



To: Avondale Elementary School District #44
Attn: Doug Lightfoot
100 S. 3rd Ave.
Avondale, AZ 85323

From: EPS Group, Inc.
Kaley Buethe, PE
2045 S. Vineyard Ave., Ste. 101
Mesa, AZ 85210

Date: May 23, 2018

Re: Eliseo C. Felix Elementary School
Site Plan Memo

Mr. Lightfoot,

The purpose of this memo is to provide a brief analysis of the safety, circulation, parking and cost associated with the three preliminary site plan options previously presented.

Option #1 – Existing Drop-off/Pick-up & Parking Area

1. Safety: This option significantly increases the potential for accidents with students of the existing traffic pattern as it minimizes the number of instances where students will cross the path of vehicles. Additionally, this option minimizes the number of entrances onto the campus. The drop-off/pick-up lane for this option would remain at the front of the campus and in close proximity to the office, thus minimizing the additional staff that would be required to monitor operations. This option also
2. Circulation: While this option does provide the least amount of drop-off/pick-up queuing capacity (312-feet or approximately 16 vehicles) for the smallest number of vehicles, the location of the drop-off/pick-up makes it ideal for circulation as it puts it in close proximity to the parent/visitor parking. This option also minimizes the change from current traffic patterns, which would be especially problematic at the start of the school year. Additionally, this option minimizes the number of entrances onto the campus.
3. Parking: This option does reduce the number of parking spaces provided from 88 spaces to 82 spaces, however; in conversations with district staff, it is noted that the only time that parking is of concern is during school events and the existing parking is adequate for normal operations.
4. Cost: This option is the most costly of the three options. It is estimated that the cost to complete will be \$250,000±.
5. Misc.: It is important to note that this option provides an ideal opportunity to enhance and beautify the face of the school for this neighborhood, which would be almost entirely wasted with the other two alternatives.



Option #2 – New Drive from La Pasada to Central

1. Safety: From a safety perspective, this is the least preferred option. This option significantly increases the potential for accidents with students. Students often head straight to the playground/fields after they are dropped off. This option would create additional points of conflict as students cross the drive lane, thus increase the accident potential. The drop-off lane for this option would occur at the back of the campus and will require additional staff to monitor it, in addition to the staff that will be required at the front of the campus.
2. Circulation: The entrance into a site is where the biggest congestion occurs. With the entrance directly across the street from the parochial school, this option would increase the congestion along Pasada. In addition to the congestion with the adjacent school, this option would also be creating congestion for the current bus drop-off/pick-up. You always want to have traffic circulating so that the drop-off/pick-up occurs on the passenger side of the vehicle so that the students don't have to cross the path of the vehicle to get onto the sidewalk (similar to what you do with your bus drop-off/pick-up). In order to achieve this, traffic would have to enter the site from Pasada and then exit the site onto Central. This is a significant disruption to current traffic patterns and will cause some significant congestion, especially at the start of the school year. As Central is where the majority of congestion occurs, it is preferable to avoid the traffic exiting onto Central. Additionally, this option places parent/visitor parking further away from the drop-off/pick-up lane. This option does provide the greatest amount of drop-off/pick-up queuing capacity (472-feet or approximately 24 vehicles).
3. Parking: This option maintains the existing number of parking spaces.
4. Cost: It is estimated that the cost to complete will be \$150,000±.
5. Misc.: None.

Option #3 – New Drive from La Pasada to La Canada

1. Safety: While this option is a variation of Option #2, from a safety perspective, this is a dramatic improvement as it limits the potential for accidents with students. The drop-off lane for this option would still occur at the back of the campus and will require additional staff to monitor it, in addition to the staff that will be required at the front of the campus.
2. Circulation: This option would still place the entrance directly across the street from the parochial school and maintain the conflicts with the traffic from that school and with the current bus drop-off/pick-up it does avoid the traffic exiting onto Central. As with Option #2, this is a significant disruption to current traffic patterns and will cause some significant congestion, especially at the start of the school year. This option places parent/visitor parking the furthest away from the drop-off/pick-up lane. This option provides the greatest amount of drop-off/pick-up queuing capacity (332-feet or approximately 17 vehicles) compared to cost.
3. Parking: This option maintains the existing number of parking spaces.



- 4. Cost: It is estimated that the cost to complete will be \$120,000±.
- 5. Misc.: None.

