



**City of Apopka
Planning Commission
Meeting Agenda
March 20, 2018, 5:30 PM
APOPKA COMMUNITY CENTER
519 S. CENTRAL AVENUE**

I. CALL TO ORDER

If you wish to appear before the Planning Commission, please submit a “Notice of Intent to Speak” card to the Recording Secretary.

II. OPENING AND INVOCATION

III. PUBLIC HEARING:

1. CHANGE OF ZONING – NEW ERROL - From Planned Unit Development (PUD) and Parks & Recreation (PR) to Planned Unit Development (PUD) for property owned by Signature H Group, LLC, and located north of Old Dixie Highway, south of Lester Road, and east of Vick Road (Parcel ID Nos. 32-20-28-0000-00-003; 32-20-28-0000-00-008; 32-20-28-0000-00-004-Portion)

IV. OLD BUSINESS:

V. NEW BUSINESS:

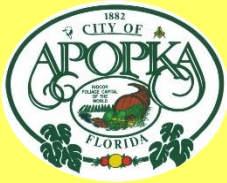
VI. ADJOURNMENT:

All interested parties may appear and be heard with respect to this agenda. Please be advised that, under state law, if you decide to appeal any decision made by the City Council with respect to any matter considered at this meeting or hearing, you will need a record of the proceedings, and that, for such purpose, you may need to ensure that a verbatim record of the proceedings is made, which record includes a testimony and evidence upon which the appeal is to be based. The City of Apopka does not provide a verbatim record.

In accordance with the American with Disabilities Act (ADA), persons with disabilities needing a special accommodation to participate in any of these proceedings should contact the City Clerk's Office at 120 East Main Street, Apopka, FL 32703, telephone (407) 703-1704, no less than 48 hours prior to the proceeding.

Backup material for agenda item:

1. CHANGE OF ZONING – NEW ERROL - From Planned Unit Development (PUD) and Parks & Recreation (PR) to Planned Unit Development (PUD) for property owned by Signature H Group, LLC, and located north of Old Dixie Highway, south of Lester Road, and east of Vick Road (Parcel ID Nos. 32-20-28-0000-00-003; 32-20-28-0000-00-008; 32-20-28-0000-00-004-Portion)



**CITY OF APOPKA
PLANNING COMMISSION**

X PUBLIC HEARING
____ SITE PLAN
____ SPECIAL REPORTS
____ OTHER:

MEETING OF: March 20, 2018
FROM: Community Development
EXHIBITS: Zoning Report
Vicinity Map
Adjacent Zoning Map
Adjacent Uses Map
Ex. A – Master Plan
Ex. B – Transportation Study

SUBJECT: CHANGE OF ZONING AND MASTER PLAN – NEW ERROL – APOPKA – SIGNATURE H GROUP LLC

PARCEL ID NUMBERS: 32-20-28-0000-00-003; 32-20-28-0000-00-008; 32-20-28-0000-00-004 (Portion)

**REQUEST: CHANGE OF ZONING
FROM: PLANNED UNIT DEVELOPMENT (PUD) AND PARKS & RECREATION (PR)
TO: PLANNED UNIT DEVELOPMENT (PUD)**

SUMMARY:

PROPERTY OWNER/
APPLICANT: Signature H Group LLC;

CONSULTING PLANNER: GAI Consultants

LOCATION: North of Old Dixie Highway, south of Lester Road, east of Vick Road

EXISTING USE: Golf Course and Club House

CURRENT ZONING: Park & Recreation

PROPOSED DEVELOPMENT: Single family, townhomes, assisted living facility, community parks, commercial amenities complex with hotel, restaurant, aquatic park, and recreation facilities

PROPOSED ZONING: Planned Unit Development with a Master Plan

Acres: 75.9 +/-

FUNDING SOURCE: N/A

DISTRIBUTION

Mayor Kilsheimer	Finance Director	Public Services Director
Commissioners	HR Director	Recreation Director
City Administrator	IT Director	City Clerk
Community Development Director	Police Chief	Fire Chief

ADDITIONAL COMMENTS: The development application is for a change of zoning to Planned Unit Development and a Master Plan, consistent with Section 2.02.18.K of the Apopka Land Development Code. Prior to development within or for each Phase, Neighborhood, or Community and Neighborhood Park, including any off-site infrastructure improvements, must be reviewed and approved by the City through a Preliminary Development Plan and a Final Development Plan. A Preliminary Development Plan implements the Master Plan by providing further detail regarding residential subdivision plans, landscaping, recreation facilities, and street layout. A final development plan serves as a construction plan to demonstrate how roads, water, sewers, utilities and recreation facilities will be constructed or installed. All preliminary development plan applications have a public hearing before the Planning Commission and City Council.

Development Profile:

Neighborhood	Acreage	Development Profile	FLUM	Proposed Zoning
A	11.64	70 townhomes	RML	PUD
B-1	9.95	25,000 sq ft clubhouse 40(21,200 sq ft) room hotel	Commercial	PUD
B-2	5.45	18 townhomes	RML	PUD
C	6.76	46 carriage homes (townhomes)	RML	PUD
D	4.97	26 townhomes	RML	PUD
E	8.57	32 townhomes 41 single family units	E-1: RLS E-2: RL	PUD
F	13.3	180 ALF units (200,000 sq ft)	F-1: RL R-2: RML	PUD
G	13.94	60 acute care beds (45,000 sq ft)	RML	PUD
Community Park	4.04	Park and Open Space	P&R	PUD

PUD CONDITIONS OF APPROVAL

1. Final street names will be determined at the time of the Preliminary Development Plan, and must be accepted by the County Emergency Management Office.
2. All wetland and floodplain impacts shall meet the mitigation requirements set forth in the Comprehensive Plan (Conservation Element) and as determined by the Water Management District. All buildings shall be set back a minimum of fifty (50) feet from a wetland line and an upland buffer shall be provided consistent with the Comprehensive Plan and Land Development Code.
3. Where and if any inconsistencies occur between a Master Plan sheet and the Design Development Standards appearing on Sheet 11.0, Sheet 11.0 shall preside.
4. Transportation: New Errol Developer shall be responsible for cost of installation (not just design) of any warranted traffic signals as determined by the Transportation Study.
5. Additional conditions not appearing above may be presented at the Planning Commission hearing.

SCHOOL CAPACITY REPORT: The applicant has obtained a School Capacity Enhancement Agreement from Orange County Public Schools. School concurrency will be required at the time of the Preliminary Development Plan or Final Development Plan application for residential development. Location served by the following schools: Apopka Elementary; Wolf Lake Middle School; and Apopka High School.

ORANGE COUNTY NOTIFICATION: All property proposed for rezoning is surrounding by incorporated areas within the jurisdiction of the City of Apopka. Notice was sent to Orange County via the agenda for the Development Review Committee.

PUBLIC HEARING SCHEDULE:

March 20, 2018 – Planning Commission (5:30 pm) (Tuesday)
March 27, 2018 – City Council (5:30 pm) - 1st Reading (Tuesday)
April 11, 2018 – City Council (5:30 pm) – 2nd Reading (Wednesday)

DULY ADVERTISED:

March 9, 2018 – Public Notice and Notification (Apopka Chief, Letter, Poster)
March 16, 2018—Public Notice (Apopka Chief)
March 30, 2018 – Public Notice (Apopka Chief)

RECOMMENDATION ACTION:

The **Development Review Committee** finds the Change of Zoning and Master Plan consistent with the Comprehensive Plan, Land Development Code, and character of the surrounding areas subject to the findings of the Staff Report, PUD Conditions of Approval, and City Council adoption of the Future Land Use Amendment and a Development Agreement.

RECOMMENDED MOTION: Find the Change of Zoning and New Errol PUD Master Plan consistent with the Comprehensive Plan, Land Development Code, and the character of the surrounding area subject to the findings of the Staff Report, PUD Conditions of Approval, and City Council adoption of the Future Land Use Amendment and a Development Agreement.

Note: This item is considered quasi-judicial. The staff report and its findings are to be incorporated into and made a part of the minutes of this meeting.

ZONING REPORT

RELATIONSHIP TO ADJACENT PROPERTIES: The Seven Neighborhoods and the Community Park (New Errol Community) are surrounding by the Errol Estates Residential Community, Vick Road, and the Errol Golf Course. Sheet 1.1 and 1.2 show the existing conditions surrounding the proposed New Errol Community. Sheet 3.0 identifies adjacent zoning and future land use designations.

**LAND USE & TRAFFIC
COMPATIBILITY:**

A transportation capacity study was prepared by the applicant’s transportation planning and engineering consultant, Traffic Planning & Design. This study was reviewed by the City’s transportation consultant, HDR. As a condition of the PUD and development agreement, the Spine Rad (called Staghorn Drive, will be constructed in two phases.

All road names appearing in the Master Plan are subject to approval by DRC at the Final Development Plan by DRC and the Orange County Emergency Management Office. The Spine Road will be a public road as well as a street serving the southern residential community within Neighborhood F. All others will be private.

**COMPREHENSIVE
PLAN COMPLIANCE:**

The proposed Planned Unit Development) zoning is consistent with the City’s Future Land Use Designations assigned to each Neighborhood, including the Community Park Development Plans shall not exceed the intensity or density allowed for the adopted Future Land Use Designation.

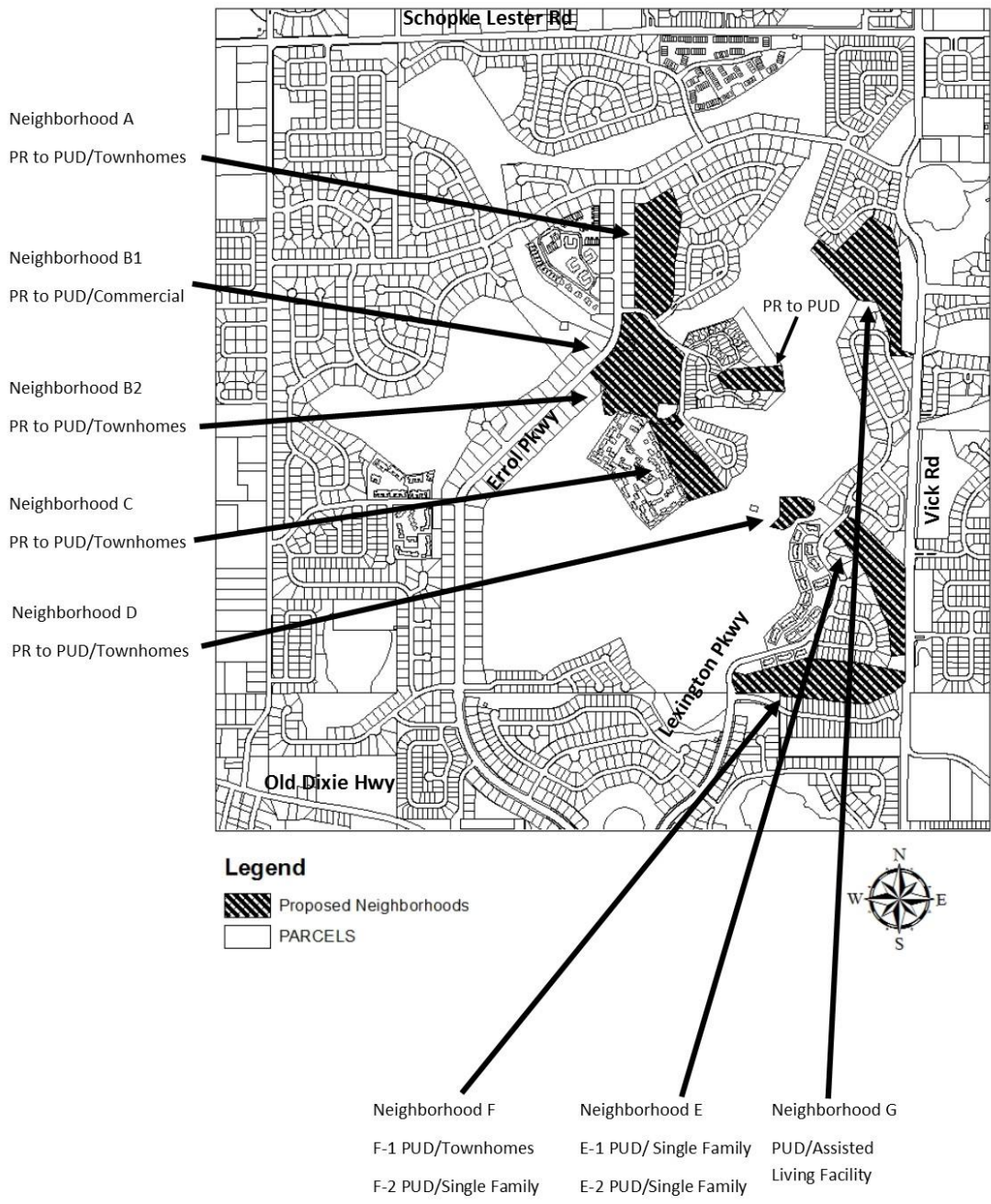
**PUD
RECOMMENDATIONS:**

PUD development standards and project phasing appear within the Master Plan. If a development standard is not addressed within the Master Plan, the City’s Land Development Code and Development Design Guidelines shall apply. A preliminary development plan and final development plan must be submitted to the City for each development phase.

**PERMISSIBLE
USES:**

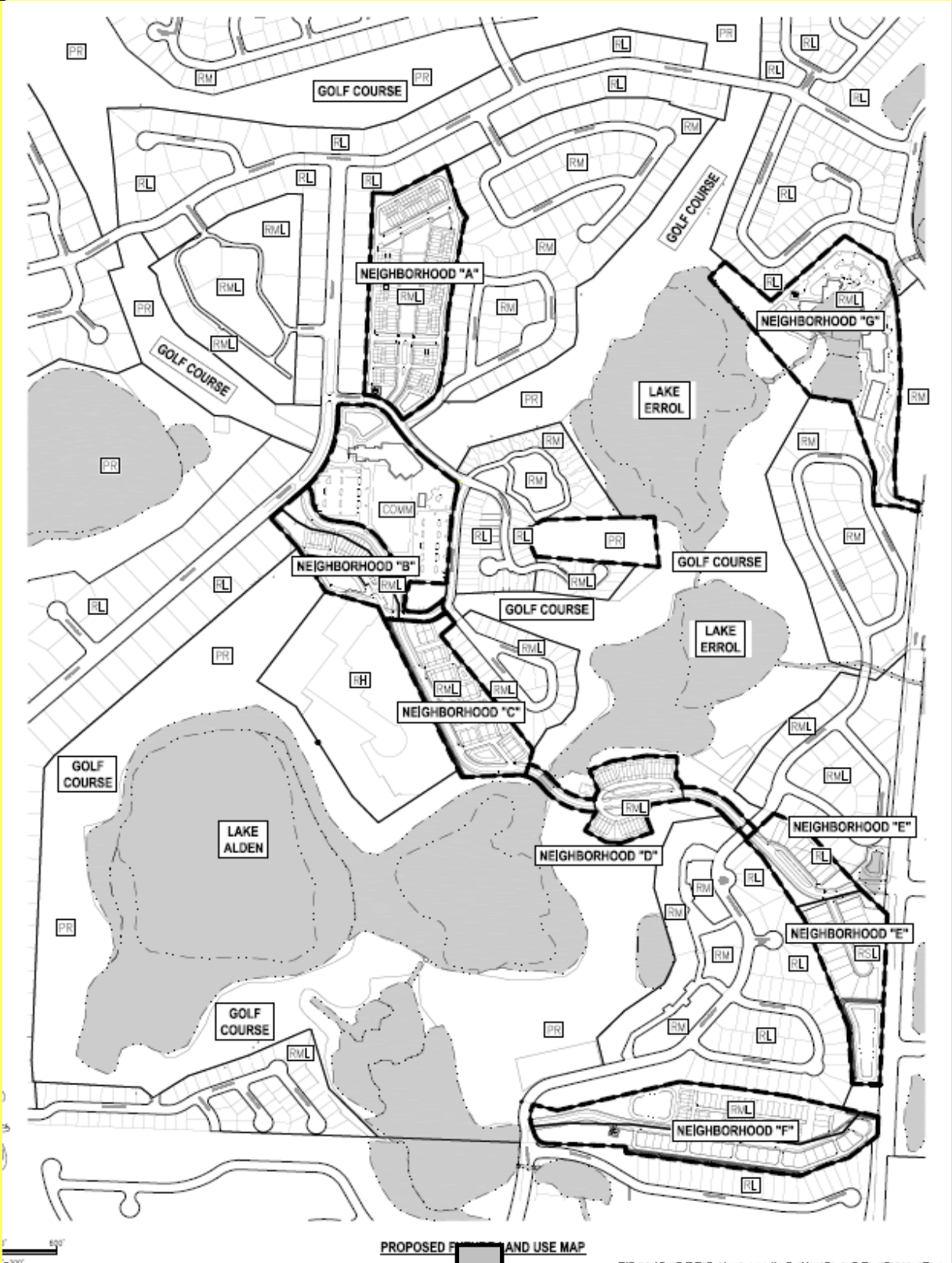
Permissible and Prohibited Uses for each Neighborhood and the Community Park are declared within Sheet 11.0 of the Master Plan. Any use not listed as prohibited or permissible is subject to the interpretation of the Community Development Director of compliance as a permissible use, or alternatively, may require an amendment to the PUD Master Plan and possibly the Development Agreement approved by City Council.

NEW ERROL PUD VICINITY MAP AND PROPOSED ZONING



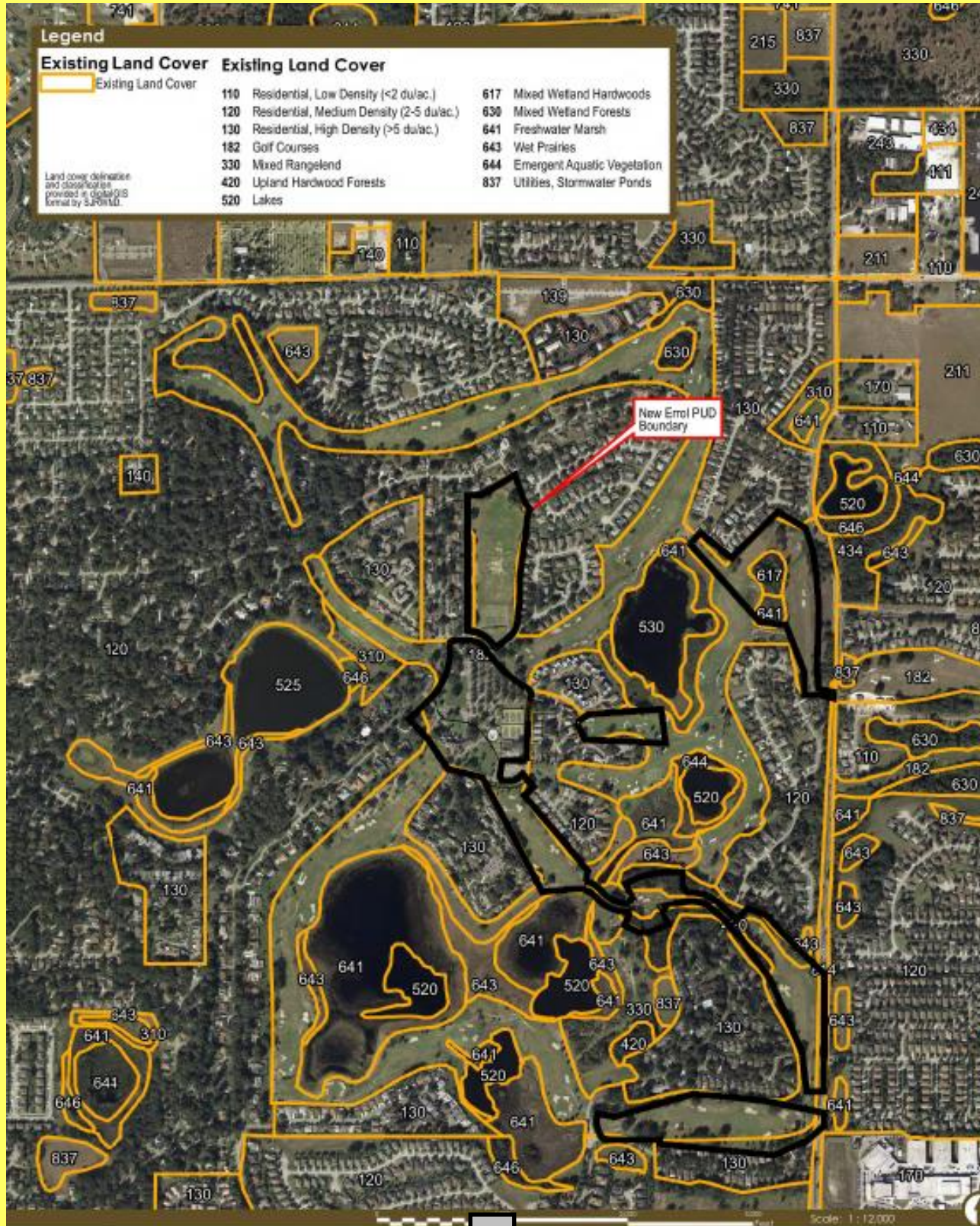


ADJACENT ZONING





ADJACENT USES



NEW ERROL PLANNED UNIT DEVELOPMENT MASTER PLAN

PARCEL ID: 32-20-28-0000-00-003,
32-20-28-0000-00-004, 32-20-28-0000-00-008,
32-20-28-5817-00-007



Location of Project
Orange County, Florida

NOTE: LEGAL DESCRIPTION TO BE INCLUDED SEPARATELY AS AN ATTACHMENT WITH THE PREDEVELOPMENT PLAN SUBMITTAL.

