



CITRUS COUNTY
PLANNING AND DEVELOPMENT COMMISSION

Thursday February 3, 2022 at 9:00 AM
Lecanto Government Building
3600 W. Sovereign Path
Room 166
Lecanto, Florida 34461

Michael Facemyer, Chair
David Bramblett, 1ST Vice Chair
Robert Bass, 2ND Vice Chair
Richard Barmes
Stacey Worthington

James Roys
Kurt Stone
William Burda (Alternate)
Carole Scragg (Alternate)
Chuck Dixon (School Board)

- A. CALL TO ORDER
- B. INVOCATION
- C. PLEDGE OF ALLEGIANCE
- D. ROLL CALL
- E. CHAIRMAN TO READ THE APPEAL PROCESS AND MEETING PROCEDURES
- F. OPEN TO THE PUBLIC – Receive comments from the public
- G. APPROVE MINUTES -
 - 1. February 3, 2022 PDC Agenda, Map, DirectionsFebruary 3, 2022 PDC Agenda, Map, Directions
- H. STAFF ANNOUNCEMENTS
- I. EX PARTE COMMUNICATION - COUNTY ATTORNEY
- J. APPLICATIONS
 - 1. V-22-01 Civilogistix for Dinkins & Dinkins, LLCConduct a public hearing on February 3, 2022, to review and consider V-22-01, Civilogistix for Dinkins and Dinkins, LLC
- K. ADDITIONAL ITEMS -
- L. PLANNING AND DEVELOPMENT COMMISSION MEMBER COMMENTS
- M. ADJOURN

If any person decides to appeal any decision made by the Commission with respect to any matter considered at this meeting or hearing, he or she will need a record of the proceedings and, for such purpose, he or she may need to insure that a verbatim record of the proceedings is made, which record includes testimony and evidence upon which the appeal is to be based.

Any person requiring reasonable accommodation at this meeting because of a disability or physical impairment should contact the County Administrator's Office, 3600 W. Sovereign Path, Suite 267, Lecanto, FL 34461, (352) 527-5210, at least two days before the meeting. If you are

hearing or speech impaired, dial 7-1-1, 1-800-955-8771 (TTY) or 1-800-955-8770 (v), via Florida Relay Service.

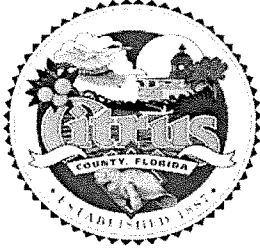
Si necesita un traductor de español por favor haga arreglos con el Condado dentro de dos días de la notificación de la publicación (352-527-5370).



AGENDA MEMORANDUM

FROM:	Michael Sherman, AICP Growth Management Director				
SUBJECT:	February 3, 2022 PDC Agenda, Map, Directions				
AGENDA DATE:	February 03, 2022				
<u>BRIEF OVERVIEW:</u>					
<u>BUDGET IMPACT/FUNDING SOURCE:</u>					
Account No.	Account Title	Current Budget	YTD Expenditures	Encumbrances	Available Balance
					\$0
<u>RECOMMENDED ACTION:</u> February 3, 2022 PDC Agenda, Map, Directions					

**CITRUS COUNTY
PLANNING AND DEVELOPMENT COMMISSION**



Thursday, February 3, 2022 at 9:00 AM

Lecanto Government Building

3600 West Sovereign Path, Room 166

Lecanto, Florida 34461

MICHAEL FACEMYER, CHAIR	KURT STONE
DAVID BRAMBLETT, 1 st VICE CHAIR	STACEY WORTHINGTON
ROBERT BASS, 2 nd VICE CHAIR	WILLIAM BURDA (Alternate)
RICHARD BARMES	CAROLE SCRAGG (Alternate)
JAMES ROYS	CHUCK DIXON (School Board)

- A. CALL TO ORDER
- B. INVOCATION
- C. PLEDGE OF ALLEGIANCE
- D. ELECTION OF OFFICERS: CHAIR, 1ST VICE CHAIR AND 2ND VICE CHAIR
- E. ROLL CALL
- F. CHAIRMAN TO READ THE APPEAL PROCESS AND MEETING PROCEDURES
- G. OPEN TO THE PUBLIC – Receive comments from the public
- H. APPROVE MINUTES – Approval of available minutes
- I. STAFF ANNOUNCEMENTS
- J. EX PARTE COMMUNICATION: County Attorney
- K. APPLICATIONS

1. LAND USE APPLICATION

a. V-22-01 Civilogistix for Dinkins & Dinkins, LLC

REQUEST: This request is a Variance from the Citrus County Land Development Code (LDC) to allow for the construction of a new non-residential driveway apron having less than the required connection spacing from an adjacent driveway connection, pursuant to Section 7140, Access Management for County Controlled Roadways, and to allow for the

construction of the new non-residential driveway apron within a turn lane in the functional area of an intersection, pursuant to Section 7900, Driveway Aprons, of the LDC.

LOCATION: Section 22, Township 18 South, Range 18 East; more specifically, Lot 92 and a portion of Lot 91, Crystal River Country Estates, as recorded in Plat Book 7, Page 151, AK 2914131, which address is known as 2927 W. Norvell Bryant Hwy, Lecanto, Florida. A complete legal description of the property is on file with the Land Development Division.

STAFF CONTACT: Joanna Coutu, AICP, Director, Land Development Division, and Cynthia L. Jones, Engineer I, Engineering Division

L. ADDITIONAL ITEMS

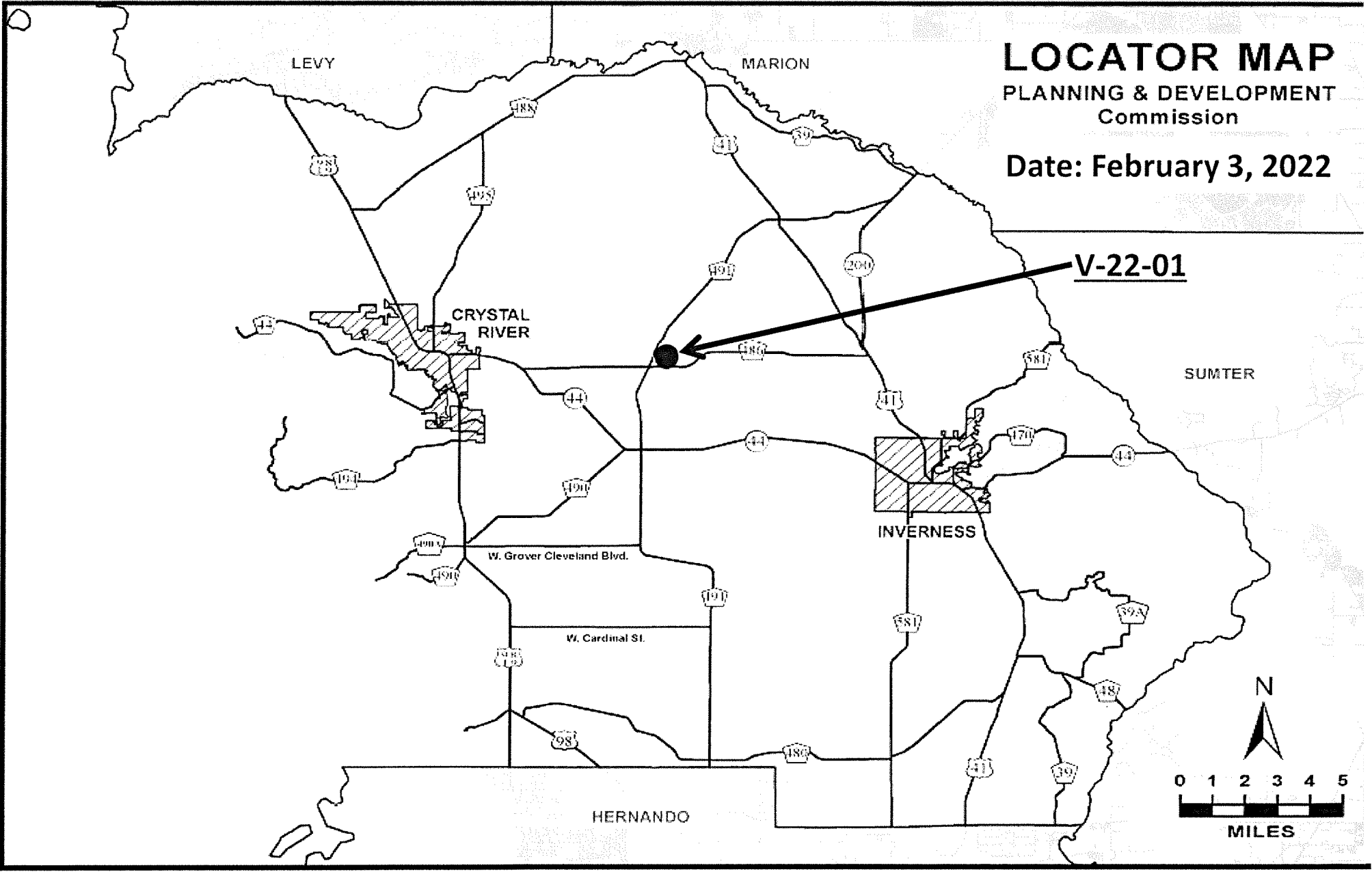
M. PLANNING AND DEVELOPMENT COMMISSION MEMBER COMMENTS

N. ADJOURN

If any person decides to appeal any decision made by the Commission with respect to any matter considered at this meeting or hearing, he or she will need a record of the proceedings and, for such purpose, he or she may need to ensure that a verbatim record of the proceedings is made, which record includes testimony and evidence upon which the appeal is to be based.

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Si necesita un traductor de español por favor haga arreglos con el Condado dentro de dos días de la notificación de la publicación (352-527-5370).



Attachment: Agenda -Map -Directions (19824 : February 3, 2022 PDC Agenda, Map, Directions)

Planning and Development Commission

Directions for meeting on February 3, 2022

V-22-01- From the intersection of Saunders Way and CR-491, turn left onto CR-491. Go **4.88 miles** and turn right onto W. Norvell Bryant Hwy. Go **0.19 miles** and make a U-turn at Crooked Branch Dr. onto W. Norvell Bryant Hwy. Go **0.12 miles** and the site is on the right at **2927 W. Norvell Bryant Hwy. Hernando.**



AGENDA MEMORANDUM

FROM:	Michael Sherman, AICP Growth Management Director
SUBJECT:	V-22-01 Civilogistix for Dinkins & Dinkins, LLC
AGENDA DATE:	February 03, 2022

BRIEF OVERVIEW:

This request is a Variance from the Citrus County Land Development Code (LDC) to allow for the construction of a new non-residential driveway apron having less than the required 245-foot connection spacing from an adjacent driveway connection, pursuant to Section 7140, Access Management for County Controlled Roadways, and to allow for the construction of the new non-residential driveway apron within a turn lane in the functional area of an intersection, pursuant to Section 7900, Driveway Aprons, of the LDC.

BUDGET IMPACT/FUNDING SOURCE:

Account No.	Account Title	Current Budget	YTD Expenditures	Encumbrances	Available Balance
					\$0

RECOMMENDED ACTION:

Conduct a public hearing on February 3, 2022, to review and consider V-22-01, Civilogistix for Dinkins and Dinkins, LLC

V-22-01

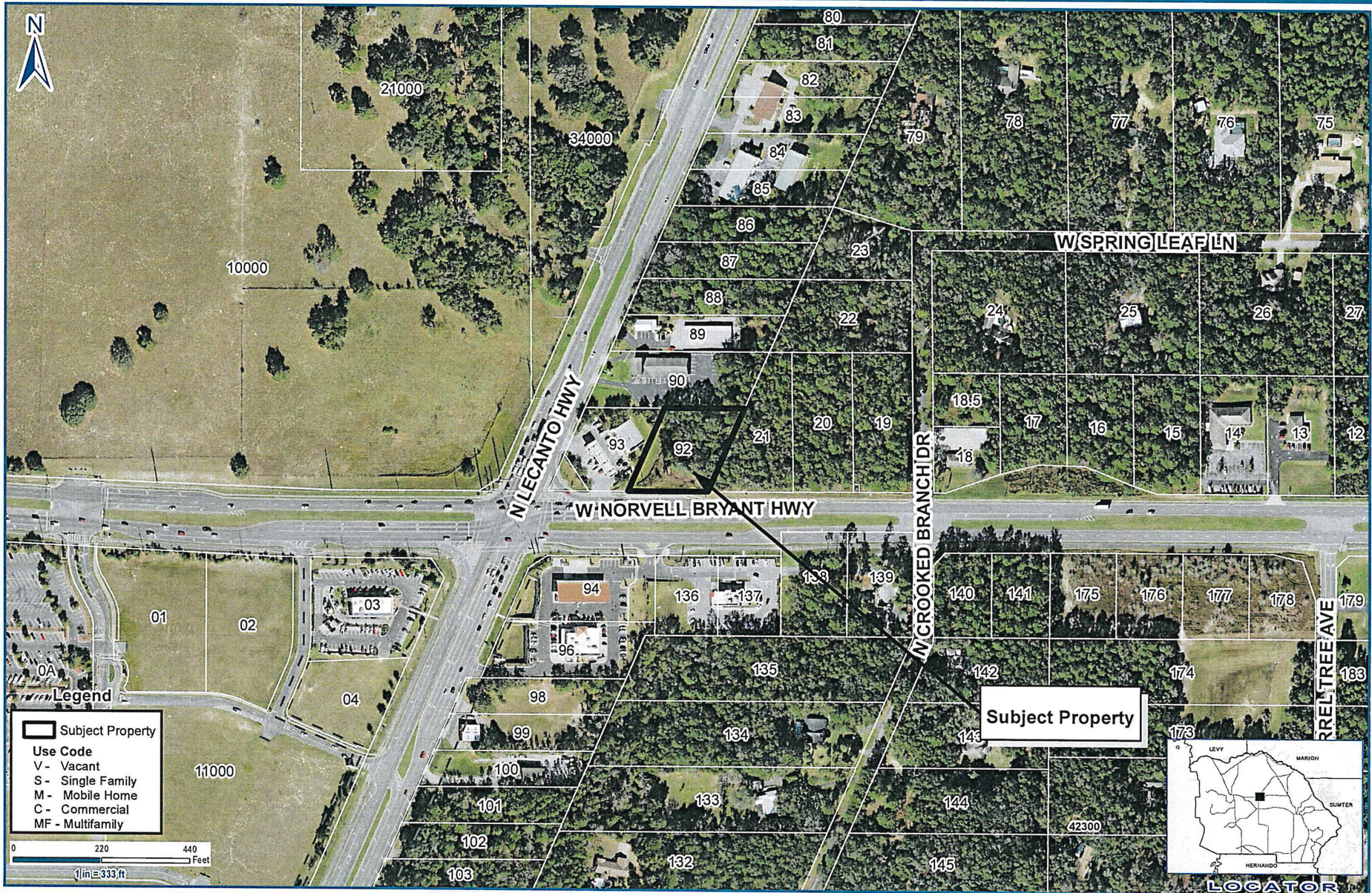


 **CALIBER**
CAR WASH
COMING SOON
www.CaliberCarWash.com

APPLICATION PENDING
(352) 527-5239
APPLX V-22-01

Commercial
DINKINS
RE
352-73

Civilogistix for Dinkins & Dinkins LLC



Application #: V-22-01

Applicant: Steve Hocutt and Jonathan Buttram for Danny York

Proposal: Driveway separation, driveway in a turn lane.

Location: 2927 W. Norvell Bryant Hwy, Lecanto, Florida

S-T-R - 22-18-18 SW

Land Use Atlas: GNC, General Commercial District

Planner Initials: *gk* Date: *12/1/21*

Geographic Information Systems

Prepared By : William Braunsch

Date: December 8, 2021

Source: Enterprise Geodatabase

Map Number: WB0000744

Cynthia P. Skelhorn

Cynthia P. Skelhorn
Director
The information is to be used for general purposes only. The Citrus County Geographic Information System is not a warranty, representation, or contract. Citrus County is not responsible for any errors or omissions in the data or for any damages or losses resulting from the use of this information. Citrus County shall not be liable for any claims, demands, or losses of any kind in connection with the use of this information, including but not limited to, damages or losses caused by reliance upon the accuracy or timeliness of the information and the viewing, copying, or distributing of this material.











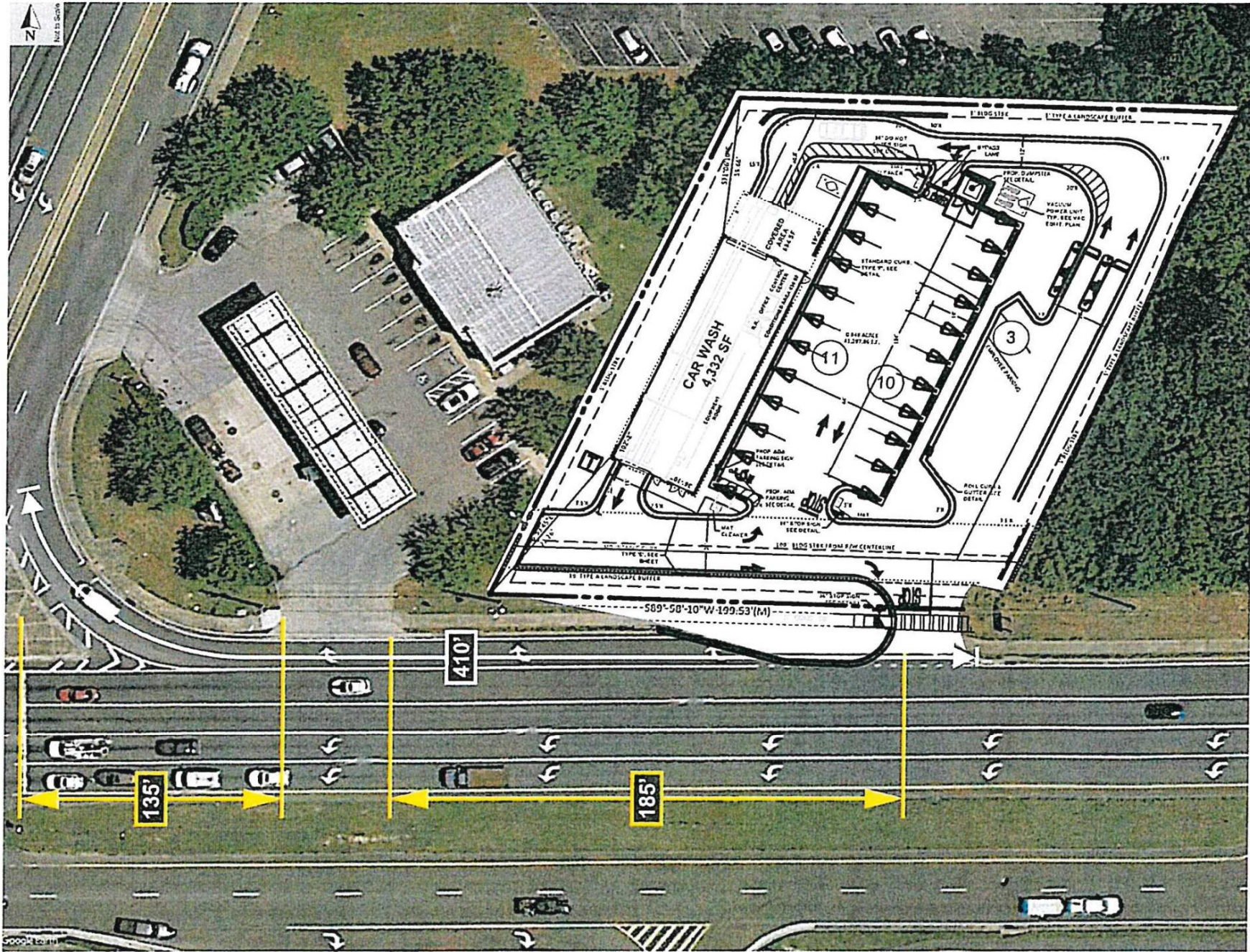
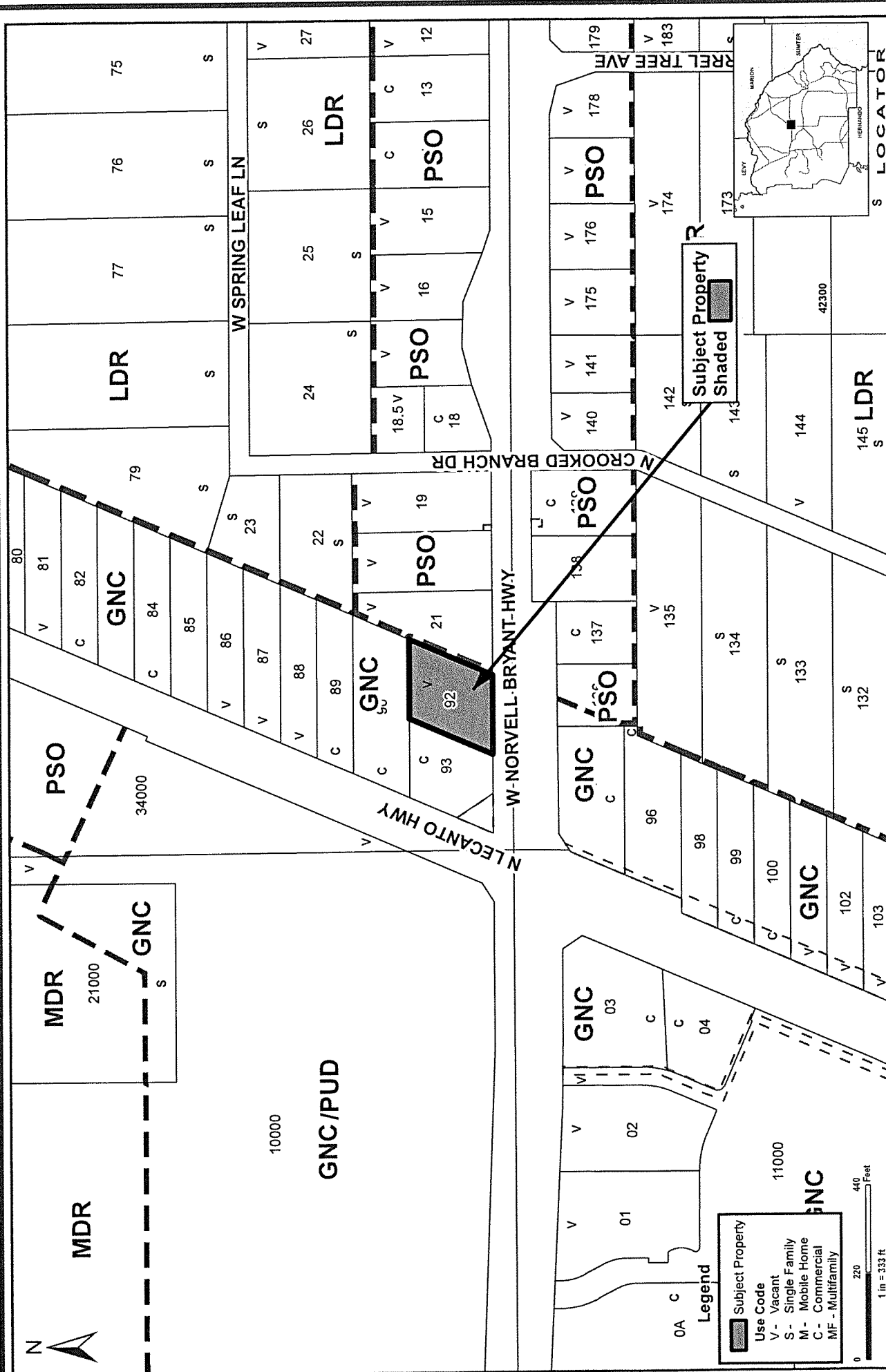


Figure 3

Access Spacing
Lecanto Car Wash
21192



Attachment: PDC coordinator pp (19823 : V-22-01 Civilogistix for Dinkins & Dinkins, LLC)



Geographic Information Systems

Prepared By : William Braunsch
 Date: December 8, 2021
 Source: Enterprise Geodatabase
 Map Number: WB0000742



Applicant: Steve Hocutt and Jonathan Buttram for Danny York

Location: 2927 W. Norvell Bryant Hwy, Lecanto, Florida

S-T-R - 22-18-18 SW

Application #: V-22-01

Proposal: Driveway separation, driveway in a turn lane.

Land Use Atlas: GNC, General Commercial District

Planner Initials: *CK*

Date: 12/14/21



Board of County Commissioners

DEPARTMENT OF GROWTH MANAGEMENT

LAND DEVELOPMENT DIVISION

3600 W. Sovereign Path, Suite 140

Lecanto, FL 34461

Telephone: (352) 527-5239 TTY Dial 711

Web Address: www.citrusboce.com

V-22-01

CITRUS COUNTY LAND DEVELOPMENT CODE VARIANCE APPLICATION

Application No.: V-22-01 Date: 10/29/21

* Written Authorization is required if Applicant is different than Owner.

Applicant*Name: STEVE HOCUTT / JONATHAN BUTTRAMAddress: 500 SUN VALLEY DR STE H3City: ROSWELLState: GAZip: 30076

Home No.: _____

Cell No.: _____

Work No.: 404-594-4403 Fax No.: _____Email: STEVE@CIVIOLOGISTIX.COMJONATHAN@CIVIOLOGISTIX.COM**Property Owner**Name: DINKINS & DINKINS LLCAddress: 101 NE 16TH AVECity: OCALAState: FLZip: 34470

Home No.: _____

Cell No.: _____

Work No.: 352-732-4464 Fax No.: _____

Email: _____

Property Description: Section: 22 Township: 18 South Range: 18 EastLegal Description: SEE ATTACHED SURVEYSubdivision: CRYSTAL RIVER ESTATESLot(s): 91 & 92 Block/Parcel: _____

Alternate Key #: _____

Parcel ID: 1818220010000000920Is this hearing being requested as a result of a Code Violation Notice? Yes _____ No X
If "Yes", explain on a separate sheet and attach a copy of the Notice of Violation.Variance Request: PLEASE SEE ATTACHED DOCUMENTState hardship that justifies the granting of the variance: PLEASE SEE ATTACHED DOCUMENT

I am aware that if the property cannot be located using information from the submitted application, this application may be rescheduled to a later hearing date. I also understand that a sign must be placed (and marking flags may be placed) on the property by the Land Development Division at least seven days prior to the scheduled meeting.