Option #4 – New Drive from La Canada to Central

- 1. Safety: This option is a variation of Option #2 and presents the same safety concerns with the potential for accidents with students discussed in that option. The drop-off lane for this option would still occur at the back of the campus and will require additional staff to monitor it, in addition to the staff that will be required at the front of the campus.
- 2. Circulation: Similar to Option #2, the entrance is situated directly across the street from the Lattie Coor Elementary School and would increase the congestion along La Canada. Traffic would be entering from La Canada and exiting the site onto Central and would place traffic exiting the site where the greatest existing congestion occurs. This option would still be a significant disruption to current traffic patterns and will cause some significant congestion, especially at the start of the school year and places parent/visitor parking further away from the drop-off/pick-up lane. This option provides the greatest amount of drop-off/pick-up queuing capacity (361-feet or approximately 18 vehicles) compared to cost.
- 3. Parking: This option maintains the existing number of parking spaces.
- 4. Cost: It is estimated that the cost to complete will be \$150,000±.
- 5. Misc.: None.

Option #5 – New Drive from La Pasada to La Canada with La Canada Bus Drop Off

- 1. Safety: This option is a variation of Option #3 and presents the same safety benefits and concerns outlined in that option. One benefit that this option provides over Option #3 is that the two drop-off/pick-up areas have been combined and moved further away from the entrance to the site. This will provide vehicles a greater opportunity for queuing prior to dropping off or picking up students.
- 2. Circulation: This option provides slightly less drop-off/pick-up queuing capacity than Option #3 (269-feet or approximately 13 vehicles). This option also adds a new bus drop-off/pick-up lane directly off of La Canada Blvd.
- 3. Parking: This option maintains the existing number of parking spaces.
- 4. Cost: It is estimated that the cost to complete will be \$170,000±.
- 5. Misc.: None.



Option #6 – New Drive from La Pasada to La Canada with La Canada Bus Drop Off Exiting Through Current Parking Lot

1. Safety: This option is a variation of Option #3 and presents the same safety benefits and concerns outlined in that option. One benefit that this option provides over Option #3 is that the two drop-off/pick-up areas have been combined and moved further away from the entrance to the site. This will provide vehicles a greater opportunity for queuing prior to dropping off or picking up students. However, in this option the buses will exit through the current parking lot in front of the school.
2. Circulation: This option provides slightly less drop-off/pick-up queuing capacity than Option #3 (269-feet or approximately 13 vehicles). This option also adds a new bus drop-off/pick-up lane with an entrance directly off of La Canada Blvd. and the exit through the existing parking lot in front of the school. The available bus queuing for this option is 6 school buses.
3. Parking: This option maintains the existing number of parking spaces.
4. Cost: It is estimated that the cost to complete will be \$250,000±.
5. Misc.: None.

Option #7 – New Drive from La Pasada to La Canada with New Bus Drop Off Lane from La Canada to Central

1. Safety: This option is a variation of Options #3 and #4 and presents the same safety benefits and concerns outlined in those options. The parent drop-off lane for this option will occur at the back of the campus and the bus drop-off will occur at the north side of the building. These locations will require additional staff to monitor it, in addition to the staff that will be required at the front of the campus.
2. Circulation: This option provides a queuing capacity of 269-feet or approximately 13 vehicles and 277-feet or approximately 6 school buses. The parent drop-off would exit onto La Pasada and the bus drop-off would exit onto Central.
3. Parking: This option maintains the existing number of parking spaces.
4. Cost: It is estimated that the cost to complete will be \$260,000±.
5. Misc.: None.

Option #8 – New Drive from La Pasada to La Canada with New Bus Drop Off Lane from La Canada to Central Behind Softball Field

1. Safety: This option is a variation of Option #6 and presents the same safety benefits and concerns outlined in that option. However, in this option the buses will exit through a new driveway connection to Central Ave.
2. Circulation: This option provides a queuing capacity of 269-feet or approximately 13 vehicles and 287-feet or approximately 6 school buses. The parent drop-



off would exit onto La Pasada and the bus drop-off would exit onto Central.

- 3. Parking: This option maintains the existing number of parking spaces.
- 4. Cost: It is estimated that the cost to complete will be \$250,000±.
- 5. Misc.: The existing softball field will need to be relocated. There is enough room for a standard U10 softball field.

