

**BONITA SPRINGS, FLORIDA
COMMUNITY DEVELOPMENT DEPARTMENT
ZONING DIVISION
STAFF REPORT**

PROJECT NAME: DISCOVERY DAY ACADEMY

TYPE OF CASE: SPECIAL EXCEPTION

CASE NUMBER: SPE21-78485-BOS

HEARING DATE: JUNE 29, 2021

PLANNER: MARY ZIZZO, ESQ.

REQUEST AND STAFF RECOMMENDATION

A special exception request for a School, Noncommercial, Other use (Discovery Day Academy) within the Community Commercial (CC) zoning district.

I. APPLICATION SUMMARY:

A. Applicant: Elizabeth Anne Basart of Discovery Day Academy IV, Inc.

B. Agent: Morris-Depew Associates, Inc.

C. Property Owner: Isram Prado, LLC

D. Request: A special exception request for a School, Noncommercial, Other use (Discovery Day Academy) within the Community Commercial (CC) zoning district.

E. Location: 25355 S Tamiami Trail, Bonita Springs, FL 34135

F. Future Land Use Designation, Current Zoning and Use of Property:

Future Land Use: General Commercial

Current Zoning: Community Commercial (CC). U.S. 41 Overlay District.

Current Use: Commercial Plaza. Requested Building: Vacant Commercial.

G. Surrounding Land Use:

<u>Existing Zoning & Land Use</u>	<u>Future Land Use Map</u>
North: CC; Prado at Spring Creek Shopping Center- Restaurants, Strip Mall, Walgreens	General Commercial
East: CN-2, Vacant then Railroad	Public/Semi-Public
South: CN-2, Commercial Plazas and RM-6, San Mirage Condominium	General Commercial
West: Residential Planned Development (RPD), Pelican Landing Community	Moderate Density Mixed-Use/Planned PUD

Staff recommends **CONSIDERATION** of the Applicant’s requested special exception to allow the use of a noncommercial school, other, at 25355 S Tamiami Trail.

In the event that the Zoning Board desires to recommend approval, or the City of Bonita Springs City Council decides to approve the special exception request, the Staff submits that the conditions at the end of this Staff Report are deemed necessary for the protection of the health, safety, comfort, convenience or welfare of the general public, specifically the families of the proposed noncommercial school, other shopping center patrons, and the surrounding area.

II. BACKGROUND AND INFORMATIONAL ANALYSIS

Introduction/Synopsis

The special exception request is to permit Discovery Day Academy, a private K-5 school currently located in Estero, to relocate to the former jewelry retail building at 25355 S. Tamiami Trail within the Prado at Spring Creek shopping center.

The Applicant proposes to relocate a daycare for infants to preschool age with 40 children maximum to coexist with the proposed K-5 private school use. The daycare use is permitted by right.

The Applicant requests to enroll 72 students for the K-5 private school use. Pursuant to Land Development Code (LDC) Sec. 4-1970, noncommercial schools not permitted by right are required to obtain special exception approval. New elementary schools shall have access to local or collector streets, whenever possible and will not be approved which, in the opinion of the City Council, are proposed for locations that are exposed to physical constraints, hazards or nuisances which are detrimental to the health and safety of clients and to the general operation of the school.

The subject property is owned by Isram Prado, LLC, which currently has multiple restaurants, a movie theater, an ice cream shop and retail shops. The building the Applicant proposes to locate to was previously occupied by a jewelry retailer. The Applicant proposes to make significant

changes to convert this building into a two-story educational facility and install a play area on the eastern side of the building (Attachment A).

The Applicant has stated that this use will not generate more Average Daily Trips (ADT's) than the previous use. While this may be true, this does not address the traffic-safety concerns of Staff. The timing of generated trips is more important than the total number of trips created. This use generates half of all its trips in the morning when people are commuting to work, school, etc. or the "AM Peak". This will create conflicts and congestion at the intersection of Bernwood Parkway and Chamber of Commerce Drive. This congestion is in addition to the existing traffic generated by Spring Creek Elementary School. This congestion will have an impact on the U.S. 41 intersection. The two simplest solutions to this problem are to either not allow this use or to control the ingress and egress between Chamber of Commerce Drive and Bernwood Parkway. The Applicant attempted to address this by proposing blocking ingress and egress with cones at the drive at Chamber of Commerce temporarily twice a day. This approach is inappropriate for a variety of safety and legal concerns and Staff believes a permanent restriction is more appropriate.



Figure 1: Location Map

Source: Energov

Special Exception Review Criteria – LDC Sec. 4-131(c)(2)

Considerations. In reaching their decision, the zoning board must consider the following, whenever applicable:

- a. Whether there exist changed or changing conditions that make approval of the request appropriate.*
- b. The testimony of any applicant.*
- c. The recommendation of staff.*
- d. The testimony of the public.*
- e. Whether the request is consistent with the goals, objectives, policies and intent of the Bonita Plan.*
- f. Whether the request meets or exceeds all performance and locational standards set forth for the proposed use.*
- g. Whether the request will protect, conserve or preserve environmentally critical areas and natural resources.*
- h. Whether the request will be compatible with existing or planned uses.*
- i. Whether the request will cause damage, hazard, nuisance or other detriment to persons or property.*
- j. Whether a requested use will be in compliance with all general zoning provisions and supplemental regulations pertaining to the use set forth in this chapter.*

Reviewing these criteria, Staff makes the following findings:

- a. Whether there exist changed or changing conditions that make approval of the request appropriate.*

The Applicant states that COVID-19 has moved retail sales to internet sales, causing more commercial locations to be vacant. Staff does not find a vacant space to be a changed condition to make this request appropriate.

- d. The testimony of the public.*

At the first neighborhood meeting, concerns of traffic along Bernwood Parkway were presented, as it was voiced that traffic along the road already exists from the existing Spring Creek Elementary School. Concerns were also submitted regarding restricting new restaurants from obtaining alcohol licenses if this school is approved. No public notice responses were received at the time of this Staff Report publishing.

- e. Whether the request is consistent with the goals, objectives, policies and intent of the Bonita Plan.*

The property is located within the General Commercial future land use of the Bonita Plan. Appropriate uses include a wide range of commercial retail and service uses for residents, visitors and schools. Objective 1.11 requires redevelopment to occur in areas of the City with public facilities. The building is already connected to public facilities, will be renovated to current standards, and is consistent with Objective 1.11 of the Bonita Plan.

f. *Whether the request meets or exceeds all performance and locational standards set forth for the proposed use.*

The Applicant requests to install a play area on the eastern side of the building, along Bernwood Parkway and Chamber of Commerce Drive. The Applicant proposes to construct a 6-foot fence around this area. They intend to connect their sidewalk to the existing U.S. 41 sidewalk. Staff's opinion is that this does not adequately address all standards required to meet the intent of the U.S. 41 Overlay District.

Staff conditions that the play area be protected by an 8' wall landscaped to LDC standards. This condition serves multiple purposes. The first is to protect those children playing from potentially escaping and immediately entering a road. The second is to protect those inside from potential hazards on the exterior. This could be pedestrian or vehicular traffic that may potentially enter the site. Due to the proximity of and the number of major roads surrounding this property, Staff's opinion is that a wall has more structural integrity in the event of a collision at the site.

This location is within the U.S. 41 Overlay district. The intent of the U.S. 41 Overlay District is to guide future growth and redevelopment along U.S. 41 in a manner that maintains and enhances the aesthetic/visual quality of the corridor, makes efficient use of public infrastructure, protects existing neighborhoods, and balances automobile-oriented development patterns with the pedestrian realm. For this reason, the Applicant is required to connect the existing sidewalk at their proposed location to the one located along U.S. 41 for pedestrian connectivity. To further the commercial development intent and to prevent the expansion of a "strip" commercial development, as intended by the U.S. 41 Overlay District, the site will also be required to connect their existing sidewalk to the principal building sidewalk, approximately 280 linear feet away (*see* Figure 2). The Applicant is required to comply with the intent of all multimodal facility provisions within the LDC.



Figure 2: Internal Pedestrian Connection

Source: Energov

In addition, any required landscaping that is currently absent from or that is removed and/or irreparably damaged as a result of the proposed site improvements/alterations, must be reinstalled, re-established and/or replaced consistent with the site's previously approved development permits and all applicable LDC requirements, as appropriate. At time of local development order review or application, the Applicant shall provide a landscape plan consistent with the requirements of the LDC Sec. 3-414, as well as a site plan with drainage, landscaping, architectural and lighting plans, which shall be dark sky compliant.

Further conditioned, the site will require installation of a raised traffic separator at the intersection of Bernwood Parkway and Chamber of Commerce Drive permitting only westbound ingress and westbound egress to provide a safer intersection and to prevent traffic impacts due to the addition of this proposed use (see Figure 3).

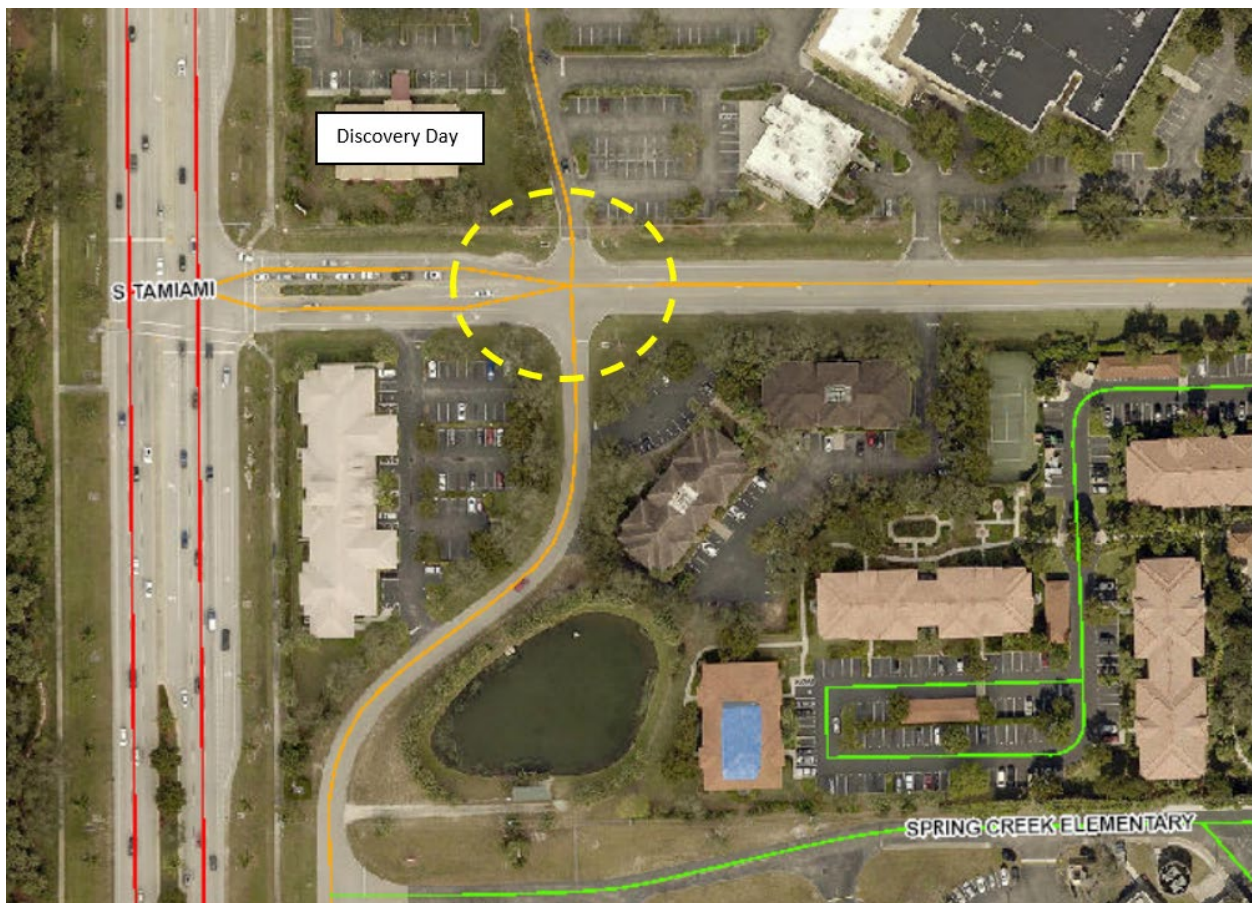


Figure 3: Intersection Map

Source: Energov

g. Whether the request will protect, conserve or preserve environmentally critical areas and natural resources.

There are no environmentally critical areas or natural resources at this site.

h. Whether the request will be compatible with existing or planned uses.

The proposed use is surrounded by commercial and residential uses. Residential uses are separated by the rights-of-ways of Bernwood Parkway and South Tamiami Trail. The proposed peak times of the school are different from those within the plaza. Those peak times are very similar to that of Spring Creek Elementary School south of Bernwood Parkway. Traffic in this area during these times is of concern. For that reason, the Applicant proposes to send all school traffic to the northern accessway or Timberwilde Drive, although the proposed implementation of it [one (1) staff post and cones], is not agreed to by Staff due to concept and the feasibility of compliance (Attachment B). The intent is to avoid impacts to the intersections of Bernwood Parkway at Chamber of Commerce Drive and at U.S. 41.

The Applicant also indicates that the families of the school may visit those commercial uses within the plaza, increasing patronage. This encourages the compatibility of this use within the existing plaza, coupled with the pedestrian connection from the proposed building to the principal sidewalk connection (*see* Figure 2).

Locating a school within this plaza may change the commercial nature of this plaza in that any new restaurants with outdoor seating requesting consumption on premises not already granted will require a special exception. Further, any existing restaurants with outdoor consumption on premises approval are permitted to continue their operations, unless the use ceases for 6-months or more.

i. Whether the request will cause damage, hazard, nuisance or other detriment to persons or property.

The Applicant states that the requested use is similar in location to other daycares and preschools within the City. Further, the Applicant indicates that all residential uses are separated by rights-of-ways and therefore the possibility of nuisance does not exist. However, should the conditions outlined below not be implemented, Staff believes the request may cause hazard, nuisance or other detriment to persons or property. The proposed play area is in proximity to three roads. As indicated in the Traffic Impact Statement submitted by the Applicant, the intersection of Bernwood Parkway and U.S. 41 is congested. An increase in traffic can be hazardous for local traffic, including the school buses from Spring Creek Elementary School or residents within San Mirage or Bonita Isles.

Further, the proposed AM and PM Queue Layout Plan (Attachment C) provided by the Applicant, if not implemented as conditioned, may cause a backup of traffic on Chamber of Commerce Drive, affecting the businesses currently present and patrons traveling through the plaza.

For these reasons, unless conditioned as outlined below, Staff believes the request may cause damage, hazard, nuisance or other detriment to persons or property.

j. *Whether a requested use will be in compliance with all general zoning provisions and supplemental regulations pertaining to the use set forth in this chapter.*

The Applicant has applied for a special exception, as required by LDC Sec. 4-1970. A narrative, site plan, traffic impact statement, traffic circulation plan and queuing plan were provided to support the request. The Applicant held the required neighborhood meetings prior to submitting the request, and again after the request was found sufficient by Staff. The request has been reviewed for compliance with the standards set forth in LDC Chapter Four and no deviations have been requested. Therefore, if approved, site development will be in accordance with the conditions outlined below and in accordance with LDC standards and the U.S. 41 Overlay District.

Surrounding Zoning

The proposed location of the school is within a commercial shopping center. The location is zoned Community Commercial (CC). The purpose and intent of the CC district is to permit the designation of suitable locations for medium to large-scale consumer-oriented commercial facilities, particularly for multiple-occupancy complexes known as community or regional shopping centers, and to facilitate their proper development and use. In addition to the retail sale of consumer goods, the district is intended to permit a wide range of services, financial and other, including business and professional offices, all arranged in discrete commercial centers or evolving business districts. Such centers or districts differ from neighborhood commercial facilities in concentrating a greater floor area of use and a broader mix of goods and services in order to serve a wider market or service area and a larger population. This is expected to create greater impact on surrounding land uses and therefore require buffering and designed gradients of intensity adjacent to less intense uses.

While the zoning is intended to permit a wide range of services, and the school service is for a fee, this use would be more appropriate in zoning districts such as CS-1 and CS-2 that provide separation and buffers between lower and medium intensity uses such as schools and higher-intensity commercial uses.

In addition, locating a school within this plaza may change the commercial nature of this plaza in that any new restaurants with outdoor seating requesting consumption on-premises not already granted will require a special exception. Further, any existing restaurants with outdoor consumption on premises approval are permitted to continue their operations, unless the use ceases for 6-months or more.

To encourage the site to function as part of the commercial plaza and to further the intent of the U.S. 41 Overlay District and the future land use, Staff recommends the condition that the building's sidewalk shall connect to the principal buildings of the plaza. In this case, the closest connection would be the restaurant sidewalk to the east (*see* Figure 2).

Neighborhood Compatibility

Surrounded by commercial and residential uses, the school has the ability to serve patrons who live in the surrounding area or those that frequent the businesses within the complex.

The Applicant proposes that this use will encourage or increase the patronage to the businesses within the plaza. As conditioned below, the sidewalk connection from the proposed building to the existing sidewalk to the east will encourage and facilitate that patronage (Figure 2).

Just south of the site is Spring Creek Elementary School, which has a capacity of 723 students. Spring Creek Elementary School is in session from 8:55 AM – 3:10 PM. The Applicant's proposed hours of operation are 8:30 AM- 3:20 PM pickup for grades K-2 and 3:30 PM pickup for grades 3-5.

The Applicant proposes their peak driving times will not conflict with the nearby school and will be different from those peak hours of the commercial plaza they propose to occupy. Staff still has concerns regarding traffic congestion and impacts of this proposed use. The conditions provided address these concerns by removing eastbound access to and from Chamber of Commerce Drive.

Environmental Considerations

The subject property has already been developed and impacted. There are no environmentally critical areas or natural resources located on site. Any future development will be in accordance with LDC standards.

Traffic

The proposed peak traffic times offered by the Applicant are 8:15-8:30 AM, for 8:30 AM start time and 3:10 – 3:30 PM, for 3:20 PM and 3:30 PM staggered release times. The daycare operates from 7:00 AM- 5:30 PM. According to the Applicant's TIS, the uses combined provide 114 trips in the AM peak hour and 78 trips in the PM peak hour. Staff notes that these traffic volumes may increase or decrease day to day and year to year as the number of children in each vehicle varies.

The Applicant purports that compared to many of the uses permitted in the zoning district by right, the requested use's increase in trips is de minimus. However, the intersection of Bernwood Parkway and Chamber of Commerce Drive/Elementary Way is very active during the AM peak hour. The Applicant proposes to use cones to close the north leg of the intersection at Bernwood Parkway and Chamber of Commerce Drive to prevent ingress and egress to/from the plaza via Bernwood Parkway during their peak arrival and dismissal times and detour school families and patrons to the northern internal accessway or the traffic light at Timberwilde Drive (Attachment C). Public Works does not agree with this method nor permit cones used within the public right-of-way as an appropriate traffic control device. Temporary closure of this driveway does not abate the problem unless the eastbound left-hand turn lane is also closed. The idea of temporarily closing this intersection twice a day would be confusing to the traveling public and would not further the interest of safety.

**DISCOVERY DAY STUDENT COUNT & ARRIVAL
AND DISMISSAL TIMES**

AGE GROUP / GRADE	NUMBER OF STUDENTS	ARRIVAL TIME	DISMISSAL TIME
INFANTS	4	7:00 - 8:00	4:00 - 5:30
ONES	6	7:00 - 8:00	4:00 - 5:30
TWOS	6	7:00 - 8:00	4:00 - 5:30
THREES	12	7:00 - 8:00	4:00 - 5:30
FOURS	12	7:00 - 8:00	4:00 - 5:30
KINDERGARTEN	12	8:30	3:20
FIRST	12	8:30	3:20
SECOND	12	8:30	3:20
THIRD	12	8:30	3:30
FOURTH	12	8:30	3:30
FIFTH	12	8:30	3:30

	DISCOVERY DAY	SPRING CREEK ELEMENTARY ⁽¹⁾
AM Time Window for Vehicles to Arrive at School	8:15 - 8:30	8:35 - 8:55
PM Time Window for Vehicles to Arrive at School	3:10 - 3:30	2:50 - 3:10

⁽¹⁾ Spring Creek Elementary Bell Times are 8:55 AM - 3:10 PM. Doors open at 8:25 AM and children are eligible for free breakfast.

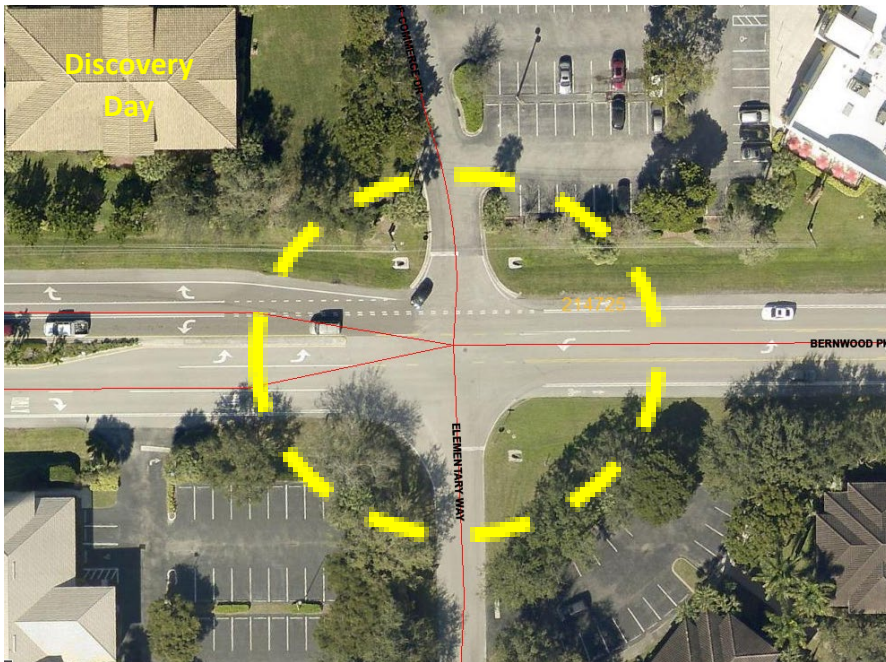


Figure 4: Intersection Map 2

Source: Lee County GIS

Staff could be in agreement with the proposed ingress and egress points to the North at the northern access point to the plaza and Timberwilde Drive; however, in the interest of safety for not only those patrons visiting but also those many students leaving Spring Creek Elementary School to the South and traffic approaching westbound, Staff recommends a condition that a traffic improvement be installed prior to occupancy, requiring a raised median that eliminates westbound ingress and egress into the plaza to provide for a right turn in and out movement only. The insertion of cones at a busy intersection, in Staff's opinion, will not provide the safety assurance that a permanent improvement will. Further, Public Works will not permit the obstruction within the public right-of-way.

Internal Site Functionality

The building has an immediate parking area with 67 spaces. The LDC requires one parking space per employee and one space per 40 students for the school use. The Applicant states they have 15 employees. The daycare use requires two spaces per employee in addition to adequate and safe provisions for loading and unloading of clients. Therefore, based on 15 employees for each use, 47 spaces are required for the two uses combined. Staff agrees that sufficient parking exists.

However, one major component of review for a school use is the pickup and drop off operations and the queuing lines. Functionally, queuing lines for the pickup operations should be accommodated entirely within a site. In this case, that would be the immediate parking area outside of the school. The Applicant provided a proposed AM and PM Queue Layout Plan indicating that 42 vehicles would need to be accommodated, which they propose via a double stacking operation, 32 in a stacked queue and 11 parking spaces if the queuing is filled (*see* Attachment C). The Applicant provides that there will be a Staff post at the entrance to the parking lot to direct exiting vehicles to turn left onto Chamber of Commerce Drive to avoid traffic from outflowing into Bernwood Parkway (Attachment B). This staff member would also be tasked with directing queuing vehicles into the overflow parking spaces if the queue fills up. In addition, another Staff post is proposed to be located at the awning and will manage students getting in and out of the vehicles during arrival and dismissal times. The Applicant indicates that those parents looking to enter the building during those times will wait in the queue line and then park in the overflow queuing spaces, half of which will then need to cross the traffic lanes to bring their children in or out.

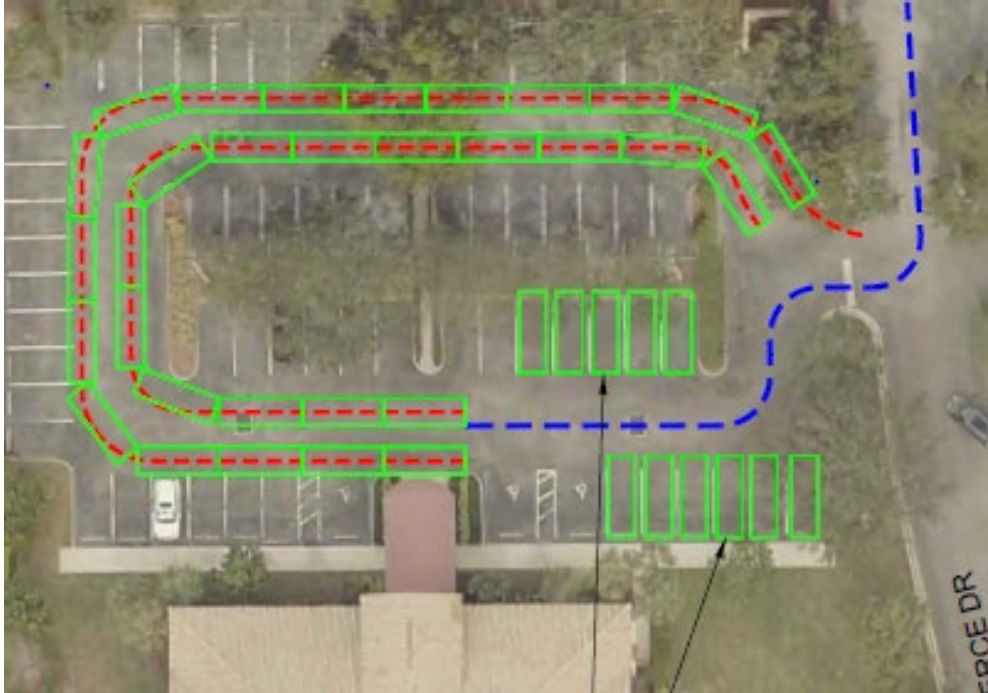


Figure 5: Applicant's Queue Layout Plan

Submitted: 6/10/2021

Staff has concerns regarding the ability of this operation to function according to the proposed plan. For this reason, Staff conditions that active monitoring occur, and should the operation not function according to the Traffic Circulation Plan and cause safety concerns or overflow onto Chamber of Commerce Drive after three documented observations, then this special exception shall return to City Council for reconsideration.

Comprehensive Plan Considerations

The subject property is located within the General Commercial future land use category according to the Future Land Use Map of the City's Comprehensive Plan. The General Commercial category is described in **Policy 1.1.14** as:

Policy 1.1.14 General Commercial – Intended to accommodate a wide range of commercial uses serving the general population of the City. This designation recognizes, but is not specifically limited to, properties that have been developed, have received development approval or have been zoned for commercial use prior to the adoption of the Comprehensive Plan.

- a. *Appropriate uses include a wide range of commercial retail and service uses for residents and visitors; hotels/motels; offices; light industrial uses; schools; recreation; public and semi-public uses; multi-family uses up to 10 units per acre within the approximately 1,468 gross acres land area in the land use category; and mixed residential and commercial use in planned developments.*
- b. *If affordable housing is provided, residential density may be increased by up to five additional units per acre.*

- c. *Maximum allowable height of structures shall be 75 feet from the base flood elevation to the eaves except that no new structures or modification of existing structures located on the islands west of the mainland may be constructed in excess of 35 feet in height.*
- d. *Nonresidential uses shall be limited to a maximum floor area ration (FAR) of 1.2*

The requested use of a Noncommercial School, Other use is consistent and compatible with the General Commercial future land use provisions in the City's Comprehensive Plan.

Findings & Conclusion

It is Staff's opinion that the special exception request for a new noncommercial school, other use is consistent with the provisions of the Comprehensive Plan. The proposed location may be compatible with existing uses but does present site plan challenges which can be addressed as set forth in the recommended conditions of approval. Based on the evidence presented, if the use functions as conditioned, it will not cause damage, hazard or nuisance, will not impact environmentally critical areas (none exist on the subject property), and is located in an area with adequate public facilities. If improvements are made as conditioned, the school will mitigate the current exposure to physical constraints, hazards or nuisances which are detrimental to the health and safety of students and to the general operation of the school. Staff deems the recommended conditions of approval necessary for the protection of the health, safety, comfort, convenience or welfare of the general public, specifically the families of the proposed noncommercial school, other shopping center patrons, and the surrounding area.

III. RECOMMENDATION:

Staff recommends **CONSIDERATION** of the Applicant's requested special exception to allow the use of a noncommercial school, other, at 25355 S Tamiami Trail. In the event that the Zoning Board desires to recommend approval, or the City of Bonita Springs City Council decides to approve the special exception request, the Staff submits that the following conditions be required and implemented as written to achieve functionality that Staff deems appropriate of the site for the proposed use:

1. This approval is for a special exception to allow the operation of a noncommercial school, other use located at 25355 S Tamiami Trail. This building is located at the southwestern corner of the Prado at Spring Creek Shopping Center (Attachment A). This use is limited to the requested user, Discovery Day Academy, only, and shall only allow for 72 students K-5, when in conjunction with the daycare use.
2. Any expansion beyond 40 daycare students or 72 elementary students will require additional approvals.
3. The hours of operation are limited to Monday-Friday only from 7:00 AM- 6:00 PM.
4. The intersection of Bernwood Parkway and Chamber of Commerce Drive shall be modified with a raised traffic separator at the intersection of Bernwood Parkway and Chamber of Commerce Drive, permitting only westbound ingress and westbound egress (right in, right out).
5. The proposed play area shall be enclosed with an 8' wall screened to LDC standards.

6. In accordance with the Traffic Circulation Plan (Plan) (Attachment B) provided by the Applicant, all school traffic shall enter and exit from the northern plaza access point or Timberwilde Drive only. The Applicant shall provide copies of the Plan to all parents or those designated to pick up or drop off the students. The Applicant shall provide sufficient staff to enforce and ensure the functionality of the Plan.
7. All traffic shall be managed entirely within the immediate parking lot of the school use. At no time shall vehicle queues extend onto public roadways, including Chamber of Commerce Drive, or block any access driveway to the parcel (Attachment C).
8. Staff Post #2 shall have a minimum of three employees posted at all times of pick up and drop off to assist in the pick-up and drop-off operations.
9. Should the operation not function according to the Traffic Circulation Plan attached or additional safety concerns arise from the implementation of the Plan, after three documented observations, then this special exception shall return to City Council for reconsideration (Attachment B).
10. Monitoring reports shall be provided annually on the anniversary date of this approval. This shall include a site functionality report, enrollment counts for the school and daycare uses, and bell schedules. Failure to timely provide this report provides for immediate revocation of this special exception. Requests for additional information shall be responded to within 14 business days.
11. An internal sidewalk from the requested site for the proposed use to the principal buildings shall be constructed to LDC standards by the first anniversary of this approval.

SUBJECT PROPERTY

The Applicant indicates the STRAP number is: 21-47-25-B2-03204.0000.

EXHIBITS

- A. Sketch and Legal Description of the Subject Property

ATTACHMENTS

- A. Proposed Site Plan
- B. Proposed Traffic Circulation Plan
- C. Proposed AM and PM Queue Layout Plans

EXHIBIT A

DESCRIPTION:
OUT PARCEL #1

A PORTION OF PARCEL 4, SPRING CREEK EAST UNIT TWO, AS RECORDED IN PLAT BOOK 62, PAGE 65, PUBLIC RECORDS OF LEE COUNTY, FLORIDA, LYING IN SECTION 21, TOWNSHIP 47 SOUTH, RANGE 25 EAST, LEE COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHEAST CORNER OF SECTION 21, TOWNSHIP 47 SOUTH, RANGE 25 EAST, LEE COUNTY, FLORIDA; THENCE RUN S.89°16'54"W., ALONG THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 21, FOR 1146.01 FEET TO THE EASTERLY RIGHT-OF-WAY LINE OF U.S. HIGHWAY 41 (TAMIAMI TRAIL); THENCE RUN S.00°06'41"E., ALONG SAID EASTERLY RIGHT-OF-WAY LINE, FOR 1719.96 FEET TO THE POINT OF BEGINNING; THENCE CONTINUE S.00°06'41"E., ALONG SAID EASTERLY RIGHT-OF-WAY LINE, FOR 279.50 FEET TO THE SOUTHWESTERLY CORNER OF SAID PARCEL 4; THENCE N.89°53'19"E ALONG THE NORTH LINE OF TRACT "A", FOR 265.95 FEET TO A POINT ON A CIRCULAR CURVE, CONCAVE WESTERLY, WHOSE RADIUS POINT BEARS S.88°23'18"E. FOR A DISTANCE OF 186.00 FEET THEREFROM; THENCE RUN NORTHERLY, ALONG THE ARC OF SAID CURVE TO THE LEFT, HAVING A RADIUS OF 186.00 FEET, THROUGH A CENTRAL ANGLE OF 15°40'01", CHORD BEARING OF N.09°26'40"W. FOR 50.70 FEET, ARC 50.86 FEET TO A POINT OF REVERSE CURVE; THENCE RUN NORTHERLY, ALONG THE ARC OF SAID CURVE TO THE RIGHT, HAVING A RADIUS OF 814.00 FEET, THROUGH A CENTRAL ANGLE OF 16°39'56", CHORD BEARING OF N.09°04'24"W. FOR 232.31 FEET, ARC 233.10 FEET; THENCE RUN S.89°53'19"W. FOR 221.54 FEET TO THE POINT OF BEGINNING.

CONTAINING 1.50 ACRES, MORE OR LESS. .

SURVEY NOTES:

THE DESCRIPTION SHOWN HEREON IS NEW.
 SKETCH PREPARED IN ACCORDANCE WITH THE STATE OF FLORIDA'S STANDARDS OF PRACTICE FOR SURVEYING, RULE 5J-17 F.A.C.
 ORIENTATION BASED ON THE WESTERLY RIGHT-OF-WAY LINE OF TAMIAMI TRAIL, AS BEARING S.00°06'41"W. AS PLATTED WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OR ELECTRONIC SIGNATURE AND SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER, THIS MAP IS NOT VALID.
 THIS IS NOT A SURVEY!

 Digitally signed by
 Thomas M. Rooks Jr.
 Date: 2021.02.10
 18:26:47 -05'00'

PREPARED BY:

THOMAS M. ROOKS JR., P.S.M. DATE
 FLORIDA CERTIFICATE NO. 6347

PROJECT:
**DISCOVERY DAY
 ACADEMY**

LOCATION:
**SECTION 21 AND 22,
 T. 47 S., R. 25 E.,
 LEE COUNTY, FLORIDA**

CONSULTANT:

**MORRIS
 DEPEW**
 ENGINEERS • PLANNERS • SURVEYORS
 LANDSCAPE ARCHITECTS
 FL. CA. NO. 6632 / FL. CERT. NO. LB6891 / LC26000330

Fort Myers
 2914 Cleveland Avenue
 Fort Myers, Florida 33901
 (239) 337-3693
 Fax: (239) 337-3994
 Toll free: 866-337-7341

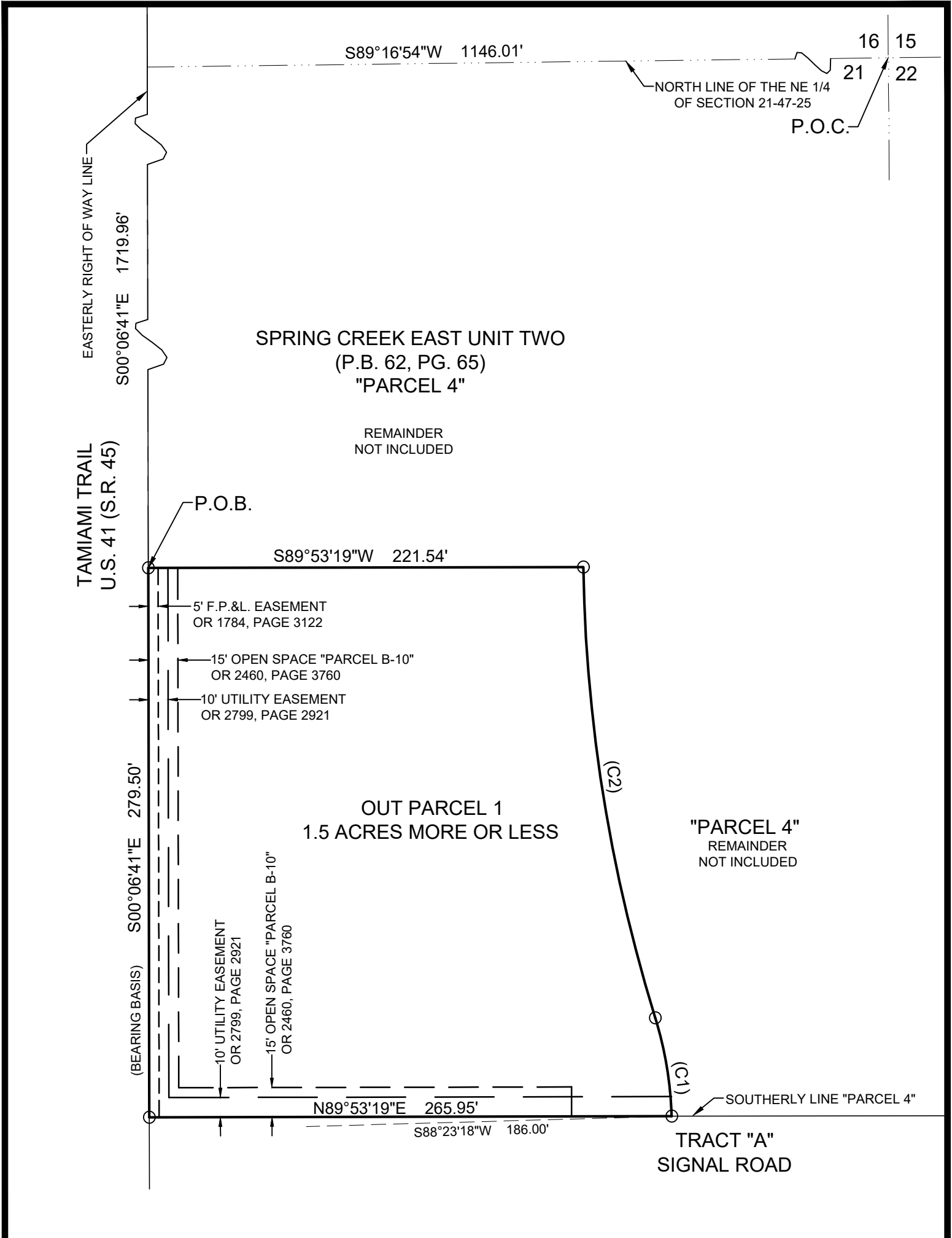
Tallahassee **Destin**
 113 South Monroe Street 5597 Highway 98
 1st Floor Unit 201
 Tallahassee, Florida 32301 Santa Rosa Beach, Florida 32459
 Toll free: 866-337-7341 Toll free: 866-337-7341

CLIENT:
 **DISCOVERY
 DAY ACADEMY**

Page 15

PROJECT MANAGER: TMR
 DRAWING BY: TAB
 JURISDICTION: CITY OF BONITA SPRINGS
 DATE: 02-10-2021
 SHEET TITLE:
**SKETCH AND
 DESCRIPTION**

SHEET NUMBER: 1 OF 2
 JOB/FILE NUMBER: 21010



CURVE	RADIUS	C.A.	CHD B.	CHD	ARC
C1	186.00'	15°40'01"	N 09°26'40" W	50.70'	50.86'
C2	814.00'	16°39'56"	N 09°04'24" W	232.31'	233.10'

PROJECT:
DISCOVERY DAY
ACADEMY

LOCATION:
SECTION 21 AND 22,
T. 47 S., R. 25 E.,
LEE COUNTY, FLORIDA

CONSULTANT:

ENGINEERS • PLANNERS • SURVEYORS
LANDSCAPE ARCHITECTS

FL CA NO. 6532 / FL CERT NO. 1B6891 / LC26000330

Fort Myers
2914 Cleveland Avenue
Fort Myers, Florida 33901
(239) 337-9998
Fax: (239) 337-9994
Toll free: 866-337-7341

Tallahassee
113 South Monroe Street
Tallahassee, Florida 32301
Toll free: 866-337-7341

Destin
5597 Highway 98
Unit 201
Santa Rosa Beach, Florida 32459
Toll free: 866-337-7341

CLIENT:

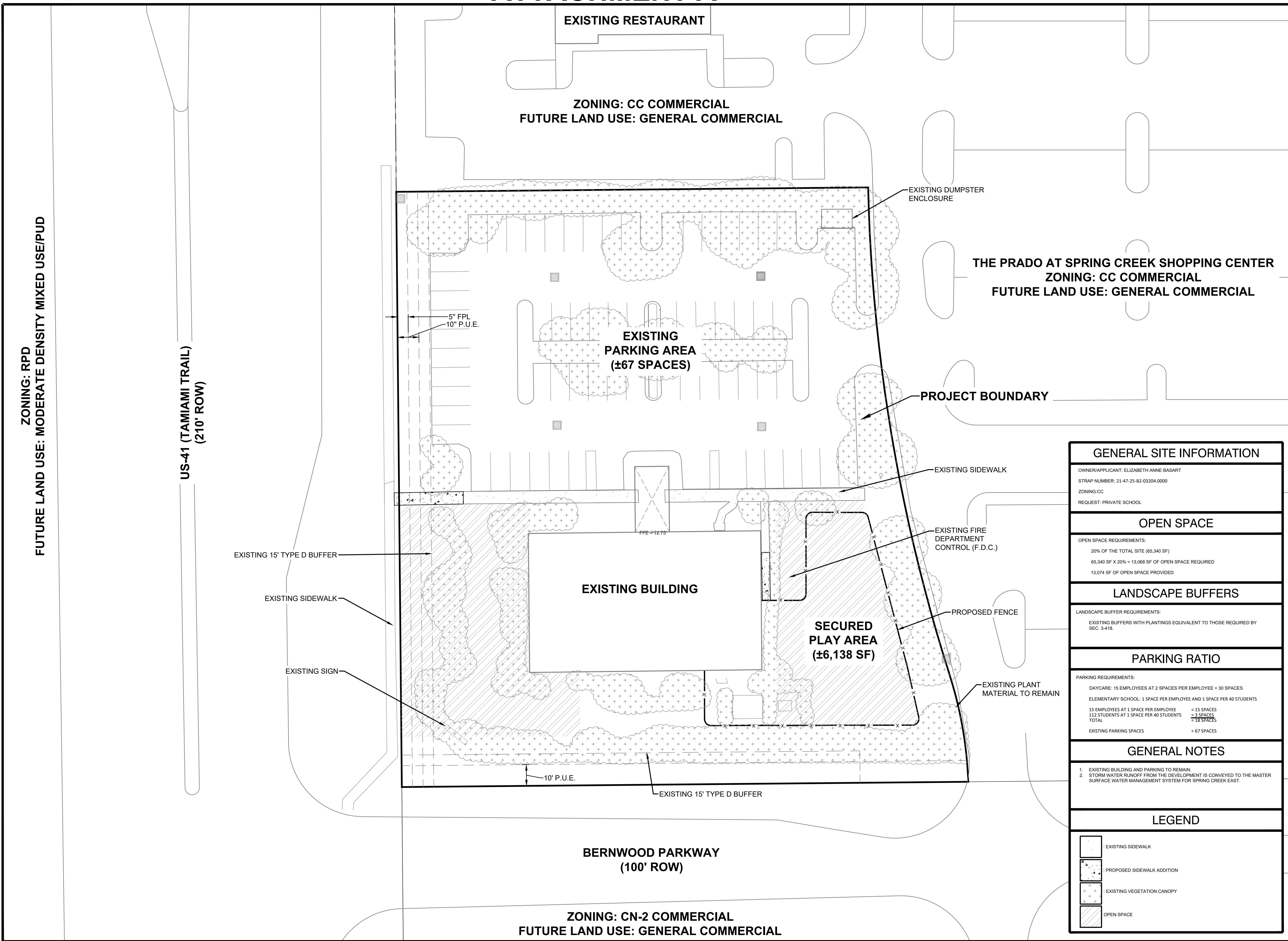
DISCOVERY DAY ACADEMY

Page 16

PROJECT MANAGER:	TMR
DRAWING BY:	TAB
JURISDICTION:	CITY OF BONITA SPRINGS
DATE:	02-10-2021
SHEET TITLE:	SKETCH AND DESCRIPTION
SHEET NUMBER:	2 OF 2
JOB/FILE NUMBER:	21010

© COPYRIGHT MORRIS-DEPEW ASSOCIATES, INC. 2021 ALL RIGHTS RESERVED I:\21010 - Discovery Day Academy Bonita\Plans\21010-Sketch-Desc_outparcel.dwg <SKET-DESC> - Feb 10 2021 03:43:46 pm PLOTTED BY: bhanley

ATTACHMENT A



PROJECT:
DISCOVERY DAY ACADEMY

LOCATION:
25355 SOUTH TAMAMIAMI TRAIL
BONITA SPRINGS, FL 34134

CLIENT:
 DISCOVERY DAY ACADEMY

CONSULTANT:
 MORRIS DEPEUW
ENGINEERS • PLANNERS • SURVEYORS
LANDSCAPE ARCHITECTS
FL CA NO. 6532 / FL CERT NO. LB6891 / LC26000330

Fort Myers
2914 Cleveland Avenue
Fort Myers, Florida 33901
(239) 337-3993
Fax: (239) 337-3994
Toll free: 866-337-7341

Tallahassee
113 South Monroe Street
1st Floor
Tallahassee, Florida 32301
Toll free: 866-337-7341

Destin
5597 Highway 98
Unit 201
Santa Rosa Beach, Florida 32459
Toll free: 866-337-7341

GENERAL SITE INFORMATION	
OWNER/APPLICANT: ELIZABETH ANNE BASART	
STRAP NUMBER: 21-47-25-82-03204.0000	
ZONING: CC	
REQUEST: PRIVATE SCHOOL	
OPEN SPACE	
OPEN SPACE REQUIREMENTS:	
20% OF THE TOTAL SITE (65,340 SF)	
65,340 SF X 20% = 13,068 SF OF OPEN SPACE REQUIRED	
13,074 SF OF OPEN SPACE PROVIDED	
LANDSCAPE BUFFERS	
LANDSCAPE BUFFER REQUIREMENTS:	
EXISTING BUFFERS WITH PLANTINGS EQUIVALENT TO THOSE REQUIRED BY SEC. 3-418.	
PARKING RATIO	
PARKING REQUIREMENTS:	
DAYCARE: 15 EMPLOYEES AT 2 SPACES PER EMPLOYEE = 30 SPACES	
ELEMENTARY SCHOOL: 1 SPACE PER EMPLOYEE AND 1 SPACE PER 40 STUDENTS	
15 EMPLOYEES AT 1 SPACE PER EMPLOYEE = 15 SPACES	
112 STUDENTS AT 1 SPACE PER 40 STUDENTS = 3 SPACES	
TOTAL = 18 SPACES	
EXISTING PARKING SPACES = 67 SPACES	
GENERAL NOTES	
1. EXISTING BUILDING AND PARKING TO REMAIN.	
2. STORM WATER RUNOFF FROM THE DEVELOPMENT IS CONVEYED TO THE MASTER SURFACE WATER MANAGEMENT SYSTEM FOR SPRING CREEK EAST.	
LEGEND	
	EXISTING SIDEWALK
	PROPOSED SIDEWALK ADDITION
	EXISTING VEGETATION CANOPY
	OPEN SPACE

REVISIONS	DATE

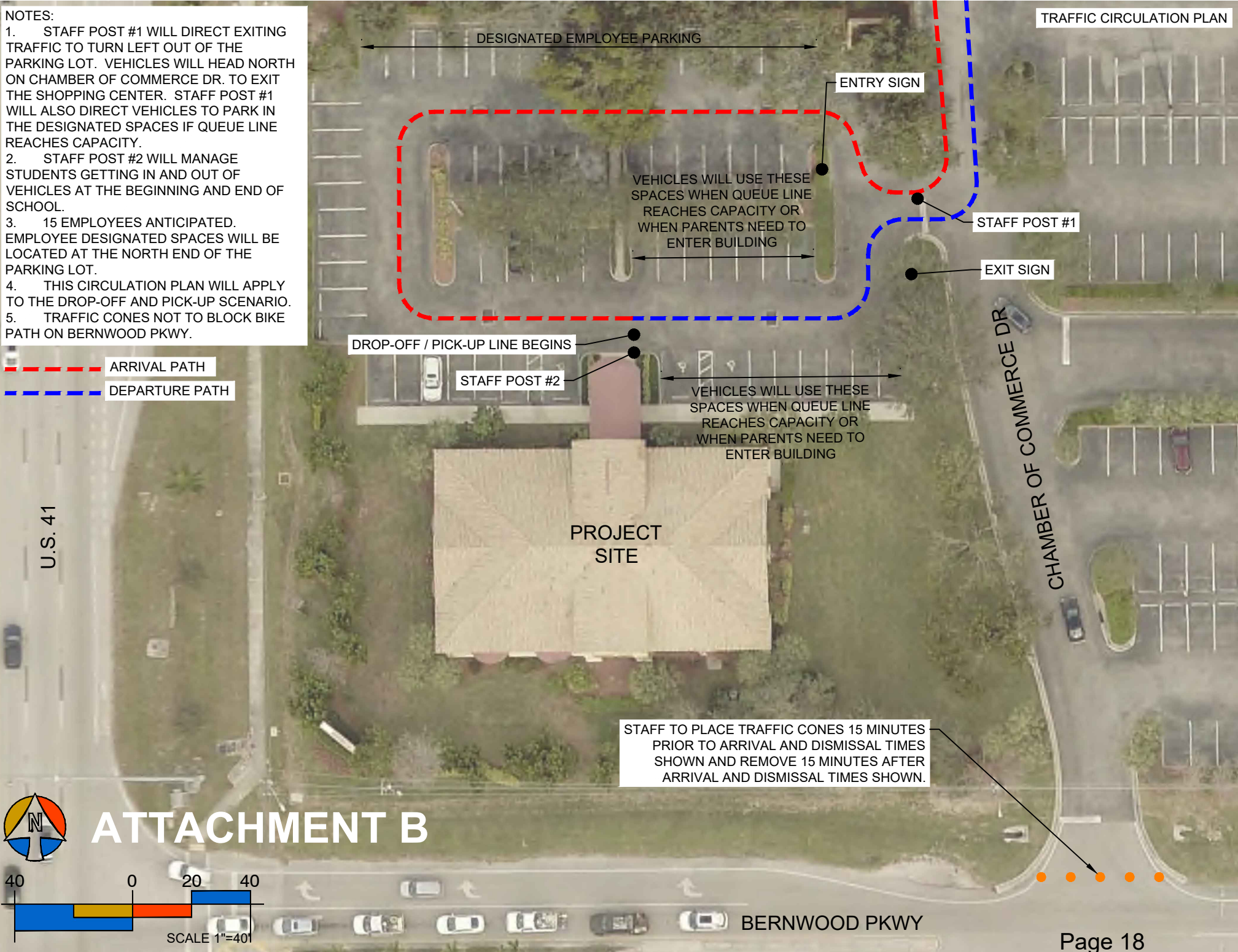
PROJECT MANAGER: HMU
DRAWING BY: TDM
JURISDICTION: BONITA SPRINGS
DATE: 4/22/2021
SHEET TITLE:

CONCEPTUAL SITE PLAN IV-G

SHEET NUMBER: C-100

JOB/FILE NUMBER: 21010-00

- NOTES:**
1. STAFF POST #1 WILL DIRECT EXITING TRAFFIC TO TURN LEFT OUT OF THE PARKING LOT. VEHICLES WILL HEAD NORTH ON CHAMBER OF COMMERCE DR. TO EXIT THE SHOPPING CENTER. STAFF POST #1 WILL ALSO DIRECT VEHICLES TO PARK IN THE DESIGNATED SPACES IF QUEUE LINE REACHES CAPACITY.
 2. STAFF POST #2 WILL MANAGE STUDENTS GETTING IN AND OUT OF VEHICLES AT THE BEGINNING AND END OF SCHOOL.
 3. 15 EMPLOYEES ANTICIPATED. EMPLOYEE DESIGNATED SPACES WILL BE LOCATED AT THE NORTH END OF THE PARKING LOT.
 4. THIS CIRCULATION PLAN WILL APPLY TO THE DROP-OFF AND PICK-UP SCENARIO.
 5. TRAFFIC CONES NOT TO BLOCK BIKE PATH ON BERNWOOD PKWY.