Prepared By:

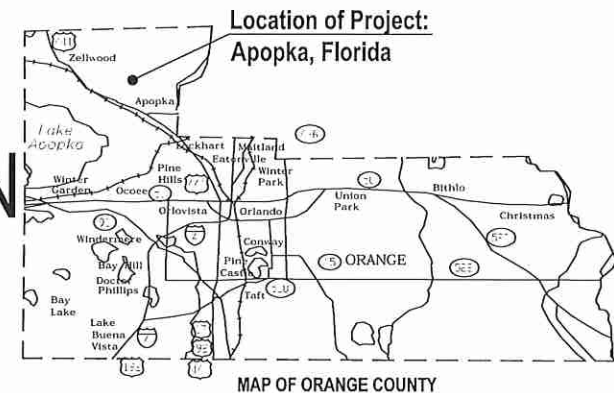


gai consultants
EB 9951

618 EAST SOUTH STREET
SUITE 700
ORLANDO, FLORIDA 32801
PHONE: (407) 423-8398

Prepared For:

Signature H Property Group LLC
1420 Celebration Boulevard, Suite 200
Celebration, Florida 34747
Phone: (305)-409-5466



Location of Project:
Apopka, Florida

MAP OF ORANGE COUNTY

INDEX OF SHEETS

Sheet List Table

Sheet #	Sheet Title
0.0	COVER SHEET
1.1	EXISTING CONDITION SITE EXHIBIT
1.2	EXISTING CONDITION SITE EXHIBIT
2.0	FUTURE LAND USE MAP
3.0	ZONING MAP
4.1	EXISTING CONDITIONS KEY MAP
4.2	EXISTING CONDITIONS
4.3	EXISTING CONDITIONS
4.4	EXISTING CONDITIONS
5.0	OVERALL CONCEPT PLAN
6.0	PHASING PLAN
7.0	OVERALL TRANSPORTATION PLAN
8.0	OVERALL OPEN SPACE PLAN
9.0	OVERALL UTILITY PLAN
10.0	NOT USED
11.0	DESIGN DEVELOPMENT STANDARDS
12.1	BUFFER SECTIONS
12.2	BUFFER DETAILS AND FINISH SCHEDULE
13.1	TRACT MAP - NEIGHBORHOOD A
13.2	SUBDIVISION PLAN - NEIGHBORHOOD A
13.3	OPEN SPACE - NEIGHBORHOOD A
13.4	BUFFER PLAN - NEIGHBORHOOD A
13.5	ARCHITECTURE - NEIGHBORHOOD A
13.7	UTILITY PLAN - NEIGHBORHOOD A
13.8	GRADING PLAN - NEIGHBORHOOD A
14.1	TRACT MAP - NEIGHBORHOOD B1
14.2	SUBDIVISION PLAN - NEIGHBORHOOD B1
14.3	OPEN SPACE - NEIGHBORHOOD B1
14.4	BUFFER PLAN - NEIGHBORHOOD B1
14.5	ARCHITECTURE - NEIGHBORHOOD B1
14.7	UTILITY PLAN - NEIGHBORHOOD B1
14.8	GRADING PLAN - NEIGHBORHOOD B1
15.1	TRACT MAP - NEIGHBORHOOD B2
15.2	SUBDIVISION PLAN - NEIGHBORHOOD B2
15.3	OPEN SPACE - NEIGHBORHOOD B2
15.4	BUFFER PLAN - NEIGHBORHOOD B2
15.5	ARCHITECTURE - NEIGHBORHOOD B2
15.7	UTILITY PLAN - NEIGHBORHOOD B2
15.8	GRADING PLAN - NEIGHBORHOOD B2
16.1	TRACT MAP - NEIGHBORHOOD C
16.2	SUBDIVISION PLAN - NEIGHBORHOOD C
16.3	OPEN SPACE - NEIGHBORHOOD C
16.4	BUFFER PLAN - NEIGHBORHOOD C
16.5	ARCHITECTURE - NEIGHBORHOOD C
16.7	UTILITY PLAN - NEIGHBORHOOD C
16.8	GRADING PLAN - NEIGHBORHOOD C
17.1	TRACT MAP - NEIGHBORHOOD D
17.2	SUBDIVISION PLAN - NEIGHBORHOOD D
17.3	OPEN SPACE - NEIGHBORHOOD D
17.4	BUFFER PLAN - NEIGHBORHOOD D
17.5	ARCHITECTURE - NEIGHBORHOOD D
17.7	UTILITY PLAN - NEIGHBORHOOD D
17.8	GRADING PLAN - NEIGHBORHOOD D
18.1	TRACT MAP - NEIGHBORHOOD E
18.2	SUBDIVISION PLAN - NEIGHBORHOOD E
18.3	OPEN SPACE - NEIGHBORHOOD E
18.4	BUFFER PLAN - NEIGHBORHOOD E
18.5	ARCHITECTURE - NEIGHBORHOOD E
18.7	UTILITY PLAN - NEIGHBORHOOD E
18.8	GRADING PLAN - NEIGHBORHOOD E
19.1	TRACT MAP - NEIGHBORHOOD F
19.2	SUBDIVISION PLAN - NEIGHBORHOOD F
19.3	OPEN SPACE - NEIGHBORHOOD F
19.4	BUFFER PLAN - NEIGHBORHOOD F
19.5	ARCHITECTURE - NEIGHBORHOOD F
19.7	UTILITY PLAN - NEIGHBORHOOD F
19.8	GRADING PLAN - NEIGHBORHOOD F
20.1	TRACT MAP - NEIGHBORHOOD G
20.2	SUBDIVISION PLAN - NEIGHBORHOOD G
20.3	OPEN SPACE - NEIGHBORHOOD G
20.4	BUFFER PLAN - NEIGHBORHOOD G
20.5	ARCHITECTURE - NEIGHBORHOOD G
20.7	UTILITY PLAN - NEIGHBORHOOD G
20.8	GRADING PLAN - NEIGHBORHOOD G



PROJECT LOCATION LOCATION MAP
CITY OF APOPKA, FLORIDA

CONTACT LIST

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Orlando, Florida 32801
(407) 423-8398
ATTN: Frank Bellomo

CIVIL ENGINEER
GAI Consultants, Inc.
618 East South Street
Suite 700
Orlando, Florida 32801
(407) 423-8398
ATTN: Randall S. Cohen, P.E.

GEOTECHNICAL ENGINEER
Professional Services Industries, Inc.
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Orlando, Florida 32839
(407) 304-5560
ATTN: Robert A. Trumpke, P.E.

SURVEYOR
Republic National
480 Needles Trail
Longwood, Florida 32779
(407) 862-4200
ATTN: Mike Solitro

NO.	DATE	BY	DESCRIPTION

SCALE: AS SHOWN
DATE: 03-13-2018
DRAWN: MJC
CHECKED: RSC
APPROVED: RSC

COVER SHEET
NEW ERROL
CITY OF APOPKA, FLORIDA

SEAL
RANDALL S. COHEN, P.E.
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ORLANDO, FLORIDA 32801
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PROJECT NO./DASH NO.
A160186.01

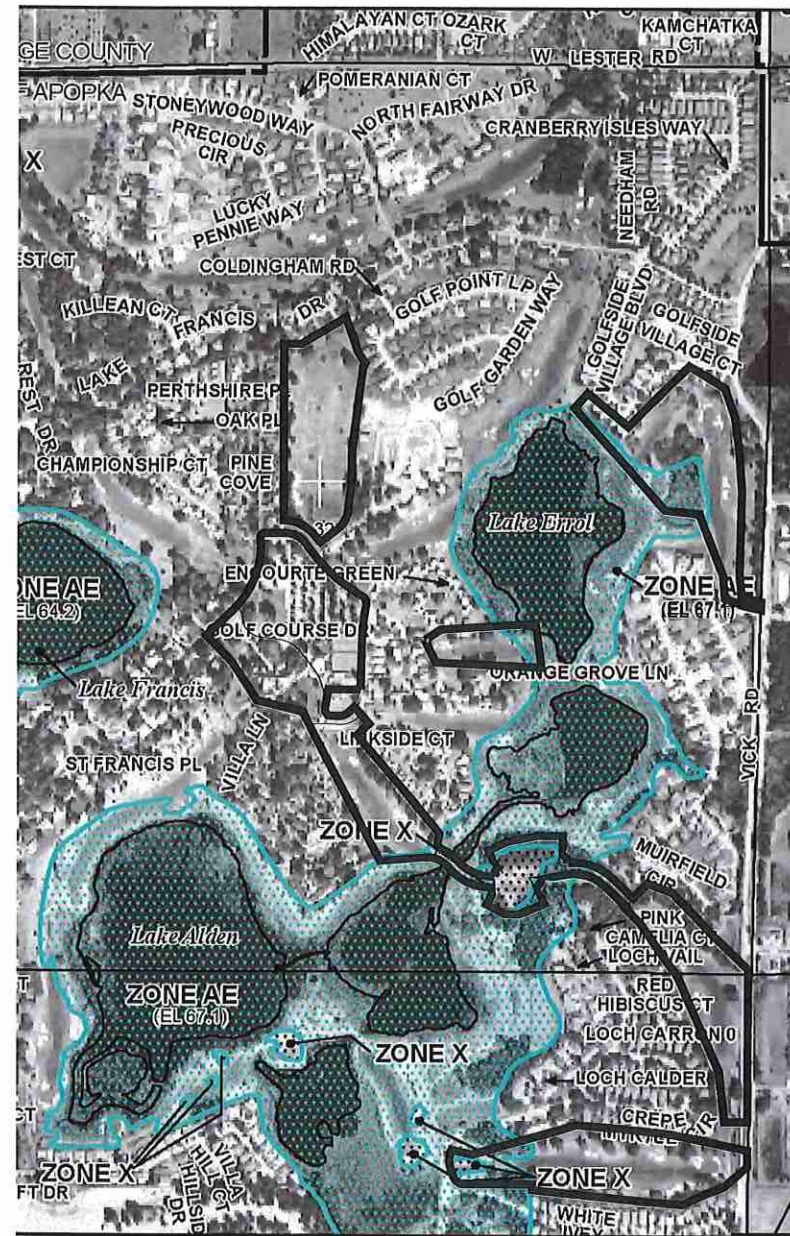
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COMMUNITY SOLUTIONS GROUP
New Errol PUD
 Sec 32, T 20S, R 28E & Sec 5, T 21S, R 28E
 City of Apopka, Orange County, Florida
 Drawn by: JGS
 Date: 31 March 2017
 A160186-F1-20170320.MXD

SOILS MAP - SOURCE: USDA NRCS SOIL SUR
ORANGE COUNTY, FL 2017

11



FLOOD MAP - SOURCE: FEMA 2009

THE SCALE OF THESE PLANS MAY HAVE CHANGED DUE TO REPRODUCTION

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NO.	DATE	BY	CHKD	APP'D	DESCRIPTION	REVISIONS

SCALE:	AS SHOWN
DATE:	03-13-2018
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APPROVED:	RSC

EXISTING CONDITION SITE EXHIBIT

NEW ERROL
CITY OF APOPKA, FLORIDA

SEAL

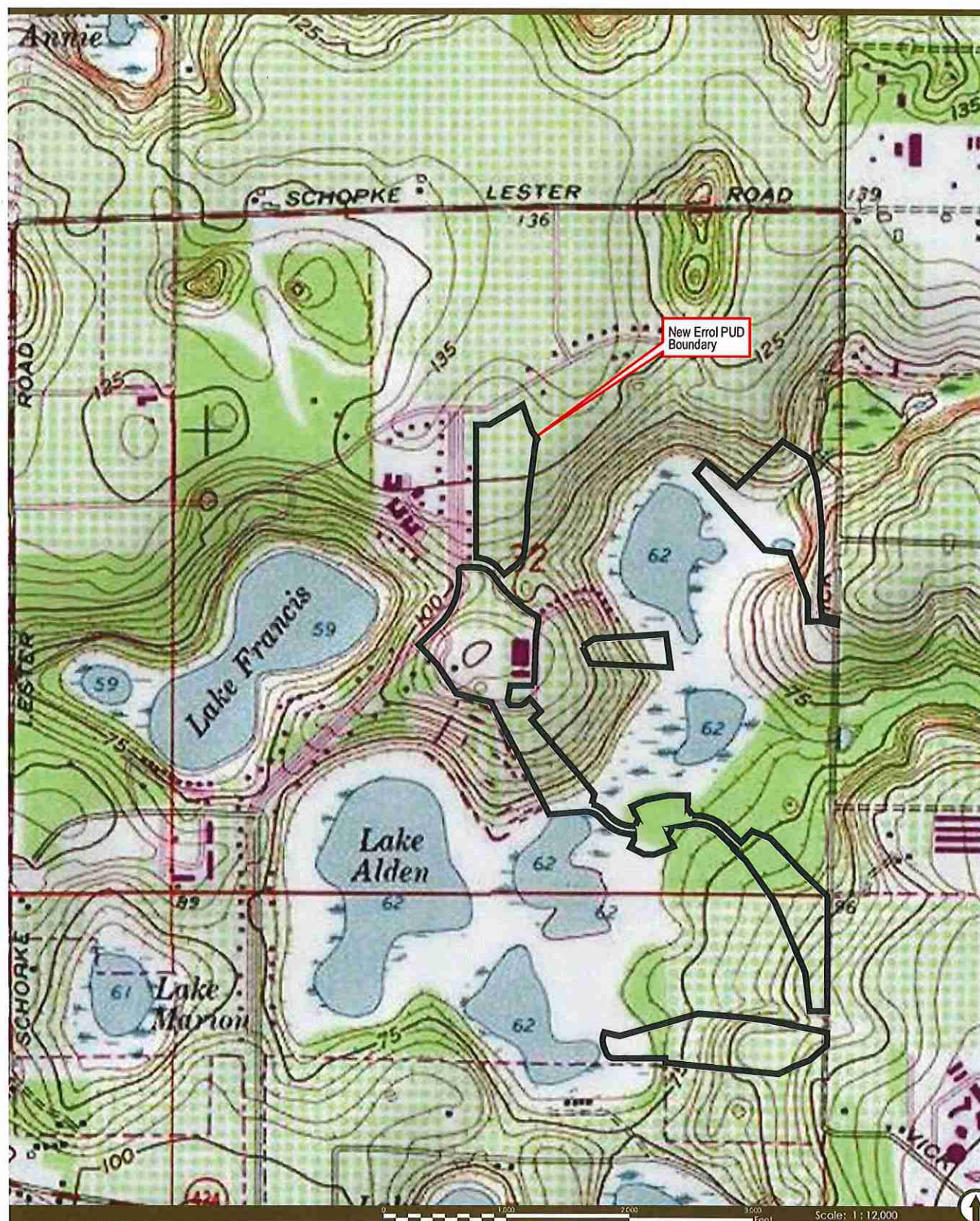
RANDALL S. COHEN, P.E.
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PROJECT NO./DASH NO.
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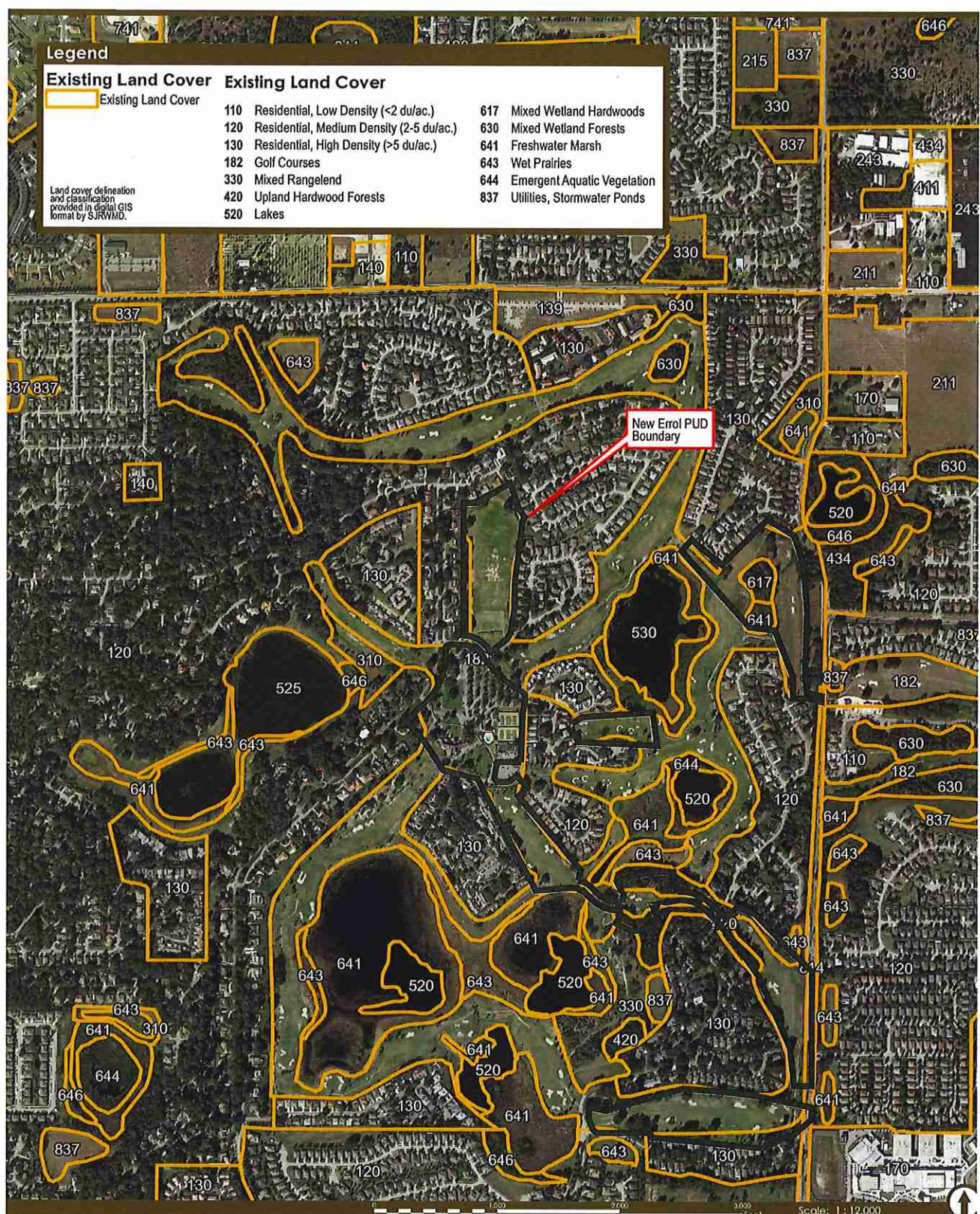


gai consultants **COMMUNITY SOLUTIONS GROUP** **New Errol PUD**

USGS Topographic Survey Map

Sec 32, T 20S, R 28E & Sec 5, T 21S, R 28E
City of Apopka, Orange County, Florida

Drawn by: JGS
Date: 31 March 2017
A160186-F1-20170320.MXD



gai consultants **COMMUNITY SOLUTIONS GROUP** **New Errol PUD**

Existing Land Cover Map

Sec 32, T 20S, R 28E & Sec 5, T 21S, R 28E
City of Apopka, Orange County, Florida