Option #9 – Existing Drop-off/Pick-up & Parking Area with New Drive from La Pasada to La Canada

- 1. Safety: This option is a variation of Options #1 and #3 and presents the same safety benefits and concerns outlined in those options.
- 2. Circulation: This option provides a queuing capacity of 312-feet or approximately 16 vehicles at the front of the building. This option also minimizes the change from current traffic patterns, which would be especially problematic at the start of the school year. This option also adds a queuing capacity of 269-feet or approximately 6 school at the rear of the building.
- 3. Parking: This option does reduce the number of parking spaces provided from 88 spaces to 82 spaces, however; in conversations with district staff, it is noted that the only time that parking is of concern is during school events and the existing parking is adequate for normal operations.
- 4. Cost: It is estimated that the cost to complete will be \$350,000±.
- 5. Misc.: None.

Please do not hesitate to contact me if you have any additional questions or comments.

Best Regards,

Kathryn K Bueth

Kaley Bueth, PE
EPS Group, Inc.

Cc: Project File



Eliseo Felix School

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PARKING COUNT
 EXIST: 88 SPACES
 PROPOSED: 82 SPACES

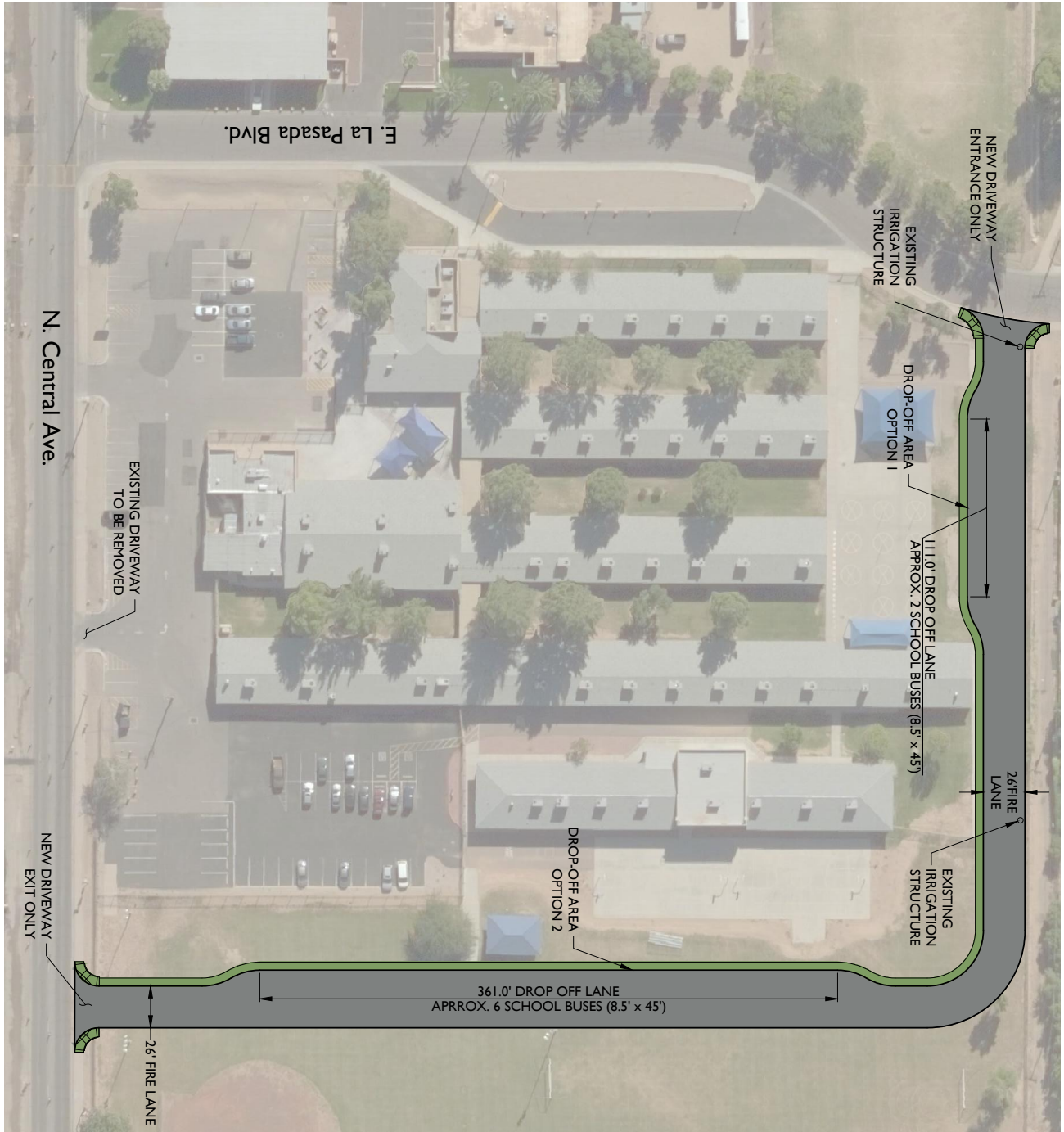
QUANTITIES

- +/- 5,185 SF OF PAVEMENT
- +/- 319 SF OF SW & RAMP
- +/- 826 SF OF LANDSCAPE



Eliseo Felix School

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QUANTITIES

- +/- 3,488 SF OF PAVEMENT
- +/- 579 SF OF SW & RAMPS



Eliseo Felix School

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QUANTITIES

- +/- 2,773 SF OF PAVEMENT
- +/- 389 SF OF SW & RAMPS



Eliseo Felix School

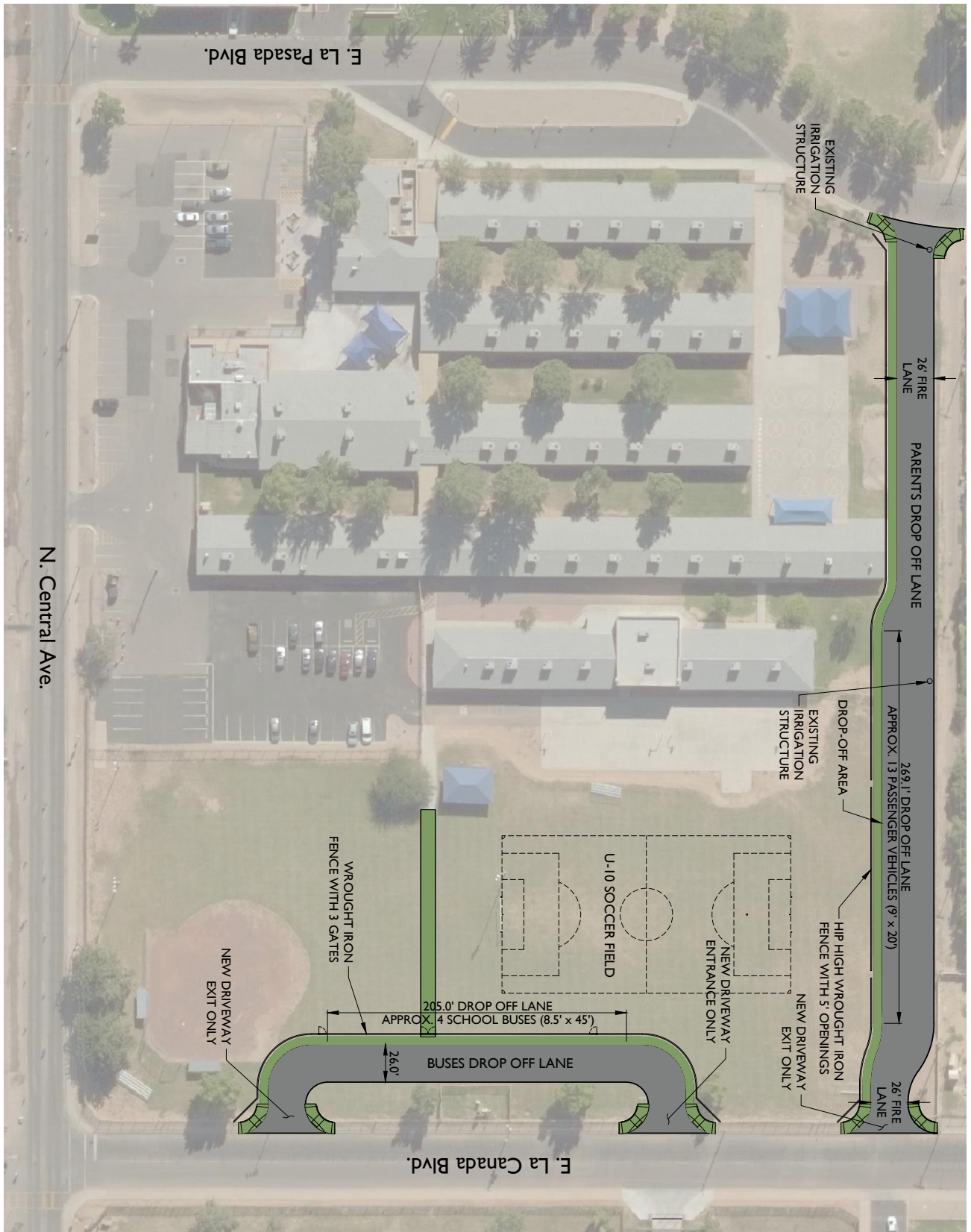
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QUANTITIES	
	+/- 2.711 SY OF PAVEMENT
	+/- 483 SY OF SW & RAHPS