ATTACHMENT B

ASSUMPTIONS:

1. PER CORRESPONDENCE WITH FOUNDER OF DISCOVERY DAY ACADEMY, ELIZABETH BASART, THE FOLLOWING INFORMATION IS USED FOR THE PURPOSE OF THIS TRAFFIC ANALYSIS:
 - 1.1. THE DRIVE AISLES IN THE EXISTING PARKING LOT WILL SERVE AS A PARENT PICK UP / DROP OFF LINE
 - 1.2. EACH VEHICLE TAKES 30 SECONDS TO LOAD/UNLOAD STUDENTS
2. DIMENSIONS PER VEHICLE = 20'L X 6.5"W

- - - - - AVAILABLE STORAGE LENGTH (671')
- - - - - DEPARTURE PATH
- ▭ 20'L X 6.5"W VEHICLE (42 TOTAL)

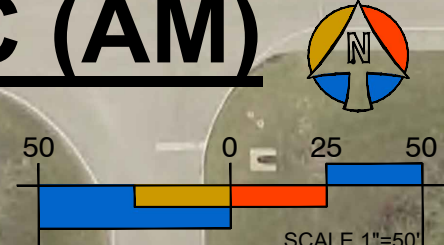
IF QUEUING LINE REACHES CAPACITY, STAFF WILL DIRECT VEHICLES TO UTILIZE THESE EXISTING PARKING SPACES

ATTACHMENT C (AM)

NOTES:

1. THIS GRAPHIC REPRESENTS A WORST-CASE SCENARIO.
2. LONGEST VEHICLE QUEUE = 42 VEHICLES.
3. THE PARKING LOT CAN ACCOMMODATE 31 VEHICLES FOR STACKED QUEUING IN THE DRIVE AISLE.
4. THE REMAINING 11 VEHICLES WILL UTILIZE THE EXISTING PARKING SPACES SHOWN TO DROP OFF STUDENTS.

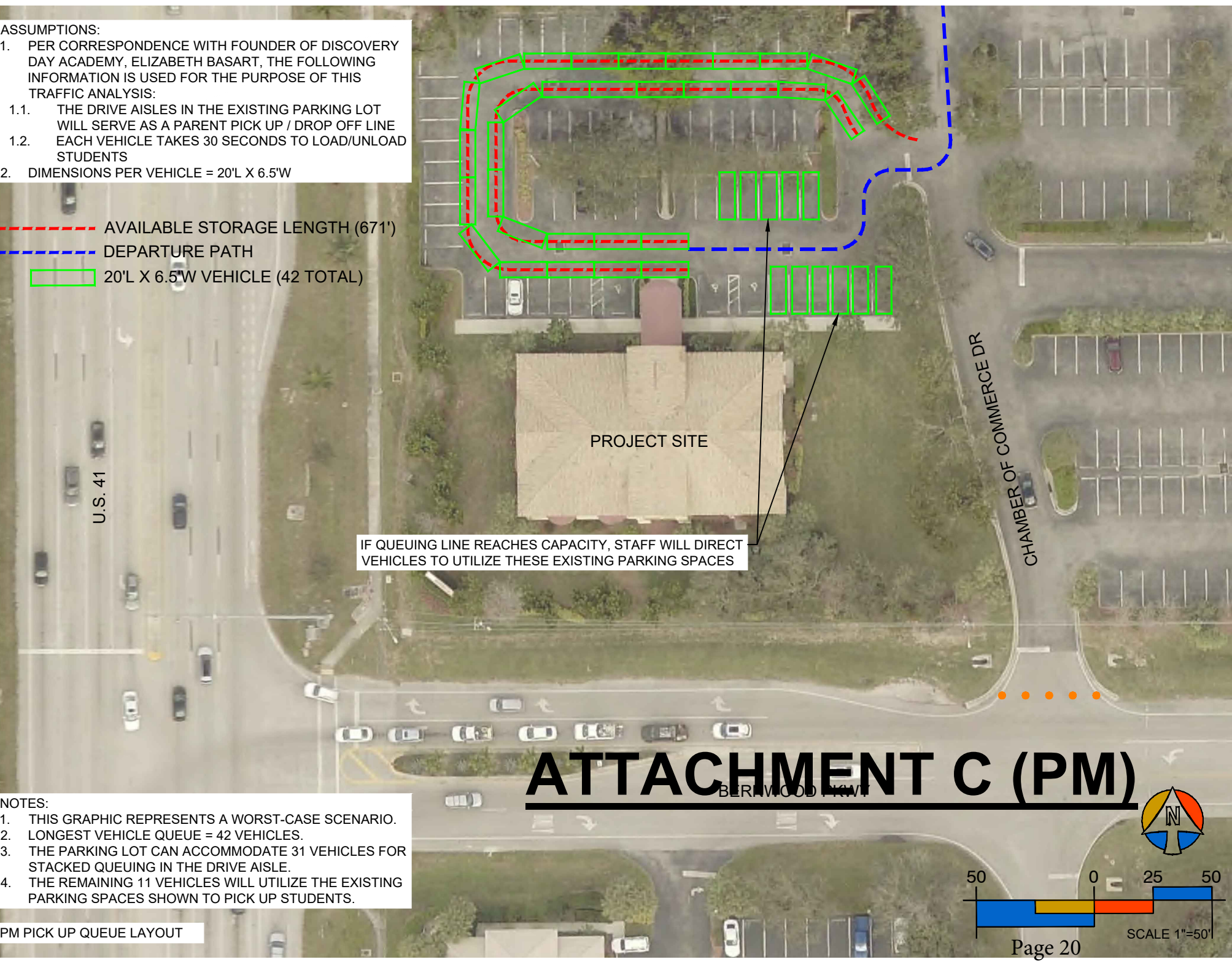
AM DROP OFF QUEUE LAYOUT



ASSUMPTIONS:

1. PER CORRESPONDENCE WITH FOUNDER OF DISCOVERY DAY ACADEMY, ELIZABETH BASART, THE FOLLOWING INFORMATION IS USED FOR THE PURPOSE OF THIS TRAFFIC ANALYSIS:
 - 1.1. THE DRIVE AISLES IN THE EXISTING PARKING LOT WILL SERVE AS A PARENT PICK UP / DROP OFF LINE
 - 1.2. EACH VEHICLE TAKES 30 SECONDS TO LOAD/UNLOAD STUDENTS
2. DIMENSIONS PER VEHICLE = 20'L X 6.5'W

-  AVAILABLE STORAGE LENGTH (671')
-  DEPARTURE PATH
-  20'L X 6.5'W VEHICLE (42 TOTAL)



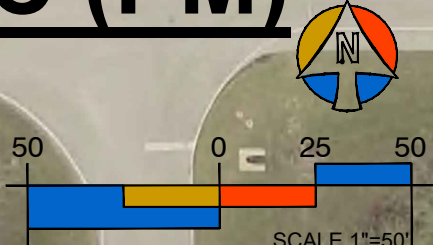
IF QUEUING LINE REACHES CAPACITY, STAFF WILL DIRECT VEHICLES TO UTILIZE THESE EXISTING PARKING SPACES

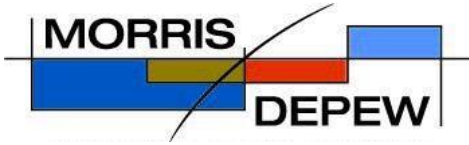
ATTACHMENT C (PM)

NOTES:

1. THIS GRAPHIC REPRESENTS A WORST-CASE SCENARIO.
2. LONGEST VEHICLE QUEUE = 42 VEHICLES.
3. THE PARKING LOT CAN ACCOMMODATE 31 VEHICLES FOR STACKED QUEUING IN THE DRIVE AISLE.
4. THE REMAINING 11 VEHICLES WILL UTILIZE THE EXISTING PARKING SPACES SHOWN TO PICK UP STUDENTS.

PM PICK UP QUEUE LAYOUT





MORRIS-DEPEW ASSOCIATES, INC.
 ENGINEERS • PLANNERS • SURVEYORS
 LANDSCAPE ARCHITECTS
 2914 Cleveland Avenue
 Fort Myers, FL 33901
 (239) 337-3993 Office • (239) 337-3994 Fax
 #LC26000330

LETTER OF TRANSMITTAL

TO: Bonita Springs Community Development Department 9200 Bonita Beach Road, Suite 109 Bonita Springs, FL 34135	
DATE: March 9, 2021	MDA PROJECT NO.: 21010
ATTENTION: Ms. Jacqueline Toemmes Genson, AICP	
RE: Discovery Day Academy Special Exception	

We are sending you Attached Under separate cover VIA the following items:

Copies	Date	No.	Description
1	03-09-2021		Application
1	03-09-2021		Affidavits & Forms
1	03-09-2021		Legal Description, Sketch & Copy of Plat
1	03-09-2021		Surrounding Property Owner's List, Map and Mailing Labels
1	03-09-2021		Area Map-in Project Request Narrative
1	03-09-2021		Project Request Narrative
1	03-09-2021		Conceptual Site Plan
1	03-09-2021		Conceptual Floor Plan
1	03-09-2021		TIS waiver materials

These are transmitted as checked below:

- | | | | |
|--|---|---|-------------------------|
| <input checked="" type="checkbox"/> For approval | <input type="checkbox"/> Approved as submitted | <input type="checkbox"/> Resubmit | copies for approval |
| <input type="checkbox"/> For your use | <input type="checkbox"/> Approved as noted | <input type="checkbox"/> Submit | copies for distribution |
| <input type="checkbox"/> As requested | <input type="checkbox"/> Returned for corrections | <input type="checkbox"/> Return | corrected prints |
| <input type="checkbox"/> For review and comment | | <input type="checkbox"/> _____ | |
| <input type="checkbox"/> For bids due | | <input type="checkbox"/> Prints returned after loan to M-DA | |

REMARKS: It is our understanding that the TIS waiver was denied and a Traffic Impact Statement (TIS) is required. Additional information addressing the TIS requirement will be submitted under separate cover to allow sufficient time for coordination with the City's Traffic Engineer. Should you have any question please feel free to contact me at 239-337-3993 or via email at hurwiller@m-da.com. Thank You.

COPY TO:

SIGNED:

Applicant's Name: _____ Phone #: _____

Address: _____

E-mail: _____

Project Name: _____

STRAP Number: _____

Application Form: _____ Computer Generated* _____ City Printed

* By signing this application, the applicant affirms that the form has not been altered.

STAFF USE ONLY

Case Number: _____

Date of Application: _____

Fee: _____

Current Zoning: _____

Land Use
Classification(s): _____

Comp. Plan Density: _____

Date of Zoning
Public Hearing: _____

Date of City Council
Public Hearing: _____

Planner Assigned: _____

Staff Recommendation: _____

PART I

APPLICANT\PROPERTY OWNERSHIP INFORMATION

A. Name of applicant: _____
Street Mailing Address: _____
City: _____ State: _____ Zip: _____
Phone Number: Area Code: _____ Number: _____ Ext. _____
E-mail: _____

B. Relationship of applicant to property:
_____ Owner _____ Trustee* _____ Option holder*
_____ Lessee* _____ Contract Purchaser*
_____ Other (indicate)* _____

*If applicant is NOT the owner and the application is NOT City-initiated, submit a **notarized** Authorization Form from the owner to the applicant. Label the attachment "Exhibit I-B-1".

* If the application is City-initiated, enter the date the action was initiated by the City Council: _____

Attach a copy of the "green sheet" and a list of all property owners, and their mailing addresses, for all properties within the area described. Names and addresses must be those appearing on the latest tax rolls of Lee County. Label the "green sheet" as "Exhibit I-B-2" and the list as "Exhibit I-B-3".

C. Name of owner of property: _____
Street Mailing Address: _____
City: _____ State: _____ Zip: _____
Phone Number: Area Code: _____ Number: _____ Ext. _____

D. Date property was acquired by present owner(s): _____

E. Is the property subject to a sales contract or sales option? _____ NO _____ YES

F. Are owner(s) or contract purchasers required to file a disclosure form? _____ NO _____ YES. If yes, please complete and submit Exhibit I-F (attached).

G. ___Authorized Agent(s): List names of authorized agents. Attach extra sheet if more space is required

Name: _____

Contact Person: _____

Address: _____

Phone: _____ E-mail: _____

**PART II
GENERAL INFORMATION**

A. Legal Description: Is property within a platted subdivision recorded in official Plat Books of Lee County?

_____ NO. *Attach a legible copy of the legal description (labeled Exhibit II-A-1.) and a certified sketch of description as set out in Chapter 5J-17.053, F.A.C., Florida Administrative Code, unless the subject property consists of one or more undivided platted lots. If the application includes multiple abutting parcels, the legal description must describe the perimeter boundary of the total area, but need not describe each individual parcel. However, the STRAP number for each parcel must be included. (labeled Exhibit II-A-2.)*

_____ YES. Property is identified as:

Subdivision Name: _____

Plat Book: _____ Page: _____ Unit: _____ Block: _____ Lot: _____

Submit a copy of the Plat Book page with subject property clearly marked. Label this Exhibit II-A-3.

STRAP NUMBER: _____

B. Project Street Address: _____

C. General Location of Property (referenced to major streets) _____

D. Nature of Request: (Check applicable answers)

_____ Rezoning FROM: _____ TO: _____

_____ Special Exception for: _____

E. Property Dimensions

1. Width (average if irregular parcel): _____ Feet

2. Depth (average if irregular parcel): _____ Feet

3. Frontage on road or street: _____ Feet

4. Width along waterbody (If applicable): _____ Feet

5. Total land area: _____ Acres or Square Feet

F. Facilities

1. Fire District: _____

2. Sewer Service Supplier: _____

3. Water Service Supplier: _____

G. Present Use of Property: Is the property vacant? _____ Yes _____ No

Except for City-initiated requests, if the property is not vacant, the owner or applicant's signature on this application indicates that the Owner agrees to either remove all existing buildings and structures, OR that the use of the building or structure(s) will be in compliance with all applicable requirements of the land development code.

Briefly describe current use of the property: _____

H. Property restrictions: Are there any deed restrictions or other types of covenants or restrictions on the property? _____ Yes _____ No. If yes, submit a copy of the restrictions and a written statement as to how the restrictions may affect the request.

PART III

AFFIDAVIT

I, _____, certify that I am the owner or authorized representative of the property described herein, and that all answers to the questions in this application and any sketches, data or other supplementary matter attached to and made a part of this application, are honest and true to the best of my knowledge and belief. I also authorize the staff of City of Bonita Springs Community Development to enter upon the property during normal working hours for the purpose of investigating and evaluating the request made thru this application.

Signature of owner or owner-authorized agent

Date:

Typed or printed name

STATE OF FLORIDA
COUNTY OF LEE

The foregoing instrument was certified and subscribed before me this _____ day of _____ 20____, by _____, who is personally known to me or who has produced _____ as identification.

(SEAL)

Signature of notary public

Printed name of notary public

**EXHIBIT I-F
DISCLOSURE OF INTEREST FORM FOR:**

STRAP NO. 21-47-25-B2-03204.0000

CASE NO. SPE21-78485-BOS

1. If the property is owned in fee simple by an INDIVIDUAL, tenancy by the entirety, tenancy in common, or joint tenancy, list all parties with an ownership interest as well as the percentage of such interest.

Name and Address

Percentage of Ownership

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

2. If the property is owned by a CORPORATION, list the officers and stockholders and the percentage of stock owned by each.

Name, Address, and Office

Percentage of Stock

Marcus, Alan J., 20803 Biscayne Blvd, Suite 301, Aventura, FL, 33180

100

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

3. If the property is in the name of a TRUSTEE, list the beneficiaries of the trust with percentage of interest.

Name and Address

Percentage of Interest

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

4. If the property is in the name of a GENERAL PARTNERSHIP OR LIMITED PARTNERSHIP, list the names of the general and limited partners.

Name and Address

Percentage of Ownership

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

5. If there is a CONTRACT FOR PURCHASE, whether contingent on this application or not, and whether a Corporation, Trustee, or Partnership, list the names of the contract purchasers below, including the officers, stockholders, beneficiaries, or partners.

Name, Address, & Office (if applicable)	Percentage of Stock
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Date of Contract: _____

6. If any contingency clause or contract terms involve additional parties, list all individuals or officers, if a corporation, partnership, or trust.

Name and Address

For any changes of ownership or changes in contracts for purchase subsequent to the date of the application, but prior to the date of final public hearing, a supplemental disclosure of interest shall be filed.

The above is a full disclosure of all parties of interest in this application, to the best of my knowledge and belief.

Signature: Elizabeth Basart
(Applicant)

Elizabeth Basart
(Printed or typed name of applicant)

STATE OF FLORIDA
COUNTY OF LEE

The foregoing instrument acknowledged before me this 22 day of April 2021, by Elizabeth Basart, who is personally known to me or who has produced N/A as identification.

Donna J. Killion
Signature of Notary Public

Donna J. Killion
Printed Name of Notary Public

(SEAL)



PART III
AFFIDAVIT

I, Elizabeth A. Basart, certify that I am the owner or authorized representative of the property described herein, and that all answers to the questions in this application and any sketches, data or other supplementary matter attached to and made a part of this application, are honest and true to the best of my knowledge and belief. I also authorize the staff of City of Bonita Springs Community Development to enter upon the property during normal working hours for the purpose of investigating and evaluating the request made thru this application.

Elizabeth A. Basart
Signature of owner or owner-authorized agent

2-4-21
Date:

Elizabeth A. Basart, Authorized Agent of Discovery Day Academy IV, Inc
Typed or printed name

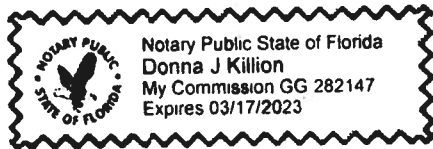
STATE OF FLORIDA
COUNTY OF LEE

The foregoing instrument was certified and subscribed before me this 4 day of Feb 2021, by Elizabeth Basart ✓, who is personally known to me or who has produced NIA as identification.

(SEAL)

Donna J. Killion
Signature of notary public

Donna J. Killion
Printed name of notary public



MORRIS

2914 Cleveland Avenue | Fort Myers, Florida 33901

DEPEW

Phone (239) 337-3993 | Toll Free (866) 337-7341
www.morris-depew.com

ENGINEERS · PLANNERS · SURVEYORS
LANDSCAPE ARCHITECTS

LETTER OF AUTHORIZATION

TO WHOM IT MAY CONCERN:

PLEASE BE ADVISED THAT I (WE) AM (ARE) THE FEE SIMPLE PROPERTY OWNER(S) OF THE PROPERTY DESCRIBED BELOW AND THAT MORRIS-DEPEW ASSOCIATES, INC. HAS BEEN AUTHORIZED TO REPRESENT ME (US) FOR THE BELOW REFERENCED PARCEL(S) IN ALL MATTERS PERTAINING TO REZONING OR DEVELOPMENT PERMITS. THIS AUTHORITY TO REPRESENT MY (OUR) INTEREST INCLUDES ANY AND ALL DOCUMENTS REQUIRED BY THE REZONING, PLANNING OR PERMITTING REQUESTS SUBMITTED ON MY (OUR) BEHALF BY MORRIS-DEPEW ASSOCIATES, INC.

STRAP NUMBER OR LEGAL DESCRIPTION:

STRAP# 21-47-25-B2-03204-0000

Discovery Day Academy IV, Inc.

COMPANY NAME

Elizabeth A. Basart

SIGNATURE

Elizabeth A. Basart, Authorized Agent

PRINTED NAME & TITLE

STATE OF Florida

COUNTY OF Lee

The foregoing instrument was acknowledged before me, by means of physical presence ___ or online notarization, this 5 day of Feb., 2021, by Elizabeth Basart.

My Commission Expires:

3-17-23

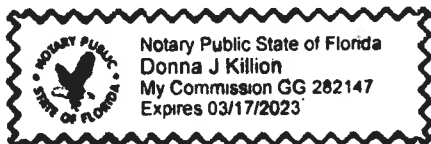
Donna J Killion

Notary Public

Donna J Killion

Notary Printed Name

(seal)



DISCLOSURE OF INTEREST AND AUTHORIZATION FORM

[Corporate or Partnership Owner]

I, (Name) SHAUL RIKMAN
As (Title) MANAGER
of (Corp.) Isram Prado, LLC
being first duly sworn, depose and say that

Name: Isram Prado, LLC
Address: 506 S Dixie Hwy Hallandale, FL 33009

is the owner of the property described as:

No. of Parcels: 1
Addresses: 25355 S Tamiami Trail Bonita Springs, FL 34135
Strap #: 21-47-25-B2-03204.0000

I do hereby appoint Elizabeth Basart of Discovery Day Academy IV, Inc. as the Owner's authorized agent and/or attorney for the purpose of representing its interests in the above-described property which is the subject matter of this application and proposed hearing. I understand that this application must be complete and accurate before a hearing can be advertised.

Signature of Owner:

Printed Name:

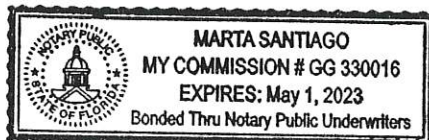
[Signature]
SHAUL RIKMAN

Sworn to and subscribed before me this 4th day of February, 2021, by Shaul Rikman, who is personally known to me

or who has produced _____ as identification. He/she has acknowledged to me and before me that he/she executed this instrument for the purposes therein expressed.

[Signature]
Notary Public
Marta Santiago
Print Notary Name

My commission expires:





[Department of State](#) / [Division of Corporations](#) / [Search Records](#) / [Search by Entity Name](#) /

Detail by Entity Name

Florida Profit Corporation
DISCOVERY DAY ACADEMY IV, INC.

Filing Information

Document Number P15000011811
FEI/EIN Number 47-3029717
Date Filed 02/04/2015
State FL
Status ACTIVE

Principal Address

23601 North Commons Drive
BONITA SPRINGS, FL 34134

Changed: 03/09/2016

Mailing Address

23601 North Commons Drive
BONITA SPRINGS, FL 34134

Changed: 03/09/2016

Registered Agent Name & Address

Basart, Elizabeth A
23601 North Commons Drive
Bonita Springs, FL 34134

Name Changed: 06/11/2020

Address Changed: 03/09/2016

Officer/Director Detail

Name & Address

Title PSTD

Basart, ELIZABETH
53 1st Street
Bonita Springs, FL 34134

Annual Reports

Report Year	Filed Date
2018	05/04/2018

2019 04/29/2019
2020 06/11/2020

Document Images

06/11/2020 -- ANNUAL REPORT	View image in PDF format
04/29/2019 -- ANNUAL REPORT	View image in PDF format
05/04/2018 -- ANNUAL REPORT	View image in PDF format
05/09/2017 -- ANNUAL REPORT	View image in PDF format
03/09/2016 -- ANNUAL REPORT	View image in PDF format
02/04/2015 -- Domestic Profit	View image in PDF format

Florida Department of State, Division of Corporations



[Department of State](#) / [Division of Corporations](#) / [Search Records](#) / [Search by Entity Name](#) /

Detail by Entity Name

Florida Profit Corporation
ISRAM REALTY AND MANAGEMENT, INC.

Filing Information

Document Number P96000009310
FEI/EIN Number 65-0649121
Date Filed 01/30/1996
State FL
Status ACTIVE

Principal Address

506 S DIXIE HWY
HALLANDALE, FL 33009

Changed: 04/15/1999

Mailing Address

506 S DIXIE HWY
HALLANDALE, FL 33009

Changed: 04/15/1999

Registered Agent Name & Address

MARCUS, ALAN J, ESQ.
20803 BISCAYNE BLVD SUITE 301
AVENTURA, FL 33180

Name Changed: 12/19/2014

Address Changed: 12/19/2014

Officer/Director Detail

Name & Address

Title D

RIKMAN, SHAUL
506 S DIXIE HWY
HALLANDALE, FL 33009

Title D

RIKMAN, JEAN

506 S DIXIE HWY
HALLANDALE, FL 33009

Annual Reports

Report Year	Filed Date
2018	04/04/2018
2019	03/08/2019
2020	03/19/2020

Document Images

03/19/2020 -- ANNUAL REPORT	View image in PDF format
03/08/2019 -- ANNUAL REPORT	View image in PDF format
04/04/2018 -- ANNUAL REPORT	View image in PDF format
02/28/2017 -- ANNUAL REPORT	View image in PDF format
04/01/2016 -- ANNUAL REPORT	View image in PDF format
04/02/2015 -- ANNUAL REPORT	View image in PDF format
12/19/2014 -- Reg. Agent Change	View image in PDF format
04/04/2014 -- ANNUAL REPORT	View image in PDF format
03/20/2013 -- ANNUAL REPORT	View image in PDF format
04/03/2012 -- ANNUAL REPORT	View image in PDF format
03/28/2011 -- ANNUAL REPORT	View image in PDF format
03/26/2010 -- ANNUAL REPORT	View image in PDF format
04/02/2009 -- ANNUAL REPORT	View image in PDF format
04/07/2008 -- ANNUAL REPORT	View image in PDF format
03/29/2007 -- ANNUAL REPORT	View image in PDF format
04/10/2006 -- ANNUAL REPORT	View image in PDF format
03/19/2005 -- ANNUAL REPORT	View image in PDF format
05/03/2004 -- ANNUAL REPORT	View image in PDF format
03/27/2003 -- ANNUAL REPORT	View image in PDF format
04/30/2002 -- ANNUAL REPORT	View image in PDF format
03/26/2001 -- ANNUAL REPORT	View image in PDF format
04/21/2000 -- ANNUAL REPORT	View image in PDF format
04/15/1999 -- ANNUAL REPORT	View image in PDF format
04/13/1998 -- ANNUAL REPORT	View image in PDF format
05/02/1997 -- ANNUAL REPORT	View image in PDF format
01/30/1996 -- DOCUMENTS PRIOR TO 1997	View image in PDF format

Florida Department of State, Division of Corporations

DESCRIPTION:
OUT PARCEL #1

A PORTION OF PARCEL 4, SPRING CREEK EAST UNIT TWO, AS RECORDED IN PLAT BOOK 62, PAGE 65, PUBLIC RECORDS OF LEE COUNTY, FLORIDA, LYING IN SECTION 21, TOWNSHIP 47 SOUTH, RANGE 25 EAST, LEE COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHEAST CORNER OF SECTION 21, TOWNSHIP 47 SOUTH, RANGE 25 EAST, LEE COUNTY, FLORIDA; THENCE RUN S.89°16'54"W., ALONG THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 21, FOR 1146.01 FEET TO THE EASTERLY RIGHT-OF-WAY LINE OF U.S. HIGHWAY 41 (TAMIAMI TRAIL); THENCE RUN S.00°06'41"E., ALONG SAID EASTERLY RIGHT-OF-WAY LINE, FOR 1719.96 FEET TO THE POINT OF BEGINNING; THENCE CONTINUE S.00°06'41"E., ALONG SAID EASTERLY RIGHT-OF-WAY LINE, FOR 279.50 FEET TO THE SOUTHWESTERLY CORNER OF SAID PARCEL 4; THENCE N.89°53'19"E ALONG THE NORTH LINE OF TRACT "A", FOR 265.95 FEET TO A POINT ON A CIRCULAR CURVE, CONCAVE WESTERLY, WHOSE RADIUS POINT BEARS S.88°23'18"E. FOR A DISTANCE OF 186.00 FEET THEREFROM; THENCE RUN NORTHERLY, ALONG THE ARC OF SAID CURVE TO THE LEFT, HAVING A RADIUS OF 186.00 FEET, THROUGH A CENTRAL ANGLE OF 15°40'01", CHORD BEARING OF N.09°26'40"W. FOR 50.70 FEET, ARC 50.86 FEET TO A POINT OF REVERSE CURVE; THENCE RUN NORTHERLY, ALONG THE ARC OF SAID CURVE TO THE RIGHT, HAVING A RADIUS OF 814.00 FEET, THROUGH A CENTRAL ANGLE OF 16°39'56", CHORD BEARING OF N.09°04'24"W. FOR 232.31 FEET, ARC 233.10 FEET; THENCE RUN S.89°53'19"W. FOR 221.54 FEET TO THE POINT OF BEGINNING.

CONTAINING 1.50 ACRES, MORE OR LESS. .

SURVEY NOTES:

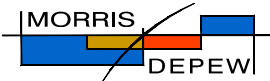
THE DESCRIPTION SHOWN HEREON IS NEW.
 SKETCH PREPARED IN ACCORDANCE WITH THE STATE OF FLORIDA'S STANDARDS OF PRACTICE FOR SURVEYING, RULE 5J-17 F.A.C.
 ORIENTATION BASED ON THE WESTERLY RIGHT-OF-WAY LINE OF TAMIAMI TRAIL, AS BEARING S.00°06'41"W. AS PLATTED WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OR ELECTRONIC SIGNATURE AND SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER, THIS MAP IS NOT VALID.
 THIS IS NOT A SURVEY!

PREPARED BY: THOMAS M. ROOKS JR., P.S.M. DATE
 FLORIDA CERTIFICATE NO. 6347

PROJECT:
**DISCOVERY DAY
 ACADEMY**

LOCATION:
**SECTION 21 AND 22,
 T. 47 S., R. 25 E.,
 LEE COUNTY, FLORIDA**

CONSULTANT:



**MORRIS
 DEPEW**

ENGINEERS • PLANNERS • SURVEYORS
 LANDSCAPE ARCHITECTS

FL. CA NO. 6532 / FL. CERT NO. LB6891 / LC26000330

Fort Myers
 2914 Cleveland Avenue
 Fort Myers, Florida 33901
 (239) 337-3993
 Fax: (239) 337-2994
 Toll free: 866-337-7341

Tallahassee
 113 South Monroe Street
 1st Floor
 Tallahassee, Florida 32301
 Toll free: 866-337-7341

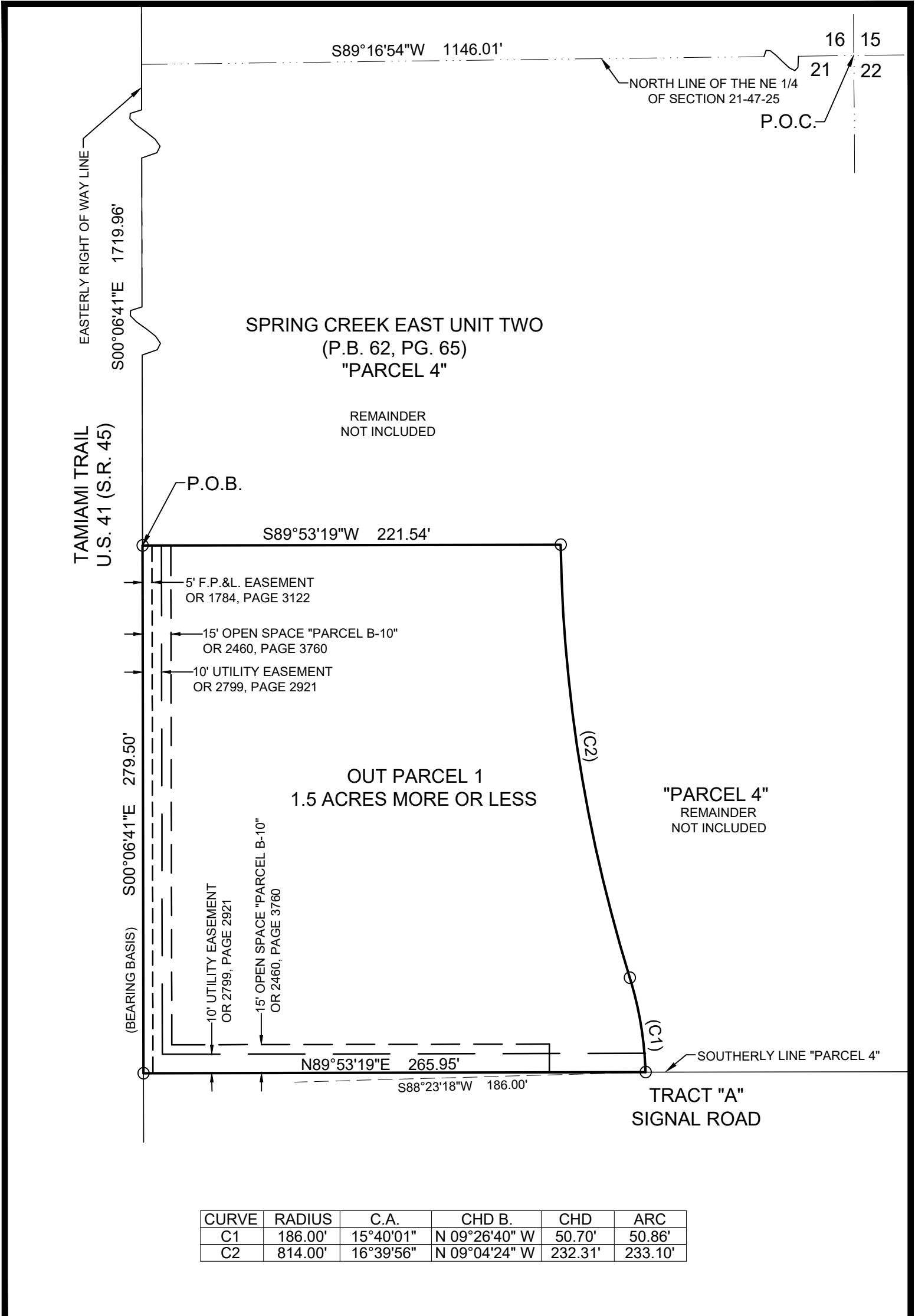
Destin
 5597 Highway 98
 Unit 201
 Santa Rosa Beach, Florida 32450
 Toll free: 866-337-7341

CLIENT:



**DISCOVERY
 DAY ACADEMY**

PROJECT MANAGER:	TMR
DRAWING BY:	TAB
JURISDICTION:	CITY OF BONITA SPRINGS
DATE:	02-10-2021
SHEET TITLE:	SKETCH AND DESCRIPTION
SHEET NUMBER:	1 OF 2
JOB/FILE NUMBER:	21010



© COPYRIGHT MORRIS-DEPEW ASSOCIATES, INC. 2021 ALL RIGHTS RESERVED I:\21010 - Discovery Day Academy Bonita\Plans\21010-Sketch-Desc_outparcel.dwg <SKET-DESC> - Feb 10 2021 03:43:46 pm PLOTTED BY: bhanley

PROJECT:
DISCOVERY DAY
ACADEMY

LOCATION:
SECTION 21 AND 22,
T. 47 S., R. 25 E.,
LEE COUNTY, FLORIDA

CONSULTANT:

ENGINEERS • PLANNERS • SURVEYORS
LANDSCAPE ARCHITECTS

FL CA NO. 6532 / FL CERT NO. 1B6891 / LC26000330

Fort Myers
2914 Cleveland Avenue
Fort Myers, Florida 33901
(239) 337-9998
Fax: (239) 337-9994
Toll free: 866-337-7341

Tallahassee
113 South Monroe Street
Tallahassee, Florida 32301
Toll free: 866-337-7341

Destin
5597 Highway 98
Unit 201
Santa Rosa Beach, Florida 32459
Toll free: 866-337-7341

CLIENT:

PROJECT MANAGER: TMR

DRAWING BY: TAB

JURISDICTION: CITY OF BONITA SPRINGS

DATE: 02-10-2021

SHEET TITLE:
SKETCH AND
DESCRIPTION

SHEET NUMBER: 2 OF 2

JOB/FILE NUMBER: 21010

PREPARED BY: JOHNSON ENGINEERING, INC. 2158 JOHNSON STREET FORT MYERS, FLORIDA 33901

SPRING CREEK EAST UNIT TWO

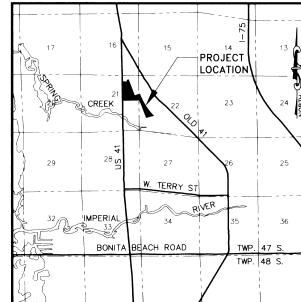
A SUBDIVISION IN SECTIONS 21 & 22, TOWNSHIP 47 SOUTH, RANGE 25 EAST LEE COUNTY, FLORIDA

NOVEMBER 1998 JOHNSON ENGINEERING, INC. ENGINEERS, SURVEYORS AND ECOLOGISTS FORT MYERS, FLORIDA

DESCRIPTION

A TRACT OR PARCEL OF LAND LYING IN SECTIONS 21 & 22, TOWNSHIP 47 SOUTH, RANGE 25 EAST, LEE COUNTY, FLORIDA WHICH TRACT OR PARCEL IS DESCRIBED AS FOLLOWS: FROM THE NORTHWEST CORNER OF SAID SECTION 21 TO AN INTERSECTION WITH THE NORTH LINE OF SAID SECTION 21... (Detailed description of the tract boundaries follows)

OFFICIAL RECORD BOOK 2799 AT PAGE 2909, LEE COUNTY RECORDS; THENCE RUN N 17° 28' 39" E ALONG AN EASTERN LINE OF SAID LANDS FOR 180.38 FEET; THENCE RUN N 58° 41' 07" W ALONG A NORTHERLY LINE OF SAID LANDS FOR 122.24 FEET TO AN INTERSECTION WITH A NON-TANGENT CURVE; THENCE RUN SOUTHERLY AND SOUTHWESTERLY ALONG THE ARC OF A CURVE TO THE RIGHT OF RADIUS 180.00 FEET (CHORD BEARING S 45° 10' 29" W) (CHORD 67.65 FEET) (DELTA 21° 39' 44") FOR 48.05 FEET TO A POINT OF TANGENCY; THENCE RUN S 54° 00' 21" W ALONG A NORTHWESTERLY LINE OF SAID LANDS FOR 124.06 FEET TO A POINT OF CURVATURE; THENCE RUN SOUTHWESTERLY AND SOUTHERLY ALONG THE ARC OF A CURVE TO THE LEFT OF RADIUS 145.00 FEET (CHORD BEARING S 27° 03' 52" W) (CHORD 131.39 FEET) (DELTA 53° 52' 36") FOR 136.36 FEET TO A POINT OF CURVATURE; THENCE RUN S 00° 07' 23" W FOR 57 FEET TO AN INTERSECTION WITH THE NORTH LINE OF CEDAR CREEK; PHASE 1 AS RECORDED IN PLAT BOOK 64 BEGINNING AT PAGE 6 OF LEE COUNTY RECORDS; THENCE RUN S 88° 52' 23" W ALONG SAID NORTH LINE FOR 40.01 FEET; THENCE RUN N 00° 07' 23" E FOR 2.88 FEET TO A POINT OF CURVATURE; THENCE RUN NORTHWESTERLY AND NORTHEASTERLY ALONG THE ARC OF A CURVE TO THE RIGHT OF RADIUS 205.00 FEET (CHORD BEARING N 27° 03' 52" E) (CHORD 190.76 FEET) (DELTA 53° 52' 58") FOR 192.79 FEET TO A POINT OF TANGENCY; THENCE RUN N 54° 00' 21" E FOR 124.06 FEET TO A POINT OF CURVATURE; THENCE RUN NORTHEASTERLY AND NORTHERLY ALONG THE ARC OF A CURVE TO THE LEFT OF RADIUS 100.00 FEET (CHORD BEARING N 26° 56' 50" E) (CHORD 109.18 FEET) (DELTA 54° 07' 02") FOR 113.54 FEET TO A POINT OF TANGENCY; THENCE RUN N 00° 06' 41" W FOR 76.45 FEET TO A POINT OF CURVATURE; THENCE RUN NORTHWESTERLY AND WESTERLY ALONG THE ARC OF A CURVE TO THE LEFT OF RADIUS 35.00 FEET (CHORD BEARING N 45° 06' 41" W) (CHORD 49.50 FEET) (DELTA 90° 00' 00") FOR 54.98 FEET TO A POINT OF TANGENCY; THENCE RUN S 80° 15' 00" W FOR 215.01 FEET TO AN INTERSECTION WITH THE EASTERN LINE OF SAID TAMAMIA TRAIL; THENCE RUN N 00° 06' 41" W ALONG SAID EAST LINE FOR 1212.69 FEET TO THE POINT OF BEGINNING. CONTAINING 56.81 ACRES, MORE OR LESS. BEARINGS ARE BASED ON THE NORTH LINE OF SECTION 21 TO BEAR N 89° 16' 54" E.



VICINITY MAP SCALE: 1" = 1 MILE

NOTICE: LANDS DESCRIBED IN THIS PLAT MAY BE SUBDIVIDED BY THE DEVELOPER WITHOUT THE ROADS, DRAINAGE, WATER AND SEWER FACILITIES BEING ACCEPTED FOR MAINTENANCE BY LEE COUNTY. ANY PURCHASER OF A LOT IN THIS SUBDIVISION IS ADVISED TO DETERMINE WHETHER THE LOT MAY BE SUBJECT TO ASSESSMENT OR CALLED UPON TO BEAR A PORTION OR ALL OF THE EXPENSE OF CONSTRUCTION, MAINTENANCE OR IMPROVEMENT OF ROADS, DRAINAGE, WATER AND SEWER FACILITIES.

NOTICE: THERE MAY BE ADDITIONAL RESTRICTIONS THAT ARE NOT RECORDED ON THIS PLAT THAT MAY BE FOUND IN THE PUBLIC RECORDS OF THIS COUNTY.

NOTES

- 1. ALL DIMENSIONS ARE IN FEET AND DECIMALS THEREOF.
2. PERMANENT REFERENCE MONUMENTS (P.R.M.'S) ARE APPLICABLE CONCRETE MONUMENTS WITH METAL DISKS SET IN THE TOP BEARING THE SURVEYOR'S CERTIFICATE NUMBER.
3. IMPERMANENT CONTROL POINTS (I.C.P.'S) ARE METAL MARKERS BEARING THE SURVEYOR'S CERTIFICATE NUMBER.
4. ALL CURVES INDICATED ARE CIRCULAR.
5. (R) INDICATES RADIAL LINE.
6. A 10' FOOT DRAINAGE AND UTILITY EASEMENT IS RESERVED ALONG THE FRONT LINE OF EACH TRACT OR PARCEL FRONTING A ROADWAY. SEE PLAT FOR ADDITIONAL EASEMENTS.
7. U.E. - UTILITY EASEMENT.
8. D.E. - DRAINAGE EASEMENT.
9. ALL PRIVATE ROADS ARE PUBLIC UTILITY EASEMENTS.
10. INTERNAL MONUMENTATION HAS BEEN SET IN ACCORDANCE WITH CHAPTER 172.091 OF THE FLORIDA STATUTES.
11. BEARINGS ARE BASED ON THE NORTH LINE OF SECTION 21 TO BEAR N89° 16' 54" E.
12. TRACT "A" AND "B" ARE ROAD RIGHT OF WAYS AND PUBLIC UTILITY EASEMENTS.
13. TRACT "B" IS FOR FUTURE DEVELOPMENT.
14. TRACT "C" IS FOR SURFACE WATER MANAGEMENT.
15. TRACTS "D" & "E" ARE A FLORIDA POWER & LIGHT COMPANY TRANSMISSION LINE EASEMENT.

CERTIFICATE

I HEREBY CERTIFY THAT THE ATTACHED PLAT OF SPRING CREEK EAST UNIT TWO, A SUBDIVISION LYING IN SECTIONS 21 AND 22, TOWNSHIP 47 SOUTH, RANGE 25 EAST, LEE COUNTY, FLORIDA WAS PREPARED UNDER MY DIRECTION AND SUPERVISION AND COMPLES WITH ALL OF THE SURVEY REQUIREMENTS OF CHAPTER 177, FLORIDA STATUTES.

I FURTHER CERTIFY THAT THE PERMANENT REFERENCE MONUMENTS (P.R.M.'S) HAVE BEEN PLACED AT THE CORNER OF THIS PLAT. DONE THIS 14th DAY OF DECEMBER, 1998. W. BRITTON POMEROY, JR. (P.E.) THE FIRM - LEB#42 PROFESSIONAL LAND SURVEYOR FLORIDA CERTIFICATE NO. 4440

ACKNOWLEDGMENT

STATE OF FLORIDA COUNTY OF LEE THE FOREGOING DEDICATION WAS APPROVED BEFORE ME THIS 11th DAY OF December, 1998 BY W. DOUGLAS PITTS, PRESIDENT OF NEWCASTER DEVELOPMENT, INC., A FLORIDA CORPORATION, THE SOLE GENERAL PARTNER OF SPRING CREEK PLAZA ASSOCIATES, LTD., A FLORIDA LIMITED PARTNERSHIP. HE IS PERSONALLY KNOWN TO ME TO BE THE PERSON DESCRIBED IN AND WHO EXECUTED THE FOREGOING DEDICATION AND ACKNOWLEDGED THE EXECUTION THEREOF TO BE HIS FREE ACT AND DEED AS SUCH OFFICER FOR THE USES AND PURPOSES THEREIN MENTIONED AND THAT HE AFFIXED THERETO THE OFFICIAL SEAL OF SAID CORPORATION AND THAT SAID DEDICATION IS THE ACT AND DEED OF SAID CORPORATION.

Michael A. Jones, Notary Public - State of Florida, Commission # CC 752209, Expires 12/2002. Michael A. Jones, Notary Public - State of Florida, Commission # CC 752209, Expires 12/2002.

DEDICATION

KNOW ALL MEN BY THESE PRESENTS THAT BONITA BAY LIMITED PARTNERSHIP, A FLORIDA LIMITED PARTNERSHIP AND SPRING CREEK PLAZA ASSOCIATES, LTD., A FLORIDA LIMITED PARTNERSHIP, THE OWNERS OF THE HEREBY DESCRIBED LANDS, HAS CAUSED THIS PLAT OF SPRING CREEK EAST UNIT TWO, A SUBDIVISION LYING IN SECTIONS 21 AND 22, TOWNSHIP 47 SOUTH, RANGE 25 EAST, LEE COUNTY, FLORIDA TO BE MADE AND HEREBY DEDICATES THE FOLLOWING: 1. TO THE PUBLIC THE HIGHWAYS DESIGNATED AS TRACT "A" (SIGNAL ROAD AND ELEMENTARY WAY) AND TRACT "B" (TIMBERLAKE DRIVE), THE DEDICATION OF SIGNAL ROAD IS SUBJECT TO AND CONDITIONED UPON THE AGREEMENT KNOWN AS THE SIGNAL ROAD AGREEMENT RECORDED AT 0.8 BOOK 353, PAGES 1356-1362 AND 0.8 BOOK 353, PAGES 1363-1364 AND IN THE WARRANTY DEED BETWEEN BONITA BAY LIMITED PARTNERSHIP AND THE SPRING CREEK EAST PROPERTY OWNERS ASSOCIATION, INC. RECORDED AT 0.8 BOOK 3033, PAGES 1353-1355, ALL OF THE PUBLIC RECORDS OF LEE COUNTY, FLORIDA. 2. TO THE SPRING CREEK EAST PROPERTY OWNERS ASSOCIATION, INC., TRACT "C" AND ALL DRAINAGE EASEMENTS. 3. TO BONITA BAY LIMITED PARTNERSHIP, A FLORIDA LIMITED PARTNERSHIP, TRACT "D" FOR FUTURE DEVELOPMENT. 4. TO DULY LICENSED PUBLIC AND PRIVATE UTILITY COMPANIES FOR USE IN PERFORMING AND DISCHARGING THEIR RESPECTIVE OFFICIAL DUTIES AND OBLIGATIONS TO PROVIDE UTILITY SERVICES, A UTILITY EASEMENT OVER, ACROSS AND UNDER TRACTS "A" AND "B". 5. TO ANY AUTHORIZED COUNTY FRANCHISED CABLE TELEVISION PROVIDER, ITS SUCCESSORS, ASSIGNS AND SUBSIDIARIES, A NON-EXCLUSIVE, UTILITY EASEMENT OVER, ACROSS AND UNDER TRACTS "A" AND "B" FOR THE PURPOSE OF CONSTRUCTION, INSTALLATION, MAINTENANCE AND OPERATION OF CABLE TELEVISION SERVICE FACILITIES AND SERVICES OF DULY LICENSED PUBLIC AND PRIVATE UTILITY COMPANIES. IN THE EVENT A CABLE TELEVISION PROVIDER, ITS SUCCESSORS, ASSIGNS OR SUBSIDIARIES, DAMAGE THE IMPROVEMENTS WITHIN TRACT "A" AND "B" OR THE FACILITIES OF ANOTHER PUBLIC UTILITY, SAID CABLE TELEVISION PROVIDER, ITS SUCCESSORS AND ASSIGNS SHALL BE SOLELY RESPONSIBLE FOR SAID DAMAGES. 6. ALL UTILITY EASEMENTS SHOWING HEREON ARE FOR THE PURPOSES OF INSTALLATION, REPAIR AND MAINTENANCE OF WATER, SEWER, IRRIGATION, ELECTRIC, CABLE TV, AND TELEPHONE. THE USE OF SUCH FACILITIES IS GRANTED TO GOVERNMENT AGENCIES AND PUBLIC UTILITY COMPANIES.