Drawn by: JGS
Date: 31 March 2017
A160186-F1-20170320.MXD

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APPROVED: RSC

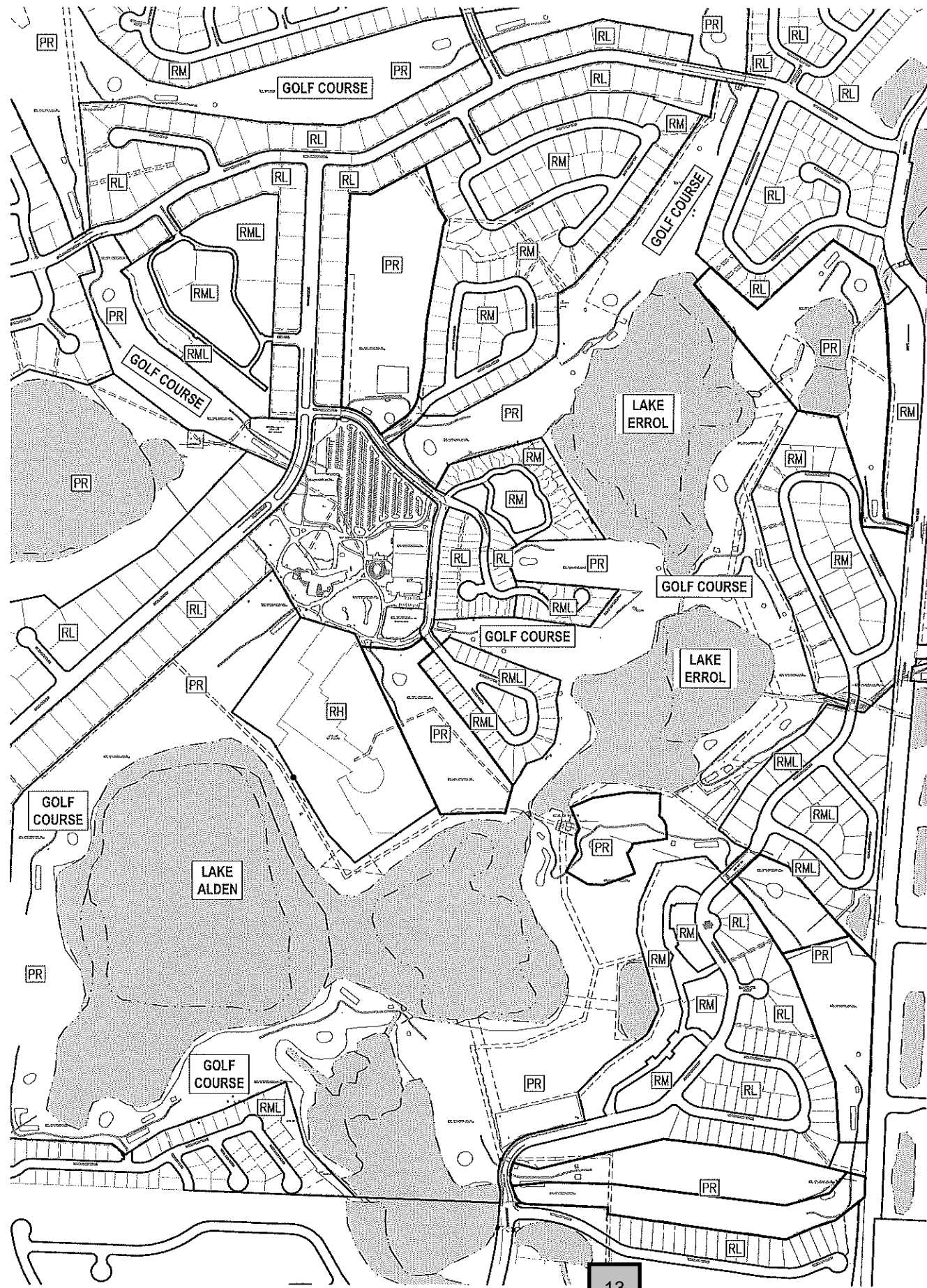
EXISTING CONDITION SITE EXHIBIT
NEW ERROL
CITY OF APOPKA, FLORIDA

SEAL
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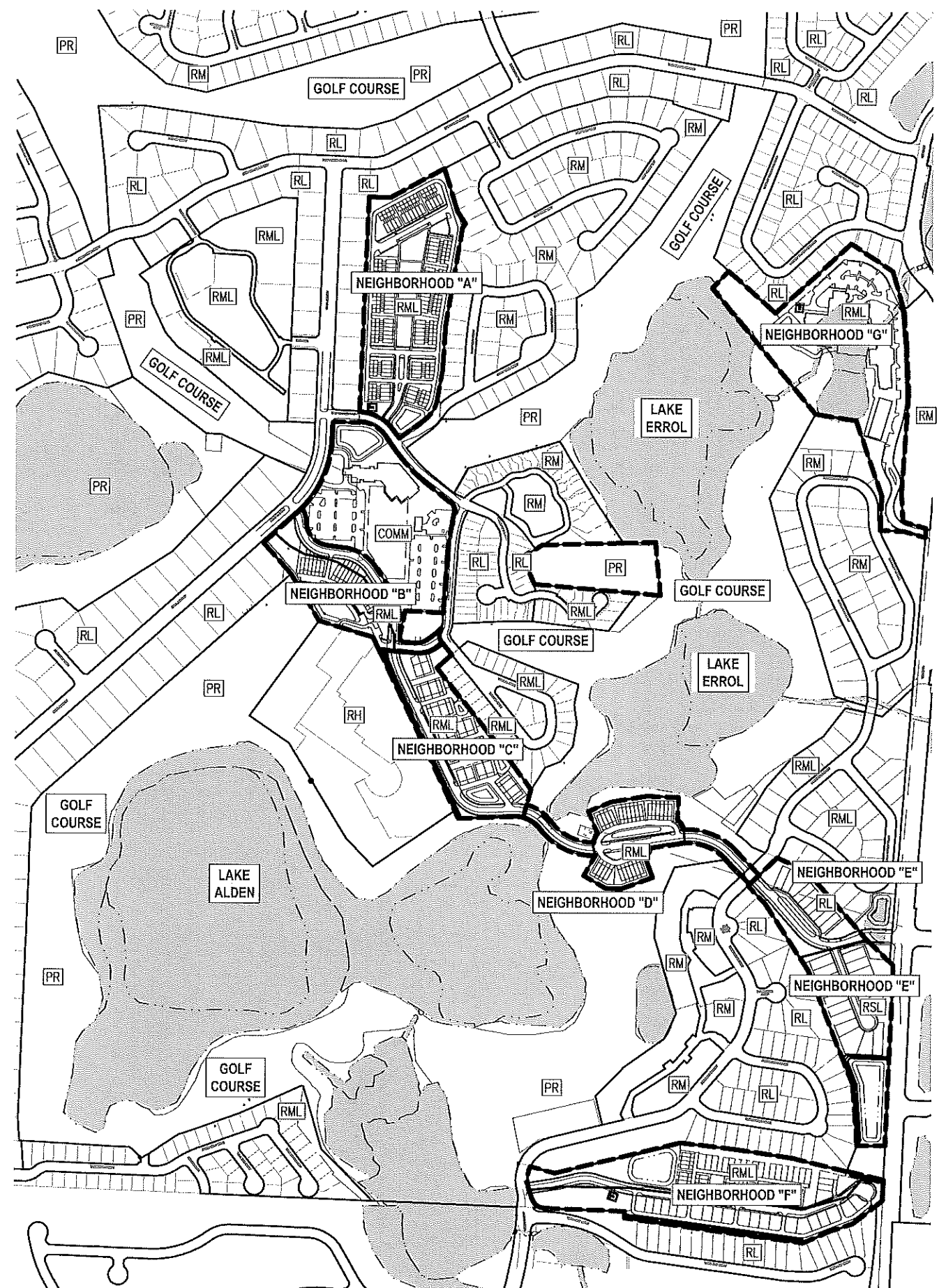
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EXISTING FUTURE LAND USE MAP

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0 300' 600'
SCALE: 1"=300'



PROPOSED FUTURE LAND USE MAP

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NO.	DATE	BY	CHKD	APPD	DESCRIPTION

SCALE: AS SHOWN
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FUTURE LAND USE MAP
NEW ERROL
CITY OF APOPKA, FLORIDA

SEAL

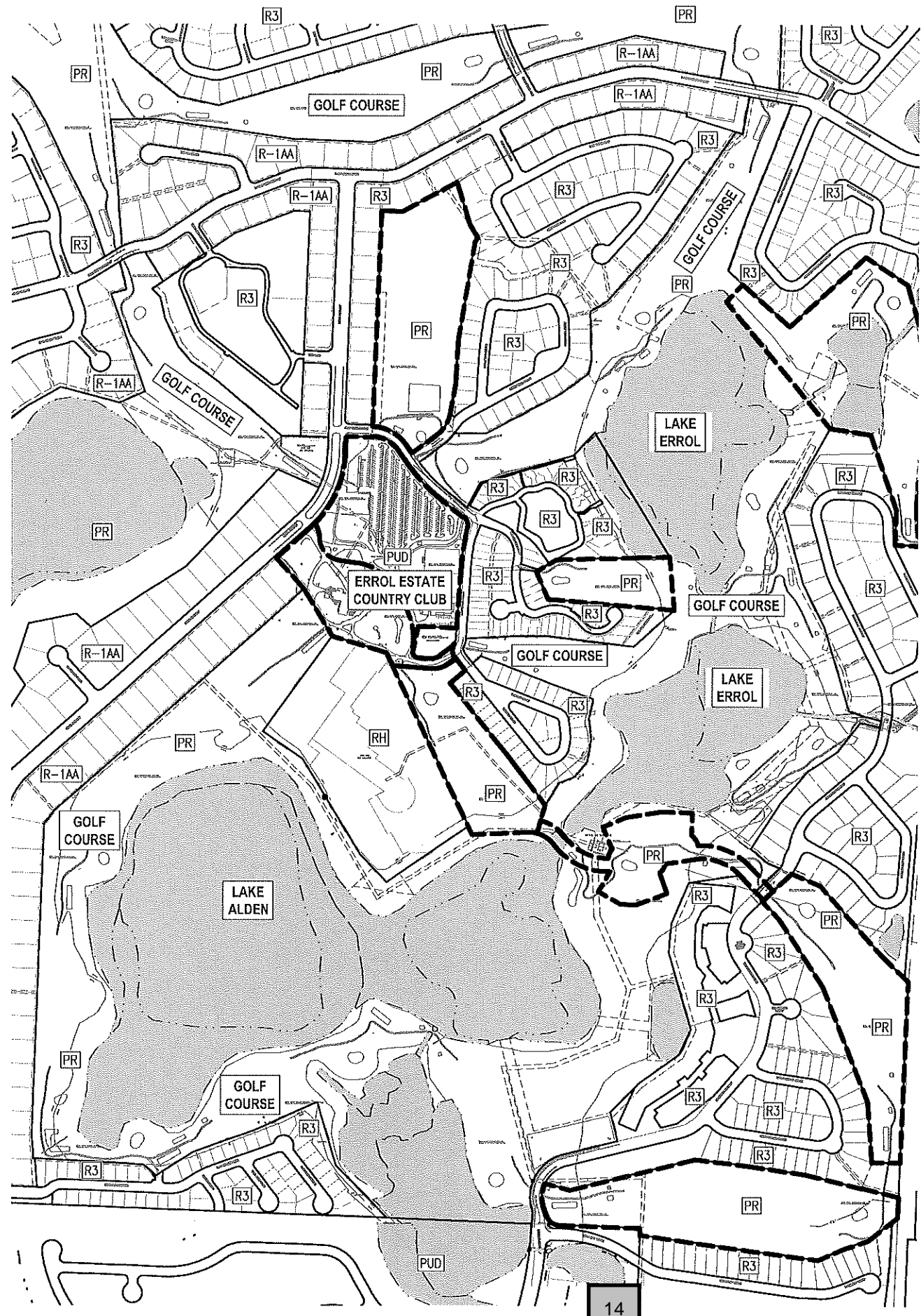
RANDALL S. COHEN, P.E.
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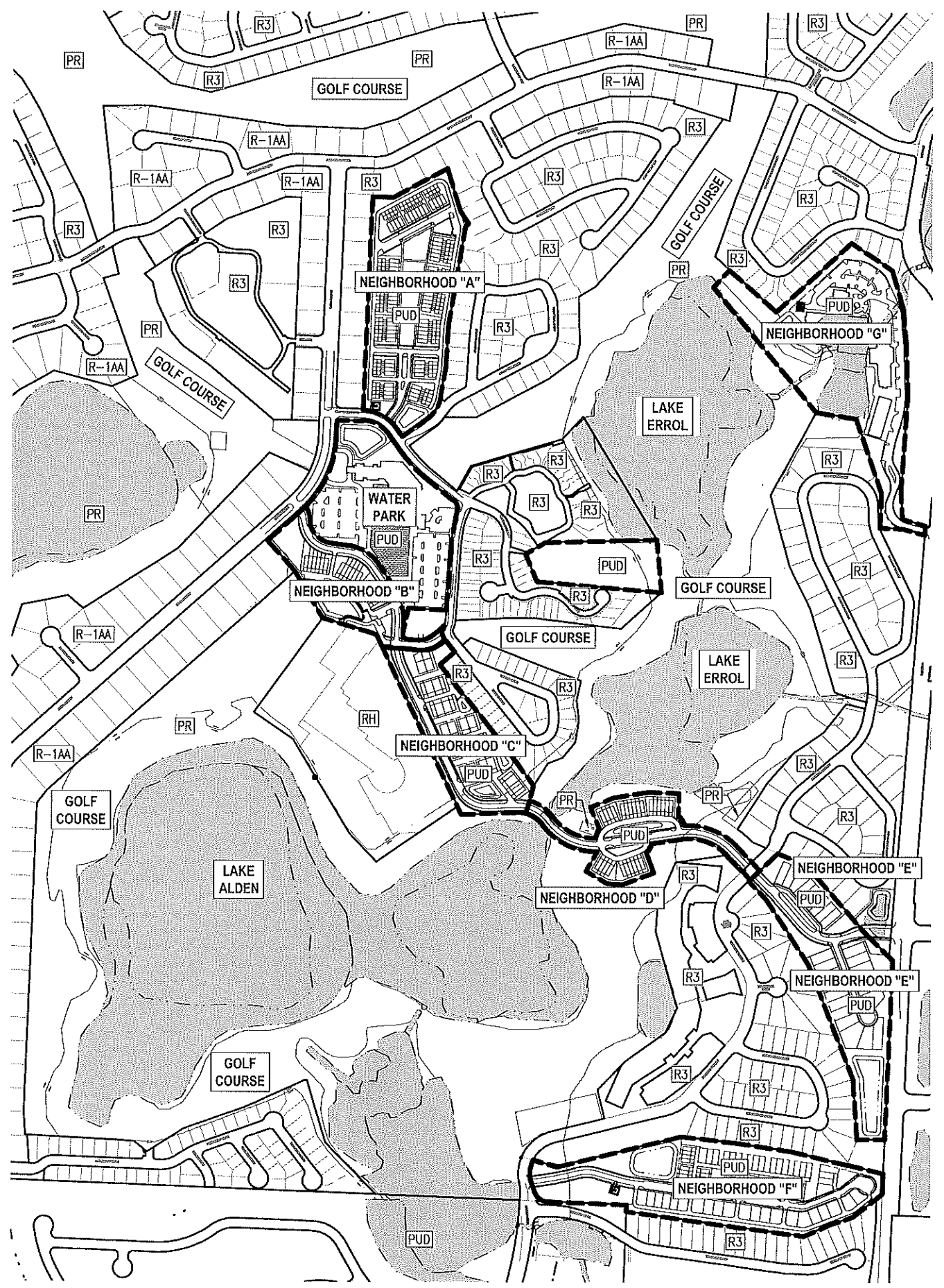
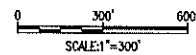
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EXISTING ZONING MAP

14



PROPOSED ZONING MAP

THE SCALE OF THESE PLANS MAY HAVE CHANGED DUE TO REPRODUCTION

NO.	DATE	BY	CHKD.	APPD.	REVISIONS

SCALE: AS SHOWN
 DATE: 03-13-2018
 DRAWN: MJC
 CHECKED: RSC
 APPROVED: RSC

ZONING MAP
 NEW ERROL
 CITY OF APOPKA, FLORIDA

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PROJECT NO./DASH NO.
 A160186.01

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SCALE: AS SHOWN

DATE: 03-13-2018

DRAWN: MJC

CHECKED: RSC

APPROVED: RSC

EXISTING CONDITIONS KEY MAP
NEW ERROL
CITY OF APOPKA, FLORIDA

SEAL

RANDALL S. COHEN, P.E.
No. 58581



PROJECT NO./DASH NO.
A160186.01

SHEET
4.1

NOTE:
LOCATIONS OF EXISTING UTILITIES
PROVIDED BY THE CITY OF
APOPKA GIS. THESE LOCATIONS
HAVE NOT BEEN FIELD VERIFIED.

THE SCALE OF THESE PLANS MAY HAVE CHANGED DUE TO REPRODUCTION

NOTE:
 LOCATIONS OF EXISTING UTILITIES
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WETLAND EXTENTS (TYP)
 (WETLANDS PER
 NATIONAL WETLAND
 INVENTORY. WETLANDS
 HAVE NOT BEEN
 SURVEYED)

SCALE: AS SHOWN
 DATE: 03-13-2018
 DRAWN: MJC
 CHECKED: RSC
 APPROVED: RSC

NO.	DATE	BY	CHKD	APP'D	REVISIONS

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 CHECKED: RSC
 APPROVED: RSC

EXISTING CONDITIONS
 NEW ERROL
 CITY OF APOPKA, FLORIDA

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PROJECT NO./DASH NO.
 A160186.01

SHEET
 4.2

16

MATCHLINE A - SEE SHEET 4.3 FOR CONTINUATION

THE SCALE OF THESE PLANS MAY HAVE CHANGED DUE TO REPRODUCTION

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MATCHLINE A - SEE SHEET 4.2 FOR CONTINUATION



NOTE:
 LOCATIONS OF EXISTING UTILITIES
 PROVIDED BY THE CITY OF
 AOPKA GIS. THESE LOCATIONS
 HAVE NOT BEEN FIELD VERIFIED.

17

MATCHLINE B - SEE SHEET 4.4 FOR CONTINUATION

NO.	DATE	BY	CHKD	APPD	DESCRIPTION

SCALE: AS SHOWN
 DATE: 03-13-2018
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 CHECKED: RSC
 APPROVED: RSC

EXISTING CONDITIONS
 NEW ERROL
 CITY OF AOPKA, FLORIDA

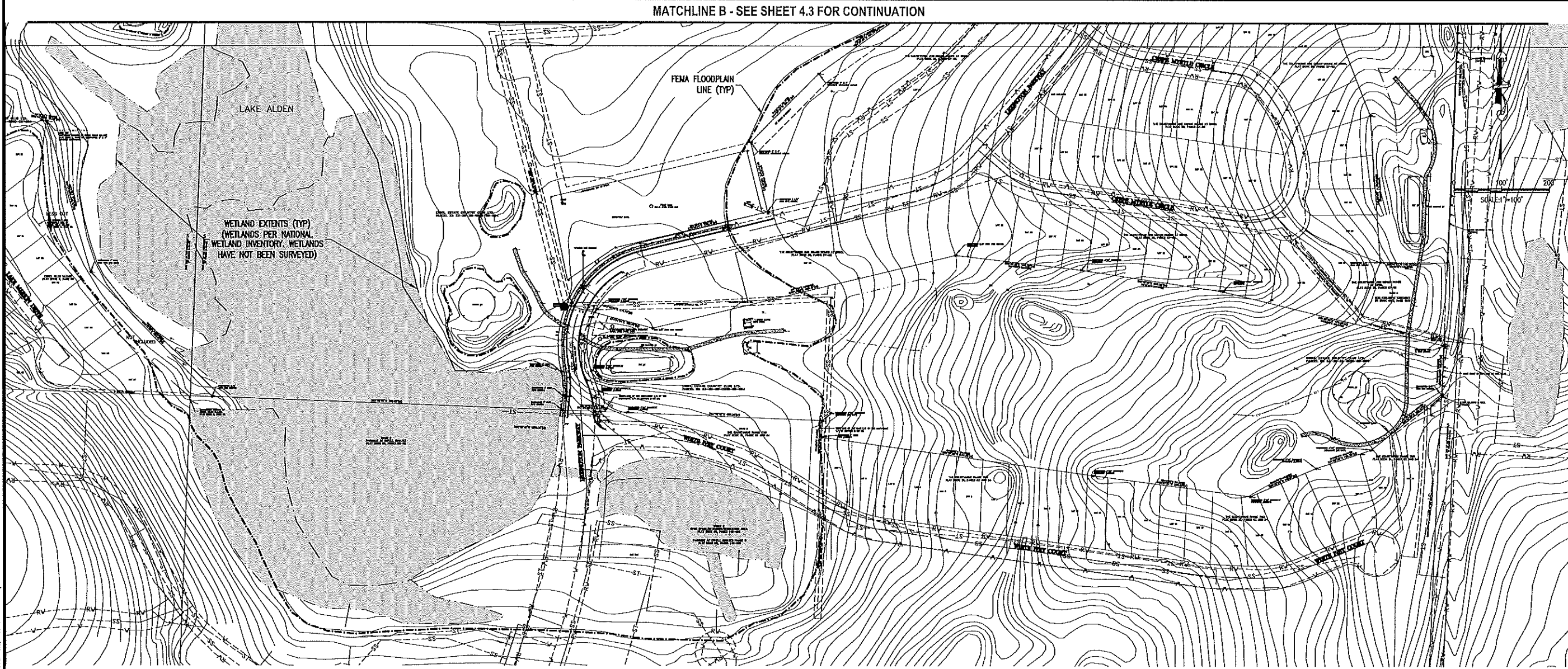
SEAL
 RANDALL S. COHEN, P.E.
 No. 58581

gai consultants
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 818 EAST SOUTH STREET
 GULF BORO, FLORIDA 32601
 PHONE: (407) 423-8398

PROJECT NO./DASH NO.
 A160186.01
 SHEET
 4.3

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MATCHLINE B - SEE SHEET 4.3 FOR CONTINUATION



NOTE:
LOCATIONS OF EXISTING UTILITIES PROVIDED BY THE CITY OF APOPKA GIS. THESE LOCATIONS HAVE NOT BEEN FIELD VERIFIED.

