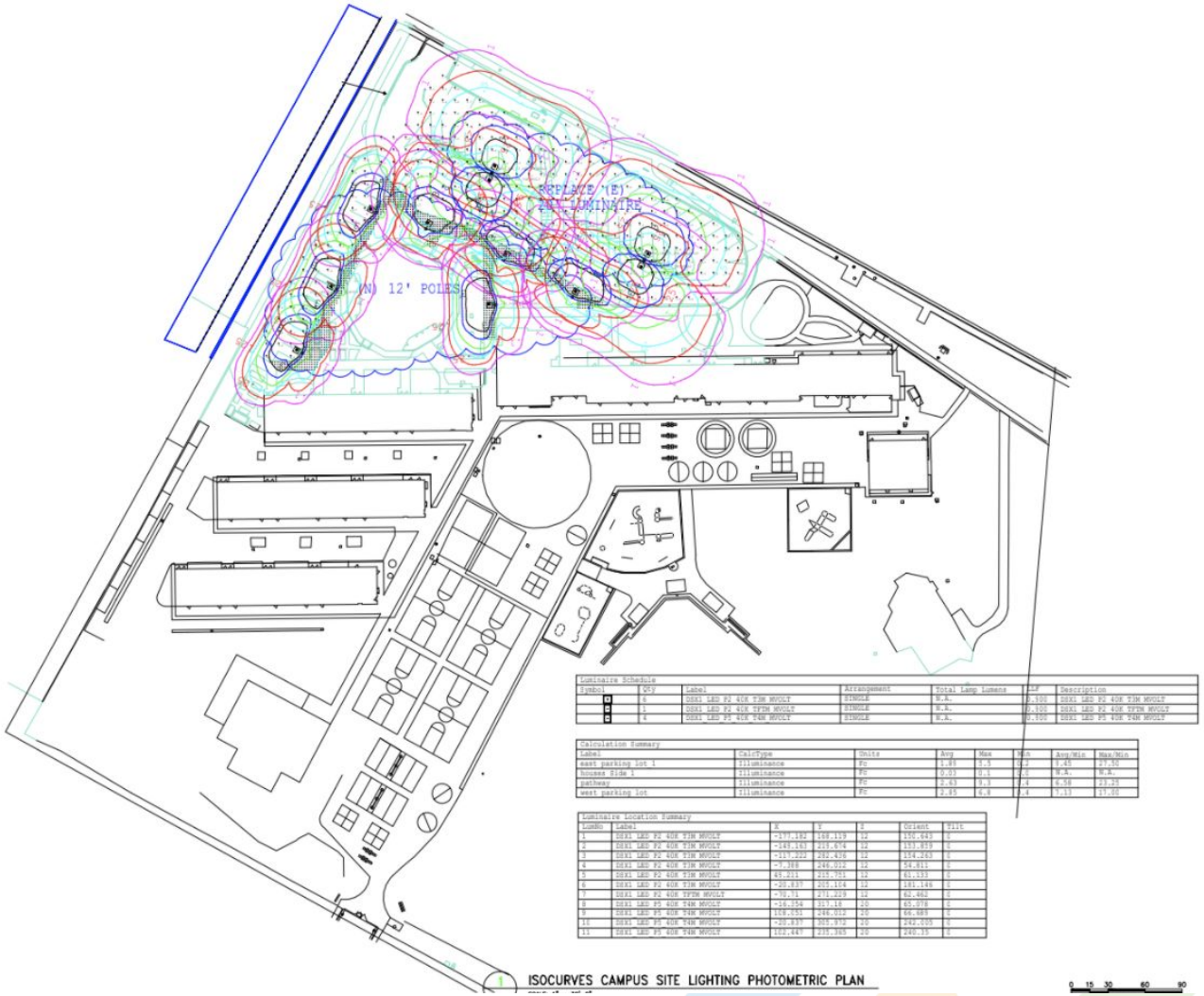


Luminaire Schedule						
Symbol	Qty	Label	Arrangement	Total Lamp Lumens	LLF	Description
	5	[SEE] LED P2 40K T3M MVOLT	SINGLE	N.A.	0.900	[SEE] LED P2 40K T3M MVOLT
	1	[SEE] LED P2 40K TFTM MVOLT	SINGLE	N.A.	0.900	[SEE] LED P2 40K TFTM MVOLT
	4	[SEE] LED P5 40K T4M MVOLT	SINGLE	N.A.	0.900	[SEE] LED P5 40K T4M MVOLT