Witnesses: Shirley M. Thompson, Dennis E. Gilkey, Dennis E. Gilkey, President of Bonita Bay Limited Partnership. Michael A. Jones, Notary Public - State of Florida, Commission # CC 752209, Expires 12/2002. Michael A. Jones, Notary Public - State of Florida, Commission # CC 752209, Expires 12/2002.

ACKNOWLEDGMENT

STATE OF FLORIDA COUNTY OF LEE THE FOREGOING DEDICATION WAS APPROVED BEFORE ME THIS 14th DAY OF December, 1998 BY DENNIS E. GILKEY, PRESIDENT OF BONITA BAY PROPERTIES, INC., A FLORIDA CORPORATION, THE GENERAL PARTNER OF BONITA BAY LIMITED PARTNERSHIP, A FLORIDA LIMITED PARTNERSHIP. HE IS PERSONALLY KNOWN TO ME TO BE THE PERSON DESCRIBED IN AND WHO EXECUTED THE FOREGOING DEDICATION AND ACKNOWLEDGED THE EXECUTION THEREOF TO BE HIS FREE ACT AND DEED AS SUCH OFFICER FOR THE USES AND PURPOSES THEREIN MENTIONED AND THAT HE AFFIXED THERETO THE OFFICIAL SEAL OF SAID CORPORATION AND THAT SAID DEDICATION IS THE ACT AND DEED OF SAID CORPORATION.

Michael A. Jones, Notary Public - State of Florida, Commission # CC 752209, Expires 12/2002. Michael A. Jones, Notary Public - State of Florida, Commission # CC 752209, Expires 12/2002.

APPROVALS

THIS PLAT IS ACCEPTED AND APPROVED BY THE BOARD OF COUNTY COMMISSIONERS, LEE COUNTY, FLORIDA THIS 11th DAY OF December, 1998. Vice-Chairman of the Board: John E. Allison, Clerk of Court: Charlie Green, County Attorney: Walter J. McCreehy, Director of Development Services: Walter J. McCreehy, Director of Community Development: Mary Gibbs.

I HEREBY CERTIFY THAT THE ATTACHED PLAT OF SPRING CREEK EAST UNIT TWO, A SUBDIVISION LYING IN SECTIONS 21 AND 22, TOWNSHIP 47 SOUTH, RANGE 25 EAST, LEE COUNTY, FLORIDA, WAS FILED FOR RECORD AT 11:51 P.M. THIS 15th DAY OF December, 1998, AND DULY RECORDED IN PLAT BOOK 62, PAGES 64 THROUGH 67, IN THE PUBLIC RECORDS OF LEE COUNTY, FLORIDA. Charlie Green, Clerk of Court in and for Lee County, Notary Public - State of Florida, Commission # CC 752209, Expires 12/2002.

REVIEW BY THE DESIGNATED COUNTY PSM DETERMINED THAT THIS PLAT CONFORMS TO THE REQUIREMENTS OF CHAPTER 177, PART 1, FLORIDA STATUTES. TITLE: D.C. P.S.M. PRINTED NAME: Allen L. Coates

PREPARED BY:
JOHNSON ENGINEERING, INC.
2158 JOHNSON STREET
FORT MYERS, FLORIDA 33901

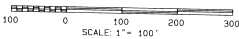
SPRING CREEK EAST UNIT TWO

PLAT BOOK 62 PAGE 66

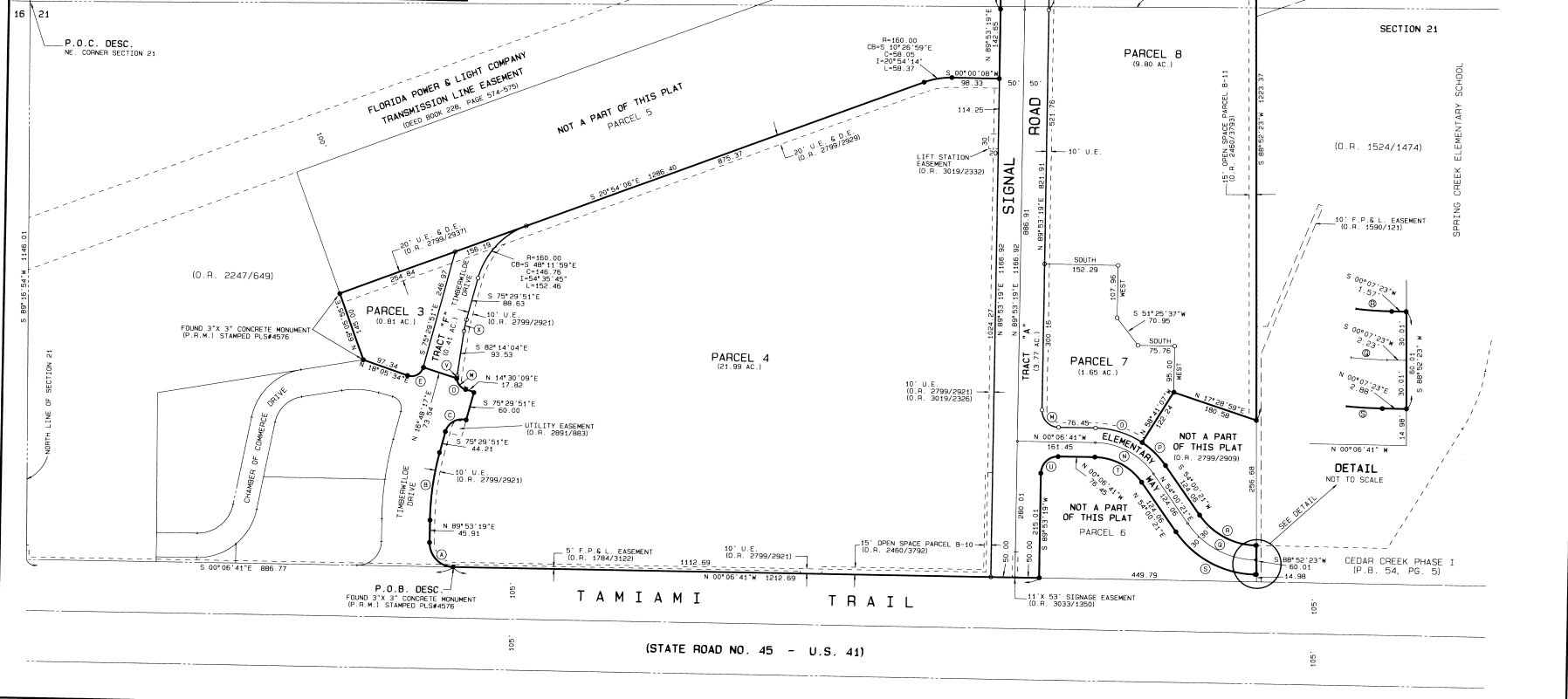
A SUBDIVISION IN
SECTIONS 21 & 22, TOWNSHIP 47 SOUTH, RANGE 25 EAST
LEE COUNTY, FLORIDA

SHEET 2 OF 3

Δ	DELTA	RADIUS	LENGTH	TANGENT	CHORD BEARING	CHORD DIST.
(A)	90°00'00"	50.00	78.54	50.00	N 44°53'19"E	70.71
(B)	14°36'50"	550.00	140.26	70.52	S 82°48'16"E	139.90
(C)	90°00'00"	35.00	54.98	35.00	S 30°29'51"E	49.50
(D)	71°26'50"	25.00	31.17	17.98	N 50°13'34"E	29.19
(E)	93°35'25"	25.00	40.84	26.62	N 28°42'09"W	36.45
(F)	0°22'31"	5794.73	37.95	18.98	S 20°43'54"E	37.95
(G)	3°44'07"	750.00	48.89	24.46	S 71°19'03"W	48.89
(H)	8°42'31"	650.00	96.80	49.49	S 73°48'15"W	98.70
(I)	16°42'12"	750.00	216.65	110.10	S 81°32'13"W	217.87
(J)	11°43'48"	750.00	153.55	77.04	S 84°01'25"W	153.28
(K)	11°43'48"	700.00	143.31	71.91	S 84°01'25"W	143.06
(L)	11°43'48"	650.00	133.07	66.77	S 84°01'25"W	132.84
(M)	90°00'00"	35.00	54.98	35.00	S 44°53'19"W	49.50
(N)	54°07'02"	150.00	141.68	76.62	S 26°56'50"W	136.47
(O)	32°27'18"	180.00	101.96	52.39	S 16°06'58"W	100.60
(P)	21°59'44"	180.00	68.05	34.44	S 43°10'29"W	67.65
(Q)	53°52'58"	175.00	164.58	88.54	S 27°03'52"W	158.58
(R)	53°52'58"	145.00	136.36	73.69	S 27°03'52"W	131.39
(S)	53°52'58"	205.00	192.79	104.19	S 27°03'52"E	185.76
(T)	54°07'02"	120.00	113.34	61.30	N 26°56'50"E	109.18
(U)	90°00'00"	35.00	54.98	35.00	N 45°06'41"W	49.50
(V)	11°48'57"	25.00	5.16	2.59	S 88°08'32"E	5.15
(W)	83°15'47"	25.00	36.33	22.22	N 56°08'02"E	33.22
(X)	6°44'13"	200.00	23.52	11.77	S 78°51'58"E	23.50
(Y)	20°26'19"	650.00	231.87	117.18	N 79°40'09"E	230.64



UNPLATTED



*** SHEET 2 *** - 5910.471DF - 25153.602 14-Dec-98 05:16 PM / 25123-1

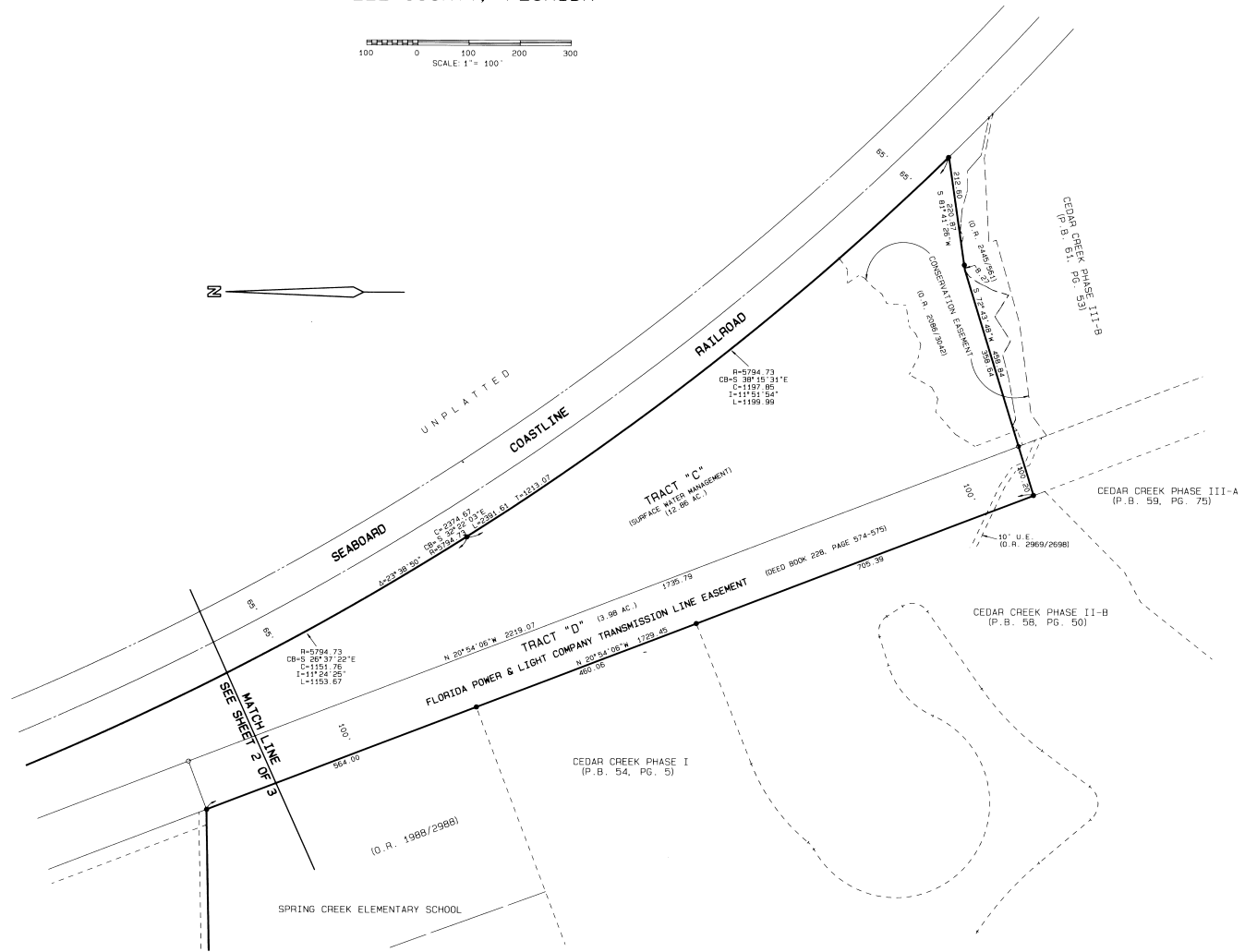
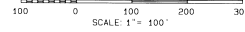
PREPARED BY:
JOHNSON ENGINEERING, INC
2158 JOHNSON STREET
FORT MYERS, FLORIDA 33901

PLAT BOOK 62 PAGE 67

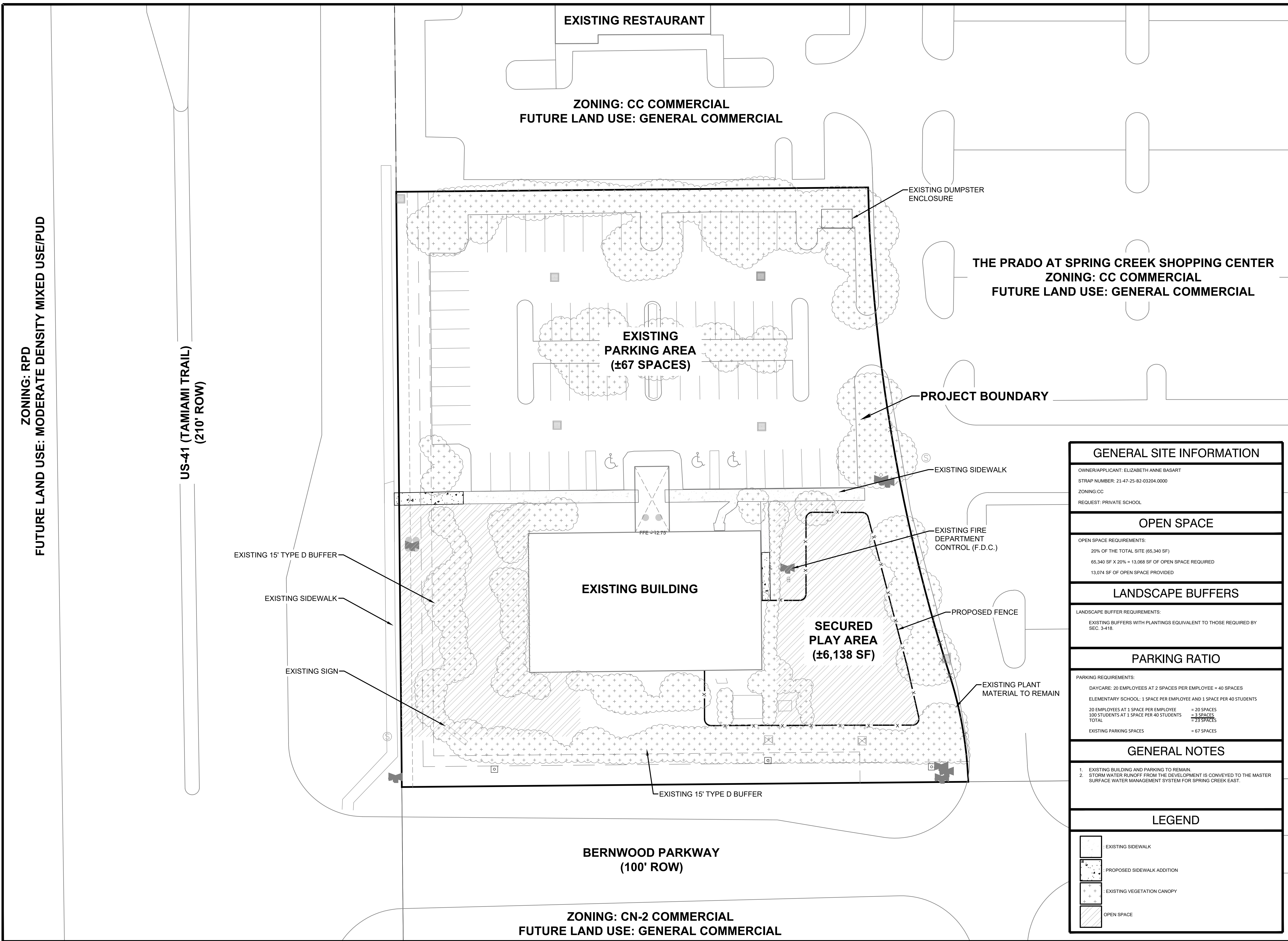
SPRING CREEK EAST UNIT TWO

SHEET 3 OF 3

A SUBDIVISION IN
SECTIONS 21 & 22, TOWNSHIP 47 SOUTH, RANGE 25 EAST
LEE COUNTY, FLORIDA



*** SHEET 3 *** 59.10.47.PT: 25123.603 14-Dec-98 05:19 PM / 25123.1



ZONING: RPD
 FUTURE LAND USE: MODERATE DENSITY MIXED USE/PUD

US-41 (TAMIAMI TRAIL)
 (210' ROW)

EXISTING RESTAURANT

ZONING: CC COMMERCIAL
 FUTURE LAND USE: GENERAL COMMERCIAL

EXISTING DUMPSTER ENCLOSURE

THE PRADO AT SPRING CREEK SHOPPING CENTER
 ZONING: CC COMMERCIAL
 FUTURE LAND USE: GENERAL COMMERCIAL

EXISTING PARKING AREA
 (±67 SPACES)

PROJECT BOUNDARY

EXISTING SIDEWALK

EXISTING FIRE DEPARTMENT CONTROL (F.D.C.)

EXISTING BUILDING

SECURED PLAY AREA
 (±6,138 SF)

PROPOSED FENCE

EXISTING PLANT MATERIAL TO REMAIN

EXISTING 15' TYPE D BUFFER

EXISTING SIDEWALK

EXISTING SIGN

EXISTING 15' TYPE D BUFFER

BERNWOOD PARKWAY
 (100' ROW)

ZONING: CN-2 COMMERCIAL
 FUTURE LAND USE: GENERAL COMMERCIAL

GENERAL SITE INFORMATION	
OWNER/APPLICANT: ELIZABETH ANNE BASART	
STRAP NUMBER: 21-47-25-82-03204.0000	
ZONING: CC	
REQUEST: PRIVATE SCHOOL	
OPEN SPACE	
OPEN SPACE REQUIREMENTS:	
20% OF THE TOTAL SITE (65,340 SF)	
65,340 SF X 20% = 13,068 SF OF OPEN SPACE REQUIRED	
13,074 SF OF OPEN SPACE PROVIDED	
LANDSCAPE BUFFERS	
LANDSCAPE BUFFER REQUIREMENTS:	
EXISTING BUFFERS WITH PLANTINGS EQUIVALENT TO THOSE REQUIRED BY SEC. 3-418.	
PARKING RATIO	
PARKING REQUIREMENTS:	
DAYCARE: 20 EMPLOYEES AT 2 SPACES PER EMPLOYEE = 40 SPACES	
ELEMENTARY SCHOOL: 1 SPACE PER EMPLOYEE AND 1 SPACE PER 40 STUDENTS	
20 EMPLOYEES AT 1 SPACE PER EMPLOYEE	= 20 SPACES
100 STUDENTS AT 1 SPACE PER 40 STUDENTS	= 3 SPACES
TOTAL	= 23 SPACES
EXISTING PARKING SPACES	= 67 SPACES
GENERAL NOTES	
1. EXISTING BUILDING AND PARKING TO REMAIN.	
2. STORM WATER RUNOFF FROM THE DEVELOPMENT IS CONVEYED TO THE MASTER SURFACE WATER MANAGEMENT SYSTEM FOR SPRING CREEK EAST.	
LEGEND	
	EXISTING SIDEWALK
	PROPOSED SIDEWALK ADDITION
	EXISTING VEGETATION CANOPY
	OPEN SPACE

PROJECT:
DISCOVERY DAY ACADEMY

LOCATION:
 25355 SOUTH TAMIAMI TRAIL
 BONITA SPRINGS, FL 34134

CLIENT:
DISCOVERY DAY ACADEMY

CONSULTANT:
MORRIS DEPEUW
 ENGINEERS • PLANNERS • SURVEYORS
 LANDSCAPE ARCHITECTS
 FL CA NO. 6532 / FL CERT NO. LB6891 / LC26000330

Fort Myers
 2914 Cleveland Avenue
 Fort Myers, Florida 33901
 (239) 337-3993
 Fax: (239) 337-3994
 Toll free: 866-337-7341

Tallahassee
 113 South Monroe Street
 1st Floor
 Tallahassee, Florida 32301
 Toll free: 866-337-7341

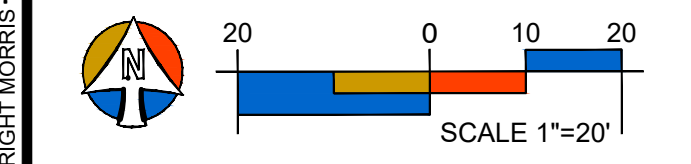
Destin
 5597 Highway 98
 Unit 201
 Santa Rosa Beach, Florida 32459
 Toll free: 866-337-7341

REVISIONS	DATE

PROJECT MANAGER: HMU
 DRAWING BY: TDM
 JURISDICTION: BONITA SPRINGS
 DATE: 3/9/2021

SHEET TITLE:
CONCEPTUAL SITE PLAN IV-G

SHEET NUMBER: C-100



JOB/FILE NUMBER: 21010-00

Discovery Day Academy Special Exception Application Project Narrative

The requested Special Exception is for a ± 1.5-acre property located on the northeast corner of the intersection of South Tamiami Trail and Bernwood Parkway. The property is in the General Commercial Future Land Use category and is zoned CC (Community Commercial). The subject property is a leased parcel in the Prado at Spring Creek Shopping Center, STRAP# 21-47-25-B2-03204.0000. The shopping center is addressed as 25355 South Tamiami Trail. Improvements on the subject property include an existing commercial building and associated parking area.

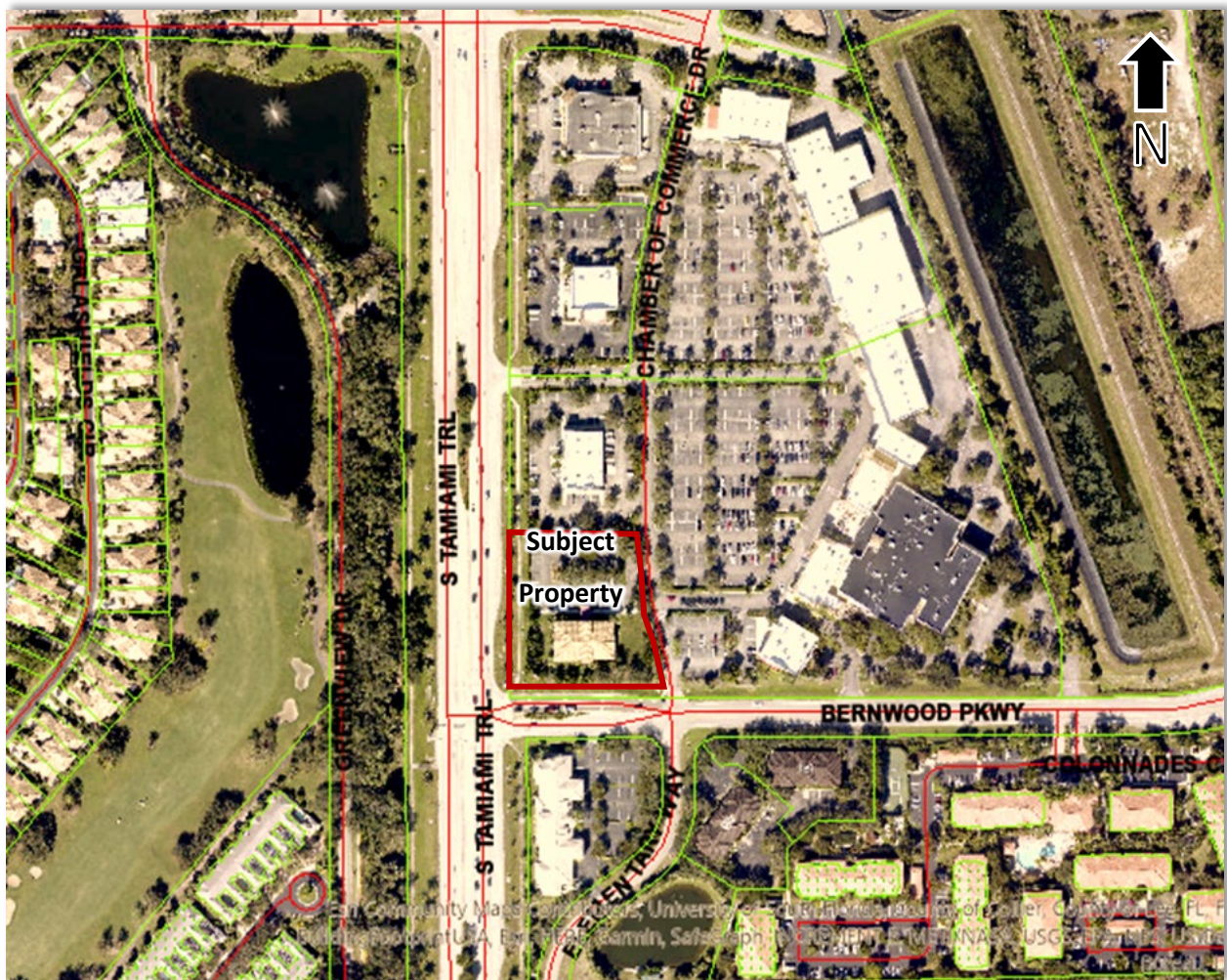


Figure 1. Property Location

Background

The Prado at Spring Creek Shopping Center was developed under DO 98-11-191.00D and platted as part of Spring Creek East Unit Two. The subject property is an outparcel of The Prado at Spring Creek Shopping Center and developed under DO 99-06-309.00D. The prior use of the property was a retail jewelry store.

Subsequent to development, the shopping center was annexed into the City of Bonita Springs. At that time of annexation, the General Commercial FLU and CC (Community Commercial) Zoning were established. The building has remained vacant for some time and as a result the building exterior has been neglected. However, the site has been maintained, existing landscaping is mature, and the parking area is in good condition. The owner is currently working to refresh the building exterior with new paint and repair the existing awnings over the windows and building entrance. The owner is working with the City's Building Department to plan the internal renovations to allow reconfiguration of the building interior to support the future private school.

The request is to allow the conversion of the existing building to a private school. The operator of Discovery Day Academy has leased the building with the intention to relocate the current school from the campus at 23601 N. Commons Drive in Bonita Springs to the subject property. The school provides educational instruction for students from preschool age thru fifth grade (elementary school). The student population is approximately 112 students, served by 15 employees.

The existing building is approximately 10,000 square feet. The building footprint is to remain unchanged. A secured fenced play area is proposed to the east of the existing building. The trees along the access drive east of the project boundary will remain to help screen the play area from the shopping center. The existing buffers and landscaping areas are proposed to remain unaltered to the greatest extent possible. However, two walkways are proposed for extension to facilitate safe pedestrian circulation throughout the site. It is possible that some landscaping may need to be pruned or relocated to facilitate the walkway extensions.

Play equipment will be relocated from the existing facility to the subject property. No additional exterior improvements are proposed beyond the walkway extensions and the play area, which will be secured behind a fence to promote student safety.

The site includes 67 parking spaces with three (3) handicap spaces and a dumpster enclosure is located in the northeast corner of the parking area. Central water and sewer are provided by Bonita Springs Utilities and in place to serve the existing building. A traffic impact statement has been provided and extensive coordination with the City regarding circulation has occurred. The school will generate less projected traffic than the previous jewelry store.

Future Land Use

The existing shopping center including the subject property is in the General Commercial Future Land Use (FLU). The surrounding land uses are predominately commercial in nature. However, west of S. Tamiami Trail (US-41) is the residential subdivision of Pelican Landings.

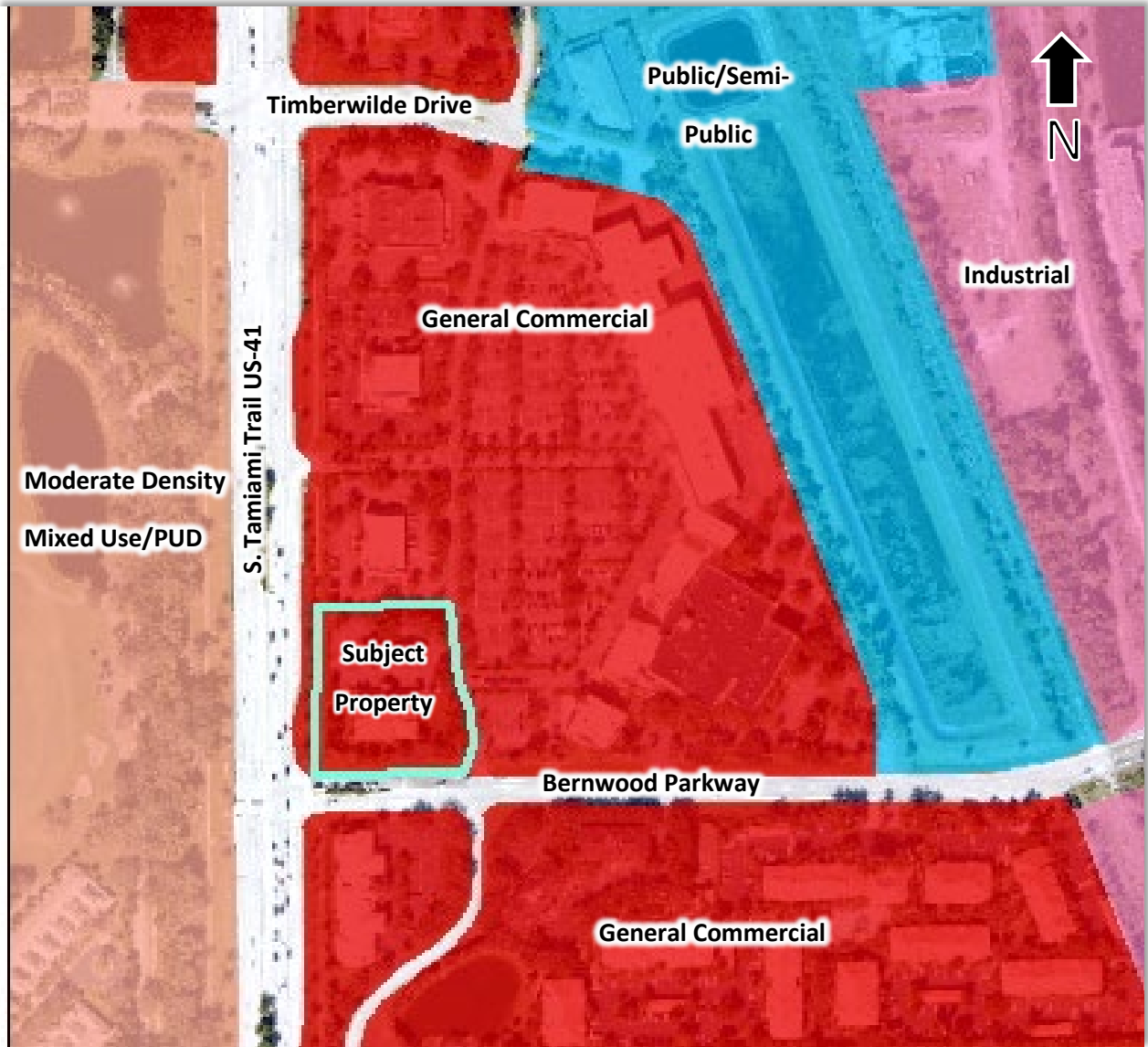


Figure 2. Future Land Use

Policy 1.1.14 of the Bonita Plan states the General Commercial FLU is

“Intended to accommodate a wide range of commercial uses serving the general population of the City. This designation recognizes, but is not specifically limited to, properties that have been developed, have received development approval or have been zoned for commercial use prior to the adoption of the Comprehensive Plan.”

- a. *Appropriate uses include a wide range of commercial retail and service uses for residents and visitors; hotels/motels; offices; light industrial uses; schools; recreation; public and semi-public uses;*

The shopping center and existing building on the subject property were developed prior to being annexed into the City of Bonita Springs. The annexation process includes designation of future land use and zoning on an annexed property as well as recognition of any existing buildings or improvements. The appropriate uses for the General Commercial FLU include school, retail, and service uses. The proposed school is a for-profit institution providing a service of educational instruction to students for a fee. The Bonita Plan defines commercial uses as;

“Activities within land areas which are predominantly connected with the sale, rental and distribution of products, or performance of services.”

The school use is permitted by the General Commercial FLU and the school provides a service to City residents consistent with the Policy 1.1.14 and the Bonita Plan’s definition of a commercial use.

Zoning

The Prado at Spring Creek Shopping Center is in the CC (Community Commercial) zoning district.

“The purpose and intent of the CC district is to permit the designation of suitable locations for medium to large-scale consumer-oriented commercial facilities, particularly for multiple-occupancy complexes known as community or regional shopping centers, and to facilitate their proper development and use. In addition to the retail sale of consumer goods, this district is intended to permit a wide range of services, financial and other, including business and professional offices, all arranged in discrete commercial centers or evolving business districts. Such centers or districts differ from neighborhood commercial facilities in concentrating a greater floor area of use and a broader mix of goods and services in order to serve a wider market or service area and a larger population. This is expected to create greater impact on surrounding land uses and therefore require buffering and designed gradients of intensity adjacent to less intense uses.”

Private schools are permitted in the CC zoning district through the special exception process and are classified as non-commercial schools.

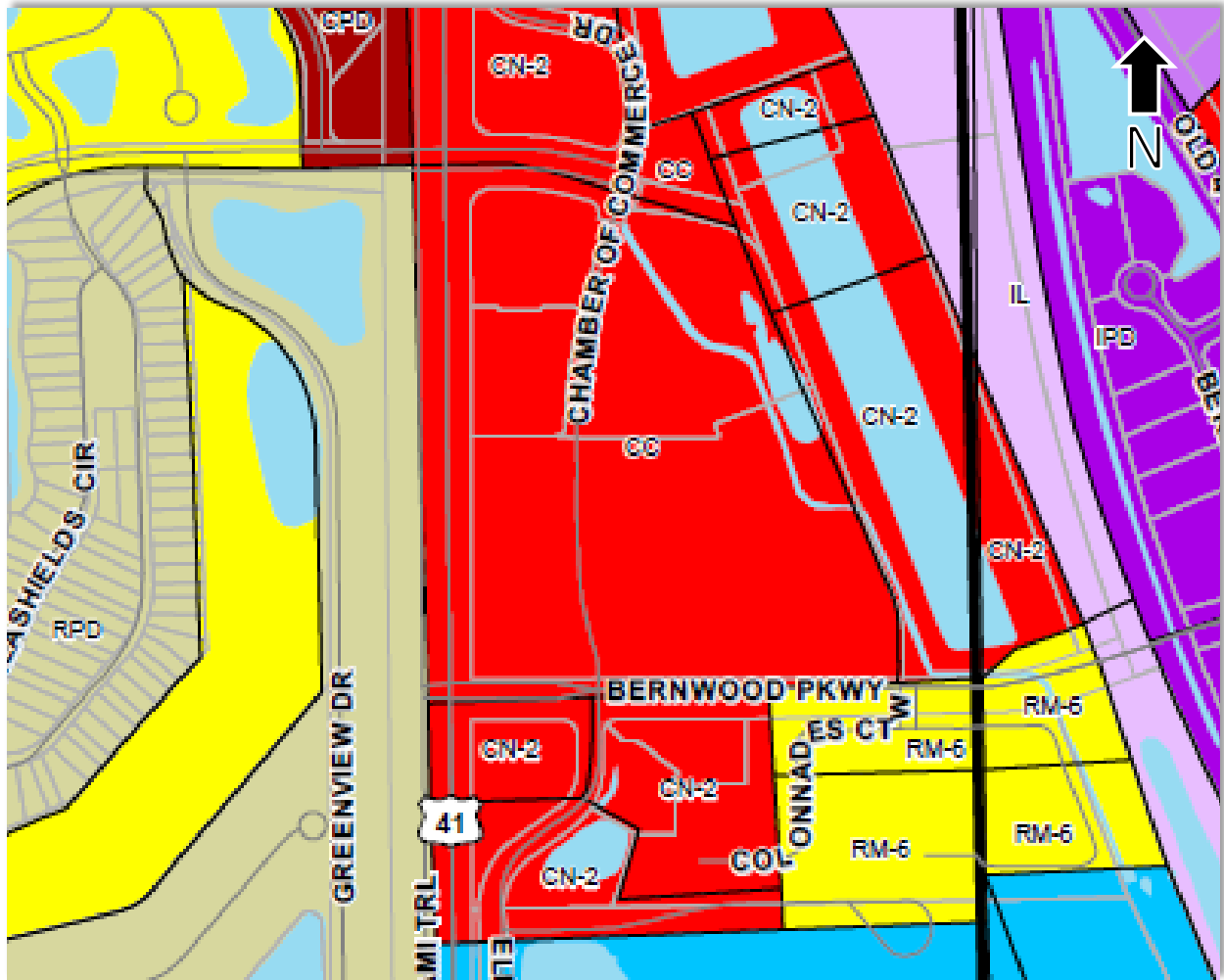


Figure 3. Zoning Map

It is necessary to ensure that private schools, like Discovery Day Academy, are compatible with the surrounding existing and planned uses. As indicated above, the CC zoning district is intended to provide for the retail and service needs of the City. Discovery Day Academy is a private school providing for profit educational instruction services to students. The use is consistent with the CC zoning category.

Surrounding Uses

The surrounding area has a mix of uses including commercial, residential, and institutional uses. Tamiami Trail abuts the subject property to the west. As a major aerial roadway, the primary uses along Tamiami Trail are retail and service consistent with the definition in the Bonita Plan. The proposed private school is a commercial use allowed by special exception approval.



Figure 4: Surrounding Uses

The subject property is a corner lot bounded on the west by S. Tamiami Trail and to the south by Bernwood Parkway. West of S. Tamiami Trail is the community of Pelican Landing, a master planned community with a golf course and a variety of residential uses. To the south of Bernwood Parkway are additional commercial uses similar to those found in the Prado at Spring Creek Shopping Center and a multifamily residential community. The subject parcel is part of the Prado at Spring Creek Shopping Center and abuts the shopping center's main access road to the east. North of the subject property is an existing restaurant. The shopping center has a variety of uses including retail shops, financial services, restaurants, and a movie theater. Some of the tenant spaces in the shopping center are currently vacant.

Direction	FLU	Zoning	Notes
North	General Commercial	CN-2	Restaurant
South	General Commercial	CC	Retail/Office Uses
East	General Commercial	CN-2	Retail
West	Moderate Density Mixed Use/PUD	RPD	Residential

Table 1. Surrounding Uses

The proposed school is a complimentary use allowed by the General Commercial FLU and permitted in the commercial zoning district. The school is located several hundred feet away from both Pelican Landing and San Mirage multi-family condominium community. The school site can be accessed from S. Tamiami Trail via the main north-south access roadway (known as Chamber of Commerce Drive) in the Prado at Spring Creek Shopping Center and from Timberwilde Drive. As indicated in the revised Queuing Analysis dated June 10, 2021, Bernwood Parkway will not be utilized to access the subject property during student pick up and drop off. Instead, safety cones will be placed by school staff at the intersection of Bernwood Parkway and Chamber of Commerce Drive which will prohibit right-turn movements from Bernwood Parkway into the Prado Plaza via Chamber of Commerce Drive. The two access points to the north of the subject property allow the traffic accessing the school to use multiple routes. Therefore there will be no negative impacts from the modest student population on the surrounding existing uses; including residential communities.

Traffic from the school will be distributed to the multiple points of entry existing at the shopping plaza. Additionally, Timberwilde Drive is a signalized intersection. By distributing the traffic from the school to the two existing accesses; there will be no over stacking or other negative impacts to any of the existing intersections with US 41.

The modest student population and hours of operation differ from those of most business in the area. Students will arrive at the campus prior to the time when most of the businesses are open. Eliminating the impact of traffic from student drop offs on business in the shopping center. Older students have staggered release times around 3PM in the afternoon; therefore will be complete prior to peak time for the surrounding retail. Additionally, student drop off will also occur during an off peak traffic time to the shopping center. Preschool students and the employees that work with the students will remain at the facility till 5PM. Parents of preschool students' park in the parking area when dropping off and picking up students, so the drop off and pickup of preschool

students will have no impact on business in the shopping plaza as the 67 existing parking spaces will accommodate parents picking up the expected 40 preschool children.

The existing building has been vacant for some time and renovations are planned to the exterior building to support the school improving the overall appearance the building. As parents will be coming to the shopping center twice a day to pick up and drop off students; it is very likely parents and employees of the school will utilize the surrounding area businesses to meet retail and service needs. The school will help increase the economic vitality of the shopping plaza and surrounding commercial businesses of the area, by increasing patronage of the local business by parents and school employees.

Location

The proposed location is highly appropriate for the proposed private school use. The neighboring communities of Estero and North Naples have other private educational institutions located within a similarly configured standalone building near commercial establishments.

Institution	Address	City
Living Water Academy	22100 S Tamiami Trail	Estero
Oak Haven Montessori	9410 Corkscrew Palms Circle	Estero
Primrose School of North Naples	4510 Executive Drive	Naples

Table 2. Comparable Institutions

Additionally, the redevelopment of a commercial building for a school is not a new concept to Lee County which has successfully achieved the redevelopment of at least two large, public elementary schools. Rayma C. Page and G. Weaver Hipps Elementary schools are located where former Kmart used to be, the schools feature high enrollment figures with over 815 students per school. The proposed private school, Discovery Day Academy, will feature a significantly smaller enrollment of just over 100 students, 40 of which are infants to 4 years of age. As a result, the student population will be approximately 72 students; which will not have any negative impacts to the surrounding infrastructure. It is important to note the other use co-located in the building with the private school is the daycare use. Due to the daycare, nearly half of the student demographic is too young to participate in the school use within the development.

Furthermore, to deter parents from picking up or dropping off students utilizing Bernwood Parkway, the operator of the school has agreed to block public access from Bernwood Parkway to the city-maintained Chamber of Commerce Drive as suggested by staff. As previously stated, safety cones will be used to achieve this measure. Concerns over the use of Bernwood Parkway were echoed at a meeting with staff on May 27, 2021. Bernwood Parkway, is a “cut-through” city-maintained local roadway. Bernwood Parkway runs from S Tamiami Trail to Old 41, it is one of three cut-throughs used by locals to traverse from Tamiami Trail to Old 41 to the north of Bonita Beach Road. From Bonita Beach Road to the northern boundary of Bonita Springs there

are a number of ways across Tamiami Trail and Old 41, they are demonstrated in the exhibit below, these include Strike Lane (to the north of Bernwood Parkway) and Terry Street (to the south of Bernwood Parkway).



Figure 5. Cut-through Streets Between Tamiami Trail and Old 41

Bernwood Parkway is generally underutilized given that the only development to rely solely on the roadway is the modest condominium development of San Mirage. All other developments along Bernwood Parkway, including the subject property, have at least one other means of ingress/egress that is not Bernwood. Another such development is Spring Creek Elementary School, a public institution with an enrollment of over 650 students. Spring Creek Elementary has direct access to Elementary Way which is a city-maintained local roadway that runs from Bernwood Parkway to Cedar Creek Drive, both of which have direct access to Tamiami Trail. All developments in proximity to the subject property, with the exception of San Mirage, have ingress/egress points which do not rely on Bernwood Parkway, allowing for greater flexibility in traffic movements in the surrounding developments.

Findings

Prior to approval, the requested Special Exceptions must demonstrate the findings described in LDC Sec 4-131 (c)(2) have been met. The requested special exception must prove entitlement by demonstrating the request:

- a. Whether there exist changed or changing conditions that make approval of the request appropriate;

Response: Upon annexing and establishing the General Commercial FLU on the property, the City permitted the opportunity for development of a variety of commercial uses. Discovery Day Academy is requesting to relocate the school from the existing campus to the subject property, bringing a new use to a vacant building. The building has been vacant for some time. As a result, the building exterior has suffered. The location is appropriate for commercial use as indicated by the General Commercial FLU. Discovery Day Academy is a private for-profit school providing educational instruction services to students for a fee. The educational services provided by the school are consistent with the Bonita Plan's definition of commercial uses, defined as;

“Activities within land areas which are predominantly connected with the sale, rental and distribution of products, or performance of services.”

The school is proposing renovation of the building, improving the building's appearance and curb appeal on a very visible corner of the City. Trends in retail sales have been pushing more retail business, like jewelry store to the internet in recent years. The pandemic has increased this trend. As a result, more and more buildings are vacant and remain on the lease market for longer periods of time. Trends like this inhibit the City's ability to increase economic vitality. Spaces like the subject property are too large for most small retail business, so buildings remain vacant.

The school is an appropriate use for this location. The other business in the shopping center will benefit from increased traffic to the shopping center as parents drop off and pick up students. The shopping center has a few restaurants, a movie theater, and a variety of retail service business. The school drop off times occur generally before most of the business in the shopping center open and pick up times are staggered to facilitate quick movement of traffic through the site.

- e. Whether the request is consistent with the goals, objectives, policies, and intent of the Bonita Plan;

Response: The school is located in the General Commercial FLU. Policy 1.1.14 of the Bonita Plan states the General Commercial FLU is;

“Intended to accommodate a wide range of commercial uses serving the general population of the City. This designation recognizes, but is not specifically limited to, properties that have been developed, have received development approval or have been zoned for commercial use prior to the adoption of the Comprehensive Plan.

- a. Appropriate uses include a wide range of commercial retail and service uses for residents and visitors; hotels/motels; offices; light industrial uses; schools; recreation; public and semi-public uses;”***

Discovery Day Academy is a private for-profit school providing educational instruction for students from preschool to elementary school age. The educational services provided by the school are consistent with the Bonita Plan’s definition of commercial uses, defined as;

“Activities within land areas which are predominantly connected with the sale, rental and distribution of products, or performance of services.”

The school provides educational instruction services to students for a fee. The school is located in an area with other commercial uses. Access is provided via an internal north-south roadway in the Prado at Spring Creek Shopping Center. The existing building has sufficient parking to accommodate the parking needs of the school. The school use will generate less traffic than the previous use, which was a jewelry store.

It is the intention of Objective 1.3 to improve the visual and aesthetic appearance of the City. The proposed school will occupy a vacant building located on a prominent corner in the City. The existing building has remained vacant for some time as a result the building exterior has been neglected. The property owner at the behest of Discovery Day Academy is painting the building exterior and replacing the damaged awnings. These simple treatments improve the curb appeal and appearance of building on a highly visible corner consistent with Objective 1.3 of the Bonita Plan.

Objective 1.11 requires new development and redevelopment occur in areas of the City with public facilities and where capacity is available to serve new development. The existing building is already connected to utilities and capacity is available to serve the building and will be demonstrated at the time of development order consistent with the requirements of Objective 1.11.

- f. Whether the request meets or exceeds all performance and locational standards set forth for the proposed use;**

Response: The school can be accommodated in the existing building footprint and limited improvements to the existing site are proposed. The improvements include extension of walkways to promote pedestrian safety and fencing of a play area on the east side of the building.

The existing building was developed under Lee County’s property development regulations and later annexed by the City of Bonita Springs. As Table 2 demonstrates, the subject property and existing building meet or exceed the property development regulations required by the CC zoning district.

Development Parameters	Minimum Requirements	Existing Building
Lot Size	20,000 sq. ft.	1.5 Acres
Lot Depth	100’	±279’
Lot Width	100’	±200’
ROW Setback -US-41	65’	±65’
ROW Setback - Bernwood Pkwy	25’	±50’
Side Setback	15’	±70’
Height	35’	±35’

Table 2. Comparison Existing Building & Minimum Property Development Regulations

The existing building is consistent with property development regulation of the CC zoning category.

The existing building and site are part of the master development for the Prado at Spring Creek Shopping Center, which included a master surface water management system, permitted as Spring Creek East under South Florida Water Management District permit # 36-02556-S issued on August 12, 1993. The subject property was issued a separate surface water management permit, number 36-02556-S, when the building and site improvements were constructed. No modifications have occurred since construction of the existing building and site improvements. The proposed improvements to the site will support the new school and include walkway extensions and fencing. If required, a modification to the existing surface water management permit for the proposed improvements will be completed along with the required limited development order. The improvements to the site are limited and surface water from the proposed improvements can be accommodated.

The open space required for commercial development in the City of Bonita is 20 percent. The concept plan demonstrates the required 20 percent open space. Landscape buffers, building

foundation landscaping, and interior parking lot landscaping are existing. The existing plantings are equivalent to those required by Chapter 3 of the Land Development Code.

Existing trees and plants onsite are mature and have remained relatively undistributed for several years as the building was vacant. Every effort is being made to limit disturbance within landscaped areas and buffers. Some pruning and relocation of plant material is required to allow the extension of walkways and to permit installation of fencing in the play area east of the building.

The proposed school will serve students from preschool to elementary school aged. As a result of the age groups being served by the school, the parking was evaluated based for two uses. The school meets the definition of a private elementary school which requires 1 parking space for each employee and 1 parking space per 40 students. The school has 15 employees and 112 students. Based on the parking ratios for elementary schools, 18 parking spaces are required. Day care centers which serve preschool age students require 2 spaces per employee in addition to adequate and safe provisions for student loading and unloading. Based on the number of employees a minimum of 20 spaces will be required. The existing parking provided is 67 parking spaces including 3 handicap spaces. The existing parking is sufficient to accommodate the parking needs of the school.