I understand that approval for the proposed use shown hereon does not in any way relieve me of the responsibility of observing and complying with any deed restrictions applicable to the subject property.

I hereby authorize Citrus County or its agents to enter upon the property, which is the subject of this application and the date of the hearing thereon, at any time between the hours of 8:00 AM and 5:00 PM for the purpose of gathering any information relevant to this application.

I DO HEREBY SWEAR THAT THE INFORMATION CONTAINED HEREIN AND THE ATTACHMENTS HERETO ARE TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE.

Signature: _____

STATE OF FLORIDA
COUNTY OF CITRUS

I HEREBY CERTIFY that on this day, before me, an officer duly authorized in the State and County aforesaid to take acknowledgements, personally appeared BRAD DINKINS, who is personally known to me or provided as identification and who did not take an oath.

WITNESS my hand and official seal this 29 day of OCTOBER, 2021Printed Name: TRACY RAINS

Notary Public - State of Florida

For Staff Use Only

Date: _____

Time: _____

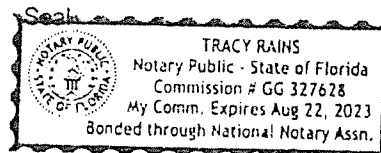
Initials: _____

ATE: _____

QTR: _____

LUD: _____

FZ: _____



VARIANCE REQUEST: We are respectfully requesting a variance for the driveway spacing requirements of the Code. Specifically, we are requesting our driveway be 104 feet, in lieu of the 245 feet, from the existing driveway in front of the neighboring Circle K property.

STATE HARDSHIP THAT JUSTFIES THE GRANTING OF THE VARIANCE: The hardship is based upon the size of the property - it does not have enough frontage to meet the 245 foot Code requirement. This special condition/circumstance does not result from the actions of the applicant. We are extending the existing turn lane to create the 204 foot separation so that the variance granted is the minimum variance that will make possible the reasonable use of the property. No special privilege will be conferred due to the unique size of the property. Lastly, we believe granting the variance will be in harmony with the general intent and purpose of the Code and the Comprehensive Plan.

V-22-01



V-22-01

Board of County Commissioners

DEPARTMENT OF GROWTH MANAGEMENT

LAND DEVELOPMENT DIVISION

3600 W. Sovereign Path, Suite 140

Leecanto, FL 34461

Telephone: (352) 527-5239 Fax (352) 527-5428

Toll Free (352) 489-2120 TTY (352) 527-5312

Web Address: www.citrusbocc.com**AUTHORIZATION****APPLICATION REQUEST: (check one)**

☒ Variance ☐ Conditional Use ☐ Minor Subdivision ☐ Lot Reconfiguration

☐ Plat Vacation ☐ Street Vacation ☐ Comprehensive Plan Amendment

☐ Atlas Amendment ☐ Other (specify): _____

LEGAL DESCRIPTION OF PROPERTY:

Section 22 Township 18 SOUTH Range 18 EAST Alternate Key # _____

LOTS 91 & 92 /

Lot/Parcel 1818220010000000920 Block _____

Subdivision CRYSTAL RIVER COUNTRY ESTATES

I, _____, owner of the above described property,
(Name of Owner)

authorize STEVE HOCUTT/JONATHAN BUTTRAM of CIVIOLOGISTIX to
(Name of Representative) (Name of Business)

serve as agent on my behalf for the purpose of making application for the proposed request. No further authorization is expressed or implied, than that which is described herein.

SIGNATURE: _____
(Signature of Owner)

STATE OF FLORIDA
COUNTY OF CITRUS MARION

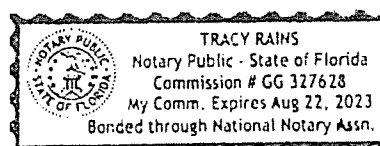
I HEREBY CERTIFY that on this day, before me, an officer duly authorized in the State and County aforesaid to take acknowledgements, personally appeared BRAD DINKINS, who is personally known to me or provided _____ as identification and who did not take an oath.

WITNESS my hand and official seal this 22nd day of OCTOBER, 2021

TRACY RAINS
Printed Name

Notary Public - State of Florida

Seal



8

FILED & RECORDED
CITRUS COUNTY Florida
BETTY STRIFLER, CLERKRecord \$ 10.55
DS \$ 1.70Documentary Tax Paid
\$ 10.55
Intangible Tax Paid
\$ 1.70
Betty Strifler,
Clerk of Circuit Court,
Citrus County, Florida
By: [Signature] D.C.

1076852

VERIFIED BY:

D.C.

V-22-01

This instrument prepared by:
Robert D. Wilson
Wilson & Williams, P.A.
Post Office Box 908
Ocala, Florida 34478

Parcel number _____

SUBJECT TO SUBSEQUENT VALUATION BY GRANTEE. MINIMUM DOCUMENTARY STAMPS ARE
AFFRDED. THIS WARRANTY DEED WILL BE RE-RECORDED WITH APPROPRIATE DOCUMENTARY
STAMPS WITHIN SIX MONTHS OF THE DATE OF THIS DEED.

WARRANTY DEED

This indenture made on June 8, 1999, between KWIK KING FOOD STORES, INC.,
a Florida corporation, Grantor, whose address is 101 Northeast 16th Avenue, Ocala, Florida
34470, and DINKINS & DINKINS, INC., a Florida corporation, Grantee, whose address is 101
Northeast 16th Avenue, Ocala, Florida 34470.WITNESSETH: that said Grantor, for and in consideration of the sum of Ten and 00/100
dollars (\$10.00), and other good and valuable considerations to said Grantors in hand paid by
said Grantee, the receipt whereof is hereby acknowledged, has granted, bargained and sold to
the said Grantee, and Grantee's heirs and assigns forever, the following described land, situate,
lying and being in CITRUS County, Florida, to-wit:

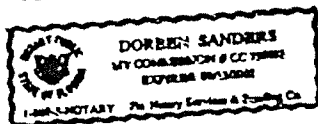
LEGAL DESCRIPTION IS ATTACHED HERETO AS EXHIBIT "A"

Together with all the tenements, hereditaments and appurtenances thereto belonging or
in anywise appertaining. To have and to hold, the same in fee simple forever.And the Grantor hereby covenants with said Grantee that the Grantor is lawfully seized of
said land in fee simple; that the Grantor has good right and lawful authority to sell and convey
said land; that the Grantor hereby fully warrants the title to said land and will defend the same
against the lawful claims of all persons whomsoever; and that said land is free of all
encumbrances.

*Grantor and Grantee are used for singular or plural, as context requires.

IN WITNESS WHEREOF, Grantor has hereunto set Grantor's hands and seals the day and
year first above written.Signed, sealed and delivered
in our presence as witnesses:[Signature]
Print name Robert D. WilsonKWIK KING FOOD STORES, INC.,
a Florida corporation[Signature]
C.L. Dinkins, Jr., President[Signature]
Print name Dorrien SandersSTATE OF FLORIDA
COUNTY OF MARIONSworn to and subscribed before me this 8 day of June, 1999, by C.L.
DINKINS, JR., President for KWIK KING FOOD STORES, INC., a Florida corporation, who is
personally known to me.

Notary stamp or seal

[Signature]
Notary Public

BK 1309901721

1999 JUN -9 PM 5:20

Attachment: Applicant Submittal (19823 : V-22-01 Civilogistix for Dinkins & Dinkins, LLC)

EXHIBIT "A"

Part of Lots 91 and 92, Crystal River Country Estates, according to the plat thereof, as recorded in plat book 7, pages 147 through 154, of the public records of Citrus County, Florida; lying in Section 22, Township 18 South, Range 18 East, Citrus County, Florida; being more particularly described as follows:

Commence at a concrete monument at the Northwest corner of said Lot 91, said point being on the Easterly right-of-way line of State Road No. 491 (a.k.a. County Road No. CR-491, a.k.a. North Lecanto Highway), and run South 23°29'30"West, along the Westerly line of said Lot 91 and said Easterly right-of-way line, 55.00 feet to an iron rod marked "PSM 5469"; thence North 89°55'30"East 199.72 feet to an iron rod marked "PSM 5469" and the Point-of-Beginning of the herein described parcel, thence continue North 89°55'30"East 199.72 feet to an iron rod on the Easterly line of said Lot 91; thence South 23°29'30"West, along the Easterly line of said Lots 91 and 92, a distance of 225.58 feet to an iron rod marked "PSM 5469" at the Southeast corner of said Lot 92 being on the North right-of-way line of County Road No. 488; thence South 89°55'30"West, along the South line of said Lot 92 and said North right-of-way line, 199.72 feet to an iron rod marked "PSM 5469" at the Southwest corner of said Lot 92; thence North 23°29'30"East, along the Westerly line of said Lot 92 and its Northeastly extension, 225.58 feet to the Point-of-Beginning.

Containing 0.948 Acres more or less

BR 12 09 98 17 22

1999 JUN -9 PM 5:28

Attachment: Applicant Submittal (19823 : V-22-01 Civilogistix for Dinkins & Dinkins, LLC)

civilOGISTIX

Steve Hocutt
500 Sun Valley Dr, Ste H3
Roswell, GA 30076
(404) 594-4403

RECEIVED
V-22-01
NOV 30 2021

November 29, 2021
Joanna Coutu, AICP
Citrus County Land Development Division
Lecanto, FL 34461

Land Development Division

Dear Joanna,

We would like to thank you and your colleagues in the land development and engineering departments of Citrus County for the collaborative effort on 11/19/21 in discussing the development of the commercial property located at 2927 West Norvell Bryant Highway Lecanto, Florida. In response to variance application V-22-01 and Letter of Sufficiency Determination PL2-21-299, the purpose of this summary is to outline all topics discussed during our meeting and the agreed upon site design remedies to each.

- 1.) Cross Access: The cross-access proposed to adjacent properties alleviates the access connection requirements to adjacent properties. Please refer to the attached traffic and site access driveway analysis and detail performed by Traffic & Mobility Consultants and dated November 23, 2021.
- 2.) Access driveway location and turn lane detail: The turning lane design and detail are similar to those existing and currently providing service to McDonalds and Walmart located in the immediate vicinity of the proposed site and main intersection of North Lecanto Highway and West Norvell Bryant Highway. Please refer to the attached traffic and site access driveway analysis and detail performed by Traffic & Mobility Consultants and dated November 23, 2021.
- 3.) Site Analysis table: All quantities have been updated/corrected.
- 4.) Stormwater: The stormwater management will be accomplished by installation of an underground exfiltration system conforming to the design guidelines of the Southwest Florida Water Management District as described in the Environmental Resource Permit Applicant's Handbook Volume II.

Thank you for your inclusion of our variance request on the next available PDC agenda meeting occurring on 02/03/22. We anticipate that the turn lane changes are sufficient to gain your support for the driveway separation variance. The revised site plan and the aforementioned traffic analysis has been included to support the requested variance. Please don't hesitate to reach out to me if there is any additional information you need regarding this matter or if an item requires clarification or revision.

Thank You,

Steve Hocutt
steve@civilogistix.com
O: 404-594-4403
C: 404-455-6615

500 Sun Valley Dr, Ste H3, Roswell, GA 30076 - (404) 594-4403 - civilogistix.com

Attachment: Applicant Submittal (19823 : V-22-01 Civilogistix for Dinkins & Dinkins, LLC)



MEMORANDUM

November 30, 2021

Re: Lecanto Car Wash
Access Analysis
Citrus County, Florida
Project № 21192

RECEIVED

V-22-01

NOV 30 2021

Land Development Division

The following access analysis was prepared to ensure the suitability of the proposed site access driveway on for the Lecanto Car Wash located on West Norvell Bryant Highway (CR 486), to maintain level of service (LOS) standards on West Norvell Bryant Highway, and to determine the necessary off-site road improvements.

Project Description

The development proposes an automated car wash facility with one (1) tunnel with an anticipated buildout year of 2022. A copy of the preliminary site plan is provided in the **Attachments**.

Project Location

The site consists of parcel 18E18S220010 0920. The ±0.95-acre site is located east of North Lecanto Highway (CR 491) and north of West Norvell Bryant Highway in Citrus County, Florida, as depicted in **Figure 1**.

Project Access

Access to the site is proposed via one (1) Right-in/Right-out (Ri/Ro) access driveway on West Norvell Bryant Highway, as shown on the site plan.

Attachment: Applicant Submittal (19823 : V-22-01 Civilogistix for Dinkins & Dinkins, LLC)



Lecanto Car Wash

Access Analysis
Project № 21192
November 30, 2021
Page 3 of 9

Trip Generation

A trip generation analysis was conducted using the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition*. **Table 1** summarizes the resulting trip generation analysis. Detailed ITE trip generation information sheets are included in the **Attachments**.

Table 1
Trip Generation Analysis

ITE Code	Land Use	Size	PM Peak Hour			
			Rate	Total	Enter	Exit
948	Automated Car Wash	1 Tunnel	77.50	78	39	39

Source: Trip generation analysis is based on ITE Trip Generation Manual, 11th Edition
ITE regression equations are used when R-squared is greater than 0.75 or number of studies ≥20

The proposed development is projected to generate 78 trips during the PM peak hour.

Trip Distribution & Assignment

A trip distribution pattern was estimated based on existing travel patterns and knowledge of the local network. The estimated trip distribution was assigned to North Lecanto Highway and West Norvell Bryant Highway as follows:

- To/from north on North Lecanto Highway – 35%
- To/from south on North Lecanto Highway – 20%
- To/from east on West Norvell Bryant Highway – 20%
- To/from west on West Norvell Bryant Highway – 25%

Lecanto Car Wash

Access Analysis

Project № 21192

November 30, 2021

Page 4 of 9

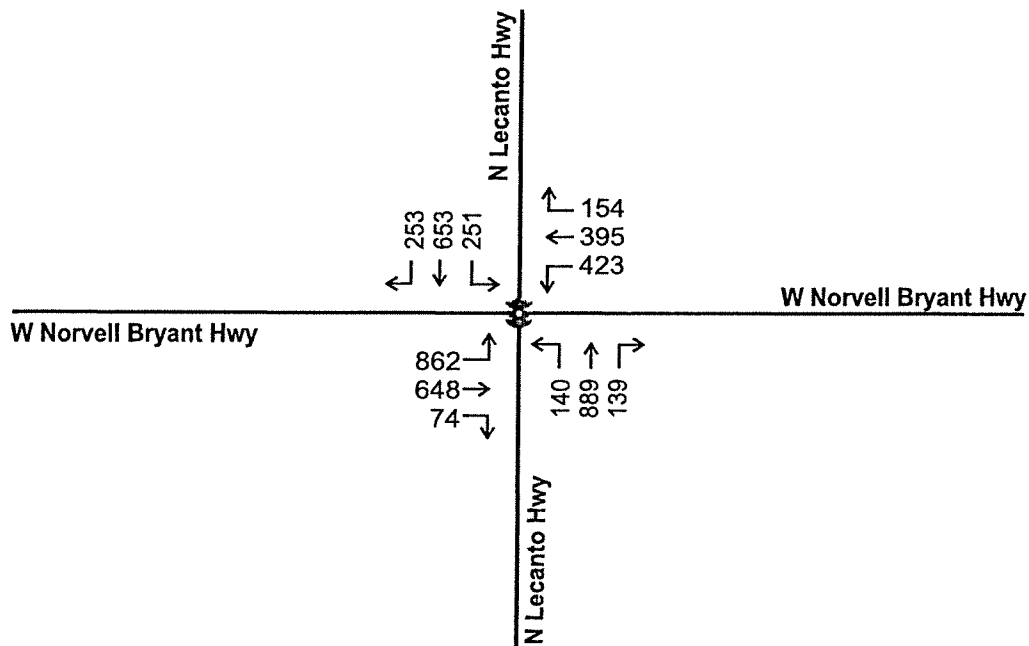
Existing Intersection Volumes

Existing turning movement counts at the intersection of West Norvell Bryant Highway and North Lecanto Highway were collected by Traffic and Mobility Consultants (TMC) during the PM peak hour on October 26, 2021. The intersection volumes were collected during the peak season; therefore, a seasonal factor was not applied. The raw turning movement counts and *2020 Peak Season Factor Category Report* used in the analysis are included in the **Attachments**. The existing PM peak hour intersection volumes are displayed in **Figure 2**.

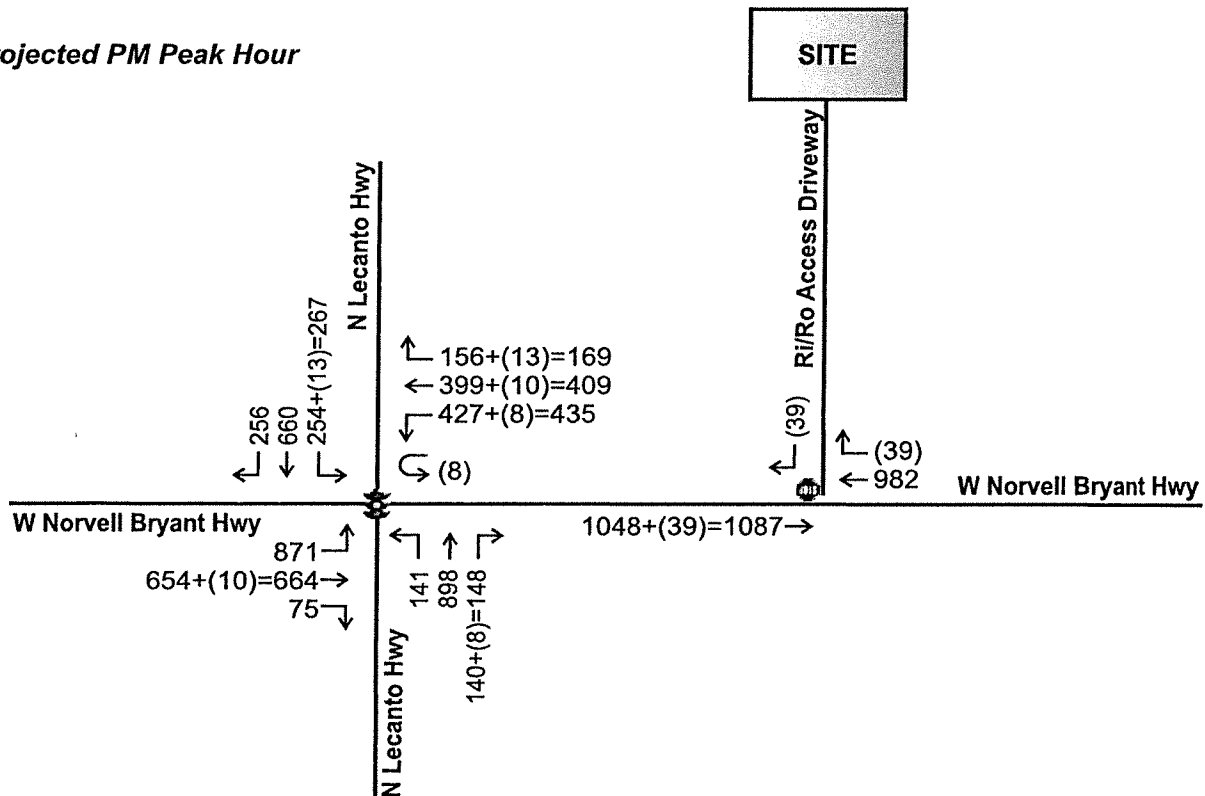
Projected Intersection Volumes

The intersections of West Norvell Bryant Highway with North Lecanto Highway and with the proposed site access driveway were both analyzed at the project buildout. The anticipated buildout year for the development is 2022. Projected turning volumes on the two-study intersections are composed of background traffic and the project-generated trips. Background traffic volumes were obtained by applying an annual growth rate to the existing intersection volumes. A minimum annual growth rate of 1% was used whenever no growth was observed. The project directional trips were assigned to the study intersections based on the estimated trip generation and assumed distribution pattern. The projected PM peak hour intersection volumes are displayed in **Figure 2**.

Existing PM Peak Hour



Projected PM Peak Hour



Legend:
Background + (Project) = Total

Lecanto Car Wash

Access Analysis

Project № 21192

November 30, 2021

Page 6 of 9

Access Analysis

A capacity analysis was performed for the proposed site access point and the adjacent intersection using methods of the *Highway Capacity Manual, 6th Edition (HCM)* and *Synchro* software. **Table 2** summarizes the results of the capacity analysis under existing and projected conditions. Detailed *HCM* analysis worksheets are included in the **Attachments**.

Table 2
Intersection Capacity Analysis

Intersection	Conditions	Traffic Control	Time Period	EB		WB		NB		SB		Overall	
				Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
W Norvell Bryant Hwy & N Lecanto Hwy	Existing	Signal	PM	181.8	F	70.4	E	55.8	E	49.9	D	99.8	F
	Projected	Signal	PM	199.2	F	72.7	E	59.2	E	51.9	D	107.2	F
W Norvell Bryant Hwy & Access Driveway	Projected	TWSC	PM	0.0	A	0.0	A	--	--	13.0	B	--	--

Delay expressed in seconds/vehicle

Worst movement delay reported at TWSC intersections

The analysis indicates that the West Norvell Bryant Highway and North Lecanto Highway currently operates below the adopted LOS and is projected to do so at the project buildout due to existing, heavy traffic volumes on eastbound and westbound approaches. The site access driveway is projected to operate at a satisfactory LOS at the project buildout.

Turn Lane Analysis

West Norvell Bryant Highway is a 4-lane divided roadway with a posted speed limit of 50 mph. Based on FDOT guidance provided in Table 27 of the *Access Management Guidebook*, included in the **Attachments**, right turn deceleration lanes should be considered at driveways on multilane roadways where the right turn volumes exceed 35 to 55 vehicles per hour. In the case of the proposed driveway, a right turn deceleration lane is recommended and warranted to help minimize the influence of the driveway on the operational integrity of West Norvell Bryant Highway.

The required turn lane length was calculated based on *Exhibit 212-1* of *FDOT Design Manual (FDM)*, included in the **Attachments**. Based on a speed of 50 mph, the required westbound right turn deceleration lane is 240 feet long (including a 50-foot taper).

The driveway would be located in the taper of the existing eastbound right turn lane that serves the downstream signalized intersection. The existing right turn lane is approximately 410 feet long. A review of the projected queue on the westbound approach reveals that the right turn movement experiences minimal queueing and the through movement experiences a 95th percentile queue of 13 vehicles per lane, or 325 feet. Therefore, it is feasible to slightly reduce the length of the existing westbound right turn lane in order to allow for the proposed access and

Lecanto Car Wash

Access Analysis

Project № 21192

November 30, 2021

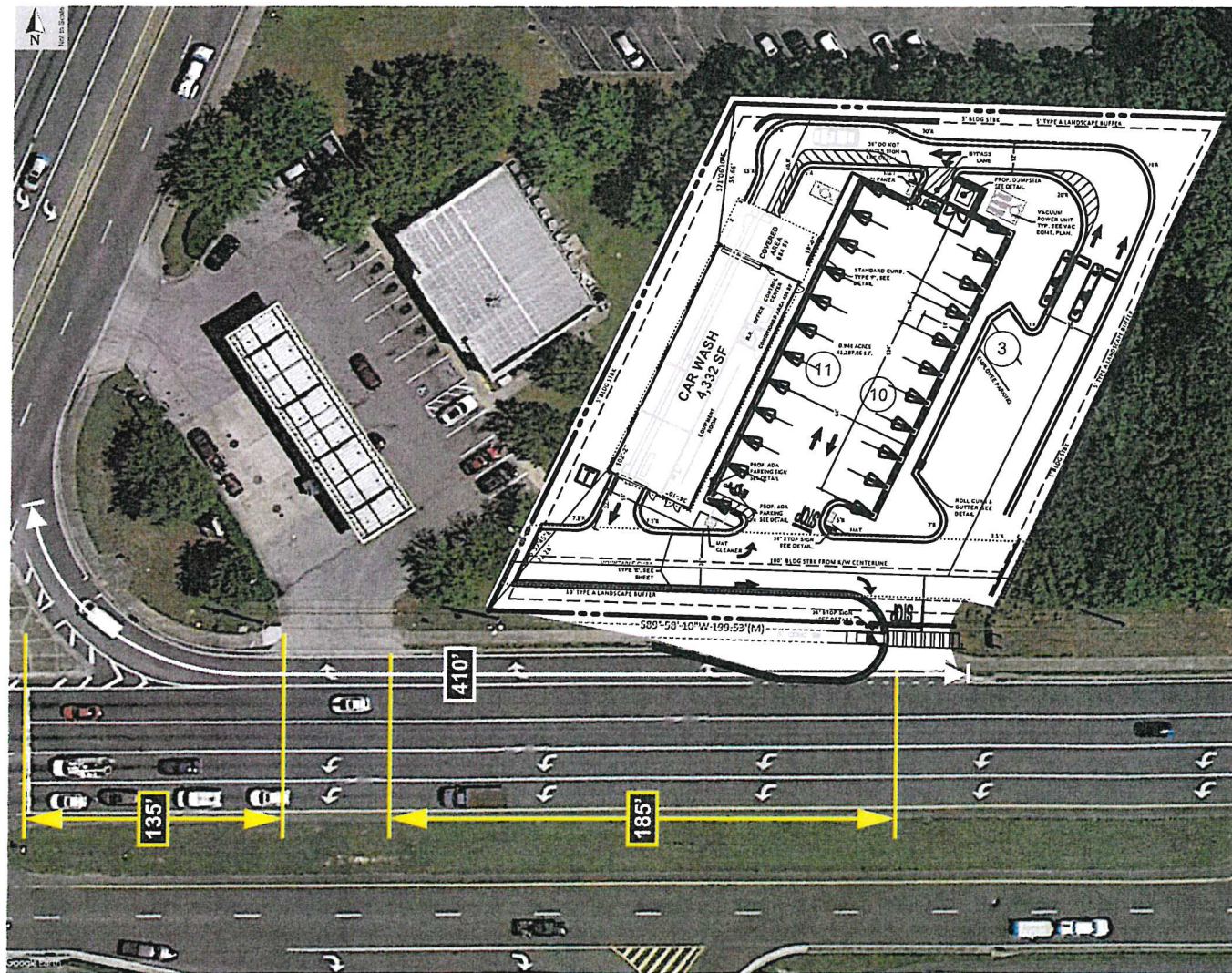
Page 7 of 9

for two (2) separated westbound right turn lanes to be installed, one (1) serving the site and one (1) serving the intersection.

