

Proposed Placement of Photovoltaic “Solar” Shelters



**Fullerton School District
Board of Education Meeting
March 12, 2019**

What's Our Why?

1. Need to replace aging lunch shelters
2. Need additional parking at the District Office
3. Need larger lunch shelters at various schools
4. Reducing future electric utility bills
5. Better for the environment
6. Will create shaded areas for outdoor learning and recess
7. District is receiving over \$4.5 million in lunch, shade, and parking shelters at no cost



Remove Aging Lunch Shade Shelters



- Remove 10 of our 14 aging lunch shelters at:
 - Pacific Drive (3)
 - Richman (3)
 - Rolling Hills (2)
 - Sunset Lane (2)
- Cost to remove 10 aging lunch shelters \$400,000 – No cost to the District

Lunch Shade Shelters



New Lunch Shelters at:

- Pacific Drive
 - Richman
 - Rolling Hills
 - Sunset Lane
 - Hermosa (Larger)
 - Maple (Larger)
 - Raymond (Larger)
-
- Cost to build these structures-\$1.6 Mil-No cost to the District

Blacktop Shade Shelters



New Blacktop Shade Shelters at:

- Acacia
 - Maple
 - Nicolas
 - Orangethorpe
 - Rolling Hills
 - Valencia Park
 - Woodcrest
-
- Cost to build these structures-\$0.6 Mil-No cost to the District

New Field Shade Shelters at:

- Acacia
 - Beechwood
 - Commonwealth
 - Pacific Drive
 - Fern
 - Golden Hill
 - Ladera Vista
 - Laguna Road
 - Nicolas
 - Parks
 - Raymond
 - Sunset Lane
 - Valencia Park
-
- Cost to build these structures-\$1.2 Mil-No cost to the District

Field Shade Shelters



Parking Shade Shelters



New Parking Lot Shade Structure and EV Charging Stations:

- District Office
 - Fisler
 - Richman
-
- New Parking Lot
 - District Office
-
- Cost to build these structures-\$0.7 Mil-No cost to the District



PFMG Solar site walks to determine best placement

District and Maintenance reviewed PFMG recommendations

District met with each Site Leadership Team (Admin and Staff) to review placement criteria, present proposed locations and collaborate on possible alternative locations

- 11 of the 20 sites came up with alternatives

District shared alternatives with PFMG who was able to honor our changes

Placement Criteria of Photovoltaic Arrays



1. Requirements per DSA (Division of State Architects):

- Solar panels can't go on top of existing structures (i.e. roofs, existing lunch shelters)
- Solar panels must be at least 20 feet from any existing building
- Solar panels can't go over play ground equipment
- Solar panels can't go over existing easements
- Solar panels can't go over fire lanes
- Solar structure needs to be ADA accessible

2. Solar panels need maximum exposure-no interference with shade from buildings or trees

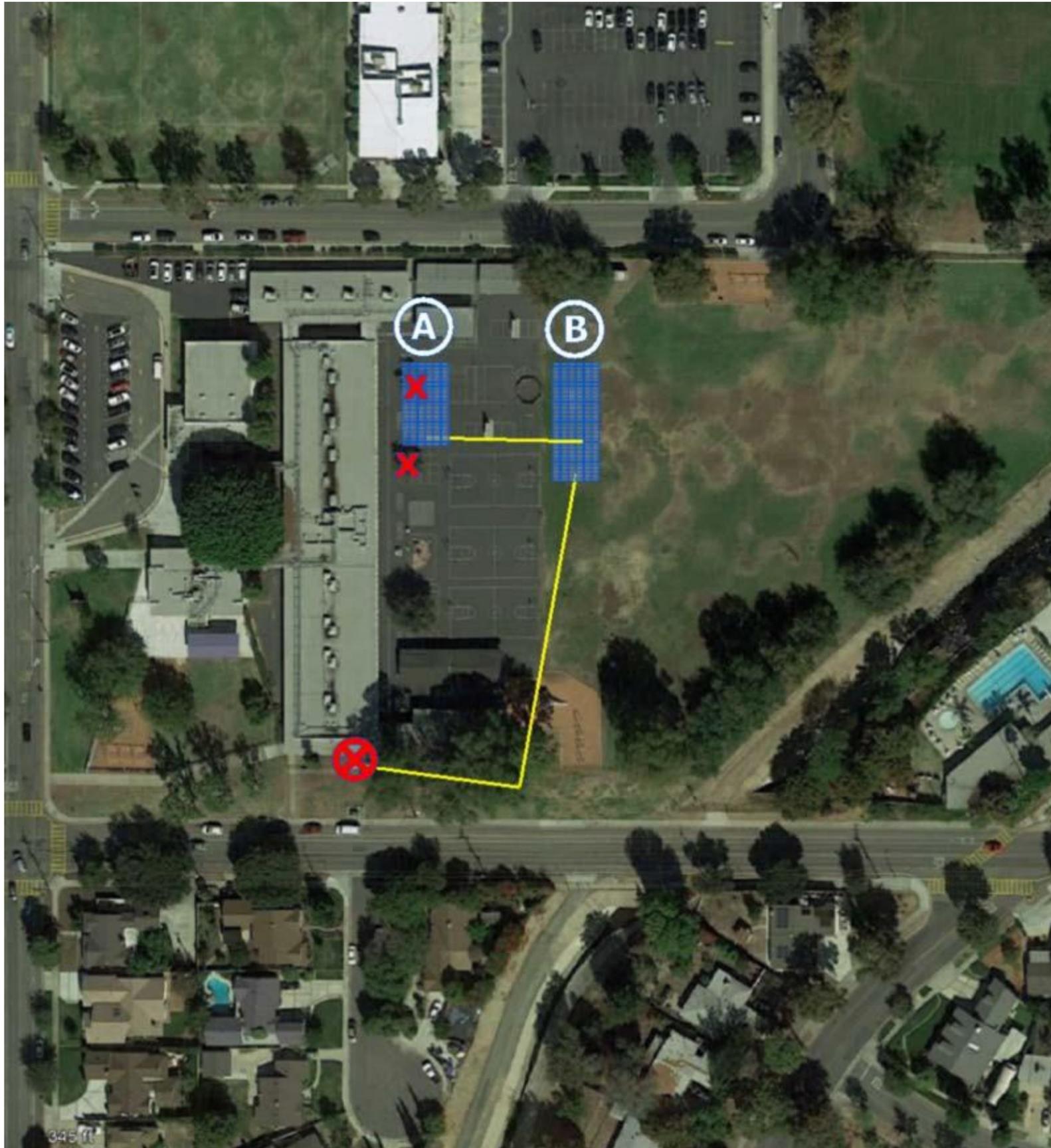
3. Avoid placing Solar panels in the front of schools for aesthetic reasons

4. Replace displaced trees

5. Create usable shade space for students and community



Recommendations



SCHEMATIC LAYOUT OF PROPOSED SOLAR SYSTEM

TABLE OF SOLAR ARRAYS

Location ID	Racking Type	Modules in Rise	# of Modules	Size DC kW	Azimuth	Tilt
A	Elevated	6	126	48.510	270°	7°
B	Elevated	6	180	69.300	270°	7°
			306	117.810		

ACACIA ELEMENTARY

TABLE OF UTILITY METERS	Location ID	Meter Name	Meter Number	# of Modules	Size DC kW	Connected to Arrays
		Acacia ES	259000-023981	306	117.810	A,B

Arrays were designed assuming a crystalline silicon PV module of nominal power = 385W
 Total estimated conduit length = 537 ft

NOTES

1. Results of easement reports may affect final placement of solar arrays
2. Trees and/or other obstructions will have to be removed, trimmed or relocated
3. A detailed analysis of the effect of shade on the arrays has not been performed
4. A soil analysis has not been performed
5. It is assumed that the site is not in a designated flood plain
6. Arrays may be divided into 4,000sf sections with a 1' gap for earthquake safety

LEGEND

-  Solar Array
 -  Point of Interconnection
 -  Proposed Conduit Run
 -  Tree to be removed. Final count may vary
- 



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 HUNTINGTON BEACH CA 92647
 (714) 408-2982
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CONFIDENTIALITY STATEMENT
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Site Name:
ACACIA ELEMENTARY SCHOOL

Project name:
FULLERTON SCHOOL DISTRICT

Site Address:
1200 N ACACIA AVE
FULLERTON, CA 92831

Revision: S02
Date: 2/8/2019
Drawn by: SAP



SCHEMATIC LAYOUT OF PROPOSED SOLAR SYSTEM

TABLE OF SOLAR ARRAYS

Location ID	Racking Type	Modules in Rise	# of Modules	Size DC kW	Azimuth	Tilt
A	Elevated	6	258	99.330	181°	7°
B	Elevated	6	180	69.300	270°	7°
			438	168.630		

BEECHWOOD

TABLE OF UTILITY METERS Location ID	Meter Name	Meter Number	# of Modules	Size DC kW	Connected to Arrays
	Beechwood ES	V349N-008813	438	168.630	A,B

Arrays were designed assuming a crystalline silicon PV module of nominal power = 385W
 Total estimated conduit length = 839 ft

NOTES

1. Results of easement reports may affect final placement of solar arrays
2. Trees and/or other obstructions will have to be removed, trimmed or relocated
3. A detailed analysis of the effect of shade on the arrays has not been performed
4. A soil analysis has not been performed
5. It is assumed that the site is not in a designated flood plain
6. Arrays may be divided into 4,000sf sections with a 1' gap for earthquake safety

LEGEND

-  Solar Array
 -  Point of Interconnection
 -  Proposed Conduit Run
 -  Tree to be removed. Final count may vary
- 



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Site Name:
BEECHWOOD ELEMENTARY SCHOOL