A traffic waiver was submitted, and further coordination will be required with the City. The traffic generated by the school is less than that associated with the previous jewelry store use. Students will be dropped off in the morning before most of the existing business in the shopping center open. Parents of students will drop off/pick up student using one of two methods. Older students will enter or exit vehicles at the front door of the building from a drop off and pick up line, which will circulate one way from the north portion of the parking area to the south. Parents of preschool age children will park in the parking area to drop off and pick up children. The school provides staggered release times of older children in the afternoon which will help reduce the impact of parents arriving to pick up children. Most preschool aged children remain at the school till 5PM.

- g. Whether the request will protect, conserve or preserve environmentally critical areas and natural resources;

Response: No environmentally critical areas and natural resources are present within the subject property. The existing building and improvements are not in proximity to any environmentally critical areas or natural resources. The subject property is part of master planned drainage system and no new improvements are proposed that with effect environmentally critical areas or natural resources. Existing landscaping will be maintained to the greatest extent possible. However, some pruning of trees or removal and relocation of landscaping may be necessary to ensure walkways can be extended to allow safe pedestrian movement around the subject property.

- h. Whether the request will be compatible with existing or planned uses;

Response: The school use is consistent with the uses allowed in the General Commercial FLU and is permitted via a special exception in the CC zoning category to determine compatibility. The area is commercial in nature with most use consisting of retail or service business. The existing building which is currently vacant is being converted to a school with minor exterior improvements proposed to the existing site. The intention is for this area to provide for the commercial needs of the City.

Residential uses in the area are separated from the school by the right of ways of Bernwood Parkway and Tamiami Trail. The separation of the residential uses from the school property should limit any impacts of the school on residential property owners in the area. The traffic from the school is distributed over the multiple access point to the shopping plaza from Bernwood Parkway, Timberwilde Drive and US-41. By distributing the traffic from the school, the impact on any one intersection will be reduced.

The only exterior improvements being proposed are walkway and a secure play area. The existing building footprint will remain the same with the interior of the building renovated to accommodate educational instruction. New awnings and painting of the exterior of the building are proposed to freshen up the exterior appearance of the building and improve the overall curb appeal.

The school will have a limited impact on the surrounding businesses. The hours of operation of the school are different from many of the businesses in the area. Students arrive before most of the businesses in the shopping center open. Student release times in the afternoon for the upper grades are staggered to facilitate pick up. Most of the early education students remain at the facility till 5PM. Parents of early education students park to drop off and pick up students as a safety precaution.

The placement of the school is appropriate for this site. Several other preschools and daycares are similarly located in existing shopping centers in other parts of the City. Since the majority of the use is conducted in the building surrounding businesses will not be disrupted by the school. With drop off times before most businesses' open and staggering of student pick up times, the school can facilitate movement of traffic through the site without adverse impacts to other shopping center businesses or patrons.

- i. Whether the request will cause damage, hazard, nuisance or other detriment to persons or property;

Response: The building is existing and only exterior improvements include walkway extensions and a installation of a secure play area. The proposed fencing and locking gate, provide protection for students from contact with patron of the existing shopping center. School employees will supervise the play area when students are present. Several preschools and

daycares in Bonita Springs are similarly located in shopping centers and have outdoor play areas, similar to the proposed play area. The school use will not damage, harm or be otherwise detrimental to persons or property. All residential uses in the area are separated from the proposed school by a right of way so the school will not damage or cause a nuisance to residential property owners.

- j. Whether a requested use will be in compliance with all general zoning provisions and supplemental regulations pertaining to the use as set forth in LDC Chapter 4.

Response: As demonstrated in criteria “f” above the site and building meet or exceed the zoning provisions of the CC zoning district. LDC Section 4-1970 provides supplementary standards for non-commercial schools. As a private school, Discovery Day Academy is considered by the Bonita Springs LDC to be a non-commercial school, as it is not consistent with the definition of a commercial school. However, a private school functions as a commercial use (requiring a fee for providing educational instruction services) and is consistent with the Bonita Plan’s definition of a commercial uses.

As stipulated by LDC Section 4-1970, all non-commercial schools not associated with Lee County School District are permitted by right or required to obtain special exception approval, in accordance with the district use standards. The CC zoning district requires special exception approval for all noncommercial schools. Access to all elementary schools is required by LDC 4-1970 to be from a local or collector road when possible. The access point for the proposed school is from the main north-south roadway within the Prado at Spring Creek Shopping Center, which is equivalent to a local street. LDC 4-1970 states that;

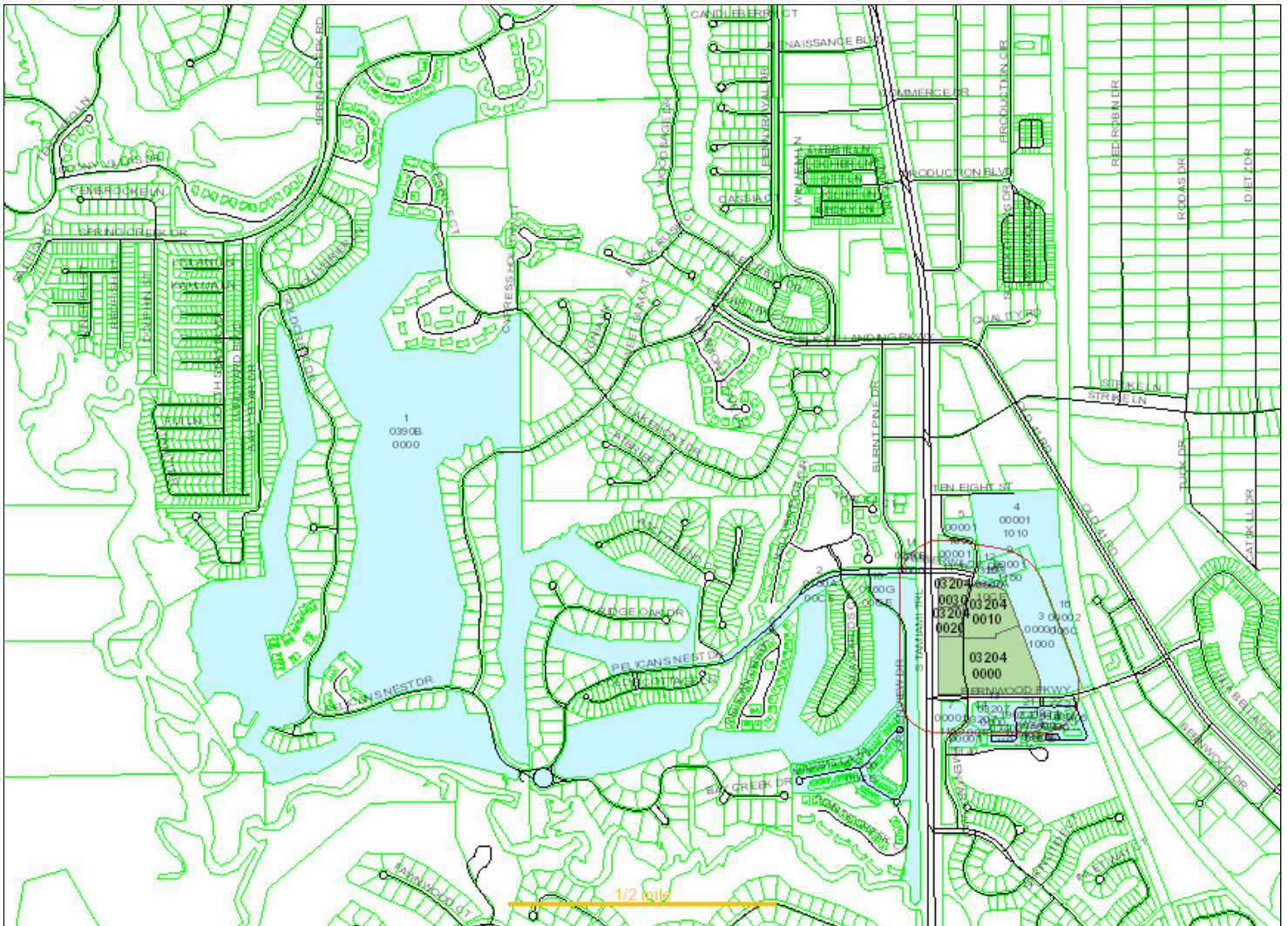
“No school site will be approved which in the opinion of the City Council, is exposed to physical constraints, hazards or nuisances which are detrimental to the health and safety of students and to the general operation of the school.”

The proposed school will not be exposed to any physical constraints. The existing site and building will adequately serve the proposed 112 students and 15 employees. Sufficient access and parking exist to provide for the needs of employees and parents dropping off students. The play area proposed will be secured with a locking gate to protect students. Additional walkways are proposed to provide safe pedestrian movement through the site.

The school will not pose a hazard or a nuisance to surrounding business. The school is proposing renovations to the exterior of the building that will improve the building’s appearance and curb appeal. The school will occupy a now vacant building, bringing traffic from employees and parents. This may provide businesses in the shopping center additional customers and serve to increase the economic vitality of the area. Student drop off occurs before most of the businesses in the shopping center are open. Student release is staggered after 3PM to facilitate pick up and reduce the impact of waiting parents on the existing business. In the event of early

arrival for afternoon pick up the existing site has 67 parking spaces where parents can park and wait for students.

The school is in compliance with the zoning provisions and supplemental regulations of LDC Chapter 4. The school has demonstrated consistency with the Bonita Plan, compatibility with existing and planned uses in the area and shall have no impact on environmentally critical or natural resources. Renovating the vacant building to a school requires minimal improvements to the existing site and building and the does not change the commercial nature of the area. The building's exterior appearance is being updated with new paint and replacement awnings improving the curb appeal of a building located a visible corner in the City. The school will be a welcome addition to the City and be an improvement over the existing vacant building.



Date of Report: April 21, 2021

Buffer Distance: feet

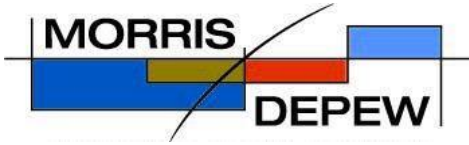
Parcels Affected: 166

Subject Parcels: **21-47-25-B2-03204.0000, 21-47-25-B2-03204.0010, 21-47-25-B2-03204.0020, 21-47-25-B2-03204.0030**

To change, add or remove subject parcels please change the parcel selection in [GeoView](#)

[Click here to download the map image, mailing labels \(Avery 5161\) and CSV formatted information.](#)

OWNER NAME AND ADDRESS	STRAP AND LOCATION	LEGAL DESCRIPTION	MAP INDEX
PELICANS NEST GOLF CLUB INC 4450 PELICANS NEST DR STE 500 BONITA SPRINGS FL 34134	20-47-25-B2-0390B.0000 4450 PELICANS NEST DR BONITA SPRINGS FL 34134	PELICANS NEST GOLF CLUB DESC IN PB 68 PGS 88-89 TRACT B + CLUB HOUSE + MAINTENANCE PARL + GOLF COURSE	1
PELICAN LANDING COMM ASSN INC MARIE MARTEL 24501 WALDEN CENTER DR BONITA SPRINGS FL 34134	21-47-25-B1-0160A.00CE 3400 PELICANS NEST DR BONITA SPRINGS FL 34134	PELICAN LANDING UNIT 14 PB 53 PGS 35-46 TRACT A R/W	2
RESOURCE CONSERVATION 9990 COCONUT RD STE 200 BONITA SPRINGS FL 34135	21-47-25-B2-00001.1000 8841 BERNWOOD PKWY BONITA SPRINGS FL 34135	FRM NE CORN SEC 21 W 346.65 THN S 555.82 TO POB THN NE 100 FT THN SE 1528.60 ETC DESC OR3259/4011 LESS OR 3671/2944	3
BONITA SPRINGS UTILITIES INC 11900 E TERRY ST BONITA SPRINGS FL 34135	21-47-25-B2-00001.1010 8890 TEN EIGHT ST BONITA SPRINGS FL 34135	PARL IN NE 1/4 SEC 21 + NW 1/4 SEC 22 AS DESC IN OR 1898 PG 4470	4
SOUTHWEST FLORIDA INC 25071 CHAMBER OF COMMERCE DR SPE21-78485-BOS	21-47-25-B2-00001.1090 25071 CHAMBER OF COMMERCE BB38	FR NE COR W 846.01 FT TH SELY 273.61 FT	5



MORRIS-DEPEW ASSOCIATES, INC.
 ENGINEERS • PLANNERS • SURVEYORS
 LANDSCAPE ARCHITECTS
 2914 Cleveland Ave
 Fort Myers, FL 33901
 (239) 337-3993 Office • (239) 337-3994 Fax
 #LC26000330

LETTER OF TRANSMITTAL

TO:
 City of Bonita Springs
 Development Services
 9220 Bonita Beach Road #111
 Bonita Springs, FL 34135

DATE: 02/08/2021 **MDA PROJECT NO.:** 21010

ATTENTION: Jacqueline Genson

RE: Discovery Day Academy – Public Hearing Submittal Requirement Waiver Package

We are sending you Attached Under separate cover VIA _____ the following items:

Copies	Date	No.	Description
1	02/08/2021	21010	Cover Letter
3	02/08/2021	21010	Public Hearing Submittal Requirement Waiver Applicationa
3	02/08/2021	21010	Explanations
3	02/08/2021	21010	MDA Letter of Authorizations

These are transmitted as checked below:

- For approval
 - For your use
 - As requested
 - For review and comment
 - For bids due
 - Approved as submitted
 - Approved as noted
 - Returned for corrections
 - Resubmit
 - Submit
 - Return
 - _____
 - Prints returned after loan to M-DA
- copies for approval
copies for distribution
corrected prints

REMARKS: Should you have any questions or concerns please contact me.
 Thank you.

COPY TO:

SIGNED: MarySue Groth



Public Hearing Submittal Requirements Waiver

Community Development Dept. | 9220 Bonita Beach Road, Suite 111 | Bonita Springs, FL 34135 | Phone: 239 444 6150 | Fax: 239 444 6140

Upon written request, the Director may modify the submittal requirements for Public Hearings (and other administrative applications) where it can be clearly demonstrated that the submission will have no bearing on the review and processing of the application. The request and the Director's written response must accompany the application submitted and will become a part of the permanent file.

APPLICATION FOR WAIVER OF REQUIRED SUBMITTAL ITEMS (indicate the appropriate application type)

- Public Hearing - General Requirements (4-194)
- Public Hearing - Additional Requirements for:
 - Development of Regional Impact (4-195)
 - Planned Developments (4-295)
 - Master Concept Plan Extension (4-303)
 - Master Concept Plan Reinstatement (4-303)
 - Rezoning other than Planned Developments (4-195(b))
 - Mobile Home Park (4-195(d))
 - Special Exception (4-195(e))
 - Variances (4-195(f))
- Administrative Action Requirements

PLEASE PRINT OR TYPE:

STAP Number: 21-47-25-B2-03204.0000

Name of Project: Discovery Day Academy

Name of Agent: Morris-Depew Associates, Inc.

Street Address: 2914 Cleveland Avenue

City: Fort Myers State: FL Zip: 33901

Phone #: 239-337-3993 Fax #: 239-337-3994

E-mail: permitting@m-da.com

Name of Applicant*: Elizabeth Anne Basart of Discovery Day Academy IV, Inc.

Street Address: 506 S. Dixie Hwy

City: Hallandale State: FL Zip: 33009

Phone #: 239-498-5826 Fax #: _____

E-mail: e.garcia@discoverydayacademy.com

* If applicant is not the owner, a letter of authorization from the owner must be submitted.

A. SPECIFIC SECTION(S) AND REQUIREMENT(S) FOR WHICH A WAIVER IS SOUGHT:

Section Number	Requirement
#1 <u>4-195(e)(2)(d)</u>	<u>A traffic impact analysis of projected trip generation for the development</u>
#2 _____	_____
#3 _____	_____
#4 _____	_____
#5 _____	_____
#6 _____	_____
#7 _____	_____
#8 _____	_____
#9 _____	_____

B. SCOPE OF PROJECT AND REASON(S) FOR REQUEST:

Please provide an explanation of the scope of the project and the reason(s) why you think the request for submittal waiver(s) should be approved. Use additional sheets if necessary and attach to this application form. (Please print or type)

Please see attached explanation.

Under penalties of perjury, I declare that I have read the foregoing application and that the facts stated in it are true.

William M. Williams

Signature of Applicant

Directors Decision: _____ Request Approved Request Denied

Comments: See attached correspondence regarding staff's concerns.

Signature: *[Signature]*

Date: 3/9/2021

From: [Ross, Tom/ORL](#)
To: [Kyle C. Knight](#)
Cc: [Heather Urwiller](#); [MarySue Groth](#); [Jacqueline Genson](#); [Cynthia Vargas](#); [Cepeda, Milagros/ORL](#)
Subject: RE: Discovery Day Academy PD
Date: Tuesday, March 9, 2021 9:50:31 AM
Attachments: [image002.png](#)
[image003.png](#)
[image007.png](#)

Kyle,

Yes, Staff will require a full TIS for this application. This use is significantly different than the previous one and there is concern over the traffic circulation and queuing with any school.

Feel free to call me if you would like to discuss.

Thank you,

Tom Ross, P.E. (FL, TX & GA)
Traffic Group Leader, Florida
M 1 407 718 5443
tom.ross2@jacobs.com

Jacobs
200 S. Orange Ave. Ste 900
Orlando, FL 32801
www.jacobs.com | [LinkedIn](#) | [Twitter](#) | [Facebook](#) | [Instagram](#)

From: Kyle C. Knight <kknight@M-DA.com>
Sent: Tuesday, March 9, 2021 9:42 AM
To: Ross, Tom/ORL <Tom.Ross2@jacobs.com>
Cc: Heather Urwiller <HUrwiller@M-DA.com>; MarySue Groth <MGroth@M-DA.com>; Jacqueline Genson <jgenson@cityofbonitaspringscd.org>; Cynthia Vargas <CVargas@cityofbonitaspringscd.org>; Cepeda, Milagros/ORL <Milagros.Cepeda@jacobs.com>
Subject: [EXTERNAL] RE: Discovery Day Academy PD

Good Morning Tom,

We just received confirmation on the student count from our client. We now have 100 students instead of the originally planned 150. I recalculated the trip generation and queuing length based on this student count update. Using the same assumptions noted in the report, we were able to reduce the queuing length to be completely contained within the parking lot. The calculated longest vehicle que is 18 vehicles.

Would the queuing still be a concern now that we are able to demonstrate that all vehicles can be kept in the parking lot? Would you like me to send a revised report showing these changes?

Thanks!

Kyle

From: Ross, Tom/ORL <Tom.Ross2@jacobs.com>
Sent: Monday, March 8, 2021 12:52 PM
To: Kyle C. Knight <kknight@M-DA.com>
Cc: Heather Urwiller <HUrwiller@M-DA.com>; MarySue Groth <MGroth@M-DA.com>; Jacqueline Genson <jgenson@cityofbonitaspringscd.org>; Cynthia Vargas <CVargas@cityofbonitaspringscd.org>; Cepeda, Milagros/ORL <Milagros.Cepeda@jacobs.com>
Subject: RE: Discovery Day Academy PD

Good Afternoon Kyle,

I spoke with Staff on Friday. They too are concerned about vehicle queuing both entering and exiting the site and at the intersection of Bernwood Parkway and US 41. Therefore, a full Traffic Impact Study will be required for Discovery Day Academy. Please prepare a methodology for the study and submit it for review. You can send that directly to me, but please copy Staff in all your communications with me. Once we review the proposed methodology, we can set up a time to discuss.

Please let me know if you have any questions.

Thank you,

Tom Ross, P.E. (FL, TX & GA)
Traffic Group Leader, Florida
M 1 407 718 5443
tom.ross2@jacobs.com

Jacobs
200 S. Orange Ave. Ste 900
Orlando, FL 32801
www.jacobs.com | [LinkedIn](#) | [Twitter](#) | [Facebook](#) | [Instagram](#)

From: Kyle C. Knight <kknight@M-DA.com>
Sent: Wednesday, March 3, 2021 8:06 AM
To: Ross, Tom/ORL <Tom.Ross2@jacobs.com>
Cc: Heather Urwiller <HUrwiller@M-DA.com>; MarySue Groth <MGroth@M-DA.com>; Jacqueline Genson <jgenson@cityofbonitaspringscd.org>; Cynthia Vargas <CVargas@cityofbonitaspringscd.org>; Cepeda, Milagros/ORL <Milagros.Cepeda@jacobs.com>
Subject: [EXTERNAL] Re: Discovery Day Academy PD

Ok, thanks for the update.

Kyle

Get [Outlook for iOS](#)

From: Ross, Tom/ORL <Tom.Ross2@jacobs.com>
Sent: Tuesday, March 2, 2021 5:58:30 PM
To: Kyle C. Knight <kknight@M-DA.com>
Cc: Heather Urwiller <HUrwiller@M-DA.com>; MarySue Groth <MGroth@M-DA.com>; Jacqueline Genson <jgenson@cityofbonitaspringscd.org>; Cynthia Vargas <CVargas@cityofbonitaspringscd.org>; Cepeda, Milagros/ORL <Milagros.Cepeda@jacobs.com>
Subject: RE: Discovery Day Academy PD

Kyle – I have some concerns about the queueing and will discuss with Staff. I'll let you know what they decide.

Tom Ross, P.E. (FL, TX & GA)

Traffic Group Leader, Florida

M 1 407 718 5443

tom.ross2@jacobs.com

Jacobs

200 S. Orange Ave. Ste 900

Orlando, FL 32801

www.jacobs.com | [LinkedIn](#) | [Twitter](#) | [Facebook](#) | [Instagram](#)

From: Kyle C. Knight <kknight@M-DA.com>
Sent: Friday, February 26, 2021 5:08 PM
To: Ross, Tom/ORL <Tom.Ross2@jacobs.com>
Cc: Heather Urwiller <HUrwiller@M-DA.com>; MarySue Groth <MGroth@M-DA.com>
Subject: [EXTERNAL] FW: Discovery Day Academy PD

Hi Tom,

I am following up on this below to see if you've had a chance to review yet.

Let me know.

Thanks!

Kyle

From: Kyle C. Knight
Sent: Tuesday, February 23, 2021 6:23 PM
To: Ross, Tom/ORL <Tom.Ross2@jacobs.com>
Cc: Heather Urwiller <HUrwiller@M-DA.com>; Jacqueline Genson <jgenson@cityofbonitaspringscd.org>; Cynthia Vargas <CVargas@cityofbonitaspringscd.org>; Cepeda, Milagros/ORL <Milagros.Cepeda@jacobs.com>; MarySue Groth <MGroth@M-DA.com>
Subject: RE: Discovery Day Academy PD

Good Afternoon Tom,

Please see below responses (in red) to your initial comments on the TIS Waiver request:

1. Please provide a copy of the TIS referenced in the request. *Please see page 5 of the attached document titled "98-11-191.00D The Prado at Spring Creek"*
2. What was the previous use of the site? *The previous use of the site was a jewelry store.*
3. How long has the building been vacant? *The building was vacated in May of 2019. It has been vacant for approximately 20 months.*
4. Please provide trip generation based on the number of students for the AM and PM peak hours of the generator. *Please see page 2 of the attached document titled "TIS Waiver Statement". We have revised the trip generation to be based on the number of students enrolled in the school (150).*
5. A queueing analysis for drop-off and pick-up operations is required. *Please see the attached document titled "TIS Waiver Statement". We have included a queueing analysis as requested. Calculations, assumptions, and summary are provided in the attachment.*

Please let us know if you need any additional information or have any questions.

Thanks!

Kyle



Kyle C Knight
Project Engineer

2941 Cleveland Avenue
Fort Myers, FL 33901

(239) 337-3993 telephone
(866) 337-7341 toll free



Download My
vCard

From: Ross, Tom/ORL <Tom.Ross2@jacobs.com>
Sent: Monday, February 15, 2021 4:01 PM
To: Kyle C. Knight <kknight@M-DA.com>
Cc: Heather Urwiller <HURwiller@M-DA.com>; Jacqueline Genson <jgenson@cityofbonitaspringscd.org>; Cynthia Vargas <CVargas@cityofbonitaspringscd.org>; Cepeda, Milagros/ORL <Milagros.Cepeda@jacobs.com>
Subject: RE: Discovery Day Academy PD

There's no prescribed format for this type. Just provide assumptions, calculations and results with a summary. One for each time period. Keep in mind the number of students, average students per car,

stacking approach and length per vehicle. Standard FDOT practice is 25 feet per vehicle. If you intend to use something different, provide back-up.

Note: I anticipate that the City will include a Condition that prohibits any vehicles queues from extending onto public streets.

Tom Ross, P.E. (FL, TX & GA)
Traffic Group Leader, Florida
M 1 407 718 5443
tom.ross2@jacobs.com

Jacobs
200 S. Orange Ave. Ste 900
Orlando, FL 32801
www.jacobs.com | [LinkedIn](#) | [Twitter](#) | [Facebook](#) | [Instagram](#)

From: Kyle C. Knight <kknight@M-DA.com>
Sent: Monday, February 15, 2021 3:34 PM
To: Ross, Tom/ORL <Tom.Ross2@jacobs.com>
Cc: Heather Urwiller <HUrwiller@M-DA.com>
Subject: [EXTERNAL] RE: Discovery Day Academy PD

Ok. I am not quite sure how the school is intending to operate dropping off & picking up students considering the school will be using the existing parking lot. Schools usually have a designated parent pick up line for this purpose. I'll confirm this.

Do you have a specific format or example you can provide for what you need to see in the queueing analysis?

Thanks,
Kyle

From: Ross, Tom/ORL <Tom.Ross2@jacobs.com>
Sent: Monday, February 15, 2021 1:50 PM
To: Kyle C. Knight <kknight@M-DA.com>
Cc: Cynthia Vargas <CVargas@cityofbonitaspringscd.org>; Jacqueline Genson <jgenson@cityofbonitaspringscd.org>; Cepeda, Milagros/ORL <Milagros.Cepeda@jacobs.com>
Subject: RE: Discovery Day Academy PD

Good Afternoon Kyle,

Schools present unique challenges compared to other uses. One of which is the nature of arriving students in the morning and their departure in the afternoon. This is often accompanied by parents lining up in the morning to drop the students off and later lining up in the afternoon prior to pick-up. These queues can often extend quite a distance and need to be carefully planned so they don't

interfere with other traffic movements, particularly off-site on public movements where this can present not only operational delays, but also safety concerns. Because this site is located near the front of the development and adjacent to US 41, we need to be sure that any queues are contained on site.

You can provide your responses directly to me, however, please copy the City.

Thank you,

From: Kyle C. Knight <kknight@M-DA.com>
Sent: Monday, February 15, 2021 1:36 PM
To: Ross, Tom/ORL <Tom.Ross2@jacobs.com>
Subject: [EXTERNAL] Discovery Day Academy PD

Hi Tom,

My name is Kyle Knight and I am a project engineer with Morris-Depew Associates. I have a couple questions on the above mentioned project. We received your comments from Bonita Springs Community Development on the Public Hearing Submittal TIS waiver. I am the engineer working on this project so I'll be addressing your comments related to this.

To recap, here are the specific comments you had on the TIS waiver form:

1. Please provide a copy of the TIS referenced in the request.
2. What was the previous use of the site?
3. How long has the building been vacant?
4. Please provide trip generation based on the number of students for the AM and PM peak hours of the generator.
5. A queueing analysis for drop-off and pick-up operations is required.

I am able to address comments 1-4, but I had a question on comment 5. I am not sure why a queueing analysis is required for a waiver request. As I understand, the waiver request for the TIS is based the comparison of trips generated in the proposed use versus the permitted use. In our case, since the proposed use will generate less trips than what is permitted for the site, the waiver request should be sufficient. If not, can you please provide further clarification on what you need to see in the queueing analysis?

Also, what is the best way to respond to these comments? Should we address them directly with you via email or should we send our responses to the City of Bonita Springs and have them circulate back to you?

Thanks!
Kyle

Kyle C Knight
Project Engineer

MORRIS

2914 Cleveland Avenue | Fort Myers, Florida 33901

DEPEW

Phone (239) 337-3993 | Toll Free (866) 337-7341

www.morris-depew.com

ENGINEERS · PLANNERS · SURVEYORS
LANDSCAPE ARCHITECTS

LETTER OF AUTHORIZATION

TO WHOM IT MAY CONCERN:

PLEASE BE ADVISED THAT I (WE) AM (ARE) THE FEE SIMPLE PROPERTY OWNER(S) OF THE PROPERTY DESCRIBED BELOW AND THAT MORRIS-DEPEW ASSOCIATES, INC. HAS BEEN AUTHORIZED TO REPRESENT ME (US) FOR THE BELOW REFERENCED PARCEL(S) IN ALL MATTERS PERTAINING TO REZONING OR DEVELOPMENT PERMITS. THIS AUTHORITY TO REPRESENT MY (OUR) INTEREST INCLUDES ANY AND ALL DOCUMENTS REQUIRED BY THE REZONING, PLANNING OR PERMITTING REQUESTS SUBMITTED ON MY (OUR) BEHALF BY MORRIS-DEPEW ASSOCIATES, INC.

STRAP NUMBER OR LEGAL DESCRIPTION:

STRAP# 21-47-25-B2-03204-0000

Discovery Day Academy IV, Inc.

COMPANY NAME

Elizabeth A. Basart

SIGNATURE

Elizabeth A. Basart, Authorized Agent

PRINTED NAME & TITLE

STATE OF Florida

COUNTY OF Lee

The foregoing instrument was acknowledged before me, by means of physical presence or online notarization, this 5 day of Feb., 2021, by Elizabeth Basart.

My Commission Expires:

3-17-23

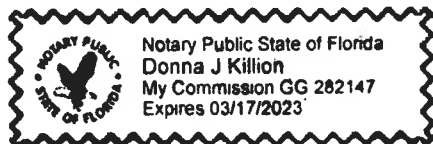
Donna J Killion

Notary Public

Donna J Killion

Notary Printed Name

(seal)



**A SCHEMATIC DESIGN FOR:
DISCOVERY DAY ACADEMY**
BONITA SPRINGS, FLORIDA

CONSULTANT:

ALBERT DAMBROSE
AR93689

PRELIMINARY
REVIEW SET

NOT FOR
CONSTRUCTION

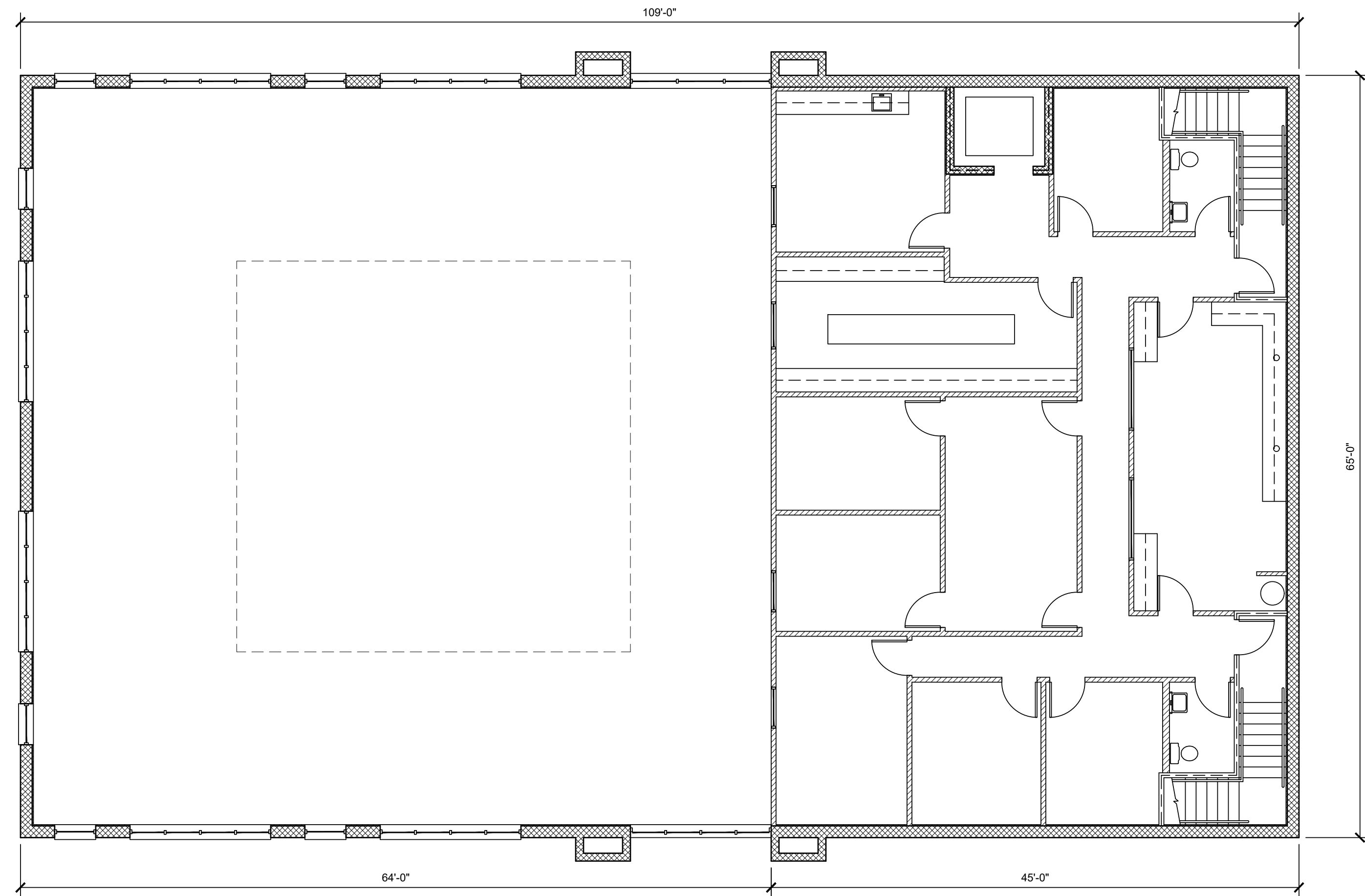
DATE ISSUED: 24 FEB 2021

REVISIONS:
▲ 5 MARCH 2021

SHEET

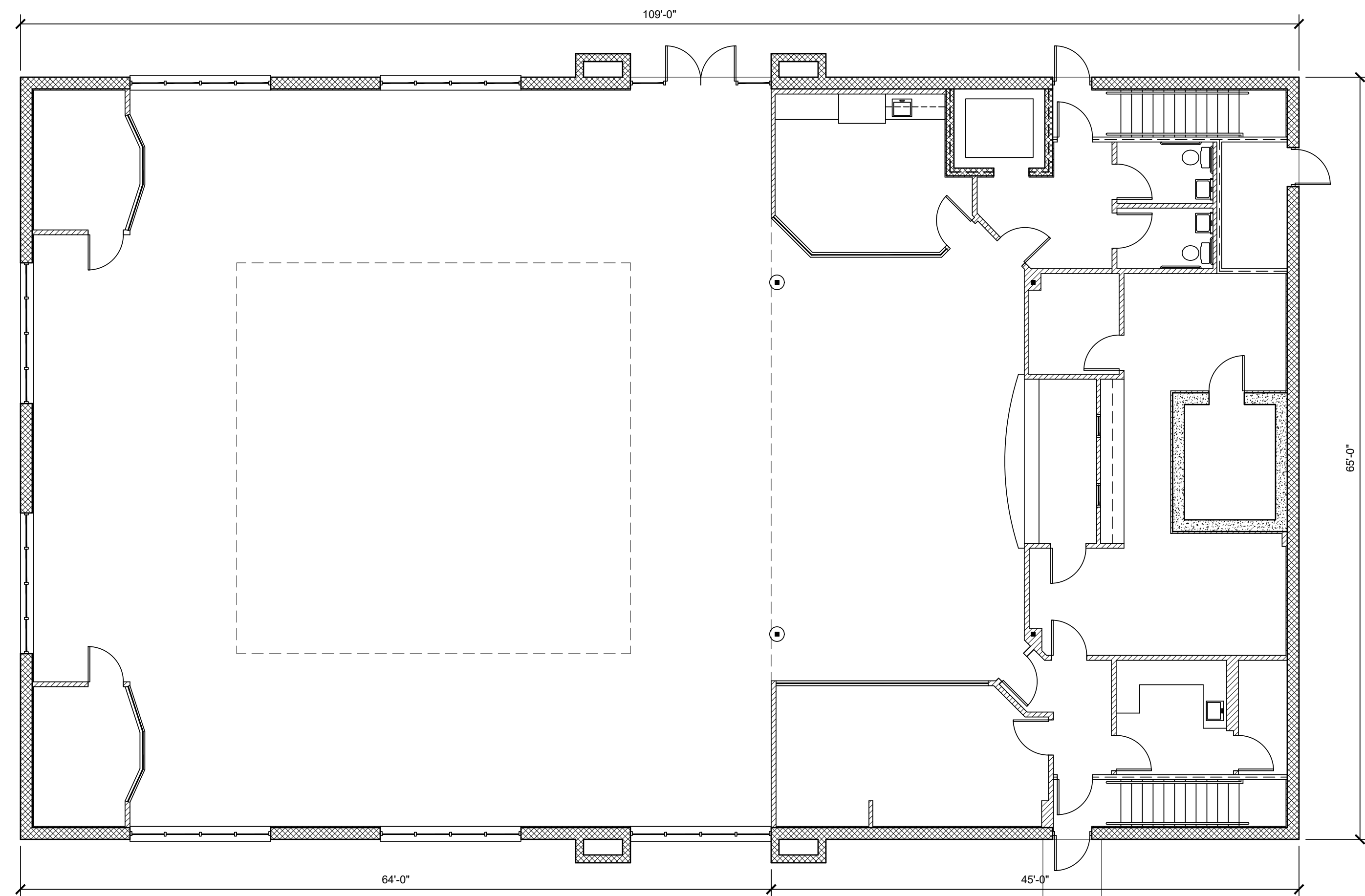
D1

OF 2



NORTH
EXISTING SECOND FLOOR PLAN

SCALE: 1/8" = 1'-0"



NORTH
EXISTING FIRST FLOOR PLAN

SCALE: 1/8" = 1'-0"

March 30, 2021

Jacqueline Toemmes Genson, AICP
Planning and Zoning Manager
City of Bonita Springs Community Development
9220 Bonita Beach Road, Suite 109
Bonita Springs, FL 34135

RE: Discovery Day Academy – TIS Methodology Statement (MDA 21010)

The purpose of this letter is to provide a Traffic Impact Statement (TIS) methodology statement for the above referenced project to the City of Bonita Springs Community Development in accordance with the City's TIS Guidelines. It was determined by City Staff on 3/9/2021 that a full TIS will be required. A pre-application meeting was held on 3/17/2021 with Tom Ross to discuss the requirements for the TIS as well as the City's concerns about vehicle queuing. The Discovery Day Academy school will be relocating from its current location to an existing building located in The Prado at Spring Creek shopping center. The school will be located at 25355 S. Tamiami Trail Bonita Springs, FL 34135. There are currently 6 access points into the shopping center which also provides access to the proposed school location (2 on Timberwilde Dr., 1 on US 41, and 3 on Bernwood Pkwy.). For purposes of this TIS and to model a worst-case scenario, the Bernwood Pkwy. & Chamber of Commerce Dr. intersection will be analyzed as the only access point.

Trip Generation

- Trip Rates - The proposed trips for the school will be calculated by using the 10th edition of the Institute of Transportation Engineers (ITE) Trip Generation Manual, Land Use Code 534 – Private School (K-8). Average Daily Trips will be based on a weekday, Peak Hour Trips will be based on peak hour of generators.
- Internal Capture – There will be not be an internal capture rate for this project. The school's generated trips will use the off-site street system.
- Pass-By Capture – There will be no pass-by capture rate for this project.

Trip Distribution & Assignment

- Distribution – A trip distribution map will be provided in the TIS.
- Peak Hour Assignment – The directional AM and PM peak hour movements will be presented on the trip distribution map.
- Link Trips – The AM and PM peak hour movements will be assigned to the adjacent roadway segments in the manner that is described in section 5.03 of the TIS Guidelines.

Background Traffic

- Presentation – A trip distribution map of the existing trips will be provided in the TIS.
- Traffic Counts – The existing traffic count information will reference the City's 2020 Traffic Count Report for the through movements on US 41 (Station Number 0010) as well as traffic counts that Morris-Depew Associates performed on 3/24/2021 for the turning movements at the US 41 & Bernwood Pkwy. intersection.

- Peak Season Volumes – Per Appendix C of the TIS Guidelines, peak season volume for the counts that were performed on 3/24/2021 have a value of 0.94 and the existing counts for the US 41 N/S movements that were performed on 3/4/2020 have a value of 0.93.
- Forecast Year – The project is expected to be completed in August of 2021.
- Growth Rates – The TIS will utilize the higher growth rate between the existing historical growth trend or 2% per year (in accordance with section 6.05 of the TIS Guidelines).

Traffic Operations Analysis Requirements

- Link Analysis – The TIS will include a link analysis in accordance with section 7.01 of the TIS Guidelines.
- Intersection Analysis - The TIS will include an intersection analysis in accordance with section 7.02 of the TIS Guidelines.
- Traffic Characteristic Factors – Directional, seasonal, and peak factors will reference the City's 2020 Traffic Count Report.

Queuing Analysis

As required by City staff, a queuing analysis for the intersection of US 41 and Bernwood Pkwy will be included in the TIS. This analysis will include the AM & PM entering and exiting scenarios. As mentioned above, this TIS will assume that all project trips utilize the access-point at Bernwood Pkwy. & Chamber of Commerce Dr. as a worst-case scenario. Intersection signal timing was provided by Lee County DOT and will be included in the analysis. This analysis will utilize the Highway Capacity Software for determining existing and proposed queues. The conclusion for this analysis will compare the vehicle queues in the existing and proposed conditions for the 4 turning movements at the intersection (US 41 northbound right turn, US 41 southbound left turn, and Bernwood Pkwy westbound left and right turns).

Identification/Recommendation of Roadway Improvements

Based on the results of the TIS, recommendations for any necessary roadway and intersection improvements will be provided in accordance with section 8.0 of the TIS Guidelines.

Please let us know if there is any additional analysis required to be included in the TIS.

MORRIS-DEPEW ASSOCIATES, INC.



Kyle C. Knight, EI
Project Engineer

Cc: Elizabeth Basart

Discovery Day Academy

Traffic Impact Statement

April 24, 2021

Prepared by:

Kyle Knight, EI

&

M. William Morris, Jr.

PE # 55543

Email: permitting@m-da.com

FL CA 6532

Table of Contents

Description of Development.....	4
Trip Generation.....	4
<i>Trip Rates</i>	4
<i>Internal Capture</i>	4
<i>Pass-By Capture</i>	4
Trip Distribution and Assignment	5
<i>Distribution</i>	5
<i>Peak Hour Assignment</i>	5
<i>Link Trips</i>	5
<i>Significantly Impacted Roadways</i>	5
<i>Significantly Impacted Intersections</i>	5
Background & Future Traffic.....	5
<i>Presentation</i>	5
<i>Traffic Counts</i>	5
<i>Peak Season Volumes</i>	6
<i>Forecast Year</i>	6
<i>Growth Rate</i>	6
Traffic Operation Analysis Requirements	6
<i>Link Analysis</i>	6
<i>Intersection Analysis</i>	6
<i>Traffic Characteristic Factors</i>	6
Internal Queuing Analysis	7
Traffic Circulation Plan	7
Conclusion.....	7
Figures	9
Figure 1: Site Location Map	10
Figure 2A: Trip Distribution Map from ITE Calculations	11
Figure 2B: Trip Distribution Map for Queuing Analysis	12
Figure 2C: Existing Trip Distribution Map	13
Figure 3: AM Drop-Off Queue Map	14
Figure 4: PM Pick-Up Queue Map.....	15
Figure 5: AM Drop-Off Queue Calculations	16

Figure 6: PM Pick-Up Queue Calculations.....	17
Figure 7: Traffic Circulation Plan	18
Tables	19
Table A: Project Trip Generation	20
Table B: Study Area Trip Distribution and Assignment.....	21
Table C: Future Background Trip Projection	22
Table D: Link LOS Analysis.....	23
Table E: US 41 & Bernwood Pkwy. Traffic Count.....	24
Appendix A	25
HCS Intersection Analysis.....	35

Description of Development

This Traffic Impact Statement (TIS) for the above referenced project is provided to the City of Bonita Springs Community Development in accordance with the City's TIS Guidelines. It was determined by City Staff on 3/9/2021 that a full TIS is required. A pre-application meeting was held on 3/17/2021 with Tom Ross from the City to discuss the requirements for the TIS as well as the City's concerns about vehicle queuing.

The Discovery Day Academy school will be relocating from its current location in the City to an existing building located in The Prado at Spring Creek shopping center. The school will be located at 25355 S. Tamiami Trail Bonita Springs, FL 34135. There are currently six (6) access points into the shopping center which also provide access to the proposed school location (2 on Timberwilde Dr., 1 on US 41, and 3 on Bernwood Pkwy.).

For purposes of this TIS the Bernwood Pkwy. & Chamber of Commerce Dr. intersection will only be analyzed as the primary access point to demonstrate the worst-case scenario for vehicle queuing related to the issues historically experienced on Bernwood Pkwy related to the operation of Spring Creek Elementary School. Spring Creek Elementary School is a public facility located on the block of US 41 south of the subject property and uses Bernwood Pkwy. See **Figure 1** for Site Location Map.

Trip Generation

Trip Rates

Trip Generation for the proposed project are determined using the ITE Trip Generation Manual 10th Edition. In accordance with standard ITE methodology, calculations for project trip generated traffic are shown in **Table A**. Based on the age group of the enrolled students (infants – 5th grade), it is our professional opinion that using ITE LUC 534 Private School (K-8) warrants the most accurate categorization. Staff has agreed with this using the Student independent variable as part of the study methodology.

The student count for this analysis are for grades K-5 include 72 out of 112 total students as the independent variable. This is appropriate based on the operator's data to account for the arrival/departure characteristic for this facility that is consistent with the focus of this analysis. The 72 students arrive at 8:30 AM and depart at 3:30 PM which most closely aligns with the near-by Spring Creek Elementary School bell times (8:55 AM - 3:10 PM). The remaining 40 students (infants - 4-year olds) have a separate arrival and dismissal time window (7:00-8:00 AM and 4:00-5:30 PM). The complete breakdown of the arrival and dismissal times for students is shown below in **Figure 7**.

Based on the considerations described above, the proposed development is shown to generate 296 Weekday Trips, 78 AM Peak Hour Trips and 43 PM Peak Hour Trips. The AM PHT results in 44 trips entering and 34 trips exiting, while the PM PHT results in 20 trips entering and 23 trips exiting. The direction distribution of the peak hour trips is calculated per the corresponding percentages for the LUC.

In reality, the trip count for the school is different than what ITE calculates. Per correspondence with Elizabeth Basart, Head of Discovery Day Academy, most students have siblings and she advised to use a vehicle count of 30 vehicles when analyzing parent pick-up / drop-off. For purposes of the queuing aspect

of this TIS, the AM entering trip count is 30 and the exiting trip count is 30 (60 total trips). The PM entering trip count is 30 and the exiting trip count is 30 (60 total trips).

Internal Capture

There no internal capture assessed for this project even though the facility is part of a shopping center. The school's generated trips are assigned to the roadway network in this analysis.

Pass-By Capture

There is no pass-by capture assessed for this study even though it is likely that a quantifiable percentage of trips that are pass-by for parents who also work, run errands, etc. during a typical day.

Trip Distribution and Assignment

Distribution

The trip distribution for site related traffic entering and exiting the project location has been indicated in **Figures 2A & 2B** below. **Figure 2A** is the distribution map based on trip generation from the ITE calculation and **Figure 2B** is the distribution map based on the actual trips for the queuing analysis. For purposes of this analysis, entering trips will travel from US 41 northbound and southbound (split 50% from both directions) and turn east on Bernwood Pkwy. From here, travelers will turn north on Chamber of Commerce Dr. and then turn left into the school parking lot. Exiting trips will follow an identical distribution pattern. The ultimate result provides a reasonable and reversible distribution of vehicles. Additional information regarding the traffic circulation plan within the school parking lot is explained below.

Peak Hour Assignment

The directional Peak Hour trips are presented on the trip distribution maps.

Link Trips

Direct Links – US 41 N. of Shopping Center Entrance (FTE Station Number 0010 and Lee County PCS 93). According to the City of Bonita Springs Traffic Count Report, the link segment mentioned above currently operates at LOS C. The directional LOS C Standard for a 3-lane divided arterial per Lee County Generalized Peak Hour Directional Service Volumes report is 2,840. As shown in **Table B**, the project-generated trips will impact the roadway's current LOS capacity by less than 2% (0.8%), therefore, no secondary or additional links need to be analyzed.

Significantly Impacted Roadways

There are no significantly impacted roadways because the directional peak hour project trips do not exceed 2% of the directional peak hour capacity of the LOS for the above-mentioned link.

Significantly Impacted Intersections

As discussed with Staff, the intersection of US 41 & Bernwood Pkwy is analyzed for this TIS. Please refer to the Highway Capacity Software (HCS) reports for the intersection analysis below the appendix.

Background & Future Traffic

Presentation

Please see **Figure 2C** for the existing trip distribution map.

Traffic Counts

Turning movements for the US 41 & Bernwood Pkwy were counted on 3/24/21. The through movement counts were taken from the 2019 Lee County traffic count report (2020 counts omitted due to atypical counts from COVID-19). A complete summary of the traffic counts is found in **Table E**. The AM counts were collected in 15-minute intervals, starting at 7:30 (1 hour before the arrival times of the Discovery Day students) and ended at 9:30 (1 hour after the arrival time). The PM counts were collected in 15-minute intervals, starting at 2:30 (1 hour before the release times of the Discovery Day students) and ended at 4:30 (1 hour after the release time).

Peak Season Volumes

Per Appendix C of the TIS Guidelines, the peak season factor (PSF) for this location is computed as 0.94.

Forecast Year

The school is expected to be in operation for the upcoming school year (about 6 months from when the traffic counts were performed). The analysis period when calculating the total adjustment factor is 0.5 years. The month of year factor and day of week factor have a value of 1.02 and 1.08, respectively. This information is from the 2019 Lee County traffic count report for this location.

Growth Rate

Background traffic for the project location is based on the 2020 Lee County Concurrency Report and the 2019 Lee County Traffic Count Report. The background traffic is considered to analyze how project generated trips impact the local roadways for estimated future trips and growth. The estimated future background trips stem from the 2019 Lee County Traffic Count Report and are accounted for as applicable in **Table C**. As shown in **Table C**, US 41's existing traffic count data from the previous 5 years (2015-2019) show a growth rate of 2.6%. Forecasting out to year 2021 and using a 2.6% growth rate from 2019, the number of trips is calculated to be 52,000. Traffic counts from 2020 were discounted from this analysis due to COVID-19 disruptions in the typical patterns.