Access Management Evaluation

The proposed access was evaluated for location with respect to access management standards and the conditions on West Norvell Bryant Highway. The roadway is an Access Classification 5 roadway with a posted speed limit of 50 mph. In accordance with FDOT access management standards, the desired connection spacing for this facility is 440 feet.

Based on existing site conditions, the proposed access driveway would be located approximately 360 feet upstream of North Lecanto Highway and 185 feet upstream of the existing driveway serving the Circle K site, as shown on **Figure 3**. It should be noted that the Circle K driveway is located 135 feet upstream of North Lecanto Highway. The subject property has approximately 200 feet of frontage on West Norvell Bryant Highway, which provides the only opportunity for direct access to the site. While the proposed driveway does not meet the desired access management separation, it is located at the furthest possible location from the intersection along the eastern property boundary. The cross access proposed to Circle K and to the undeveloped property to the north would alleviate the access connection requirements to adjacent properties.



Access Spacing

to Car Wash
21192

to Car
21192

Lecanto Car Wash

Access Analysis

Project № 21192

November 30, 2021

Page 9 of 9

Summary of Findings

This analysis was performed to evaluate operation and suitability of the proposed site access driveway on West Norvell Bryant Highway. The analysis results indicate the following:

- The proposed development is projected to generate 78 trips during the PM peak hour.
- The intersection of West Norvell Bryant Highway and North Lecanto Highway currently operates below the adopted LOS and is projected to do so at the project buildout.
- The site access driveway is projected to operate at a satisfactory LOS at the project buildout.
- A 240-foot westbound right turn lane on West Norvell Bryant Highway at the proposed site access is warranted and recommended.
- Projected 95th percentile queue length right turning movements on the westbound approach are minimal and can be accommodated by the existing turn lane length of 410 feet.
- It is feasible to slightly reduce the existing westbound turn lane length to allow for installation of two separate right turn lanes.
- The proposed driveway is located at the furthest possible location, which is approximately 360 feet upstream of the intersection and along the eastern property boundary. The cross access proposed to Circle K and to the undeveloped property to the north would alleviate the access connection requirements to adjacent properties.

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY

ON THE DATE ADJACENT TO THE SEAL

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED
SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED
ON ANY ELECTRONIC COPIES.

TRAFFIC & MOBILITY CONSULTANTS LLC
3101 MAGUIRE BOULEVARD, SUITE 265
ORLANDO, FLORIDA 32803
CERTIFICATE OF AUTHORIZATION CA-30024
MOHAMMED N. ABDALLAH, P.E. NO 56169

Attachment: Applicant Submittal (19823 : V-22-01 Civilogistix for Dinkins & Dinkins, LLC)

ATTACHMENTS



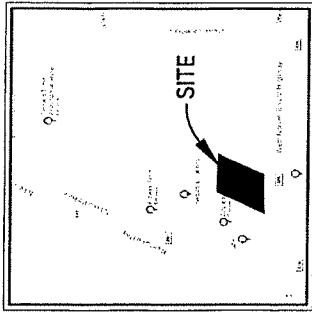
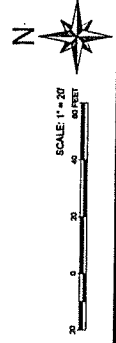
civilogistix
500 SUNVALLEY DRIVE, STE. H3, ROSWELL, GA 30076
(404) 594-4103 • info@civilogistix.com

SITE PLAN
Norvell Blvd CCW
2927 West Norvell Highway
Lecanto, FL 34461

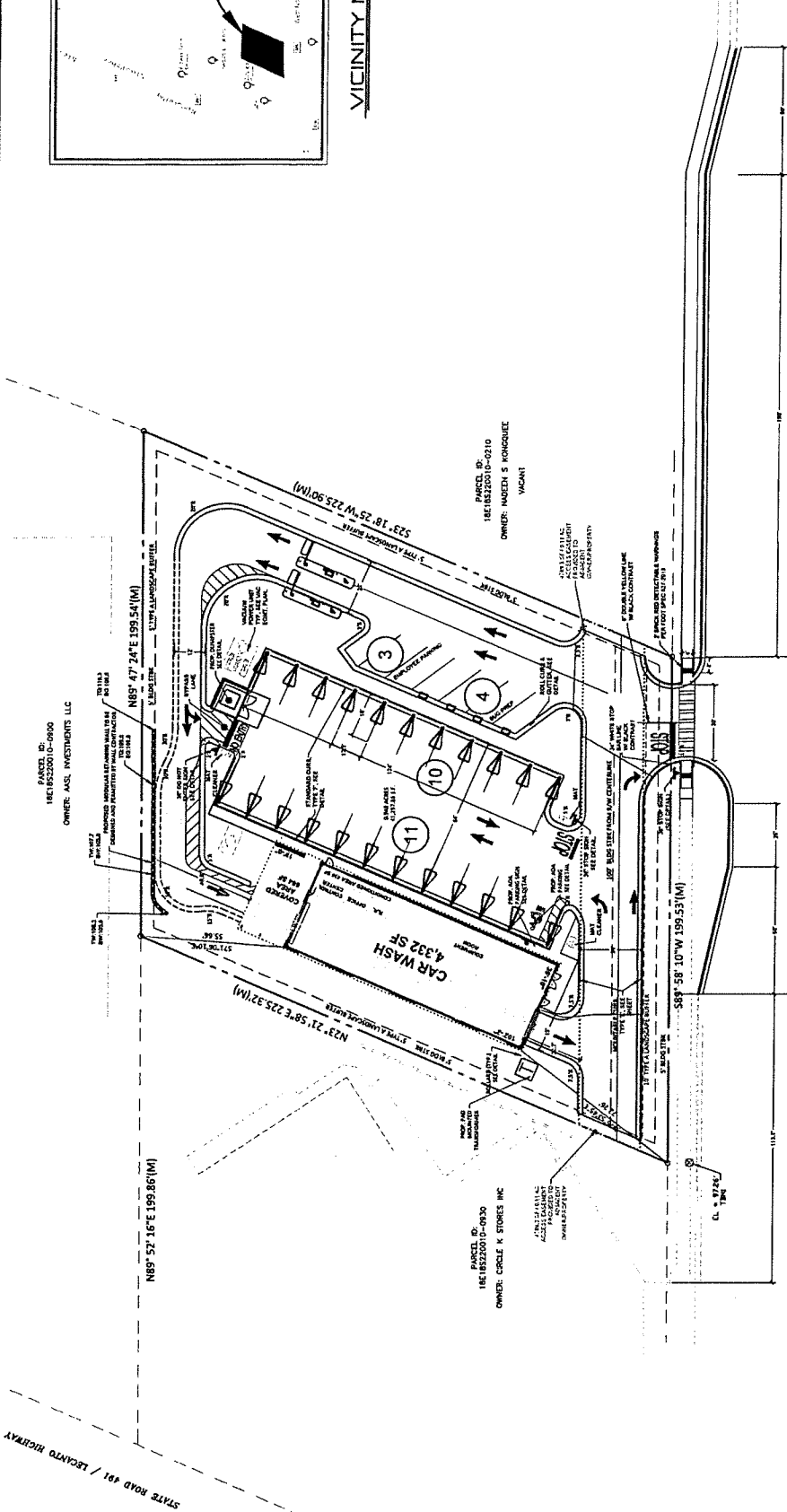
C201

21209

NOVEMBER 29, 2021
REVISIONS



VICINITY MAP



COUNTY ROAD 486 / WEST NORVELL BRYANT HIGHWAY
ASPHALT ROAD WIDTH VARIES
160' RIGHT-OF-WAY

SITE ANALYSIS

PROPOSED USE	CAR WASH
REQUIRED AREA	4,332 SF
REQUIRED PARKING	10
PROPOSED PARKING	10
PROPOSED BIKE/PED PARKING	0
PROPOSED BIKE/PED PARKING	0
PROPOSED ADA PARKING	1 VAN SPACE 3 VAN SPACE
PROPOSED ADA PARKING	3 VAN SPACE
CAR WASH SITE AREA	635 AC
PERVIOUS AREA	635 AC
% IMPERVIOUS	44.7%
% PERVIOUS	55.3%
TOTAL SITE AREA	635 AC

WE WILL HAVE ONE CAR WASH LANE WITH TWO PAY STATIONS.

FOR THE RECORD, THE SITE PLAN IS BASED ON INFORMATION SUBMITTED BY THE APPLICANT. CIVILOGISTIX HAS CONDUCTED VISUAL VERIFICATION OF THE SITE AND HAS FOUND THE INFORMATION TO BE REASONABLY ACCURATE. CIVILOGISTIX DOES NOT WARRANT THE ACCURACY OF THE INFORMATION AND DOES NOT ASSUME ANY LIABILITY FOR THE INFORMATION. THE APPLICANT IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND LEGAL ENTITLEMENTS AND AN ALTA SURVEY SHOULD BE OBTAINED BY AN ATTORNEY.

Automated Car Wash (948)

Vehicle Trip Ends vs: Car Wash Tunnels

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 3

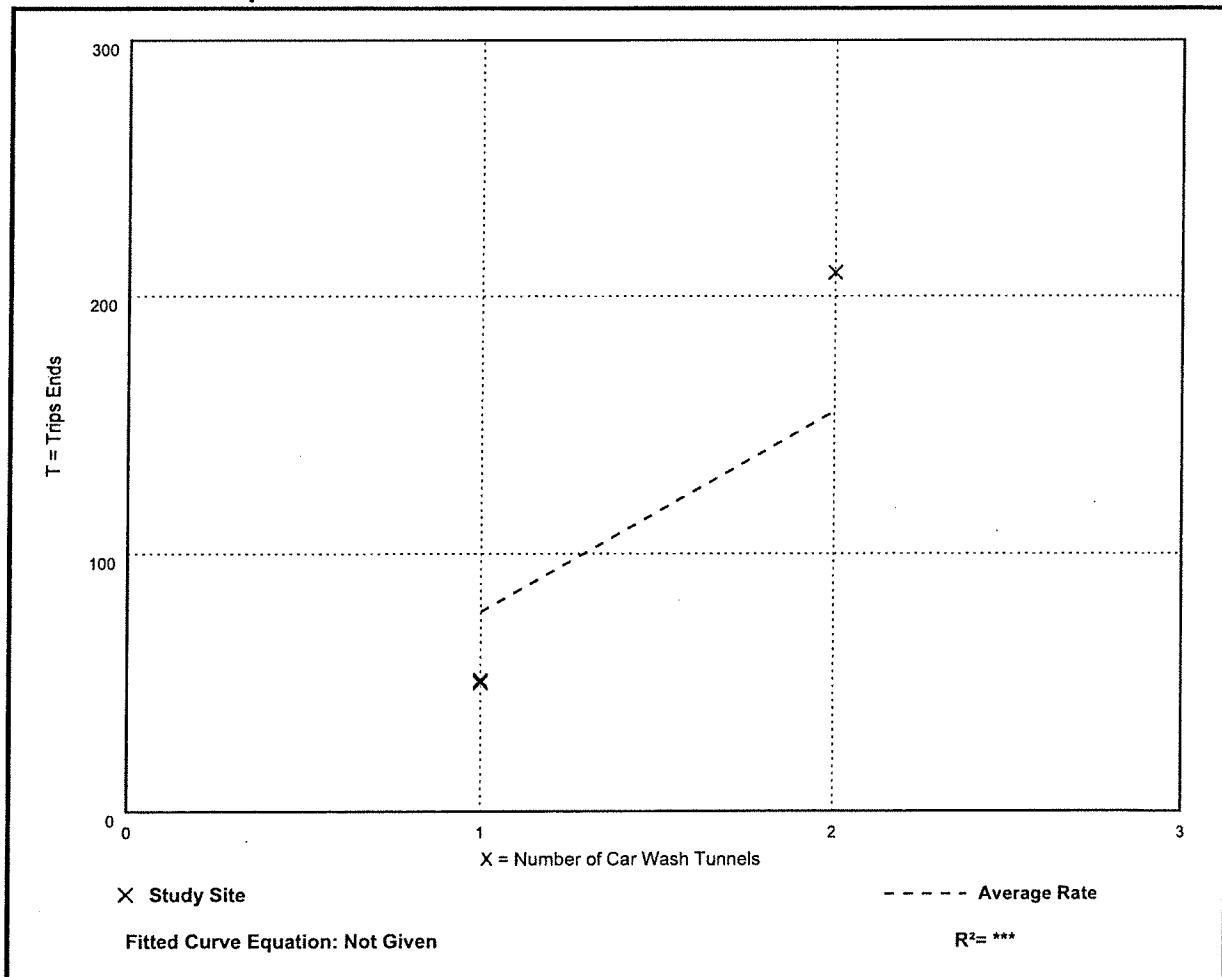
Avg. Num. of Car Wash Tunnels: 1

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Car Wash Tunnel

Average Rate	Range of Rates	Standard Deviation
77.50	50.00 - 104.50	33.07

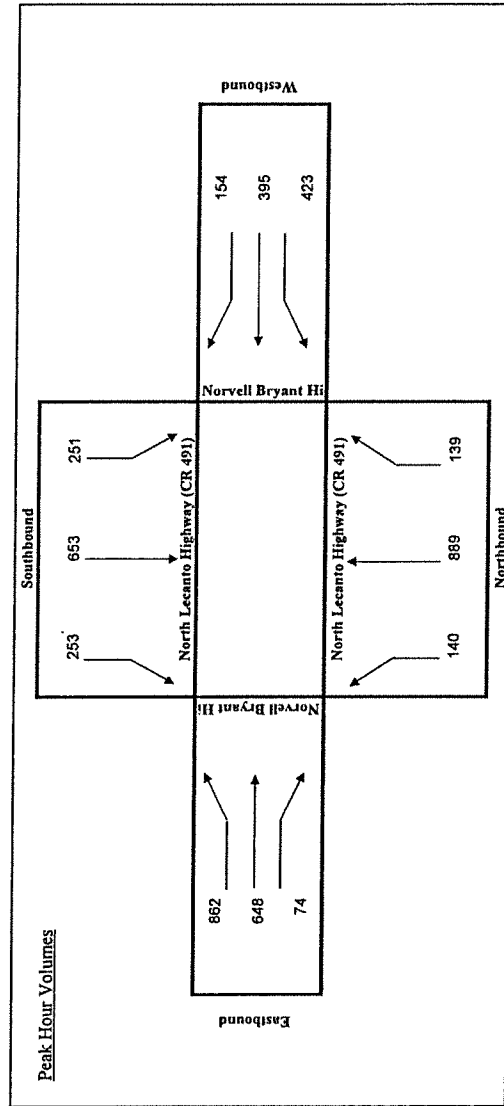
Data Plot and Equation



TURNING MOVEMENT COUNT ANALYSIS
AUTOS & TRUCKS

Intersection (N/S): North Lecanto Highway (CR 491)
Intersection (E/W): Norvell Bryant Highway (CR 486)
Date: 10/26/2021

Start	End	North Lecanto Highway (CR 491)			North Lecanto Highway (CR 491)			Norvell Bryant Highway (CR 486)			Norvell Bryant Highway (CR 486)			TOTAL
		L	T	R	L	T	R	L	T	R	L	T	R	
4:00 PM	4:15 PM	42	198	40	61	146	66	174	131	16	82	125	37	1118
4:15 PM	4:30 PM	36	216	35	71	154	71	186	146	18	92	112	45	1182
4:30 PM	4:45 PM	31	204	27	86	140	79	179	127	11	96	97	42	1119
4:45 PM	5:00 PM	42	222	45	68	160	56	139	109	15	89	117	42	1104
5:00 PM	5:15 PM	37	244	29	88	174	85	228	134	24	147	90	35	1315
5:15 PM	5:30 PM	32	216	41	39	145	69	231	178	15	85	90	36	1177
5:30 PM	5:45 PM	36	223	36	61	173	51	200	164	17	94	114	42	1211
5:45 PM	6:00 PM	35	208	33	63	161	48	203	172	18	97	101	41	1178
Total for: 4:00 PM		151	840	147	286	600	272	678	513	60	359	451	166	4523
Total for: 5:00 PM		140	889	139	251	653	253	862	648	74	423	395	154	4881
Total Peak Hour: 5:00 PM		140	889	139	251	653	253	862	648	74	423	395	154	4881
Overall PHF: 0.93														

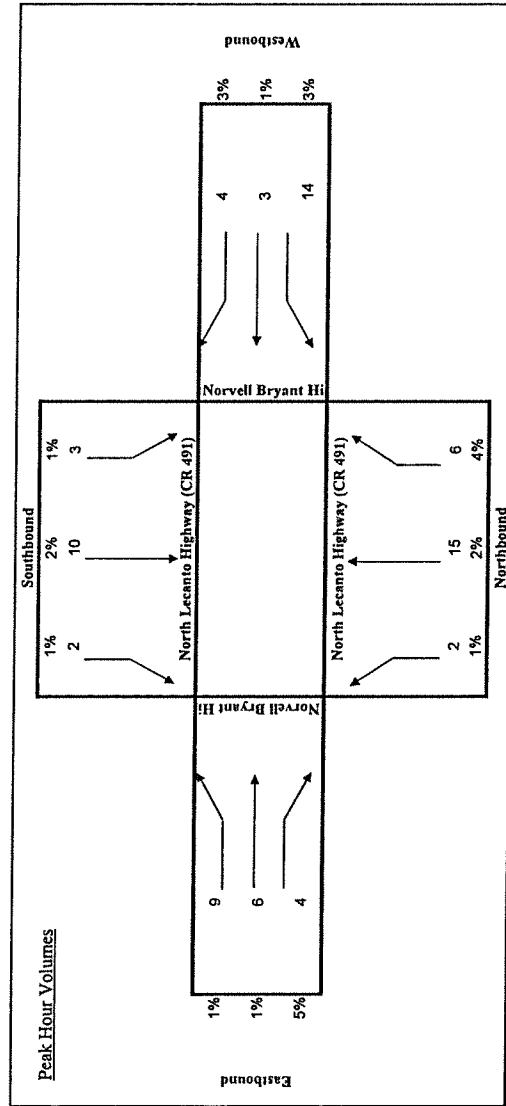


TURNING MOVEMENT COUNT ANALYSIS
TRUCKS

Intersection (N/S): North Lecanto Highway (CR 491)
Intersection (E/W): Norvell Bryant Highway (CR 486)

Date: 10/26/2021

Start	End	North Lecanto Highway (CR 491)			North Lecanto Highway (CR 491)			Norvell Bryant Highway (CR 486)			Norvell Bryant Highway (CR 486)			TOTAL
		R	T	L	R	T	L	R	T	L	R	T	L	
4:00 PM	4:15 PM	1	3	1	2	2	1	2	2	1	2	2	1	20
4:15 PM	4:30 PM	0	4	2	1	1	0	1	2	0	4	1	1	17
4:30 PM	4:45 PM	1	7	1	0	1	1	1	1	1	5	0	1	20
4:45 PM	5:00 PM	0	1	2	0	6	0	5	1	2	3	0	1	21
5:00 PM	5:15 PM	1	3	1	0	5	2	1	0	0	3	1	0	17
5:15 PM	5:30 PM	1	1	1	1	3	0	0	0	1	1	0	0	9
5:30 PM	5:45 PM	1	3	1	1	3	1	1	1	0	3	2	1	18
5:45 PM	6:00 PM	0	2	0	1	3	1	1	2	1	2	2	1	16
Total for: 4:00 PM		2	15	6	3	10	2	9	6	4	14	3	4	78
Total for: 5:00 PM		3	9	3	3	14	4	3	3	2	9	5	2	60
Total Peak Hour: 4:00 PM		2	15	6	3	10	2	9	6	4	14	3	4	78
Overall PHF:		0.93												



2020 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
 CATEGORY: 0200 CITRUS COUNTYWIDE

WEEK	DATES	SF	MOCF: 0.95
			PSCF
1	01/01/2020 - 01/04/2020	0.95	1.00
2	01/05/2020 - 01/11/2020	0.96	1.01
3	01/12/2020 - 01/18/2020	0.97	1.02
4	01/19/2020 - 01/25/2020	0.96	1.01
5	01/26/2020 - 02/01/2020	0.94	0.99
6	02/02/2020 - 02/08/2020	0.93	0.98
7	02/09/2020 - 02/15/2020	0.92	0.97
8	02/16/2020 - 02/22/2020	0.94	0.99
9	02/23/2020 - 02/29/2020	0.97	1.02
10	03/01/2020 - 03/07/2020	0.99	1.04
11	03/08/2020 - 03/14/2020	1.02	1.07
12	03/15/2020 - 03/21/2020	1.05	1.11
13	03/22/2020 - 03/28/2020	1.14	1.20
14	03/29/2020 - 04/04/2020	1.24	1.31
15	04/05/2020 - 04/11/2020	1.34	1.41
16	04/12/2020 - 04/18/2020	1.44	1.52
17	04/19/2020 - 04/25/2020	1.35	1.42
18	04/26/2020 - 05/02/2020	1.27	1.34
19	05/03/2020 - 05/09/2020	1.18	1.24
20	05/10/2020 - 05/16/2020	1.10	1.16
21	05/17/2020 - 05/23/2020	1.09	1.15
22	05/24/2020 - 05/30/2020	1.08	1.14
23	05/31/2020 - 06/06/2020	1.07	1.13
24	06/07/2020 - 06/13/2020	1.06	1.12
25	06/14/2020 - 06/20/2020	1.05	1.11
26	06/21/2020 - 06/27/2020	1.03	1.08
27	06/28/2020 - 07/04/2020	1.01	1.06
28	07/05/2020 - 07/11/2020	0.99	1.04
29	07/12/2020 - 07/18/2020	0.97	1.02
30	07/19/2020 - 07/25/2020	0.97	1.02
31	07/26/2020 - 08/01/2020	0.97	1.02
32	08/02/2020 - 08/08/2020	0.97	1.02
33	08/09/2020 - 08/15/2020	0.97	1.02
34	08/16/2020 - 08/22/2020	0.97	1.02
35	08/23/2020 - 08/29/2020	0.97	1.02
36	08/30/2020 - 09/05/2020	0.97	1.02
37	09/06/2020 - 09/12/2020	0.97	1.02
38	09/13/2020 - 09/19/2020	0.97	1.02
39	09/20/2020 - 09/26/2020	0.96	1.01
*40	09/27/2020 - 10/03/2020	0.95	1.00
*41	10/04/2020 - 10/10/2020	0.94	0.99
*42	10/11/2020 - 10/17/2020	0.93	0.98
*43	10/18/2020 - 10/24/2020	0.94	0.99
*44	10/25/2020 - 10/31/2020	0.94	0.99
*45	11/01/2020 - 11/07/2020	0.95	1.00
*46	11/08/2020 - 11/14/2020	0.95	1.00
*47	11/15/2020 - 11/21/2020	0.96	1.01
*48	11/22/2020 - 11/28/2020	0.95	1.00
*49	11/29/2020 - 12/05/2020	0.95	1.00
*50	12/06/2020 - 12/12/2020	0.95	1.00
*51	12/13/2020 - 12/19/2020	0.95	1.00
*52	12/20/2020 - 12/26/2020	0.96	1.01
53	12/27/2020 - 12/31/2020	0.97	1.02

* PEAK SEASON

27-FEB-2021 10:30:06

830UPD

7_0200_PKSEASON.TXT

Attachment: Applicant Submittal (19823 : V-22-01 Civilogistix for Dinkins & Dinkins, LLC)

HCM 6th Signalized Intersection Summary1: CR 491 & CR 486

Existing PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	862	648	74	423	395	154	140	889	139	251	653	253
Future Volume (veh/h)	862	648	74	423	395	154	140	889	139	251	653	253
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1826	1856	1885	1856	1885	1870	1841	1885	1870	1885
Adj Flow Rate, veh/h	937	704	0	460	429	0	152	966	75	273	710	137
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	5	3	1	3	1	2	4	1	2	1
Cap, veh/h	651	825		515	694		217	1147	504	333	1266	569
Arrive On Green	0.19	0.23	0.00	0.15	0.19	0.00	0.06	0.32	0.32	0.10	0.36	0.36
Sat Flow, veh/h	3483	3582	1547	3428	3582	1572	3483	3554	1560	3483	3554	1598
Grp Volume(v), veh/h	937	704	0	460	429	0	152	966	75	273	710	137
Grp Sat Flow(s), veh/h/ln	1742	1791	1547	1714	1791	1572	1742	1777	1560	1742	1777	1598
Q Serve(g_s), s	30.0	30.2	0.0	21.1	17.6	0.0	6.9	40.6	5.5	12.4	25.8	9.7
Cycle Q Clear(g_c), s	30.0	30.2	0.0	21.1	17.6	0.0	6.9	40.6	5.5	12.4	25.8	9.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	651	825		515	694		217	1147	504	333	1266	569
V/C Ratio(X)	1.44	0.85		0.89	0.62		0.70	0.84	0.15	0.82	0.56	0.24
Avail Cap(c_a), veh/h	651	1673		641	1673		651	1660	729	651	1660	746
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.3	59.2	0.0	67.0	59.3	0.0	73.8	50.6	38.7	71.3	41.6	36.4
Incr Delay (d2), s/veh	206.6	2.6	0.0	12.9	0.9	0.0	4.1	3.1	0.2	6.0	0.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	48.1	19.7	0.0	15.2	12.5	0.0	5.7	25.2	3.8	9.6	16.7	6.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	271.9	61.8	0.0	79.9	60.2	0.0	77.9	53.6	38.8	77.3	42.0	36.6
LnGrp LOS	F	E		E	E		E	D	D	E	D	D
Approach Vol, veh/h		1641	A		889	A		1193			1120	
Approach Delay, s/veh		181.8			70.4			55.8			49.9	
Approach LOS		F			E			E			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	31.8	45.8	17.2	65.8	37.7	39.9	22.5	60.4				
Change Period (Y+Rc), s	7.7	* 8.8	7.2	* 8.6	7.7	* 8.8	7.2	* 8.6				
Max Green Setting (Gmax), s	30.0	* 75	30.0	* 75	30.0	* 75	30.0	* 75				
Max Q Clear Time (g_c+I1), s	23.1	32.2	8.9	27.8	32.0	19.6	14.4	42.6				
Green Ext Time (p_c), s	1.0	4.8	0.4	5.6	0.0	2.7	1.0	9.2				