Eliseo Felix School

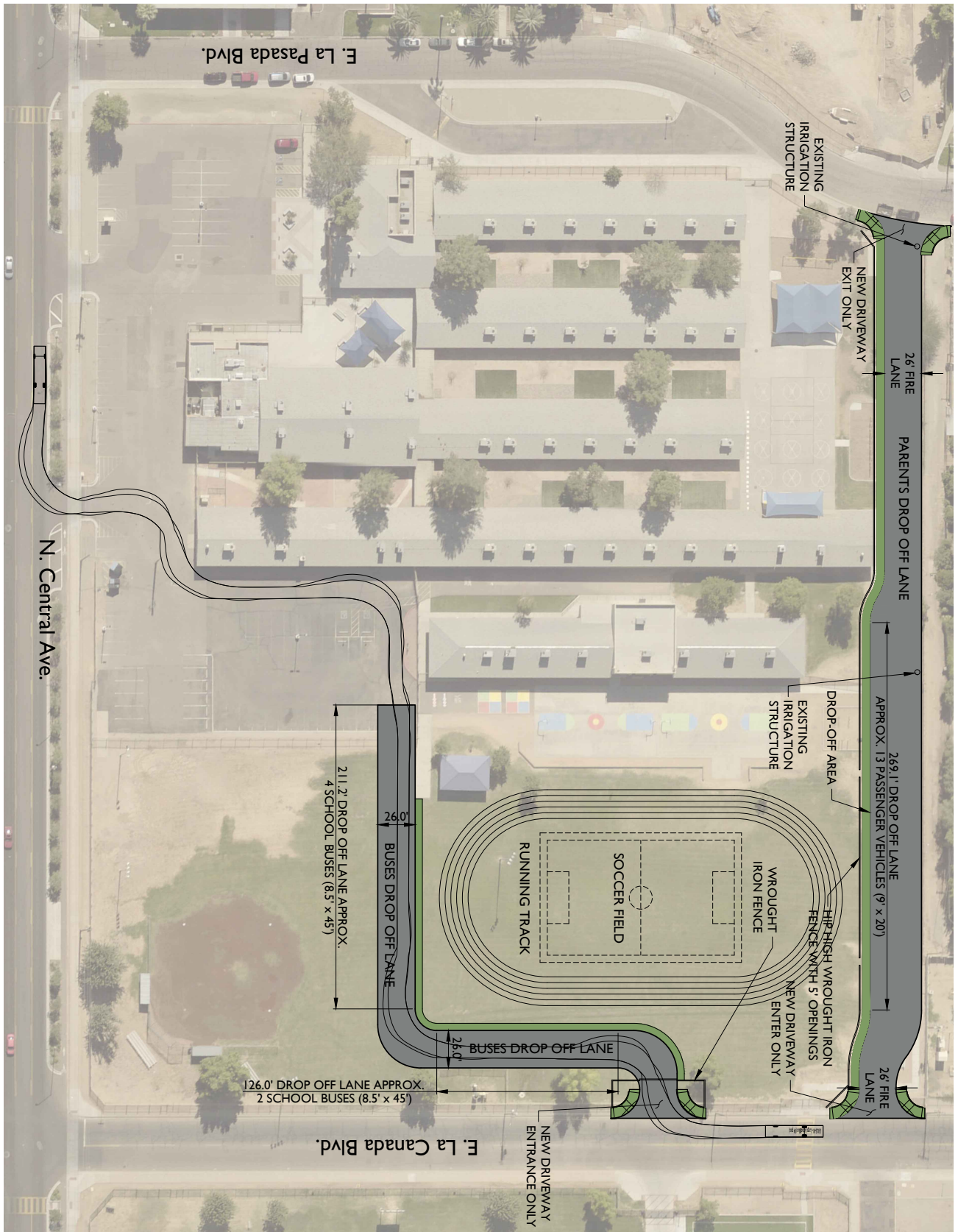
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QUANTITIES	
	+/- 3,233 SF OF PAVEMENT
	+/- 876 SF OF SW & RAMPS