Project name:
FULLERTON SCHOOL DISTRICT

Site Address:
780 BEECHWOOD AVE
FULLERTON, CA 92835

Revision: S03
Date: 2/8/2019
Drawn by: SAP



SCHEMATIC LAYOUT OF PROPOSED SOLAR SYSTEM

TABLE OF SOLAR ARRAYS

Location ID	Racking Type	Modules in Rise	# of Modules	Size DC kW	Azimuth	Tilt
A	Elevated	6	324	124.740	180°	7°
			324	124.740		

COMMONWEALTH ELEMENTARY

Location ID	Meter Name	Meter Number	# of Modules	Size DC kW	Connected to Arrays
	Commonwealth ES	259000-073203	324	124.740	A

Arrays were designed assuming a crystalline silicon PV module of nominal power = 385W
 Total estimated conduit length = 433 ft

NOTES

1. Results of easement reports may affect final placement of solar arrays
2. Trees and/or other obstructions will have to be removed, trimmed or relocated
3. A detailed analysis of the effect of shade on the arrays has not been performed
4. A soil analysis has not been performed
5. It is assumed that the site is not in a designated flood plain
6. Arrays may be divided into 4,000sf sections with a 1' gap for earthquake safety

LEGEND

-  Solar Array
-  Point of Interconnection
-  Proposed Conduit Run
-  Tree to be removed. Final count may vary



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Site Name:
 COMMONWEALTH ELEMENTARY SCHOOL

Project name:
 FULLERTON SCHOOL DISTRICT

Site Address:
 2200 E COMMONWEALTH AVE
 FULLERTON, CA 92831

Revision: S02
Date: 2/13/2019
Drawn by: SAP



SCHEMATIC LAYOUT OF PROPOSED SOLAR SYSTEM

TABLE OF SOLAR ARRAYS

Location ID	Racking Type	Modules in Rise	# of Modules	Size DC kW	Azimuth	Tilt
D	Carport	6	216	83.160	180°	7°
E	Elevated	6	396	152.460	270°	7°
A	Elevated	6	132	50.820	180°	7°
B	Elevated	6	132	50.820	180°	7°
C	Elevated	6	132	50.820	180°	7°
			1,008	388.080		

PACIFIC DRIVE, DISTRICT OFFICE

TABLE OF UTILITY METERS	Location ID	Meter Name	Meter Number	# of Modules	Size DC kW	Connected to Arrays
	2	District Office 3	259000-041676	216	83.160	D
	3	District Office 7	259000-039565	396	152.460	E
	1	Pacific Drive ES	V349N-000365	396	152.460	A,B,C
				1,008	388.080	

Arrays were designed assuming a crystalline silicon PV module of nominal power = 385W
 Total estimated conduit length = 1138 ft

NOTES

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2. Trees and/or other obstructions will have to be removed, trimmed or relocated
3. A detailed analysis of the effect of shade on the arrays has not been performed
4. A soil analysis has not been performed
5. It is assumed that the site is not in a designated flood plain
6. Arrays may be divided into 4,000sf sections with a 1' gap for earthquake safety

LEGEND

-  Solar Array
-  Point of Interconnection
-  Proposed Conduit Run
-  Tree to be removed. Final count may vary



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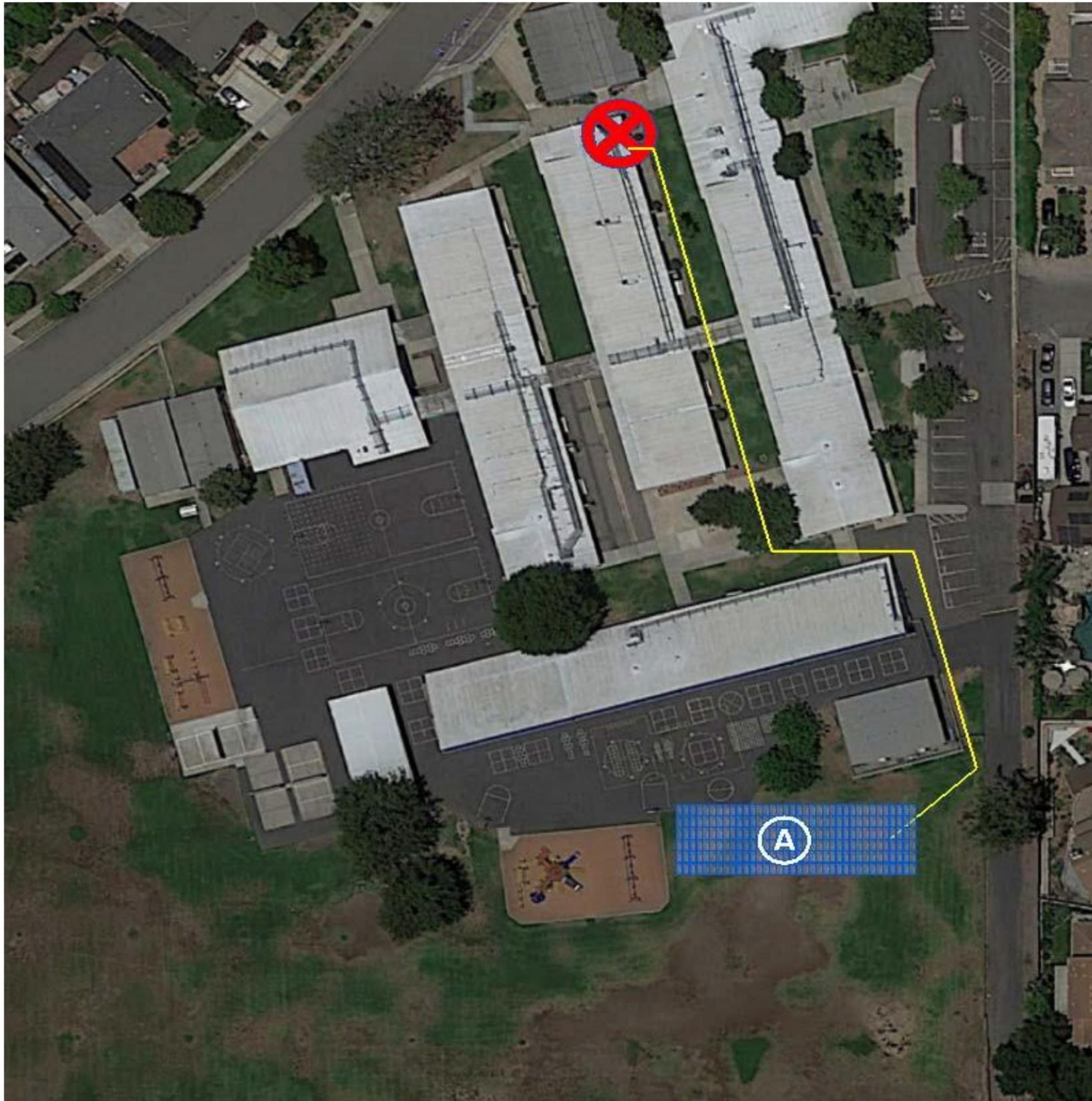
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Site Name:
 DISTRICT OFFICE AND PACIFIC DRIVE ELEMENTARY SCHOOL

Project name:
 FULLERTON SCHOOL DISTRICT

Site Address:
 1401 W VALENCIA DR
 FULLERTON, CA 92833

Revision: S06-L
Date: 2/13/2019
Drawn by: SAP



SCHEMATIC LAYOUT OF PROPOSED SOLAR SYSTEM

TABLE OF SOLAR ARRAYS

Location ID	Racking Type	Modules in Rise	# of Modules	Size DC kW	Azimuth	Tilt
A	Elevated	6	216	83.160	180°	7°
			216	83.160		

FERN ELEMENTARY

Proposed New Placement 3/22/19

TABLE OF UTILITY METERS

Location ID	Meter Name	Meter Number	# of Modules	Size DC kW	Connected to Arrays
	Fern Drive ES	259000-080549	216	83.160	A

Arrays were designed assuming a crystalline silicon PV module of nominal power = 385W
 Total estimated conduit length = 512 ft

NOTES

1. Results of easement reports may affect final placement of solar arrays
2. Trees and/or other obstructions will have to be removed, trimmed or relocated
3. A detailed analysis of the effect of shade on the arrays has not been performed
4. A soil analysis has not been performed
5. It is assumed that the site is not in a designated flood plain
6. Arrays may be divided into 4,000sf sections with a 1' gap for earthquake safety

LEGEND

-  Solar Array
-  Point of Interconnection
-  Proposed Conduit Run
-  Tree to be removed. Final count may vary