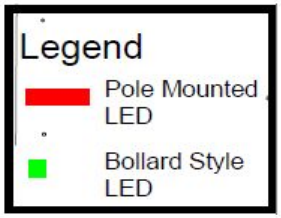
Calculation Summary								
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
east parking lot_1	Illuminance	Fc	1.49	5.6	0.2	9.65	27.00
pathway	Illuminance	Fc	2.63	9.3	0.4	6.58	23.25
west parking lot	Illuminance	Fc	2.95	6.9	0.4	7.13	17.00

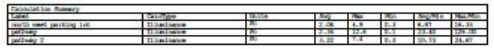
Luminaire Location Summary						
Lumin	Label	X	Y	Z	Orient	Tilt
1	[SEE] LED P2 40K T3M MVOLT	-177.182	164.119	20	150.643	0
2	[SEE] LED P2 40K T3M MVOLT	-149.163	319.874	20	183.859	0
3	[SEE] LED P2 40K T3M MVOLT	-117.222	382.636	20	164.263	0
4	[SEE] LED P2 40K T3M MVOLT	-7.364	246.012	20	54.911	0
5	[SEE] LED P2 40K T3M MVOLT	49.211	215.705	20	42.133	0
6	[SEE] LED P2 40K T3M MVOLT	-20.837	206.104	20	141.146	0
7	[SEE] LED P2 40K TFTM MVOLT	-72.71	215.229	20	82.892	0
8	[SEE] LED P5 40K T4M MVOLT	-16.164	317.18	20	65.076	0
9	[SEE] LED P5 40K T4M MVOLT	106.051	344.012	20	66.889	0
10	[SEE] LED P5 40K T4M MVOLT	-20.835	305.972	20	242.005	0
11	[SEE] LED P5 40K T4M MVOLT	102.447	235.362	20	245.36	0