Eliseo Felix School

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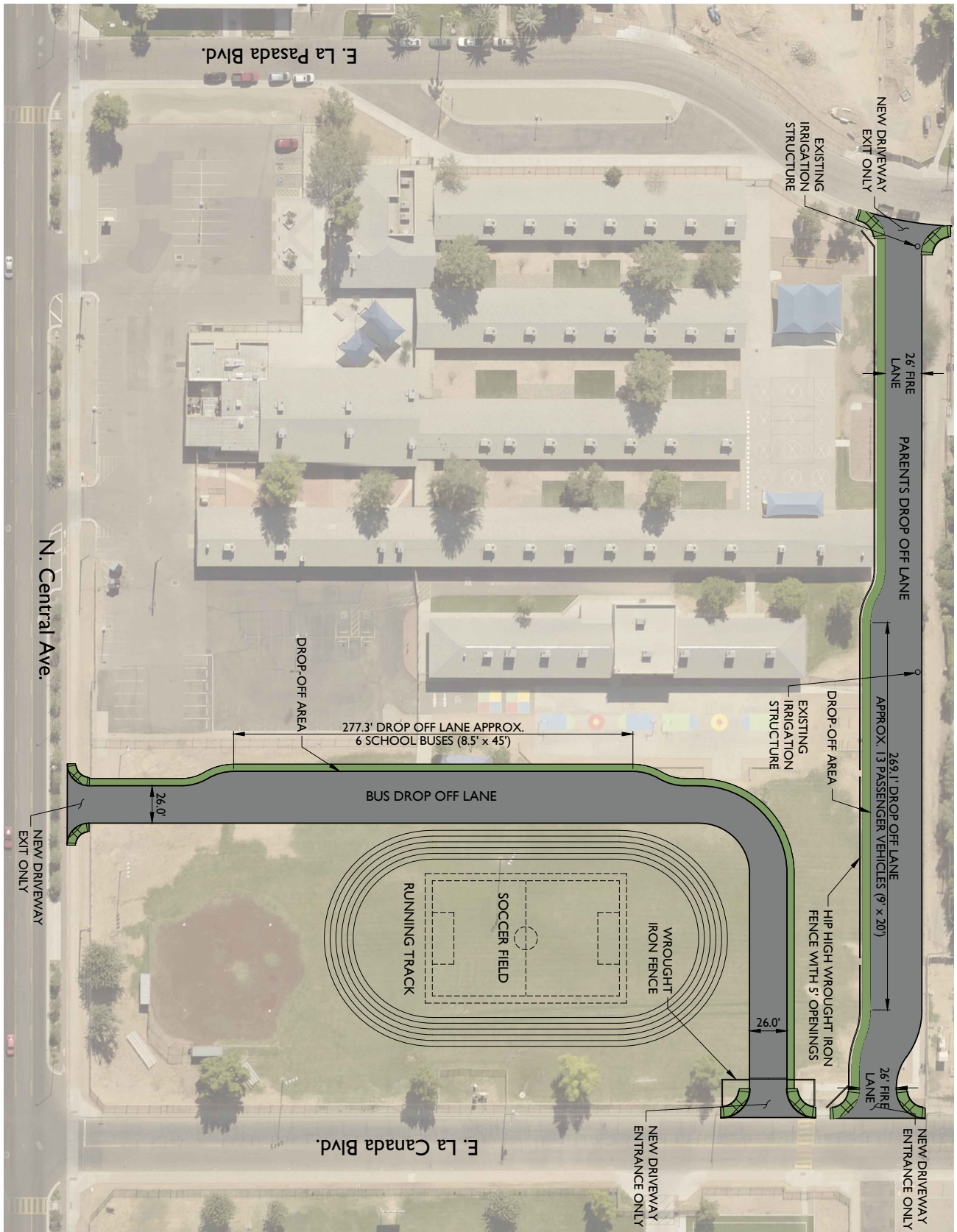
QUANTITIES