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NO.	DATE	BY	CHKD	APPD	DESCRIPTION

SCALE: AS SHOWN
DATE: 03-13-2018
DRAWN: MJC
CHECKED: RSC
APPROVED: RSC

EXISTING CONDITIONS
NEW ERROL
CITY OF APOPKA, FLORIDA

SEAL
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PROJECT NO./DASH NO.
A160186.01
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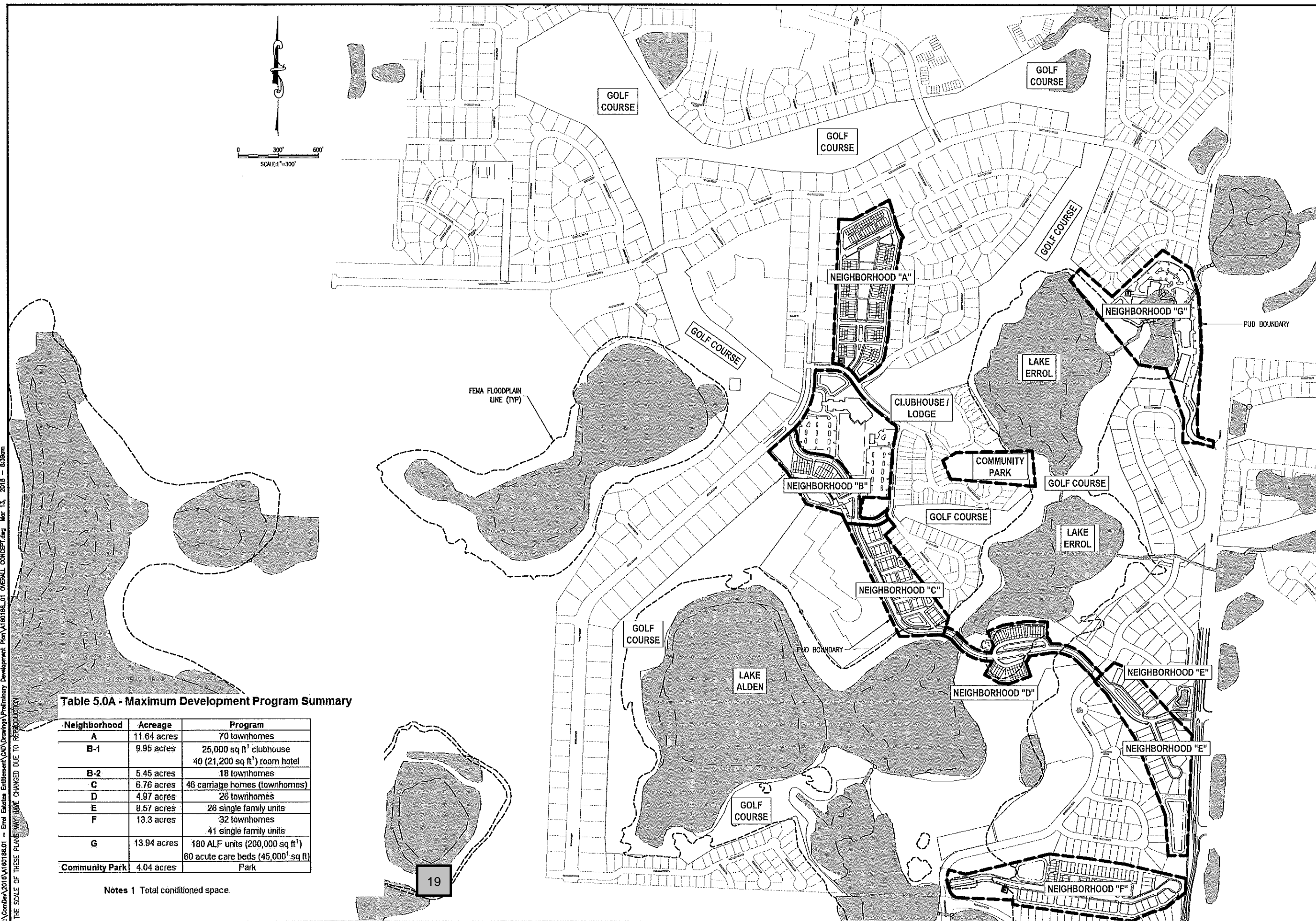
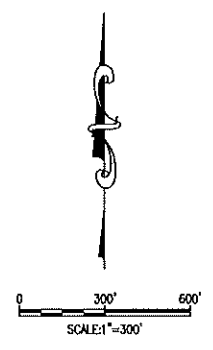


Table 5.0A - Maximum Development Program Summary

Neighborhood	Acreage	Program
A	11.64 acres	70 townhomes
B-1	9.95 acres	25,000 sq ft clubhouse 40 (21,200 sq ft) room hotel
B-2	5.45 acres	18 townhomes
C	6.76 acres	46 carriage homes (townhomes)
D	4.97 acres	26 townhomes
E	8.57 acres	26 single family units
F	13.3 acres	32 townhomes 41 single family units
G	13.94 acres	180 ALF units (200,000 sq ft) 60 acute care beds (45,000 sq ft)
Community Park	4.04 acres	Park

Notes 1 Total conditioned space

19

REVISIONS	
NO.	DESCRIPTION

SCALE: AS SHOWN
 DATE: 03-13-2018
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 APPROVED: RSC

OVERALL CONCEPT PLAN
 NEW ERROL
 CITY OF APOPKA, FLORIDA

SEAL

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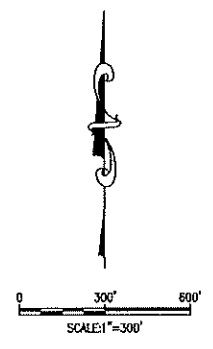


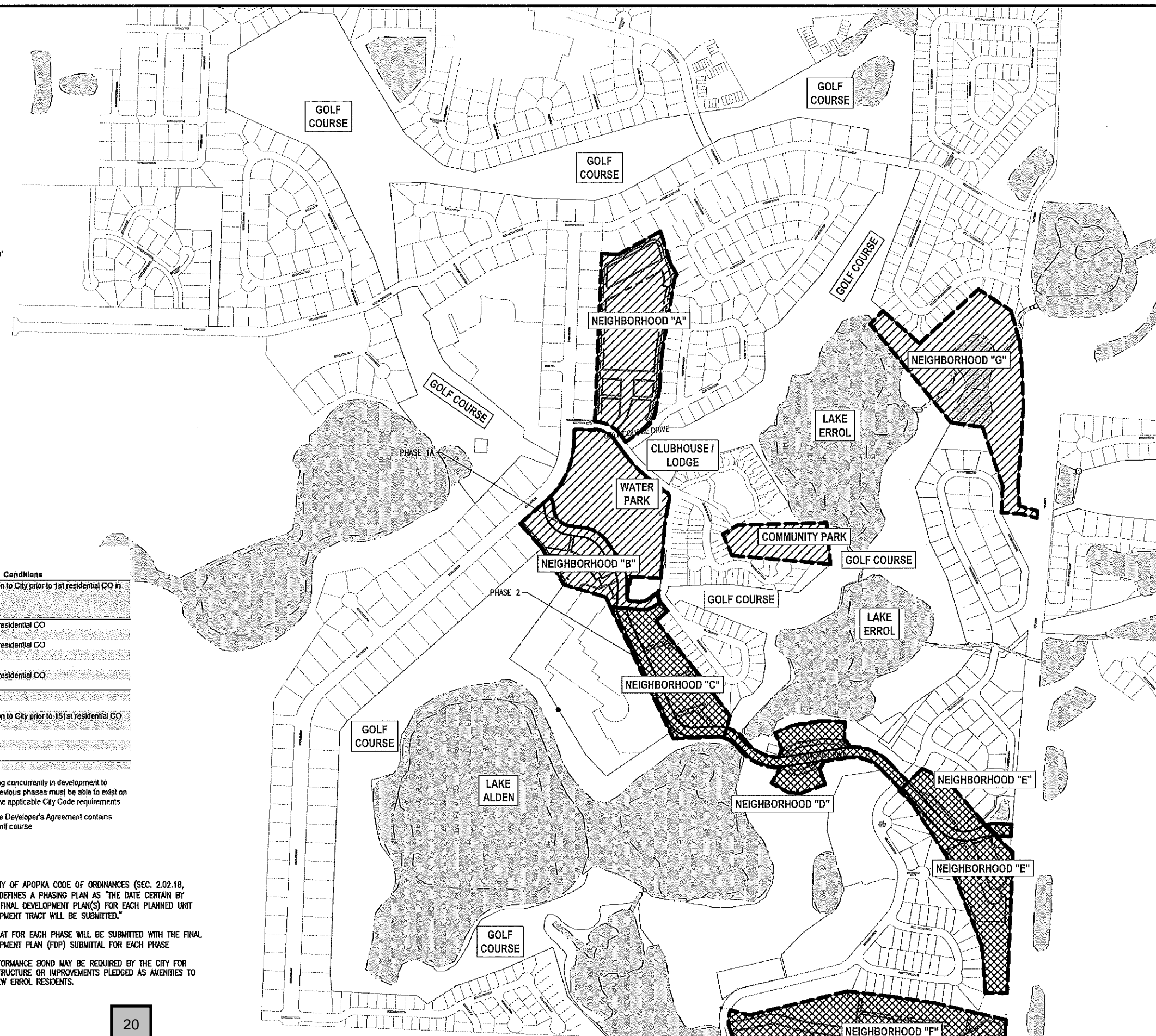
Table 6.0A - Phasing Plan

Phase 1,2	Item	Conditions
1a	Staghorn Drive (Spine Road) from Errol Parkway to Villas Access South extension of Golf Course Drive (Linkside Court to Staghorn Drive)	Completion and dedication to City prior to 1st residential CO in Neighborhood B-2
1b	Clubhouse Lodge/Hotel Water Park Neighborhood A ALF (Building 1) Community Park Neighborhood B-2	Completion prior to 50th residential CO Completion prior to 50th residential CO Completion prior to 90th residential CO
2	Neighborhood C Neighborhood D Staghorn Drive (Spine Road) South of Villas Access Neighborhood E Neighborhood F ALF (Building 2)	Completion and dedication to City prior to 151st residential CO
3	Acute Care Rehab Center	

Notes
 1 Phases 1 and 2 will include multiple internal sub-phases running concurrently in development to completion. Each phase, portion or parcel in combination with previous phases must be able to exist on its own with respect to sufficient on-site infrastructure to satisfy the applicable City Code requirements.
 2 The golf course has been removed from the PUD, however, the Developer's Agreement contains additional phasing requirements related to improvements to the golf course.

LEGEND	
	PHASE 1
	PHASE 2
	PHASE 3

- NOTE:**
1. THE CITY OF APOPKA CODE OF ORDINANCES (SEC. 2.02.18, K.2.e) DEFINES A PHASING PLAN AS "THE DATE CERTAIN BY WHICH FINAL DEVELOPMENT PLAN(S) FOR EACH PLANNED UNIT DEVELOPMENT TRACT WILL BE SUBMITTED."
 2. THE PLAN FOR EACH PHASE WILL BE SUBMITTED WITH THE FINAL DEVELOPMENT PLAN (FDP) SUBMITTAL FOR EACH PHASE.
 3. A PERFORMANCE BOND MAY BE REQUIRED BY THE CITY FOR INFRASTRUCTURE OR IMPROVEMENTS PLEDGED AS AMENITIES TO THE NEW ERROL RESIDENTS.



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PHASING PLAN
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 CITY OF APOPKA, FLORIDA

SEAL

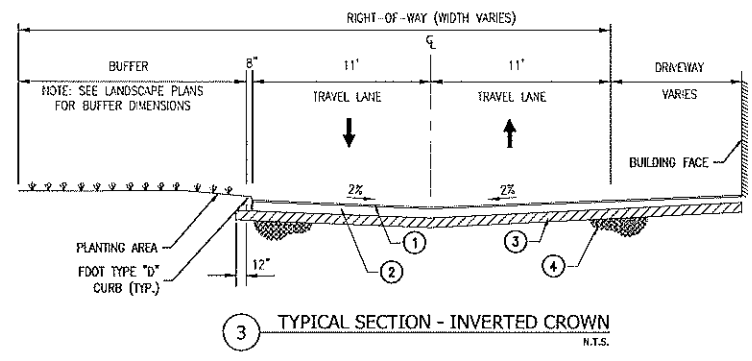
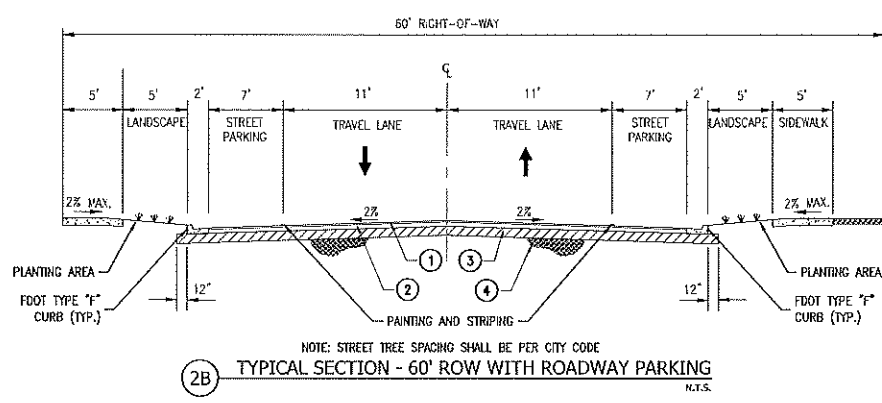
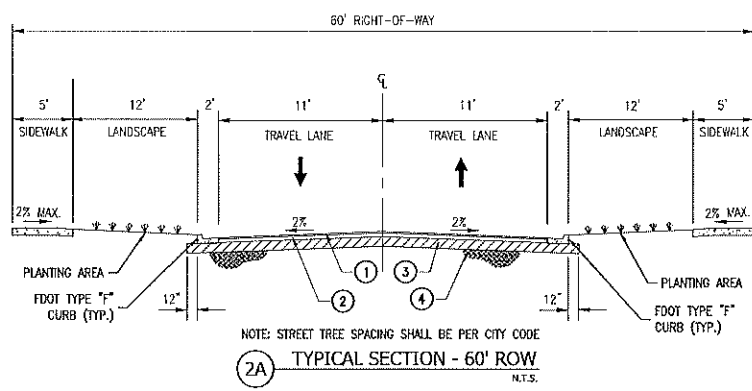
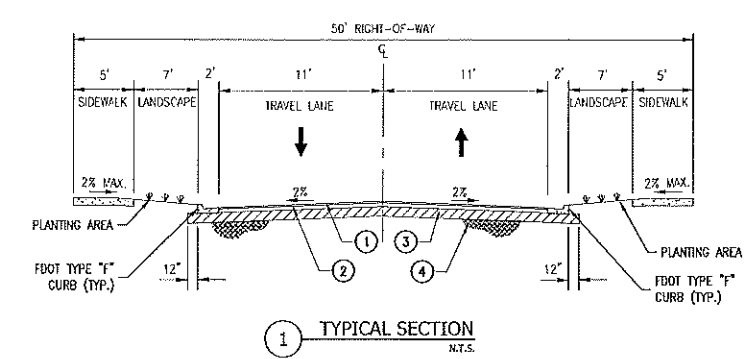
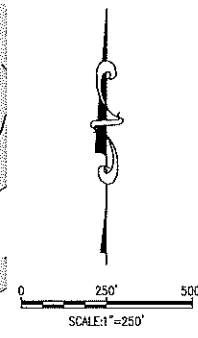
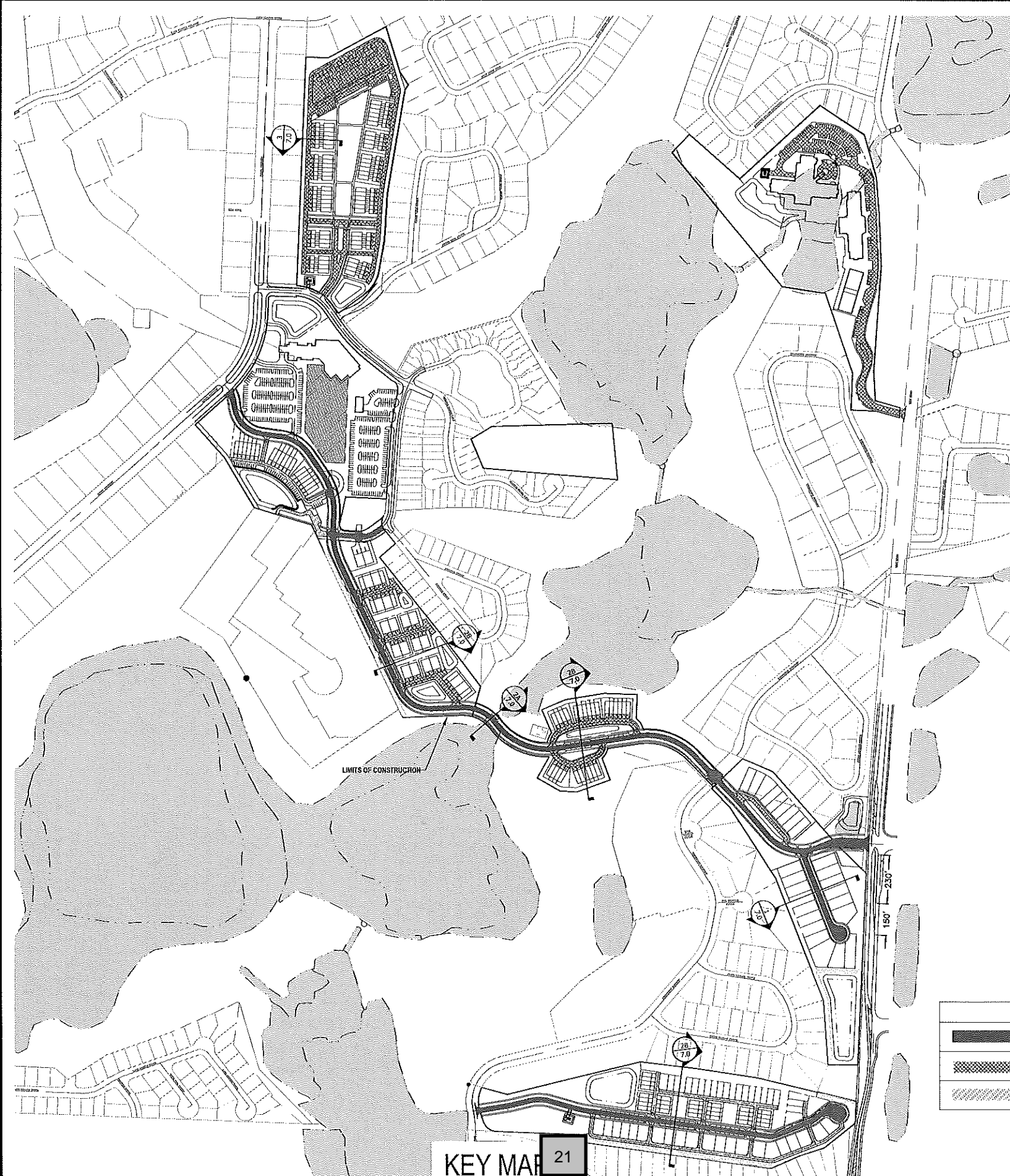
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LEGEND	
	PUBLIC RIGHT-OF-WAY
	PRIVATE RIGHT-OF-WAY
	ALLEY (PRIVATE)

NOTE: NORTH BOUND LEFT TURN SHOWN FOR DISPLAY PURPOSES ONLY.

ASPHALT PAVEMENT KEY NOTES			
1	1.5" ASPHALT - SP 9.5	3	12" TYPE 'B' STABILIZATION - MIN. LBR 40
2	8" LIMEROCK BASE - MIN. LBR 100	4	COMP. FILL/IN-SITU SOILS

REVISIONS			
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OVERALL TRANSPORTATION PLAN
NEW ERROL
CITY OF APOKA, FLORIDA

SEAL
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No. 58581

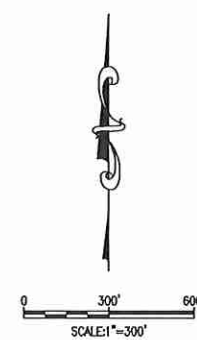
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OPEN SPACE LEGEND

- PARKS and PROGRAMMED OPEN SPACES
- BUFFERS and UNPROGRAMMED OPEN SPACES
- ENVIRONMENTAL OPEN SPACE
- STORMWATER (not included in total unless noted)
- 8' NEIGHBORHOOD TRAIL
- * COMMUNITY PARK ACCESS

OPEN SPACE ACREAGE

NEIGHBORHOOD	TOTAL AREA	OPEN SPACE	PERCENTAGE
NEIGHBORHOOD A	11.64 ACRES	3.3 ACRES	28.4 %
NEIGHBORHOOD B1 (1)	9.95 ACRES	4.3 ACRES	43.6 %
NEIGHBORHOOD B2	5.45 ACRES	1.4 ACRES	25.7 %
NEIGHBORHOOD C	6.76 ACRES	1.6 ACRES	23.7 %
NEIGHBORHOOD D	4.97 ACRES	1.1 ACRES	22.1 %
NEIGHBORHOOD E (2)	8.57 ACRES	4.2 ACRES	49.0 %
NEIGHBORHOOD F	13.3 ACRES	4.3 ACRES	32.3 %
NEIGHBORHOOD G	13.94 ACRES	6.4 ACRES	45.9 %
TOTAL	78.62 ACRES	26.6 ACRES	33.9 %

(1) Neighborhood B1 acreage includes Community Park.
 (2) Neighborhood E acreage excludes City-owned stormwater parcel at Vick Road.

NOTE:
 The specific design and programming of each individual park space will be submitted with future development plan applications. Proposed facilities and typical photos are provided to indicate the character of each proposed space.



COMMUNITY PARK



LAKE EDGE



PASSIVE PARK (OPEN SPACE)



DOG PARK

NOTE:
 The Community Park is accessed via the New Errol trail system and no parking is provided. On street parking is not permitted on Encourte Green or Orange Grove Lane for park access.