Intersection Summary

HCM 6th Ctrl Delay	99.8
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary

1: CR 491 & CR 486

Projected PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	871	664	75	443	409	169	141	898	148	267	660	256
Future Volume (veh/h)	871	664	75	443	409	169	141	898	148	267	660	256
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1885	1885	1826	1856	1885	1856	1885	1870	1841	1885	1870	1885
Adj Flow Rate, veh/h	947	722	0	482	445	0	153	976	85	290	717	140
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	5	3	1	3	1	2	4	1	2	1
Cap, veh/h	630	841		532	749		210	1125	494	344	1262	567
Arrive On Green	0.18	0.23	0.00	0.16	0.21	0.00	0.06	0.32	0.32	0.10	0.36	0.36
Sat Flow, veh/h	3483	3582	1547	3428	3582	1572	3483	3554	1560	3483	3554	1598
Grp Volume(v), veh/h	947	722	0	482	445	0	153	976	85	290	717	140
Grp Sat Flow(s),veh/h/ln	1742	1791	1547	1714	1791	1572	1742	1777	1560	1742	1777	1598
Q Serve(g_s), s	30.0	32.0	0.0	22.9	18.6	0.0	7.2	42.9	6.5	13.6	27.0	10.3
Cycle Q Clear(g_c), s	30.0	32.0	0.0	22.9	18.6	0.0	7.2	42.9	6.5	13.6	27.0	10.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	630	841		532	749		210	1125	494	344	1262	567
V/C Ratio(X)	1.50	0.86		0.91	0.59		0.73	0.87	0.17	0.84	0.57	0.25
Avail Cap(c_a), veh/h	630	1619		620	1619		630	1607	705	630	1607	722
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.9	60.8	0.0	68.9	59.2	0.0	76.6	53.4	41.0	73.5	43.2	37.8
Incr Delay (d2), s/veh	234.8	2.7	0.0	15.5	0.8	0.0	4.8	3.8	0.2	5.6	0.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	51.3	20.8	0.0	16.4	13.1	0.0	6.0	26.6	4.6	10.4	17.5	7.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	302.7	63.5	0.0	84.3	60.0	0.0	81.4	57.2	41.2	79.1	43.6	38.0
LnGrp LOS	F	E		F	E		F	E	D	E	D	D
Approach Vol, veh/h	1669			927			1214			1147		
Approach Delay, s/veh	199.2			72.7			59.2			51.9		
Approach LOS	F			E			E			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	33.5	47.8	17.2	67.5	37.7	43.5	23.6	61.1				
Change Period (Y+Rc), s	7.7	* 8.8	7.2	* 8.6	7.7	* 8.8	7.2	* 8.6				
Max Green Setting (Gmax), s	30.0	* 75	30.0	* 75	30.0	* 75	30.0	* 75				
Max Q Clear Time (g_c+1), s	24.9	34.0	9.2	29.0	32.0	20.6	15.6	44.9				
Green Ext Time (p_c), s	0.8	4.9	0.4	5.6	0.0	2.8	0.8	7.6				

Intersection Summary

HCM 6th Ctrl Delay 107.2
 HCM 6th LOS F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
 Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th TWSC 2: CR 486 & Site Access

Projected PM Peak

Intersection

Int Delay, s/veh 0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑	↑		↑
Traffic Vol, veh/h	0	1087	982	39	0	39
Future Vol, veh/h	0	1087	982	39	0	39
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	145	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1182	1067	42	0	42

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	-	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	-
Pot Cap-1 Maneuver	0	-	0
Stage 1	0	-	0
Stage 2	0	-	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	13
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	491
HCM Lane V/C Ratio	-	-	-	0.086
HCM Control Delay (s)	-	-	-	13
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.3

When Not to Consider Exclusive Right-Turn Lanes

- Dense or built-out corridors with limited space
- Right-turn lane that would negatively impact pedestrians or bicyclists
- Vehicular movements from driveways or median openings that cross the right-turn lane resulting in multiple threat crashes
- Context classifications C2T, C4, C5, or C6

When Exclusive Right-Turn Lanes are Beneficial

There are instances when adding an exclusive right-turn lane for unsignalized driveways are beneficial to traffic operations and safety. **Table 27** provides some guidance for this situation based on the speed limit of the roadway and how many right turns occur per hour. Locations where the Auto and Truck Modal Emphasis is "High" may be appropriate for consideration of Exclusive Right Turn Lanes.

Table 27 – Recommended Guidelines for Exclusive Right-Turn Lanes to Unsignalized Driveway¹⁰

Roadway Posted Speed Limit	Number of Right Turns Per Hour
45 mph or less	80 – 125 ¹
Over 45 mph	35 – 55 ²
Note: A posted speed limit of 45 mph may be used with these thresholds if the operating speeds are known to be over 45 mph during the time of peak right turn demand.	
Note on traffic projections: Projecting turning volumes is, at best, a knowledgeable estimate. Keep this in mind especially if the projections of right turns are close to meeting the guidelines. In that case, consider requiring the turn lane.	
¹ The lower threshold of 80 right-turn vehicles per hour would be most used for higher volume (greater than 600 vehicles per hour, per lane in one direction on the major roadway) or two-lane roads where lateral movement is restricted. The 125 right-turn vehicles per hour upper threshold would be most appropriate on lower volume roadways, multilane highways, or driveways with a large entry radius (50 feet or greater).	
² The lower threshold of 35 right-turn vehicles per hour would be most appropriately used on higher volume two-lane roadways where lateral movement is restricted. The 55 right-turn vehicles per hour upper threshold would be most appropriate on lower volume roadways, multilane highways, or driveways with large entry radius (50 feet or greater).	

Source: NCHRP Report 420 (Impacts of Access Management Techniques)

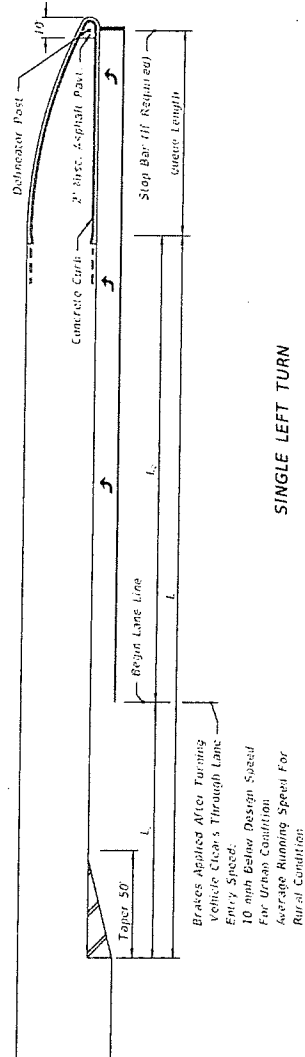
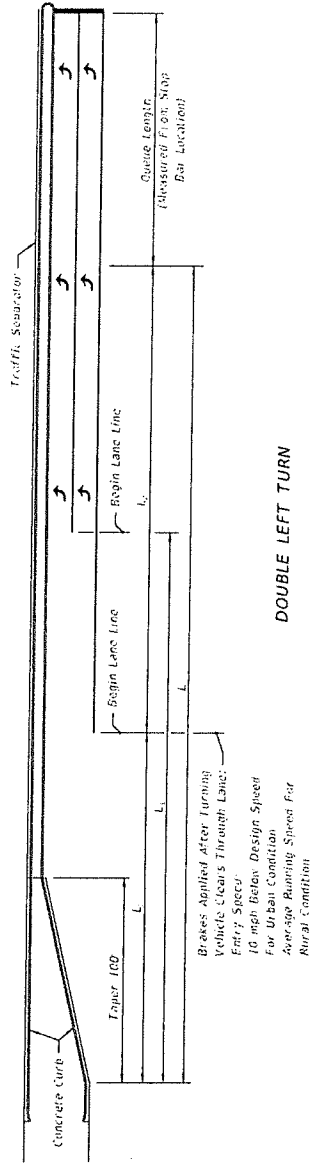
These recommendations are primarily based on the research done in NCHRP Report 420, Impacts of Access Management Techniques, Chapter 4 – Unsignalized Access Spacing (Technique 1B), and Use of Speed Differential as a Measure to Evaluate the Need for Right-Turn Deceleration Lane at Unsignalized Intersections.

In the *NCHRP Report 420*, the observed high-speed roads, 30 to 40 right-turn vehicles per hour caused evasive maneuvers on 5 - 10 percent of the following through vehicles. For lower speed roadways, 80 to 110 right-turn vehicles caused 15 - 20 percent of the following through vehicles to make evasive maneuvers. The choice of acceptable percentages of through vehicles impacted is a decision based on reasonable expectations of the different roadways.

In this study, by modeling speed differentials, a better understanding of the impacts of through volume and driveway radius was discovered.

¹⁰ May not be appropriate for signalized locations where signal phasing plays an important role in determining the need for right turn lanes.

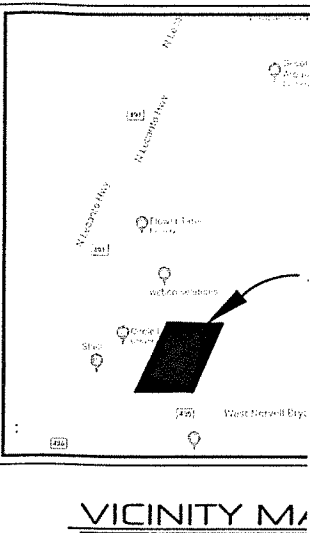
MEDIAN TURN LANES MINIMUM DECELERATION LENGTHS



MEDIAN TURN LANES									
URBAN CONDITIONS					RURAL CONDITIONS				
Design Speed (mph)	Entry Speed (mph)	Clearance Distance L (ft.)	Brake To Stop Distance L _s (ft.)	Total Decel. Distance L _t (ft.)	Clearance Distance L _c (ft.)	Brake To Stop Distance L _s (ft.)	Total Decel. Distance L _t (ft.)	Clearance Distance L _c (ft.)	Clearance Distance L _c (ft.)
35	25	70	75	145	110	—	—	—	—
40	30	80	75	155	120	—	—	—	—
45	35	85	100	185	135	—	—	—	—
50	40/44	105	135	240	160	185	290	290	290
55	48	125	—	—	—	225	350	350	350
60	52	145	—	—	—	260	405	405	405
65	55	170	—	—	—	290	460	460	460

NOT TO SCALE

EXHIBIT 212-1
01/01/2018



COUNTY ROAD 486 / WEST NORVELL BRYANT HIGHWAY
 ASPHALT ROAD WIDTH VARIES
 160' RIGHT-OF-WAY

Land Development Div

NOTE: THE PREPARATION OF THIS SITE PLAN IS BASED UPON INFORMATION READILY AVAILABLE DURING THE DILIGENCE PROCESS AND SHOULD NOT BE RELIED UPON FOR ZONING ENTITLEMENTS



V-22-01



Civilogistix for Dinkins & Dinkins LLC



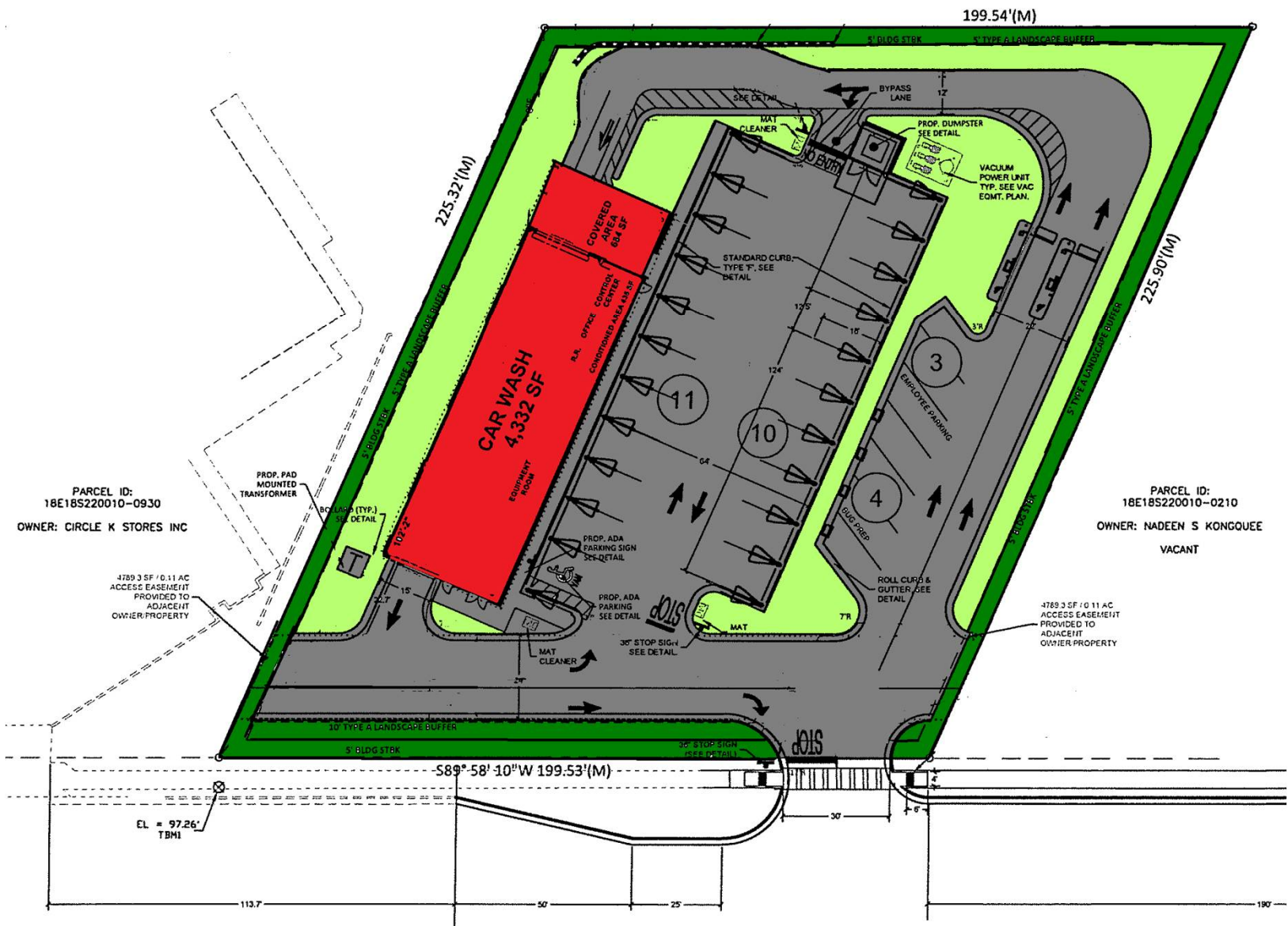


Attachment: PDC Planner pp (19823 : V-22-01 Civilogistix for Dinkins & Dinkins, LLC)



Attachment: PDC Planner pp (19823 : V-22-01 Civilogistix for Dinkins & Dinkins, LLC)

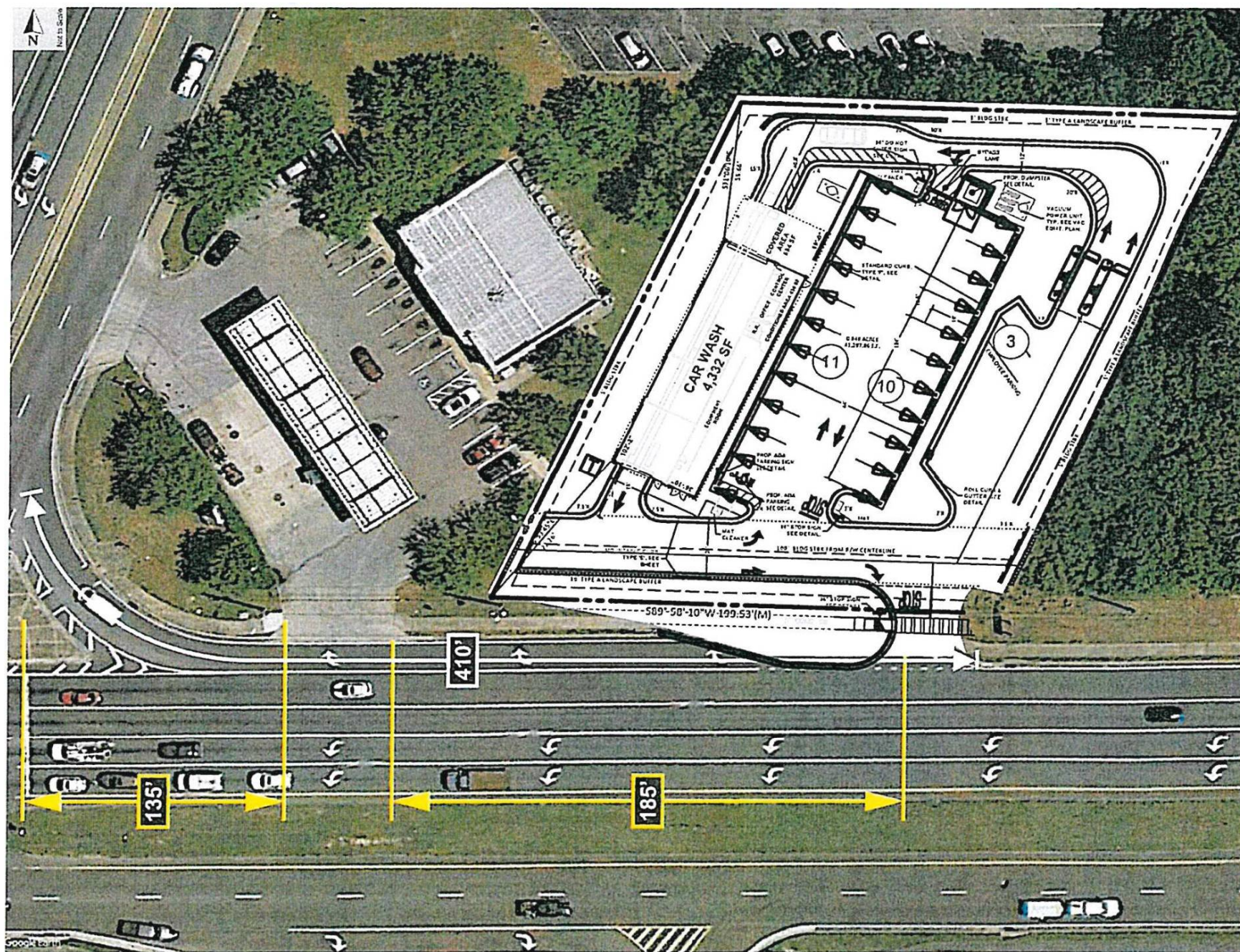




IS
CAR WASH
4,332 SF

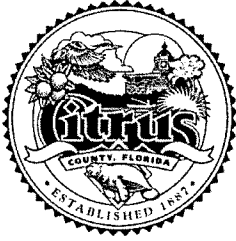
COUNTY ROAD 486 / WEST NORVELL BRYANT HIGH

ASPHALT ROAD WIDTH VARIES
160' RIGHT-OF-WAY



Access Spacing

Attachment: PDC Planner pp (19823 : V-22-01 Civilogistix for Dinkins & Dinkins, LLC)



PM2-21-167

**DEPARTMENT OF GROWTH MANAGEMENT
LAND DEVELOPMENT DIVISION
STAFF FINDINGS REPORT
TO THE
PLANNING AND DEVELOPMENT COMMISSION**

VARIANCE APPLICATION NO. – V-22-01 Civilogistix for Dinkins & Dinkins, LLC

DATE: December 22, 2021

PREPARED BY: Joanna L. Coutu, AICP, Director; Land Development Division
Cynthia L. Jones, E.I., Engineer I; Engineering Division

VARIANCE REQUESTED	This request is a Variance from the Citrus County Land Development Code (LDC) to allow for the construction of a new non-residential driveway apron having less than the required 245-foot connection spacing from an adjacent driveway connection, pursuant to Section 7140, <u>Access Management for County Controlled Roadways</u> , and to allow for the construction of the new non-residential driveway apron within a turn lane in the functional area of an intersection, pursuant to Section 7900, <u>Driveway Aprons</u> , of the LDC.
SUBJECT PROPERTIES	<u>Section 22, Township 18 South, Range 18 East</u> ; more specifically, Lot 92 and a portion of Lot 91, Crystal River Country Estates, as recorded in Plat Book 7, Page 151, AK 2914131, which address is known as 2927 W. Norvell Bryant Hwy, Lecanto, Florida. A complete legal description of the property is on file with the Land Development Division.
ACREAGE	Approximately 0.95 acres
LAND USE	GNC, General Commercial District on the Land Use Atlas Map and Future Land Use Map
FLOOD ZONE	According to the Flood Insurance Rate Map (FIRM), the subject property appears to be located in Flood Zone X, as found on Community-Panel Number 12017C0 213D
SURROUNDING AREA	North – Medical office South – CR-486; Convenience store with gas pumps, fast food restaurant East – Vacant Commercial West – Convenience store with gas pumps The subject property is a vacant commercial lot. See attached map for a complete graphic description of the characteristics of the surrounding area.

Attachment: PDC Staff Report (19823 : V-22-01 Civilogistix for Dinkins & Dinkins, LLC)

BACKGROUND AND ANALYSIS:

The subject property is just under one acre in size and contains a billboard but is otherwise vacant with trees. A car wash is proposed for the site, with access to the CR-486 (W. Norvell Bryant Highway) roadway. That roadway serves as a major collector roadway and is just east of the CR-491 (N. Lecanto Highway) intersection.

Following discussion with County staff, the applicant has revised the proposed site plan to meet buffering standards and provide cross-access along CR-486. An approximately 4,332 square foot car wash building is proposed, with a circular access, vacuum/detail stalls, and employee parking.

The driveway apron for the car wash does not meet the LDC separation standards from an existing driveway apron and lies in the functional area of an intersection. These requests are outlined further below.

Consistency with the Comprehensive Plan - All development applications shall demonstrate complete compliance with the Comprehensive Plan. The following policies would appear to be applicable to this request:

Policy 10B.3.12 Frontage roads, access roads, and/or other alternative access systems, along arterial and major collector roadways, shall be required in accordance with Ch. 7 of the Land Development Code. Interconnection of parking lots along a road frontage shall be encouraged. New points of ingress and/or egress shall be limited to these access systems to minimize direct access to the congested roadways.

[Staff note – The site lies on a major collector roadway and is providing an interconnection to the adjacent commercial site to the east and west via cross-access.]

Policy 10B.6.2 Reduce transportation related crashes, injuries and fatalities using current design standards, complete streets design, advanced technologies and education.

[Staff note – The applicant has provided an access analysis to support this request. However, refer to Engineering Division comments below.]

Consistency with the Land Development Code (LDC) - Staff reviewed this application under the standards of Section 7140, Access Management for County Controlled Roadways, and Section 7900, Driveway Aprons, as specified in the LDC. This section notes that the connection spacing for this portion of the Major Collector roadway would be 245', while the application proposes a connection spacing of 185'. This also places the driveway apron into the turn lane in the functional area of the CR-491/CR-486 intersection in violation of Section 7900.

The applicant has submitted an access analysis to address these requests and has noted that the placement of the apron in the turn lane is consistent with other nearby businesses such as Wawa and Wal-Mart along CR-491.

Engineering Division has reviewed the request and the submitted access analysis and cannot support the request, with the following comments:

- The applicant has submitted an access analysis in support of the application. The access analysis compares the proposed turn lane design for their site to the existing turn lane design for the nearby commercial shopping plazas. The length of the nearby shopping plaza turn lanes varies from 185-ft, 240-ft, 270-ft, 318-ft, to 410-ft. We agree that the required turn lane length for this roadway (50 MPH) is 240-feet. The turn lane length would apply to the applicant's driveway as well as the existing convenience store's driveway. The access analysis does not discuss the traffic safety at the convenience store driveway resulting from the existing turn lane length being reduced from 225-feet to 164-feet, which reduction is directly related to the applicant's proposed changes. The traffic safety at the convenience store driveway would be reduced if this application were approved. The access analysis does not provide adequate justification for the Engineering Division to support this request.

The following background information is provided regarding this project:

- On June 8, 2021, a non-residential pre-application meeting was conducted with Civilogistix for the proposed development. The Engineering Division provided access management requirements to the applicant including the driveway separation requirements. See Engineering Division pre-application work sheet attached with the packet.
- Request for administrative approval - Section 7140 allows the applicant to request an administrative reduction of up to 20 percent of the required 245-foot minimum connection spacing if the applicant can demonstrate traffic safety will not be unduly impaired. A maximum 20 percent reduction of the required 245-foot separation would be a 196-foot connection spacing. On August 10, 2021, the applicant sent an e-mail to the Engineering Division requesting administrative approval of a 196.1-foot driveway connection spacing. The Engineering Division replied to the request on August 26, 2021, stating we could not support the request. The reasons cited in the e-mail included that the driveway apron was proposed within the turn lane, which is part of the functional area of the intersection which violates standards of the 2018 Florida Green Book and the 2008 FDOT Driveway Information Guide. See e-mail attached with the packet and FDOT excerpts.
- If a property does not have adequate roadway frontage to install a driveway apron that meets separation standards, the Code provides for access to be provided via a cross access connection. In this case, the non-residential driveway apron would be located on an adjacent property and access would be provided to the subject property via a 20-ft wide cross access connection. The cross-access connection is often provided in the form of an interconnected parking lot between properties. In the August 26, 2021 e-mail, the Engineering Division provided the applicant with contact information for the eastern property owner. As of the writing of this report, the applicant has not provided any documentation demonstrating their attempt to contact the adjacent property owner to gain access via cross-access.
- Following the pre-application meeting, the Engineering Division corresponded with the applicant regarding various site plan proposals, many of which did not meet driveway separation requirements.

- On September 10, 2021, the applicant e-mailed a preliminary site plan to the Engineering Division and asked for review comments. The preliminary site plan included a driveway apron with a 248-ft separation from the convenience store driveway, which placed it outside the functional area of the intersection. The driveway apron was located on the adjacent eastern property and connected to the subject property via cross-access. A cross-access connection to the convenience store parking lot was also proposed. The plan was reviewed by the Engineering Division and found to be acceptable. It is unclear why this plan was not proposed for permitting.
- Section 7110.E states that if a project cannot gain access to an abutting roadway due to access management standards, that access should be obtained via cross-access. If the developer is unable to obtain access via cross-access, the LDC allows for an interim driveway access to be granted. An interim driveway is approved with the condition that the interim driveway is to be removed at the developer's expense when an access that meets standards is available. A template for the "Temporary Driveway Agreement and Restrictive Covenants" is attached for reference.