Traffic Operation Analysis Requirements

Link Analysis

The trips attributed to the proposed project are distributed onto the surrounding roadway network as shown in **Figures 2A & 2B**. The peak hour trips for the AM & PM PHT are calculated and shown in **Table A**. The peak hour trips on the arterial link are then compared to the 1-Way LOS C Peak Hour Service Volume. The service volumes stated on **Table B** is based on the 2020 Lee County Concurrency Management Report. **Table D** shows Project-generated + Background trips as well as Project-generated + Future Background trips using a 2.6% growth rate out to year 2021. Additionally, the Lee County Generalized Peak Hour Directional Service Volumes report is utilized for determining acceptable limits of level of service. The Project + Future Background generated trips does not exceed the existing level of service (LOS C) capacity (2,840 trips).

Intersection Analysis

As discussed with Staff, the intersection of US 41 & Bernwood Pkwy is analyzed for this TIS. Please refer to the HCS reports for the intersection analysis below the appendix.

Traffic Characteristic Factors

The following traffic factors were utilized in the queuing analysis in order to obtain a total adjustment factor:

- Seasonal Peak = 0.94
- Month of Year = 1.02
- Day of Week = 1.08
- Growth Rate = 2.6%
- Number of Periods (years) = 0.5
- Total Adjustment Factor = 0.864

Internal Queuing Analysis

As requested by Staff, a queuing analysis was performed for the morning drop-off and afternoon pick-up scenarios in order to understand how far the queuing from the parking lot would extend onto the surrounding roadway system. Based on the results of this analysis, the longest vehicle queue that will be produced in the AM drop-off scenario is 10 vehicles (250 feet). The longest vehicle queue that will be produced in the PM pick-up scenario is also 10 vehicles (250 feet). The total available storage length that the parking lot can accommodate without extending onto Chamber of Commerce Dr. is 654 feet (26 vehicles). Please refer to **Figures 3 through 6** for the queue calculations, maps, and list of assumptions made.

Traffic Circulation Plan

As requested by Staff, a traffic circulation plan was prepared in order to demonstrate how school staff will be managing the operation of the student pick-up / drop-off lines. As shown in **Figure 7**, there are two locations in the parking lot that will be occupied by school staff. According to Elizabeth Basart, Staff post #1 will direct exiting traffic to alternate turning left and right in order to disburse the traffic evenly onto Chamber of Commerce Dr. (keep in mind we are analyzing every vehicle to exit right to utilize the Chamber of Commerce Dr. & Bernwood Pkwy. intersection as a worst-case scenario). Staff post #2 will manage students getting in and out of vehicles during the morning arrival times and afternoon dismissal times. There will also be entry and exit signs located at the parking lot driveway. In the event that parents need to go inside of the school to drop off / pick up their students, their designated parking location will be the northernmost row of parking spaces.

Conclusion

The trip generation realized by Discovery Day Academy on the surrounding roadway network is negligible and will not pose any adverse impacts to the existing flow of traffic. Direct roadway links and intersections considered in this study are shown to be impacted by a value that is less than 2% and the projected project + future background trips show the same LOS that is currently in operation. As mentioned below in the HCS analysis for the US 41 & Bernwood intersection, the impact to the intersection is inconsequential. The greatest difference in queue length is 1.9 additional vehicles and the greatest increase in intersection delay is 1 second. Also, based on the results from the internal queuing analysis, all vehicles will be contained within the parking lot when in line for student pick-up / drop-off.

In addition to the above-mentioned findings, it is worth stating that the ADT and the peak hour trips in the AM and PM for the proposed land use are lower than what was calculated in the previously approved TIS for the project site. As noted in the development order for the entire shopping center (Development Order # 98-11-191.00D), the Traffic Impact Statement (TIS) states that Outparcel #1 (the parcel that serves the existing building where Discovery Day Academy will be located) has the following trip allotments:

The Prado at Spring Creek
ORIGINAL T.I.S. TRIP GENERATION ESTIMATE - FROM BONITA TOWNE CENTER TIS
BY DAVID PLUMMER AND ASSOCIATES - BASED ON ITE Trip Generation (6th Edition)

LAND USE	ITE (LUC)	SIZE	UNIT	TRIP TYPE	AM PEAK			PM PEAK			DAILY
					IN	OUT	TOTAL	IN	OUT	TOTAL	
Retail/Commercial	820	94,405	SF	Total	94	60	154	290	314	605	6,569
Movie Theatre	444	14	SCREEN	Total	0	0	0	324	299	623	2,147
OP #1 Service Station	845	3,366	SF	Total	133	128	261	162	162	324	4,055
OP #2 Restaurant - Fast Food	834	5,024	SF	Total	128	123	250	87	81	168	2,493
OP #3 Restaurant - Quality	831	8,698	SF	Total	4	4	7	44	21	65	782
OP #4 Drugstore/Pharmacy	881	13,905	SF	Total	21	16	37	71	74	145	1,226
Totals					380	330	710	979	952	1,930	17,271

Land Use	X Units	Average Daily Trips Equation	AM Peak Hour Equation	PM Peak Hour Equation
820	sf/1000	$\text{Ln}(T) = 0.643 * \text{Ln}(X) + 5.866$	$\text{Ln}(T) = 0.596 * \text{Ln}(X) + 2.329$ (61% in)	$\text{Ln}(T) = 0.660 * \text{Ln}(X) + 3.403$ (48% in)
444	Screens	$T = 153.33 * \text{SCREENS}$	$T = 0$	$T = 44.53 * \text{SCREENS}$ (52% in)
845	sf/1000	$T = \text{PM Peak} / 0.08$	$T = 77.68 * X$ (51% in)	$T = 96.37 * X$ (50% in)
834	sf/1000	$T = 496.12 * X$	$T = 49.86 * X$ (51% in)	$T = 33.48 * X$ (52% in)
831	sf/1000	$T = 89.95 * X$	$T = 0.81 * X$ (50% in)	$T = 7.49 * X$ (67% in)
881	sf/1000	$T = 88.16 * X$	$T = 2.66 * X$ (57% in)	$T = 10.40 * X$ (49% in)

Original Permitted Project Trips – Outparcel 1

Average Daily Weekday (ADT) Trips =	4,055
A.M. Peak Hour Trips =	261
P.M. Peak Hour Trips =	324

As demonstrated above, the proposed trips are substantially less than the corresponding permitted trips (ADT 296 < 4055, AM PHT 78 < 261 & PM PHT 43 < 324).

In addition to the traffic counts we made at the US 41 & Bernwood Pkwy intersection, we also conducted a site visit to the intersection in the morning and afternoon hours on 4/22/21 to observe the queuing behavior that the City has expressed as being a concern for the intersection of US41 and Bernwood Parkway. We did not observe any queuing from the school into the intersection for either the morning arrival or afternoon departure times during the bell times of Discovery Day Academy.

We will acknowledge that the apparent lack of vehicle queuing at the intersection could possibly be the result of a significant number of students still enrolled in virtual school associated with the COVID-19 pandemic.

Based on the results of this study, the trips generated from Discovery Day Academy do not warrant any major roadway improvements. If there is determined to be a conflict with traffic from the proposed facility and Spring Creek Elementary, the proposed facility has at least two other access points which vehicles can use to alleviate any issues.

Figures



Figure 1: Site Location Map

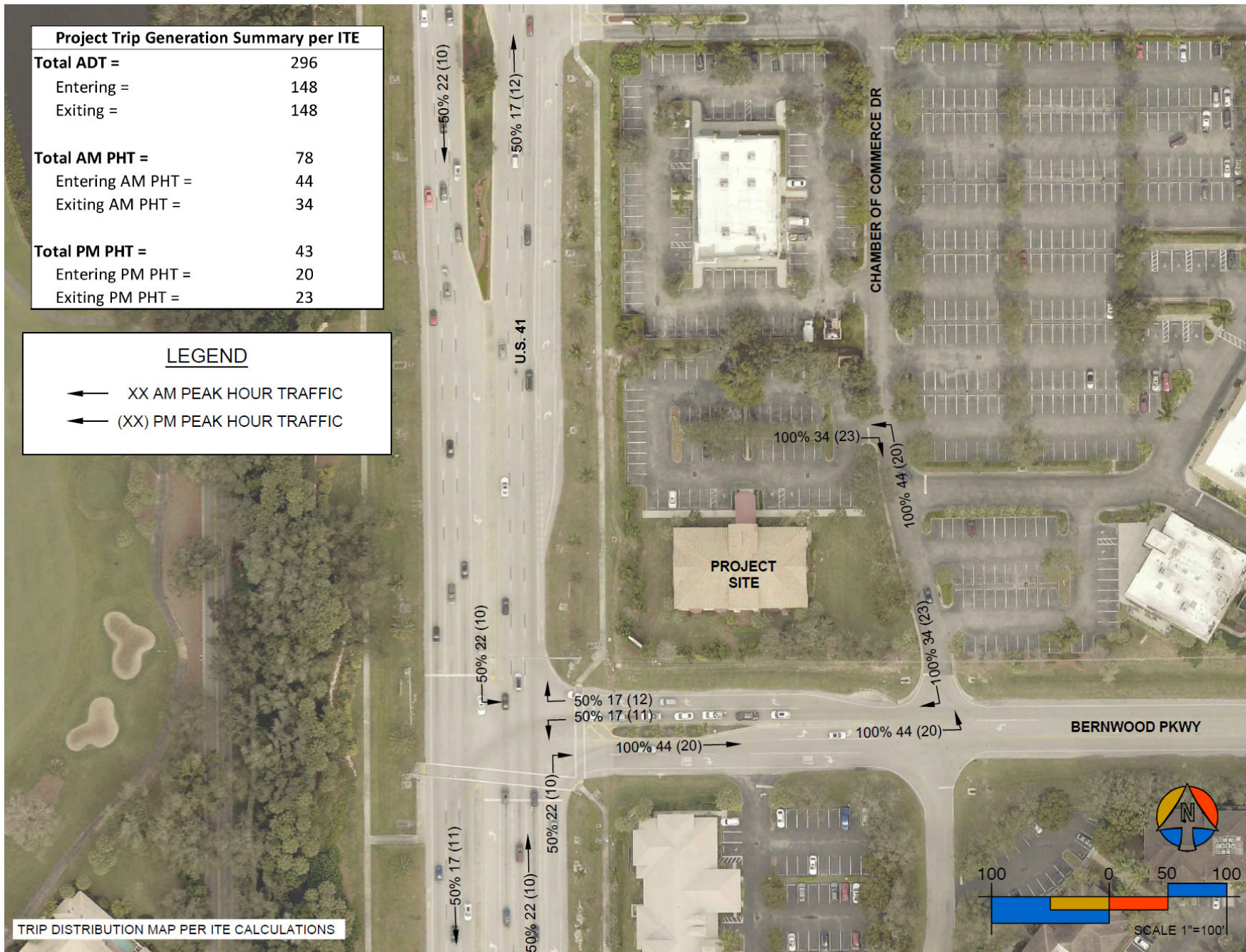


Figure 2A: Trip Distribution Map from ITE Calculations

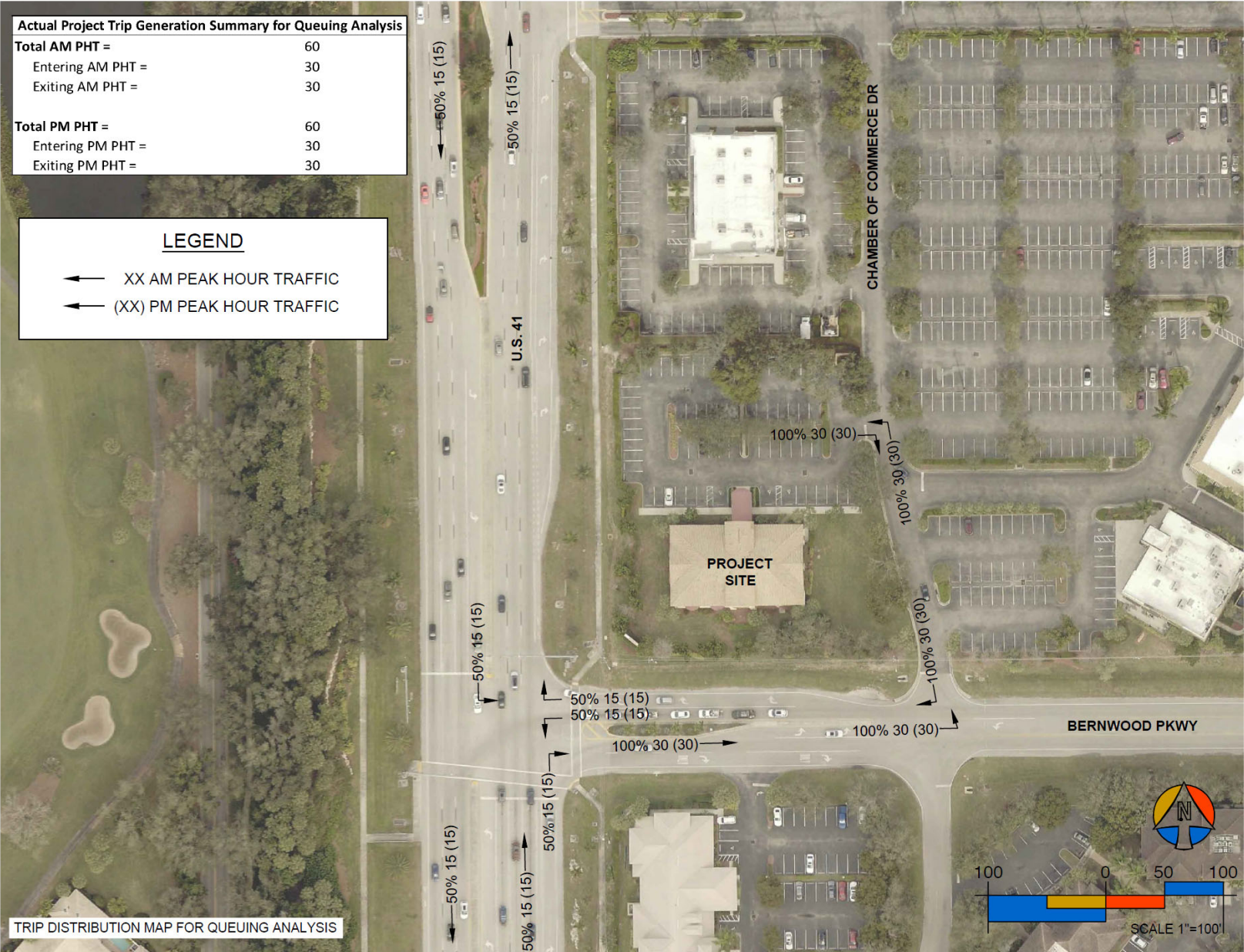


Figure 2B: Trip Distribution Map for Queuing Analysis

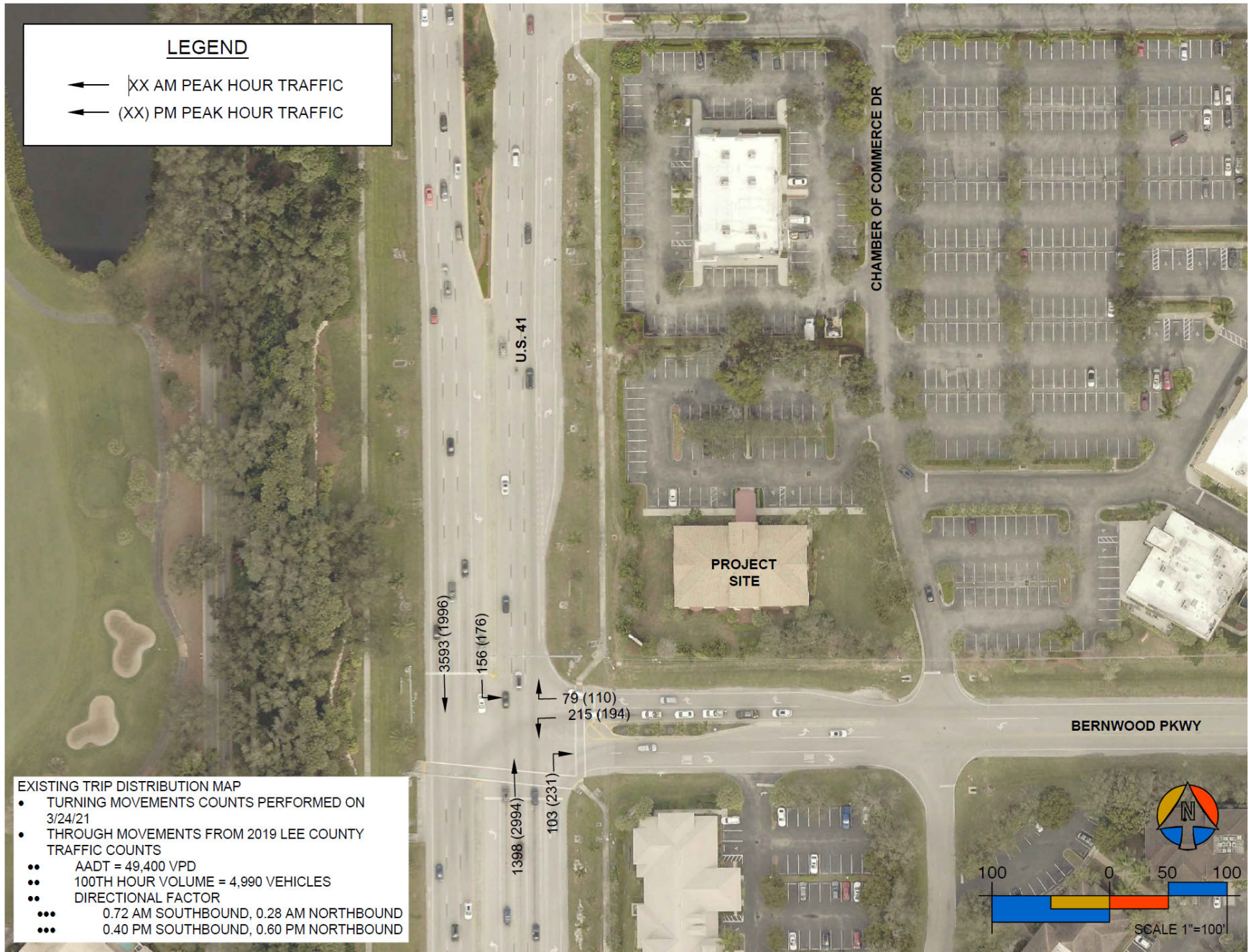


Figure 2C: Existing Trip Distribution Map

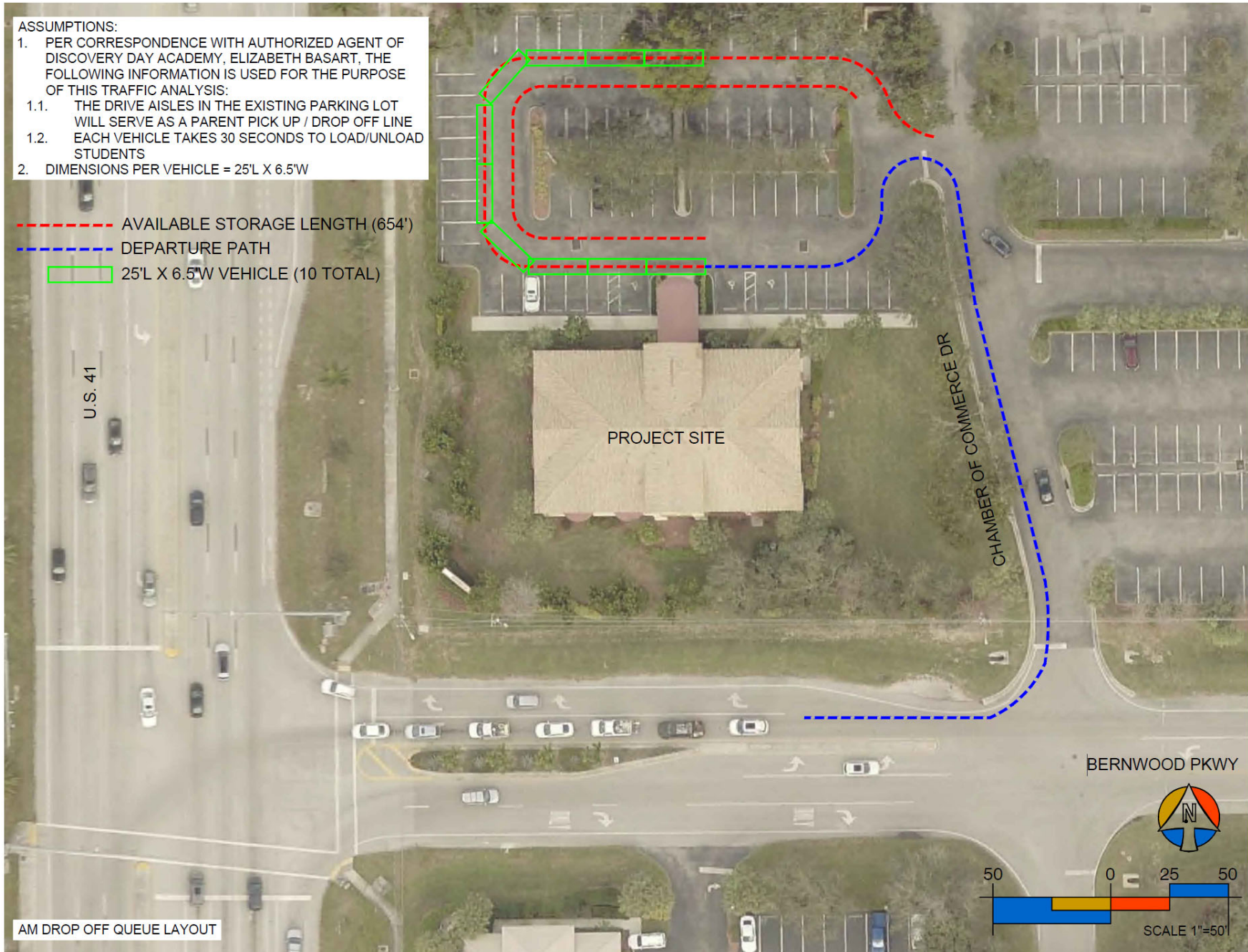


Figure 3: AM Drop-Off Queue Map

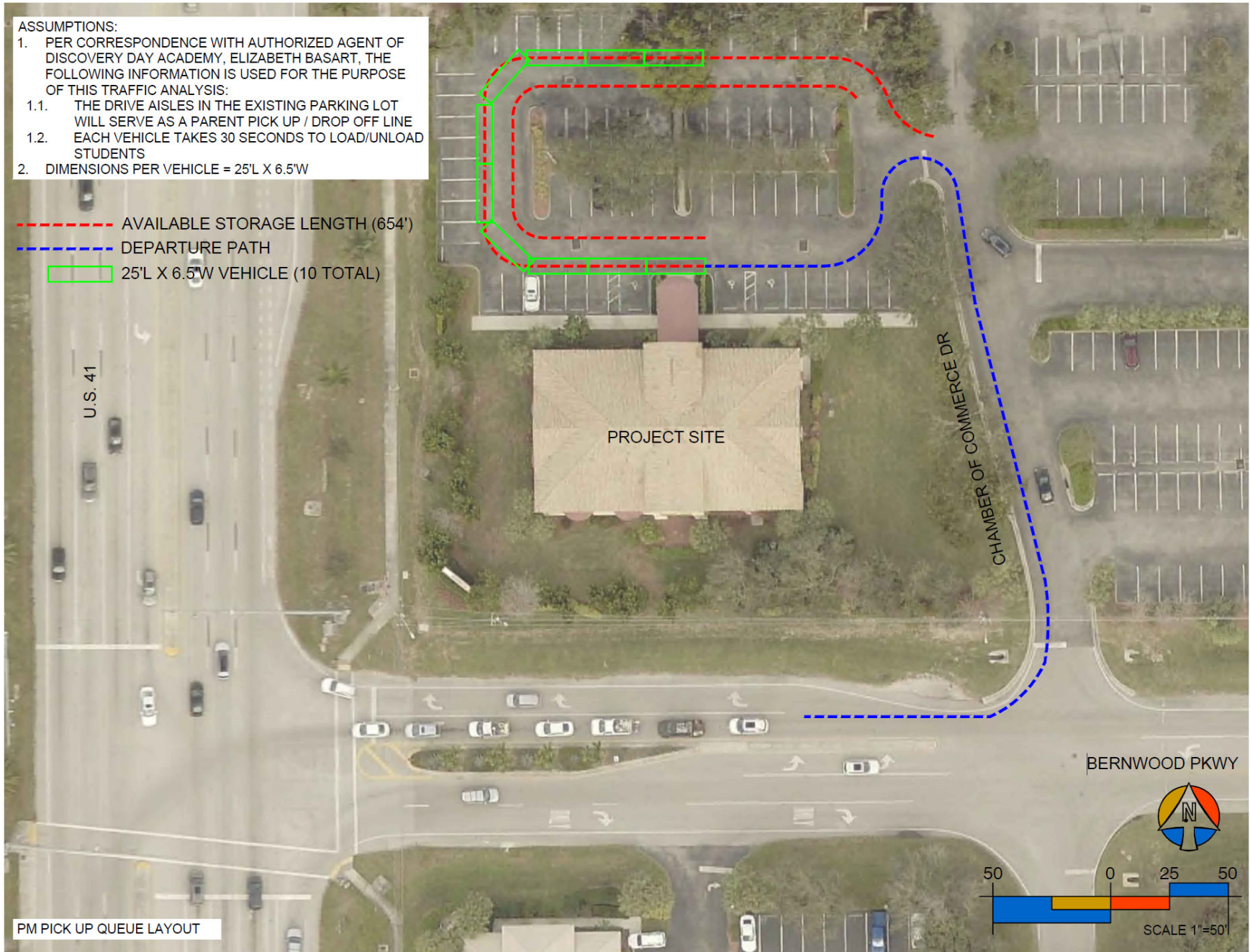
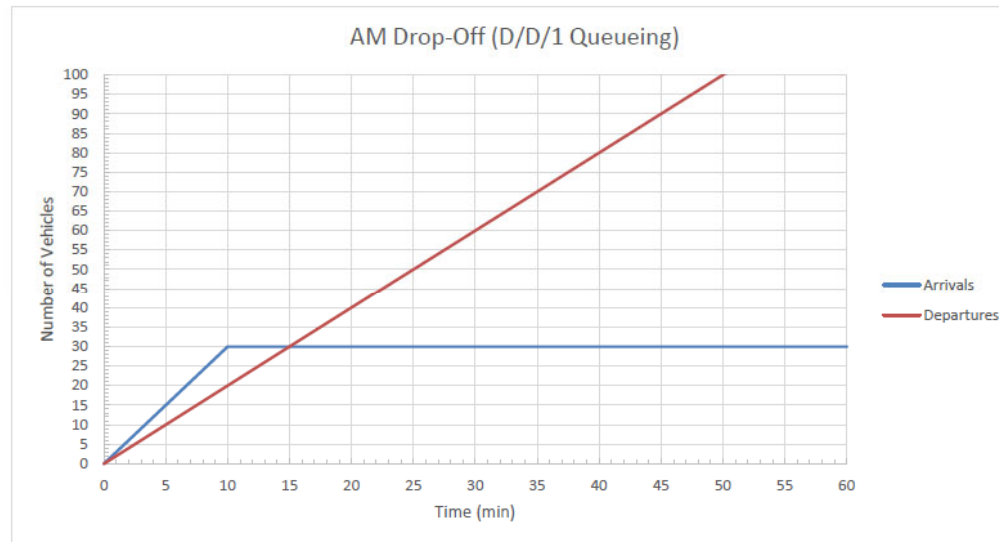


Figure 4: PM Pick-Up Queue Map

AM Drop-Off (D/D/1 Queueing)

Arrival rate, λ , (vehicles / minute) = 3.00 (30 vehicles enter in the AM Peak Hour)
 Departure rate, μ , (vehicles / minute) = 2.00

Number of Arrivals = $3t$ for $t \leq 10$ min
 = 30 for $t > 10$ min
 Number of Departures = $2t$ for all t



Longest Vehicle Delay = 5 min
 Longest Vehicle Queue = 10 vehicles

Assumptions:

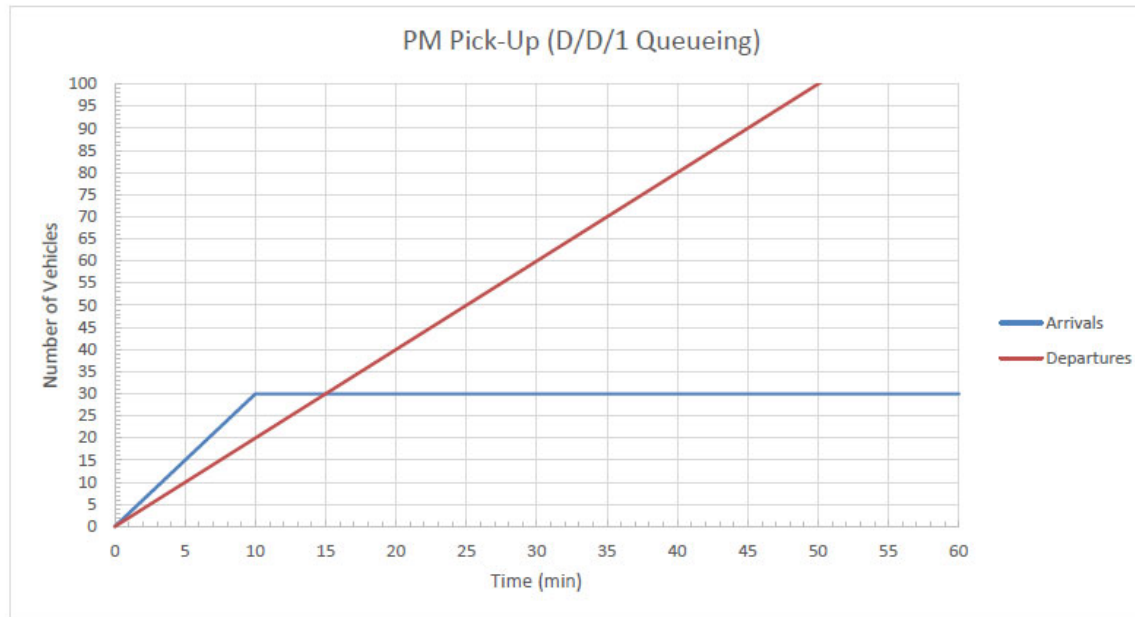
1. All vehicles arrive at the school within a 10-minute period
2. Number of vehicles per corespondence with Elizabeth Basart
3. Each vehicle takes 30 seconds to unload students
4. First in / First out queueing discipline

Figure 5: AM Drop-Off Queue Calculations

PM Pick-Up (D/D/1 Queueing)

Arrival rate, λ , (vehicles / minute) = 3.00 (30 vehicles enter in the PM Peak Hour)
 Departure rate, μ , (vehicles / minute) = 2.00

Number of Arrivals = $3t$ for $t \leq 10$ min
 = 30 for $t > 10$ min
 Number of Departures = $2t$ for all t



Longest Vehicle Delay = 5 min
 Longest Vehicle Queue = 10 vehicles

Assumptions:

1. All vehicles arrive at the school within a 10-minute period
2. Number of vehicles per corespondence with Elizabeth Basart
3. Each vehicle takes 30 seconds to load students
4. First in / First out queueing discipline

Figure 6: PM Pick-Up Queue Calculations

BB69

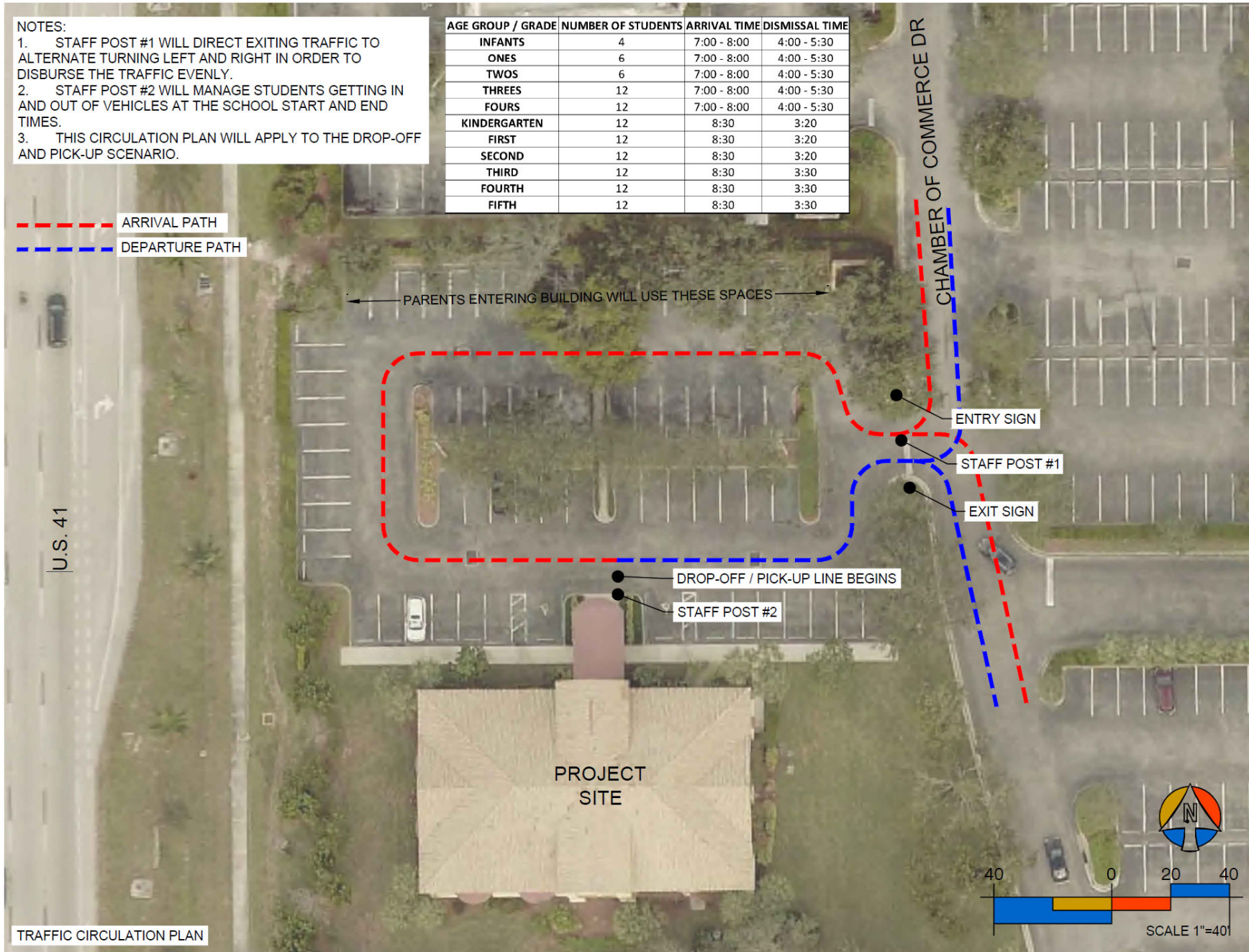


Figure 7: Traffic Circulation Plan

Tables

Table A: Project Trip Generation

Proposed Trip Generation ⁽³⁾										
ITE LUC ⁽¹⁾		Units	Number of Units ⁽²⁾	Trip Generation					Trip Directional Distribution ⁽¹⁾	
				Type	ITE LUC Equation ⁽¹⁾	Trips	Entering	Exiting	Entering	Exiting
534	Private School (K-8)	Students	72	ADT	$T = 4.11(X)$	296	50%	50%	148	148
				AM Peak Hour of Generator	$T = 0.88(X) + 14.85$	78	56%	44%	44	34
				PM Peak Hour of Generator	$T = 0.63(X) - 1.93$	43	47%	53%	20	23

(1) Trip Generation, 10th Edition, Institute of Transportation Engineers

(2) The student count for this analysis are for grades K-5 (72 out of 112 total students). These students arrive at 8:30 AM and depart at 3:30 PM. This closely aligns with the near-by Spring Creek Elementary School bell times (8:55 AM - 3:10 PM). The remaining 40 students (infants - 4-year olds) have a separate arrival and dismissal time windows (7:00-8:00 AM and 4:00-5:30 PM).

(3) In reality, the trip count for the school is different than what ITE calculates. Per correspondence with Elizabeth Basart, majority of students have siblings and she advised to use a vehicle count of 30 vehicles. For purposes of the queuing aspect of the TIS, the AM entering trip count is 30 and the exiting trip count is 30 (60 total trips). The PM entering trip count is 30 and the exiting trip count is 30 (60 total trips).

Project Trip Generation Summary per ITE	
Total ADT =	296
Entering =	148
Exiting =	148
Total AM PHT =	78
Entering AM PHT =	44
Exiting AM PHT =	34
Total PM PHT =	43
Entering PM PHT =	20
Exiting PM PHT =	23

Actual Project Trip Generation Summary for Queuing Analysis	
Total AM PHT =	60
Entering AM PHT =	30
Exiting AM PHT =	30
Total PM PHT =	60
Entering PM PHT =	30
Exiting PM PHT =	30

Table B: Study Area Trip Distribution and Assignment

Link				Directional LOS Capacity (1) (PHT)	LOS 2019 100th Highest Hr Volume (2) (PHT)	Project		Project Impact (Trips / LOS C Service Volume)
Name	From	To	Type			Trip Distribution ⁽²⁾ (1-Way)	1-Way PHT ⁽²⁾	
US 41	Shopping Center Entrance	Coconut Rd	3 LD	2,840	2,662	50%	22	0.8%

(1) Information from Lee County Generalized Peak Hour Directional Service Volumes report

(2) Information from Lee County 2020 Concurrency Report

(3) Peak Hour Distribution represents 1-way entering or exiting trips on a particular link

Table C: Future Background Trip Projection

Roadway Link	Location	Daily Traffic Volume (AADT) for Counted Year ⁽¹⁾					Least Squares Method Curve Fit Information		Existing Growth Rate ⁽²⁾	Projected Background Trips at Buildout
		2015	2016	2017	2018	2019	Y - Intercept	Slope		2021
US 41 (PCS 93)	South of Coconut Rd	46100	45000	49900	48800	49400	-2049840.0	1040	2.60%	52000

(1) Information taken from Lee County Department of Transportation 2019 Traffic Count Report (2020 counts omitted due to atypical counts from COVID-19)

(2) For daily traffic growth rates less than 2%, assume 2% growth rate for calculating future trips

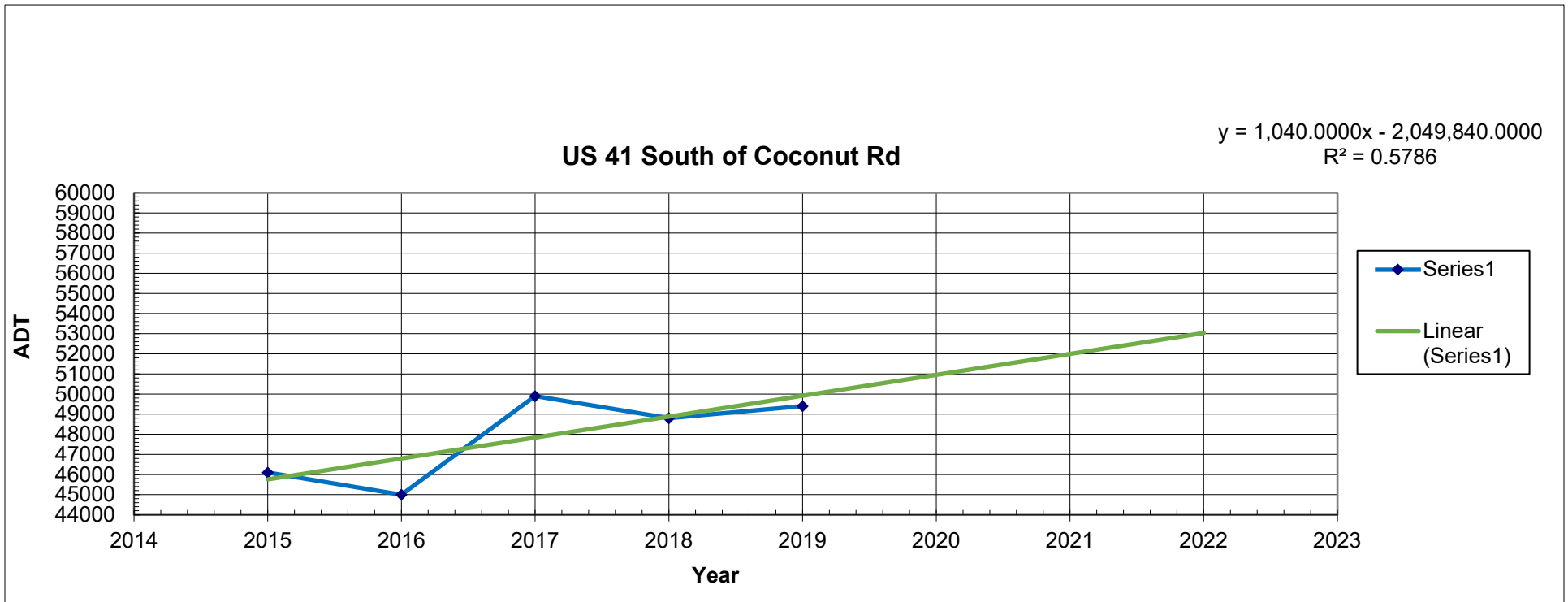


Table D: Link LOS Analysis

Link				Directional Capacity of Link's Current LOS (PHT)		2019 100th Highest Hour Directional Volume		Project + Background		Future Background (Using 2.6% Growth Rate)		Project + Future Background	
Name	From	To	Type	LOS ⁽¹⁾	Capacity (VPH) ⁽¹⁾	LOS ⁽¹⁾	1-Way Trips ⁽³⁾	LOS ⁽¹⁾	1-Way Trips ^(2, 3)	LOS ⁽¹⁾	1-Way Trips ⁽³⁾	LOS ⁽¹⁾	1-Way Trips ^(2, 3)
US 41	Shopping Center Entrance	Coconut Rd	3 LD	C	2,840	C	2,662	C	2684	C	2,802	C	2824

(1) Information from Lee County Generalized Peak Hour Directional Service Volumes report

(2) Calculations from Table A - Trip Generation

(3) Information from Lee County 2020 Concurrency Report

Table E: US 41 & Bernwood Pkwy. Traffic Count

US 41 / BERNWOOD PKWY INTERSECTION RAW COUNTS					
		US 41 NORTHBOUND	US 41 SOUTHBOUND	BERNWOOD WESTBOUND	
		R	L	L	R
3/24/2021	7:30 - 7:45	24	48	55	15
	7:45 - 8:00	36	54	56	25
	8:00 - 8:15	21	34	55	6
	8:15 - 8:30	15	20	45	12
	8:30 - 8:45	23	22	53	23
	8:45 - 9:00	25	24	62	26
	9:00 - 9:15	33	24	34	13
	9:15 - 9:30	22	32	37	17
AM PHT		103	156	215	79
3/24/2021	2:30 - 2:45	58	44	30	16
	2:45 - 3:00	58	50	38	13
	3:00 - 3:15	57	35	34	24
	3:15 - 3:30	58	47	71	36
	3:30 - 3:45	47	33	51	23
	3:45 - 4:00	49	56	38	27
	4:00 - 4:15	63	23	27	22
	4:15 - 4:30	50	41	31	17
PM PHT		231	176	194	110

Appendix A

Land Use: 534 Private School (K-8)

Description

A private school (K-8) primarily serves students attending kindergarten through the eighth grade but may also include students beginning with pre-K classes. These schools may also offer extended care and day care. Students may travel a long distance to get to private schools. Elementary school (Land Use 520), middle school/junior high school (Land Use 522), high school (Land Use 530), private school (K-12) (Land Use 536), and charter elementary school (Land Use 537) are related uses.

Additional Data

The sites were surveyed in the 1990s, the 2000s, and the 2010s in Arizona, Florida, Maryland, Oregon, Pennsylvania, and Texas.