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NO.	DESCRIPTION

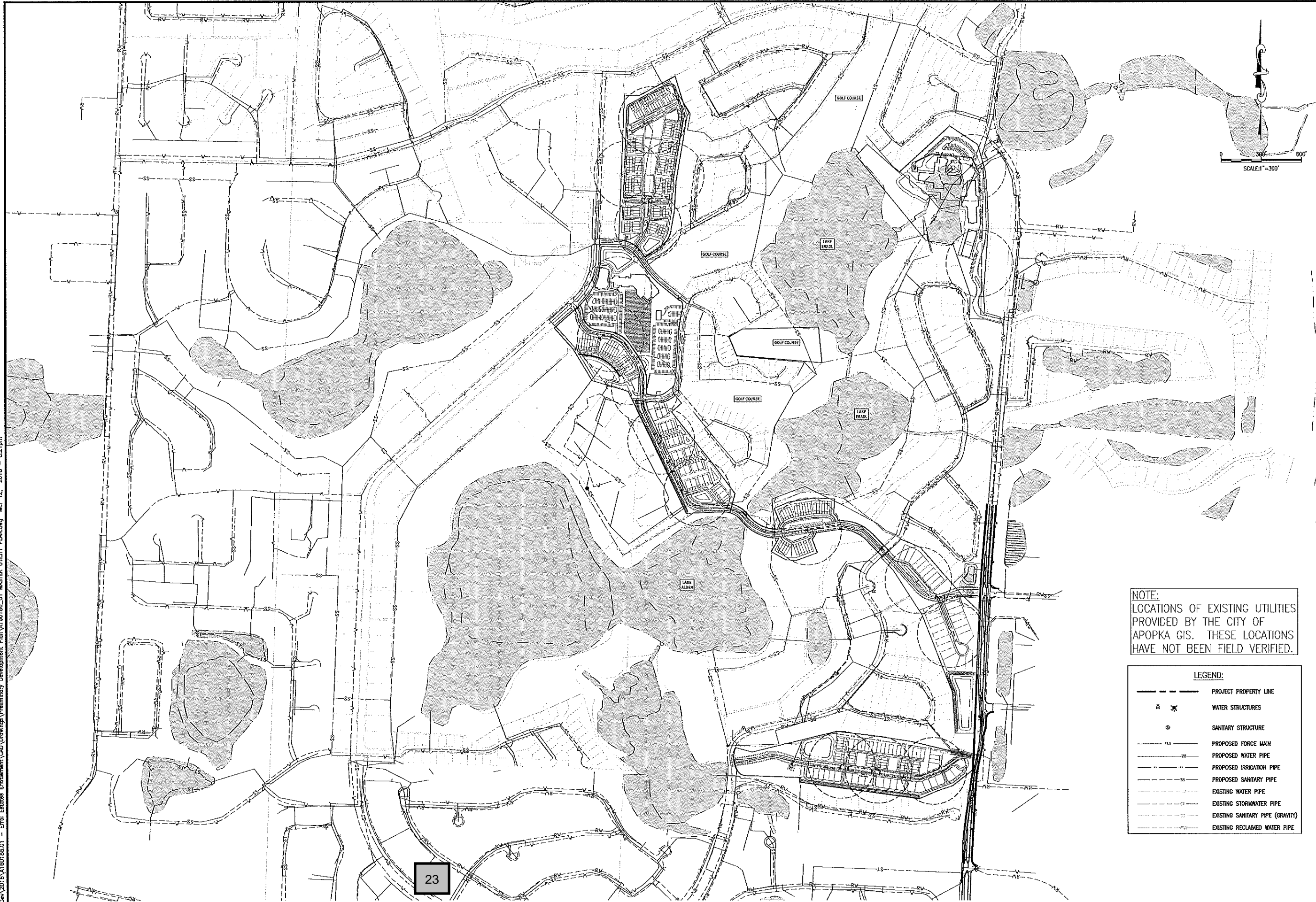
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APPROVED:	RSC

OPEN SPACE PLAN

NEW ERROL
CITY OF APOPKA, FLORIDA

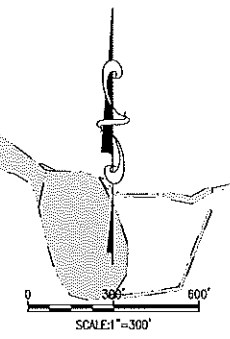
SEAL
RANDALL S. COHEN, P.E. No. 58561
 gai consultants EB 9951 618 EAST SOUTH STREET ORLANDO, FLORIDA 32801 PHONE: (407) 423-8398
PROJECT NO./DASH NO. A160186.01 SHEET 8.0

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NOTE:
LOCATIONS OF EXISTING UTILITIES
PROVIDED BY THE CITY OF
APOPKA GIS. THESE LOCATIONS
HAVE NOT BEEN FIELD VERIFIED.

LEGEND:	
— — — — —	PROJECT PROPERTY LINE
⊗	WATER STRUCTURES
⊙	SANITARY STRUCTURE
— F1 — — —	PROPOSED FORCE MAIN
— W — — —	PROPOSED WATER PIPE
— I — — —	PROPOSED IRRIGATION PIPE
— SS — — —	PROPOSED SANITARY PIPE
— — — — —	EXISTING WATER PIPE
— — — — —	EXISTING STORMWATER PIPE
— — — — —	EXISTING SANITARY PIPE (GRAVITY)
— — — — —	EXISTING RECLAIMED WATER PIPE



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OVERALL UTILITY PLAN
NEW ERROL
CITY OF APOPKA, FLORIDA

SEAL
RANDALL S. COFFIN, P.E.
No. 58561

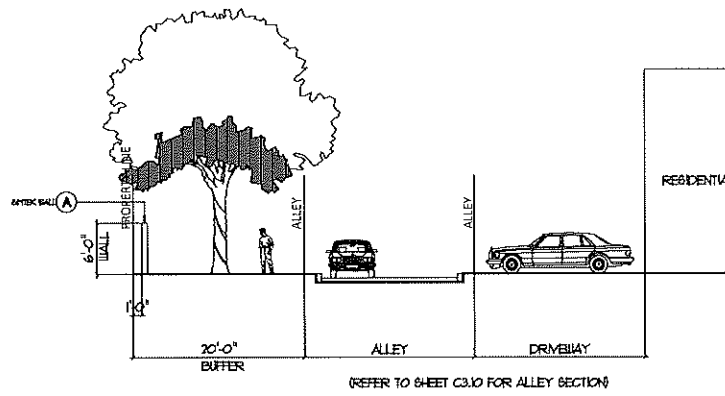
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PROJECT NO./DASH NO.
A160186.01

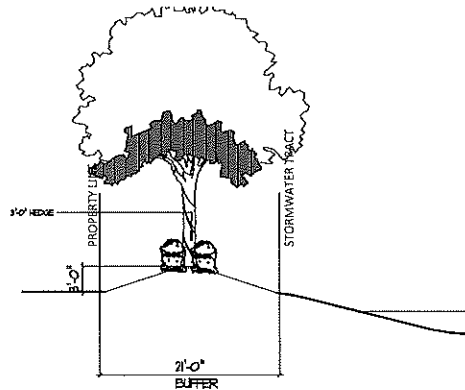
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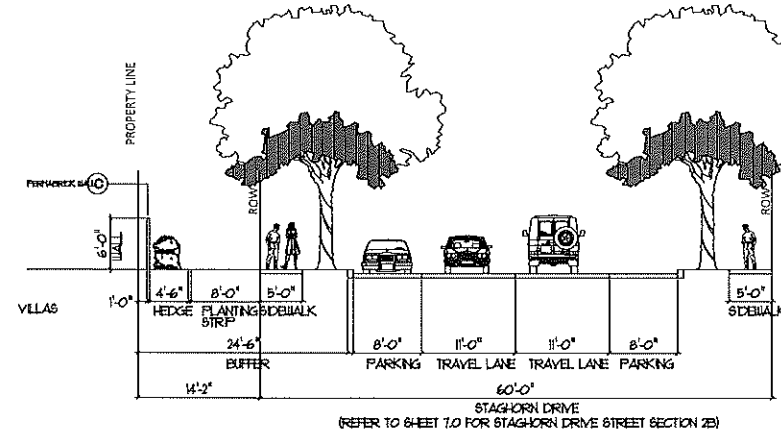
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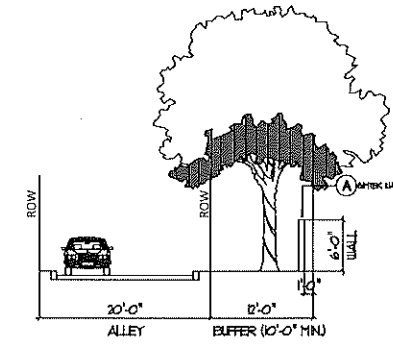
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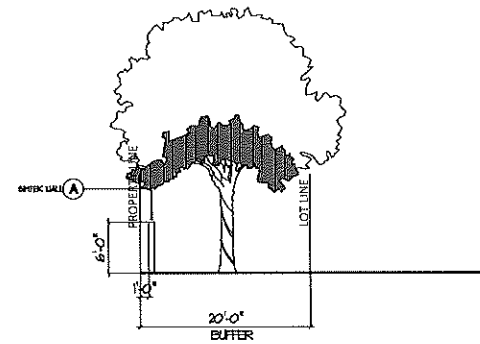
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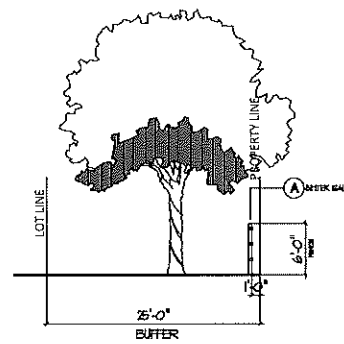
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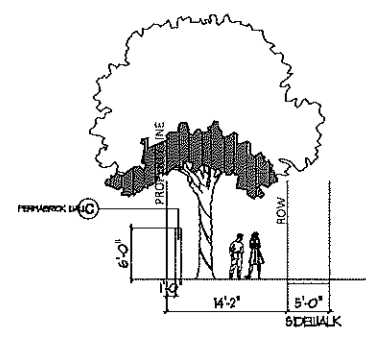
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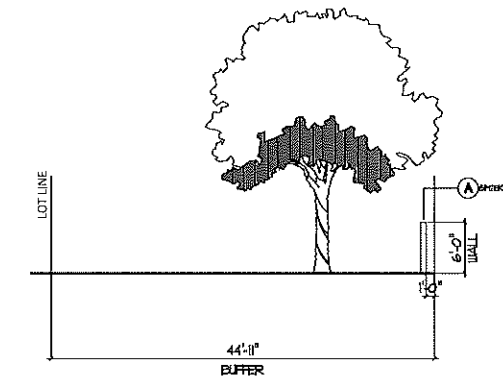
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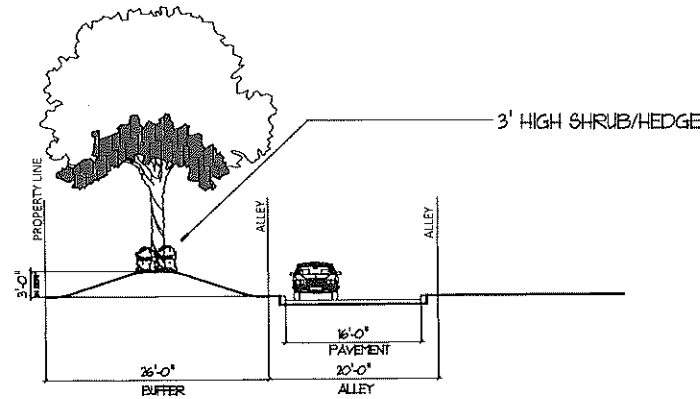
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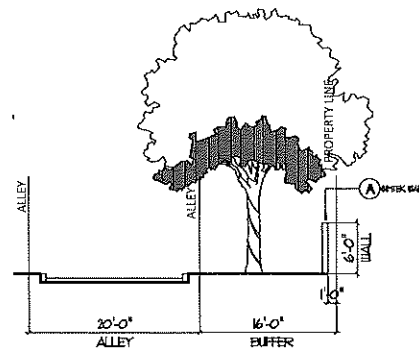
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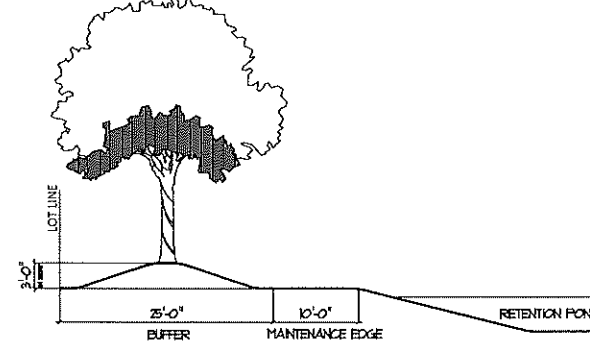
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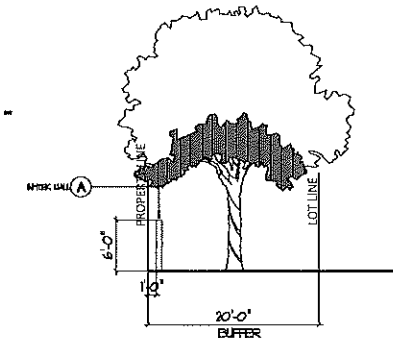
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12.1 SCALE = 1"=10'



10 BUFFER J
12.1 SCALE = 1"=10'



11 BUFFER K
12.1 SCALE = 1"=10'



12 BUFFER L
12.1 SCALE = 1"=10'

BUFFER SECTIONS

REVISIONS			
NO.	DATE	BY	DESCRIPTION

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APPROVED:	RSC

BUFFER SECTIONS
NEW ERROL
CITY OF APOKA, FLORIDA

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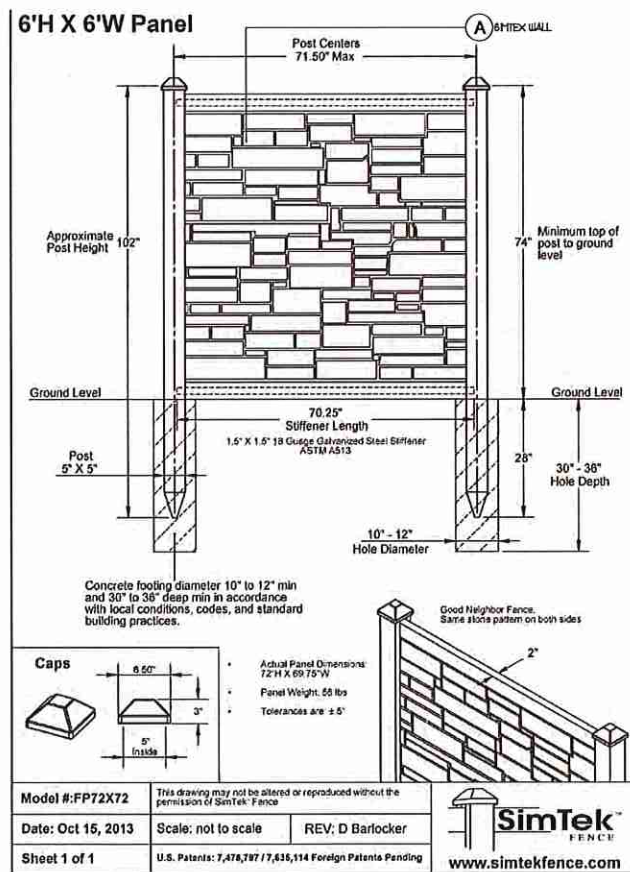
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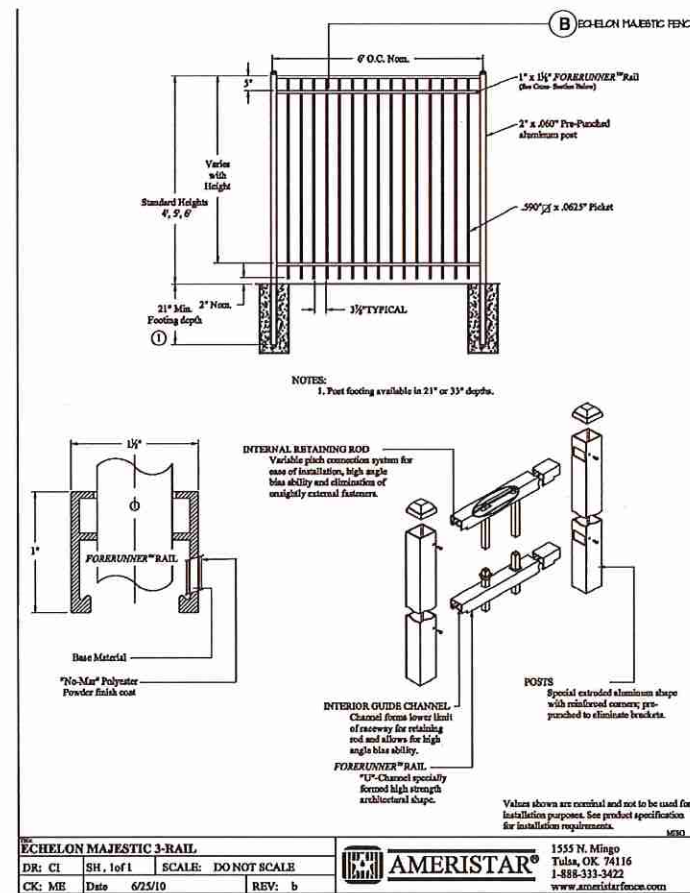
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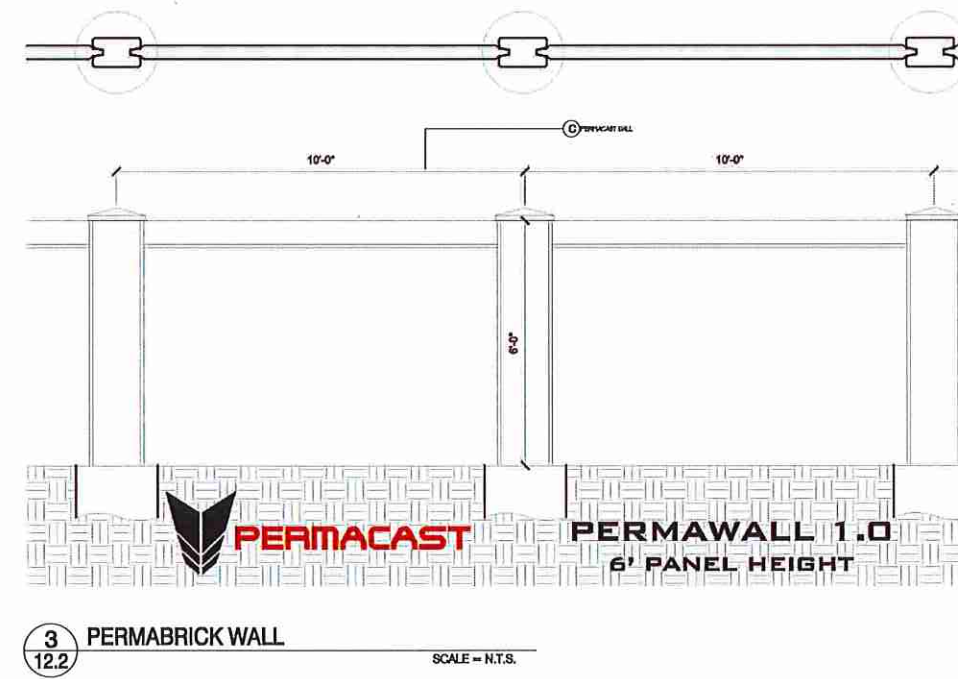
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1
12.2 SIMTEK WALL
SCALE = N.T.S.



2
12.2 ECHELON MAJESTIC FENCE
SCALE = N.T.S.



FINISH SCHEDULE		
SYM	ITEM	SPECIFICATIONS
(A)	SIMTEK WALL	TYPE: SIMTEK ECOSTONE WALL (6' X 6' PANELS) COLOR: BROWN FINISH: ECOSTONE SOURCE: SIMTEK FENCE; www.simtekfence.com/ecostone/
(B)	FENCE	TYPE: ECHELON MAJESTIC FENCE COLOR: BLACK FINISH: ALUMINUM SOURCE: AMERISTAR FENCE; www.ameristarfence.com
(C)	PERMABRICK WALL	TYPE: PRECAST BRICK CONCRETE WALL (6' TALL X 10' WIDE PANELS) COLOR: BRICK FINISH: BRICK SOURCE: PERMACAST; www.permacastwalls.com

NOTE: CONTRACTOR MUST SUBMIT SAMPLES AND/OR OBTAIN SHOP DRAWING APPROVAL FOR ALL FINISH SCHEDULE ITEMS.