PROPOSED FINDINGS OF FACT

Pursuant to Section 4400, Variances, of the Citrus County Land Development Code (LDC), approval of a petition for variance from the provisions and requirements of this code shall be granted by the PDC only if all of the following are positive:

1. ***Special conditions and circumstances do exist which are peculiar to the land, structure, or building involved and which are not applicable to land, structures, or buildings in the same land use district.*** The applicant has noted that the site only has approximately 200' of frontage on CR-486, which limits the available options for access.
2. ***The special conditions and circumstances do not result from the actions of the applicants.*** The lot width and its reduced separation from CR-491 and adjacent driveway(s), are existing.
3. ***A granting of the variance requested will confer on the applicant any special privilege that is denied by this code to other lands, buildings, or structures in the same land use district.*** This variance request is inconsistent with the LDC and the Comprehensive Plan, which are referenced in this staff report. The applicant's proposal will result in a reduction of the turn lane length for the convenience store which lowers traffic safety for the convenience store access.
4. ***Literal interpretation of the provisions of this code would not deprive the applicant of rights commonly enjoyed by other similarly situated properties and would not work unnecessary and undue hardship on the applicant.*** The applicant has proposed a current design for the subject property which appears to reduce traffic safety for the convenience store driveway, while an earlier proposal connecting via cross-access to the east was acceptable.

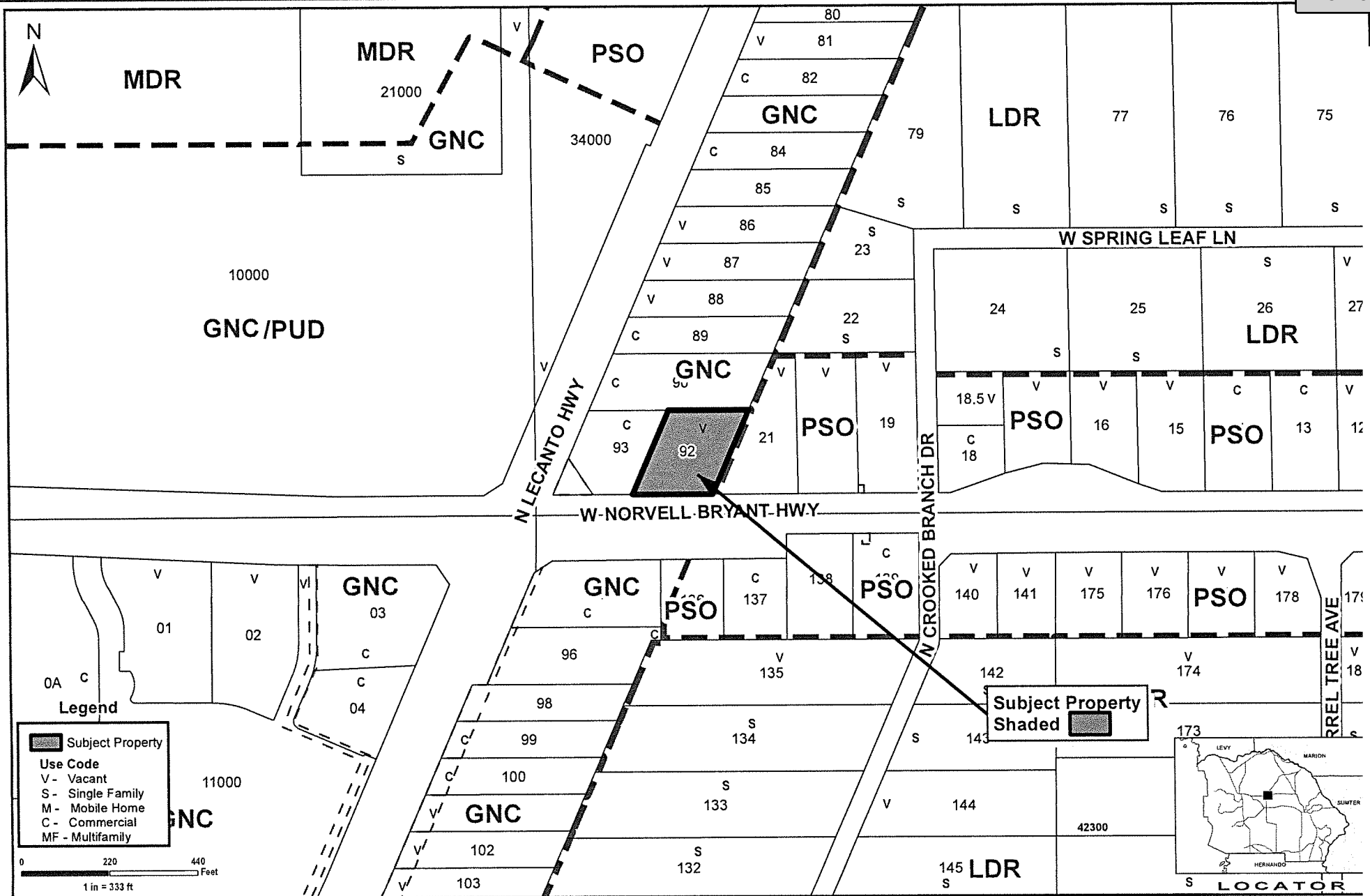
5. ***The variance granted is not the minimum variance that will make possible the reasonable development and/or use of the land, building, or structure.*** The site has a reduced lot width for commercial development and has proposed a cross-access that would help to alleviate connection constraints. The site can connect via the adjacent parcel to the east while still meeting LDC standards, but if access solely to this site is desired, then a Temporary Driveway Agreement may be applicable (as outlined in this report).
6. ***The granting of the variance will not be in harmony with the general intent and purpose of this code and will be injurious to the area involved or otherwise detrimental to the public welfare.*** The Engineering Division has noted that the proposal would be detrimental to traffic safety for the adjacent convenience store.
7. ***There will be full compliance with any additional conditions and safeguards which the PDC may prescribe, including but not limited to reasonable time limits within which the action for which the variance is required shall be begun or completed, or both.*** Where standards are not specified herein, the Citrus County Land Development Code standards (or current code standards) will apply. In addition, noncompliance with or any violation of the above referenced conditions, as may be determined by Citrus County Compliance may, in addition to any penalty imposed by Code Compliance and subsequent to the procedural requirements set forth in Section 1800 of the Citrus County Land Development Code being satisfied, render this Variance null, void, and of no force or effect.
8. ***Granting the variance will deviate from the clear intent of the adopted Comprehensive Plan.*** The application is inconsistent with the intent of the Comprehensive Plan, as discussed in this staff report.

If the application is approved, the following conditions are suggested:

1. The non-residential driveway apron shall be located as shown on the site plan date-stamped received November 30, 2021 by the Land Development Division.
2. A stop sign and stop bar must be provided at the proposed driveway on W. Norvell Bryant Highway.
3. A right-of-way utilization permit will be required prior to any work being conducted in the right-of-way of W. Norvell Bryant Highway.
4. The non-residential driveway shall be installed as an interim driveway and a "Temporary Driveway Agreement and Restrictive Covenants" approved by the BCC.

JLC/CLJ/cb

Attachment: PDC Staff Report (19823 : V-22-01 Civilogistix for Dinkins & Dinkins, LLC)



Application #: V-22-01

Applicant: Steve Hocutt and Jonathan Buttram for Danny York

Proposal: Driveway separation, driveway in a turn lane.

Location: 2927 W. Norvell Bryant Hwy, Lecanto, Florida

S-T-R - 22-18-18 SW

Land Use Atlas: GNC, General Commercial District

Planner Initials: *JK* Date: *12/1/21*

Geographic Information Systems

Prepared By: William Braunsch

Date: December 8, 2021

Source: Enterprise Geodatabase

Map Number: WB0000742

Cynthia P. Skeithorn

Director

The information is to be used for general reference only. The Citrus County Geographic Information System Division makes every effort to provide current and accurate information. However, all information provided must be independently verified by the user.

Citrus County shall not be liable for any errors, omissions, or delays in any data or information made the use of this information, including but not limited to, damages or losses caused by reliance upon the accuracy or timeliness of the information and its use, storage, or distribution of this material.

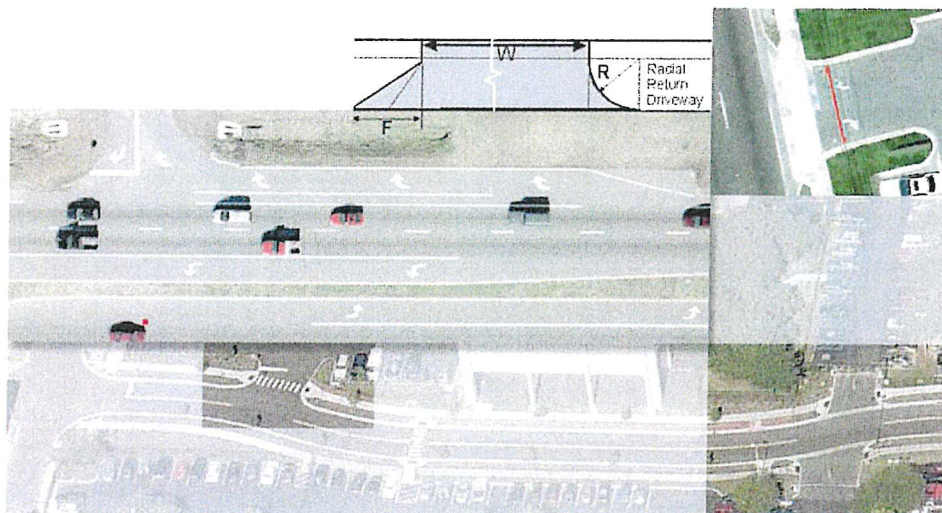


Driveway Information Guide

FLORIDA DEPARTMENT OF TRANSPORTATION 2008

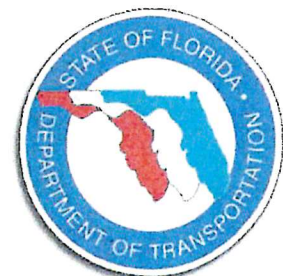
The purpose of this document is to guide the professional through the existing rules, standards and current accepted practice. The background behind the guidelines is also provided.

Unless stated otherwise or referenced, this is not a set of Department Standards but is a comprehensive guide to assist the professional in making better decisions for driveway placement and design.



Florida Department of Transportation
Systems Planning Office
605 Suwannee St. - Station 19
Tallahassee, Florida 32399
850-414-4900

www.dot.state.fl.us/planning

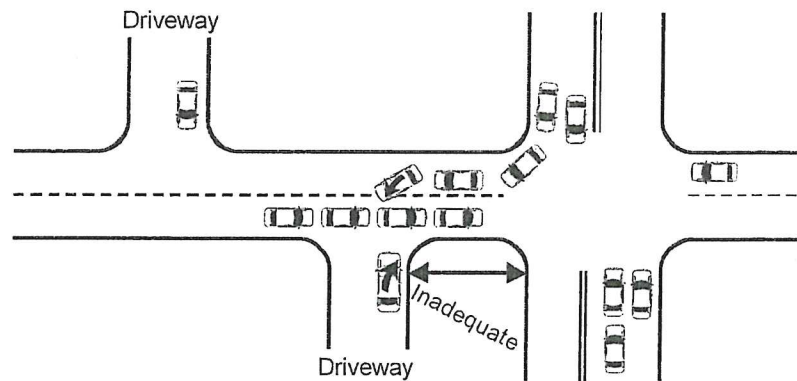


9.2

DRIVEWAYS NEAR INTERSECTIONS (CORNER CLEARANCE)

Driveways and median openings close to a major intersection create a situation where the driver must negotiate conflicts close to an area that has been designed to manage large volumes of traffic. This situation can lead to poor safety and operational conditions. Proper driveway placement can help alleviate this problem. Proper driveway placement can also help the business operators, because traffic queues can become so long that traffic exiting driveways may be blocked for long periods of time.

Exhibit 57
Corner Clearance



The **AASHTO Green Book** cautions that driveways should not be placed too close to intersections.



“... driveways should not be located within the functional area or influence area of an adjacent driveway. The functional area extends both upstream and downstream from the physical intersection area and includes the longitudinal limits of auxiliary lanes.”

(AASHTO Green Book)

9.3

OTHER GENERAL DRIVEWAY LOCATION CONSIDERATIONS

Even though the determination of the full “functional area” of an intersection may be debatable, here are some important points to help in the driveway placement decisions near intersections.

Use the established driveway spacing standards as much as possible, for the classification of the roadway you are designing for. These standards are in **Administrative Rule Chapter 14-97** and will be known by the Department’s responsible Permitting, Planning, or Design staff person.

Where minimum corner clearance found in Rule 14-97.003(1)(i) cannot be met, due to specific site conditions, you should at least try and get 125 to 230 feet of corner clearance. In these cases it is most important to prohibit (or limit) left turns from these driveway locations.

Driveways should be as far as possible from major intersections

Driveways should be as far as possible from major intersections. This allows for the best operations of traffic exiting the driveway and positioning itself in the intersection. It also allows the driveway to operate better because long queues are not blocking the driveway.

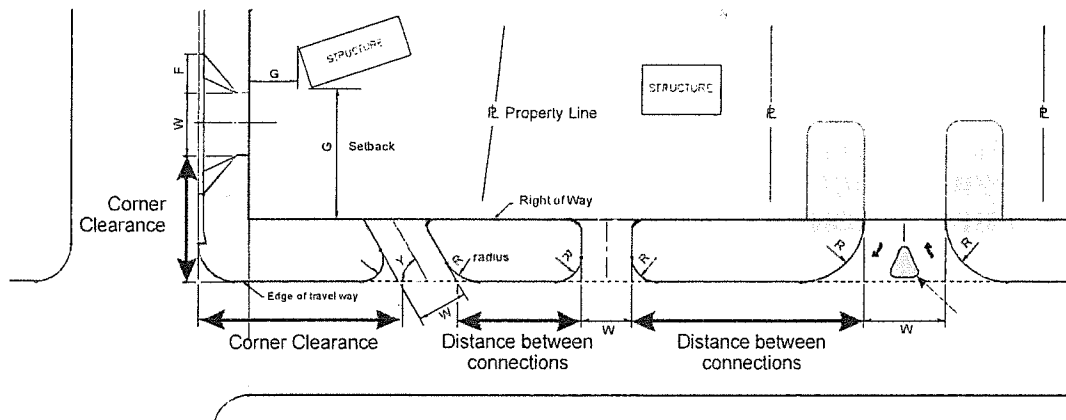
Corner clearance is measured like driveway separation, from the closest edge of the driveway connection to the closest edge of the parallel roadway.

Exhibit 58
Connection Spacing and
Corner Clearance

Access Class <i>Rule 14-97</i>	Connection Spacing (Feet)	
	>45mph	= or <45mph
1	N/A – Freeways	N/A – Freeways
2	1,320	660
3	660	440
4	660	440
5	440	245
6	440	245
7	125	

Exhibit 59
Driveway Separation and
Corner Clearance

Exhibit 59 is adapted from the Standard Index 515 and shows where the driveway connections are skewed, the distance would be measured from a projected edge of pavement.



Locations of access points near structures, decision points, or the termination of street or highway lighting should be avoided.

Driveways should not be placed within the influence zone of intersections or other points that would tend to produce traffic conflict.

C.8.b.2 Spacing of Access Points

The spacing of access points should be adequate to prevent conflict or mutual interference of traffic flow.

Separation of entrance and exit ramps should be sufficient to provide adequate distance for required weaving maneuvers.

Adequate spacing between access and decision points is necessary to avoid burdening the driver with the need for rapid decisions or maneuvers.

Frequent median openings should be avoided.

The use of a frontage road or other auxiliary roadways is recommended on arterials and higher classifications where the need for direct driveway or minor road access is frequent.

C.8.b.3 Restrictions of Maneuvers

Where feasible, the number and type of permitted maneuvers (crossing, turning slowing, etc.) should be restricted.

The restriction of crossing maneuvers may be accomplished by the use of grade separations and continuous raised medians.

The restriction of left turns is achieved most effectively by continuous medians.

Channelization should be considered for the purposes of guiding traffic flow and reducing vehicle conflicts.

This Instrument Prepared by
 And Return to:
 Denise A. Dymond Lyn
 Count Attorney
 110 N. Apopka Ave.
 Inverness, FL 34450
 (352) 341-6579

TEMPORARY DRIVEWAY AGREEMENT
and RESTRICTIVE COVENANT

This TEMPORARY DRIVEWAY AGREEMENT dated this _____ day of _____, 2021, between **APPLICANT**, APPLICANT ADDRESS, (Property Owner), is the owner of the property located at PROPERTY ADDRESS and **CITRUS COUNTY, FLORIDA**, 3600 W. Sovereign Path, Lecanto, Florida 34461, (County).

WITNESSETH:

Whereas, Property Owner has applied for a development order to improve the property at PROPERTY ADDRESS and legally described as:

[(Insert Legal) _____]

Whereas, County's access management standards require Property Owner to gain access through a cross access connection with adjoining property owners because Property Owner cannot meet the current right of way connection spacing standards; and,

Whereas, as a condition of the development order approval, Property Owner is required to enter into an agreement with adjoining property owners allowing traffic to flow between the properties and onto the abutting principal or minor arterial or major collector road; and,

Whereas, Property Owner has been unable to secure such access with the adjoining property owners after demonstrating attempts to secure such; and,

Whereas, County is agreeable to allowing, as a condition of the issuance of the development order, Property Owner to install a temporary driveway connection pursuant to the terms and conditions of this Agreement without prejudice to the County's right to have the temporary driveway connection removed at a later date at the Property Owner's expense; and,

Whereas, Property Owner understands and agrees that at any time the County may require Property Owner to remove the driveway connection from the County's right-of-way.

Now Therefore, it is hereby agreed between the parties as follows:

Attachment: Temp Driveway Agreement blank form (19823 : V-22-01 Civilogistix for Dinkins & Dinkins, LLC)

1. The above recitals are true and correct and form an integral part of this Agreement.

2. The County agrees to allow, as a condition of the Property Owners Development Order, Property Owner to construct a temporary driveway connection to the County's right-of-way at the Property Owner's expense. Such connection shall be constructed to all current County standards.

3. Property Owner agrees that when either of the adjoining properties to the East or West constructs cross access connections to Property Owner's property, Property Owner shall remove, at Property Owner's sole expense, the temporary driveway connection and shall restore the County's right-of-way to its predevelopment condition including regrading and stabilizing pursuant to current County Land Development Code Standards. Property Owner shall complete such removal no later than thirty (30) days following its connection to the neighboring cross access or upon notification from the County to effect such removal, whichever is sooner. Property Owner agrees that if Property Owner fails to make such removal, the County may remove such connection and may impose the removal costs and expenses as a lien against the property.

4. Property Owner agrees that cross access is required to the property to the North and to the property to the South.

5. Property Owner agrees Property Owner is entering into this agreement on behalf of Property Owner and Property Owner's successors in interest.

6. Property Owner agrees that at such time as Property Owner connects to either adjoining property by way of a cross access connection, Property Owner will execute a cross access easement with the adjoining property owners and will execute any and all necessary documents to create the cross access easement. The easement shall be binding on and shall inure to the benefit of the property owners, their respective heirs, successors or assigns.

7. Property Owner agrees that the encroachment of the driveway connection into the County right-of-way is for a permissive use only and that the placing of the connection in the right-of-way shall not operate to create or vest any property rights in Property Owner.

8. This Agreement shall be recorded and the covenants shall run with the land and subsequent purchasers of the above described property shall be bound by the terms and agreements herein.

9. This Agreement shall inure to the benefit of and be binding upon the respective heirs, personal representatives, successors and assigns of the parties hereto.

APPLICANT_____
Signature of Witness (1)_____
Printed Name of Witness (1)_____
Signature of Witness (2)_____
Printed Name of Witness (2)STATE OF FLORIDA
COUNTY OF _____BY: _____
APPLICANT NAME, TITLE

I HEREBY CERTIFY that on this day, before me, an officer duly authorized in the State and County aforesaid to take acknowledgements, personally appeared APPLICANT, as TITLE, who is personally known to me or who has produced _____ as identification.

WITNESS my hand and official seal this the _____ day of _____, 2021.

NOTARY PUBLIC-State of FloridaCitrus County, Florida, a Political
Subdivision of the State of Florida

ATTEST:

Angela Vick, ClerkBY: _____
Scott Carnahan, Chairman

DATE: _____

APPROVED AS TO FORM FOR THE
RELIANCE OF CITRUS COUNTY ONLY:

Denise A. Dymond Lyn, County Attorney

Cynthia L. Jones

From: Steve Hocutt - civilogistix <steve@civilogistix.com>
Sent: Friday, September 10, 2021 1:53 PM
To: Cynthia L. Jones
Cc: Brian C. Kauffman
Subject: RE: [EXTERNAL]2927 West Norvell Bryant Highway, Lecanto FL
Attachments: 21209 C201 09-09-21.pdf

Good Afternoon,

Please advise if the attached preliminary site plan is acceptable with respect to the drive entrance pushed further to the East and located on the adjacent property with permission from the property owner. I have located the drive about 248' from the gas station entrance located near the main intersection.

Thank You,

Steve Hocutt

Civil Engineer

civilOGISTIX

(404)-594-4403 -Office

500 Sun Valley Dr, Ste H3

Roswell, GA 30076

From: Cynthia L. Jones <cynthia.jones@citrusbocc.com>
Sent: Thursday, August 26, 2021 8:22 AM
To: Steve Hocutt - civilogistix <steve@civilogistix.com>
Cc: Brian C. Kauffman <Brian.Kauffman@citrusbocc.com>
Subject: RE: [EXTERNAL]2927 West Norvell Bryant Highway, Lecanto FL

Steve,

I had a chance to confer with Engineering Division staff regarding your latest proposal. Your proposal is to request an administrative reduction of the driveway separation from 245-ft to 196.1-ft. This would place the driveway apron within the turn lane, which is part of the functional area of the intersection. This request is in violation of standards of the 2018 Florida Green Book and the 2008 FDOT Driveway Information Guide. The Director of Engineering would not be able to support approval of this administrative reduction request. If you want to proceed with this request, it would require the submittal of a public hearing variance to request approval of the 196.1-ft driveway separation. The Engineering Division, Department of Public Works would not be able to support this request.

Based on your proposed design it appears that you are able to gain access to the site via cross access connection to the gas station. Engineering Division would be able to approve your project with access via the cross access connection to the gas station and cross access to the eastern property line, with no driveway connection to the road. Since you are able to obtain access via cross access, you would not be able to qualify for an interim driveway apron as we discussed.

As we had discussed, we would suggest that you contact the adjacent land owner Nadeen Kongquee to obtain permission to place a driveway apron at the 245-ft spacing via a cross access connection across her property. You may want to let her know that access management standards would require that commercial development of her lot include

Cynthia L. Jones

From: Cynthia L. Jones <cynthia.jones@citrusbocc.com>
Sent: Thursday, August 26, 2021 8:22 AM
To: Steve Hocutt - civilogistix
Cc: Brian C. Kauffman
Subject: RE: [EXTERNAL]2927 West Norvell Bryant Highway, Lecanto FL

Steve,

I had a chance to confer with Engineering Division staff regarding your latest proposal. Your proposal is to request an administrative reduction of the driveway separation from 245-ft to 196.1-ft. This would place the driveway apron within the turn lane, which is part of the functional area of the intersection. This request is in violation of standards of the 2018 Florida Green Book and the 2008 FDOT Driveway Information Guide. The Director of Engineering would not be able to support approval of this administrative reduction request. If you want to proceed with this request, it would require the submittal of a public hearing variance to request approval of the 196.1-ft driveway separation. The Engineering Division, Department of Public Works would not be able to support this request.

Based on your proposed design it appears that you are able to gain access to the site via cross access connection to the gas station. Engineering Division would be able to approve your project with access via the cross access connection to the gas station and cross access to the eastern property line, with no driveway connection to the road. Since you are able to obtain access via cross access, you would not be able to qualify for an interim driveway apron as we discussed.

As we had discussed, we would suggest that you contact the adjacent land owner Nadeen Kongquee to obtain permission to place a driveway apron at the 245-ft spacing via a cross access connection across her property. You may want to let her know that access management standards would require that commercial development of her lot include the placement of a paved cross access connection (minimum 20-ft wide) and driveway apron meeting spacing standards. The placement of a cross access connection and driveway apron on her property may make it more valuable at a time when commercial development is on the rise. Please feel free to provide my number to her and I would be glad to speak with her regarding this subject.

Here is some contact information for Nadeen Kongquee that is publicly available.

From the Property Appraiser's office:

Attachment: Emails between Eng Div and applicant (19823 : V-22-01 Civilogistix for Dinkins & Dinkins, LLC)

Altkey: 1489491

Parcel ID: 18E18S220010 0210

KONGQUEE NADEEN S

2895 W NORVELL BRYANT HWY, LECANTO

Citrus County Property Appraiser, Cregg E. Dalton

PC Code 1000 - VACANT COMM
 Bldg Counts Res 0 / MH 0 / Comm 0
 Nbhd 0286 - HWY 491 E TO OTTAWA AVE
 Tax District 000X - WITHLACOOCHEE RIVER BASIN
 Subdivision 000565 - CRYSTAL RIVER COUNTRY ESTATES
 Short Legal CRYSTAL RIVER CTRY ESTS PB 7 PG 147 LOT 21
 Est. Parcel Sqft 47,415
 Est. Parcel Acres 1.09
 Map SC-TW-RG 22-18S-18E

Mailing Address

Name KONGQUEE NADEEN S
 Mailing Address 831 E CHARLESTON CT
 HERNANDO FL 34442

All Owners

Name	Owner Type
KONGQUEE NADEEN S	IN - Individual

Her phone number off the internet:

Full Name NADEEN KONGQUEE
Gender Female
Practice Address 831 E Charleston Ct
 Hernando
 FL 34442-9313
 US
Practice Telephone 13522121833
Mailing Address 831 E Charleston Ct
 Hernando
 FL 34442-9313
 US
Mailing Telephone 13522121833

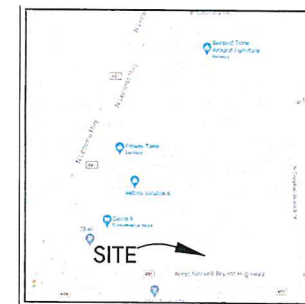
Sincerely,

Cynthia L. Jones, E.I.
Engineer I
Engineering Division
Department of Public Works
Citrus County Board of County Commissioners
3600 W. Sovereign Path, Suite 241
Lecanto, FL 34461

Ph: (352) 527-5247

Please Note: Florida has a very broad Public Records Law. Most written communications to or from State and Local Officials regarding State or Local business are public records available to the public and media upon request. Your email communications may therefore be subject to public disclosure.