Source Numbers

355, 444, 516, 536, 634, 905, 940

Private School (K-8)
(534)

Vehicle Trip Ends vs: Students
On a: Weekday

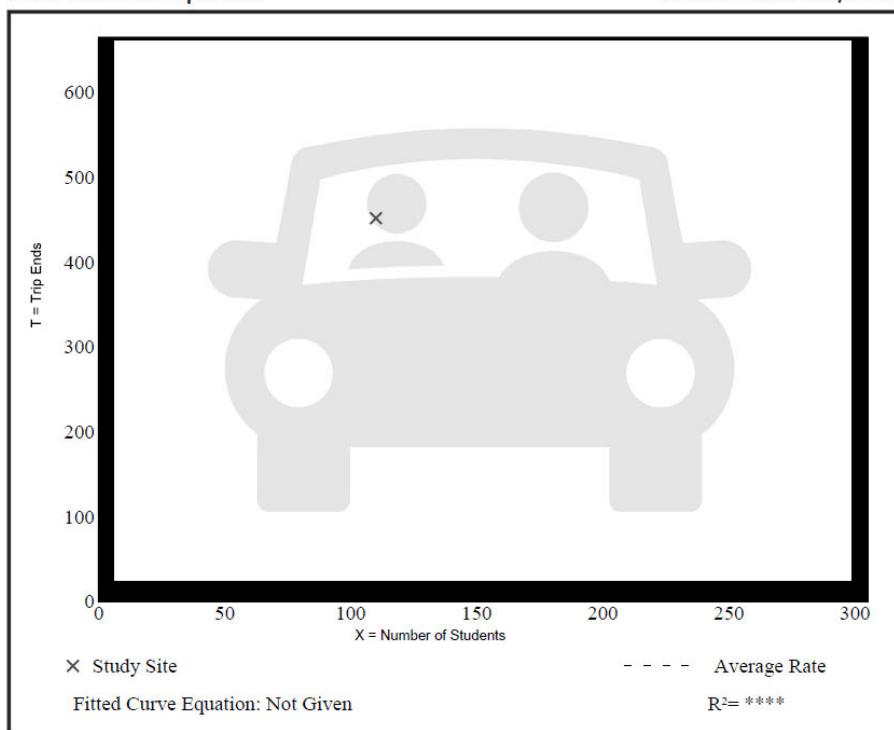
Setting/Location: General Urban/Suburban
Number of Studies: 1
Avg. Num. of Students: 110
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
4.11	4.11 - 4.11	*

Data Plot and Equation

Caution – Small Sample Size



Trip Gen Manual, 10th Edition • Institute of Transportation Engineers

Private School (K-8)
(534)

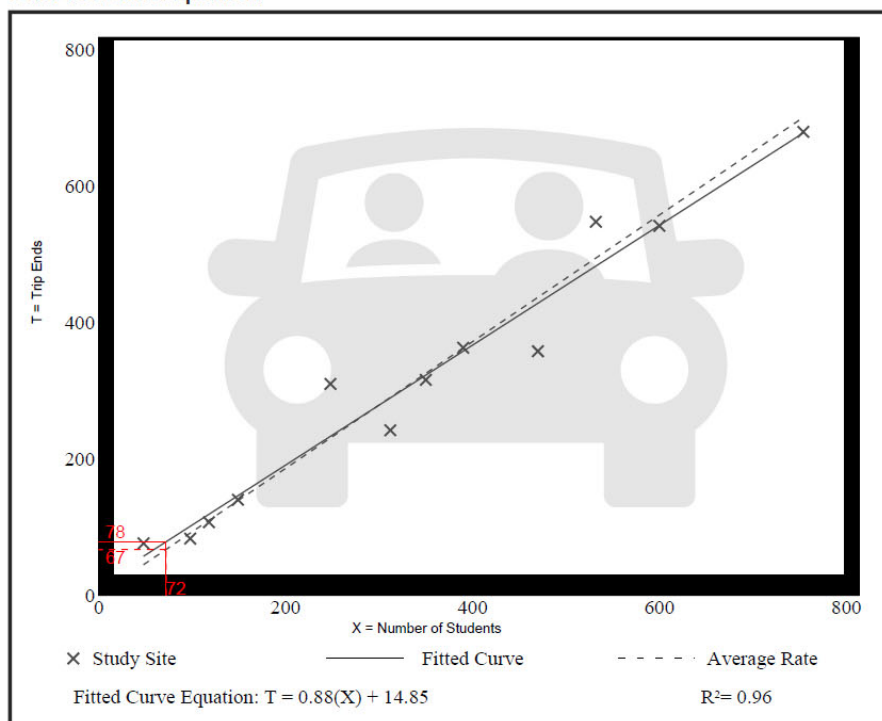
Vehicle Trip Ends vs: **Students**
On a: **Weekday,**
AM Peak Hour of Generator

Setting/Location: General Urban/Suburban
Number of Studies: 12
Avg. Num. of Students: 339
Directional Distribution: 56% entering, 44% exiting

Vehicle Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.93	0.76 - 1.58	0.14

Data Plot and Equation



Trip Gen Manual, 10th Edition • Institute of Transportation Engineers

Private School (K-8)
(534)

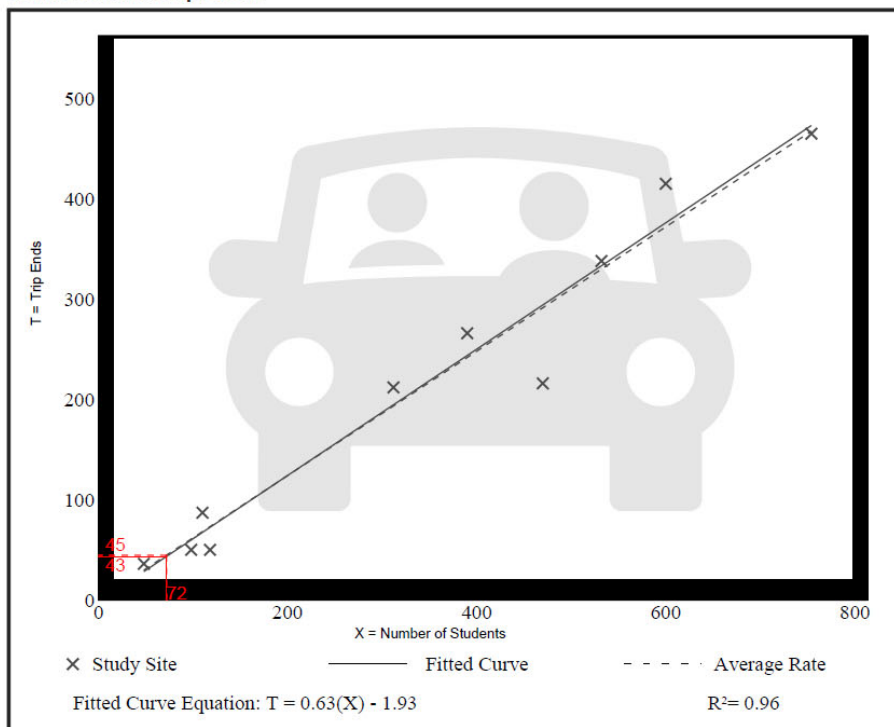
Vehicle Trip Ends vs: Students
On a: Weekday,
PM Peak Hour of Generator

Setting/Location: General Urban/Suburban
Number of Studies: 10
Avg. Num. of Students: 343
Directional Distribution: 47% entering, 53% exiting

Vehicle Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.62	0.42 - 0.79	0.09

Data Plot and Equation



Trip Gen Manual, 10th Edition • Institute of Transportation Engineers

5/25/2020

LEE COUNTY Road Link Volumes (County- and State-Maintained Roadways)

LINK NO.	NAME	ROADWAY LINK		ROAD TYPE	PERFORMANCE STANDARD		2019 100TH HIGHEST HOUR		FORECAST FUTURE		NOTES
		FROM	TO		LOS	CAPACITY	LOS	VOLUME	LOS	VOLUME	
21400	PINE ISLAND RD (SR 78)	CITY LIMITS E OF BARRETT RD	US 41	4LD	D	2,100	C	1,696	C	1,843	
21500	PINE ISLAND RD (SR 78)	US 41	BUS 41	4LD	D	2,100	C	1,690	C	1,750	
21600	PINE RIDGE RD	SAN CARLOS BLVD	SUMMERLIN RD	2LN	E	860	C	499	C	545	*
21700	PINE RIDGE RD	SUMMERLIN RD	GLADIOLUS DR	2LN	E	860	C	286	C	545	Heritage Isle*
21800	PINE RIDGE RD	GLADIOLUS DR	McGREGOR BLVD	2LN	E	860	C	286	C	301	
21900	PLANTATION RD	SIX MILE PKWY	DANIELS PKWY	2LN	E	860	C	288	C	417	Intermed Park
22000	PLANTATION RD	DANIELS PKWY	IDLEWILD ST	2LN	E	860	D	672	D	706	FDOT Metro Pkwy 6-laning
22050	PLANTATION RD	IDLEWILD ST	COLONIAL BLVD	4LN	E	1,790	C	841	C	884	
22100	PONDELA RD	SR 78	ORANGE GROVE BLVD	4LD	E	1,890	B	736	B	774	*
22200	PONDELA RD	ORANGE GROVE BLVD	US 41	4LD	E	1,890	B	1,164	B	1,239	
22300	PONDELA RD	US 41	BUS 41	4LD	E	1,890	B	953	B	1,002	
22400	PRITCHETT PKWY	SR 78	RICH RD	2LN	E	860	C	73	C	541	old count, Stoneybrook North(2009)
22500	RANCHETTE RD	PENZANCE BLVD	IDLEWILD ST	2LN	E	860	C	93	C	98	
22600	RICH RD	SLATER RD	PRITCHETT PKWY	2LN	E	860	C	55	C	62	old count projection(2009)
22700	RICHMOND AVE	LEELAND HEIGHTS	E 12TH ST	2LN	E	860	C	79	C	91	*
22800	RICHMOND AVE	E 12TH ST	GREENBRIAR BLVD	2LN	E	860	C	79	C	83	*
23000	SAN CARLOS BLVD (SR 865)	MANTANZAS PASS B.	MAIN ST	2LD	D	970	F	1,055	F	1,176	Constrained
23100	SAN CARLOS BLVD (SR 865)	MAIN ST	SUMMERLIN RD	4LD	D	2,100	C	1,055	C	1,176	PD&E Study
23180	SAN CARLOS BLVD (SR 865)	SUMMERLIN RD	KELLY RD	2LD	D	970	C	744	C	847	
23200	SAN CARLOS BLVD (SR 865)	KELLY RD	GLADIOLUS DR	4LD	D	2,100	C	744	C	847	
23230	SAN CARLOS BLVD	US 41	THREE OAKS PKWY	2LN	E	860	C	427	C	449	*
23260	SANIBEL BLVD	US 41	LEE RD	2LN	E	860	C	484	C	508	
23300	SANIBEL CAUSEWAY	SANIBEL SHORELINE	TOLL PLAZA	2LN	E	1,140	E	944	E	992	
23400	SHELL POINT BLVD	McGREGOR BLVD	PALM ACRES	2LN	E	860	C	290	C	304	*
23500	SIX MILE PKWY (SR 739)	US 41	METRO PKWY	4LD	D	2,100	C	1,778	C	1,950	
23600	SIX MILE CYPRESS	METRO PKWY	DANIELS PKWY	4LD	E	2,000	B	1,398	B	1,469	
23700	SIX MILE CYPRESS	DANIELS PKWY	WINKLER EXT.	4LD	E	1,900	B	1,149	B	1,352	
23800	SIX MILE CYPRESS	WINKLER EXT.	CHALLENGER BLVD	4LD	E	1,900	B	1,050	B	1,104	
23900	SIX MILE CYPRESS	CHALLENGER BLVD	COLONIAL BLVD	6LD	E	2,860	A	1,050	A	1,104	
24000	SLATER RD	SR 78	NALLE GRADE RD	2LN	E	1,010	C	402	C	423	*
24100	SOUTH POINTE BLVD	CYPRESS LAKE DR	COLLEGE PKWY	2LD	E	910	D	644	D	677	*
24200	SR 31 (ARCADIA RD)	SR 80	SR 78	2LN	D	970	C	643	C	610	PD&E/SEIR Study
24300	SR 31 (ARCADIA RD)	SR 78	COUNTY LINE	2LN	C	820	C	564	C	460	PD&E/SEIR Study
24400	STALEY RD	TICE	ORANGE RIVER BLVD	2LN	E	860	C	189	C	215	*
24500	STRINGFELLOW RD	1ST AVE	BERKSHIRE RD	2LN	E	1,060	B	315	D	672	Constrained
24600	STRINGFELLOW RD	BERKSHIRE RD	PINE ISLAND RD	2LN	E	1,060	B	315	C	448	Constrained
24700	STRINGFELLOW RD	PINE ISLAND RD	PINELAND RD	2LN	E	1,060	C	551	D	652	Constrained
24800	STRINGFELLOW RD	PINELAND RD	MAIN ST	2LN	E	1,060	C	551	D	648	
24900	SUMMERLIN RD	McGREGOR BLVD	KELLY COVE RD	4LD	E	1,980	A	1,243	A	1,306	
25000	SUMMERLIN RD	KELLY COVE RD	SAN CARLOS BLVD	4LD	E	1,980	A	1,243	A	1,306	
25100	SUMMERLIN RD	SAN CARLOS BLVD	PINE RIDGE RD	6LD	E	3,000	A	1,919	A	2,149	
25200	SUMMERLIN RD	PINE RIDGE RD	BASS RD	6LD	E	3,000	A	1,919	A	2,016	
25300	SUMMERLIN RD	BASS RD	GLADIOLUS DR	6LD	E	3,000	A	1,919	A	2,016	
25400	SUMMERLIN RD	GLADIOLUS DR	CYPRESS LAKE DR	4LD	E	1,900	C	1,454	C	1,552	
25500	SUMMERLIN RD	CYPRESS LAKE DR	COLLEGE PKWY	6LD	E	2,880	B	1,783	B	1,874	
25600	SUMMERLIN RD	COLLEGE PKWY	PARK MEADOW DR	6LD	E	2,880	B	1,916	B	2,014	
25700	SUMMERLIN RD	PARK MEADOW DR	BOY SCOUT	6LD	E	2,880	B	1,916	B	2,014	
25800	SUMMERLIN RD	BOY SCOUT	MATHEWS DR	4LD	E	1,820	D	1,260	D	1,324	
25900	SUMMERLIN RD	MATHEWS DR	COLONIAL BLVD	4LD	E	1,820	D	1,260	D	1,324	
26000	SUNRISE BLVD	BELL BLVD	COLUMBUS BLVD	2LN	E	860	C	42	C	53	
26100	SUNSHINE BLVD	SR 82	23RD ST SW	2LN	E	1,010	C	369	C	388	*
26150	SUNSHINE BLVD	23RD ST SW	LEE BLVD	2LN	E	1,010	C	369	C	388	*
26200	SUNSHINE BLVD	LEE BLVD	W 12TH ST	2LN	E	1,010	D	596	D	626	*
26300	SUNSHINE BLVD	W 12TH ST	W 75TH ST	2LN	E	860	D	623	D	655	
26400	SW 23RD ST	GUNNERY RD	SUNSHINE BLVD	2LN	E	860	D	650	D	683	
26500	THREE OAKS PKWY	COCONUT RD	ESTERO PKWY	4LD	E	1,940	B	1,230	B	1,413	
26600	THREE OAKS PKWY	ESTERO PKWY	SAN CARLOS BLVD	4LD	E	1,940	A	623	B	724	
26700	THREE OAKS PKWY	SAN CARLOS BLVD	ALICO RD	4LD	E	1,940	A	633	B	976	
26800	TICE ST	SR 80	ORTIZAVE	2LN	E	860	C	163	C	171	old count(2010)
26900	TICE ST	ORTIZ AVE	STALEY RD	2LN	E	860	C	203	D	716	Elementry U.
27000	TREELINE AVE	TERMINAL ACCESS RD	DANIELS PKWY	4LD	E	1,980	A	1,272	A	1,510	Harley Davidson
27030	TREELINE AVE	DANIELS PKWY	AMBERWOOD RD	4LD	E	1,980	A	880	A	924	
27070	TREELINE AVE	AMBERWOOD RD	COLONIAL BLVD	4LD	E	1,980	A	880	A	924	
29800	US 41 (S TAMIAMI TR)	OLD 41	CORKSCREW RD	6LD	D	3,171	C	2,662	C	2,712	
29900	US 41 (S TAMIAMI TR)	CORKSCREW RD	SANIBEL BLVD	6LD	D	3,171	C	2,422	C	2,485	
30000	US 41 (S TAMIAMI TR)	SANIBEL BLVD	ALICO RD	6LD	D	3,171	C	2,623	C	2,686	
30100	US 41 (S TAMIAMI TR)	ALICO RD	ISLAND PARK RD	6LD	D	3,171	C	2,623	C	2,730	
30200	US 41 (S TAMIAMI TR)	ISLAND PARK RD	BRIARCLIFF RD	6LD	D	3,171	C	2,905	D	3,092	

Lee County
Generalized Peak Hour Directional Service Volumes
Urbanized Areas

April 2016

c:\input5

Uninterrupted Flow Highway						
Level of Service						
Lane	Divided	A	B	C	D	E
1	Undivided	130	420	850	1,210	1,640
2	Divided	1,060	1,810	2,560	3,240	3,590
3	Divided	1,600	2,720	3,840	4,860	5,380
Arterials						
Class I (40 mph or higher posted speed limit)						
Level of Service						
Lane	Divided	A	B	C	D	E
1	Undivided	*	140	800	860	860
2	Divided	*	250	1,840	1,960	1,960
3	Divided	*	400	2,840	2,940	2,940
4	Divided	*	540	3,830	3,940	3,940
Class II (35 mph or slower posted speed limit)						
Level of Service						
Lane	Divided	A	B	C	D	E
1	Undivided	*	*	330	710	780
2	Divided	*	*	710	1,590	1,660
3	Divided	*	*	1,150	2,450	2,500
4	Divided	*	*	1,580	3,310	3,340
Controlled Access Facilities						
Level of Service						
Lane	Divided	A	B	C	D	E
1	Undivided	*	160	880	940	940
2	Divided	*	270	1,970	2,100	2,100
3	Divided	*	430	3,050	3,180	3,180
Collectors						
Level of Service						
Lane	Divided	A	B	C	D	E
1	Undivided	*	*	310	660	740
1	Divided	*	*	330	700	780
2	Undivided	*	*	730	1,440	1,520
2	Divided	*	*	770	1,510	1,600
Note: the service volumes for I-75 (freeway), bicycle mode, pedestrian mode, and bus mode should be from FDOT's most current version of LOS Handbook.						

2018 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: DISTRICT
 CATEGORY: 1252 BONITA SPRINGS AREA

WEEK	DATES	SF	MOCF: 0.95 PSCF
1	01/01/2018 - 01/06/2018	1.00	1.05
2	01/07/2018 - 01/13/2018	1.00	1.05
3	01/14/2018 - 01/20/2018	0.99	1.04
4	01/21/2018 - 01/27/2018	0.98	1.03
* 5	01/28/2018 - 02/03/2018	0.97	1.02
* 6	02/04/2018 - 02/10/2018	0.95	1.00
* 7	02/11/2018 - 02/17/2018	0.94	0.99
* 8	02/18/2018 - 02/24/2018	0.94	0.99
* 9	02/25/2018 - 03/03/2018	0.94	0.99
*10	03/04/2018 - 03/10/2018	0.93	0.98
*11	03/11/2018 - 03/17/2018	0.93	0.98
*12	03/18/2018 - 03/24/2018	0.94	0.99
*13	03/25/2018 - 03/31/2018	0.95	1.00
*14	04/01/2018 - 04/07/2018	0.95	1.00
*15	04/08/2018 - 04/14/2018	0.96	1.01
*16	04/15/2018 - 04/21/2018	0.97	1.02
*17	04/22/2018 - 04/28/2018	0.98	1.03
18	04/29/2018 - 05/05/2018	1.00	1.05
19	05/06/2018 - 05/12/2018	1.01	1.06
20	05/13/2018 - 05/19/2018	1.02	1.07
21	05/20/2018 - 05/26/2018	1.03	1.08
22	05/27/2018 - 06/02/2018	1.03	1.08
23	06/03/2018 - 06/09/2018	1.04	1.09
24	06/10/2018 - 06/16/2018	1.04	1.09
25	06/17/2018 - 06/23/2018	1.05	1.11
26	06/24/2018 - 06/30/2018	1.05	1.11
27	07/01/2018 - 07/07/2018	1.06	1.12
28	07/08/2018 - 07/14/2018	1.06	1.12
29	07/15/2018 - 07/21/2018	1.07	1.13
30	07/22/2018 - 07/28/2018	1.06	1.12
31	07/29/2018 - 08/04/2018	1.05	1.11
32	08/05/2018 - 08/11/2018	1.04	1.09
33	08/12/2018 - 08/18/2018	1.03	1.08
34	08/19/2018 - 08/25/2018	1.04	1.09
35	08/26/2018 - 09/01/2018	1.04	1.09
36	09/02/2018 - 09/08/2018	1.05	1.11
37	09/09/2018 - 09/15/2018	1.05	1.11
38	09/16/2018 - 09/22/2018	1.04	1.09
39	09/23/2018 - 09/29/2018	1.03	1.08
40	09/30/2018 - 10/06/2018	1.02	1.07
41	10/07/2018 - 10/13/2018	1.01	1.06
42	10/14/2018 - 10/20/2018	1.00	1.05
43	10/21/2018 - 10/27/2018	1.00	1.05
44	10/28/2018 - 11/03/2018	1.00	1.05
45	11/04/2018 - 11/10/2018	1.00	1.05
46	11/11/2018 - 11/17/2018	1.00	1.05
47	11/18/2018 - 11/24/2018	1.00	1.05
48	11/25/2018 - 12/01/2018	1.00	1.05
49	12/02/2018 - 12/08/2018	1.00	1.05
50	12/09/2018 - 12/15/2018	1.00	1.05
51	12/16/2018 - 12/22/2018	1.00	1.05
52	12/23/2018 - 12/29/2018	0.99	1.04
53	12/30/2018 - 12/31/2018	0.99	1.04

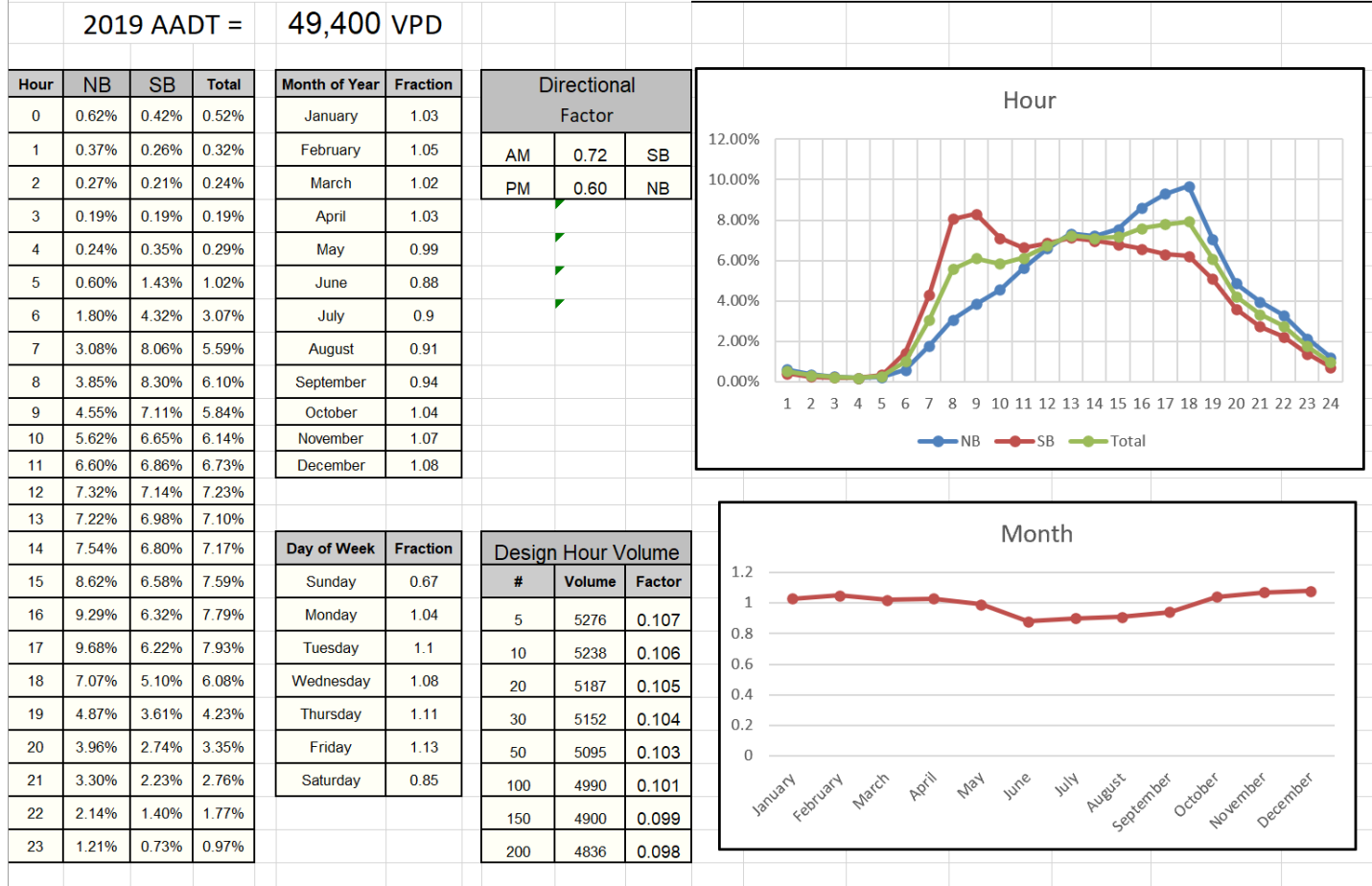
* PEAK SEASON

26-FEB-2019 18:31:28

830UPD

1_1252_PKSEASON.TXT

PCS 93 - US 41 south of Coconut Rd



Updated 3/13/20		Daily Traffic Volume (AADT)										
STREET	LOCATION	Station #	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
TREELINE AVE	S OF DANIELS PKWY	502	22100									
TREELINE AVE	N OF AIRPORT TERMINAL	61	24000	23600	23800	24500	25500	23800	25000	23800	23400	22700
12 ST W	E OF GUNNERY RD	472	3400					4100				5200
23RD ST SW	E OF GUNNERY RD	469	10100			10200	11000		11800	12700	13200	
US 41 (SR 45)	N OF COLLIER CO LINE	23	33900	32000	32700	33000	33900	34800	36100	36900	32600	37200
US 41 (SR 45)	N OF BONITA BEACH RD	437	40800									
US 41 (SR 45)	N OF BONITA BEACH RD	92						42600	57100		46600	49000
US 41 (SR 45)	N OF WEST TERRY ST	433	34200									
US 41 (SR 45)	S OF COCONUT RD	93						46100	45000	49900	48800	49400
US 41 (SR 45)	S OF HICKORY DR	25	38600	42000		36600	37700	42500	45100	48000	50100	52100
US 41 (SR 45)	N OF SANIBEL BLVD	424	33400									
US 41 (SR 45)	N OF CONSTITUTION BLVD	94						33100	34900	35400	43600	35400
US 41 (SR 45)	N OF ALICO RD	420	53400									

HCS Intersection Analysis

MORRIS

DEPEW

ENGINEERS · PLANNERS · SURVEYORS
LANDSCAPE ARCHITECTS

2914 Cleveland Avenue | Fort Myers, Florida 33901

Phone (239) 337-3993 | Toll Free (866) 337-7341
www.morris-depew.com

Discovery Day Academy

HCS Intersection Report

(US 41 & Bernwood Pkwy.)

April 24, 2021

- I. Raw Traffic Counts.
- II. Intersection Signal Timing & Phasing Patterns
- III. Background Trips, Adjustment Factors & Future Trips without Site-Generated Trips
- IV. Background Trips, Adjustment Factors & Future Trips with Site-Generated Trips
- V. Proposed Trip Generation at Project Buildout
- VI. Trip Generation Map
- VII. HCS Reports
 - a. AM PHT without Project Traffic
 - b. AM PHT with Project Traffic
 - c. PM PHT without Project Traffic
 - d. PM PHT with Project Traffic
- VIII. Conclusion

HCS Intersection Report (Raw Traffic Counts)



US 41 / BERNWOOD PKWY INTERSECTION RAW COUNTS

		US 41 NORTHBOUND	US 41 SOUTHBOUND	BERNWOOD WESTBOUND	
		R	L	L	R
3/24/2021	7:30 - 7:45	24	48	55	15
	7:45 - 8:00	36	54	56	25
	8:00 - 8:15	21	34	55	6
	8:15 - 8:30	15	20	45	12
	8:30 - 8:45	23	22	53	23
	8:45 - 9:00	25	24	62	26
	9:00 - 9:15	33	24	34	13
	9:15 - 9:30	22	32	37	17
AM PHT		103	156	215	79
3/24/2021	2:30 - 2:45	58	44	30	16
	2:45 - 3:00	58	50	38	13
	3:00 - 3:15	57	35	34	24
	3:15 - 3:30	58	47	71	36
	3:30 - 3:45	47	33	51	23
	3:45 - 4:00	49	56	38	27
	4:00 - 4:15	63	23	27	22
	4:15 - 4:30	50	41	31	17
PM PHT		231	176	194	110

HCS Intersection Report

(Intersection Signal Timing & Phasing Patterns)



Lee County, FL



MOVING TRAFFIC FORWARD

5308 - US 41 & Bernwood - - Econolite Type - ASC/3

Controller Timing Plan (MM) 2-1

Plan 1

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	NBLT	SB		WB	SBLT	NB										
Min Green	5	15	0	7	5	15	0	0	0	0	0	0	0	0	0	0
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	0	0	7	0	7	0	0	0	0	0	0	0	0	0	0
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	0	0	38	0	23	0	0	0	0	0	0	0	0	0	0
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	2.0	5.0	0.0	3.0	2.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	15	45	0	20	15	45	0	0	0	0	0	0	0	0	0	0
Max2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	5.2	5.2	0.0	4.0	5.2	5.2	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clear	2.0	2.6	0.0	3.0	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
---------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Lee County, FL



MOVING TRAFFIC FORWARD

5308 - US 41 & Bernwood - - Econolite Type - ASC/3

Coordination Pattern Data
Coordinator Pattern Data (MM) 3-2

Coordinator Pattern # 2

Split Pattern	2	TS2 (Pat-Off)	0-2	Splits In	Percent
Cycle	180	Std (COS)	0	Offsets In	Percent
Offset Value	16%	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	0		
Actuated Walk Rest	No	Sequence	1		
Phase Reservice	No	Action Plan	0		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	NBLT	SB		WB	SBLT	NB										
Splits (Split Pat 2)	10	72	0	18	12	70	0	0	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	100%	82%	0%	0%

Misc. Data					
Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time		X				X										
Omit Phase									X	X	X	X	X	X	X	X
Special Function Outputs																

PM Pattern

Coordinator Pattern # 3

Split Pattern	3	TS2 (Pat-Off)	0-3	Splits In	Percent
Cycle	200	Std (COS)	233	Offsets In	Percent
Offset Value	89%	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	0		
Actuated Walk Rest	No	Sequence	0		
Phase	No	Action Plan	0		
Reservice					
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	NBLT	SB		WB	SBLT	NB										
Splits (Split Pat 3)	8	72	0	20	13	67	0	0	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	100%	80%	0%	0%

Misc. Data
 Veh Perm 1 0 Veh Perm 2 0 Veh Perm 2 Disp 0
 Split Demand 0 Split Demand 0 Crossing Arterial Pat 0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time		X				X										
Omit Phase									X	X	X	X	X	X	X	X
Special Function Outputs																

Coordinator Pattern # 4

Split Pattern	4	TS2 (Pat-Off)	1-1	Splits In	Percent
Cycle	180	Std (COS)	0	Offsets In	Percent
Offset Value	16%	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	0		
Actuated Walk Rest	No	Sequence	1		
Phase	No	Action Plan	0		
Reservice					
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	NBLT	SB		WB	SBLT	NB										
Splits (Split Pat 4)	10	72	0	18	12	70	0	0	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	100%	82%	0%	0%

Misc. Data

Veh Perm 1 0 Veh Perm 2 0 Veh Perm 2 Disp 0
 Split Demand Pat 1 0 Split Demand Pat 2 0 Crossing Arterial Pat 0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time		X				X										
Omit Phase									X	X	X	X	X	X	X	X
Special Function Outputs																

Coordinator Pattern # 5

Split Pattern	5	TS2 (Pat-Off)	1-2	Splits In	Percent
Cycle	150	Std (COS)	0	Offsets In	Percent
Offset Value	92%	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	0		
Actuated Walk Rest	No	Sequence	1		
Phase	No	Action Plan	0		
Reservice					
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	NBLT	SB		WB	SBLT	NB										
Splits (Split Pat 5)	11	69	0	20	14	66	0	0	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	100%	80%	0%	0%

Misc. Data
 Veh Perm 1 0 Veh Perm 2 0 Veh Perm 2 Disp 0
 Split Demand 0 Split Demand 0 Crossing Arterial 0
 Pat 1 Pat 2 Pat

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time		X				X										
Omit Phase									X	X	X	X	X	X	X	X
Special Function Outputs																

Coordinator Pattern # 6

Split Pattern	6	TS2 (Pat-Off)	1-3	Splits In	Percent
Cycle	120	Std (COS)	0	Offsets In	Percent
Offset Value	15%	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	0		
Actuated Walk Rest	No	Sequence	1		
Phase	No	Action Plan	0		
Reservice					
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	NBLT	SB		WB	SBLT	NB										
Splits (Split Pat 6)	13	65	0	22	13	65	0	0	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	100%	78%	0%	0%

Misc. Data

Veh Perm 1 0 Veh Perm 2 0 Veh Perm 2 Disp 0
 Split Demand Pat 1 0 Split Demand Pat 2 0 Crossing Arterial Pat 0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time		X				X										
Omit Phase									X	X	X	X	X	X	X	X
Special Function Outputs																

Coordinator Pattern # 7

Split Pattern	7	TS2 (Pat-Off)	2-1	Splits In	Percent
Cycle	200	Std (COS)	234	Offsets In	Percent
Offset Value	48%	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	0		
Actuated Walk Rest	No	Sequence	0		
Phase	No	Action Plan	0		
Reservice					
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	NBLT	SB		WB	SBLT	NB										
Splits (Split Pat 7)	12	73	0	15	12	73	0	0	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	100%	85%	0%	0%

Misc. Data
 Veh Perm 1 0 Veh Perm 2 0 Veh Perm 2 Disp 0
 Split Demand 0 Split Demand 0 Crossing Arterial 0
 Pat 1 Pat 2 Pat

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time		X				X										
Omit Phase									X	X	X	X	X	X	X	X
Special Function Outputs																

AM Pattern

Coordinator Pattern # 11

Split Pattern	11	TS2 (Pat-Off)	3-2	Splits In	Percent
Cycle	180	Std (COS)	0	Offsets In	Percent
Offset Value	8%	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	0		
Actuated Walk Rest	No	Sequence	1		
Phase	No	Action Plan	0		
Reservice					
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	NBLT	SB		WB	SBLT	NB										
Splits (Split Pat 11)	9	73	0	18	18	64	0	0	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	100%	82%	0%	0%

Misc. Data
 Veh Perm 1 0 Veh Perm 2 0 Veh Perm 2 Disp 0
 Split Demand Pat 1 0 Split Demand Pat 2 0 Crossing Arterial Pat 0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time		X				X										
Omit Phase									X	X	X	X	X	X	X	X
Special Function Outputs																

HCS Intersection Report
**(Background Trips, Adjustment Factors & Future Trips without Site-
Generated Trips)**



INTERSECTION TRAFFIC DATA

Project:	21010	N/S Link:	US 41	E/W Link:	Bernwood Pkwy
Date:	3/24/2021	Data:	K. Knight	Analysis:	K. Knight

Background AM Intersection Trips

Time	Northbound				Southbound				Eastbound				Westbound				Intersection Total
	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
0730		24	24	48				48				0	55	15	70	142	
0745		36	36	54				54				0	56	25	81	171	
0800		21	21	34				34				0	55	6	61	116	
0815		15	15	20				20				0	45	12	57	92	
0830		23	23	22				22				0	53	23	76	121	
0845		25	25	24				24				0	62	26	88	137	
0900		33	33	24				24				0	34	13	47	104	
0915		22	22	32				32				0	37	17	54	108	
Peak Qtr Hr																171	
Peak Hr	0	0	103	103	156	0	0	156	0	0	0	0	215	0	79	282	
Peak Factor																0.76	

Background PM Intersection Trips

Time	Northbound				Southbound				Eastbound				Westbound				Intersection Total
	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
0230			58	58	44			44				0	30	16	46	148	
0245			58	58	50			50				0	38	13	51	159	
0300			57	57	35			35				0	34	24	58	150	
0315			58	58	47			47				0	71	36	107	212	
0330			47	47	33			33				0	51	23	74	154	
0345			49	49	56			56				0	38	27	65	170	
0400			63	63	23			23				0	27	22	49	135	
0415			50	50	41			41				0	31	17	48	139	
Peak Qtr Hr																212	
Peak Hr	0	0	231	231	176	0	0	176	0	0	0	0	194	0	110	304	
Peak Factor																0.81	

Background Trips Adjustment Factors

Peak-Hour, Peak-Season Adjustment Factor:	Seasonal Peak to AADT:	0.940
	Month to AADT:	1.020
	Day-of-week to AADT:	1.080
Annual Growth Rate (Percent)		2.600
Number of Periods (Years)		0.500
Total Adjustment Factor		0.864

Future Background AM Intersection Trips

Time	Northbound				Southbound				Eastbound				Westbound				Intersection Total
	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
0730	0	0	21	21	41	0	0	41	0	0	0	0	48	0	13	61	123
0745	0	0	31	31	47	0	0	47	0	0	0	0	48	0	22	70	148
0800	0	0	18	18	29	0	0	29	0	0	0	0	48	0	5	53	100
0815	0	0	13	13	17	0	0	17	0	0	0	0	39	0	10	49	80
0830	0	0	20	20	19	0	0	19	0	0	0	0	46	0	20	66	105
0845	0	0	22	22	21	0	0	21	0	0	0	0	54	0	22	76	118
0900	0	0	29	29	21	0	0	21	0	0	0	0	29	0	11	41	90
0915	0	0	19	19	28	0	0	28	0	0	0	0	32	0	15	47	93
Peak Qtr Hr																	148
Peak Hr	0	0	89	89	135	0	0	135	0	0	0	0	186	0	68	254	478
Peak Factor																	0.81

Future Background PM Intersection Trips

Time	Northbound				Southbound				Eastbound				Westbound				Intersection Total
	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
0230	0	0	50	50	38	0	0	38	0	0	0	0	26	0	14	40	128
0245	0	0	50	50	43	0	0	43	0	0	0	0	33	0	11	44	137
0300	0	0	49	49	30	0	0	30	0	0	0	0	29	0	21	50	130
0315	0	0	50	50	41	0	0	41	0	0	0	0	61	0	31	92	183
0330	0	0	41	41	29	0	0	29	0	0	0	0	44	0	20	64	133
0345	0	0	42	42	48	0	0	48	0	0	0	0	33	0	23	56	147
0400	0	0	54	54	20	0	0	20	0	0	0	0	23	0	19	42	117
0415	0	0	43	43	35	0	0	35	0	0	0	0	27	0	15	41	120
Peak Qtr Hr																	183
Peak Hr	0	0	200	200	152	0	0	152	0	0	0	0	168	0	95	263	615
Peak Factor																	0.84

Site-Generated AM Peak-Hour Trips

	Northbound				Southbound				Eastbound				Westbound				Intersection Total
	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
Site Trips				0				0				0				0	
Percent	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Int. Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Site-Generated PM Peak-Hour Trips

	Northbound				Southbound				Eastbound				Westbound				Intersection Total
	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
Site Trips				0				0				0				0	
Percent	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Int. Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Future Background + Site-Generated AM Peak-Hour Intersection Trips

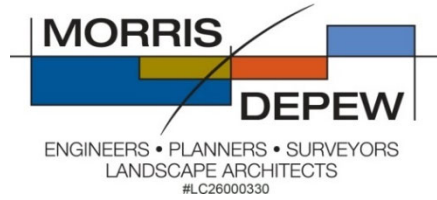
Time	Northbound				Southbound				Eastbound				Westbound				Intersection Total
	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
Peak Hr	0	0	89	89	135	0	0	135	0	0	0	0	186	0	68	254	478

Future Background + Site-Generated PM Peak-Hour Intersection Trips

Time	Northbound				Southbound				Eastbound				Westbound				Intersection Total
	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
Peak Hr	0	0	200	200	152	0	0	152	0	0	0	0	168	0	95	263	615

HCS Intersection Report

(Background Trips, Adjustment Factors & Future Trips with Site-Generated Trips)



INTERSECTION TRAFFIC DATA

Project:	21010	N/S Link:	US 41	E/W Link:	Bernwood Pkwy
Date:	3/24/2021	Data:	K. Knight	Analysis:	K. Knight

Background AM Intersection Trips

Time	Northbound				Southbound				Eastbound				Westbound				Intersection Total			
	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total				
0730			24	24	48				48							0	55	15	70	142
0745			36	36	54				54							0	56	25	81	171
0800			21	21	34				34							0	55	6	61	116
0815			15	15	20				20							0	45	12	57	92
0830			23	23	22				22							0	53	23	76	121
0845			25	25	24				24							0	62	26	88	137
0900			33	33	24				24							0	34	13	47	104
0915			22	22	32				32							0	37	17	54	108
Peak Qtr Hr																				171
Peak Hr	0	0	103	103	156	0	0	156	0	0	0	0	0	0	0	215	0	79	282	521
Peak Factor																				0.76

Background PM Intersection Trips

Time	Northbound				Southbound				Eastbound				Westbound				Intersection Total			
	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total				
0230			58	58	44				44				0	30	16	46	148			
0245			58	58	50				50				0	38	13	51	159			
0300			57	57	35				35				0	34	24	58	150			
0315			58	58	47				47				0	71	36	107	212			
0330			47	47	33				33				0	51	23	74	154			
0345			49	49	56				56				0	38	27	65	170			
0400			63	63	23				23				0	27	22	49	135			
0415			50	50	41				41				0	31	17	48	139			
Peak Qtr Hr																				212
Peak Hr	0	0	231	231	176	0	0	176	0	0	0	0	0	194	0	110	304	686		
Peak Factor																				0.81

Background Trips Adjustment Factors

Peak-Hour, Peak-Season Adjustment Factor:	Seasonal Peak to AADT:	0.940
	Month to AADT:	1.020
	Day-of-week to AADT:	1.080
Annual Growth Rate (Percent)		2.600
Number of Periods (Years)		0.500
Total Adjustment Factor		0.864

Future Background AM Intersection Trips

Time	Northbound				Southbound				Eastbound				Westbound				Intersection Total			
	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total				
0730	0	0	21	21	41	0	0	41	0	0	0	0	48	0	13	61	123			
0745	0	0	31	31	47	0	0	47	0	0	0	0	48	0	22	70	148			
0800	0	0	18	18	29	0	0	29	0	0	0	0	48	0	5	53	100			
0815	0	0	13	13	17	0	0	17	0	0	0	0	39	0	10	49	80			
0830	0	0	20	20	19	0	0	19	0	0	0	0	46	0	20	66	105			
0845	0	0	22	22	21	0	0	21	0	0	0	0	54	0	22	76	118			
0900	0	0	29	29	21	0	0	21	0	0	0	0	29	0	11	41	90			
0915	0	0	19	19	28	0	0	28	0	0	0	0	32	0	15	47	93			
Peak Qtr Hr																				148
Peak Hr	0	0	89	89	135	0	0	135	0	0	0	0	186	0	68	254	478			
Peak Factor																				0.81

Future Background PM Intersection Trips

Time	Northbound				Southbound				Eastbound				Westbound				Intersection Total			
	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total				
0230	0	0	50	50	38	0	0	38	0	0	0	0	26	0	14	40	128			
0245	0	0	50	50	43	0	0	43	0	0	0	0	33	0	11	44	137			
0300	0	0	49	49	30	0	0	30	0	0	0	0	29	0	21	50	130			
0315	0	0	50	50	41	0	0	41	0	0	0	0	61	0	31	92	183			
0330	0	0	41	41	29	0	0	29	0	0	0	0	44	0	20	64	133			
0345	0	0	42	42	48	0	0	48	0	0	0	0	33	0	23	56	147			
0400	0	0	54	54	20	0	0	20	0	0	0	0	23	0	19	42	117			
0415	0	0	43	43	35	0	0	35	0	0	0	0	27	0	15	41	120			
Peak Qtr Hr																				183
Peak Hr	0	0	200	200	152	0	0	152	0	0	0	0	168	0	95	263	615			
Peak Factor																				0.84

Site-Generated AM Peak-Hour Trips

	Northbound				Southbound				Eastbound				Westbound				Intersection Total
	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
Site Trips				15				15				0					30
Percent	0	0	100	100	0	0	100	100	0	0	0	0	50	0	50	100	300
Int. Trips	0	0	15	15	15	0	0	15	0	0	0	0	15	0	15	30	60

Site-Generated PM Peak-Hour Trips

	Northbound				Southbound				Eastbound				Westbound				Intersection Total
	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
Site Trips				15				15				0					30
Percent	0	0	100	100	0	0	100	100	0	0	0	0	50	0	50	100	300
Int. Trips	0	0	15	15	15	0	0	15	0	0	0	0	15	0	15	30	60

Future Background + Site-Generated AM Peak-Hour Intersection Trips

Time	Northbound				Southbound				Eastbound				Westbound				Intersection Total
	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
Peak Hr	0	0	104	104	150	0	0	150	0	0	0	0	201	0	83	284	538

Future Background + Site-Generated PM Peak-Hour Intersection Trips

Time	Northbound				Southbound				Eastbound				Westbound				Intersection Total
	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
Peak Hr	0	0	215	215	167	0	0	167	0	0	0	0	183	0	110	293	675

HCS Intersection Report

(Proposed Trip Generation at Project Buildout)



Proposed Trip Generation ⁽³⁾

ITE LUC ⁽¹⁾	Units	Number of Units ⁽²⁾	Trip Generation					Trip Directional Distribution ⁽¹⁾		
			Type	ITE LUC Equation ⁽¹⁾	Trips	Entering	Exiting	Entering	Exiting	
534	Private School (K-8)	Students	72	ADT	$T = 4.11(X)$	296	50%	50%	148	148
				AM Peak Hour of Generator	$T = 0.88(X) + 14.85$	78	56%	44%	44	34
				PM Peak Hour of Generator	$T = 0.63(X) - 1.93$	43	47%	53%	20	23

(1) Trip Generation, 10th Edition, Institute of Transportation Engineers

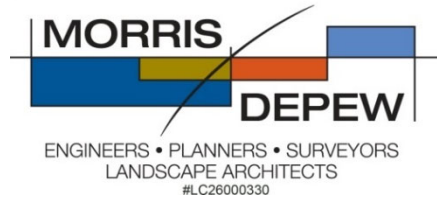
(2) The student count for this analysis are for grades K-5 (72 out of 112 total students). These students arrive at 8:30 AM and depart at 3:30 PM. This closely aligns with the near-by Spring Creek Elementary School bell times (8:55 AM - 3:10 PM). The remaining 40 students (infants - 4-year olds) have a separate arrival and dismissal time windows (7:00-8:00 AM and 4:00-5:30 PM).

(3) In reality, the trip count for the school is different than what ITE calculates. Per correspondence with Elizabeth Basart, majority of students have siblings and she advised to use a vehicle count of 30 vehicles. For purposes of the queuing aspect of the TIS, the AM entering trip count is 30 and the exiting trip count is 30 (60 total trips). The PM entering trip count is 30 and the exiting trip count is 30 (60 total trips).

Project Trip Generation Summary per ITE	
Total ADT =	296
Entering =	148
Exiting =	148
Total AM PHT =	78
Entering AM PHT =	44
Exiting AM PHT =	34
Total PM PHT =	43
Entering PM PHT =	20
Exiting PM PHT =	23

Actual Project Trip Generation Summary for Queuing Analysis	
Total AM PHT =	60
Entering AM PHT =	30
Exiting AM PHT =	30
Total PM PHT =	60
Entering PM PHT =	30
Exiting PM PHT =	30

HCS Intersection Report (Trip Generation Map)



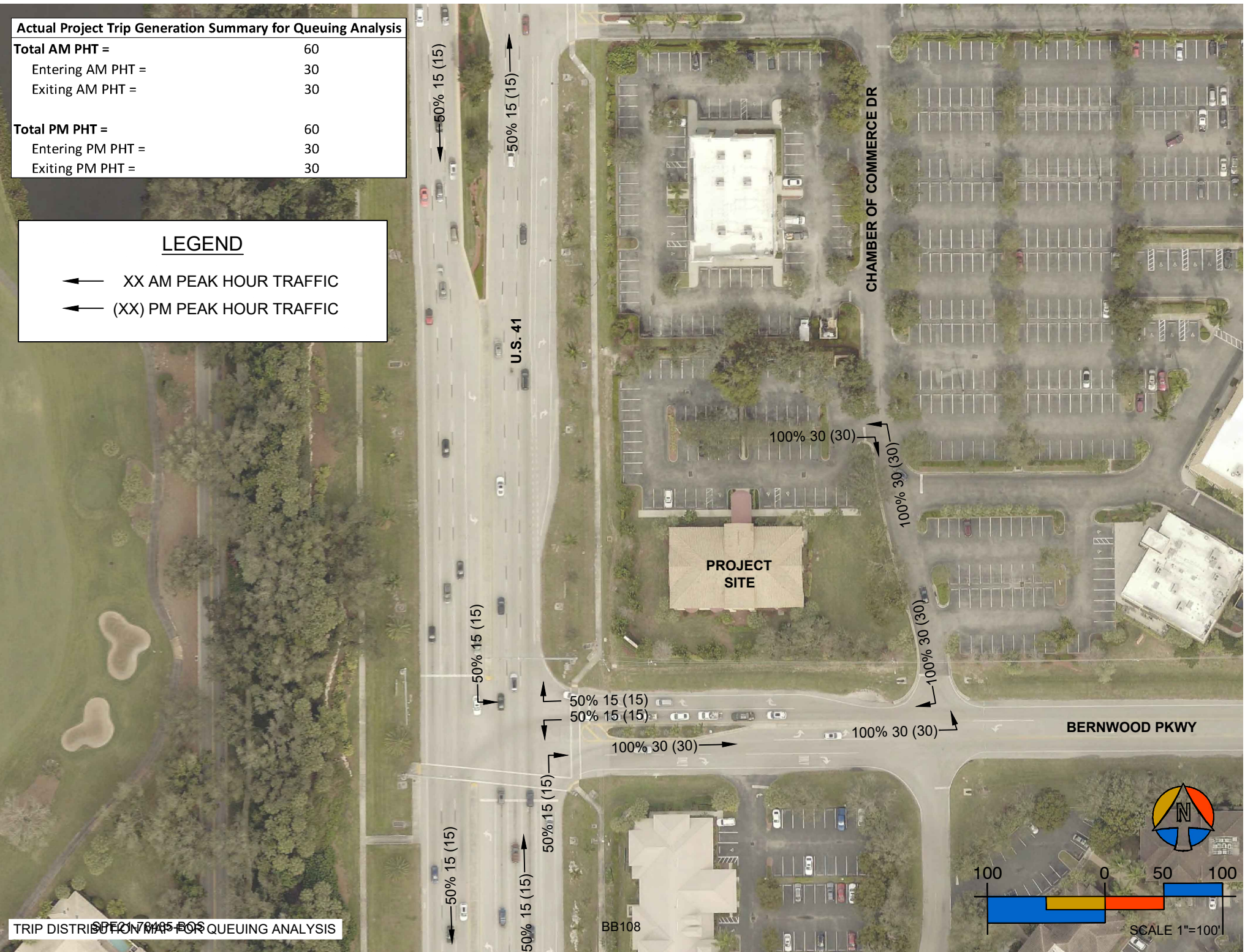
Actual Project Trip Generation Summary for Queuing Analysis

Total AM PHT =	60
Entering AM PHT =	30
Exiting AM PHT =	30
Total PM PHT =	60
Entering PM PHT =	30
Exiting PM PHT =	30

LEGEND

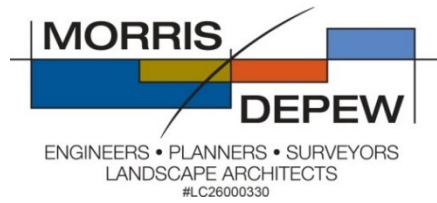
- ← XX AM PEAK HOUR TRAFFIC
- ← (XX) PM PEAK HOUR TRAFFIC

TRIP DISTRIBUTION MAP FOR QUEUING ANALYSIS



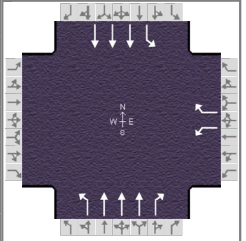
HCS Intersection Report

(HCS Reports: AM PHT without Project Traffic)



HCS7 Signalized Intersection Input Data

General Information				Intersection Information			
Agency	Morris-Depew Associates, Inc.			Duration, h	0.25		
Analyst	K. Knight	Analysis Date	10/31/2019	Area Type	Other		
Jurisdiction	City of Bonita Springs	Time Period	AM PH	PHF	1.00		
Urban Street	US 41	Analysis Year	2021	Analysis Period	1 > 7:00		
Intersection	Bernwood Pkwy	File Name	Intersection Analysis - AM PH.xus				
Project Description	2021 Without Project Traffic						



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h				186		68	0	1398	89	135	3593	

Signal Information													
Cycle, s	180.0	Reference Phase	2										
Offset, s	0	Reference Point	End										
Uncoordinated	No	Simult. Gap E/W	On	Green	0.0	24.6	107.4	25.4	0.0	0.0			
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	5.2	5.2	5.2	4.0	0.0	0.0			
				Red	2.0	2.6	2.6	3.0	0.0	0.0			

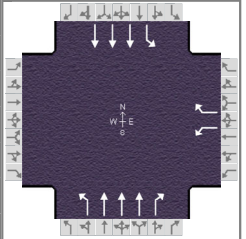
Traffic Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h				186		68	0	1398	89	135	3593	
Initial Queue (Q _b), veh/h				0		0	0	0	0	0	0	
Base Saturation Flow Rate (s ₀), veh/h				1900		1900	1900	1900	1900	1900	1900	
Parking (N _m), man/h						None	0	L + R	0		None	
Heavy Vehicles (P _{HV}), %				10		10	1	10	10	10	10	
Ped / Bike / RTOR, /h	0	0		0	0		0	0	0	0	0	
Buses (N _b), buses/h				0		0	0	0	0	0	0	
Arrival Type (AT)				3		3	3	3	3	3	3	
Upstream Filtering (I)				1.00		1.00	1.00	1.00	1.00	1.00	1.00	
Lane Width (W), ft				12.0		12.0	12.0	12.0	12.0	12.0	12.0	
Turn Bay Length, ft				400		180	500	1600	380	320	1500	
Grade (P _g), %		0				0		0			0	
Speed Limit, mi/h				30		30	45	45	45	45	45	

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G _{max}) or Phase Split, s			32.4	32.4	16.2	115.2	32.4	131.4
Yellow Change Interval (Y), s			4.0	4.0	5.2	5.2	5.2	5.2
Red Clearance Interval (R _c), s			3.0	3.0	2.0	2.6	2.6	2.6
Minimum Green (G _{min}), s			7	7	5	15	5	15
Start-Up Lost Time (l _t), s			2.0		2.0	2.0	2.0	2.0
Extension of Effective Green (e), s			2.0		2.0	2.0	2.0	2.0
Passage (PT), s			2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode			Max	Max	Max	Max	Max	Max
Dual Entry			No	No	No	No	No	No
Walk (Walk), s			0.0		0.0	0.0	0.0	0.0
Pedestrian Clearance Time (PC), s			0.0		0.0	0.0	0.0	0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius				0	No	25	0	No	25	0	No	25
Walkway / Crosswalk Width / Length, ft				9.0	12	0	9.0	12	0	9.0	12	0
Street Width / Island / Curb				0	0	No	0	0	No	0	0	No
Width Outside / Bike Lane / Shoulder, ft				12	5.0	2.0	12	5.0	2.0	12	5.0	2.0
Pedestrian Signal / Occupied Parking				No	0.50		No	0.50		No	0.50	

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information			
Agency	Morris-Depew Associates, Inc.			Duration, h	0.25		
Analyst	K. Knight	Analysis Date	10/31/2019	Area Type	Other		
Jurisdiction	City of Bonita Springs	Time Period	AM PH	PHF	1.00		
Urban Street	US 41	Analysis Year	2021	Analysis Period	1 > 7:00		
Intersection	Bernwood Pkwy	File Name	Intersection Analysis - AM PH.xus				
Project Description	2021 Without Project Traffic						



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h				186		68	0	1398	89	135	3593	