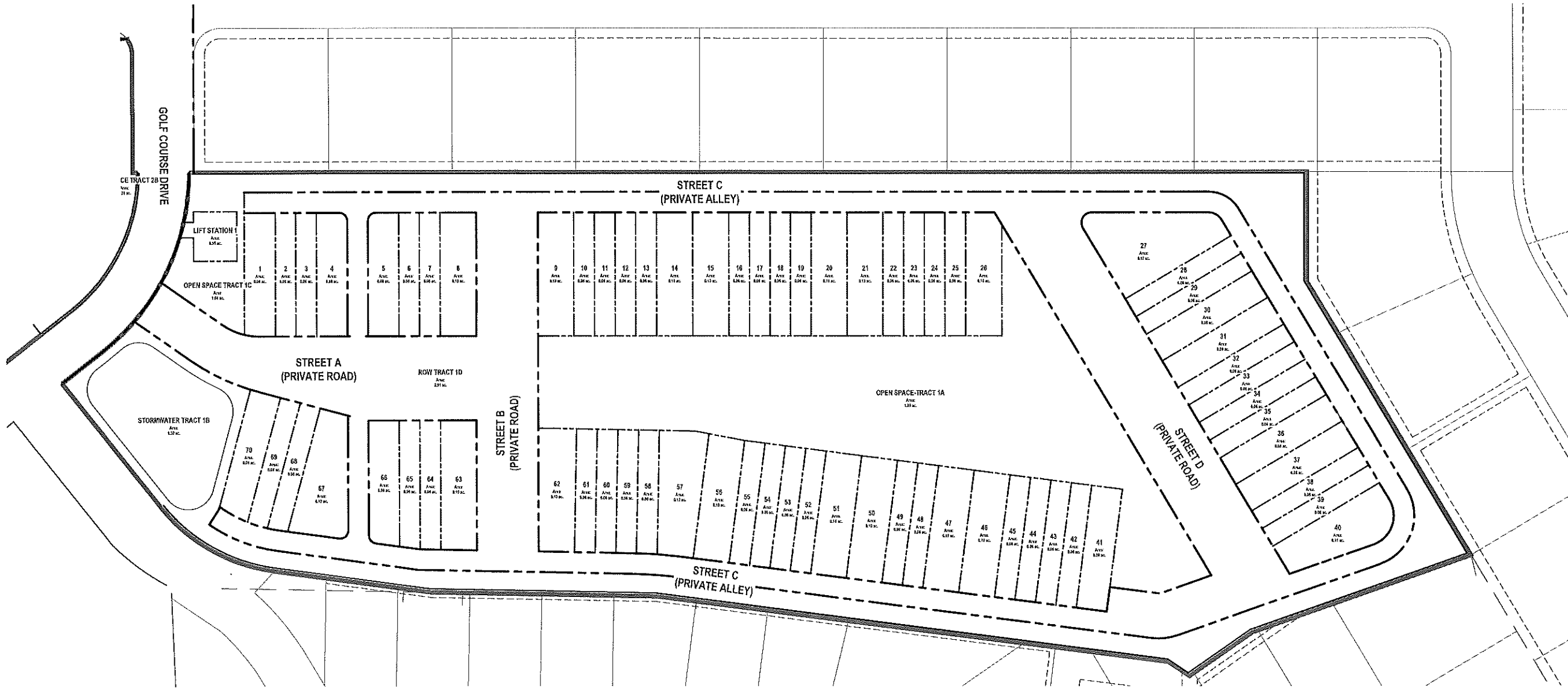
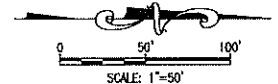
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BUFFER DETAILS AND FINISH SCHEDULE
NEW ERROL
CITY OF APOPKA, FLORIDA

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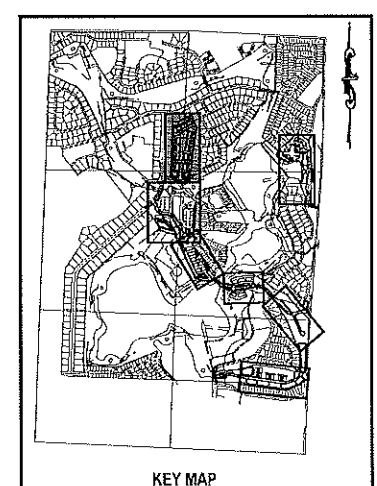
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PHONE: (407) 423-8398
PROJECT NO./DASH NO.
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12.2



NEIGHBORHOOD "A"

TABLE 13.1 A

TRACT ACREAGE TABLE	
NEIGHBORHOOD A	AREA (AC.)
DEVELOPMENT	5.03 ACRES
OPEN SPACE	3.33 ACRES
TRACT 1A	1.69 ACRES
TRACT 1C	1.64 ACRES
STORMWATER RETENTION	0.32 ACRES
TRACT 1B	0.32 ACRES
RIGHT-OF-WAY	2.91 ACRES
TRACT 1D	2.91 ACRES
LIFT STATION	0.05 ACRES
TOTAL	11.64 ACRES



KEY MAP

REVISIONS					
NO.	DATE	BY	CHKD	APPD	DESCRIPTION

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TRACT MAP - NEIGHBORHOOD A
NEW ERROL
CITY OF APOPKA, FLORIDA

SEAL

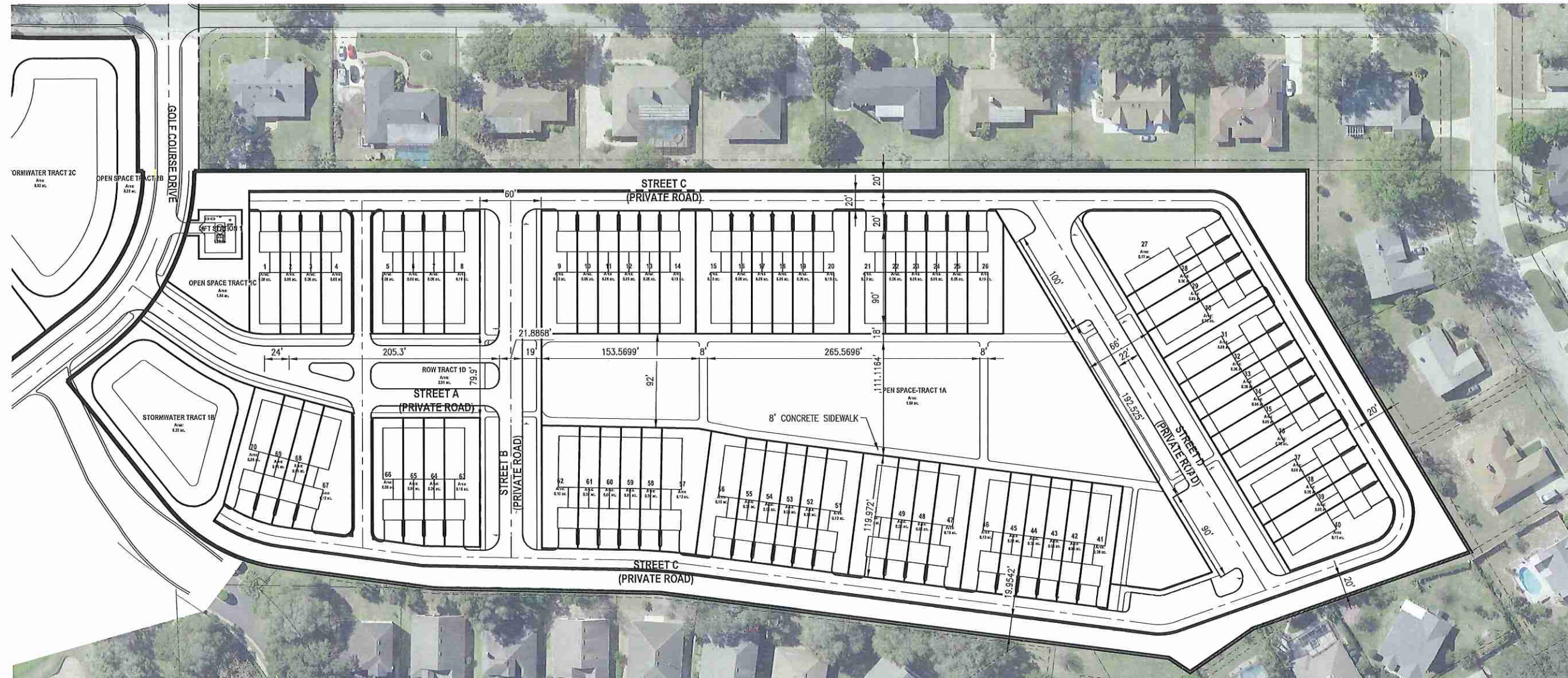
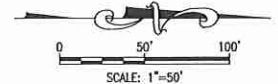
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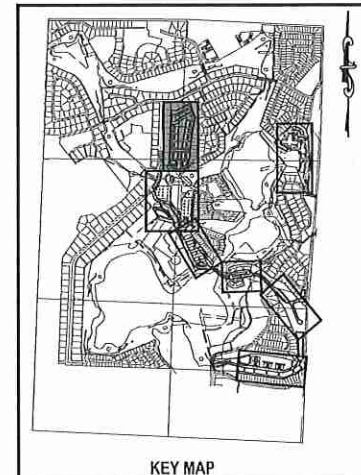
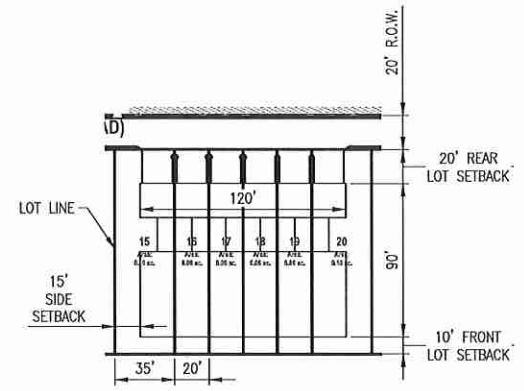
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NEIGHBORHOOD "A"

Table 13.2A - Neighborhood A Development Standards

Allowable Uses	Attached Residential (townhomes)
Max Residential Units	70
Neighborhood Acreage	11.84 acres
Gross Neighborhood Density	6.01 du/acre
Proposed Parking Count	140 enclosed spaces (rear loaded) 27 guest spaces
Lot Standards	
Min Lot Width	20'
Min Lot Depth	100'
Minimum Setbacks	
Front (from road or common area)	10'
Side	10'
Corner Side	15'
Rear	20'
Minimum Attached Building Separation	
Building Height	20'
Max Stories	2
Max Height	35'
Minimum Living Area	1,350 sq ft
Minimum Parking	2 enclosed spaces per unit



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SUBDIVISION PLAN - NEIGHBORHOOD A
NEW ERROL
CITY OF APOPKA, FLORIDA

SEAL

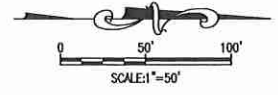
RANDALL S. COHEN, P.E.
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13.2

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OPEN SPACE - NEIGHBORHOOD A
 NEW ERROL
 CITY OF APOPKA, FLORIDA

SEAL

RANDALL S. COHEN, P.E.
 No. 56581



PROJECT NO./DASH NO.
 A160186.01

SHEET
 13.3

TABLE 13.3 A

OPEN SPACE ACREAGE	
NEIGHBORHOOD A	AREA (AC.)
OPEN SPACE	3.33 ACRES
TRACT 1A	1.69 ACRES
TRACT 1C	1.64 ACRES
STORMWATER RETENTION	
TRACT 1B	NOT COUNTED
TOTAL	3.33 ACRES

OPEN SPACE LEGEND

- PARKS and PROGRAMMED OPEN SPACES
- BUFFERS and UNPROGRAMMED OPEN SPACES
- ENVIRONMENTAL OPEN SPACE
- STORMWATER (not included in total unless noted)

NEIGHBORHOOD "A"



A. PLAYGROUND



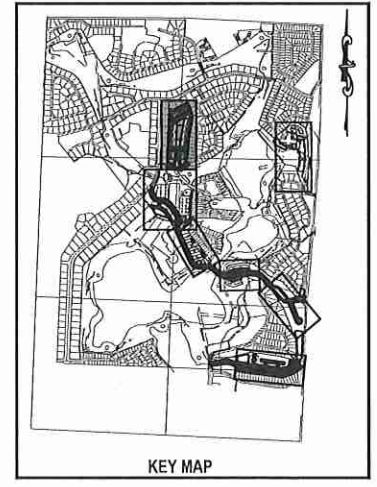
B. PLAZA + SEATING



C. GAZEBO



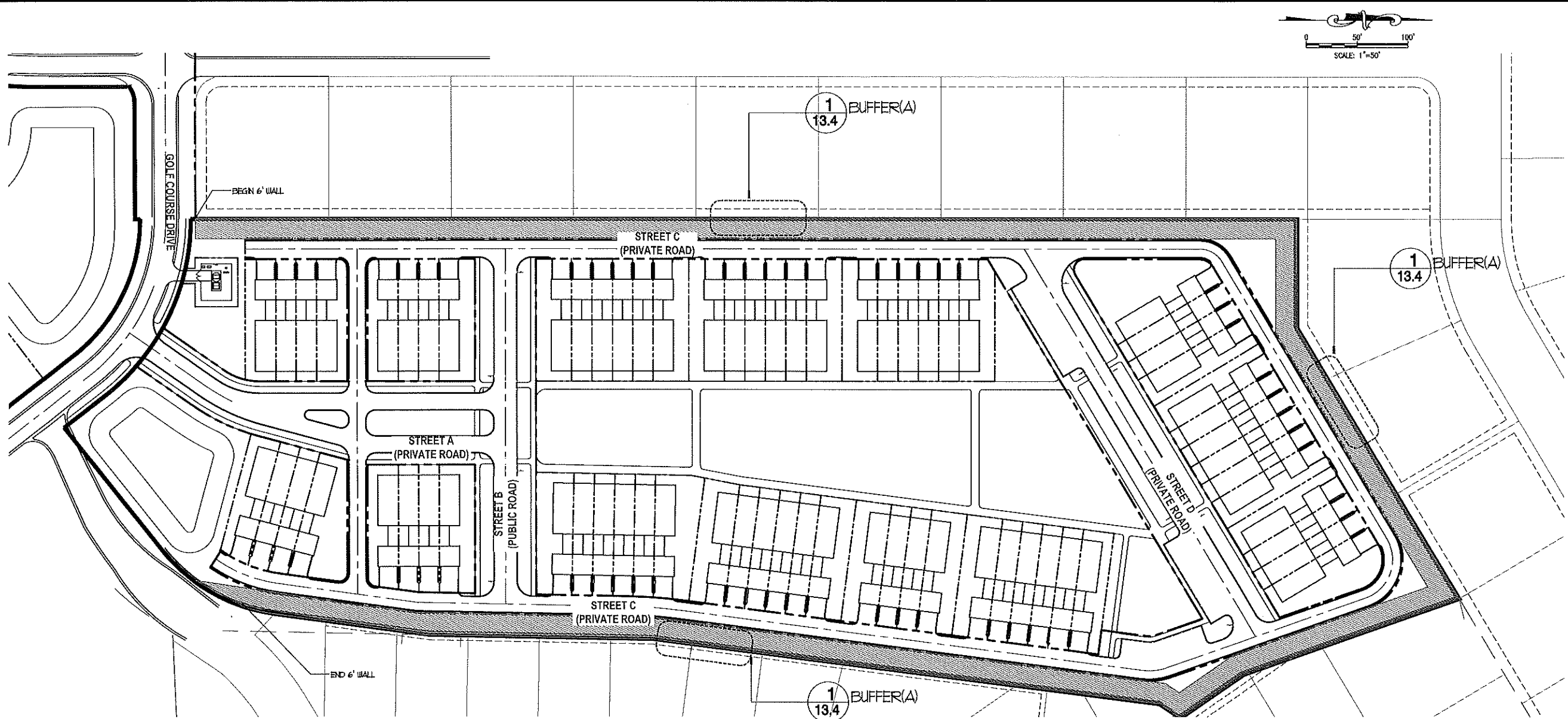
D. LAWN



KEY MAP

NOTE:
 The specific design and programming of each individual park space will be submitted with future development plan applications. Proposed facilities and typical photos are provided to indicate the character of each proposed space.

Z:\ComDev\2018\160186.01 - errol estobas entitlement\CAD Drawings\preliminary development plan\160186.01 MASTER SITE PLAN_buffers.dwg Mar 12, 2018 - 7:20pm



REVISIONS			
NO.	DATE	BY	DESCRIPTION

SCALE: AS SHOWN
 DATE: 03-13-2018
 DRAWN: MJC
 CHECKED: RSC
 APPROVED: RSC

BUFFER PLAN - NEIGHBORHOOD A
NEW ERROL
CITY OF APOPKA, FLORIDA

NEIGHBORHOOD "A" BUFFER TYPES

MINIMUM BUFFERYARD: 10'-0" WITH A 6" WALL

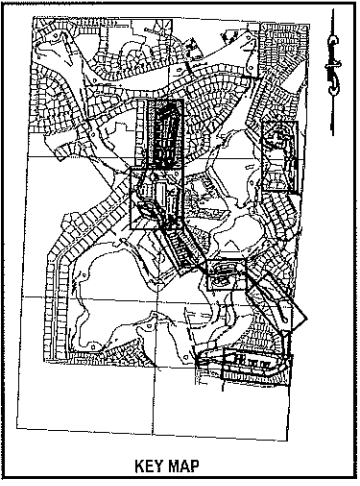
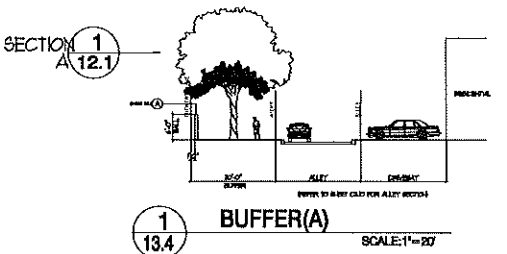
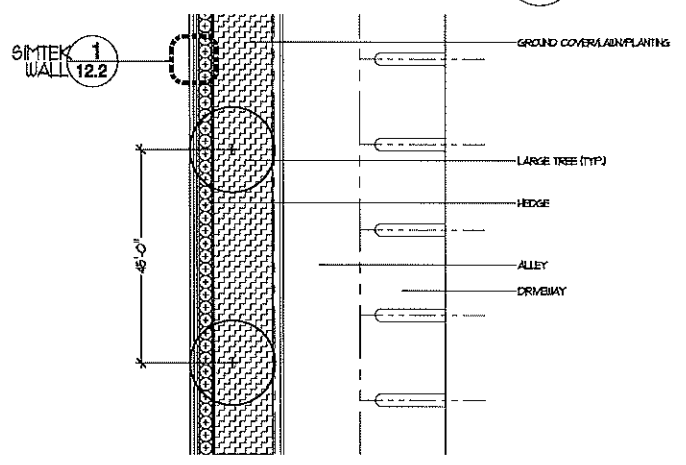
WALLS - CAN MEANDER IN THE BUFFERYARD, HOWEVER AT LEAST 25% MUST BE LOCATED WITHIN 1'-0" OF THE INTERIOR EXTENT OF THE BUFFERYARD

BUFFERYARDS ADJACENT TO A RIGHT-OF-WAY: 1 CANOPY TREE (45' O.C.) / CONTINUOUS HEDGE ROW 24" TALL AND 36" APART.

BERMS: MIN OF 3'-0" TALL / MAX SLOPE = 3:1

GROUND COVER: MINIMUM OF 25% OF THE BUFFERYARD AREA.