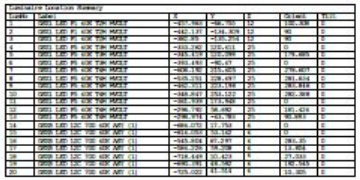
Landels Elementary School Iso Diagram



Monta Loma Elementary School

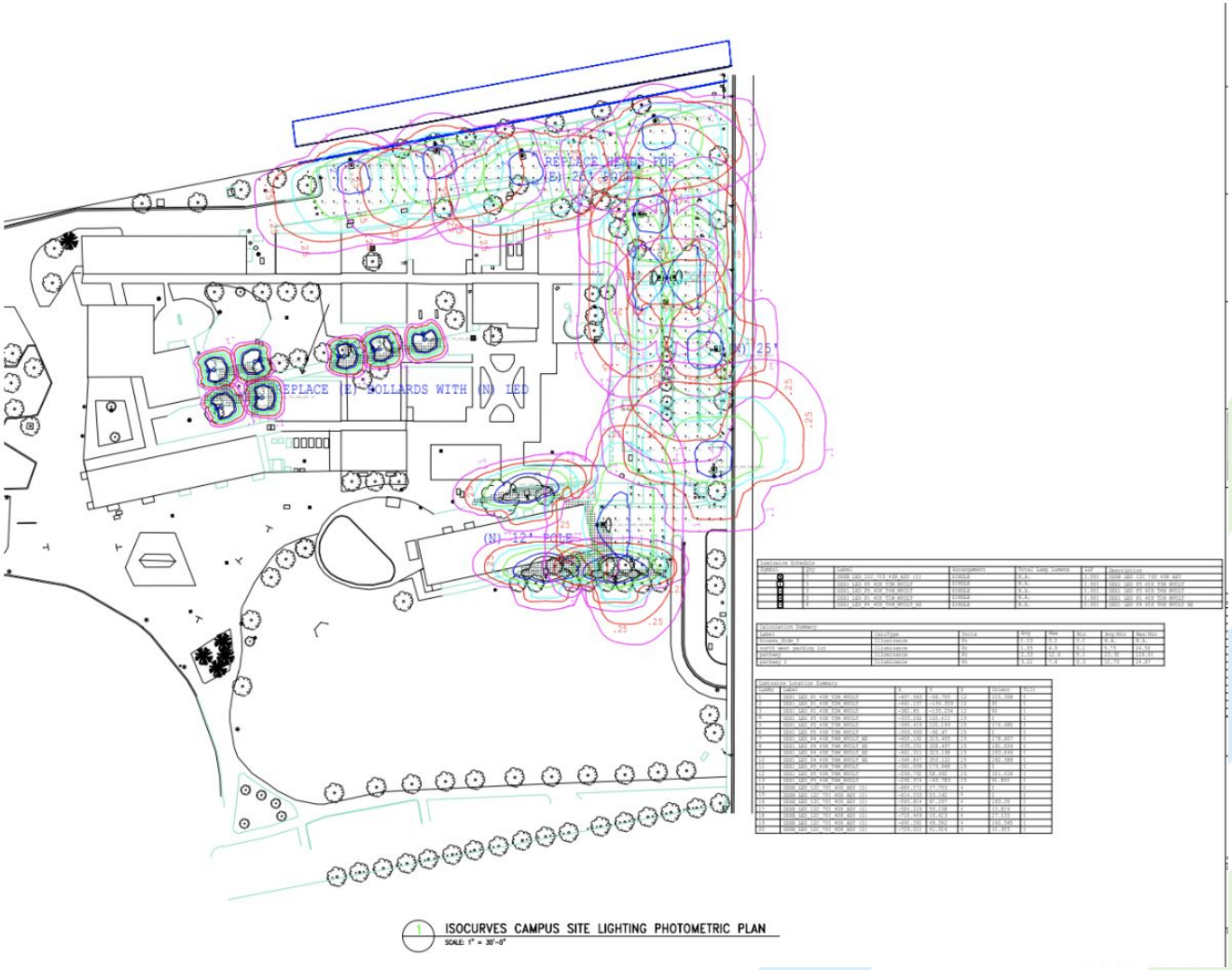




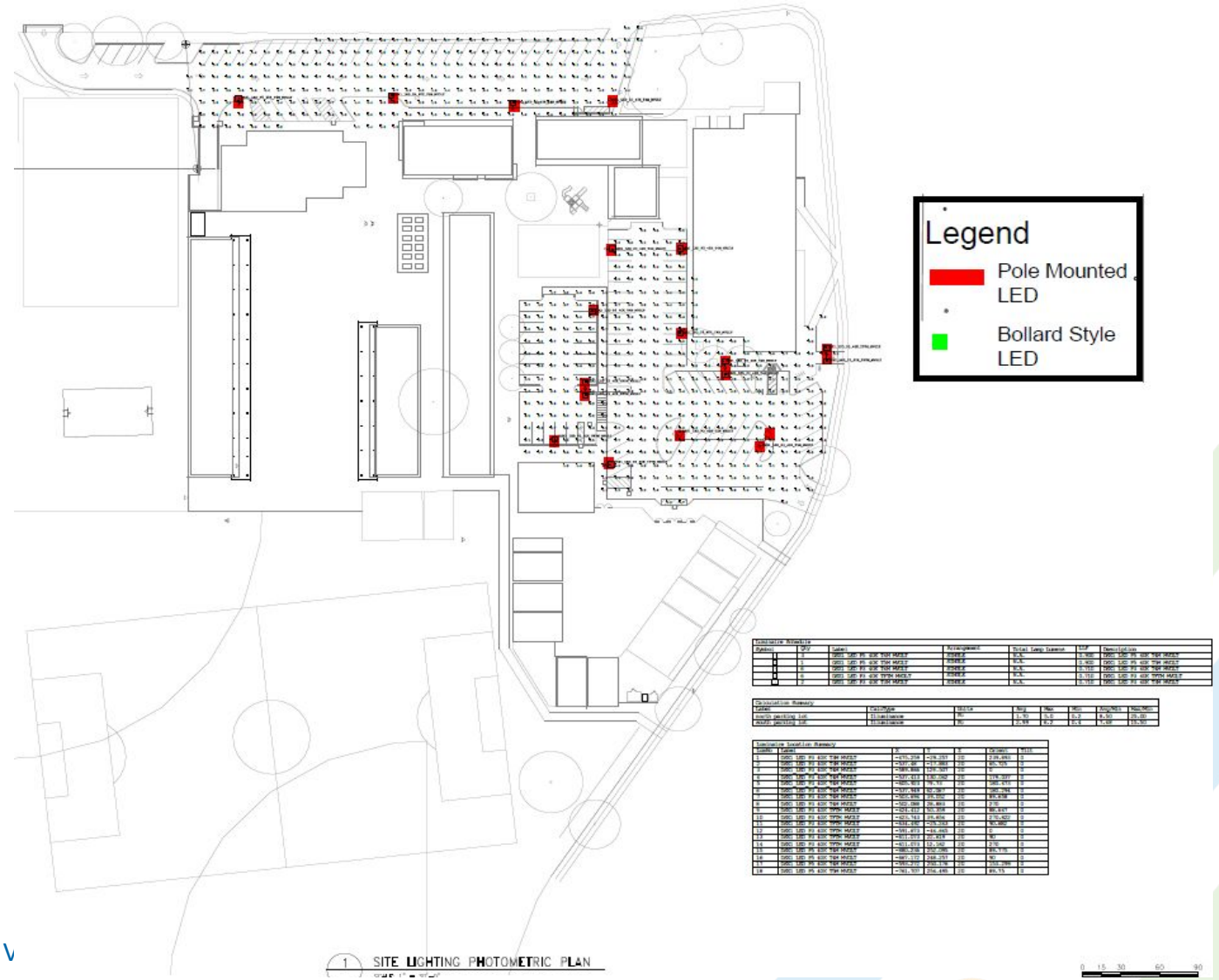


1 SITE LIGHTING PHOTOMETRIC PLAN

Monta Loma Elementary School Iso Diagram



Stevenson Elementary School/District Office



Stevenson Elementary/DO Iso Diagram

Additional Requests

- Castro requested lights on the backside of campus
- Landels requested additional lighting in the hallways
- Monta Loma requested additional lighting around the field pathways

Additional Requests

- Monta Loma requested to check lights or install lights in the hallways
- Bubb and Living Classroom had a concern around lights near the pollinator garden
- All items will be addressed through maintenance or the design process

Recap: Board and City Council Updates After Community Meetings

- June 3
  - staff will present feedback from the community to the Board of Trustees
- June 8
  - Tentatively, staff will present or provide a report to City Council on feedback received from the community
- June 17
  - staff will present schematic designs, budget, and timeline for approval from the Board of Trustees.

Mountain View
Whisman
School District

Photometric Survey

Photometric Survey

- A photometric survey was completed to identify problem areas where more light is needed.

- Vargas did not show a need for additional pathway lighting.
  - We held community meeting to determine if there is a need to proceed with additional lighting.
  - Vargas is a newer campus so some lighting had already been installed.

Mountain View
Whisman
School District

Thoughts and Questions