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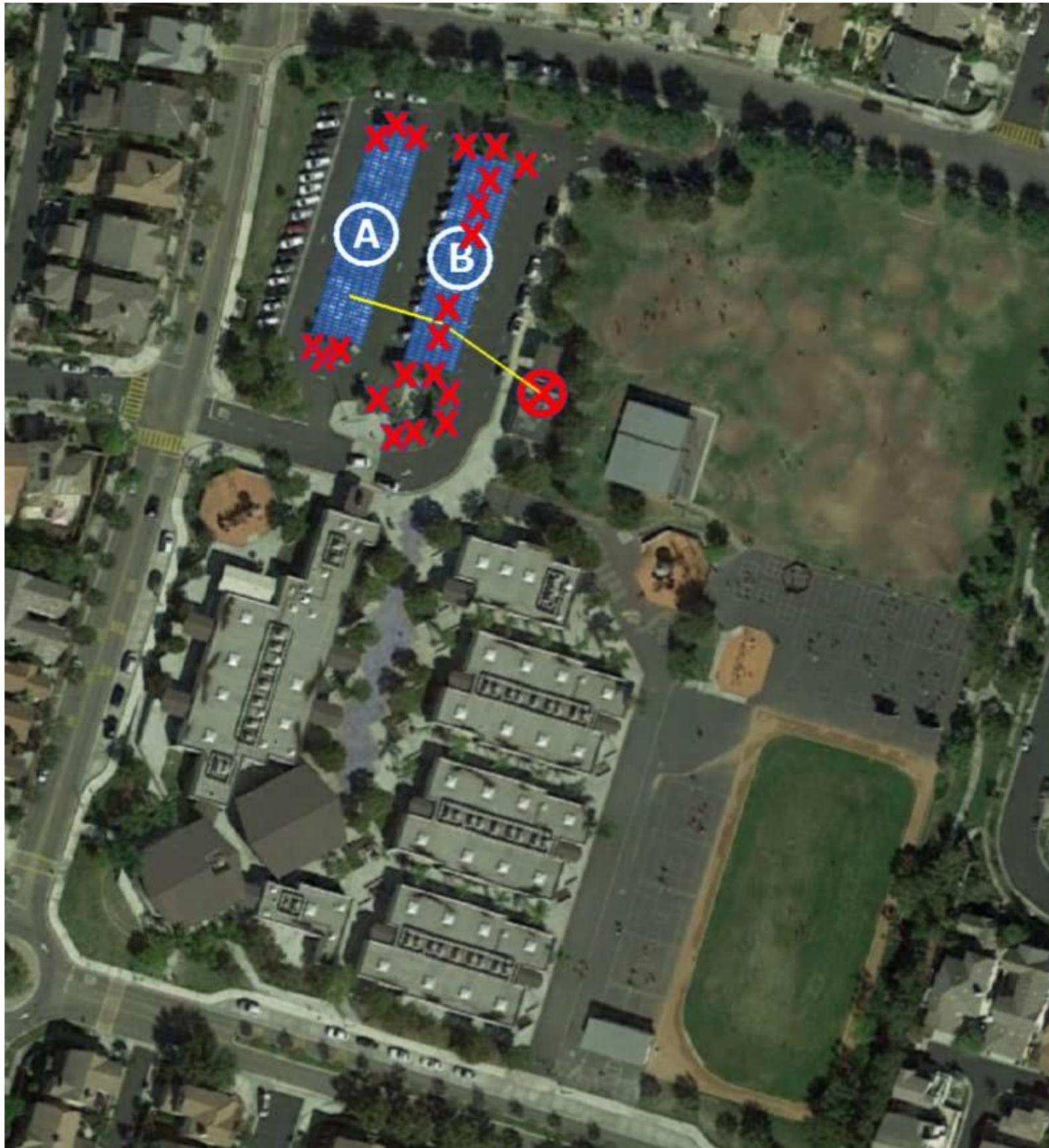
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Site Name:
 FERN DRIVE ELEMENTARY SCHOOL

Project name:
 FULLERTON SCHOOL DISTRICT

Site Address:
 1400 W FERN DR
 FULLERTON, CA 92833

Revision: S02
Date: 3/21/2019
Drawn by: PMS



SCHEMATIC LAYOUT OF PROPOSED SOLAR SYSTEM

TABLE OF SOLAR ARRAYS

Location ID	Racking Type	Modules in Rise	# of Modules	Size DC kW	Azimuth	Tilt
A	Carport	6	294	113.190	107°	7°
B	Carport	6	294	113.190	107°	7°
			588	226.380		

FISLER

TABLE OF UTILITY METERS	Location ID	Meter Name	Meter Number	# of Modules	Size DC kW	Connected to Arrays
		Fisler ES	V349N-000348	588	226.380	A,B

Arrays were designed assuming a crystalline silicon PV module of nominal power = 385W
 Total estimated conduit length = 164 ft

NOTES

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2. Trees and/or other obstructions will have to be removed, trimmed or relocated
3. A detailed analysis of the effect of shade on the arrays has not been performed
4. A soil analysis has not been performed
5. It is assumed that the site is not in a designated flood plain
6. Arrays may be divided into 4,000sf sections with a 1' gap for earthquake safety

LEGEND

-  Solar Array
 -  Point of Interconnection
 -  Proposed Conduit Run
 -  Tree to be removed. Final count may vary
- 



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Site Name:

FISLER ELEMENTARY SCHOOL

Project name:

FULLERTON SCHOOL DISTRICT

Site Address:

1350 STARBUCK ST
 FULLERTON, CA 92833

Revision:

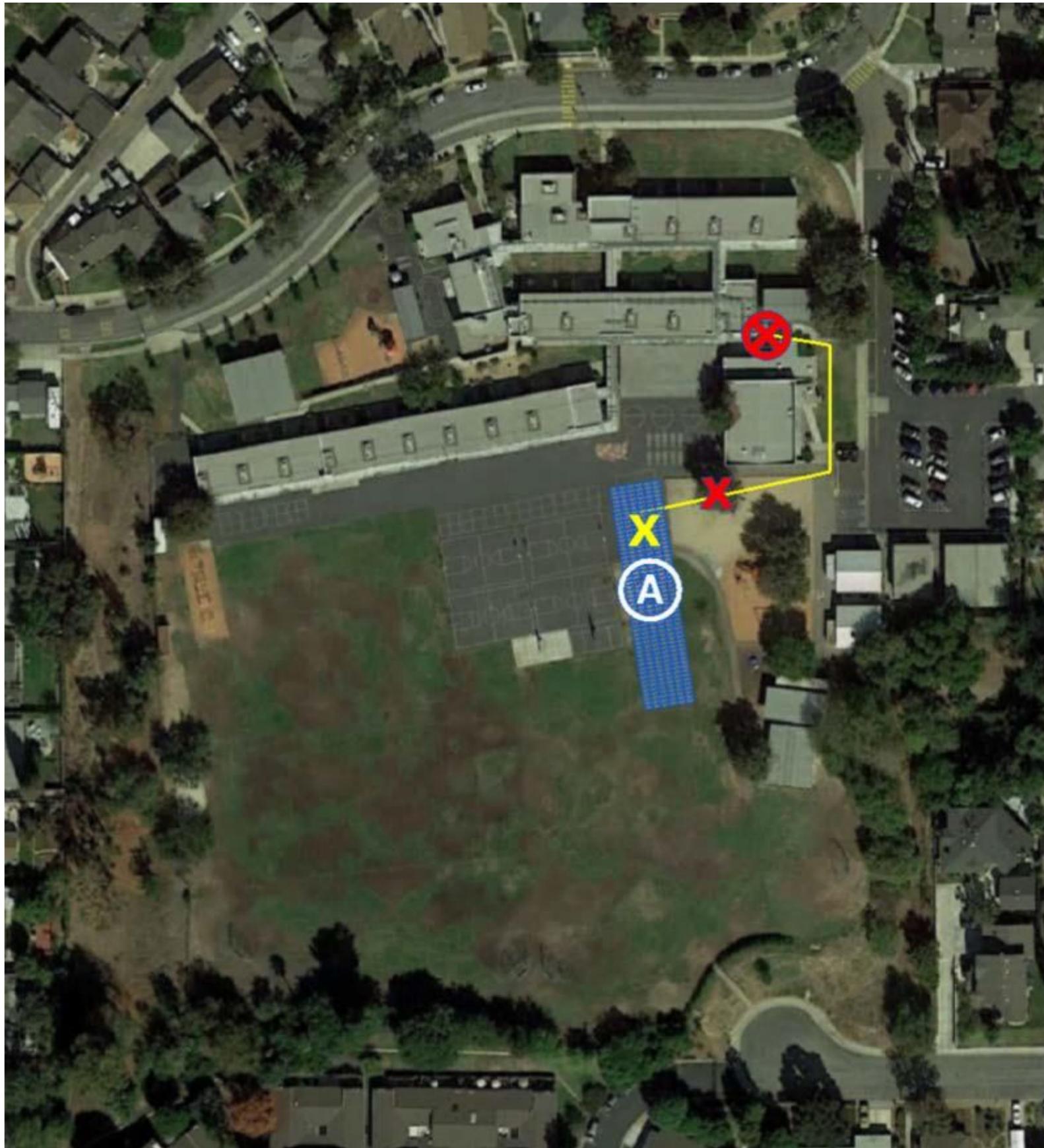
S04-L

Date:

2/8/2019

Drawn by:

SAP



SCHEMATIC LAYOUT OF PROPOSED SOLAR SYSTEM

TABLE OF SOLAR ARRAYS

Location ID	Racking Type	Modules in Rise	# of Modules	Size DC kW	Azimuth	Tilt
A	Elevated	6	312	120.120	261°	7°
			312	120.120		

GOLDEN HILL ELEMENTARY

TABLE OF UTILITY METERS	Location ID	Meter Name	Meter Number	# of Modules	Size DC kW	Connected to Arrays
		Golden Hill ES	259000-084459	312	120.120	A

Arrays were designed assuming a crystalline silicon PV module of nominal power = 385W
 Total estimated conduit length = 293 ft

NOTES

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2. Trees and/or other obstructions will have to be removed, trimmed or relocated
3. A detailed analysis of the effect of shade on the arrays has not been performed
4. A soil analysis has not been performed
5. It is assumed that the site is not in a designated flood plain
6. Arrays may be divided into 4,000sf sections with a 1' gap for earthquake safety

LEGEND

-  Solar Array
 -  Point of Interconnection
 -  Proposed Conduit Run
 -  Tree to be removed. Final count may vary
- 