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- +/- 664 SF OF SW & RAMPS



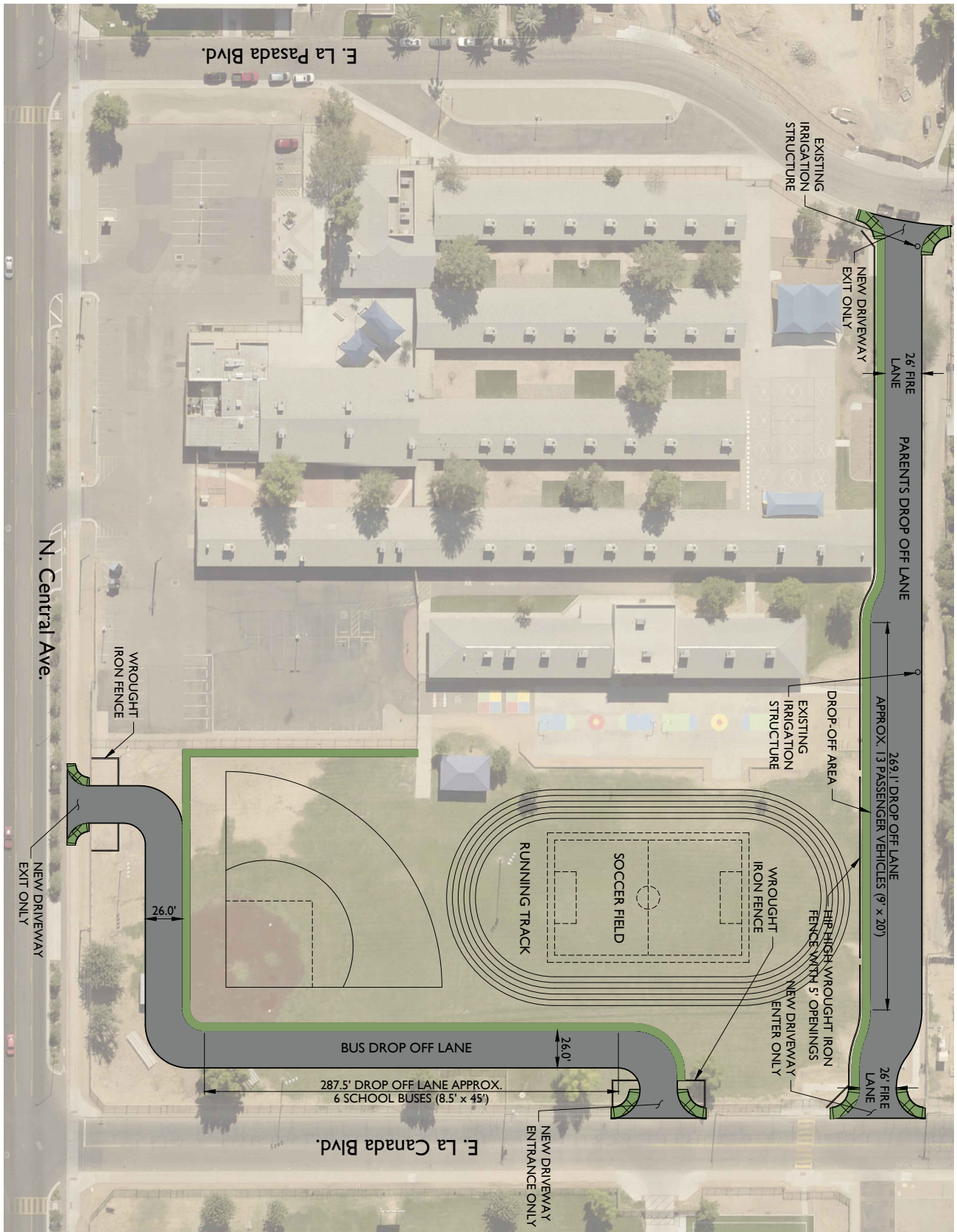
Eliseo Felix School

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Eliseo Felix School

May 21, 2018 3:59pm S:\Projects\2018\18-034\Planning\18-034 - Layout - Option 8.dwg



kbuethe May 21, 2018 2:45pm S:\Projects\2018\18-034\Planning\18-034 - Layout - Option 9.dwg



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Job No.
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EX09
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