Signal Information																		
Cycle, s	180.0	Reference Phase	2															
Offset, s	0	Reference Point	End															
Uncoordinated	No	Simult. Gap E/W	On	Green	0.0	24.6	107.4	25.4	0.0	0.0	1			2		3		4
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	5.2	5.2	5.2	4.0	0.0	0.0	5			6		7		8
				Red	2.0	2.6	2.6	3.0	0.0	0.0								

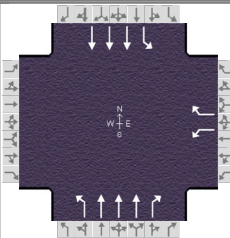
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase				4	1	6	5	2
Case Number				9.0	1.1	3.0	1.1	4.0
Phase Duration, s				32.4	0.0	115.2	32.4	147.6
Change Period, (Y+R _c), s				7.0	7.2	7.8	7.8	7.8
Max Allow Headway (MAH), s				3.3	0.0	0.0	3.1	0.0
Queue Clearance Time (g _s), s				21.8			6.1	
Green Extension Time (g _e), s				0.2	0.0	0.0	0.2	0.0
Phase Call Probability				1.00			1.00	
Max Out Probability				0.76			0.00	

Movement Group Results	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement				7		14	1	6	16	5	2	
Adjusted Flow Rate (v), veh/h				186		68	0	1398	89	135	3593	
Adjusted Saturation Flow Rate (s), veh/h/ln				1637		1537	1762	1591	1383	1637	1591	
Queue Service Time (g _s), s				19.8		7.2	0.0	30.1	5.0	4.1	122.5	
Cycle Queue Clearance Time (g _c), s				19.8		7.2	0.0	30.1	5.0	4.1	122.5	
Green Ratio (g/C)				0.14		0.14	0.56	0.60	0.60	0.74	0.78	
Capacity (c), veh/h				231		217	45	2847	825	419	3706	
Volume-to-Capacity Ratio (X)				0.805		0.314	0.000	0.491	0.108	0.322	0.969	
Back of Queue (Q), ft/ln (95 th percentile)				410.3		149.4	0	447.6	79.7	77.1	1365	
Back of Queue (Q), veh/ln (95 th percentile)				15.2		5.5	0.0	16.6	3.0	2.9	50.6	
Queue Storage Ratio (RQ) (95 th percentile)				1.03		0.83	0.00	0.28	0.21	0.24	0.91	
Uniform Delay (d ₁), s/veh				74.9		69.5	0.0	20.7	15.6	11.0	18.2	
Incremental Delay (d ₂), s/veh				25.0		3.7	0.0	0.6	0.3	2.0	9.2	
Initial Queue Delay (d ₃), s/veh				0.0		0.0	0.0	0.0	0.0	0.0	0.0	
Control Delay (d), s/veh				99.9		73.2	0.0	21.3	15.9	13.0	27.4	
Level of Service (LOS)				F		E		C	B	B	C	
Approach Delay, s/veh / LOS	0.0			92.8		F	21.0	C		26.9	C	
Intersection Delay, s/veh / LOS				28.3						C		

Multimodal Results	EB	WB	NB	SB
Pedestrian LOS Score / LOS				
Bicycle LOS Score / LOS				

HCS7 Signalized Intersection Intermediate Values

General Information				Intersection Information			
Agency	Morris-Depew Associates, Inc.			Duration, h	0.25		
Analyst	K. Knight	Analysis Date	10/31/2019	Area Type	Other		
Jurisdiction	City of Bonita Springs	Time Period	AM PH	PHF	1.00		
Urban Street	US 41	Analysis Year	2021	Analysis Period	1 > 7:00		
Intersection	Bernwood Pkwy	File Name	Intersection Analysis - AM PH.xus				
Project Description	2021 Without Project Traffic						



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h				186		68	0	1398	89	135	3593	

Signal Information														
Cycle, s	180.0	Reference Phase	2											
Offset, s	0	Reference Point	End											
Uncoordinated	No	Simult. Gap E/W	On	Green	0.0	24.6	107.4	25.4	0.0	0.0				
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	5.2	5.2	5.2	4.0	0.0	0.0				
				Red	2.0	2.6	2.6	3.0	0.0	0.0				

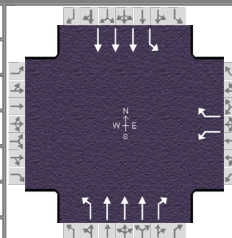
Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)				1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor (f_{HVg})				0.922	0.992	0.922	0.992	0.922	0.922	0.922	0.922	1.000
Parking Activity Adjustment Factor (f_p)	0.000	0.000	0.000	1.000	1.000	1.000	1.000	1.000	0.900	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	0.000	0.000	0.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)				1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.908	1.000	1.000	0.908	1.000
Left-Turn Adjustment Factor (f_{LT})				0.935	0.000		0.935	0.000		0.935	0.000	
Right-Turn Adjustment Factor (f_{RT})					0.000	0.877		0.000	0.877		1.000	1.000
Left-Turn Pedestrian Adjustment Factor (f_{LPB})				1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{RPB})						1.000			1.000			1.000
Work Zone Adjustment Factor (f_{wz})				1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
DDI Factor (f_{DDI})				1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Movement Saturation Flow Rate (s), veh/h				1637	0	1537	1762	4772	1383	1637	4933	0
Proportion of Vehicles Arriving on Green (P)	0.00	0.00	0.00	0.14	0.00	0.14	0.00	0.60	0.60	0.14	0.78	0.00
Incremental Delay Factor (k)				0.50		0.50		0.50	0.50	0.50	0.50	

Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)				4.0	7.2	7.8	7.8	7.8
Green Ratio (g/C)				0.14	0.56	0.60	0.74	0.78
Permitted Saturation Flow Rate (s_p), veh/h/ln				1637	44	0	361	0
Shared Saturation Flow Rate (s_{sh}), veh/h/ln								
Permitted Effective Green Time (g_p), s				0.0	107.4	0.0	109.4	0.0
Permitted Service Time (g_u), s				0.0	15.2	0.0	77.3	0.0
Permitted Queue Service Time (g_{ps}), s					0.0		19.1	
Time to First Blockage (g_t), s				0.0	0.0	0.0	0.0	0.0
Queue Service Time Before Blockage (g_{ts}), s								
Protected Right Saturation Flow (s_R), veh/h/ln				0		0		
Protected Right Effective Green Time (g_R), s				0.0		0.0		

Multimodal	EB	WB	NB	SB
Pedestrian F_w / F_v				
Pedestrian F_s / F_{delay}				
Pedestrian M_{corner} / M_{cw}				
Bicycle c_b / d_b				
Bicycle F_w / F_v				

HCS7 Signalized Intersection Results Graphical Summary

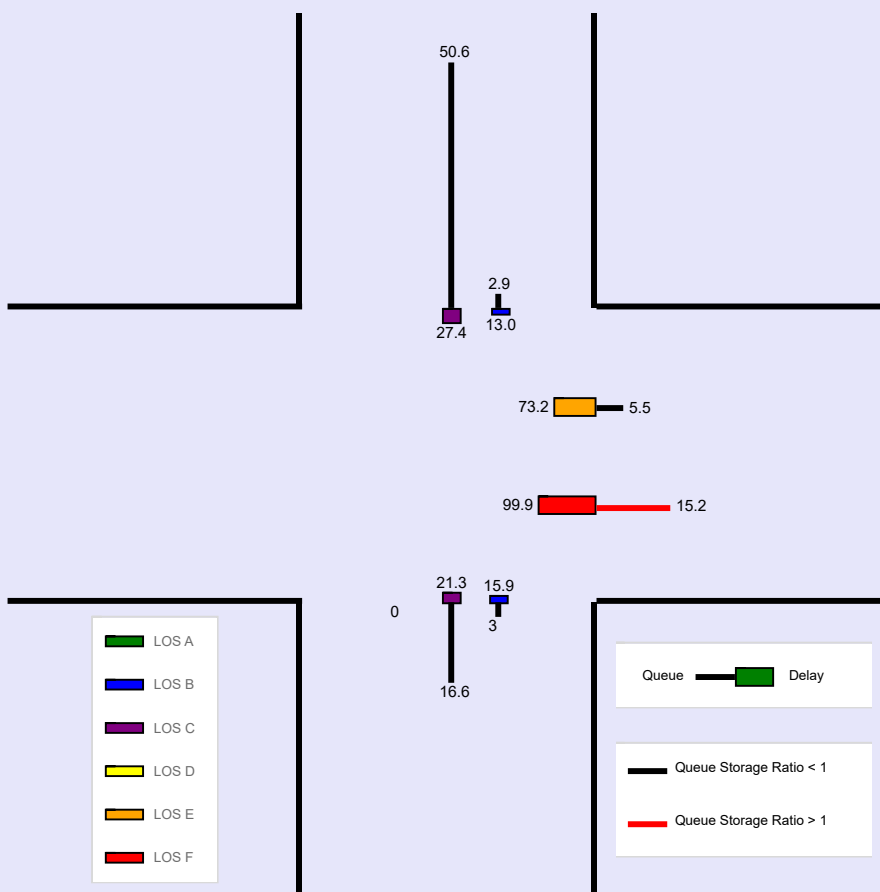
General Information				Intersection Information			
Agency	Morris-Depew Associates, Inc.			Duration, h	0.25		
Analyst	K. Knight	Analysis Date	10/31/2019	Area Type	Other		
Jurisdiction	City of Bonita Springs	Time Period	AM PH	PHF	1.00		
Urban Street	US 41	Analysis Year	2021	Analysis Period	1 > 7:00		
Intersection	Bernwood Pkwy	File Name	Intersection Analysis - AM PH.xus				
Project Description	2021 Without Project Traffic						



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h				186		68	0	1398	89	135	3593	

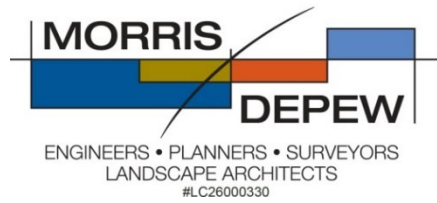
Signal Information				Phase Diagrams								
Cycle, s	180.0	Reference Phase	2									
Offset, s	0	Reference Point	End	Green	0.0	24.6	107.4	25.4	0.0	0.0		
Uncoordinated	No	Simult. Gap E/W	On	Yellow	5.2	5.2	5.2	4.0	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Red	2.0	2.6	2.6	3.0	0.0	0.0		

Movement Group Results	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Back of Queue (Q), ft/ln (95 th percentile)				410.3		149.4	0	447.6	79.7	77.1	1365	
Back of Queue (Q), veh/ln (95 th percentile)				15.2		5.5	0.0	16.6	3.0	2.9	50.6	
Queue Storage Ratio (RQ) (95 th percentile)				1.03		0.83	0.00	0.28	0.21	0.24	0.91	
Control Delay (d), s/veh				99.9		73.2	0.0	21.3	15.9	13.0	27.4	
Level of Service (LOS)				F		E		C	B	B	C	
Approach Delay, s/veh / LOS	0.0			92.8		F	21.0	C		26.9	C	
Intersection Delay, s/veh / LOS				28.3			C					



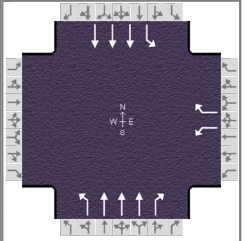
HCS Intersection Report

(HCS Reports: AM PHT with Project Traffic)



HCS7 Signalized Intersection Input Data

General Information				Intersection Information			
Agency	Morris-Depew Associates, Inc.			Duration, h	0.25		
Analyst	K. Knight	Analysis Date	10/31/2019	Area Type	Other		
Jurisdiction	City of Bonita Springs	Time Period	AM PH	PHF	1.00		
Urban Street	US 41	Analysis Year	2021	Analysis Period	1 > 7:00		
Intersection	Bernwood Pkwy	File Name	Intersection Analysis - AM PH.xus				
Project Description	2021 With Project Traffic						



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h				201		83	0	1398	104	150	3593	

Signal Information													
Cycle, s	180.0	Reference Phase	2										
Offset, s	0	Reference Point	End										
Uncoordinated	No	Simult. Gap E/W	On	Green	0.0	24.6	107.4	25.4	0.0	0.0			
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	5.2	5.2	5.2	4.0	0.0	0.0			
				Red	2.0	2.6	2.6	3.0	0.0	0.0			

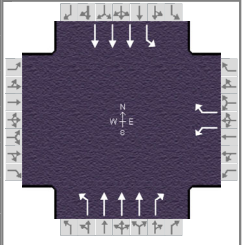
Traffic Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h				201		83	0	1398	104	150	3593	
Initial Queue (Q _b), veh/h				0		0	0	0	0	0	0	
Base Saturation Flow Rate (s ₀), veh/h				1900		1900	1900	1900	1900	1900	1900	
Parking (N _m), man/h						None	0	L + R	0		None	
Heavy Vehicles (P _{HV}), %				10		10	1	10	10	10	10	
Ped / Bike / RTOR, /h	0	0		0	0		0	0	0	0	0	
Buses (N _b), buses/h				0		0	0	0	0	0	0	
Arrival Type (AT)				3		3	3	3	3	3	3	
Upstream Filtering (I)				1.00		1.00	1.00	1.00	1.00	1.00	1.00	
Lane Width (W), ft				12.0		12.0	12.0	12.0	12.0	12.0	12.0	
Turn Bay Length, ft				400		180	500	1600	380	320	1500	
Grade (P _g), %		0				0		0			0	
Speed Limit, mi/h				30		30	45	45	45	45	45	

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G _{max}) or Phase Split, s			32.4	32.4	16.2	115.2	32.4	131.4
Yellow Change Interval (Y), s			4.0	4.0	5.2	5.2	5.2	5.2
Red Clearance Interval (R _c), s			3.0	3.0	2.0	2.6	2.6	2.6
Minimum Green (G _{min}), s			7	7	5	15	5	15
Start-Up Lost Time (l _t), s			2.0		2.0	2.0	2.0	2.0
Extension of Effective Green (e), s			2.0		2.0	2.0	2.0	2.0
Passage (PT), s			2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode			Max	Max	Max	Max	Max	Max
Dual Entry			No	No	No	No	No	No
Walk (Walk), s			0.0		0.0	0.0	0.0	0.0
Pedestrian Clearance Time (PC), s			0.0		0.0	0.0	0.0	0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius				0	No	25	0	No	25	0	No	25
Walkway / Crosswalk Width / Length, ft				9.0	12	0	9.0	12	0	9.0	12	0
Street Width / Island / Curb				0	0	No	0	0	No	0	0	No
Width Outside / Bike Lane / Shoulder, ft				12	5.0	2.0	12	5.0	2.0	12	5.0	2.0
Pedestrian Signal / Occupied Parking				No	0.50		No	0.50		No	0.50	

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information			
Agency	Morris-Depew Associates, Inc.			Duration, h	0.25		
Analyst	K. Knight	Analysis Date	10/31/2019	Area Type	Other		
Jurisdiction	City of Bonita Springs	Time Period	AM PH	PHF	1.00		
Urban Street	US 41	Analysis Year	2021	Analysis Period	1 > 7:00		
Intersection	Bernwood Pkwy	File Name	Intersection Analysis - AM PH.xus				
Project Description	2021 With Project Traffic						



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h				201		83	0	1398	104	150	3593	

Signal Information														
Cycle, s	180.0	Reference Phase	2											
Offset, s	0	Reference Point	End											
Uncoordinated	No	Simult. Gap E/W	On											
Force Mode	Fixed	Simult. Gap N/S	On											
				Green	0.0	24.6	107.4	25.4	0.0	0.0				
				Yellow	5.2	5.2	5.2	4.0	0.0	0.0				
				Red	2.0	2.6	2.6	3.0	0.0	0.0				

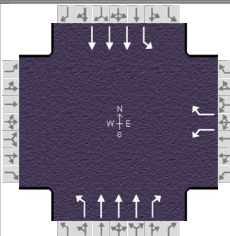
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase				4	1	6	5	2
Case Number				9.0	1.1	3.0	1.1	4.0
Phase Duration, s				32.4	0.0	115.2	32.4	147.6
Change Period, (Y+R _c), s				7.0	7.2	7.8	7.8	7.8
Max Allow Headway (MAH), s				3.3	0.0	0.0	3.1	0.0
Queue Clearance Time (g _s), s				23.6			6.6	
Green Extension Time (g _e), s				0.1	0.0	0.0	0.2	0.0
Phase Call Probability				1.00			1.00	
Max Out Probability				1.00			0.00	

Movement Group Results	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement				7		14	1	6	16	5	2	
Adjusted Flow Rate (v), veh/h				201		83	0	1398	104	150	3593	
Adjusted Saturation Flow Rate (s), veh/h/ln				1637		1537	1762	1591	1383	1637	1591	
Queue Service Time (g _s), s				21.6		8.8	0.0	30.1	5.9	4.6	122.5	
Cycle Queue Clearance Time (g _c), s				21.6		8.8	0.0	30.1	5.9	4.6	122.5	
Green Ratio (g/C)				0.14		0.14	0.56	0.60	0.60	0.74	0.78	
Capacity (c), veh/h				231		217	45	2847	825	419	3706	
Volume-to-Capacity Ratio (X)				0.870		0.383	0.000	0.491	0.126	0.358	0.969	
Back of Queue (Q), ft/ln (95 th percentile)				454.2		185.6	0	447.6	94.2	87.1	1365	
Back of Queue (Q), veh/ln (95 th percentile)				16.8		6.9	0.0	16.6	3.5	3.2	50.6	
Queue Storage Ratio (RQ) (95 th percentile)				1.14		1.03	0.00	0.28	0.25	0.27	0.91	
Uniform Delay (d ₁), s/veh				75.7		70.2	0.0	20.7	15.8	11.4	18.2	
Incremental Delay (d ₂), s/veh				33.3		5.1	0.0	0.6	0.3	2.4	9.2	
Initial Queue Delay (d ₃), s/veh				0.0		0.0	0.0	0.0	0.0	0.0	0.0	
Control Delay (d), s/veh				108.9		75.2	0.0	21.3	16.1	13.7	27.4	
Level of Service (LOS)				F		E		C	B	B	C	
Approach Delay, s/veh / LOS	0.0			99.1		F	21.0		C	26.8		C
Intersection Delay, s/veh / LOS				29.0						C		

Multimodal Results	EB	WB	NB	SB
Pedestrian LOS Score / LOS				
Bicycle LOS Score / LOS				

HCS7 Signalized Intersection Intermediate Values

General Information				Intersection Information			
Agency	Morris-Depew Associates, Inc.			Duration, h	0.25		
Analyst	K. Knight	Analysis Date	10/31/2019	Area Type	Other		
Jurisdiction	City of Bonita Springs	Time Period	AM PH	PHF	1.00		
Urban Street	US 41	Analysis Year	2021	Analysis Period	1 > 7:00		
Intersection	Bernwood Pkwy	File Name	Intersection Analysis - AM PH.xus				
Project Description	2021 With Project Traffic						



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h				201		83	0	1398	104	150	3593	

Signal Information															
Cycle, s	180.0	Reference Phase	2												
Offset, s	0	Reference Point	End	Green	0.0	24.6	107.4	25.4	0.0	0.0					
Uncoordinated	No	Simult. Gap E/W	On	Yellow	5.2	5.2	5.2	4.0	0.0	0.0					
Force Mode	Fixed	Simult. Gap N/S	On	Red	2.0	2.6	2.6	3.0	0.0	0.0					

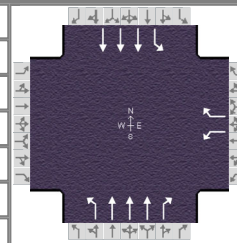
Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)				1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor (f_{HVg})				0.922	0.992	0.922	0.992	0.922	0.922	0.922	0.922	1.000
Parking Activity Adjustment Factor (f_p)	0.000	0.000	0.000	1.000	1.000	1.000	1.000	1.000	0.900	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	0.000	0.000	0.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)				1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.908	1.000	1.000	0.908	1.000
Left-Turn Adjustment Factor (f_{LT})				0.935	0.000		0.935	0.000		0.935	0.000	
Right-Turn Adjustment Factor (f_{RT})					0.000	0.877		0.000	0.877		1.000	1.000
Left-Turn Pedestrian Adjustment Factor (f_{LPB})				1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})						1.000			1.000			1.000
Work Zone Adjustment Factor (f_{wz})				1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
DDI Factor (f_{DDI})				1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Movement Saturation Flow Rate (s), veh/h				1637	0	1537	1762	4772	1383	1637	4933	0
Proportion of Vehicles Arriving on Green (P)	0.00	0.00	0.00	0.14	0.00	0.14	0.00	0.60	0.60	0.14	0.78	0.00
Incremental Delay Factor (k)				0.50		0.50		0.50	0.50	0.50	0.50	

Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)				4.0	7.2	7.8	7.8	7.8
Green Ratio (g/C)				0.14	0.56	0.60	0.74	0.78
Permitted Saturation Flow Rate (s_p), veh/h/ln				1637	44	0	361	0
Shared Saturation Flow Rate (s_{sh}), veh/h/ln								
Permitted Effective Green Time (g_p), s				0.0	107.4	0.0	109.4	0.0
Permitted Service Time (g_u), s				0.0	15.2	0.0	77.3	0.0
Permitted Queue Service Time (g_{ps}), s					0.0		22.8	
Time to First Blockage (g_t), s				0.0	0.0	0.0	0.0	0.0
Queue Service Time Before Blockage (g_{ts}), s								
Protected Right Saturation Flow (s_R), veh/h/ln				0		0		
Protected Right Effective Green Time (g_R), s				0.0		0.0		

Multimodal	EB	WB	NB	SB
Pedestrian F_w / F_v				
Pedestrian F_s / F_{delay}				
Pedestrian M_{corner} / M_{cw}				
Bicycle c_b / d_b				
Bicycle F_w / F_v				

HCS7 Signalized Intersection Results Graphical Summary

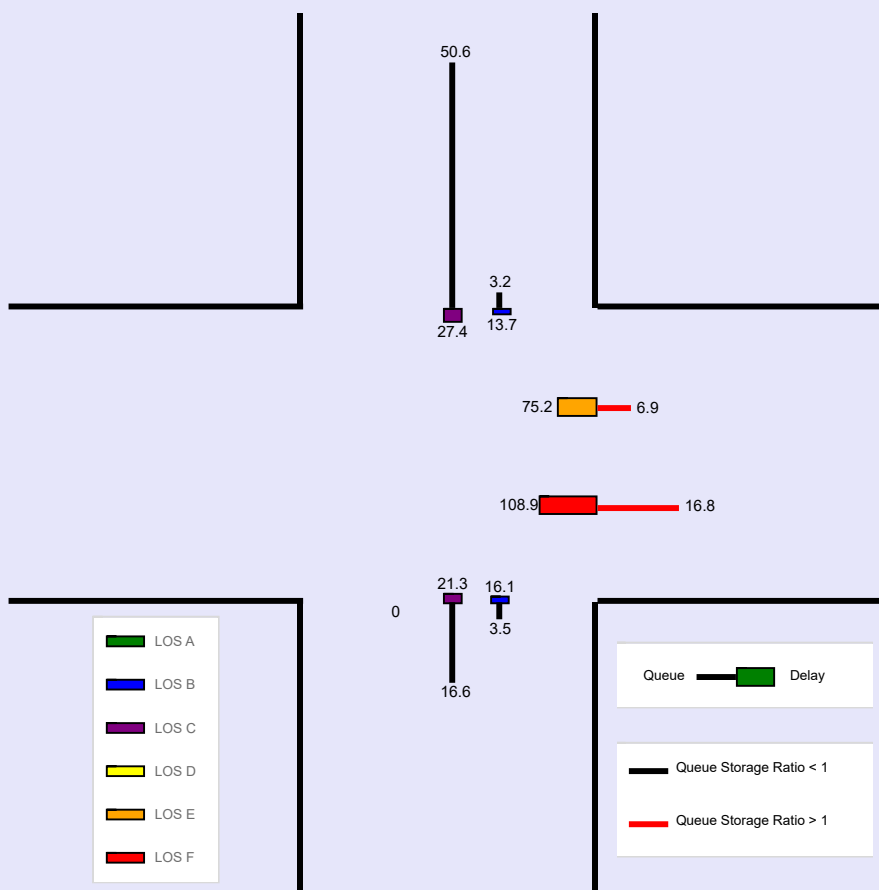
General Information				Intersection Information	
Agency	Morris-Depew Associates, Inc.			Duration, h	0.25
Analyst	K. Knight	Analysis Date	10/31/2019	Area Type	Other
Jurisdiction	City of Bonita Springs	Time Period	AM PH	PHF	1.00
Urban Street	US 41	Analysis Year	2021	Analysis Period	1 > 7:00
Intersection	Bernwood Pkwy	File Name	Intersection Analysis - AM PH.xus		
Project Description	2021 With Project Traffic				



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h				201		83	0	1398	104	150	3593	

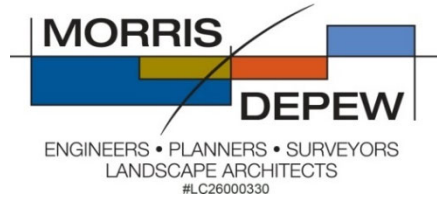
Signal Information				Phase Diagrams									
Cycle, s	180.0	Reference Phase	2										
Offset, s	0	Reference Point	End	Green	0.0	24.6	107.4	25.4	0.0	0.0			
Uncoordinated	No	Simult. Gap E/W	On	Yellow	5.2	5.2	5.2	4.0	0.0	0.0			
Force Mode	Fixed	Simult. Gap N/S	On	Red	2.0	2.6	2.6	3.0	0.0	0.0			

Movement Group Results	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Back of Queue (Q), ft/ln (95 th percentile)				454.2		185.6	0	447.6	94.2	87.1	1365	
Back of Queue (Q), veh/ln (95 th percentile)				16.8		6.9	0.0	16.6	3.5	3.2	50.6	
Queue Storage Ratio (RQ) (95 th percentile)				1.14		1.03	0.00	0.28	0.25	0.27	0.91	
Control Delay (d), s/veh				108.9		75.2	0.0	21.3	16.1	13.7	27.4	
Level of Service (LOS)				F		E		C	B	B	C	
Approach Delay, s/veh / LOS	0.0			99.1		F	21.0	C		26.8	C	
Intersection Delay, s/veh / LOS	29.0						C					



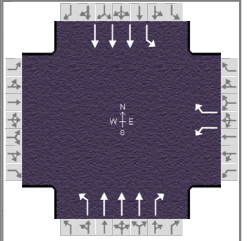
HCS Intersection Report

(HCS Reports: PM PHT without Project Traffic)



HCS7 Signalized Intersection Input Data

General Information				Intersection Information			
Agency	Morris-Depew Associates, Inc.			Duration, h	0.25		
Analyst	K. Knight	Analysis Date	10/31/2019	Area Type	Other		
Jurisdiction	City of Bonita Springs	Time Period	PM PH	PHF	1.00		
Urban Street	US 41	Analysis Year	2021	Analysis Period	1 > 7:00		
Intersection	Bernwood Pkwy	File Name	Intersection Analysis - PM PH.xus				
Project Description	2021 Without Project Traffic						



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h				168		95	0	2994	200	152	1996	

Signal Information																		
Cycle, s	200.0	Reference Phase	2															
Offset, s	0	Reference Point	End															
Uncoordinated	No	Simult. Gap E/W	On	Green	0.0	18.2	126.2	33.0	0.0	0.0	1		2		3		4	
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	5.2	5.2	5.2	4.0	0.0	0.0	5		6		7		8	
				Red	2.0	2.6	2.6	3.0	0.0	0.0								

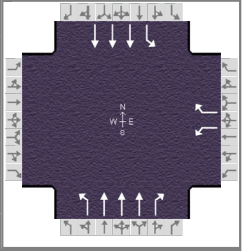
Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h				168		95	0	2994	200	152	1996	
Initial Queue (Q _b), veh/h				0		0	0	0	0	0	0	
Base Saturation Flow Rate (s ₀), veh/h				1900		1900	1900	1900	1900	1900	1900	
Parking (N _m), man/h						None	0	L + R	0			None
Heavy Vehicles (P _{HV}), %				10		10	1	10	10	10	10	
Ped / Bike / RTOR, /h	0	0		0	0		0	0	0	0	0	
Buses (N _b), buses/h				0		0	0	0	0	0	0	
Arrival Type (AT)				3		3	3	3	3	3	3	
Upstream Filtering (I)				1.00		1.00	1.00	1.00	1.00	1.00	1.00	
Lane Width (W), ft				12.0		12.0	12.0	12.0	12.0	12.0	12.0	
Turn Bay Length, ft				400		180	500	1600	380	320	1500	
Grade (P _g), %		0				0		0			0	
Speed Limit, mi/h				30		30	45	45	45	45	45	

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G _{max}) or Phase Split, s			40.0	40.0	16.0	134.0	26.0	144.0
Yellow Change Interval (Y), s			4.0	4.0	5.2	5.2	5.2	5.2
Red Clearance Interval (R _c), s			3.0	3.0	2.0	2.6	2.6	2.6
Minimum Green (G _{min}), s			7	7	5	15	5	15
Start-Up Lost Time (l _t), s			2.0		2.0	2.0	2.0	2.0
Extension of Effective Green (e), s			2.0		2.0	2.0	2.0	2.0
Passage (PT), s			2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode			Max	Max	Max	Max	Max	Max
Dual Entry			No	No	No	No	No	No
Walk (Walk), s			0.0		0.0	0.0	0.0	0.0
Pedestrian Clearance Time (PC), s			0.0		0.0	0.0	0.0	0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius				0	No	25	0	No	25	0	No	25
Walkway / Crosswalk Width / Length, ft				9.0	12	0	9.0	12	0	9.0	12	0
Street Width / Island / Curb				0	0	No	0	0	No	0	0	No
Width Outside / Bike Lane / Shoulder, ft				12	5.0	2.0	12	5.0	2.0	12	5.0	2.0
Pedestrian Signal / Occupied Parking				No	0.50		No	0.50		No	0.50	

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information			
Agency	Morris-Depew Associates, Inc.			Duration, h	0.25		
Analyst	K. Knight	Analysis Date	10/31/2019	Area Type	Other		
Jurisdiction	City of Bonita Springs	Time Period	PM PH	PHF	1.00		
Urban Street	US 41	Analysis Year	2021	Analysis Period	1 > 7:00		
Intersection	Bernwood Pkwy	File Name	Intersection Analysis - PM PH.xus				
Project Description	2021 Without Project Traffic						



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h				168		95	0	2994	200	152	1996	

Signal Information													
Cycle, s	200.0	Reference Phase	2										
Offset, s	0	Reference Point	End										
Uncoordinated	No	Simult. Gap E/W	On	Green	0.0	18.2	126.2	33.0	0.0	0.0			
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	5.2	5.2	5.2	4.0	0.0	0.0			
				Red	2.0	2.6	2.6	3.0	0.0	0.0			

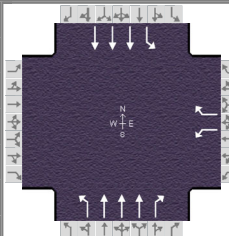
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase				4	1	6	5	2
Case Number				9.0	1.1	3.0	1.1	4.0
Phase Duration, s				40.0	0.0	134.0	26.0	160.0
Change Period, (Y+R _c), s				7.0	7.2	7.8	7.8	7.8
Max Allow Headway (MAH), s				3.3	0.0	0.0	3.1	0.0
Queue Clearance Time (g _s), s				21.1			15.7	
Green Extension Time (g _e), s				0.4	0.0	0.0	0.1	0.0
Phase Call Probability				1.00			1.00	
Max Out Probability				0.00			1.00	

Movement Group Results	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement				7		14	1	6	16	5	2	
Adjusted Flow Rate (v), veh/h				168		95	0	2994	200	152	1996	
Adjusted Saturation Flow Rate (s), veh/h/ln				1637		1537	1762	1591	1383	1637	1591	
Queue Service Time (g _s), s				19.1		11.0	0.0	124.3	12.5	13.7	34.4	
Cycle Queue Clearance Time (g _c), s				19.1		11.0	0.0	124.3	12.5	13.7	34.4	
Green Ratio (g/C)				0.16		0.16	0.60	0.63	0.63	0.73	0.76	
Capacity (c), veh/h				270		254	163	3011	873	186	3631	
Volume-to-Capacity Ratio (X)				0.622		0.375	0.000	0.994	0.229	0.819	0.550	
Back of Queue (Q), ft/ln (95 th percentile)				373		222.9	0	1651	199.7	392.4	454.9	
Back of Queue (Q), veh/ln (95 th percentile)				13.8		8.3	0.0	61.1	7.4	14.5	16.8	
Queue Storage Ratio (RQ) (95 th percentile)				0.93		1.24	0.00	1.03	0.53	1.23	0.30	
Uniform Delay (d ₁), s/veh				77.7		74.3	0.0	36.5	15.9	74.2	9.8	
Incremental Delay (d ₂), s/veh				10.3		4.2	0.0	15.1	0.6	31.5	0.6	
Initial Queue Delay (d ₃), s/veh				0.0		0.0	0.0	0.0	0.0	0.0	0.0	
Control Delay (d), s/veh				88.0		78.5	0.0	51.7	16.5	105.8	10.4	
Level of Service (LOS)				F		E		D	B	F	B	
Approach Delay, s/veh / LOS	0.0			84.6		F	49.5		D	17.2		B
Intersection Delay, s/veh / LOS				38.7						D		

Multimodal Results	EB	WB	NB	SB
Pedestrian LOS Score / LOS				
Bicycle LOS Score / LOS				

HCS7 Signalized Intersection Intermediate Values

General Information				Intersection Information	
Agency	Morris-Depew Associates, Inc.			Duration, h	0.25
Analyst	K. Knight	Analysis Date	10/31/2019	Area Type	Other
Jurisdiction	City of Bonita Springs	Time Period	PM PH	PHF	1.00
Urban Street	US 41	Analysis Year	2021	Analysis Period	1 > 7:00
Intersection	Bernwood Pkwy	File Name	Intersection Analysis - PM PH.xus		
Project Description	2021 Without Project Traffic				



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h				168		95	0	2994	200	152	1996	

Signal Information														
Cycle, s	200.0	Reference Phase	2											
Offset, s	0	Reference Point	End											
Uncoordinated	No	Simult. Gap E/W	On	Green	0.0	18.2	126.2	33.0	0.0	0.0				
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	5.2	5.2	5.2	4.0	0.0	0.0				
				Red	2.0	2.6	2.6	3.0	0.0	0.0				

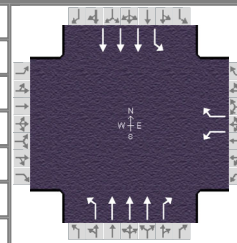
Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)				1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor (f_{HVg})				0.922	0.992	0.922	0.992	0.922	0.922	0.922	0.922	1.000
Parking Activity Adjustment Factor (f_p)	0.000	0.000	0.000	1.000	1.000	1.000	1.000	1.000	0.900	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	0.000	0.000	0.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)				1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.908	1.000	1.000	0.908	1.000
Left-Turn Adjustment Factor (f_{LT})				0.935	0.000		0.935	0.000		0.935	0.000	
Right-Turn Adjustment Factor (f_{RT})					0.000	0.877		0.000	0.877		1.000	1.000
Left-Turn Pedestrian Adjustment Factor (f_{LPB})				1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})						1.000			1.000			1.000
Work Zone Adjustment Factor (f_{wz})				1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
DDI Factor (f_{DDI})				1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Movement Saturation Flow Rate (s), veh/h				1637	0	1537	1762	4772	1383	1637	4933	0
Proportion of Vehicles Arriving on Green (P)	0.00	0.00	0.00	0.17	0.00	0.17	0.00	0.63	0.63	0.09	0.76	0.00
Incremental Delay Factor (k)				0.50		0.50		0.50	0.50	0.50	0.50	

Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)				4.0	7.2	7.8	7.8	7.8
Green Ratio (g/C)				0.17	0.60	0.63	0.73	0.76
Permitted Saturation Flow Rate (s_p), veh/h/ln				1637	218	0	75	0
Shared Saturation Flow Rate (s_{sh}), veh/h/ln								
Permitted Effective Green Time (g_p), s				0.0	126.2	0.0	128.2	0.0
Permitted Service Time (g_u), s				0.0	115.8	0.0	1.9	0.0
Permitted Queue Service Time (g_{ps}), s					0.0		1.9	
Time to First Blockage (g_t), s				0.0	0.0	0.0	0.0	0.0
Queue Service Time Before Blockage (g_{ts}), s								
Protected Right Saturation Flow (s_R), veh/h/ln				0		0		
Protected Right Effective Green Time (g_R), s				0.0		0.0		

Multimodal	EB	WB	NB	SB
Pedestrian F_w / F_v				
Pedestrian F_s / F_{delay}				
Pedestrian M_{corner} / M_{cw}				
Bicycle c_b / d_b				
Bicycle F_w / F_v				

HCS7 Signalized Intersection Results Graphical Summary

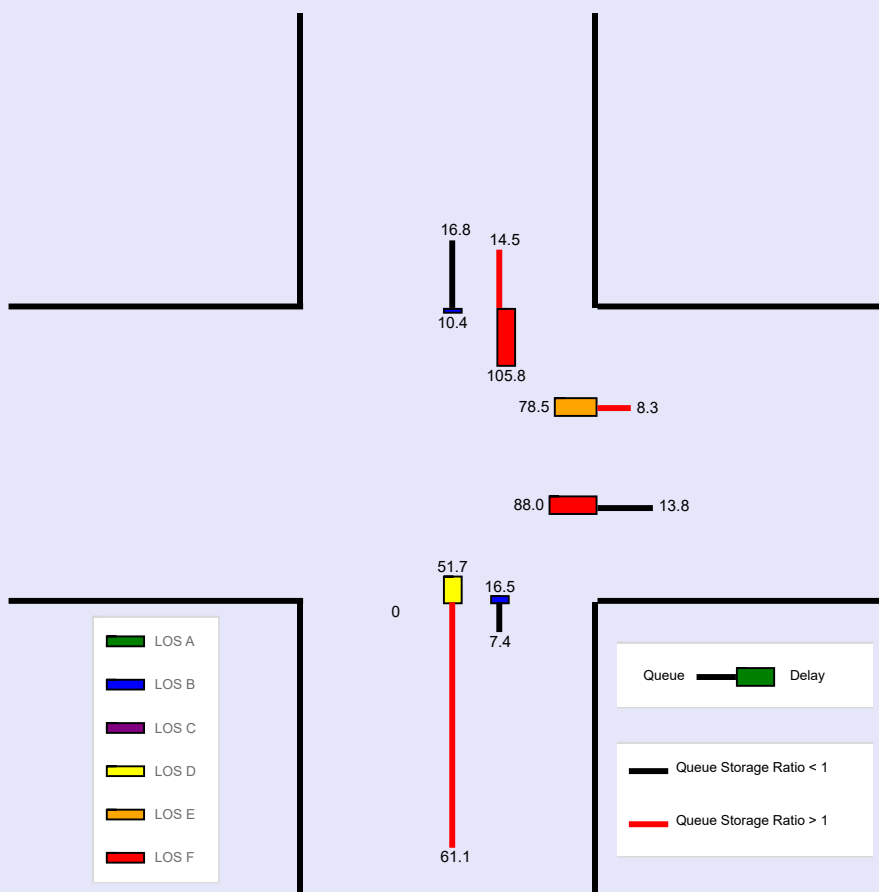
General Information				Intersection Information	
Agency	Morris-Depew Associates, Inc.			Duration, h	0.25
Analyst	K. Knight	Analysis Date	10/31/2019	Area Type	Other
Jurisdiction	City of Bonita Springs	Time Period	PM PH	PHF	1.00
Urban Street	US 41	Analysis Year	2021	Analysis Period	1 > 7:00
Intersection	Bernwood Pkwy	File Name	Intersection Analysis - PM PH.xus		
Project Description	2021 Without Project Traffic				



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h				168		95	0	2994	200	152	1996	

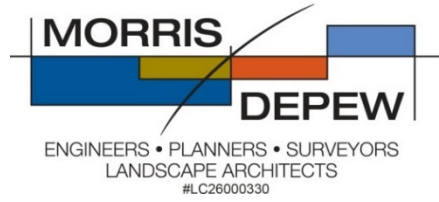
Signal Information													
Cycle, s	200.0	Reference Phase	2										
Offset, s	0	Reference Point	End										
Uncoordinated	No	Simult. Gap E/W	On	Green	0.0	18.2	126.2	33.0	0.0	0.0			
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	5.2	5.2	5.2	4.0	0.0	0.0			
				Red	2.0	2.6	2.6	3.0	0.0	0.0			

Movement Group Results	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Back of Queue (Q), ft/ln (95 th percentile)				373		222.9	0	1651	199.7	392.4	454.9	
Back of Queue (Q), veh/ln (95 th percentile)				13.8		8.3	0.0	61.1	7.4	14.5	16.8	
Queue Storage Ratio (RQ) (95 th percentile)				0.93		1.24	0.00	1.03	0.53	1.23	0.30	
Control Delay (d), s/veh				88.0		78.5	0.0	51.7	16.5	105.8	10.4	
Level of Service (LOS)				F		E		D	B	F	B	
Approach Delay, s/veh / LOS	0.0			84.6		F	49.5	D		17.2	B	
Intersection Delay, s/veh / LOS				38.7						D		



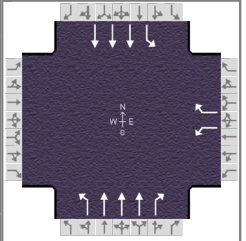
HCS Intersection Report

(HCS Reports: PM PHT with Project Traffic)



HCS7 Signalized Intersection Input Data

General Information				Intersection Information			
Agency	Morris-Depew Associates, Inc.			Duration, h	0.25		
Analyst	K. Knight	Analysis Date	10/31/2019	Area Type	Other		
Jurisdiction	City of Bonita Springs	Time Period	PM PH	PHF	1.00		
Urban Street	US 41	Analysis Year	2021	Analysis Period	1 > 7:00		
Intersection	Bernwood Pkwy	File Name	Intersection Analysis - PM PH.xus				
Project Description	2021 With Project Traffic						



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h				183		110	0	2994	215	167	1996	

Signal Information													
Cycle, s	200.0	Reference Phase	2										
Offset, s	0	Reference Point	End										
Uncoordinated	No	Simult. Gap E/W	On	Green	0.0	18.2	126.2	33.0	0.0	0.0			
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	5.2	5.2	5.2	4.0	0.0	0.0			
				Red	2.0	2.6	2.6	3.0	0.0	0.0			

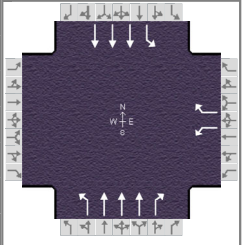
Traffic Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h				183		110	0	2994	215	167	1996	
Initial Queue (Q _b), veh/h				0		0	0	0	0	0	0	
Base Saturation Flow Rate (s ₀), veh/h				1900		1900	1900	1900	1900	1900	1900	
Parking (N _m), man/h						None	0	L + R	0		None	
Heavy Vehicles (P _{HV}), %				10		10	1	10	10	10	10	
Ped / Bike / RTOR, /h	0	0		0	0		0	0	0	0	0	
Buses (N _b), buses/h				0		0	0	0	0	0	0	
Arrival Type (AT)				3		3	3	3	3	3	3	
Upstream Filtering (I)				1.00		1.00	1.00	1.00	1.00	1.00	1.00	
Lane Width (W), ft				12.0		12.0	12.0	12.0	12.0	12.0	12.0	
Turn Bay Length, ft				400		180	500	1600	380	320	1500	
Grade (P _g), %		0				0		0			0	
Speed Limit, mi/h				30		30	45	45	45	45	45	

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G _{max}) or Phase Split, s			40.0	40.0	16.0	134.0	26.0	144.0
Yellow Change Interval (Y), s			4.0	4.0	5.2	5.2	5.2	5.2
Red Clearance Interval (R _c), s			3.0	3.0	2.0	2.6	2.6	2.6
Minimum Green (G _{min}), s			7	7	5	15	5	15
Start-Up Lost Time (l _t), s			2.0		2.0	2.0	2.0	2.0
Extension of Effective Green (e), s			2.0		2.0	2.0	2.0	2.0
Passage (PT), s			2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode			Max	Max	Max	Max	Max	Max
Dual Entry			No	No	No	No	No	No
Walk (Walk), s			0.0		0.0	0.0	0.0	0.0
Pedestrian Clearance Time (PC), s			0.0		0.0	0.0	0.0	0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius				0	No	25	0	No	25	0	No	25
Walkway / Crosswalk Width / Length, ft				9.0	12	0	9.0	12	0	9.0	12	0
Street Width / Island / Curb				0	0	No	0	0	No	0	0	No
Width Outside / Bike Lane / Shoulder, ft				12	5.0	2.0	12	5.0	2.0	12	5.0	2.0
Pedestrian Signal / Occupied Parking				No	0.50		No	0.50		No	0.50	

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information			
Agency	Morris-Depew Associates, Inc.			Duration, h	0.25		
Analyst	K. Knight	Analysis Date	10/31/2019	Area Type	Other		
Jurisdiction	City of Bonita Springs	Time Period	PM PH	PHF	1.00		
Urban Street	US 41	Analysis Year	2021	Analysis Period	1 > 7:00		
Intersection	Bernwood Pkwy	File Name	Intersection Analysis - PM PH.xus				
Project Description	2021 With Project Traffic						



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h				183		110	0	2994	215	167	1996	

Signal Information													
Cycle, s	200.0	Reference Phase	2										
Offset, s	0	Reference Point	End										
Uncoordinated	No	Simult. Gap E/W	On	Green	0.0	18.2	126.2	33.0	0.0	0.0			
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	5.2	5.2	5.2	4.0	0.0	0.0			
				Red	2.0	2.6	2.6	3.0	0.0	0.0			

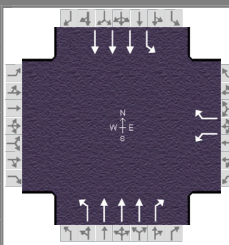
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase				4	1	6	5	2
Case Number				9.0	1.1	3.0	1.1	4.0
Phase Duration, s				40.0	0.0	134.0	26.0	160.0
Change Period, (Y+R _c), s				7.0	7.2	7.8	7.8	7.8
Max Allow Headway (MAH), s				3.3	0.0	0.0	3.1	0.0
Queue Clearance Time (g _s), s				23.0			17.7	
Green Extension Time (g _e), s				0.4	0.0	0.0	0.0	0.0
Phase Call Probability				1.00			1.00	
Max Out Probability				0.01			1.00	

Movement Group Results	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement				7		14	1	6	16	5	2	
Adjusted Flow Rate (v), veh/h				183		110	0	2994	215	167	1996	
Adjusted Saturation Flow Rate (s), veh/h/ln				1637		1537	1762	1591	1383	1637	1591	
Queue Service Time (g _s), s				21.0		12.9	0.0	124.3	13.6	15.7	34.4	
Cycle Queue Clearance Time (g _c), s				21.0		12.9	0.0	124.3	13.6	15.7	34.4	
Green Ratio (g/C)				0.16		0.16	0.60	0.63	0.63	0.73	0.76	
Capacity (c), veh/h				270		254	163	3011	873	186	3631	
Volume-to-Capacity Ratio (X)				0.677		0.434	0.000	0.994	0.246	0.899	0.550	
Back of Queue (Q), ft/ln (95 th percentile)				407.5		253.3	0	1651	214.5	442	454.9	
Back of Queue (Q), veh/ln (95 th percentile)				15.1		9.4	0.0	61.1	7.9	16.4	16.8	
Queue Storage Ratio (RQ) (95 th percentile)				1.02		1.41	0.00	1.03	0.56	1.38	0.30	
Uniform Delay (d ₁), s/veh				78.5		75.1	0.0	36.5	16.1	76.2	9.8	
Incremental Delay (d ₂), s/veh				12.9		5.3	0.0	15.1	0.7	43.9	0.6	
Initial Queue Delay (d ₃), s/veh				0.0		0.0	0.0	0.0	0.0	0.0	0.0	
Control Delay (d), s/veh				91.4		80.4	0.0	51.7	16.8	120.2	10.4	
Level of Service (LOS)				F		F		D	B	F	B	
Approach Delay, s/veh / LOS	0.0			87.3		F	49.3		D	18.9		B
Intersection Delay, s/veh / LOS				39.7						D		

Multimodal Results	EB	WB	NB	SB
Pedestrian LOS Score / LOS				
Bicycle LOS Score / LOS				

HCS7 Signalized Intersection Intermediate Values

General Information				Intersection Information	
Agency	Morris-Depew Associates, Inc.			Duration, h	0.25
Analyst	K. Knight	Analysis Date	10/31/2019	Area Type	Other
Jurisdiction	City of Bonita Springs	Time Period	PM PH	PHF	1.00
Urban Street	US 41	Analysis Year	2021	Analysis Period	1 > 7:00
Intersection	Bernwood Pkwy	File Name	Intersection Analysis - PM PH.xus		
Project Description	2021 With Project Traffic				



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h				183		110	0	2994	215	167	1996	

Signal Information															
Cycle, s	200.0	Reference Phase	2												
Offset, s	0	Reference Point	End	Green	0.0	18.2	126.2	33.0	0.0	0.0					
Uncoordinated	No	Simult. Gap E/W	On	Yellow	5.2	5.2	5.2	4.0	0.0	0.0					
Force Mode	Fixed	Simult. Gap N/S	On	Red	2.0	2.6	2.6	3.0	0.0	0.0					

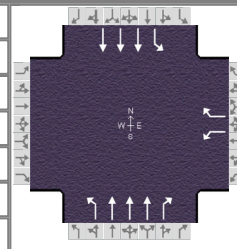
Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)				1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor (f_{HVg})				0.922	0.992	0.922	0.992	0.922	0.922	0.922	0.922	1.000
Parking Activity Adjustment Factor (f_p)	0.000	0.000	0.000	1.000	1.000	1.000	1.000	1.000	0.900	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	0.000	0.000	0.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)				1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.908	1.000	1.000	0.908	1.000
Left-Turn Adjustment Factor (f_{LT})				0.935	0.000		0.935	0.000		0.935	0.000	
Right-Turn Adjustment Factor (f_{RT})					0.000	0.877		0.000	0.877		1.000	1.000
Left-Turn Pedestrian Adjustment Factor (f_{LPB})				1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})						1.000			1.000			1.000
Work Zone Adjustment Factor (f_{wz})				1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
DDI Factor (f_{DDI})				1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Movement Saturation Flow Rate (s), veh/h				1637	0	1537	1762	4772	1383	1637	4933	0
Proportion of Vehicles Arriving on Green (P)	0.00	0.00	0.00	0.17	0.00	0.17	0.00	0.63	0.63	0.09	0.76	0.00
Incremental Delay Factor (k)				0.50		0.50		0.50	0.50	0.50	0.50	

Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)				4.0	7.2	7.8	7.8	7.8
Green Ratio (g/C)				0.17	0.60	0.63	0.73	0.76
Permitted Saturation Flow Rate (s_p), veh/h/ln				1637	218	0	75	0
Shared Saturation Flow Rate (s_{sh}), veh/h/ln								
Permitted Effective Green Time (g_p), s				0.0	126.2	0.0	128.2	0.0
Permitted Service Time (g_u), s				0.0	115.8	0.0	1.9	0.0
Permitted Queue Service Time (g_{ps}), s					0.0		1.9	
Time to First Blockage (g_t), s				0.0	0.0	0.0	0.0	0.0
Queue Service Time Before Blockage (g_{ts}), s								
Protected Right Saturation Flow (s_R), veh/h/ln				0		0		
Protected Right Effective Green Time (g_R), s				0.0		0.0		

Multimodal	EB	WB	NB	SB
Pedestrian F_w / F_v				
Pedestrian F_s / F_{delay}				
Pedestrian M_{corner} / M_{cw}				
Bicycle c_b / d_b				
Bicycle F_w / F_v				

HCS7 Signalized Intersection Results Graphical Summary

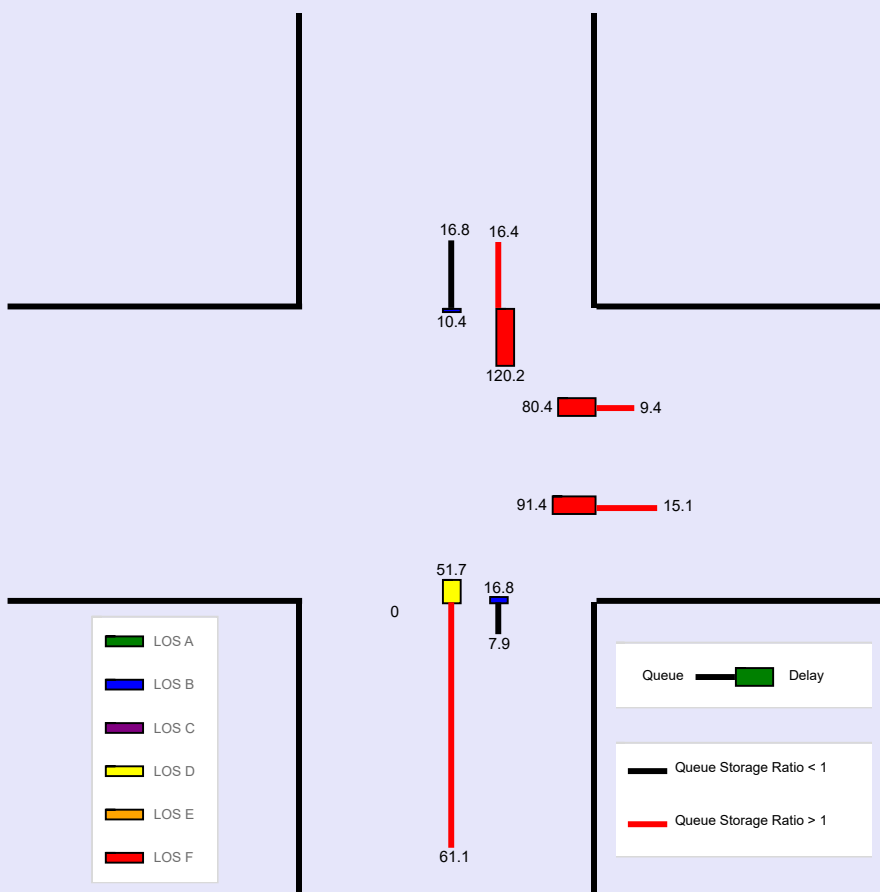
General Information				Intersection Information			
Agency	Morris-Depew Associates, Inc.			Duration, h	0.25		
Analyst	K. Knight	Analysis Date	10/31/2019	Area Type	Other		
Jurisdiction	City of Bonita Springs	Time Period	PM PH	PHF	1.00		
Urban Street	US 41	Analysis Year	2021	Analysis Period	1 > 7:00		
Intersection	Bernwood Pkwy	File Name	Intersection Analysis - PM PH.xus				
Project Description	2021 With Project Traffic						



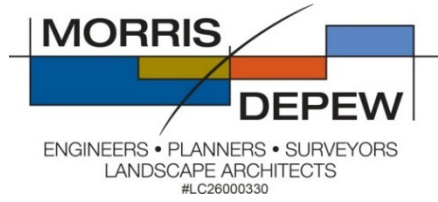
Demand Information	EB			WB			NB			SB					
	L	T	R	L	T	R	L	T	R	L	T	R			
Approach Movement															
Demand (v), veh/h				183			110			0	2994	215	167	1996	

Signal Information				Phase Diagrams							
Cycle, s	200.0	Reference Phase	2								
Offset, s	0	Reference Point	End	Green	0.0	18.2	126.2	33.0	0.0	0.0	
Uncoordinated	No	Simult. Gap E/W	On	Yellow	5.2	5.2	5.2	4.0	0.0	0.0	
Force Mode	Fixed	Simult. Gap N/S	On	Red	2.0	2.6	2.6	3.0	0.0	0.0	

Movement Group Results	EB			WB			NB			SB					
	L	T	R	L	T	R	L	T	R	L	T	R			
Approach Movement															
Back of Queue (Q), ft/ln (95 th percentile)				407.5			253.3			0	1651	214.5	442	454.9	
Back of Queue (Q), veh/ln (95 th percentile)				15.1			9.4			0.0	61.1	7.9	16.4	16.8	
Queue Storage Ratio (RQ) (95 th percentile)				1.02			1.41			0.00	1.03	0.56	1.38	0.30	
Control Delay (d), s/veh				91.4			80.4			0.0	51.7	16.8	120.2	10.4	
Level of Service (LOS)				F			F				D	B	F	B	
Approach Delay, s/veh / LOS	0.0			87.3			F			49.3	D		18.9		B
Intersection Delay, s/veh / LOS				39.7						D					



HCS Intersection Report (Conclusion)



The conclusion of the above reports demonstrates that the impact from the site-generated trips to the US 41 & Bernwood Pkwy. intersection is inconsequential. The AM peak hour traffic with and without site-generated trips have been projected out to year 2021. The difference in overall intersection delay is 0.7 seconds. The turning movement that produces the highest increase in vehicle queue length is the west-bound left turn (1.6 additional vehicles).