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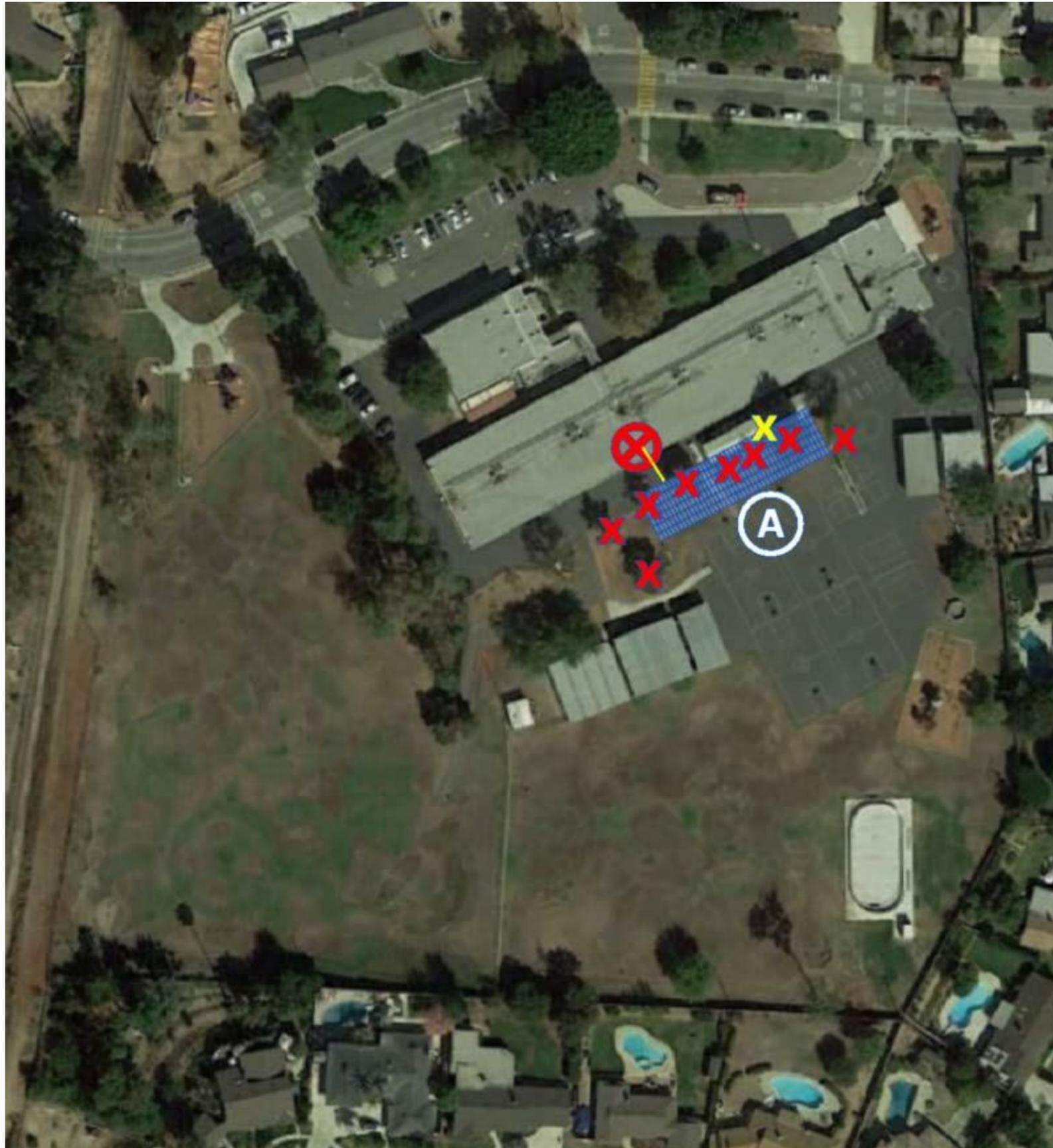
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Site Name:
GOLDEN HILL ELEMENTARY SCHOOL

Project name:
FULLERTON SCHOOL DISTRICT

Site Address:
732 BARRIS DR
FULLERTON, CA 92832

Revision: S03
Date: 2/13/2019
Drawn by: SAP



SCHEMATIC LAYOUT OF PROPOSED SOLAR SYSTEM

TABLE OF SOLAR ARRAYS

Location ID	Racking Type	Modules in Rise	# of Modules	Size DC kW	Azimuth	Tilt
A	Elevated	6	258	99.330	153°	7°
			258	99.330		

HERMOSA ELEMENTARY

TABLE OF UTILITY METERS	Location ID	Meter Name	Meter Number	# of Modules	Size DC kW	Connected to Arrays
		Hermosa Drive ES 1	259000-071826	258	99.330	A

Arrays were designed assuming a crystalline silicon PV module of nominal power = 385W
 Total estimated conduit length = 33 ft

NOTES

1. Results of easement reports may affect final placement of solar arrays
2. Trees and/or other obstructions will have to be removed, trimmed or relocated
3. A detailed analysis of the effect of shade on the arrays has not been performed
4. A soil analysis has not been performed
5. It is assumed that the site is not in a designated flood plain
6. Arrays may be divided into 4,000sf sections with a 1' gap for earthquake safety

LEGEND

-  Solar Array
-  Point of Interconnection
-  Proposed Conduit Run
-  Tree to be removed. Final count may vary



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Site Name:
HERMOSA DRIVE ELEMENTARY SCHOOL

Project name:
FULLERTON SCHOOL DISTRICT

Site Address:
400 E HERMOSA DR
FULLERTON, CA 92835

Revision: S02
Date: 2/8/2019
Drawn by: SAP



SCHEMATIC LAYOUT OF PROPOSED SOLAR SYSTEM

TABLE OF SOLAR ARRAYS

Location ID	Racking Type	Modules in Rise	# of Modules	Size DC kW	Azimuth	Tilt
A	Elevated	6	360	138.600	199°	7°
B	Elevated	6	360	138.600	196°	7°
			720	277.200		

LADERA VISTA JUNIOR HIGH

TABLE OF UTILITY METERS Location ID	Meter Name	Meter Number	# of Modules	Size DC kW	Connected to Arrays
	Ladera Vista JHS	V349N-017710	720	277.200	A,B

Arrays were designed assuming a crystalline silicon PV module of nominal power = 385W
 Total estimated conduit length = 560 ft

NOTES

1. Results of easement reports may affect final placement of solar arrays
2. Trees and/or other obstructions will have to be removed, trimmed or relocated
3. A detailed analysis of the effect of shade on the arrays has not been performed
4. A soil analysis has not been performed
5. It is assumed that the site is not in a designated flood plain
6. Arrays may be divided into 4,000sf sections with a 1' gap for earthquake safety

LEGEND

-  Solar Array
 -  Point of Interconnection
 -  Proposed Conduit Run
 -  Tree to be removed. Final count may vary
- 



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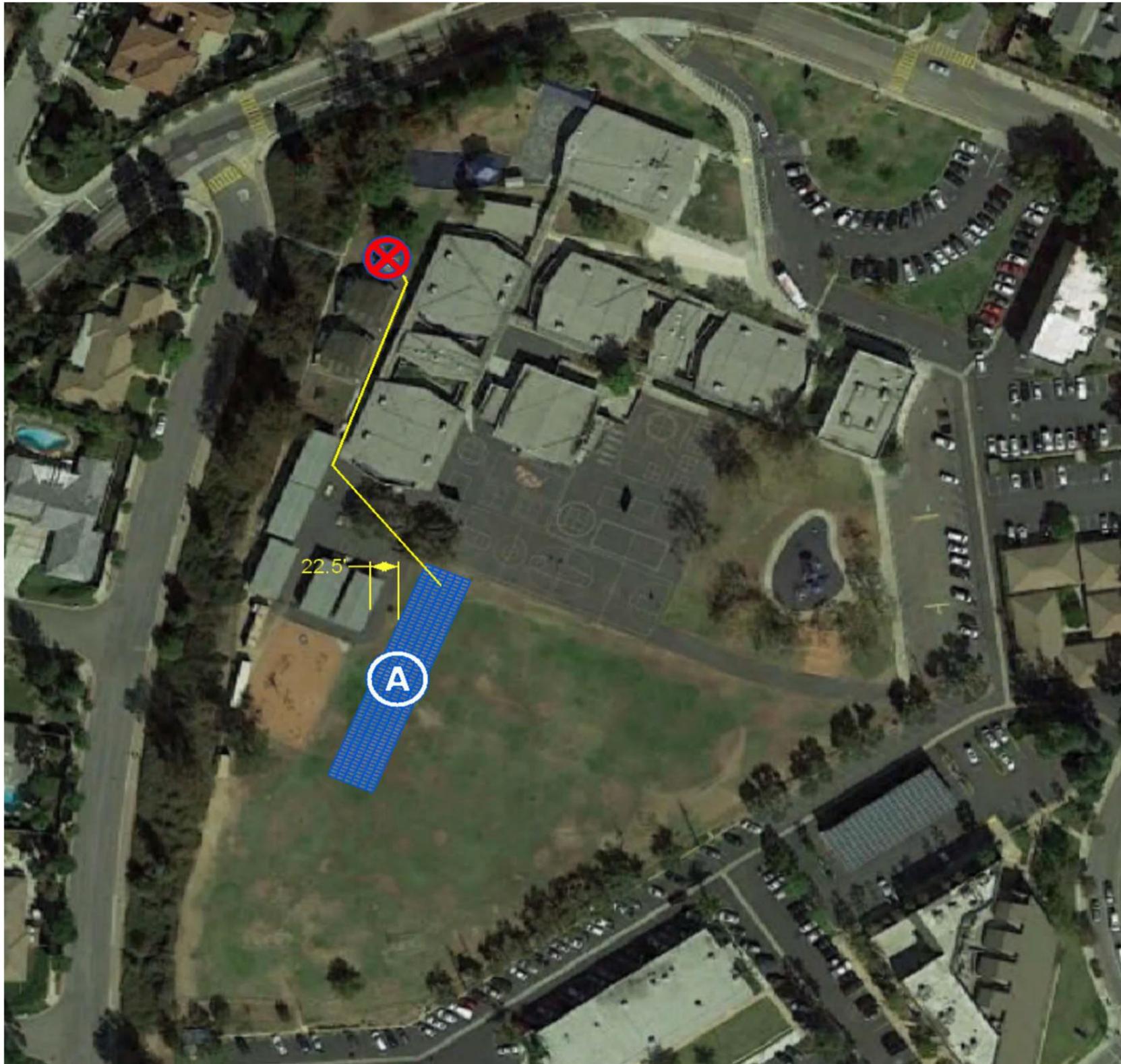
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Site Name:
LADERA VISTA JUNIOR HIGH SCHOOL