PLANT MATERIALS, MULCH OR OTHER APPROVED MATERIALS = 100% OF THE BUFFERYARD AREA



SCALE

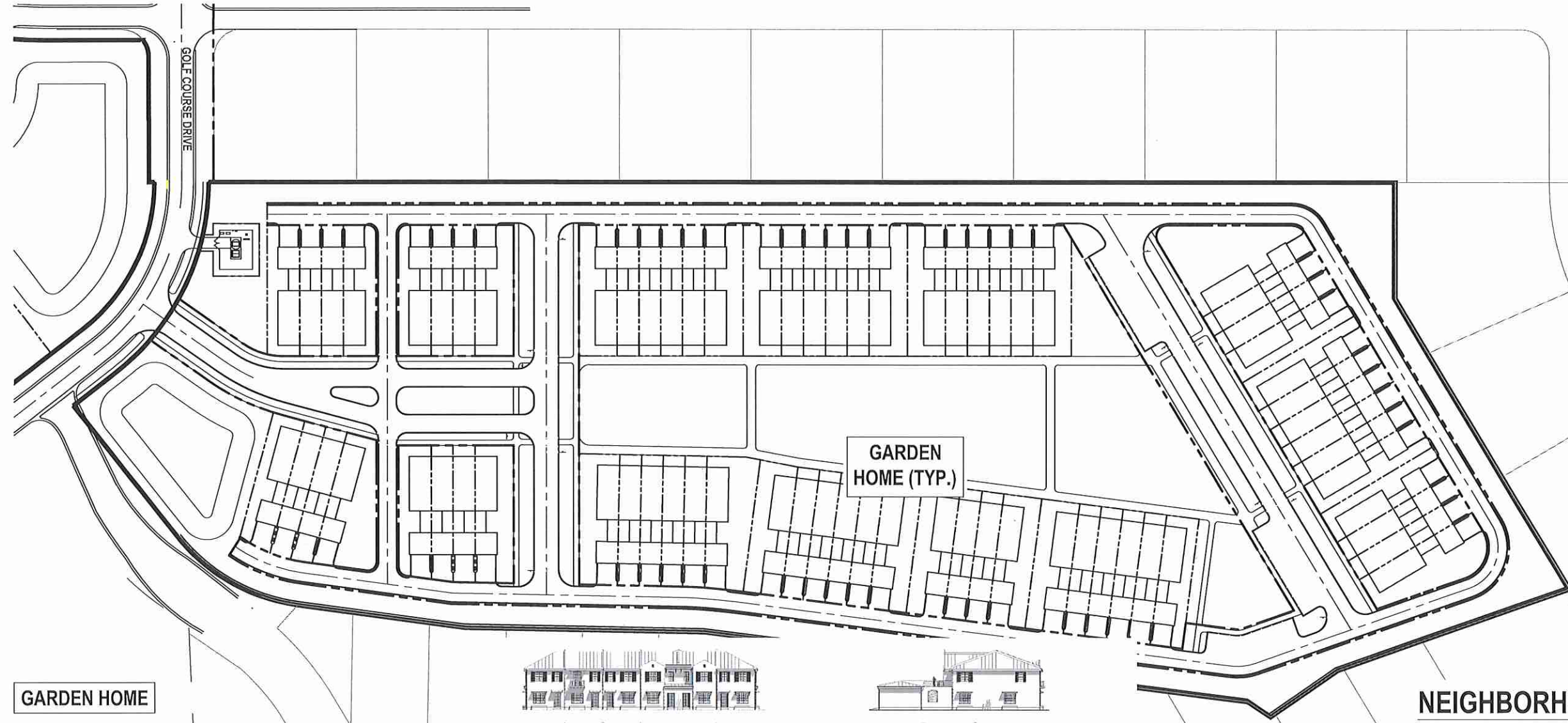
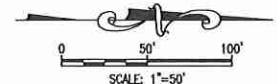
RANDALL S. COHEN, P.E.
No. 58581

gai consultants
 ED 9951
 618 EAST SOUTH STREET
 GAITHERSBURG, FLORIDA 33501
 PHONE: (407) 425-8398

PROJECT NO./DASH NO.
A160186.01

SHEET
13.4

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 APPROVED: RSC

ARCHITECTURE - NEIGHBORHOOD A
 NEW ERROL
 CITY OF APOPKA, FLORIDA

SEAL

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PROJECT NO./DASH NO.
 A160186.01

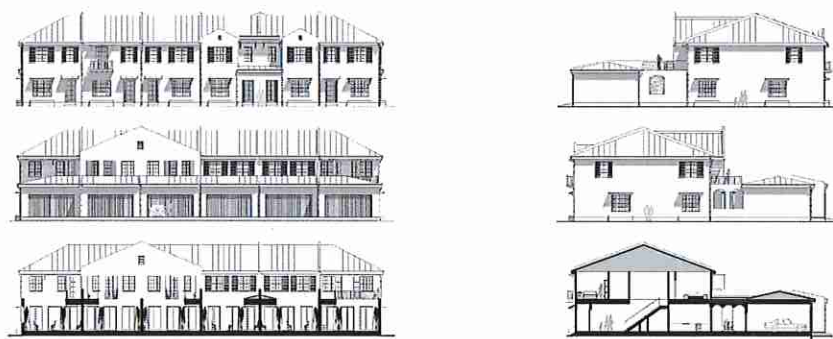
SHEET
 13.5

GARDEN HOME



ELEVATION

31

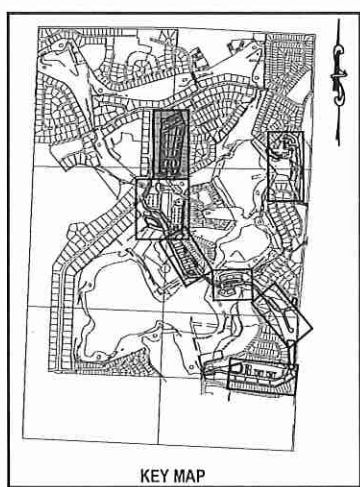


SECTION (N.T.S.)



FLOOR PLAN (N.T.S.)

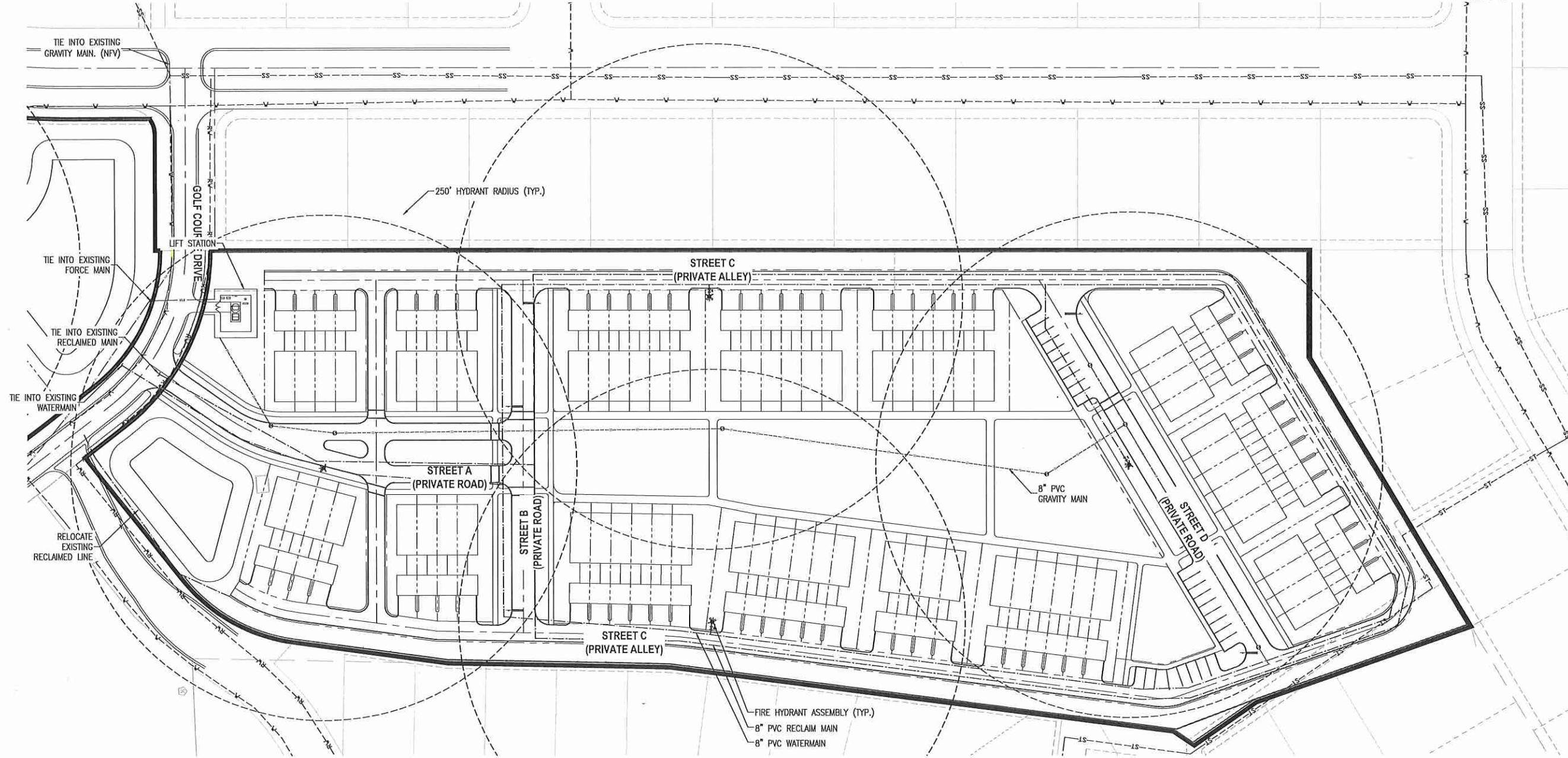
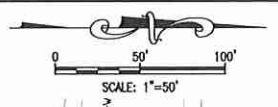
NEIGHBORHOOD "A"



KEY MAP

NOTE:
 The floorplans, elevations, and renderings depicted in this plan are conceptual in nature and subject to minor changes. Any such changes submitted in future development plan applications may be approved at the discretion of the Development Director if the proposed changes are determined to be in substantial compliance with the architectural intent of this plan.

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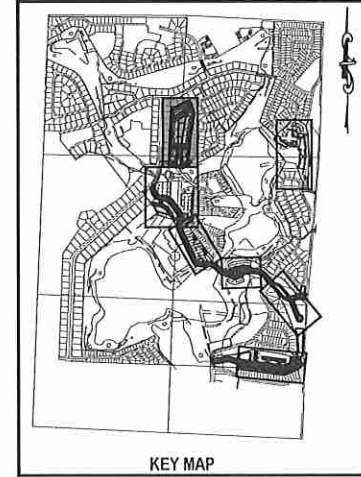
NEIGHBORHOOD "A"

NOTE:
LOCATIONS OF EXISTING UTILITIES PROVIDED BY THE CITY OF AOPKA GIS. THESE LOCATIONS HAVE NOT BEEN FIELD VERIFIED.

LEGEND:

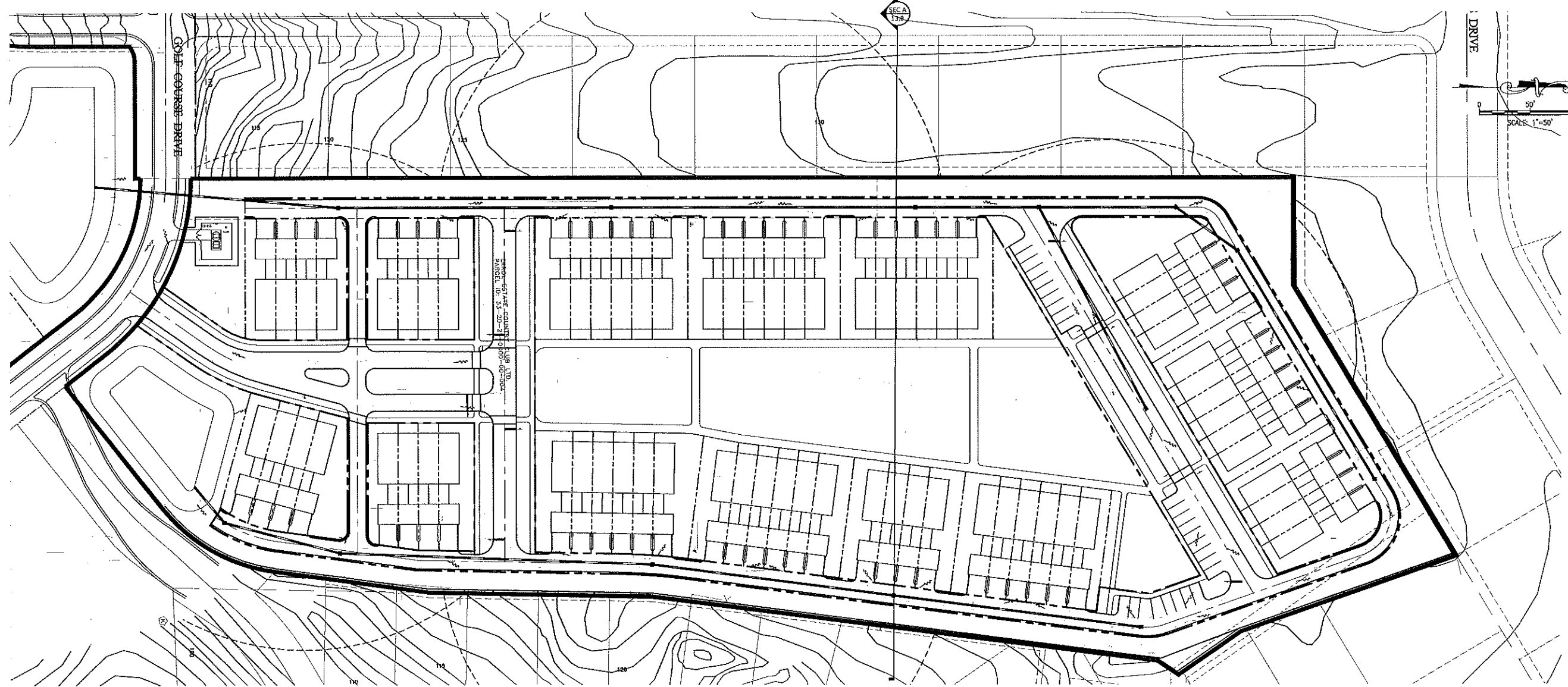
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	WATER STRUCTURES
	SANITARY STRUCTURE
	PROPOSED FORCE MAIN
	PROPOSED WATER PIPE
	PROPOSED IRRIGATION PIPE
	PROPOSED SANITARY PIPE
	EXISTING WATER PIPE
	EXISTING STORMWATER PIPE
	EXISTING SANITARY PIPE (GRAVITY)
	EXISTING RECLAIMED WATER PIPE

NOTE:
POTABLE WATER AND RECLAIMED WATER LINES TO BE PLACED IN GRASS AREA WHENEVER POSSIBLE.

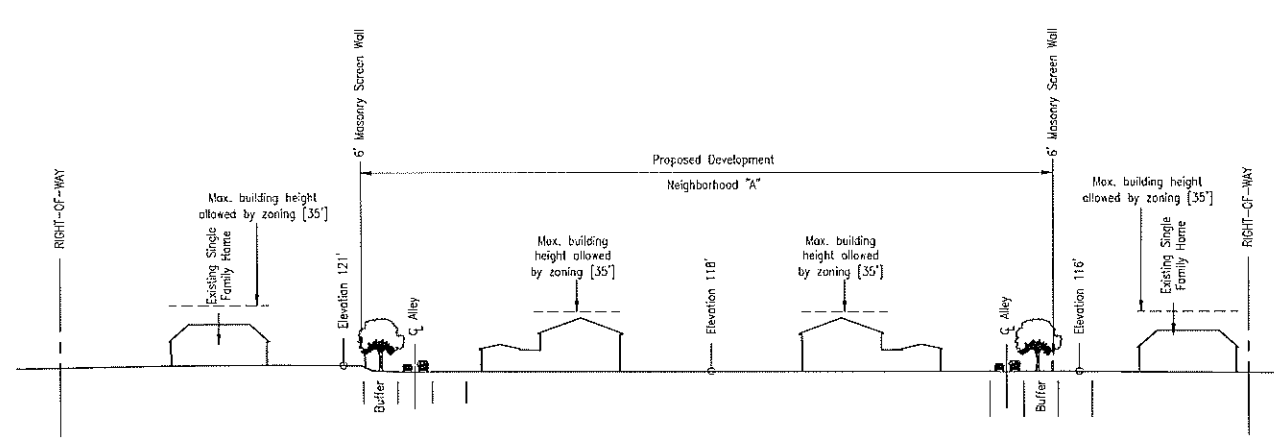


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NO.	DATE	BY	CHKD.	APPROV.	DESCRIPTION											
UTILITY PLAN - NEIGHBORHOOD A NEW ERROL CITY OF AOPKA, FLORIDA																
RANDALL S. COHEN, P.E. No. 58581 gai consultants 618 EAST SOUTH STREET ORLANDO, FLORIDA 32801 PHONE: (407) 423-8398																
PROJECT NO./DASH NO. A160186.01																
SHEET 13.7																

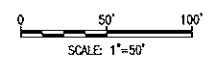
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NEIGHBORHOOD "A"



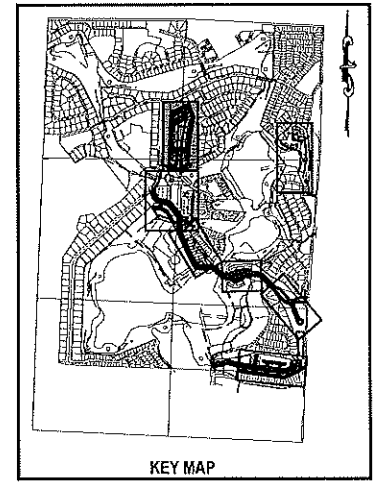
33



LEGEND:

- PROJECT PROPERTY LINE
- STORM STRUCTURES
- PROPOSED STORM PIPE

NOTE:
 ADDITIONAL CROSS SECTIONS MAY BE REQUIRED AT PRELIMINARY DEVELOPMENT PLAN INCLUDING BUILDING HEIGHTS AND SIGHT ANGLES TO ADJACENT RESIDENTIAL NEIGHBORHOODS. INCREASED LANDSCAPING MAY BE REQUIRED TO MITIGATE VISUAL IMPACTS CAUSED BY FUTURE MULTI-STORY BUILDINGS WITHIN NEW ERROL.



NO.	DATE	BY	CHKD	APPD	DESCRIPTION

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 CHECKED: RSC
 APPROVED: RSC

GRADING PLAN - NEIGHBORHOOD A
 NEW ERROL
 CITY OF APOPKA, FLORIDA

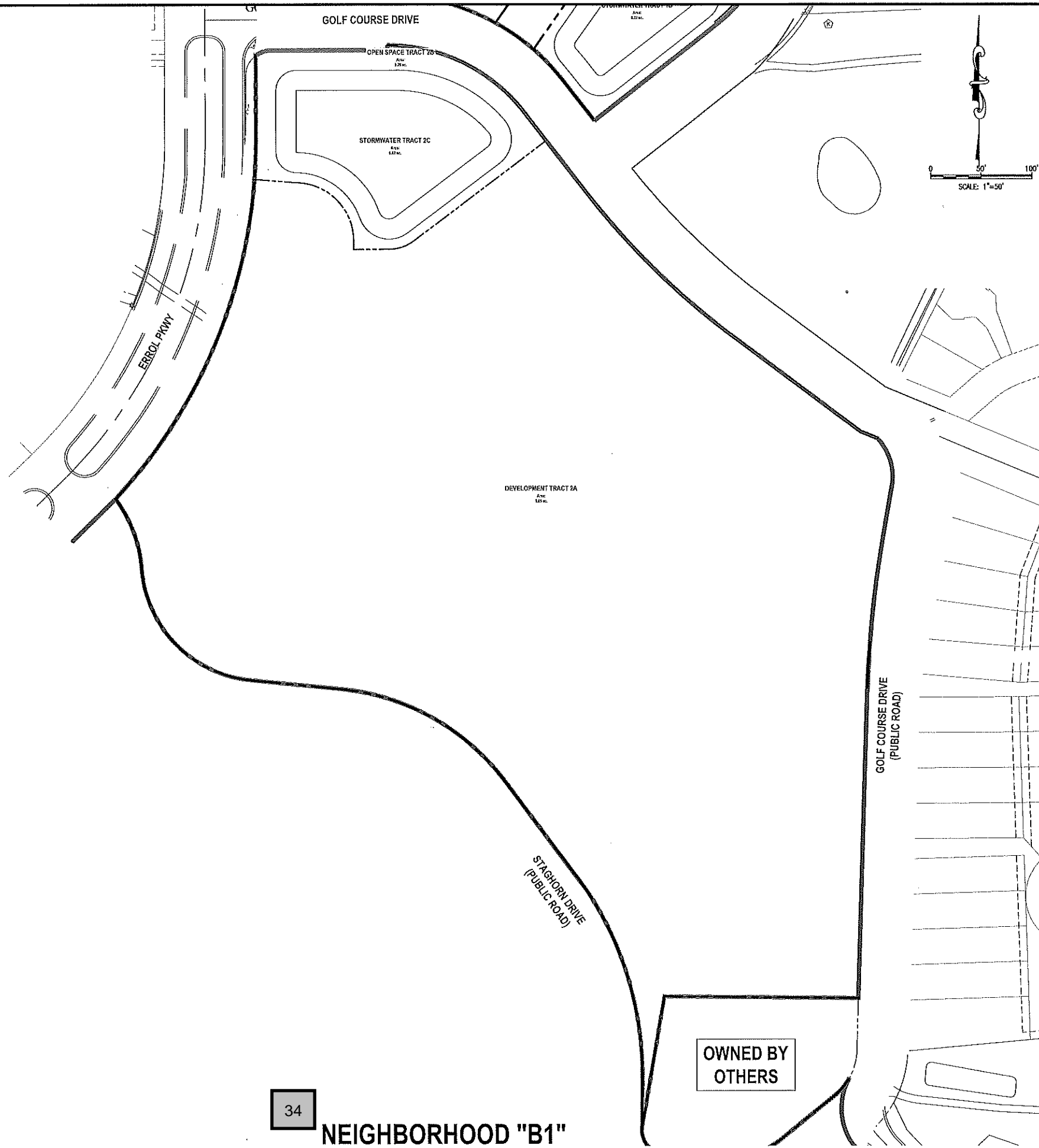
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PROJECT NO./DASH NO.
 A160186.01
 SHEET
 13.8

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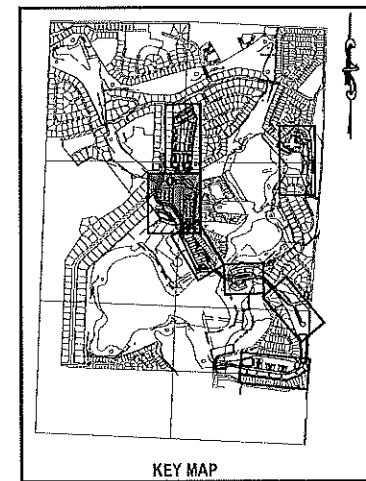


34

NEIGHBORHOOD "B1"

**TABLE 14.1A
TRACT ACREAGE TABLE**

NEIGHBORHOOD B1	AREA (AC.)
DEVELOPMENT TRACT 2A	9.05 ACRES
OPEN SPACE TRACT 2B	0.28 ACRES
STORMWATER TRACT 2C	0.62 ACRES
TOTAL	9.95 ACRES



NO.	DATE	BY	CHKD	APPROD	DESCRIPTION

SCALE: AS SHOWN
DATE: 03-13-2018
DRAWN: M.J.C.
CHECKED: R.S.C.
APPROVED: R.S.C.