The PM peak hour traffic with and without site-generated trips have been projected out to year 2021. The difference in overall intersection delay is 1.0 seconds. The turning movement that produces the highest increase in vehicle queue length is the south-bound left turn (1.9 additional vehicles).

Discovery Day Academy

Trip Generation Comparison & Traffic Queue Analysis

June 10, 2021

- I. Trip Generation Comparison
 - a. Summary
 - b. Table A: Discovery Day Proposed Trip Generation
 - c. Table B: Permitted Trip Generation Scenarios (1 hour between 7-9 and 4-6)
 - d. Table C: Permitted Trip Generation Scenarios (Peak Hour of Generator)
 - e. Table D: Prado at Spring Creek Shopping Center Existing Trip Generation (Per Original TIS)
 - f. Table E: Trip Generation Summary
 - g. Table F: Access Point Distribution Comparison
- II. Queue Analysis
 - a. Traffic Circulation Plan
 - b. Parking Lot Queue Analysis
 - i. AM Queue Calculation
 - ii. AM Queue Map
 - iii. PM Queue Calculation
 - iv. PM Queue Map

Prepared by:

Kyle C. Knight, PE

Engineer of Record:

M. William Morris, Jr.

PE 55543

Email: permitting@m-da.com

FL CA 6532

Trip Generation Comparison

Summary

The below tables are intended to compare Discovery Day Academy’s proposed trip generation to the existing permitted trip generation for the Prado at Spring Creek Shopping Center as well as the trip generation from a couple different scenarios of land use combinations that for the site. The complete TIS for the shopping center is under Development Order # DOS98-11-191.00D. This study analyzes a worst-case scenario for Discovery Day Academy’s trip generation as it considers the total number of day care center students and elementary-aged students together. In reality, the pick-up and drop-off times for the day care students and elementary students are staggered and the results of this study below would not actually occur during the operation of Discovery Day Academy. The student arrival & dismissal times as well as the anticipated time window for vehicles to arrive/leave the site is shown below. We have also indicated the anticipated morning and afternoon arrival times for the nearby Spring Creek Elementary School.

DISCOVERY DAY STUDENT COUNT & ARRIVAL AND DISMISSAL TIMES

AGE GROUP / GRADE	NUMBER OF STUDENTS	ARRIVAL TIME	DISMISSAL TIME
INFANTS	4	7:00 - 8:00	4:00 - 5:30
ONES	6	7:00 - 8:00	4:00 - 5:30
TWOS	6	7:00 - 8:00	4:00 - 5:30
THREES	12	7:00 - 8:00	4:00 - 5:30
FOURS	12	7:00 - 8:00	4:00 - 5:30
KINDERGARTEN	12	8:30	3:20
FIRST	12	8:30	3:20
SECOND	12	8:30	3:20
THIRD	12	8:30	3:30
FOURTH	12	8:30	3:30
FIFTH	12	8:30	3:30

	DISCOVERY DAY	SPRING CREEK ELEMENTARY ⁽¹⁾
AM Time Window for Vehicles to Arrive at School	8:15 - 8:30	8:35 - 8:55
PM Time Window for Vehicles to Arrive at School	3:10 - 3:30	2:50 - 3:10

⁽¹⁾ Spring Creek Elementary Bell Times are 8:55 AM - 3:10 PM

Table A: Discovery Day Proposed Trip Generation

This table demonstrates the proposed trips of Discovery Day as a worst-case scenario. As discussed with Staff, the combination of day care children (40) and elementary-aged children (72) are being analyzed together under the same morning and afternoon time periods. As discussed with Staff, the AM and PM peak hour of generator is being utilized to calculate the number of trips for the morning and afternoon time frames. As shown in **Table A**, there are 114 trips in the AM hour and 78 trips in the PM hour.

Table B: Permitted Trip Generation Scenarios (1 hour between 7-9 and 4-6)

This table looks at 2 scenarios that represent a combination of specific land uses that are permitted for the site location as identified in the City’s Land Development Code and calculates what the trip generation would be for the AM and PM peak hours.

Scenario 1 identifies a convenience market and a high-turnover restaurant that could operate together in the existing building on site (7,144 square feet) and produces a higher trip generation in the AM and PM peak hours than Discovery Day Academy's trip generation. As discussed with City Staff, if Discovery Day Academy's trip generation produces no greater than a 10% increase over what could be permitted for this location, then the impact would be considered de-minimis. For this specific scenario, the impact is de-minimis because there is no increase in trips. The percent increase in trips is identified below on **Table E**.

Scenario 2 identifies a convenience market and a variety store that could operate together in the existing building on site (7,144 square feet) and produces a higher trip generation in the AM and PM peak hours than Discovery Day Academy's trip generation. As discussed with City Staff, if Discovery Day Academy's trip generation produces no greater than a 10% increase over what could be permitted for this location, then the impact would be considered de-minimis. For this specific scenario, the impact is de-minimis because there is no increase in trips. The percent increase in trips is identified below on **Table E**.

We have also calculated the required parking spaces adjacent to this Table for both scenarios. Both scenarios have a required parking space count that is less than what is currently available in the parking lot. Scenario 1 warrants 66 spaces and Scenario 2 warrants 32 spaces. The parking lot currently has 67 spaces.

Table C: Permitted Trip Generation Scenarios (Peak Hour of Generator)

This table represents the same scenarios identified in **Table B** but during the peak hour of generators. We wanted to include this time window just to show that Discovery Day Academy's trip generation would also be less than the above-mentioned scenarios' trip generation during the peak of generators. The specific percent increase in trips is identified below in **Table E**.

Table D: Prado at Spring Creek Shopping Center Existing Trip Generation (Per Original TIS)

This is the trip generation table from the approved TIS within the development order for the entire shopping center (DOS98-11-191.00D). This table is the basis for determining the volume of trips at each access point into the shopping center. The comparison between these trips with and without Discovery Day Academy are analyzed at each access point as shown below in **Table F**.

Table E: Trip Generation Summary

This table is a summary of the total ADT, AM, and PM peak hours for Discovery Day Academy and both land use scenarios. Discovery Day Academy's trip generation percent increase over these uses is also shown on this table. In no scenario or time period do the Discovery Day Academy's trips produce a greater than 10% increase.

Table F: Access Point Distribution Comparison

This table analyzes the volume of trips at each access point surrounding the shopping center. The percent distribution was derived from the original TIS for the shopping center. As shown on the table, there are 6 access points with assigned trips to them in the existing conditions. It is also broken out into entering and exiting trips during the PM peak hour. We have added the Discovery Day Academy trips onto these access points as identified in the table and included the percent increase over the existing trips. As discussed with City Staff, we are not proposing any trips to utilize the Bernwood Pkwy access points, therefore Discovery Day Academy's trips are split 50/50 between the "US 41" and the "Timberwilde 1" access points. The graphic below the table identifies the various access points. Discovery Day Academy's trips produce less than 10% increase in both the entering and exiting movements during the PM peak hour, therefore is considered de-minimis. The comparison was made in the PM hour because that is when the shopping center is most active and operates with much higher trip volumes than in the AM hour.

Queue Analysis

Traffic Circulation Plan

As requested by City Staff, a traffic circulation plan was prepared in order to demonstrate how school staff will be managing the operation of the student pick-up / drop-off lines. As shown in **Traffic Circulation Plan**, there are two locations in the parking lot that will be occupied by school staff. Staff Post #1 will direct exiting traffic to turn left out of the parking lot for vehicles to head north on Chamber of Commerce Dr. to exit the shopping center. Staff Post #1 will also direct vehicles to park in the designated spaces if the queue line reaches capacity. Staff post #2 will manage students getting in and out of vehicles during the morning arrival times and afternoon dismissal times. There will also be entry and exit signs located at the parking lot driveway as shown in the **Traffic Circulation Plan**. In the event that parents need to go inside of the school to drop off / pick up their students, their designated parking locations will be the spaces directly in front of the start of the queue line. These are identified in the **Traffic Circulation Plan**. In order to prevent vehicles to use Bernwood Pkwy during the operation of the morning and afternoon queue lines, school staff will place traffic cones that cross Chamber of Commerce Dr. at the intersection of Bernwood Pkwy. The cones should be placed 15 minutes prior to arrival and dismissal times shown above and removed 15 minutes after arrival and dismissal times shown above.

Parking Lot Queue Analysis

As requested by City Staff, a queuing analysis was performed for the morning drop-off and afternoon pick-up scenarios in order to understand how far the queuing from the parking lot would extend onto the surrounding roadway system. Based on the results of this analysis, the longest vehicle queue that will be produced in the AM drop-off scenario is 42 vehicles. The parking lot can accommodate 31 vehicles for stacked queuing in the drive aisle. The remaining 11 vehicles will utilize the existing parking spaces shown in the **AM Drop Off Queue Layout** to drop off students.

The longest vehicle queue that will be produced in the PM pick-up scenario is also 42 vehicles. The parking lot can accommodate 31 vehicles for stacked queuing in the drive aisle. The remaining 11 vehicles will utilize the existing parking spaces shown in the **PM Pick Up Queue Layout** to pick up students. Please refer to the figures below for the queue calculations, maps, and list of assumptions made.

Table A: Discovery Day Proposed Trip Generation

ITE LUC ⁽¹⁾	Units	Number of Units	Trip Generation					Trip Directional Distribution ⁽¹⁾		
			Type	ITE LUC Equation ⁽¹⁾	Trips	Entering	Exiting	Entering	Exiting	
534	Private School (K-8)	Students	72	ADT	$T = 4.11(X)$	296	50%	50%	148	148
				AM Peak Hour of Generator	$T = 0.88(X) + 14.85$	78	56%	44%	44	34
				PM Peak Hour of Generator	$T = 0.63(X) - 1.93$	43	47%	53%	20	23
565	Day Care Center	Students	40	ADT	$T = 3.56(X) + 47.23$	190	50%	50%	95	95
				AM Peak Hour of Generator	$\ln(T) = 0.77\ln(X) + 0.74$	36	53%	47%	19	17
				PM Peak Hour of Generator	$\ln(T) = 0.78\ln(X) + 0.68$	35	47%	53%	16	19

(1) Trip Generation, 10th Edition, Institute of Transportation Engineers

Table B: Permitted Trip Generation Scenarios (1 hour between 7-9 and 4-6)

ITE LUC ⁽¹⁾	Units ⁽²⁾	Number of Units	Trip Generation					Trip Directional Distribution ⁽¹⁾		
			Type	ITE LUC Equation ⁽¹⁾	Trips	Entering	Exiting	Entering	Exiting	
Scenario 1										
851	Convenience Market	1000 SF GFA	3.557	ADT	$T = 761.44(X) + 2.27$	2711	50%	50%	1355	1355
				AM Peak Hour	$T = 62.54(X)$	222	50%	50%	111	111
				PM Peak Hour	$T = 49.11(X)$	175	51%	49%	89	86
932	High-Turnover (Sit-Down) Restaurant	1000 SF GFA	3.557	ADT	$T = 112.18(X)$	399	50%	50%	200	200
				AM Peak Hour	$T = 9.94(X)$	35	55%	45%	19	16
				PM Peak Hour	$T = 9.77(X)$	35	62%	38%	22	13
Scenario 2										
851	Convenience Market	1000 SF GFA	3.557	ADT	$T = 761.44(X) + 2.27$	2711	50%	50%	1355	1355
				AM Peak Hour	$T = 62.54(X)$	222	50%	50%	111	111
				PM Peak Hour	$T = 49.11(X)$	175	51%	49%	89	86
814	Variety Store	1000 SF GFA	3.557	ADT	$T = 63.47(X)$	226	50%	50%	113	113
				AM Peak Hour	$T = 3.18(X)$	11	57%	43%	6	5
				PM Peak Hour	$T = 6.84(X)$	24	52%	48%	13	12

(1) Trip Generation, 10th Edition, Institute of Transportation Engineers

(2) 50/50 split between uses. Utilizes existing building square footage (7,114 SF)

Required Parking Spaces

Formula	Units	Number of Units	Required Spaces	Total Required Spaces	Available Spaces
Scenario 1					
1 space per 200 square feet of total floor area	SF	3557	17.8	65.2	67
1 space per 50 square feet of seating area ⁽¹⁾	SF	2371	47.4		
Scenario 2					
1 space per 200 square feet of total floor area	SF	3557	17.8	32.0	67
1 space per 250 square feet of total floor area	SF	3557	14.2		

(1) Assume seating area is 2/3 of total floor area

Table C: Permitted Trip Generation Scenarios (Peak Hour of Generator)

ITE LUC ⁽¹⁾	Units ⁽²⁾	Number of Units	Trip Generation					Trip Directional Distribution ⁽¹⁾		
			Type	ITE LUC Equation ⁽¹⁾	Trips	Entering	Exiting	Entering	Exiting	
Scenario 1										
851	Convenience Market	1000 SF GFA	3.557	ADT	$T = 761.44(X) + 2.27$	2711	50%	50%	1355	1355
				AM Peak Hour of Generator	$T = 68.83(X)$	245	50%	50%	122	122
				PM Peak Hour of Generator	$T = 53.51(X)$	190	51%	49%	97	93
932	High-Turnover (Sit-Down) Restaurant	1000 SF GFA	3.557	ADT	$T = 112.18(X)$	399	50%	50%	200	200
				AM Peak Hour of Generator	$T = 14.04(X)$	50	57%	43%	28	21
				PM Peak Hour of Generator	$T = 17.41(X)$	62	52%	48%	32	30
Scenario 2										
851	Convenience Market	1000 SF GFA	3.557	ADT	$T = 761.44(X) + 2.27$	2711	50%	50%	1355	1355
				AM Peak Hour of Generator	$T = 68.83(X)$	245	50%	50%	122	122
				PM Peak Hour of Generator	$T = 53.51(X)$	190	51%	49%	97	93
814	Variety Store	1000 SF GFA	3.557	ADT	$T = 63.47(X)$	226	50%	50%	113	113
				AM Peak Hour of Generator	$T = 4.52(X)$	16	50%	50%	8	8
				PM Peak Hour of Generator	$T = 7.42(X)$	26	50%	50%	13	13

(1) Trip Generation, 10th Edition, Institute of Transportation Engineers

(2) 50/50 split between uses. Utilizes existing building square footage (7,114 SF)

Table D: Prado at Spring Creek Shopping Center Existing Trip Generation (Per Original TIS)

ITE LUC ⁽¹⁾	Units	Number of Units ⁽²⁾	Trip Generation				Trip Directional Distribution ⁽¹⁾			
			Type	ITE LUC Equation ⁽¹⁾	Trips	Entering	Exiting	Entering	Exiting	
820	Shopping Center	1000 SF GLA	92.718	ADT	$\text{Ln}(T) = 0.643\text{Ln}(X) + 5.866$	6493	50%	50%	3247	3247
				AM Peak Hour (7-9)	$\text{Ln}(T) = 0.596\text{Ln}(X) + 2.329$	153	61%	39%	93	60
				PM Peak Hour (4-6)	$\text{Ln}(T) = 0.660\text{Ln}(X) + 3.403$	597	48%	52%	287	311
444	Movie Theatre	Screens	14	ADT	$T = 153.33(X)$	2147	50%	50%	1073	1073
				AM Peak Hour (7-9)	$T = 0$	0	0%	0%	0	0
				PM Peak Hour (4-6)	$T = 44.53(X)$	623	52%	48%	324	299
820	Shopping Center (OP #1)	1000 SF GLA	13.000	ADT	$\text{Ln}(T) = 0.643\text{Ln}(X) + 5.866$	1836	50%	50%	918	918
				AM Peak Hour (7-9)	$\text{Ln}(T) = 0.596\text{Ln}(X) + 2.329$	47	61%	39%	29	18
				PM Peak Hour (4-6)	$\text{Ln}(T) = 0.660\text{Ln}(X) + 3.403$	163	48%	52%	78	85
911	Walk-In-Bank (OP #2)	1000 SF GFA	6.803	ADT	$T = 156.48(X)$	1065	50%	50%	532	532
				AM Peak Hour (7-9)	$T = 4.07(X)$	28	50%	50%	14	14
				PM Peak Hour (4-6)	$T = 33.15(X)$	226	50%	50%	113	113
931	Quality Restaurant (OP #3)	1000 SF GFA	7.063	ADT	$T = 89.95(X)$	635	50%	50%	318	318
				AM Peak Hour (7-9)	$T = 0.81(X)$	6	50%	50%	3	3
				PM Peak Hour (4-6)	$T = 7.49(X)$	53	67%	33%	35	17
881	Pharmacy/Durgstore with Drive-Through Windo (OP #4)	1000 SF GFA	14.531	ADT	$T = 88.16(X)$	1281	50%	50%	641	641
				AM Peak Hour (7-9)	$T = 2.66(X)$	39	57%	43%	22	17
				PM Peak Hour (4-6)	$T = 10.40(X)$	151	49%	51%	74	77
Totals			ADT			13457			6728	6728
			AM Peak Hour (7-9)			272			161	111
			PM Peak Hour (4-6)			1814			912	902

(1) Trip Generation, 6th Edition, Institute of Transportation Engineers per Original TIS

(2) Area breakdown from as-built TIS within DOS98-11-191.00D

Table E: Trip Generation Summary

	Table A	Table B Scenario 1		Table B Scenario 2		Table C Scenario 1		Table C Scenario 2	
	Trips	Trips	Percent Increase ⁽¹⁾	Trips	Percent Increase ⁽¹⁾	Trips	Percent Increase ⁽¹⁾	Trips	Percent Increase ⁽¹⁾
ADT	486	3110	-84%	2936	-83%	3110	-84%	2936	-83%
AM PH	114	258	-56%	234	-51%	295	-61%	261	-56%
PM PH	78	209	-63%	199	-61%	252	-69%	217	-64%

(1) Discovery Day's Trip Generation % Increase Over the Permitted Trip Generation

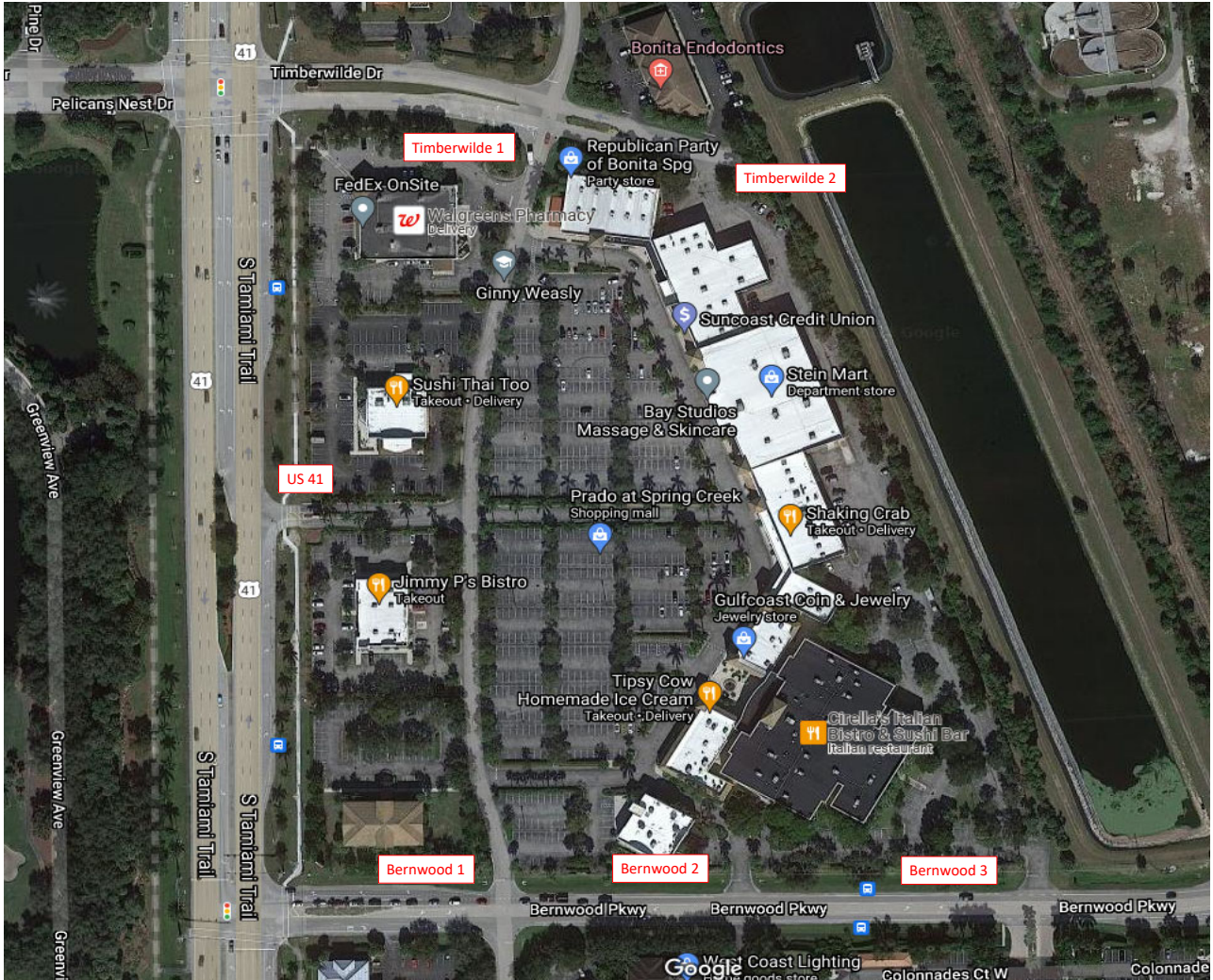
Table F: Access Point Distribution Comparison

Access Point	Percent Distribution ⁽¹⁾	Shopping Center Existing Trip Generation ⁽³⁾	Shopping Center With Discovery Day's Trips ⁽²⁾	Percent Increase
		PM PH (1 Hour Between 4-6)	PM PH (1 Hour Between 4-6)	PM PH (1 Hour Between 4-6)
Entering				
Bernwood 1	15%	134	Not Using Bernwood	N/A
Bernwood 2	12%	108	Not Using Bernwood	N/A
Bernwood 3	6%	53	Not Using Bernwood	N/A
US 41	36%	326	345	5.7%
Timberwilde 1	27%	250	268	7.4%
Timberwilde 2	4%	41	Not Using this Access Point	N/A
Exiting				
Bernwood 1	28%	257	Not Using Bernwood	N/A
Bernwood 2	16%	149	Not Using Bernwood	N/A
Bernwood 3	1%	12	Not Using Bernwood	N/A
US 41	25%	230	250	9.1%
Timberwilde 1	23%	211	231	9.9%
Timberwilde 2	5%	44	Not Using this Access Point	N/A

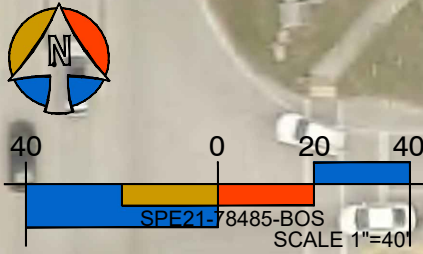
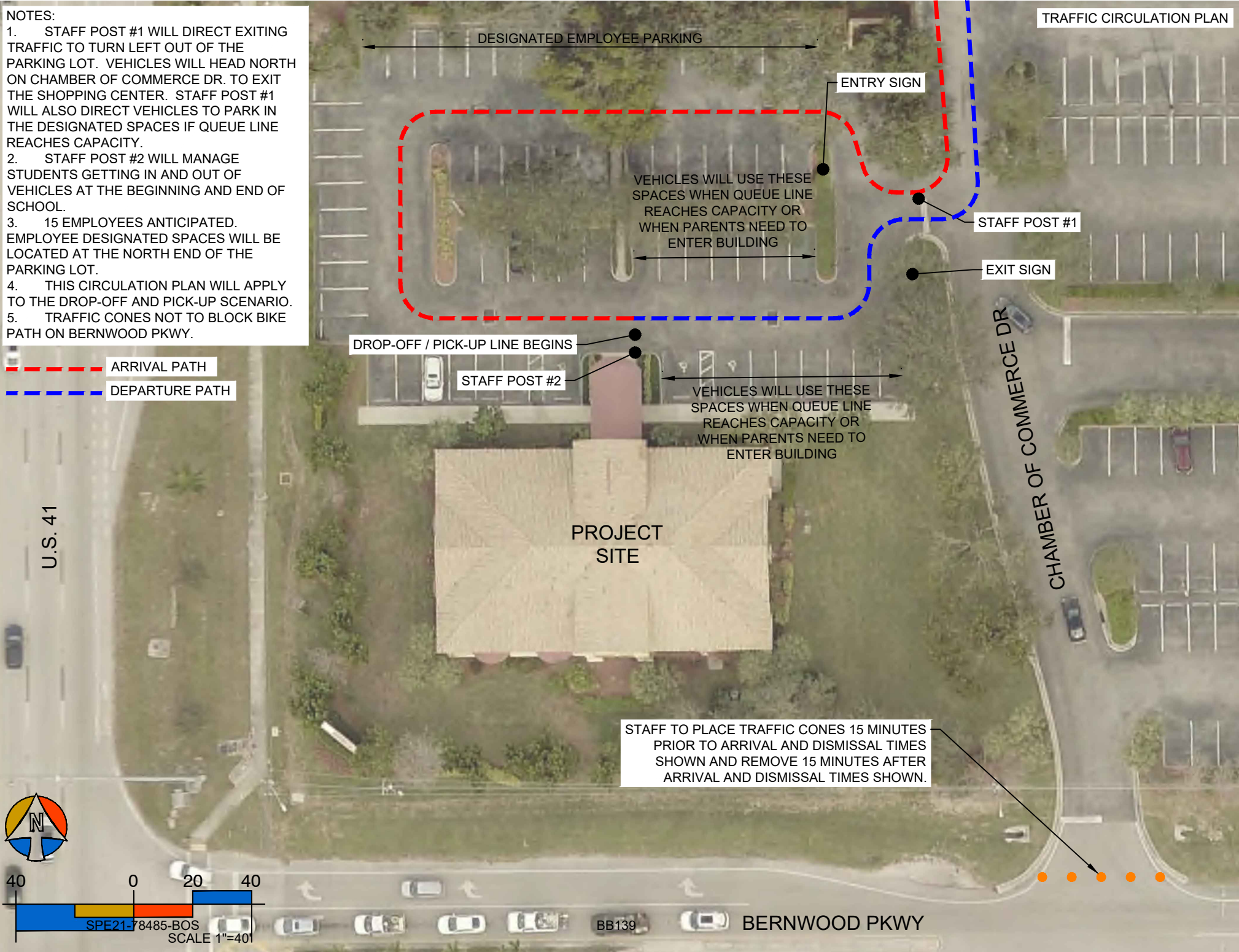
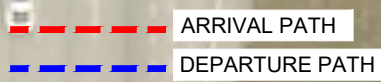
(1) Percent Distribution from existing TIS within DOS98-11-191.000

(2) Assumes Discovery Day's generated trips will US 41 and Timberwilde 1 access points. Proposed distribution is split 50/50.

(3) Trip Generation from existing TIS within DOS98-11-191.000



- NOTES:**
1. STAFF POST #1 WILL DIRECT EXITING TRAFFIC TO TURN LEFT OUT OF THE PARKING LOT. VEHICLES WILL HEAD NORTH ON CHAMBER OF COMMERCE DR. TO EXIT THE SHOPPING CENTER. STAFF POST #1 WILL ALSO DIRECT VEHICLES TO PARK IN THE DESIGNATED SPACES IF QUEUE LINE REACHES CAPACITY.
 2. STAFF POST #2 WILL MANAGE STUDENTS GETTING IN AND OUT OF VEHICLES AT THE BEGINNING AND END OF SCHOOL.
 3. 15 EMPLOYEES ANTICIPATED. EMPLOYEE DESIGNATED SPACES WILL BE LOCATED AT THE NORTH END OF THE PARKING LOT.
 4. THIS CIRCULATION PLAN WILL APPLY TO THE DROP-OFF AND PICK-UP SCENARIO.
 5. TRAFFIC CONES NOT TO BLOCK BIKE PATH ON BERNWOOD PKWY.



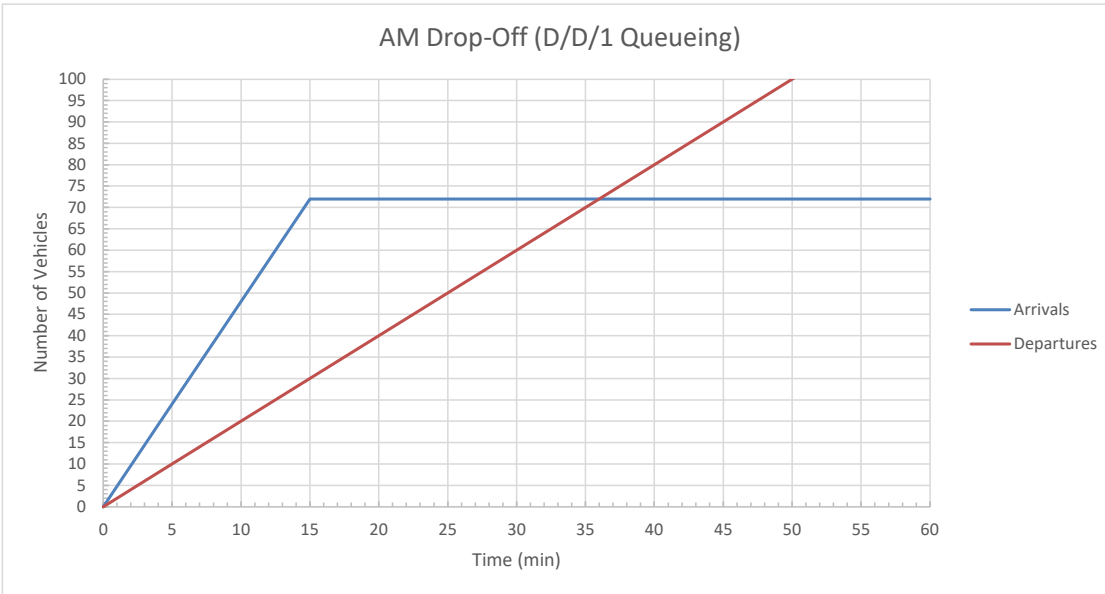
BB139

AM Drop-Off (D/D/1 Queueing) ⁽¹⁾

Arrival rate, λ , (vehicles / minute) = 4.80 (72 vehicles enter in the AM Peak Hour)
 Departure rate, μ , (vehicles / minute) = 2.00

Number of Arrivals = $4.8t$ for $t \leq 15$ min
 = 72 for $t > 15$ min

Number of Departures = $2t$ for all t



Longest Vehicle Delay = 21 min
 Longest Vehicle Queue = 42 vehicles

Assumptions:

1. All vehicles arrive at the school within a 15-minute period
2. 1 student per vehicle (72 K-5)
3. Each vehicle takes 30 seconds to unload students
4. First in / First out queueing discipline

ASSUMPTIONS:

1. PER CORRESPONDENCE WITH FOUNDER OF DISCOVERY DAY ACADEMY, ELIZABETH BASART, THE FOLLOWING INFORMATION IS USED FOR THE PURPOSE OF THIS TRAFFIC ANALYSIS:
 - 1.1. THE DRIVE AISLES IN THE EXISTING PARKING LOT WILL SERVE AS A PARENT PICK UP / DROP OFF LINE
 - 1.2. EACH VEHICLE TAKES 30 SECONDS TO LOAD/UNLOAD STUDENTS
2. DIMENSIONS PER VEHICLE = 20'L X 6.5'W

- - - - - AVAILABLE STORAGE LENGTH (671')
- - - - - DEPARTURE PATH
- ▭ 20'L X 6.5'W VEHICLE (42 TOTAL)

IF QUEUING LINE REACHES CAPACITY, STAFF WILL DIRECT VEHICLES TO UTILIZE THESE EXISTING PARKING SPACES

NOTES:

1. THIS GRAPHIC REPRESENTS A WORST-CASE SCENARIO.
2. LONGEST VEHICLE QUEUE = 42 VEHICLES.
3. THE PARKING LOT CAN ACCOMMODATE 31 VEHICLES FOR STACKED QUEUING IN THE DRIVE AISLE.
4. THE REMAINING 11 VEHICLES WILL UTILIZE THE EXISTING PARKING SPACES SHOWN TO DROP OFF STUDENTS.

AM DROP OFF QUEUE LAYOUT

BB141

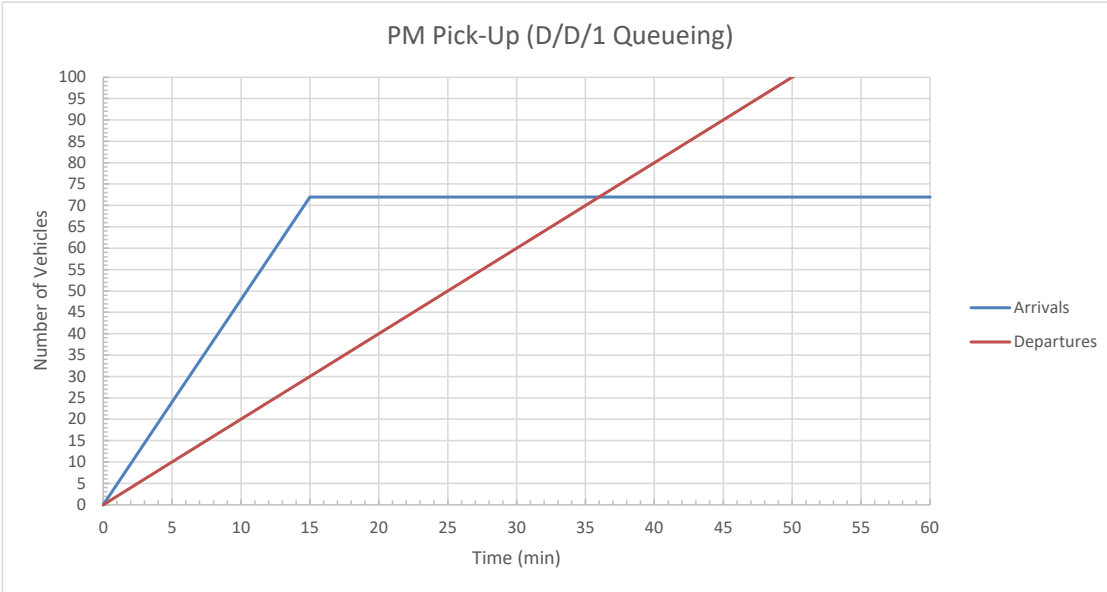


PM Pick-Up (D/D/1 Queueing) ⁽¹⁾

Arrival rate, λ , (vehicles / minute) = 4.80 (72 vehicles enter in the PM Peak Hour)
 Departure rate, μ , (vehicles / minute) = 2.00

Number of Arrivals = $4.8t$ for $t \leq 15$ min
 = 72 for $t > 15$ min

Number of Departures = $2t$ for all t



Longest Vehicle Delay = 21 min
 Longest Vehicle Queue = 42 vehicles

Assumptions:

1. All vehicles arrive at the school within a 15-minute period
2. 1 student per vehicle (72 K-5)
3. Each vehicle takes 30 seconds to load students
4. First in / First out queueing discipline

⁽¹⁾ SPE21-78485-BOS BB142
 Mannering, Fred L., and Scott S. Washburn. *Principles of Highway Engineering and Traffic Analysis*. 5th ed., John Wiley Sons, Inc., 2013.

ASSUMPTIONS:

1. PER CORRESPONDENCE WITH FOUNDER OF DISCOVERY DAY ACADEMY, ELIZABETH BASART, THE FOLLOWING INFORMATION IS USED FOR THE PURPOSE OF THIS TRAFFIC ANALYSIS:
 - 1.1. THE DRIVE AISLES IN THE EXISTING PARKING LOT WILL SERVE AS A PARENT PICK UP / DROP OFF LINE
 - 1.2. EACH VEHICLE TAKES 30 SECONDS TO LOAD/UNLOAD STUDENTS
2. DIMENSIONS PER VEHICLE = 20'L X 6.5'W

- - - - - AVAILABLE STORAGE LENGTH (671')
- - - - - DEPARTURE PATH
- ▭ 20'L X 6.5'W VEHICLE (42 TOTAL)

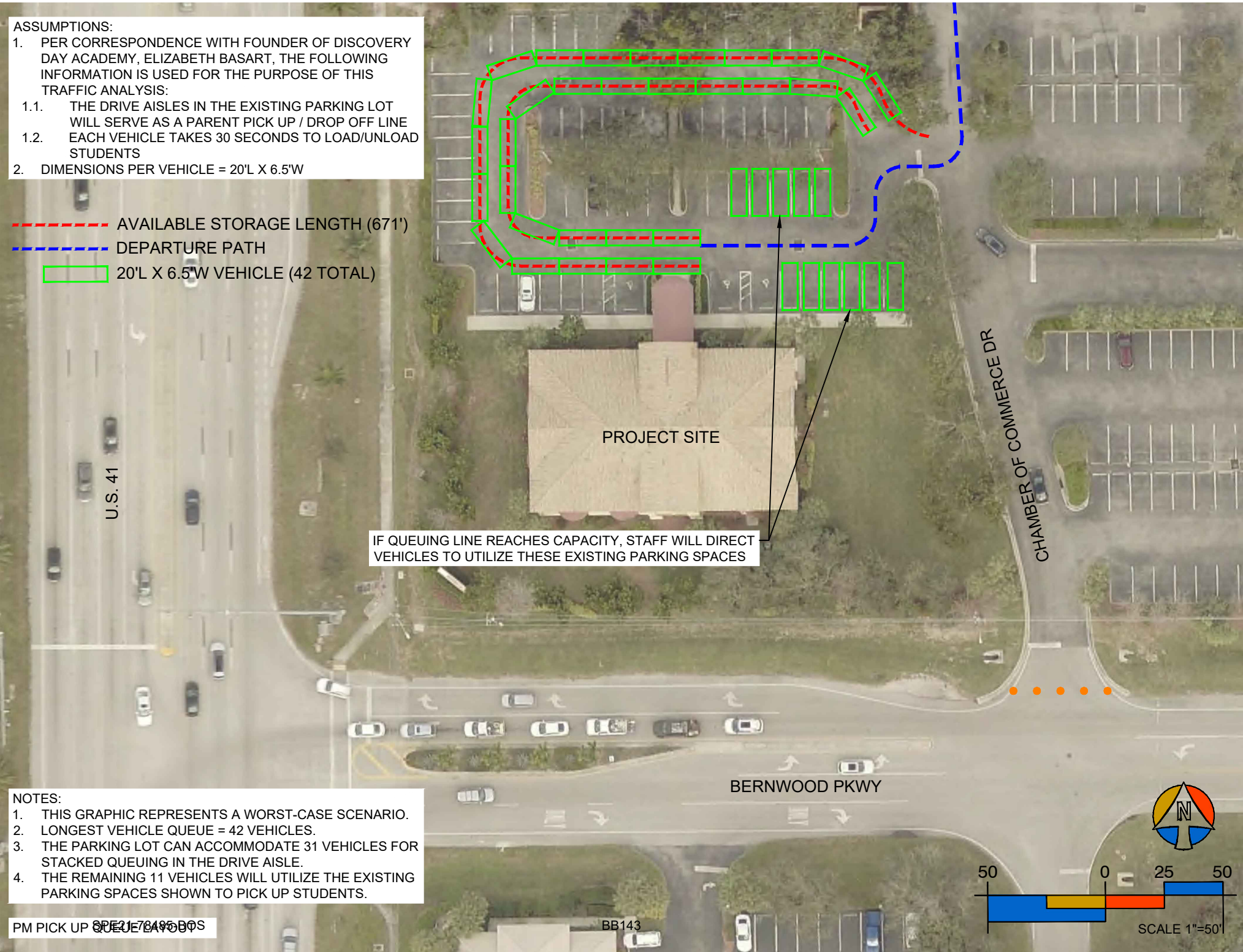
IF QUEUING LINE REACHES CAPACITY, STAFF WILL DIRECT VEHICLES TO UTILIZE THESE EXISTING PARKING SPACES

NOTES:

1. THIS GRAPHIC REPRESENTS A WORST-CASE SCENARIO.
2. LONGEST VEHICLE QUEUE = 42 VEHICLES.
3. THE PARKING LOT CAN ACCOMMODATE 31 VEHICLES FOR STACKED QUEUING IN THE DRIVE AISLE.
4. THE REMAINING 11 VEHICLES WILL UTILIZE THE EXISTING PARKING SPACES SHOWN TO PICK UP STUDENTS.

PM PICK UP QUEUE LAYOUT

BB143





MORRIS

2914 Cleveland Avenue | Fort Myers, Florida 33901

DEPEW

Phone (239) 337-3993 | Toll Free (866) 337-7341

www.morris-depew.com

ENGINEERS · PLANNERS · SURVEYORS
LANDSCAPE ARCHITECTS

Discovery Day Academy SEZ Request
Neighborhood Information Meeting
Meeting Summary

A Neighborhood Information Meeting for the Discovery Day Academy Special Exception request was advertised for June 18, 2021 at the Bonita Springs Fire and Rescue Station, 27707 Bonita Grande Drive, Bonita Springs, Florida. The meeting was advertised to begin at 6 PM and hosted by Cindy Leal Brizuela of Morris Depew Associates on behalf of the applicant. There were no attendees at the meeting.

Enclosures
Mail Notice
Copy of Ad
Publication Affidavit



MORRIS

DEPEW

ENGINEERS · PLANNERS · SURVEYORS
LANDSCAPE ARCHITECTS

2914 Cleveland Avenue | Fort Myers, Florida 33901

Phone (239) 337-3993 | Toll Free (866) 337-7341
www.morris-depew.com

Notice of Informational Public Meeting for Discovery Day Academy

You are receiving this notice as your property is located within 1,000 feet of the proposed Discovery Day Academy private school located at 25355 S. Tamiami Trail, Bonita Springs, FL 34135. An information meeting will be held as required by Sec. 4-28 of the Bonita Springs Land Development Code.

The meeting will include a presentation by Morris-Depew Associates regarding the conversion of a vacant building at 25355 S. Tamiami Trail on the northeast corner of S. Tamiami Trail and Bernwood Parkway to a noncommercial school through the City of Bonita Springs' Special Exception process.

The public meeting will be held on:

Date & Time: Friday, June 18, 2021 at 6 PM

Location: Bonita Springs Fire and Rescue, 27707 Bonita Grande Dr. Bonita Springs 34135

Should you have question or comments on the proposal Cindy Leal Brizuela with Morris Depew Associates, Inc. can be reached at 239-337-3993.

Naples Daily News

PART OF THE USA TODAY NETWORK

Published Daily
Naples, FL 34110

MORRIS DEPEW ASSOC
2914 CLEVELAND AVE

FORT MYERS, FL 33901-6003

Affidavit of Publication

STATE OF WISCONSIN
COUNTY OF BROWN

Before the undersigned they serve as the authority, personally appeared said legal clerk who on oath says that he/she serves as Legal Clerk of the Naples Daily News, a daily newspaper published at Naples, in Collier County, Florida; distributed in Collier and Lee counties of Florida; that the attached copy of the advertising was published in said newspaper on dates listed. Affiant further says that the said Naples Daily News is a newspaper published at Naples, in said Collier County, Florida, and that the said newspaper has heretofore been continuously published in said

Collier County, Florida; distributed in Collier and Lee counties of Florida, each day and has been entered as second class mail matter at the post office in Naples, in said Collier County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that he has neither paid nor promised any person, or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

Published: 05/27/2021



Subscribed and sworn to before on May 27, 2021:

Tara Mondloch

Notary, State of WI, County of Brown

TARA MONDLOCH
Notary Public
State of Wisconsin

My commission expires August 6, 2021

Publication Cost: \$73.50
Ad No: 0004751021
Customer No: 1907555
PO #:

of Affidavits 1

This is not an invoice

Public Meeting Notice

Notice of public meeting: An informational meeting will be conducted as required by Sec. 4-28 of the Bonita Springs Land Development Code. The meeting will include a presentation by Morris-Depew Associates regarding a request for a Special Exception for a non-commercial school, at 25355 S. Tamiami Trail, Bonita Springs, FL. The application will be submitted shortly to the City of Bonita Springs. The public meeting will be held at Bonita Springs Fire and Rescue on June 18, 2021 at 6 PM at 27707 Bonita Grande Drive Bonita Springs, FL 34135.
May 27, 2021 No. 4751021