Project name:
FULLERTON SCHOOL DISTRICT

Site Address:
1700 E COMMONWEALTH AVE
FULLERTON, CA 92831

Revision: S04
Date: 2/13/2019
Drawn by: SAP



SCHEMATIC LAYOUT OF PROPOSED SOLAR SYSTEM

TABLE OF SOLAR ARRAYS

Location ID	Racking Type	Modules in Rise	# of Modules	Size DC kW	Azimuth	Tilt
A	Elevated	6	360	138.600	113°	7°
			360	138.600		

LAGUNA ROAD ELEMENTARY

TABLE OF UTILITY METERS

Location ID	Meter Name	Meter Number	# of Modules	Size DC kW	Connected to Arrays
	Laguna Road ES	259000-063238	360	138.600	A

Arrays were designed assuming a crystalline silicon PV module of nominal power = 385W
Total estimated conduit length = 351 ft

NOTES

1. Results of easement reports may affect final placement of solar arrays
2. Trees and/or other obstructions will have to be removed, trimmed or relocated
3. A detailed analysis of the effect of shade on the arrays has not been performed
4. A soil analysis has not been performed
5. It is assumed that the site is not in a designated flood plain
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LEGEND

-  Solar Array
-  Point of Interconnection
-  Proposed Conduit Run
-  Tree to be removed. Final count may vary



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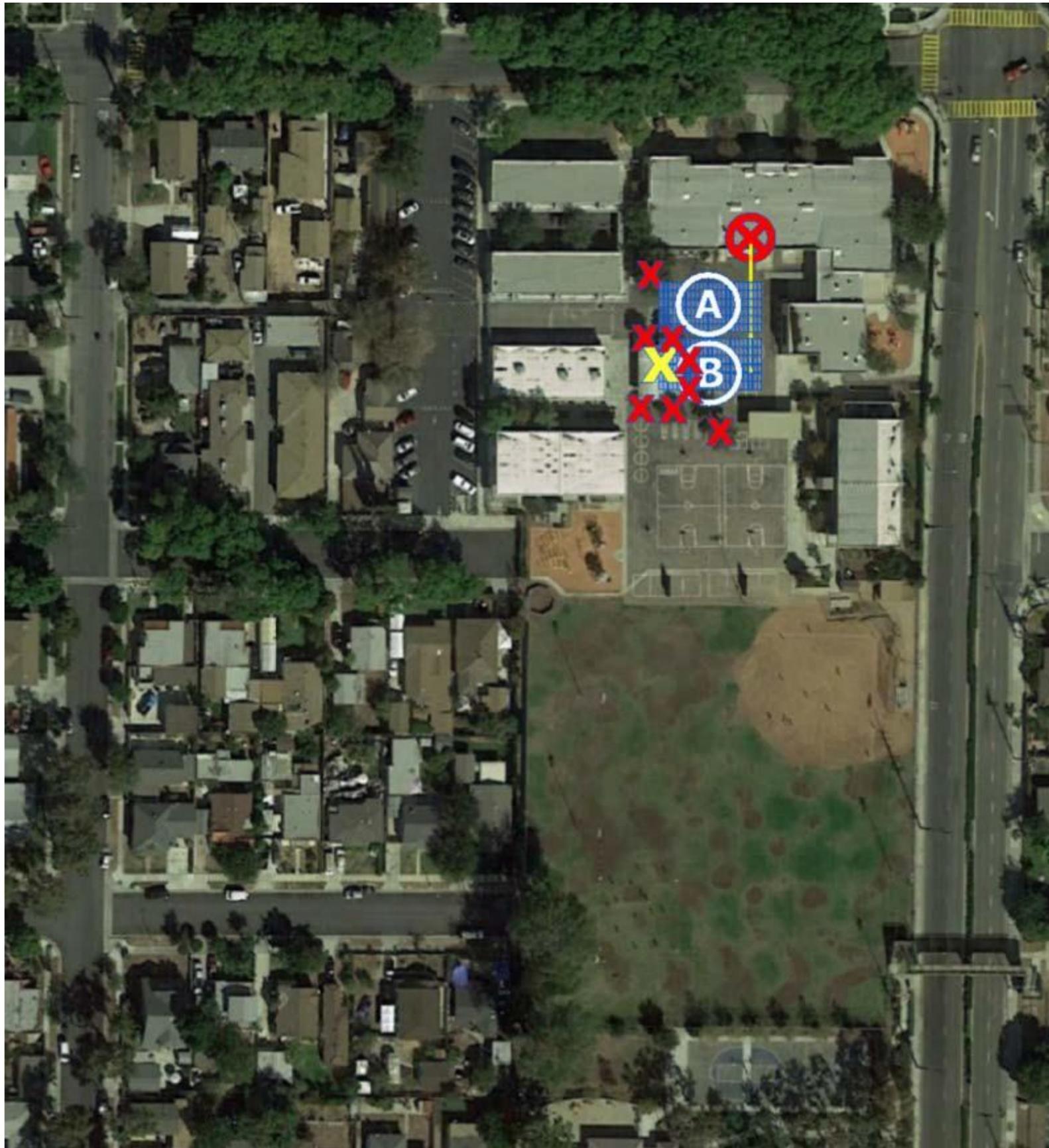
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Site Name:
LAGUNA ROAD ELEMENTARY SCHOOL

Project name:
FULLERTON SCHOOL DISTRICT

Site Address:
300 LAGUNA RD
FULLERTON, CA 92835

Revision: S03
Date: 2/27/2019
Drawn by: SAP



SCHEMATIC LAYOUT OF PROPOSED SOLAR SYSTEM

TABLE OF SOLAR ARRAYS

Location ID	Racking Type	Modules in Rise	# of Modules	Size DC kW	Azimuth	Tilt
A	Elevated	6	138	53.130	180°	7°
B	Elevated	6	138	53.130	180°	7°
			276	106.260		

MAPLE ELEMENTARY

TABLE OF UTILITY METERS	Location ID	Meter Name	Meter Number	# of Modules	Size DC kW	Connected to Arrays
		Maple ES	259000-056151	276	106.260	A,B

Arrays were designed assuming a crystalline silicon PV module of nominal power = 385W
 Total estimated conduit length = 98 ft

NOTES

1. Results of easement reports may affect final placement of solar arrays
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LEGEND

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 -  Point of Interconnection
 -  Proposed Conduit Run
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Site Name:
 MAPLE ELEMENTARY SCHOOL

Project name:
 FULLERTON SCHOOL DISTRICT

Site Address:
 244 E VALENCIA DR
 FULLERTON, CA 92832

Revision: S01-L
Date: 2/8/2019
Drawn by: SAP

SCHEMATIC LAYOUT OF PROPOSED SOLAR SYSTEM

TABLE OF SOLAR ARRAYS

Location ID	Racking Type	Modules in Rise	# of Modules	Size DC kW	Azimuth	Tilt
A	Elevated	6	360	138.600	270°	7°
B	Elevated	3	90	34.650	180°	7°
			450	173.250		

NICOLAS JUNIOR HIGH

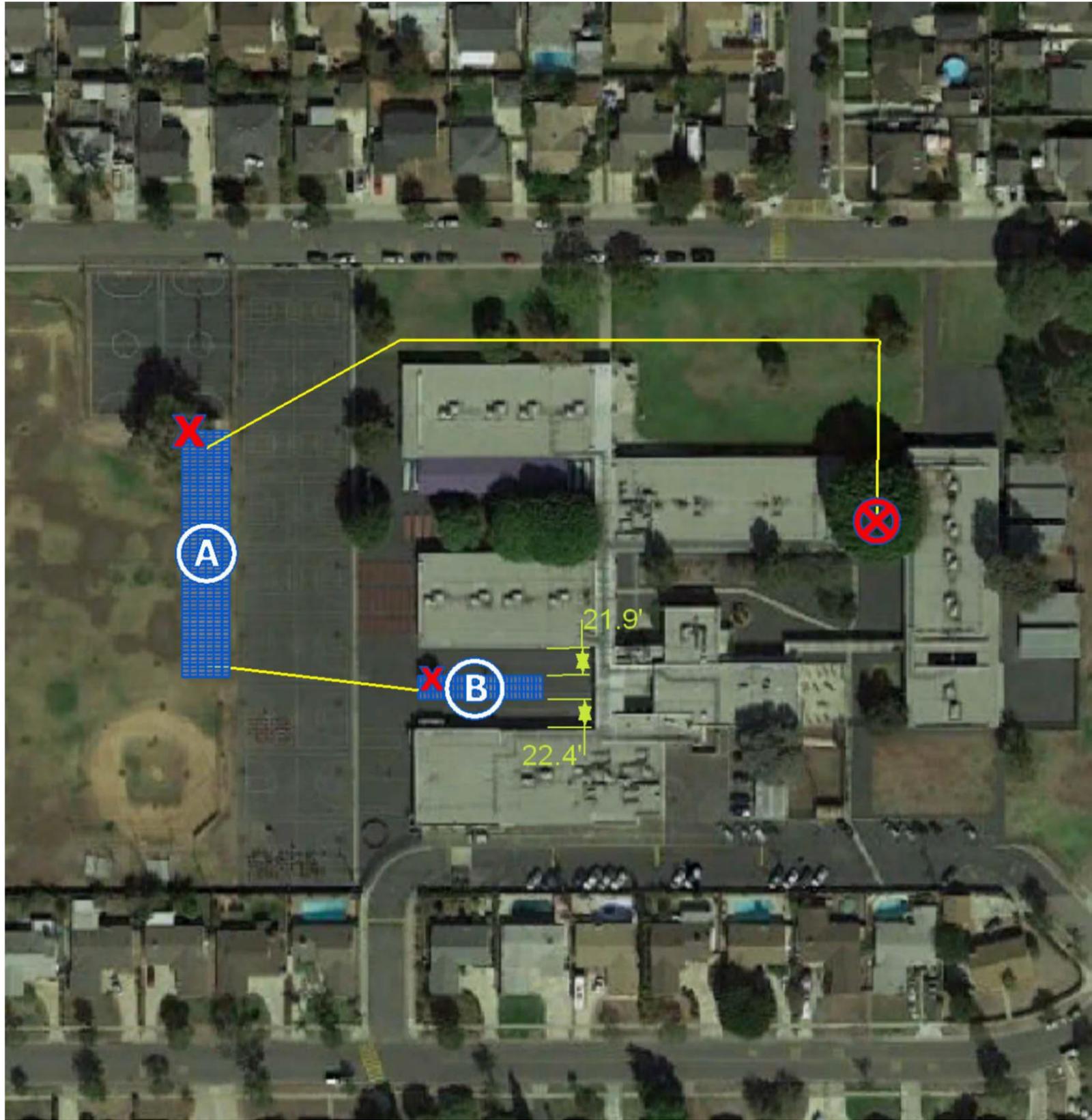


TABLE OF UTILITY METERS

Location ID	Meter Name	Meter Number	# of Modules	Size DC kW	Connected to Arrays
	Nicolas JHS 1	359150-001234	450	173.250	A,B