Attachment: Emails between Eng Div and applicant (19823 : V-22-01 Civilogistix for Dinkins & Dinkins, LLC)



VICINITY MAP

Level 1		Existing/Req'	Proposed
Zoning		CNC	-
Use Allowed		Yes	-
Use Specific Req'		N/A	-
Flood Zone		No	-
National Wetlands Inventory		No	-
Overly District		No	-
Total Site Area		-	3,648 S.F. 0.93 AC
Building Setbacks			
Major	100' from R/W CL	N/A	100' from R/W CL
Minor		N/A	N/A
Side	5'		5'
Rear	5'		5'
Landscape Strips			
Major	6'		6'
Minor	N/A		N/A
Side	6'		6'
Land Use Buffers		TBD	TBD
Environmental Buffers		TBD	TBD
Level 2		Existing/Req'	Proposed
Parking Ratio			
Parking Spaces			
Parking Size			
Compact Parking %			
Loading Space			
LS - Open Space			
Minimum Lot Size			
Minimum Frontage			
Adjacent Zoning North			
Adjacent Zoning South			
Adjacent Zoning East			
Adjacent Zoning West			
Water Sewer Proximity			
Overhead Intermentment			

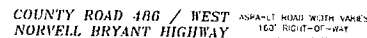
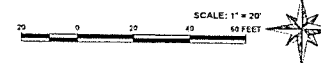
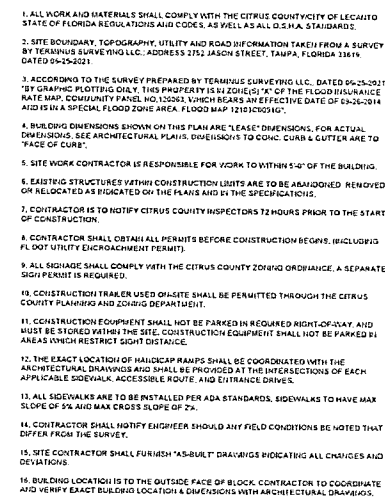
PRELIMINARY SITE PLAN

Norvell Blvd CCW

C20

2120

July 7th, 2011



	DRIVEWAY THROAT DISTANCE	
	Distance Required of feet	Distance Required of feet
Rank Three Tree	Within Right Turn Lane	Without A Right Turn Lane
50 or less	15	30
51 to 99	25	50
100 or more	35	75

NOTE: SITE WILL HAVE ONE CAR WASH LANE WITH TWO PAY STATIONS

NOTE: THE PREPARATION OF THIS SITE PLAN IS BASED UPON INFORMATION READILY AVAILABLE DURING THE DILIGENCE PROCESS AND SHOULD NOT BE RELIED UPON FOR ZONING ENTITLEMENTS. ZONING, LEGAL ENTITLEMENTS AND AN ALTA SURVEY SHOULD BE REVIEWED BY AN ATTORNEY.

Florida Department of Transportation



Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways

(Commonly known as the Florida Greenbook)

<https://www.fdot.gov/roadway>

FDOT Office
Office of Design
Topic # 625-000-015

Date of Publication
2018 Edition

Attachment: Emails between Eng Div and applicant (19823 : V-22-01 Civilogistix for Dinkins & Dinkins, LLC)

Driveways should be as far as possible from major intersections

Where minimum corner clearance found in Rule 14-97.003(1)(i) cannot be met, due to specific site conditions, you should at least try and get 125 to 230 feet of corner clearance. In these cases it is most important to prohibit (or limit) left turns from these driveway locations.

Driveways should be as far as possible from major intersections. This allows for the best operations of traffic exiting the driveway and positioning itself in the intersection. It also allows the driveway to operate better because long queues are not blocking the driveway.

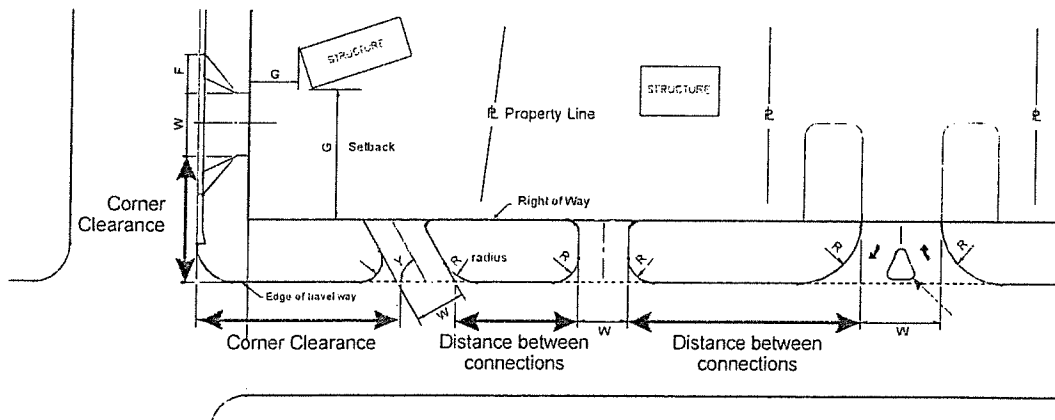
Corner clearance is measured like driveway separation, from the closest edge of the driveway connection to the closest edge of the parallel roadway.

Exhibit 58
Connection Spacing and
Corner Clearance

Access Class <i>Rule 14-97</i>	Connection Spacing (Feet)	
	>45mph	= or <45mph
1	N/A – Freeways	N/A – Freeways
2	1,320	660
3	660	440
4	660	440
5	440	245
6	440	245
7	125	

Exhibit 59
Driveway Separation and
Corner Clearance

Exhibit 59 is adapted from the Standard Index 515 and shows where the driveway connections are skewed, the distance would be measured from a projected edge of pavement.



C.7.j.4.(c) End Treatment

The termini of guardrails, bridge railings, abutments, and other structures should be constructed to protect vehicles and their occupants from serious impact. Requirements for end treatment of structures are given in **Chapter 4 - Roadside Design**.

C.8 Access Control

All new facilities (and existing when possible) should have some degree of access control, since each point of access produces a traffic conflict. The control of access is one of the most effective, efficient, and economical methods for improving the capacity and safety characteristics of streets and highways. The reduction of the frequency of access points and the restriction of turning and crossing maneuvers, which should be primary objectives, is accomplished more effectively by the design of the roadway geometry than by the use of traffic control devices. Design criteria for access points are presented under the general requirements for intersection design.

Additional information on access management can be found in *Rule Chapter 14-97 State Highway System Access Control Classification System, Florida Administrative Code*. The *Department's Driveway Information Guide (2008)* and *Median Handbook (2014)* provide further information on designing roadways and connections to support access management.

C.8.a Justification

The justification for control of access should be based on several factors, including safety, capacity, economics, and aesthetics.

C.8.b General Criteria

C.8.b.1 Location of Access Points

All access locations should have adequate sight distance available for the safe execution of entrance, exit, and crossing maneuvers.

Pre-Application Meeting Engineering Review

DATE: 06-08-21 9am PROJECT NAME: Carwash APPLICANT: Jesus Estrada / Civilogistix
 SEC 22 TWP 18S RNG 18E LOT 92 & 92 BLOCK/PARCEL N/A SUB CRYSTAL RIVER COUNTRY ESTATES
 SITE ADDRESS 2927 W Norvell Bryant Hwy, Lecanto FL AK 2914131
 PROPOSED USE: Carwash
 ROADWAY CLASSIFICATION: Minor Arterial HYDROLOGICAL BASIN: ☐ OPEN ☒ CLOSED WATERSHED: Crystal River



Citrus County Engineering Division: Engineer Review
3600 West Sovereign Path, Suite 241, Lecanto, Florida 34461
Telephone (352) 527-5446; FAX (352) 527-5482

Visit our web site at www.citrusbocc.com, and then click on "Departments" and then "Growth Management" to find "Land Development" and then scroll down to click on bulleted information, including the Land Development Code (LDC).

✓	LDC Section	Non-residential Development Standards – must be shown on site plan together with supporting documentation	
		☒ Indicates applicability	
	6070	Exempt Redevelopment Sites (Still requires pre-treatment of new area per De Minimis Sec. 6080)	
	6080	De Minimis Drainage: Project may meet the criteria to apply De Minimis Drainage formula	
	6090	Exempt from Stormwater Review	
	6200	Infrastructure Design Criteria	
✓	6300	Nonresidential Design Criteria	
✓	6310	SWERP General or ERP Individual Obtained: No Stormwater Review Required Swale, Pipe and Inlet capacities will be reviewed by County	
	6310	FDOT Drainage Permit Obtained: No Stormwater review for all of Project or part of Project (included in FDOT Permit)	
	6310.A.8. 7110 I.	Roadway Upgrade	Nonresidential/Commercial development that accesses an unclassified county road shall either upgrade the portion of the roadway to County Roadway standards or provide testing and survey results indication that the roadway meets these requirements
	6310.K.	Flood Plain Compensation	
✓	6320.B.	Water Quality: ☒ one-half (½) inch ☐ three-quarters (¾) inch	
✓	6320.C.	Water Quantity: Design rainfall amounts to be used: ☐ 25 yr/24 hr storm event = 8.64 inches ☒ 100 yr/24 hr storm event = 11.50 inches	

Carwash
2914131

Pre-Application Meeting Engineering Review

06-08-21 9am

✓	LDC Section	Non-residential Development Standards – must be shown on site plan together with supporting documentation ☒ Indicates applicability
✓	6320.D.11.	Number of Soil Borings Required to be Calculated
	6320.G.	Karst Development Requirements
	7110.B.	All streets and Roads Developed to LDC requirements
✓	7130 & 7140	Access Management for County Controlled Roadway: Separation <u>245</u> Feet; Driveway Throat Distance* <u>TBD 30' min</u> Feet; Corner Parcel Access Spacing <u>230</u> feet from corner
	7150	Access Management for State Highway: Separation _____ Feet; Driveway Throat Distance _____ Feet
✓	7190	Auxiliary Lane(s)* (* “Throat Distance” and “Auxiliary Lane” requirements based upon Trip Generation Analysis)
✓	7290.H	Delivery Truck Movement Routing (Not required for vehicles < 2 kips)
✓	7320	Right of Way Permit
✓	7340	Gated Entrances
	7600	Roadway Construction Requirements
✓	7900	Driveway Aprons
NOTES: W. Norvell Bryant Hwy. is a Class 5 Minor Arterial Roadway with a posted speed limit of 50 mph. In accordance with Section 7110.D of the LDC cross access (min 20-ft wide) will be required to be constructed to the east and west lot line. At time of development, provide trip generation rates for the proposed development for throat distance (LDC 7140) and auxiliary lane (LDC 7190). Provide a bypass lane (minimum 12 ft in width) per Section 7170.C.		
Notice to Applicants: This checklist is intended to provide general assistance to the applicant prior to submission of a development project and is non-binding. Comments are based upon the information presented at the pre-application meeting. Changes in this information may result in additional requirements. To expedite the review process, and to avoid delays, please submit all required information at time of application submittal. Applicants are responsible for compliance of their project with the Land Development Code standards and all other applicable standards required by Citrus County ordinances in effect at time of submittal. It is important that the applicant contact the Building Division if there have been changes to the approved plans. Failure to do so may result in a failed inspection(s).		
Applicant's Initials:		Reviewing Agent: Cynthia L. Jones, Engineer I
		Hansen Entry

Attachment: Pre-Application Meeting comments from Engineering (19823 : V-22-01 Civilogistix for Dinkins)

civilOGISTIX

Steve Hocutt
500 Sun Valley Dr, Ste H3
Roswell, GA 30076

01/13/21

All participants- Citrus County PDC Agenda Meeting
Lecanto, FL 34461

Re: Variance Application V-22-01

To Whom It May Concern,

The proposed development is a Caliber Car Wash to be located at 2927 West Norvell Bryant Highway, Lecanto FL. This development will make a positive contribution through new jobs and aesthetic curb appeal. The subject of the variance request for this vacant lot is centered on securing reasonable and direct access to the property that will allow the freedom and benefit of safe commercial success in the area. It is in the best interest of all parties to allow this freedom to ensure the continued success and tenant stability. The proposed access is similar in nature to the access provided to many other commercial properties in the immediate vicinity.

The variance requested is to reduce the driveway separation distance between the proposed driveway and the non-compliant driveway located to the west. A 16% reduction from 245' to 205' is requested. Reductions of less than 20% are eligible for administrative variance.

Beginning in August 2021, proposed preliminary site plans were sent to Citrus County for consideration. The iteration and progression of site plans through this time will affirm the collaborative effort and dedication of Caliber Car Wash and the design team to ensure a balance of reasonable access and safety. The current and proposed site plan provides considerable improvements to the road and intersection in comparison to the existing infrastructure. There were discussions between Caliber Car Wash and the adjacent neighbor to include them in the improvements through a shared access, but those discussions were not productive despite a sizeable infrastructural benefit they would enjoy at no cost to them. A statement describing the interaction with the adjacent neighbor shared access is listed below along with the progression of the site plan.

STATEMENT:

From: Danny York <dyork@caliber-capital.com>

Sent: Wednesday, December 29, 2021 1:03 PM

To: Dan Brown <dbrown@caliber-capital.com>

Subject: Re: Lecanto CCW Project 21209

Dan,

I reached out to the neighbor who then inserted a real estate broker to handle the communication. I explained what our plan was, explained the benefit of us having a shared driveway, and sent them the proposed site plan. Most importantly, I explained that we would pay for all of the shared infrastructure, so whenever they decided to develop their property, they would save that money. Unfortunately, that was not good enough for them and they said they wanted additional compensation. I stopped communicating with them immediately after that request because it was clear they saw an opportunity to hold us hostage and try to extract money from us even though we were spending money to improve their property. I have not spoken to them since.

Let me know you need anything else.

Thanks,
Danny York
Caliber Capital
727-518-4656

RECEIVED
V-22-01
JAN 13 2023
Land Development Division

SITE PLAN PROGRESSION

1. Preliminary Site Plan 1
2. Preliminary Site Plan 2 - lengthening of the turn lane
3. Preliminary Site Plan 3 – locating the access on adjacent property
4. Preliminary Site Plan 4 – lengthening of turn lane with minor modifications

On November 19, 2021, a conference call was made to Citrus County in regards to the Letter of Sufficiency Determination for the Variance request. As a follow up to the meeting, three items were sent to Citrus County.

- 1.) Civilogistix response to variance meeting
- 2.) 21209 Lecanto Car Wash Access Analysis (prepared by Traffic & Mobility Consultants)
- 3.) Revised site plan that is currently in the Citrus County portal (Variance Submittal 1)

The Variance Exhibit 1 was created as an alternate design in response to advisement and discussions with Traffic Mobility Consultants. In providing the enclosed site plan with traffic study we anticipate our efforts to achieve a safe and improved site area are sufficient to gain your support. We look forward to being a part of the improvement in the community and providing a service to be enjoyed by those visiting and living in the surrounding area.

Best Regards,

Steve Hocutt

steve@civilogistix.com

O: (404) 594-4403

C: (404) 455-6615

RECEIVED
V-22-01
JAN 13 2023

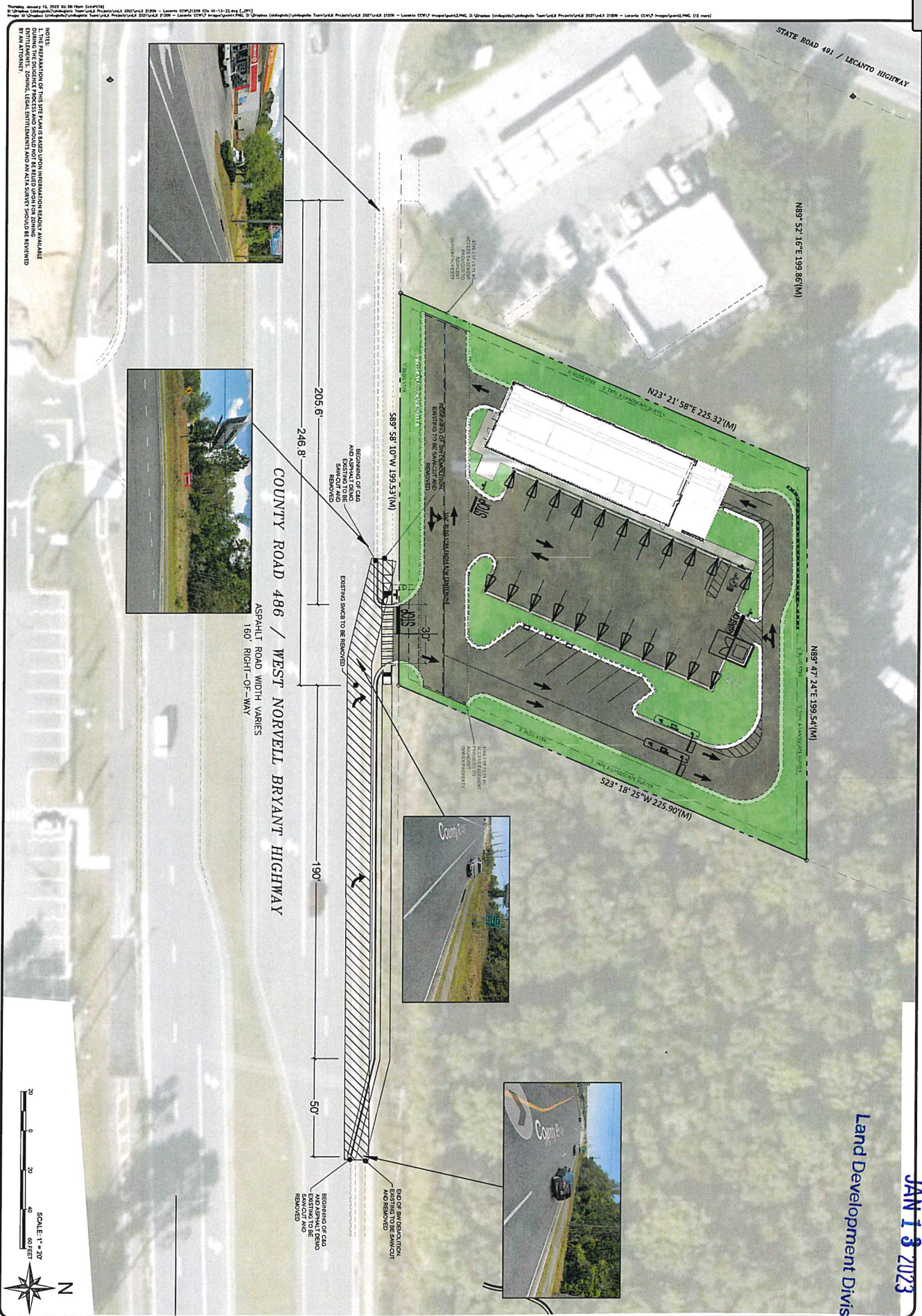
Land Development Division

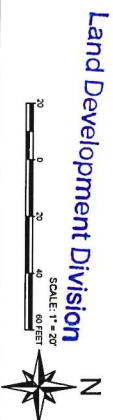
Attachment: Applicant Jan 13 2021 submittal (19823 : V-22-01 Civilogistix for Dinkins & Dinkins, LLC)

RECEIVED
V-22-01

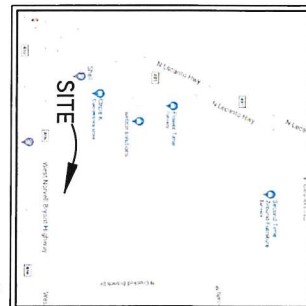
JAN 13 2023

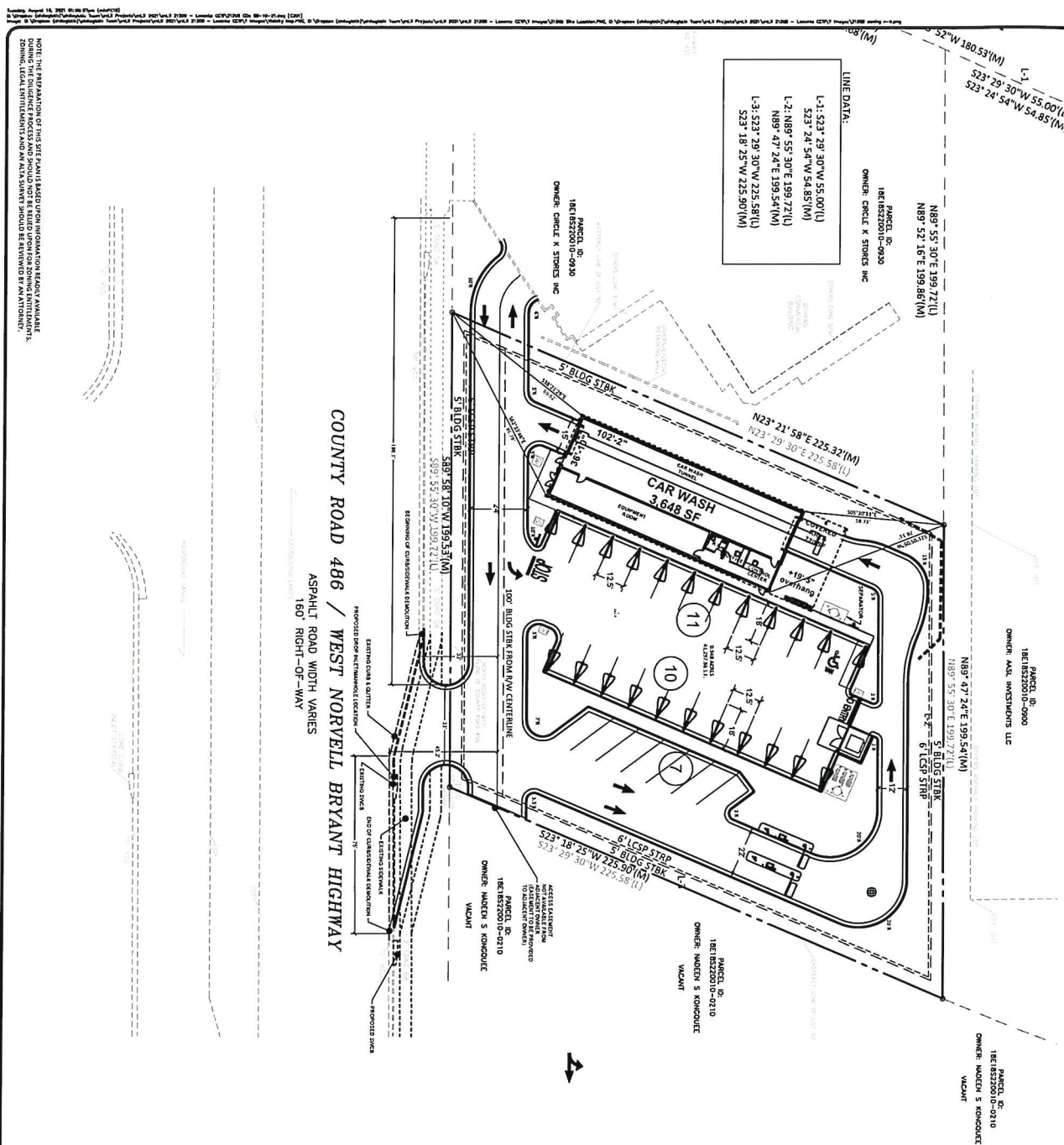
Land Development Division





	Existing/Req'd	Proposed
Zoning	URC	-
Use Allowed	N/A	-
Use Specific Req'd	N/A	-
Flood Zone	No	-
National Wetlands Inventory	No	-
Overlay District	No	-
CCV	-	3,648 S.F.
Total Sq. Ft.	-	6,731 S.F.
Building Setbacks	-	-
Minor	100' from N.W. CL	100' from N.W. CL
Major	N/A	N/A
Minor	5'	5'
Side	5'	5'
Rear	5'	5'
Landscape Strips	-	-
Front	5'	5'
Minor	N/A	N/A
Major	6'	6'
Side	TBD	TBD
Land Use Buffers	TBD	TBD
Environmental Buffers	TBD	TBD
Level 2	Existing/Req'd	Proposed
Parking Ratio	-	-
Public Use	-	-
Parking	-	-
Compact Parking %	-	-
Loading Space	-	-
Minimum Lot Size	-	-
Minimum Frontage	-	-
Adjacent Zoning	-	-
Adjacent Zoning South	-	-
Adjacent Zoning East	-	-
Adjacent Zoning West	-	-
Water Sewer Preliminary	-	-
Overlay Requirements	-	-





VICINITY MAP

Level 1		Existing/Req	Proposed
Zoning	ONC		
Use Allowed	N/A		
Use Specific Req	N/A		
National Wetlands Inventory	No		
County District	No		
CCW			3,648 SF
Total Site Area			0.93 AC
Building Footprint			100' from R/W CL
Minor	N/A		100' from R/W CL
Side	5'		5'
Rear	5'		5'
Landscaping Strips	6'		6'
Major	N/A		N/A
Minor	N/A		N/A
Land Use Buffer	100'		100'
Environmental Buffers	100'		100'
Level 2		Existing/Req	Proposed
Parking Ratio			
Parking Spaces			
Compliance			
US - Open Space %			
Minimum Lot Size			
Minimum Frontage			
Adjacent Zoning North			
Adjacent Zoning South			
Adjacent Zoning East			
Adjacent Zoning West			
Water Sewer Provisions			
Overlay Requirements			

RECEIVED
V-22-01
JAN 13 2023

Land Development Division

SCALE: 1" = 20'

0 20 40 60 FEET

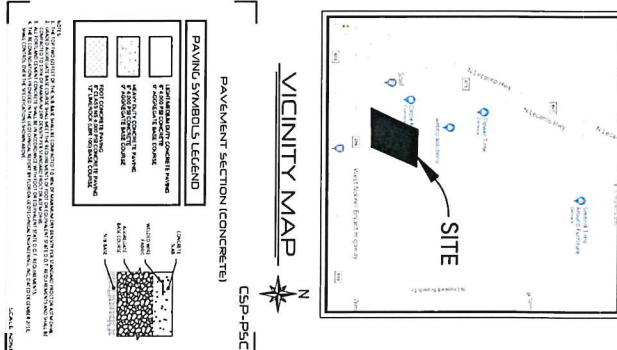
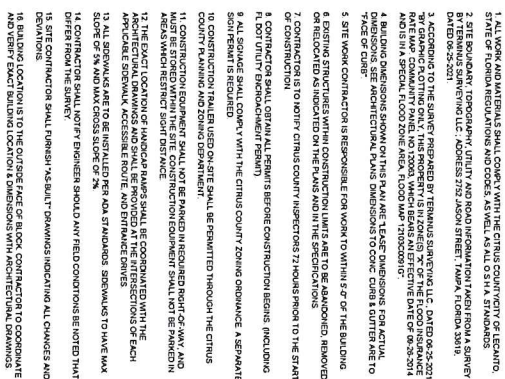
North Arrow

NOTE: THE PREPARATION OF THIS SITE PLAN IS BASED UPON INFORMATION READILY AVAILABLE DURING THE DILIGENCE PROCESS AND SHOULD NOT BE REUSED UPON FOR ZONING ENTITLEMENT ZONING, LEGAL ENTITLEMENTS AND AN ALTA SURVEY SHOULD BE REVIEWED BY AN ATTORNEY.