Arrays were designed assuming a crystalline silicon PV module of nominal power = 385W
 Total estimated conduit length = 896 ft

- NOTES**
1. Results of easement reports may affect final placement of solar arrays
 2. Trees and/or other obstructions will have to be removed, trimmed or relocated
 3. A detailed analysis of the effect of shade on the arrays has not been performed
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 5. It is assumed that the site is not in a designated flood plain
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LEGEND

-  Solar Array
-  Point of Interconnection
-  Proposed Conduit Run
-  Tree to be removed. Final count may vary



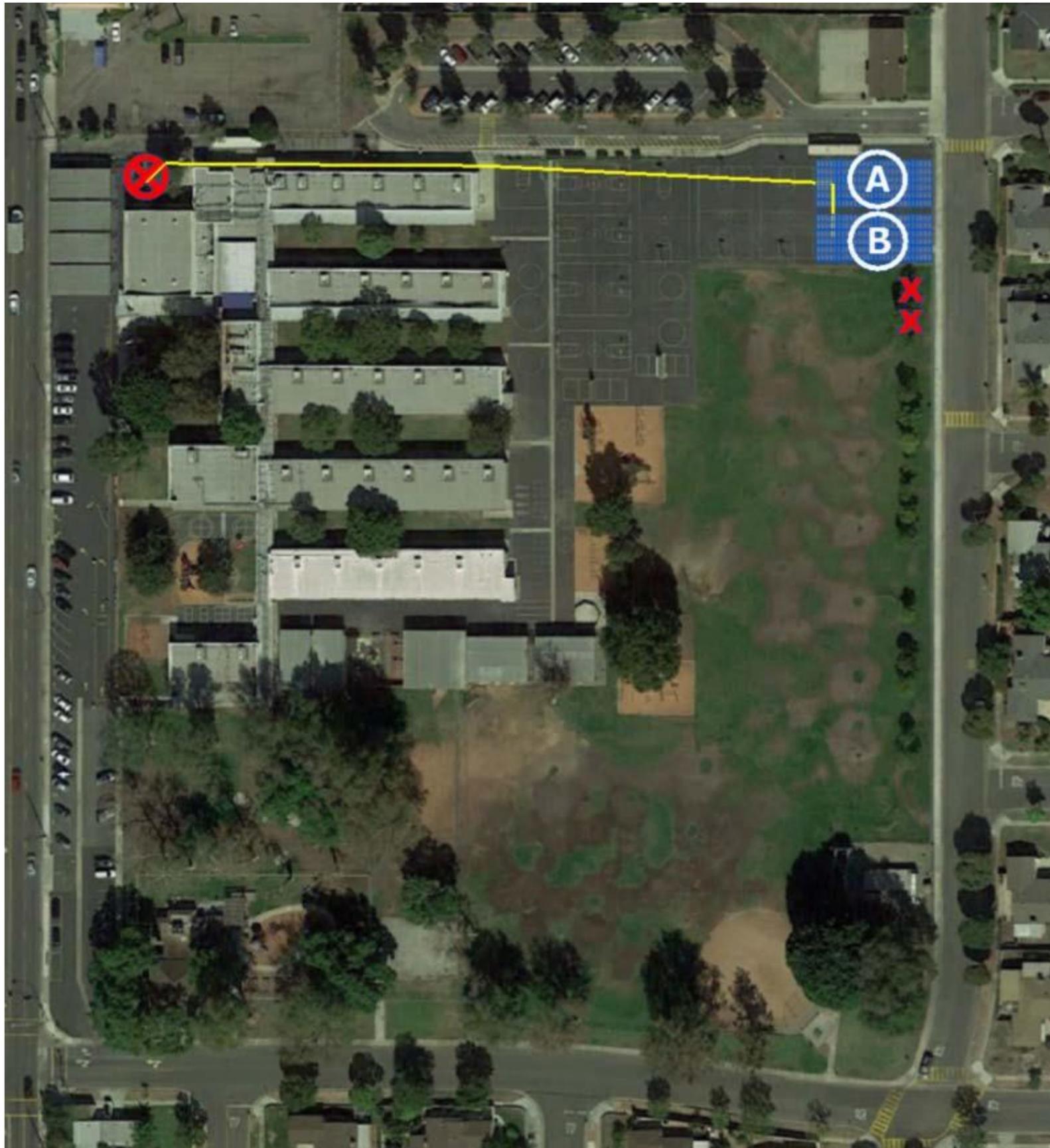


Partners For Many Generations

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Site Name: NICOLAS JUNIOR HIGH SCHOOL	Project name: FULLERTON SCHOOL DISTRICT	Site Address: 1100 W OLIVE AVE FULLERTON, CA 92833	Revision: S03-L Date: 2/22/2019 Drawn by: SAP
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SCHEMATIC LAYOUT OF PROPOSED SOLAR SYSTEM

TABLE OF SOLAR ARRAYS

Location ID	Racking Type	Modules in Rise	# of Modules	Size DC kW	Azimuth	Tilt
A	Elevated	6	168	64.680	180°	7°
B	Elevated	6	168	64.680	180°	7°
			336	129.360		

ORANGETHORPE ELEMENTARY

TABLE OF UTILITY METERS Location ID	Meter Name	Meter Number	# of Modules	Size DC kW	Connected to Arrays
	Orangethorpe ES 2	V349N-011990	336	129.360	A,B

Arrays were designed assuming a crystalline silicon PV module of nominal power = 385W
 Total estimated conduit length = 608 ft

NOTES

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3. A detailed analysis of the effect of shade on the arrays has not been performed
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LEGEND

-  Solar Array
 -  Point of Interconnection
 -  Proposed Conduit Run
 -  Tree to be removed. Final count may vary
- 



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Site Name:
ORANGETHORPE ELEMENTARY SCHOOL

Project name:
FULLERTON SCHOOL DISTRICT

Site Address:
1400 S BROOKHURST RD
FULLERTON, CA 92833

Revision: S01-L
Date: 2/8/2019
Drawn by: SAP



SCHEMATIC LAYOUT OF PROPOSED SOLAR SYSTEM

TABLE OF SOLAR ARRAYS

Location ID	Racking Type	Modules in Rise	# of Modules	Size DC kW	Azimuth	Tilt
A	Elevated	6	522	200.970	90°	7°
			522	200.970		

PARKS JUNIOR HIGH

TABLE OF UTILITY METERS	Location ID	Meter Name	Meter Number	# of Modules	Size DC kW	Connected to Arrays
		Parks JHS	V349N-003848	522	200.970	A

Arrays were designed assuming a crystalline silicon PV module of nominal power = 385W
 Total estimated conduit length = 778 ft

NOTES

1. Results of easement reports may affect final placement of solar arrays
2. Trees and/or other obstructions will have to be removed, trimmed or relocated
3. A detailed analysis of the effect of shade on the arrays has not been performed
4. A soil analysis has not been performed
5. It is assumed that the site is not in a designated flood plain
6. Arrays may be divided into 4,000sf sections with a 1' gap for earthquake safety

LEGEND

-  Solar Array
 -  Point of Interconnection
 -  Proposed Conduit Run
 -  Tree to be removed. Final count may vary
- 



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Site Name:
PARKS JUNIOR HIGH SCHOOL

Project name:
FULLERTON SCHOOL DISTRICT

Site Address:
1710 ROSECRANS AVE
FULLERTON, CA 92833

Revision: S01
Date: 2/8/2019
Drawn by: SAP

SCHEMATIC LAYOUT OF PROPOSED SOLAR SYSTEM

TABLE OF SOLAR ARRAYS

Location ID	Racking Type	Modules in Rise	# of Modules	Size DC kW	Azimuth	Tilt
A	Elevated	6	180	69.300	180°	7°
B	Elevated	3	72	27.720	180°	7°
			252	97.020		