NOTE: SITE WILL HAVE ONE CAR WASH LANE WITH TWO PAY STATIONS



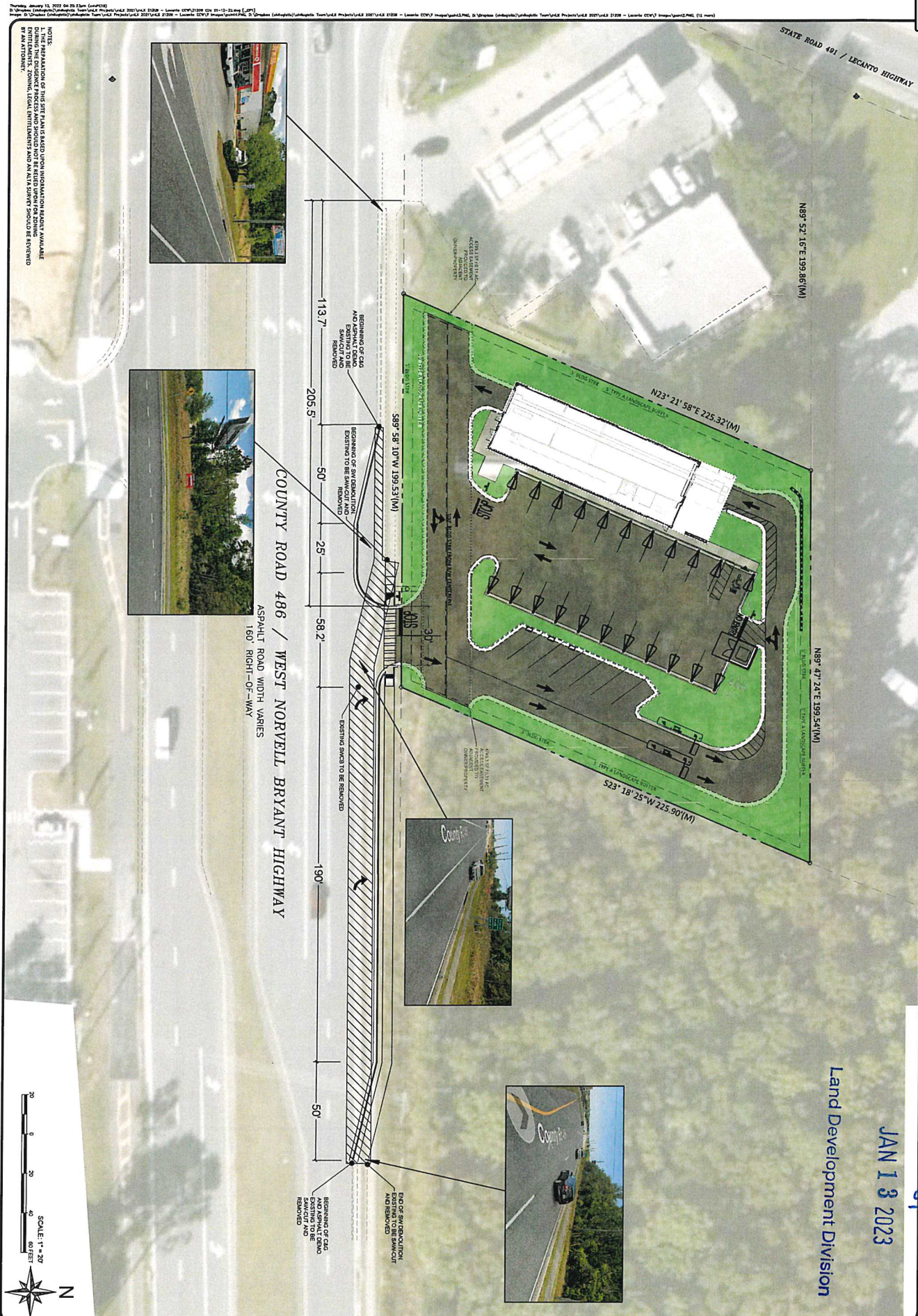
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JAN 13 2023

Land Development Division





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JAN 13 2023

Land Development Division

MEMORANDUM

November 30, 2021

Re: Lecanto Car Wash
Access Analysis
Citrus County, Florida
Project No 21192

The following access analysis was prepared to ensure the suitability of the proposed site access driveway on for the Lecanto Car Wash located on West Norvell Bryant Highway (CR 486), to maintain level of service (LOS) standards on West Norvell Bryant Highway, and to determine the necessary off-site road improvements.

Project Description

The development proposes an automated car wash facility with one (1) tunnel with an anticipated buildout year of 2022. A copy of the preliminary site plan is provided in the **Attachments**.

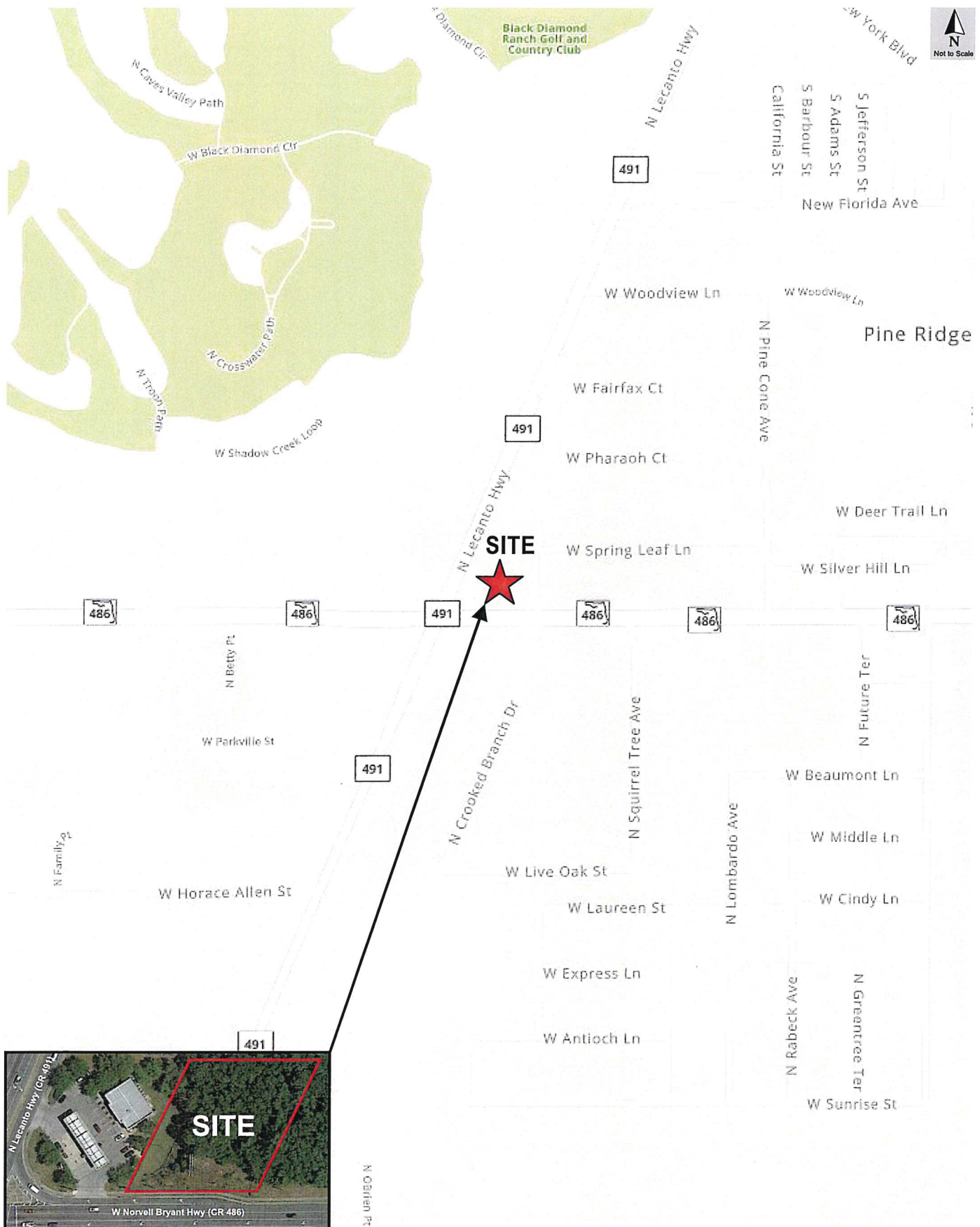
Project Location

The site consists of parcel 18E18S220010 0920. The ±0.95-acre site is located east of North Lecanto Highway (CR 491) and north of West Norvell Bryant Highway in Citrus County, Florida, as depicted in **Figure 1**.

Project Access

Access to the site is proposed via one (1) Right-in/Right-out (Ri/Ro) access driveway on West Norvell Bryant Highway, as shown on the site plan.

Attachment: Applicant Jan 13 2021 submittal (19823 : V-22-01 Civilogistix for Dinkins & Dinkins, LLC)



Attachment: Applicant Jan 13 2021 submittal (19823 : V-22-01 Civilogistix for Dinkins & Dinkins, LLC)

Lecanto Car Wash

Access Analysis
Project № 21192
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Trip Generation

A trip generation analysis was conducted using the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition*. **Table 1** summarizes the resulting trip generation analysis. Detailed ITE trip generation information sheets are included in the **Attachments**.

Table 1
Trip Generation Analysis

ITE Code	Land Use	Size	PM Peak Hour			
			Rate	Total	Enter	Exit
948	Automated Car Wash	1 Tunnel	77.50	78	39	39

Source: Trip generation analysis is based on ITE Trip Generation Manual, 11th Edition

ITE regression equations are used when R-squared is greater than 0.75 or number of studies ≥20

The proposed development is projected to generate 78 trips during the PM peak hour.

Trip Distribution & Assignment

A trip distribution pattern was estimated based on existing travel patterns and knowledge of the local network. The estimated trip distribution was assigned to North Lecanto Highway and West Norvell Bryant Highway as follows:

- To/from north on North Lecanto Highway – 35%
- To/from south on North Lecanto Highway – 20%
- To/from east on West Norvell Bryant Highway – 20%
- To/from west on West Norvell Bryant Highway – 25%

Lecanto Car Wash

Access Analysis

Project № 21192

November 30, 2021

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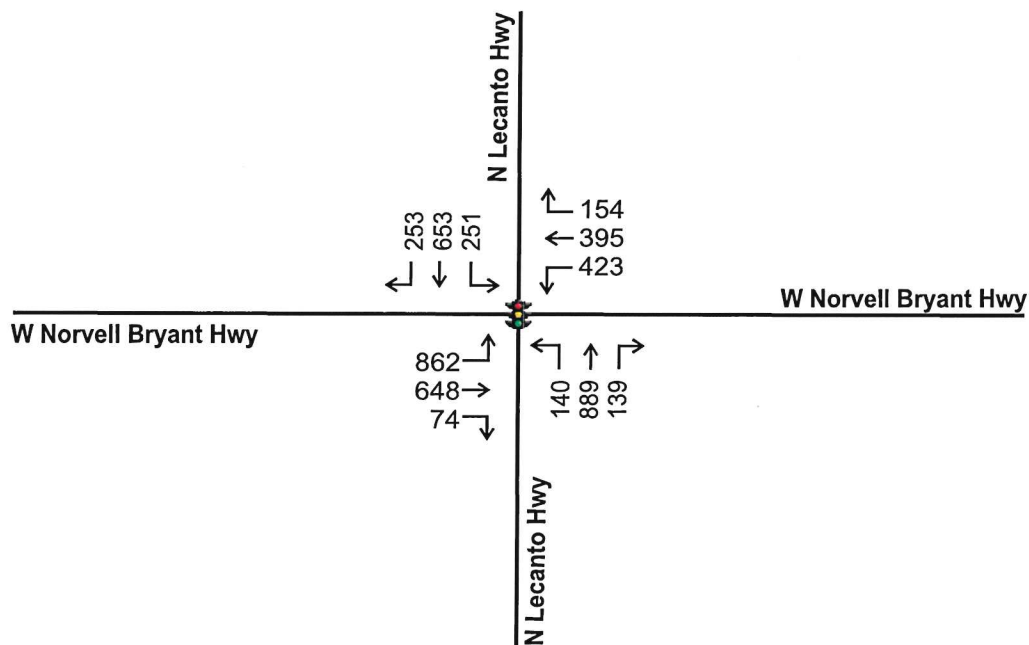
Existing Intersection Volumes

Existing turning movement counts at the intersection of West Norvell Bryant Highway and North Lecanto Highway were collected by Traffic and Mobility Consultants (TMC) during the PM peak hour on October 26, 2021. The intersection volumes were collected during the peak season; therefore, a seasonal factor was not applied. The raw turning movement counts and *2020 Peak Season Factor Category Report* used in the analysis are included in the **Attachments**. The existing PM peak hour intersection volumes are displayed in **Figure 2**.

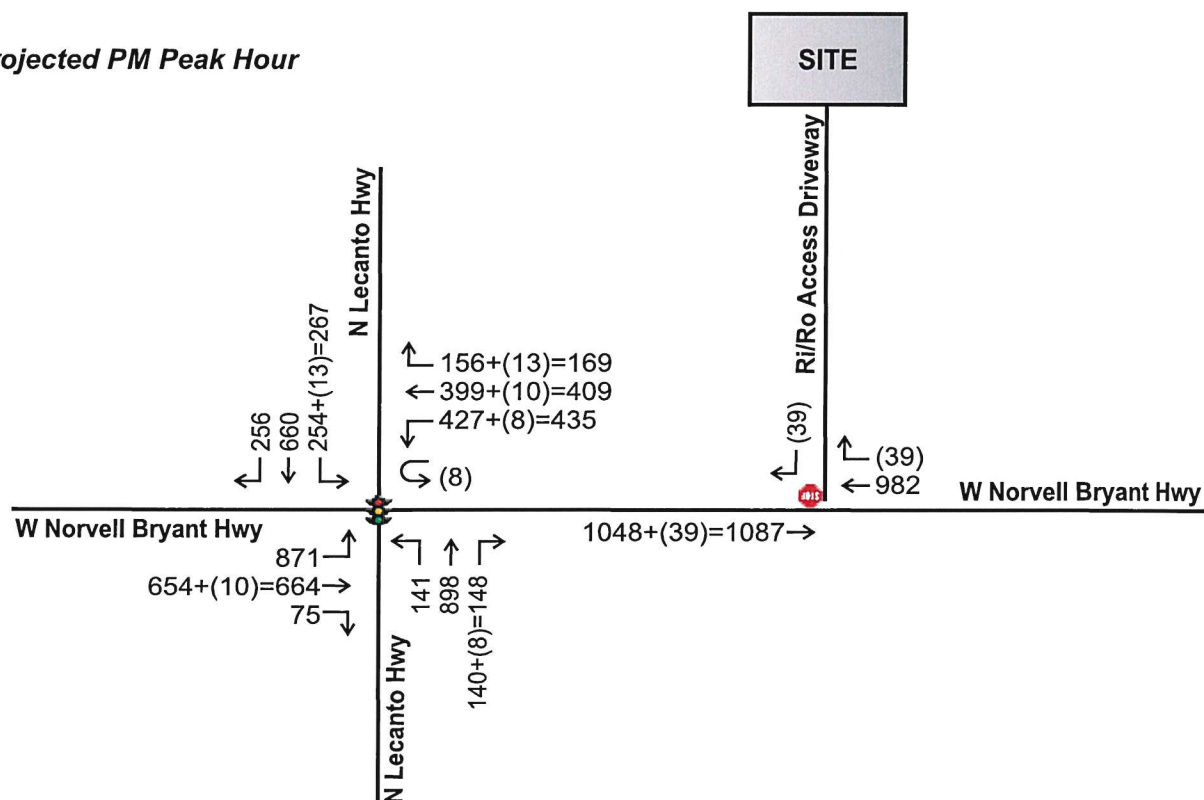
Projected Intersection Volumes

The intersections of West Norvell Bryant Highway with North Lecanto Highway and with the proposed site access driveway were both analyzed at the project buildout. The anticipated buildout year for the development is 2022. Projected turning volumes on the two-study intersections are composed of background traffic and the project-generated trips. Background traffic volumes were obtained by applying an annual growth rate to the existing intersection volumes. A minimum annual growth rate of 1% was used whenever no growth was observed. The project directional trips were assigned to the study intersections based on the estimated trip generation and assumed distribution pattern. The projected PM peak hour intersection volumes are displayed in **Figure 2**.

Existing PM Peak Hour



Projected PM Peak Hour



Legend:
Background + (Project) = Total

Lecanto Car Wash

Access Analysis

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Access Analysis

A capacity analysis was performed for the proposed site access point and the adjacent intersection using methods of the *Highway Capacity Manual, 6th Edition (HCM)* and *Synchro* software. **Table 2** summarizes the results of the capacity analysis under existing and projected conditions. Detailed *HCM* analysis worksheets are included in the **Attachments**.

Table 2
Intersection Capacity Analysis

Intersection	Conditions	Traffic Control	Time Period	EB		WB		NB		SB		Overall	
				Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
W Norvell Bryant Hwy & N Lecanto Hwy	Existing	Signal	PM	181.8	F	70.4	E	55.8	E	49.9	D	99.8	F
	Projected	Signal	PM	199.2	F	72.7	E	59.2	E	51.9	D	107.2	F
W Norvell Bryant Hwy & Access Driveway	Projected	TWSC	PM	0.0	A	0.0	A	--	--	13.0	B	--	--

Delay expressed in seconds/vehicle

Worst movement delay reported at TWSC intersections

The analysis indicates that the West Norvell Bryant Highway and North Lecanto Highway currently operates below the adopted LOS and is projected to do so at the project buildout due to existing, heavy traffic volumes on eastbound and westbound approaches. The site access driveway is projected to operate at a satisfactory LOS at the project buildout.

Turn Lane Analysis

West Norvell Bryant Highway is a 4-lane divided roadway with a posted speed limit of 50 mph. Based on FDOT guidance provided in Table 27 of the *Access Management Guidebook*, included in the **Attachments**, right turn deceleration lanes should be considered at driveways on multilane roadways where the right turn volumes exceed 35 to 55 vehicles per hour. In the case of the proposed driveway, a right turn deceleration lane is recommended and warranted to help minimize the influence of the driveway on the operational integrity of West Norvell Bryant Highway.

The required turn lane length was calculated based on *Exhibit 212-1 of FDOT Design Manual (FDM)*, included in the **Attachments**. Based on a speed of 50 mph, the required westbound right turn deceleration lane is 240 feet long (including a 50-foot taper).

The driveway would be located in the taper of the existing eastbound right turn lane that serves the downstream signalized intersection. The existing right turn lane is approximately 410 feet long. A review of the projected queue on the westbound approach reveals that the right turn movement experiences minimal queueing and the through movement experiences a 95th percentile queue of 13 vehicles per lane, or 325 feet. Therefore, it is feasible to slightly reduce the length of the existing westbound right turn lane in order to allow for the proposed access and

Lecanto Car Wash

Access Analysis

Project № 21192

November 30, 2021

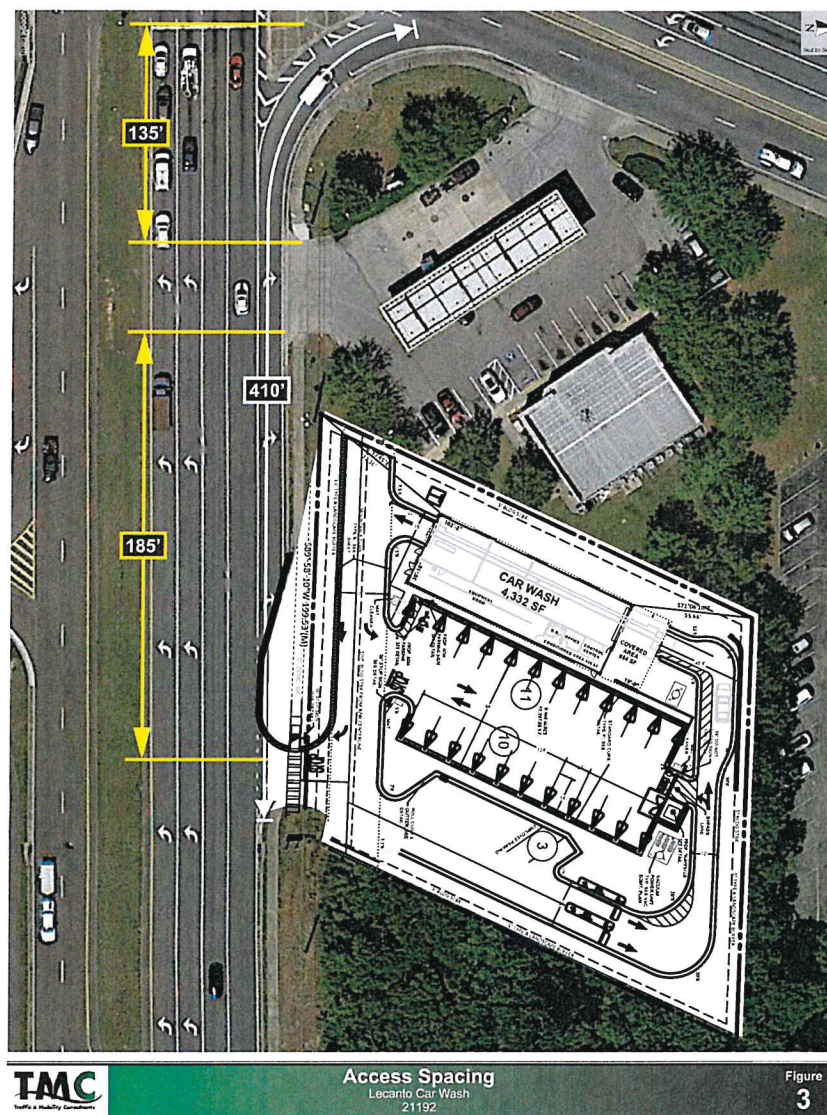
Page 7 of 9

for two (2) separated westbound right turn lanes to be installed, one (1) serving the site and one (1) serving the intersection.

Access Management Evaluation

The proposed access was evaluated for location with respect to access management standards and the conditions on West Norvell Bryant Highway. The roadway is an Access Classification 5 roadway with a posted speed limit of 50 mph. In accordance with FDOT access management standards, the desired connection spacing for this facility is 440 feet.

Based on existing site conditions, the proposed access driveway would be located approximately 360 feet upstream of North Lecanto Highway and 185 feet upstream of the existing driveway serving the Circle K site, as shown on **Figure 3**. It should be noted that the Circle K driveway is located 135 feet upstream of North Lecanto Highway. The subject property has approximately 200 feet of frontage on West Norvell Bryant Highway, which provides the only opportunity for direct access to the site. While the proposed driveway does not meet the desired access management separation, it is located at the furthest possible location from the intersection along the eastern property boundary. The cross access proposed to Circle K and to the undeveloped property to the north would alleviate the access connection requirements to adjacent properties.



Lecanto Car Wash

Access Analysis

Project № 21192

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Summary of Findings

This analysis was performed to evaluate operation and suitability of the proposed site access driveway on West Norvell Bryant Highway. The analysis results indicate the following:

- The proposed development is projected to generate 78 trips during the PM peak hour.
- The intersection of West Norvell Bryant Highway and North Lecanto Highway currently operates below the adopted LOS and is projected to do so at the project buildout.
- The site access driveway is projected to operate at a satisfactory LOS at the project buildout.
- A 240-foot westbound right turn lane on West Norvell Bryant Highway at the proposed site access is warranted and recommended.
- Projected 95th percentile queue length right turning movements on the westbound approach are minimal and can be accommodated by the existing turn lane length of 410 feet.
- It is feasible to slightly reduce the existing westbound turn lane length to allow for installation of two separate right turn lanes.
- The proposed driveway is located at the furthest possible location, which is approximately 360 feet upstream of the intersection and along the eastern property boundary. The cross access proposed to Circle K and to the undeveloped property to the north would alleviate the access connection requirements to adjacent properties.

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY

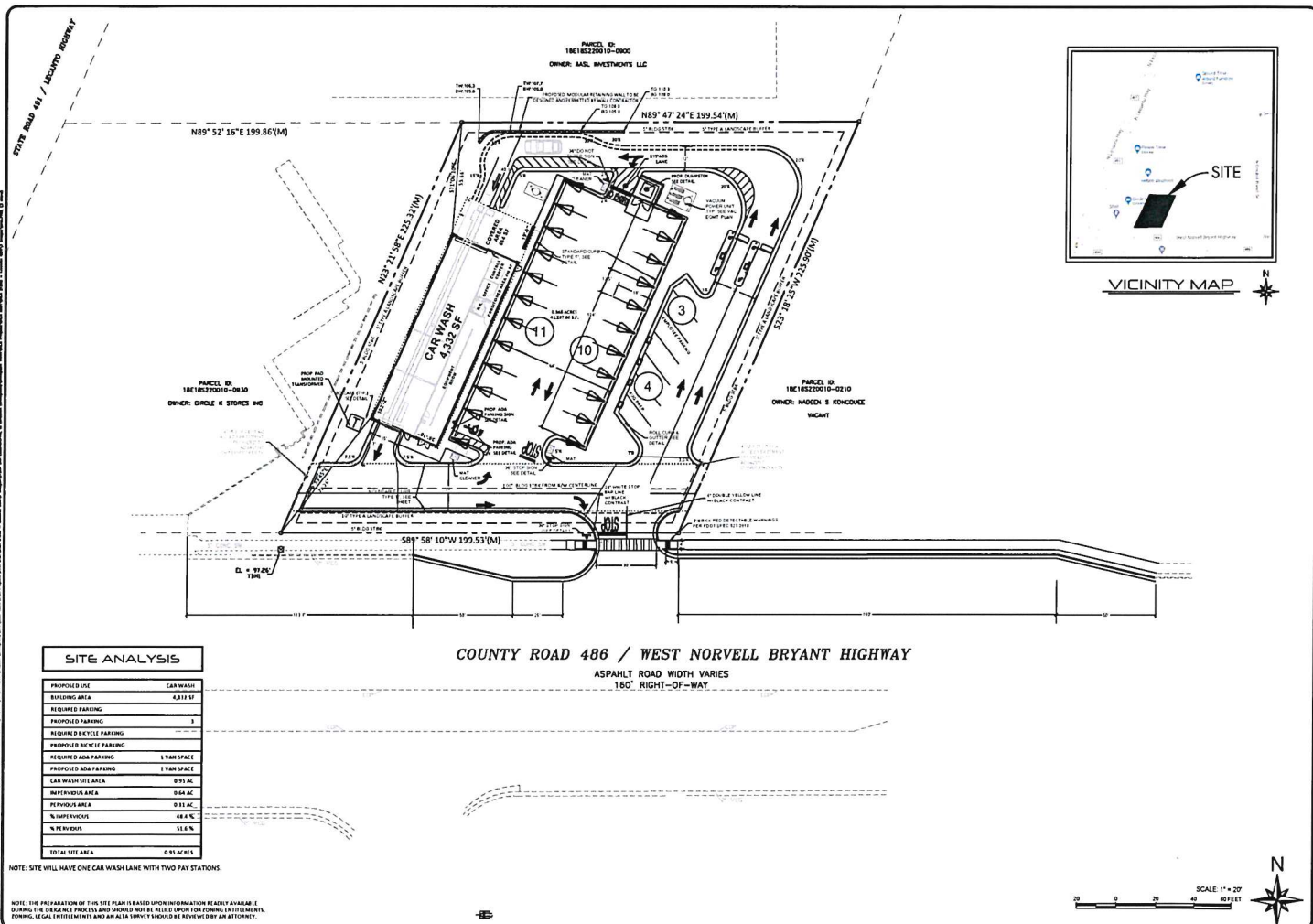
ON THE DATE ADJACENT TO THE SEAL

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SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED
ON ANY ELECTRONIC COPIES.

TRAFFIC & MOBILITY CONSULTANTS LLC
3101 MAGUIRE BOULEVARD, SUITE 265
ORLANDO, FLORIDA 32803
CERTIFICATE OF AUTHORIZATION CA-30024
MOHAMMED N. ABDALLAH, P.E. NO 56169

Attachment: Applicant Jan 13 2021 submittal (19823 : V-22-01 Civilogistix for Dinkins & Dinkins, LLC)

ATTACHMENTS



Automated Car Wash (948)

Vehicle Trip Ends vs: Car Wash Tunnels

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 3

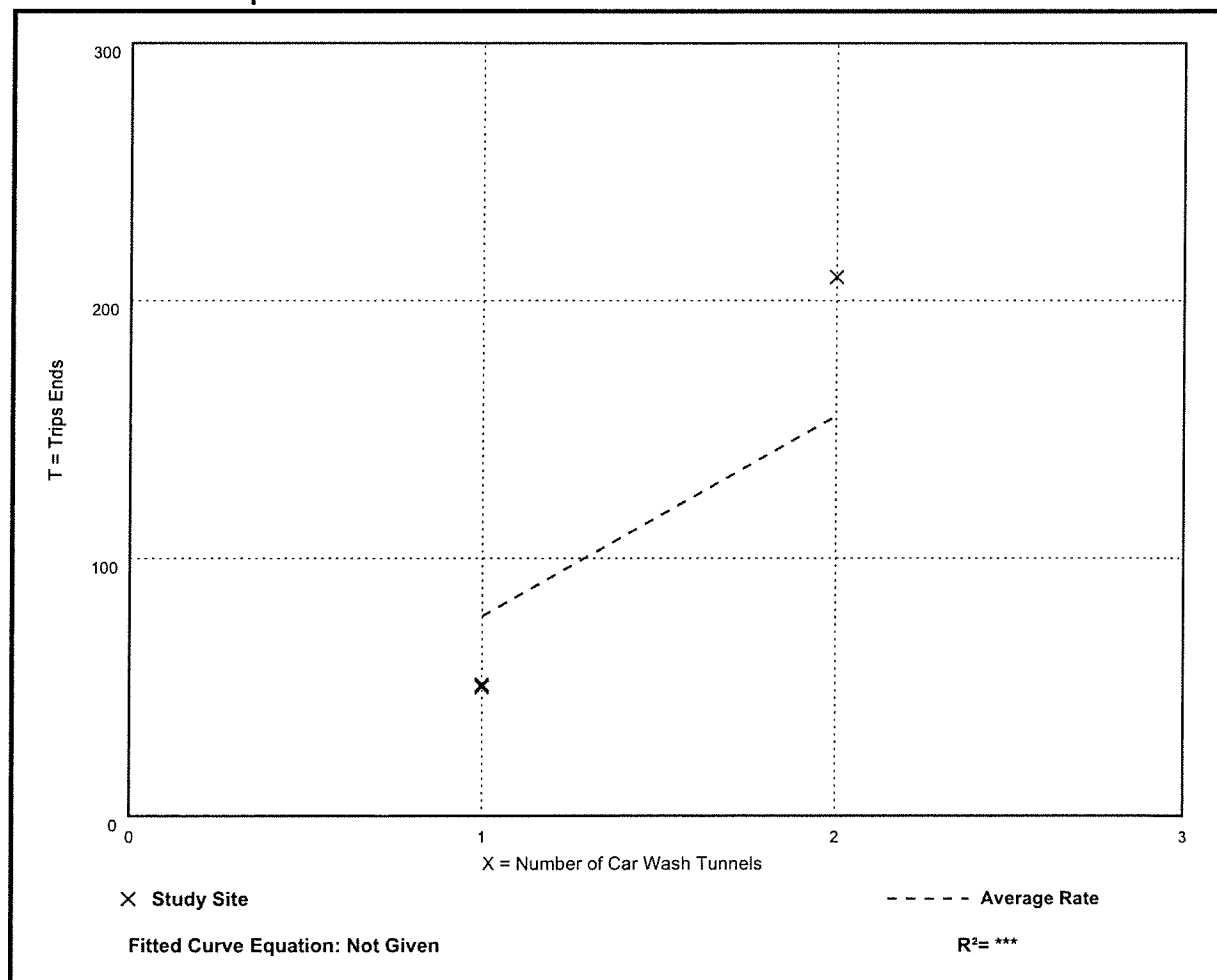
Avg. Num. of Car Wash Tunnels: 1

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Car Wash Tunnel

Average Rate	Range of Rates	Standard Deviation
77.50	50.00 - 104.50	33.07

Data Plot and Equation



TURNING MOVEMENT COUNT ANALYSIS
AUTOS & TRUCKS

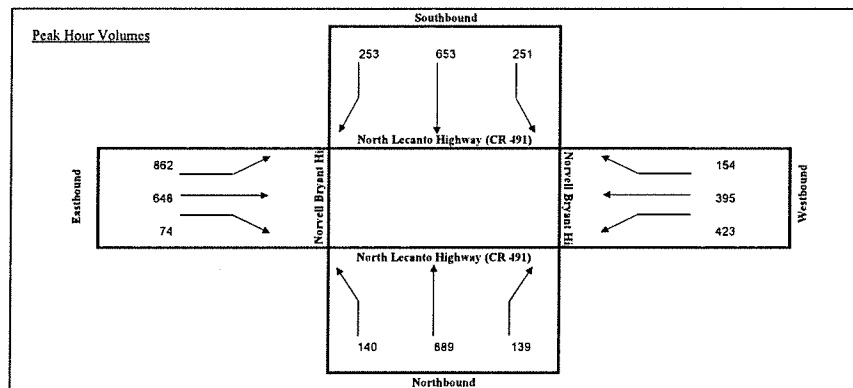
Intersection (N/S): North Lecanto Highway (CR 491)

Intersection (E/W): Norvell Bryant Highway (CR 486)

Date: 10/26/2021

		North Lecanto Highway (CR 491)			North Lecanto Highway (CR 491)			Norvell Bryant Highway (CR 486)			Norvell Bryant Highway (CR 486)			TOTAL
		NB			SB			EB			WB			
Start	End	L	T	R	L	T	R	L	T	R	L	T	R	
4:00 PM	4:15 PM	42	198	40	61	146	66	174	131	16	82	125	37	1118
4:15 PM	4:30 PM	36	216	35	71	154	71	186	146	18	92	112	45	1182
4:30 PM	4:45 PM	31	204	27	86	140	79	179	127	11	96	97	42	1119
4:45 PM	5:00 PM	42	222	45	68	160	56	139	109	15	89	117	42	1104
5:00 PM	5:15 PM	37	244	29	88	174	85	228	134	24	147	90	35	1315
5:15 PM	5:30 PM	32	216	41	39	145	69	231	178	15	85	90	36	1177
5:30 PM	5:45 PM	36	223	36	61	173	51	200	164	17	94	114	42	1211
5:45 PM	6:00 PM	35	206	33	63	161	48	203	172	18	97	101	41	1178

Total for:	4:00 PM	5:00 PM	151	840	147	286	600	272	678	513	60	359	451	166	4523
Total for:	5:00 PM	6:00 PM	140	889	139	251	653	253	862	648	74	423	395	154	4881
Total Peak Hour:	5:00 PM	6:00 PM	140	889	139	251	653	253	862	648	74	423	395	154	4881
Overall PHF:	0.93														

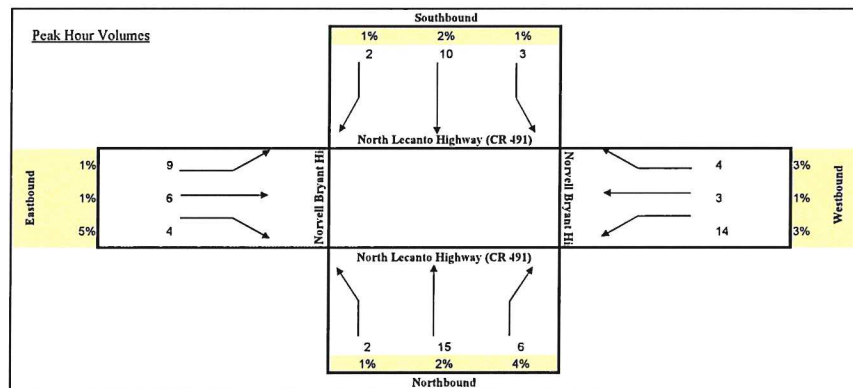


TURNING MOVEMENT COUNT ANALYSIS
TRUCKS

Intersection (N/S): North Lecanto Highway (CR 491)
Intersection (E/W): Norvell Bryant Highway (CR 486)
Date: 10/26/2021

		North Lecanto Highway (CR 491)			North Lecanto Highway (CR 491)			Norvell Bryant Highway (CR 486)			Norvell Bryant Highway (CR 486)			TOTAL
Start	End	NB			SB			EB			WB			
		R	T	L	R	T	L	R	T	L	R	T	L	
4:00 PM	4:15 PM	1	3	1	2	2	1	2	2	1	2	2	1	20
4:15 PM	4:30 PM	0	4	2	1	1	0	1	2	0	4	1	1	17
4:30 PM	4:45 PM	1	7	1	0	1	1	1	1	1	5	0	1	20
4:45 PM	5:00 PM	0	1	2	0	6	0	5	1	2	3	0	1	21
5:00 PM	5:15 PM	1	3	1	0	5	2	1	0	0	3	1	0	17
5:15 PM	5:30 PM	1	1	1	1	3	0	0	0	1	1	0	0	9
5:30 PM	5:45 PM	1	3	1	1	3	1	1	1	0	3	2	1	18
5:45 PM	6:00 PM	0	2	0	1	3	1	1	2	1	2	2	1	16

Total for:	4:00 PM	5:00 PM	2	15	6	3	10	2	9	6	4	14	3	4	78
Total for:	5:00 PM	6:00 PM	3	9	3	3	14	4	3	3	2	9	5	2	60
Total Peak Hour:	4:00 PM	5:00 PM	2	15	6	3	10	2	9	6	4	14	3	4	78
Overall PHF:	0.93														



2020 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
 CATEGORY: 0200 CITRUS COUNTYWIDE

WEEK	DATES	SF	MOCF: 0.95 PSCF
1	01/01/2020 - 01/04/2020	0.95	1.00
2	01/05/2020 - 01/11/2020	0.96	1.01
3	01/12/2020 - 01/18/2020	0.97	1.02
4	01/19/2020 - 01/25/2020	0.96	1.01
5	01/26/2020 - 02/01/2020	0.94	0.99
6	02/02/2020 - 02/08/2020	0.93	0.98
7	02/09/2020 - 02/15/2020	0.92	0.97
8	02/16/2020 - 02/22/2020	0.94	0.99
9	02/23/2020 - 02/29/2020	0.97	1.02
10	03/01/2020 - 03/07/2020	0.99	1.04
11	03/08/2020 - 03/14/2020	1.02	1.07
12	03/15/2020 - 03/21/2020	1.05	1.11
13	03/22/2020 - 03/28/2020	1.14	1.20
14	03/29/2020 - 04/04/2020	1.24	1.31
15	04/05/2020 - 04/11/2020	1.34	1.41
16	04/12/2020 - 04/18/2020	1.44	1.52
17	04/19/2020 - 04/25/2020	1.35	1.42
18	04/26/2020 - 05/02/2020	1.27	1.34
19	05/03/2020 - 05/09/2020	1.18	1.24
20	05/10/2020 - 05/16/2020	1.10	1.16
21	05/17/2020 - 05/23/2020	1.09	1.15
22	05/24/2020 - 05/30/2020	1.08	1.14
23	05/31/2020 - 06/06/2020	1.07	1.13
24	06/07/2020 - 06/13/2020	1.06	1.12
25	06/14/2020 - 06/20/2020	1.05	1.11
26	06/21/2020 - 06/27/2020	1.03	1.08
27	06/28/2020 - 07/04/2020	1.01	1.06
28	07/05/2020 - 07/11/2020	0.99	1.04
29	07/12/2020 - 07/18/2020	0.97	1.02
30	07/19/2020 - 07/25/2020	0.97	1.02
31	07/26/2020 - 08/01/2020	0.97	1.02
32	08/02/2020 - 08/08/2020	0.97	1.02
33	08/09/2020 - 08/15/2020	0.97	1.02
34	08/16/2020 - 08/22/2020	0.97	1.02
35	08/23/2020 - 08/29/2020	0.97	1.02
36	08/30/2020 - 09/05/2020	0.97	1.02
37	09/06/2020 - 09/12/2020	0.97	1.02
38	09/13/2020 - 09/19/2020	0.97	1.02
39	09/20/2020 - 09/26/2020	0.96	1.01
*40	09/27/2020 - 10/03/2020	0.95	1.00
*41	10/04/2020 - 10/10/2020	0.94	0.99
*42	10/11/2020 - 10/17/2020	0.93	0.98
*43	10/18/2020 - 10/24/2020	0.94	0.99
*44	10/25/2020 - 10/31/2020	0.94	0.99
*45	11/01/2020 - 11/07/2020	0.95	1.00
*46	11/08/2020 - 11/14/2020	0.95	1.00
*47	11/15/2020 - 11/21/2020	0.96	1.01
*48	11/22/2020 - 11/28/2020	0.95	1.00
*49	11/29/2020 - 12/05/2020	0.95	1.00
*50	12/06/2020 - 12/12/2020	0.95	1.00
*51	12/13/2020 - 12/19/2020	0.95	1.00
*52	12/20/2020 - 12/26/2020	0.96	1.01
53	12/27/2020 - 12/31/2020	0.97	1.02

* PEAK SEASON

27-FEB-2021 10:30:06

830UPD

7_0200_PKSEASON.TXT

Attachment: Applicant Jan 13 2021 submittal (19823 : V-22-01 Civilogistix for Dinkins & Dinkins, LLC)

HCM 6th Signalized Intersection Summary

1: CR 491 & CR 486

Existing PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	862	648	74	423	395	154	140	889	139	251	653	253
Future Volume (veh/h)	862	648	74	423	395	154	140	889	139	251	653	253
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1826	1856	1885	1856	1885	1870	1841	1885	1870	1885
Adj Flow Rate, veh/h	937	704	0	460	429	0	152	966	75	273	710	137
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	5	3	1	3	1	2	4	1	2	1
Cap, veh/h	651	825		515	694		217	1147	504	333	1266	569
Arrive On Green	0.19	0.23	0.00	0.15	0.19	0.00	0.06	0.32	0.32	0.10	0.36	0.36
Sat Flow, veh/h	3483	3582	1547	3428	3582	1572	3483	3554	1560	3483	3554	1598
Grp Volume(v), veh/h	937	704	0	460	429	0	152	966	75	273	710	137
Grp Sat Flow(s), veh/h/ln	1742	1791	1547	1714	1791	1572	1742	1777	1560	1742	1777	1598
Q Serve(g_s), s	30.0	30.2	0.0	21.1	17.6	0.0	6.9	40.6	5.5	12.4	25.8	9.7
Cycle Q Clear(g_c), s	30.0	30.2	0.0	21.1	17.6	0.0	6.9	40.6	5.5	12.4	25.8	9.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	651	825		515	694		217	1147	504	333	1266	569
V/C Ratio(X)	1.44	0.85		0.89	0.62		0.70	0.84	0.15	0.82	0.56	0.24
Avail Cap(c_a), veh/h	651	1673		641	1673		651	1660	729	651	1660	746
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.3	59.2	0.0	67.0	59.3	0.0	73.8	50.6	38.7	71.3	41.6	36.4
Incr Delay (d2), s/veh	206.6	2.6	0.0	12.9	0.9	0.0	4.1	3.1	0.2	6.0	0.4	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	48.1	19.7	0.0	15.2	12.5	0.0	5.7	25.2	3.8	9.6	16.7	6.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	271.9	61.8	0.0	79.9	60.2	0.0	77.9	53.6	38.8	77.3	42.0	36.6
LnGrp LOS	F	E		E	E		E	D	D	E	D	D
Approach Vol, veh/h		1641	A		889	A		1193			1120	
Approach Delay, s/veh		181.8			70.4			55.8			49.9	
Approach LOS		F			E			E			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	31.8	45.8	17.2	65.8	37.7	39.9	22.5	60.4				
Change Period (Y+Rc), s	7.7	* 8.8	7.2	* 8.6	7.7	* 8.8	7.2	* 8.6				
Max Green Setting (Gmax), s	30.0	* 75	30.0	* 75	30.0	* 75	30.0	* 75				
Max Q Clear Time (g_c+I1), s	23.1	32.2	8.9	27.8	32.0	19.6	14.4	42.6				
Green Ext Time (p_c), s	1.0	4.8	0.4	5.6	0.0	2.7	1.0	9.2				

Intersection Summary

HCM 6th Ctrl Delay	99.8
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary

1: CR 491 & CR 486

Projected PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	871	664	75	443	409	169	141	898	148	267	660	256
Future Volume (veh/h)	871	664	75	443	409	169	141	898	148	267	660	256
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1826	1856	1885	1856	1885	1870	1841	1885	1870	1885
Adj Flow Rate, veh/h	947	722	0	482	445	0	153	976	85	290	717	140
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	5	3	1	3	1	2	4	1	2	1
Cap, veh/h	630	841		532	749		210	1125	494	344	1262	567
Arrive On Green	0.18	0.23	0.00	0.16	0.21	0.00	0.06	0.32	0.32	0.10	0.36	0.36
Sat Flow, veh/h	3483	3582	1547	3428	3582	1572	3483	3554	1560	3483	3554	1598
Grp Volume(v), veh/h	947	722	0	482	445	0	153	976	85	290	717	140
Grp Sat Flow(s),veh/h/ln	1742	1791	1547	1714	1791	1572	1742	1777	1560	1742	1777	1598
Q Serve(g_s), s	30.0	32.0	0.0	22.9	18.6	0.0	7.2	42.9	6.5	13.6	27.0	10.3
Cycle Q Clear(g_c), s	30.0	32.0	0.0	22.9	18.6	0.0	7.2	42.9	6.5	13.6	27.0	10.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	630	841		532	749		210	1125	494	344	1262	567
V/C Ratio(X)	1.50	0.86		0.91	0.59		0.73	0.87	0.17	0.84	0.57	0.25
Avail Cap(c_a), veh/h	630	1619		620	1619		630	1607	705	630	1607	722
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.9	60.8	0.0	68.9	59.2	0.0	76.6	53.4	41.0	73.5	43.2	37.8
Incr Delay (d2), s/veh	234.8	2.7	0.0	15.5	0.8	0.0	4.8	3.8	0.2	5.6	0.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	51.3	20.8	0.0	16.4	13.1	0.0	6.0	26.6	4.6	10.4	17.5	7.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	302.7	63.5	0.0	84.3	60.0	0.0	81.4	57.2	41.2	79.1	43.6	38.0
LnGrp LOS	F	E		F	E		F	E	D	E	D	D
Approach Vol, veh/h		1669	A		927	A		1214			1147	
Approach Delay, s/veh		199.2			72.7			59.2			51.9	
Approach LOS		F			E			E			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	33.5	47.8	17.2	67.5	37.7	43.5	23.6	61.1				
Change Period (Y+Rc), s	7.7	* 8.8	7.2	* 8.6	7.7	* 8.8	7.2	* 8.6				
Max Green Setting (Gmax), s	30.0	* 75	30.0	* 75	30.0	* 75	30.0	* 75				
Max Q Clear Time (g_c+I1), s	24.9	34.0	9.2	29.0	32.0	20.6	15.6	44.9				
Green Ext Time (p_c), s	0.8	4.9	0.4	5.6	0.0	2.8	0.8	7.6				

Intersection Summary

HCM 6th Ctrl Delay	107.2
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th TWSC

2: CR 486 & Site Access

Projected PM Peak

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑	↑		↑
Traffic Vol, veh/h	0	1087	982	39	0	39
Future Vol, veh/h	0	1087	982	39	0	39
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	145	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1182	1067	42	0	42
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	-	0	-	0	-	534
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	491
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	-	491
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		13		
HCM LOS	B					
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1		
Capacity (veh/h)	-	-	-	491		
HCM Lane V/C Ratio	-	-	-	0.086		
HCM Control Delay (s)	-	-	-	13		
HCM Lane LOS	-	-	-	B		
HCM 95th %tile Q(veh)	-	-	-	0.3		

When Not to Consider Exclusive Right-Turn Lanes

- Dense or built-out corridors with limited space
- Right-turn lane that would negatively impact pedestrians or bicyclists
- Vehicular movements from driveways or median openings that cross the right-turn lane resulting in multiple threat crashes
- Context classifications C2T, C4, C5, or C6

When Exclusive Right-Turn Lanes are Beneficial

There are instances when adding an exclusive right-turn lane for unsignalized driveways are beneficial to traffic operations and safety. [Table 27](#) provides some guidance for this situation based on the speed limit of the roadway and how many right turns occur per hour. Locations where the Auto and Truck Modal Emphasis is "High" may be appropriate for consideration of Exclusive Right Turn Lanes.

Table 27 – Recommended Guidelines for Exclusive Right-Turn Lanes to Unsignalized Driveway¹⁰

Roadway Posted Speed Limit	Number of Right Turns Per Hour
45 mph or less	80 – 125 ¹
Over 45 mph	35 – 55 ²
<i>Note: A posted speed limit of 45 mph may be used with these thresholds if the operating speeds are known to be over 45 mph during the time of peak right turn demand.</i>	
<i>Note on traffic projections: Projecting turning volumes is, at best, a knowledgeable estimate. Keep this in mind especially if the projections of right turns are close to meeting the guidelines. In that case, consider requiring the turn lane.</i>	
¹ The lower threshold of 80 right-turn vehicles per hour would be most used for higher volume (greater than 600 vehicles per hour, per lane in one direction on the major roadway) or two-lane roads where lateral movement is restricted. The 125 right-turn vehicles per hour upper threshold would be most appropriate on lower volume roadways, multilane highways, or driveways with a large entry radius (50 feet or greater).	
² The lower threshold of 35 right-turn vehicles per hour would be most appropriately used on higher volume two-lane roadways where lateral movement is restricted. The 55 right-turn vehicles per hour upper threshold would be most appropriate on lower volume roadways, multilane highways, or driveways with large entry radius (50 feet or greater).	

Source: [NCHRP Report 420 \(Impacts of Access Management Techniques\)](#)

These recommendations are primarily based on the research done in [NCHRP Report 420, Impacts of Access Management Techniques, Chapter 4 – Unsignalized Access Spacing \(Technique 1B\), and Use of Speed Differential as a Measure to Evaluate the Need for Right-Turn Deceleration Lane at Unsignalized Intersections.](#)

In the *NCHRP Report 420*, the observed high-speed roads, 30 to 40 right-turn vehicles per hour caused evasive maneuvers on 5 - 10 percent of the following through vehicles. For lower speed roadways, 80 to 110 right-turn vehicles caused 15 - 20 percent of the following through vehicles to make evasive maneuvers. The choice of acceptable percentages of through vehicles impacted is a decision based on reasonable expectations of the different roadways.

In this study, by modeling speed differentials, a better understanding of the impacts of through volume and driveway radius was discovered.

¹⁰ May not be appropriate for signalized locations where signal phasing plays an important role in determining the need for right turn lanes.

[illegible]

MEDIAN TURN LANES									
URBAN CONDITIONS					RURAL CONDITIONS				
Design Speed (mph)	Entry Speed (mph)	Clearance Distance (ft.)	Brake To Stop Distance (ft.)	Total Decel. Distance (ft.)	Clearance Distance (ft.)	Brake To Stop Distance (ft.)	Total Decel. Distance (ft.)	Clearance Distance (ft.)	Total Decel. Distance (ft.)
35	25	50	75	125	118	100	150	168	218
40	30	55	85	140	128	110	160	180	230
45	35	60	95	155	138	120	170	190	240
50	40	65	105	170	148	130	180	200	250
55	45	70	115	185	158	140	190	210	260
60	50	75	125	200	168	150	200	220	270
65	55	80	135	215	178	160	210	230	280

EXHIBIT 212-1
01/01/2018