RAYMOND ELEMENTARY

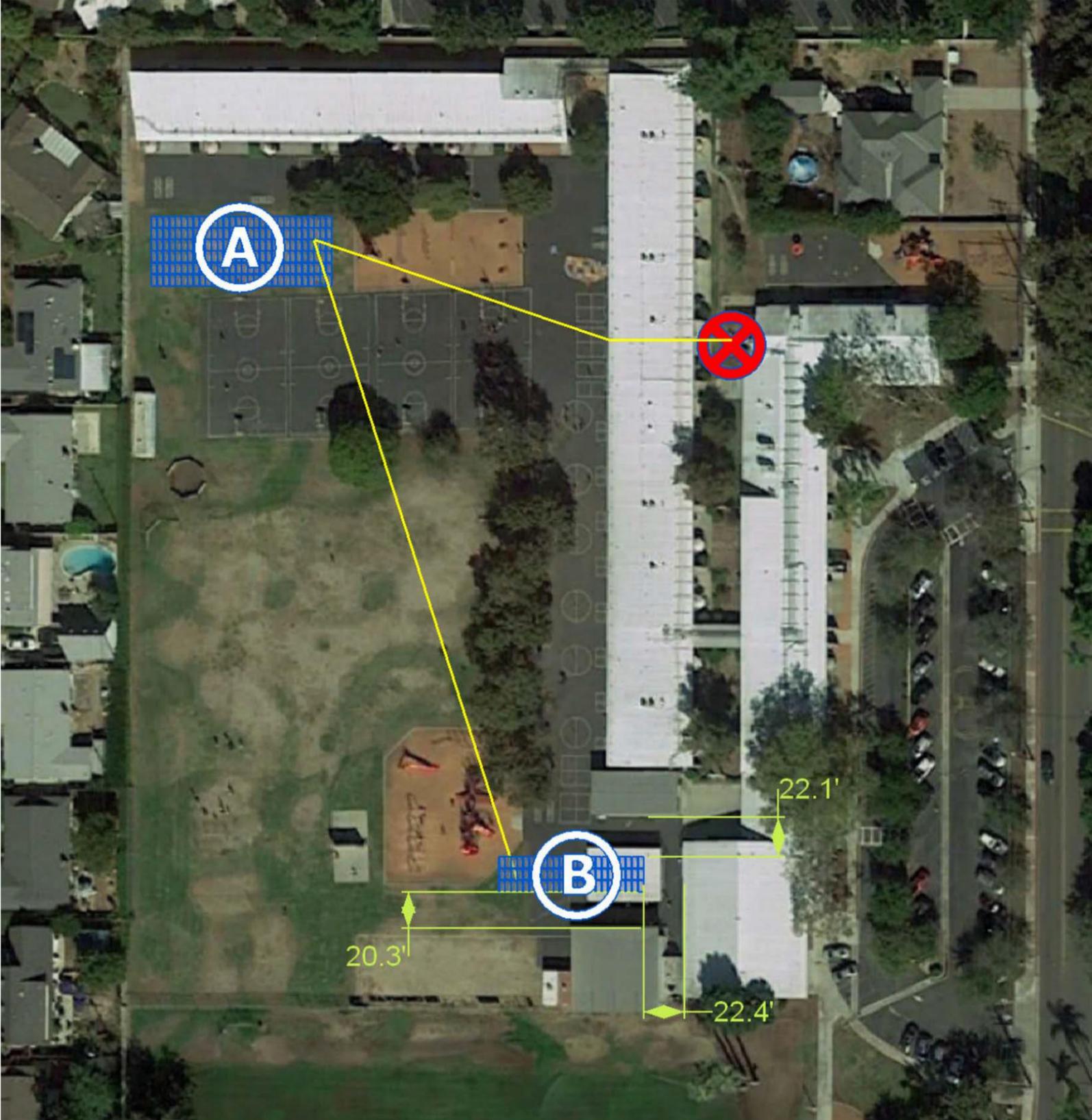


TABLE OF UTILITY METERS

Location ID	Meter Name	Meter Number	# of Modules	Size DC kW	Connected to Arrays
	Raymond ES	259000-070156	252	97.020	A,B

Arrays were designed assuming a crystalline silicon PV module of nominal power = 385W
 Total estimated conduit length = 613 ft

- NOTES**
1. Results of easement reports may affect final placement of solar arrays
 2. Trees and/or other obstructions will have to be removed, trimmed or relocated
 3. A detailed analysis of the effect of shade on the arrays has not been performed
 4. A soil analysis has not been performed
 5. It is assumed that the site is not in a designated flood plain
 6. Arrays may be divided into 4,000sf sections with a 1' gap for earthquake safety

LEGEND

-  Solar Array
-  Point of Interconnection
-  Proposed Conduit Run
-  Tree to be removed. Final count may vary



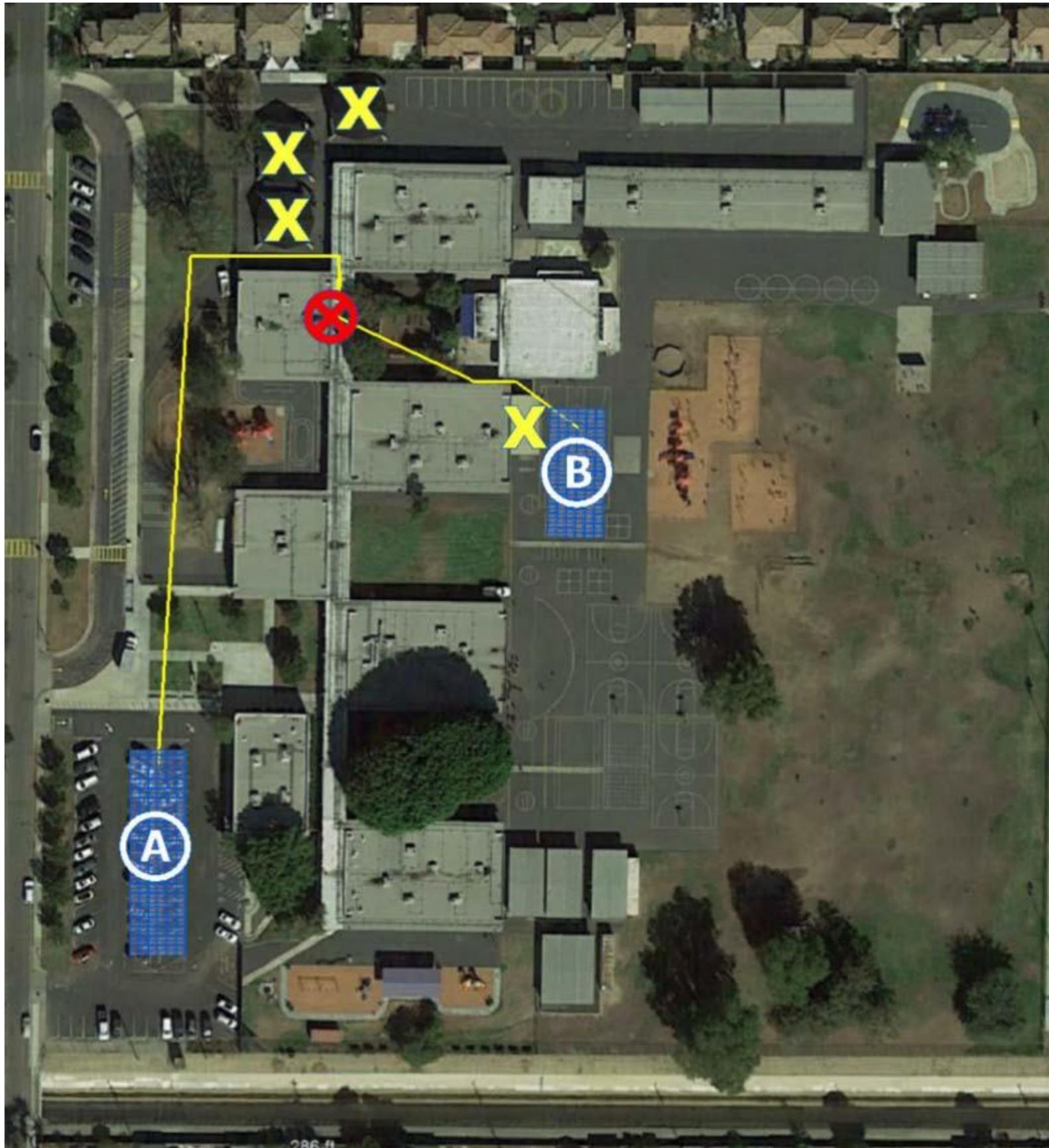


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Site Name: RAYMOND ELEMENTARY SCHOOL	Project name: FULLERTON SCHOOL DISTRICT	Site Address: 517 N RAYMOND FULLERTON, CA 92831	Revision: S05 Date: 2/22/2019 Drawn by: SAP
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SCHEMATIC LAYOUT OF PROPOSED SOLAR SYSTEM

TABLE OF SOLAR ARRAYS

Location ID	Racking Type	Modules in Rise	# of Modules	Size DC kW	Azimuth	Tilt
A	Carport	6	258	99.330	270°	7°
B	Elevated	6	162	62.370	272°	7°
			420	161.700		

RICHMAN ELEMENTARY

TABLE OF UTILITY METERS Location ID	Meter Name	Meter Number	# of Modules	Size DC kW	Connected to Arrays
	Richman ES	V349N-007764	420	161.700	A,B

Arrays were designed assuming a crystalline silicon PV module of nominal power = 385W
 Total estimated conduit length = 1116 ft

NOTES

1. Results of easement reports may affect final placement of solar arrays
2. Trees and/or other obstructions will have to be removed, trimmed or relocated
3. A detailed analysis of the effect of shade on the arrays has not been performed
4. A soil analysis has not been performed
5. It is assumed that the site is not in a designated flood plain
6. Arrays may be divided into 4,000sf sections with a 1' gap for earthquake safety

LEGEND

-  Solar Array
-  Point of Interconnection
-  Proposed Conduit Run
-  Tree to be removed. Final count may vary



Site Name:

RICHMAN ELEMENTARY SCHOOL

Project name:

FULLERTON SCHOOL DISTRICT

Site Address:

700 S RICHMOND AVE
FULLERTON, CA 92832

Revision:

S04-L

Date:

2/13/2019

Drawn by:

SAP



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SCHEMATIC LAYOUT OF PROPOSED SOLAR SYSTEM

TABLE OF SOLAR ARRAYS

Location ID	Racking Type	Modules in Rise	# of Modules	Size DC kW	Azimuth	Tilt
A	Elevated	6	180	69.300	180°	7°
B	Elevated	6	150	57.750	180°	7°
			330	127.050		

ROLLING HILLS ELEMENTARY

TABLE OF UTILITY METERS	Location ID	Meter Name	Meter Number	# of Modules	Size DC kW	Connected to Arrays
		Rolling Hills ES 2	259000-077470	330	127.050	A,B

Arrays were designed assuming a crystalline silicon PV module of nominal power = 385W
 Total estimated conduit length = 425 ft

NOTES

1. Results of easement reports may affect final placement of solar arrays
2. Trees and/or other obstructions will have to be removed, trimmed or relocated
3. A detailed analysis of the effect of shade on the arrays has not been performed
4. A soil analysis has not been performed
5. It is assumed that the site is not in a designated flood plain
6. Arrays may be divided into 4,000sf sections with a 1' gap for earthquake safety

LEGEND

-  Solar Array
 -  Point of Interconnection
 -  Proposed Conduit Run
 -  Tree to be removed. Final count may vary
- 



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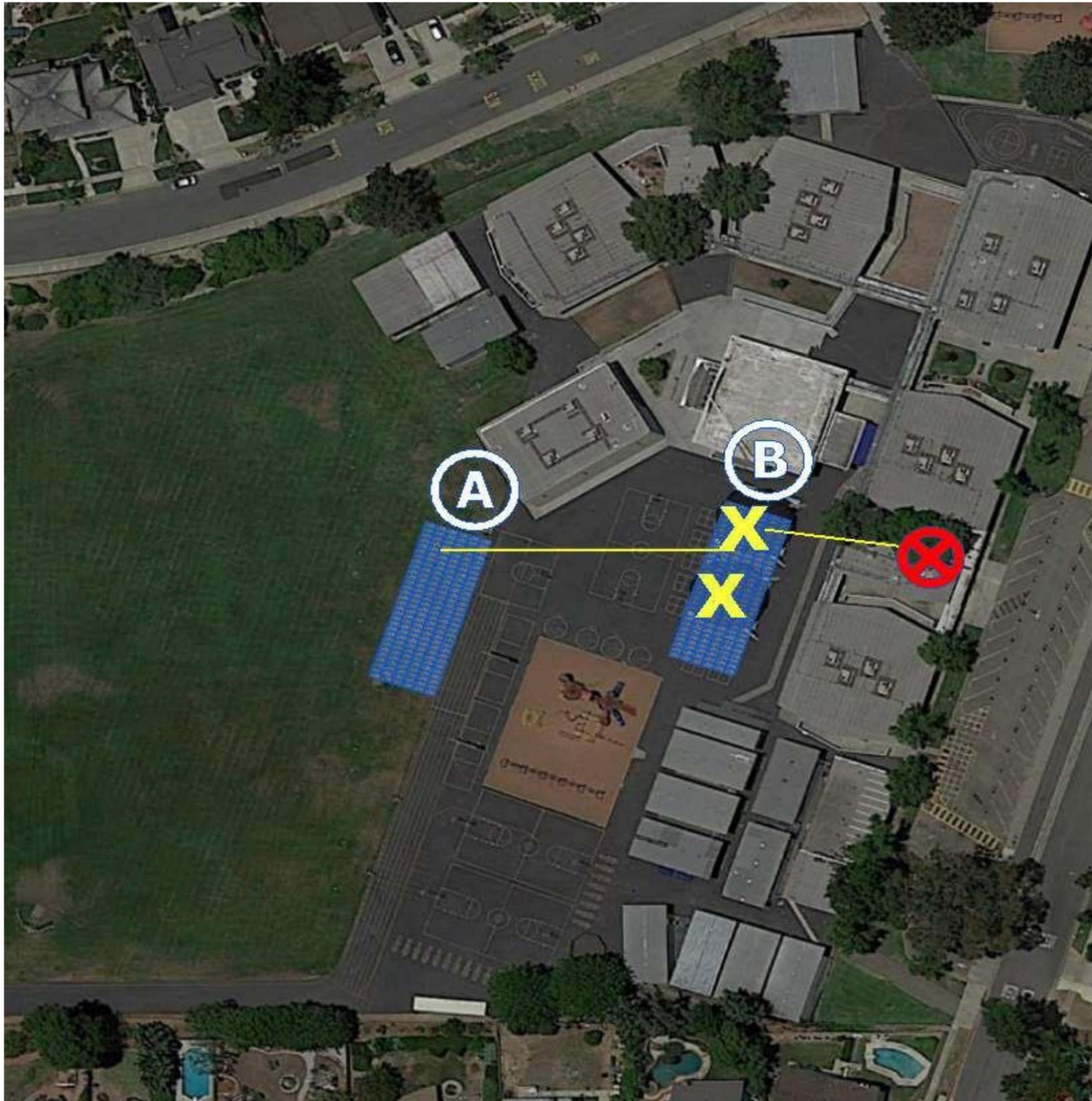
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Site Name:
 ROLLING HILLS ELEMENTARY SCHOOL

Project name:
 FULLERTON SCHOOL DISTRICT

Site Address:
 1460 ROLLING HILLS DR
 FULLERTON, CA 92835

Revision: S04
Date: 2/13/2019
Drawn by: SAP



SCHEMATIC LAYOUT OF PROPOSED SOLAR SYSTEM

TABLE OF SOLAR ARRAYS

Location ID	Racking Type	Modules in Rise	# of Modules	Size DC kW	Azimuth	Tilt
A	Elevated	6	180	69.300	109°	7°
B	Elevated	6	180	69.300	109°	7°
			360	138.600		

SUNSET LANE ELEMENTARY

TABLE OF UTILITY METERS	Meter Name	Meter Number	# of Modules	Size DC kW	Connected to Arrays
Location ID	Sunset Lane ES	V349N-003728	360	138.600	A,B

Arrays were designed assuming a crystalline silicon PV module of nominal power = 385W
 Total estimated conduit length = 258 ft

NOTES

1. Results of easement reports may affect final placement of solar arrays
2. Trees and/or other obstructions will have to be removed, trimmed or relocated
3. A detailed analysis of the effect of shade on the arrays has not been performed
4. A soil analysis has not been performed
5. It is assumed that the site is not in a designated flood plain
6. Arrays may be divided into 4,000sf sections with a 1' gap for earthquake safety

LEGEND

-  Solar Array
-  Point of Interconnection
-  Proposed Conduit Run
-  Tree to be removed. Final count may vary



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Site Name:
SUNSET LANE ELEMENTARY SCHOOL

Project name:
FULLERTON SCHOOL DISTRICT

Site Address:
 2030 SUNSET LN
 FULLERTON, CA 92833

Revision: S01
 Date: 3/7/2019
 Drawn by: PMS



SCHEMATIC LAYOUT OF PROPOSED SOLAR SYSTEM

TABLE OF SOLAR ARRAYS

Location ID	Racking Type	Modules in Rise	# of Modules	Size DC kW	Azimuth	Tilt
A	Elevated	6	126	48.510	180°	7°
B	Elevated	6	180	69.300	270°	7°
			306	117.810		

VALENCIA PARK ELEMENTARY

TABLE OF UTILITY METERS	Location ID	Meter Name	Meter Number	# of Modules	Size DC kW	Connected to Arrays
		Valencia Park ES	V349N-013636	306	117.810	A,B

Arrays were designed assuming a crystalline silicon PV module of nominal power = 385W
Total estimated conduit length = 445 ft

NOTES

1. Results of easement reports may affect final placement of solar arrays
2. Trees and/or other obstructions will have to be removed, trimmed or relocated
3. A detailed analysis of the effect of shade on the arrays has not been performed
4. A soil analysis has not been performed
5. It is assumed that the site is not in a designated flood plain
6. Arrays may be divided into 4,000sf sections with a 1' gap for earthquake safety

LEGEND

-  Solar Array
-  Point of Interconnection
-  Proposed Conduit Run
-  Tree to be removed. Final count may vary



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Site Name:
VALENCIA PARK ELEMENTARY SCHOOL

Project name:
FULLERTON SCHOOL DISTRICT

Site Address:
3441 W VALENCIA DR
FULLERTON, CA 92833

Revision: S02-L
Date: 2/12/2019
Drawn by: SAP



SCHEMATIC LAYOUT OF PROPOSED SOLAR SYSTEM

TABLE OF SOLAR ARRAYS

Location ID	Racking Type	Modules in Rise	# of Modules	Size DC kW	Azimuth	Tilt
A	Elevated	6	288	110.880	180°	7°
			288	110.880		

WOODCREST ELEMENTARY

TABLE OF UTILITY METERS	Meter Name	Meter Number	# of Modules	Size DC kW	Connected to Arrays
Location ID	Woodcrest ES 1	259000-039582	288	110.880	A

Arrays were designed assuming a crystalline silicon PV module of nominal power = 385W
 Total estimated conduit length = 437 ft

NOTES

1. Results of easement reports may affect final placement of solar arrays
2. Trees and/or other obstructions will have to be removed, trimmed or relocated
3. A detailed analysis of the effect of shade on the arrays has not been performed
4. A soil analysis has not been performed
5. It is assumed that the site is not in a designated flood plain
6. Arrays may be divided into 4,000sf sections with a 1' gap for earthquake safety

LEGEND

-  Solar Array
 -  Point of Interconnection
 -  Proposed Conduit Run
 -  Tree to be removed. Final count may vary
- 



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Site Name:
WOODCREST ELEMENTARY SCHOOL

Project name:
FULLERTON SCHOOL DISTRICT

Site Address:
455 W BAKER AVE
FULLERTON, CA 92832

Revision: S01-L
Date: 2/8/2019
Drawn by: SAP

Next Steps

1. Board approves placement locations
2. PFMG proceeds with applications and pre-construction
3. Construction