TRACT MAP - NEIGHBORHOOD B1
NEW ERROL
CITY OF APOPKA, FLORIDA

SEAL
RANDALL S. COHEN, P.E.
No. 56551

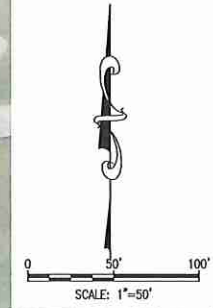
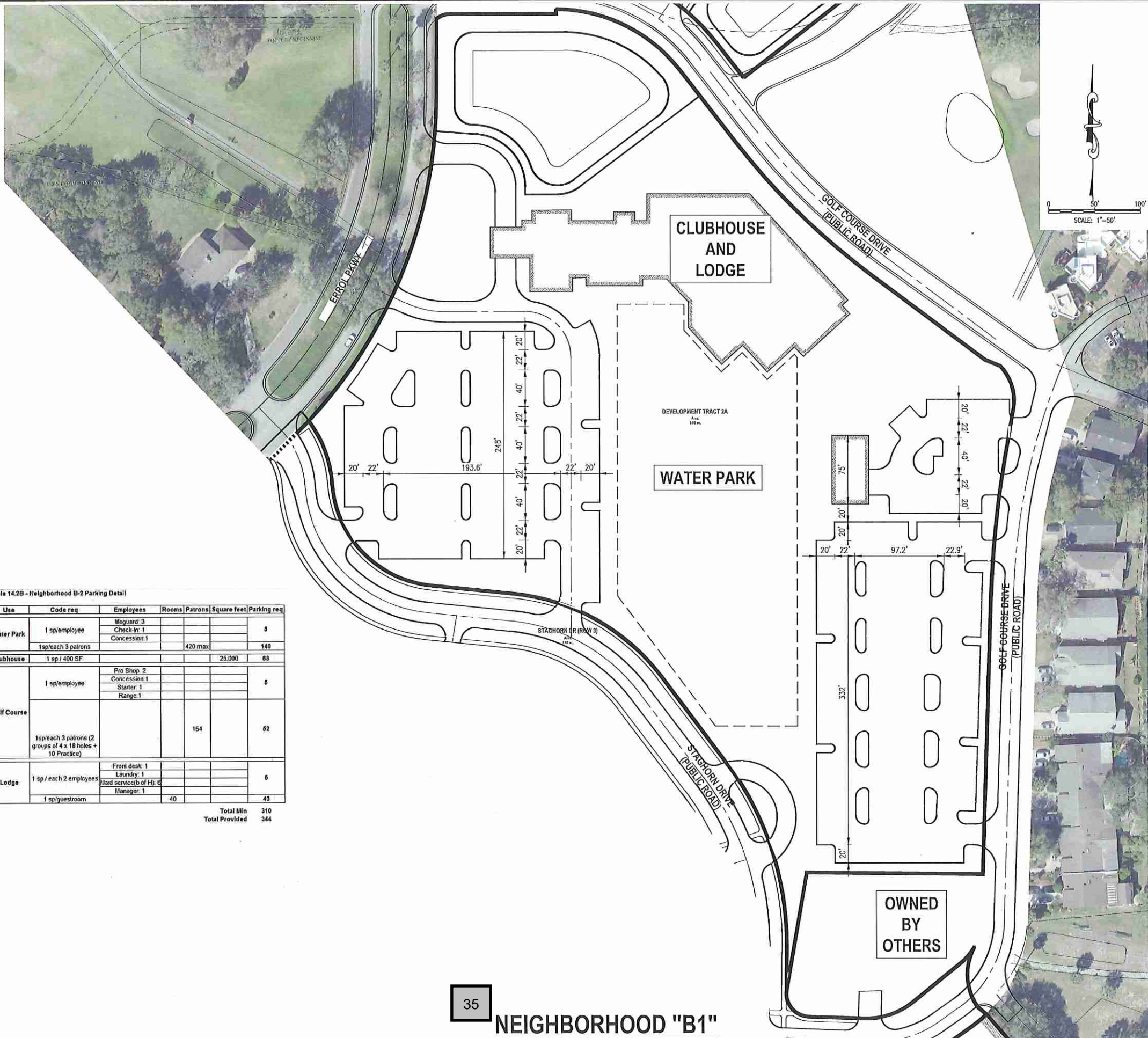
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PROJECT NO./DASH NO.
A160186.01
SHEET
14.1

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Table 14.2B - Neighborhood B-2 Parking Detail

Use	Code req	Employees	Rooms	Patrons	Square feet	Parking req
Water Park	1 sp/employee	lifeguard 3 Check-in 1 Concession 1				8
	1sp/each 3 patrons			420 max		140
Clubhouse	1 sp / 400 SF				25,000	63
Golf Course	1 sp/employee	Pro Shop 2 Concession 1 Starter 1 Range 1				6
	1sp/each 3 patrons (2 groups of 4 x 18 holes + 10 Practice)			154		62
Lodge	1 sp / each 2 employees	Front desk 1 Laundry 1 Jad service (b of Hr) 8 Manager 1				6
	1 sp/questroom		40			40
Total Min						310
Total Provided						344

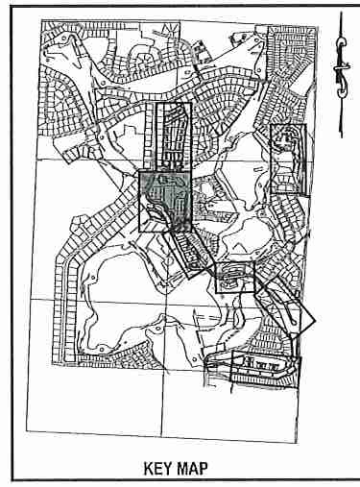


NOTE:
THE DUMPSTER ENCLOSURE(S) WILL BE PLACED IN AREAS ACCESSIBLE TO A 40-FOOT SANITATION VEHICLE WHICH HAS A 40 FOOT TURNING RADIUS.

Table 14.2A - Neighborhood B-1 Development Standards

Allowable Uses	Clubhouse ¹ Hotel/Lodge ¹ Golf Golf Maintenance Facility Water Park
Max Clubhouse	25,000 sqft
Max Hotel	40 rooms
	21,200 sq ft
Neighborhood Acreage	9.95 acres
Gross FAR	0.11 FAR
Proposed Parking Count	280
Lot Standards	
Min Lot Width	N/A
Min Lot Depth	N/A
Minimum Setbacks	
Front	25'
Side	25'
Corner Side	25'
Rear	25'
Building Height	
Max Stories	2/3 ²
Max Height	50'/60' ²
Minimum Parking	per City LDC

Notes
1 Detailed uses in the Clubhouse/Lodge is found in Table 11.0B
2 Stories and height at front / Stories and height at rear due to topo



35 NEIGHBORHOOD "B1"

NO.	DATE	BY	CHKD	APP'D	DESCRIPTION

SCALE: AS SHOWN

DATE: 03-13-2018

DRAWN: MJC

CHECKED: RSC

APPROVED: RSC

SUBDIVISION PLAN - NEIGHBORHOOD B1
NEW ERROL
CITY OF APOPKA, FLORIDA

SEAL
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PROJECT NO./DASH NO.
A160186.01

SHEET
14.2

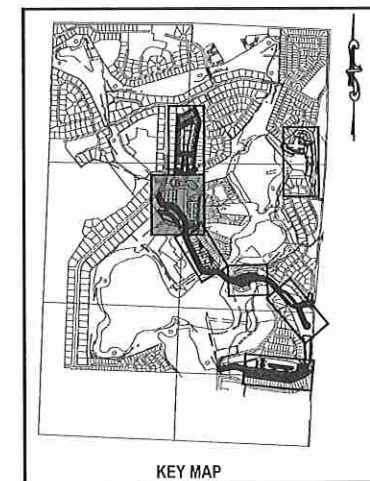
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**TABLE 14.3 A
OPEN SPACE ACREAGE**

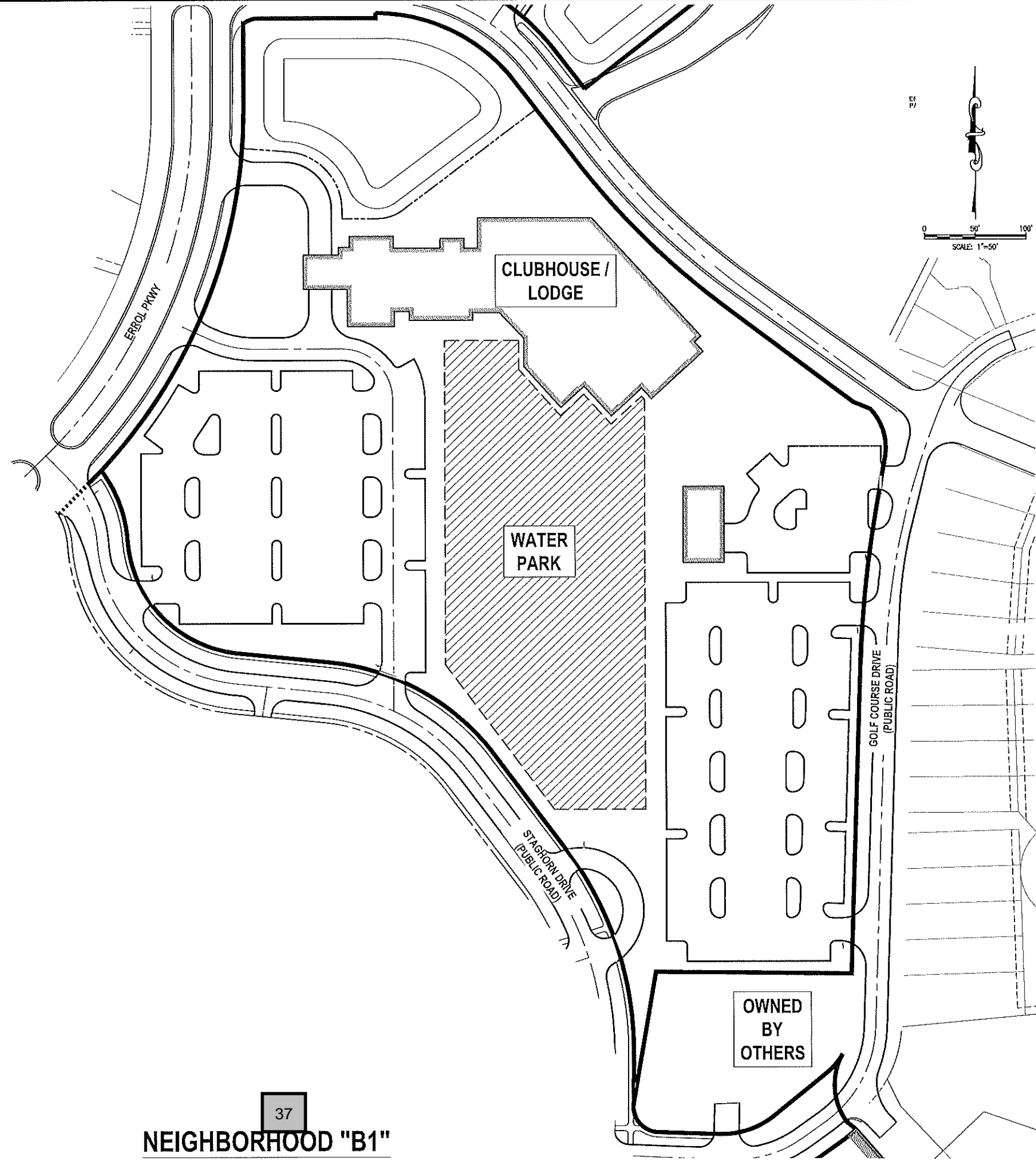
NEIGHBORHOOD B1	AREA (AC.)
OPEN SPACE TRACT 2B	0.28 ACRES
COMMUNITY PARK (NOT SHOWN)	4.04 ACRES
STORMWATER TRACT 2C	NOT COUNTED
TOTAL	4.32 ACRES



NOTE:
The specific design and programming of each individual park space will be submitted with future development plan applications. Proposed facilities and typical photos are provided to indicate the character of each proposed space.

36
NEIGHBORHOOD B1

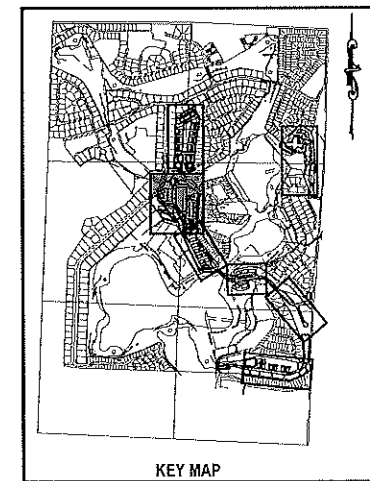
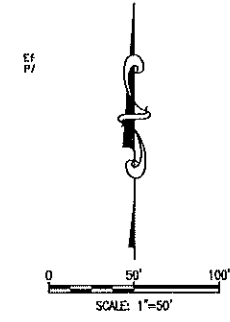
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CHECKED:	RSC
APPROVED:	RSC
SEAL	
RANDALL S. COHEN, P.E. No. 58581	
 gai consultants EB 9951 618 EAST SOUTH STREET ORLANDO, FLORIDA 32801 PHONE: (407) 423-8398	
PROJECT NO./DASH NO. A160186.01	
SHEET 14.3	
OPEN SPACE - NEIGHBORHOOD B1	NEW ERROL CITY OF APOPKA, FLORIDA



37
NEIGHBORHOOD "B1"

NEIGHBORHOOD "B1"
BUFFER TYPES

NO BUFFER YARDS SHOWN IN THIS NEIGHBORHOOD



NO.	DATE	BY	CHKD	APPD	DESCRIPTION

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APPROVED: RSC

SEAL
BUFFER PLAN - NEIGHBORHOOD B1
NEW ERROL
CITY OF APOPKA, FLORIDA

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PROJECT NO./DASH NO.
A160186.01

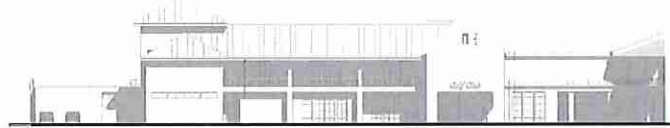
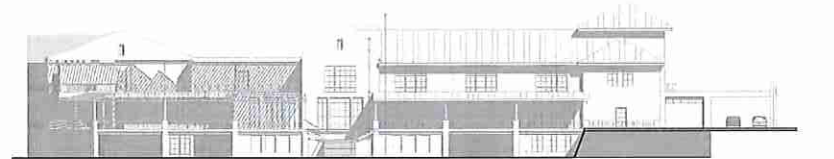
SHEET
14.4

MATCHLINE A

GOLF CLUBHOUSE + LODGE



ELEVATION



SECTION (N.T.S.)



3rd floor (mechanical) & roof



FLOOR PLAN (N.T.S.)

CLUBHOUSE AND LODGE

WATER PARK

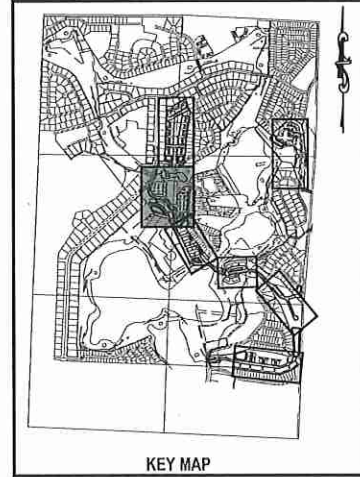
OWNED BY OTHERS

STAGHORN DRIVE

GOLF COURSE DRIVE

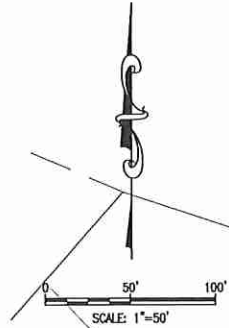
MATCHLINE A

NEIGHBORHOOD B1



KEY MAP

NOTE:
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ARCHITECTURE - NEIGHBORHOOD B1
 NEW ERROL
 CITY OF APOPKA, FLORIDA

SEAL

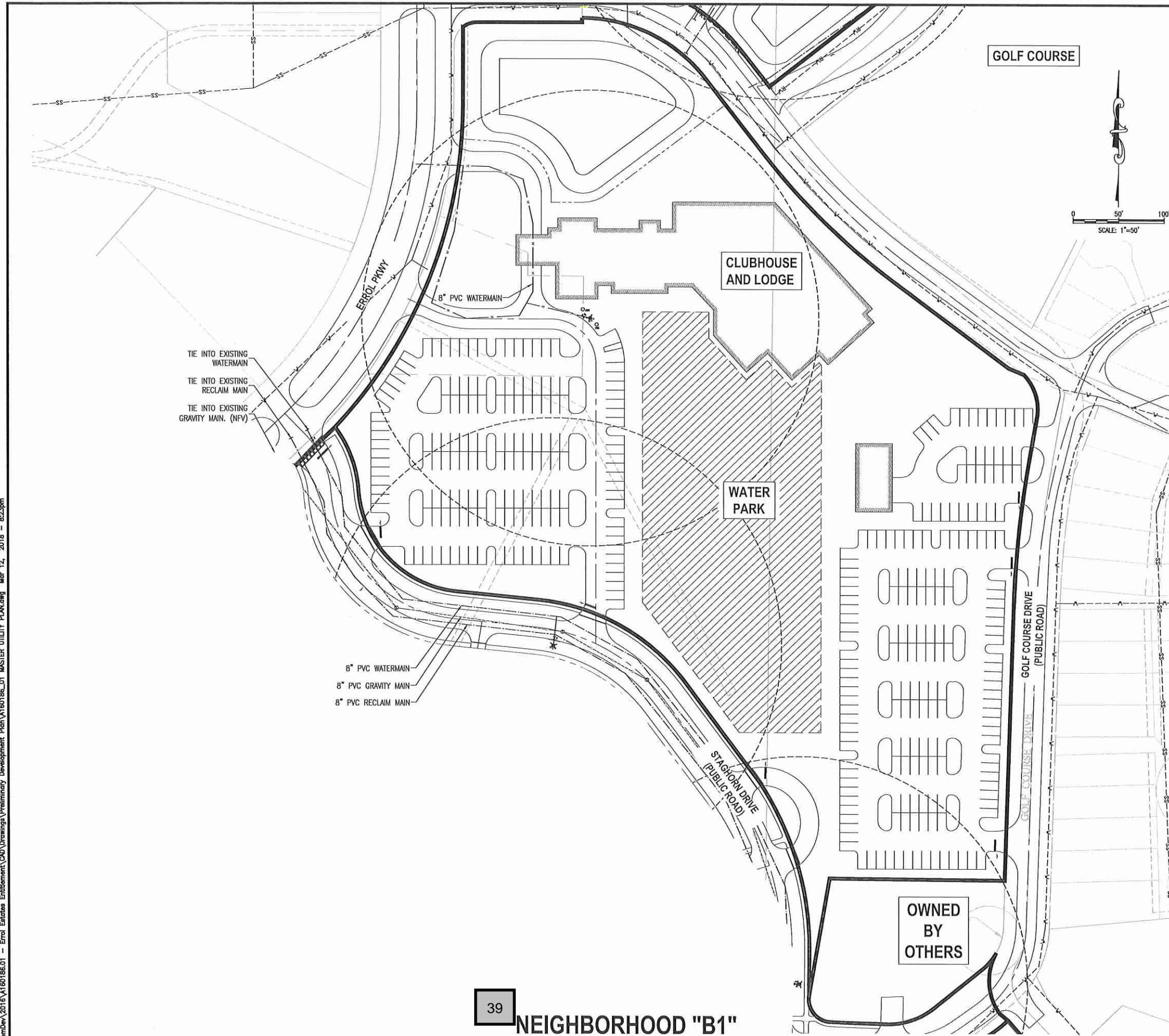
RANDALL S. COHEN, P.E.
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PROJECT NO./DASH NO.
 A160186.01

SHEET
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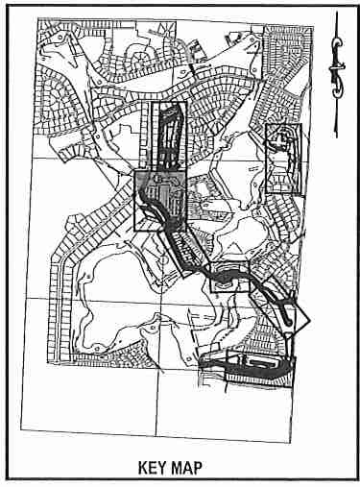


NOTE:
LOCATIONS OF EXISTING UTILITIES PROVIDED BY THE CITY OF APOPKA GIS. THESE LOCATIONS HAVE NOT BEEN FIELD VERIFIED.

LEGEND:

	PROJECT PROPERTY LINE
	WATER STRUCTURES
	SANITARY STRUCTURE
	PROPOSED FORCE MAIN
	PROPOSED WATER PIPE
	PROPOSED IRRIGATION PIPE
	PROPOSED SANITARY PIPE
	EXISTING WATER PIPE
	EXISTING STORMWATER PIPE
	EXISTING SANITARY PIPE (GRAVITY)
	EXISTING RECLAIMED WATER PIPE

NOTE:
POTABLE WATER AND RECLAIMED WATER LINES TO BE PLACED IN GRASS AREA WHENEVER POSSIBLE.



39 NEIGHBORHOOD "B1"

NO.	DATE	BY	CHKD	APPD	DESCRIPTION

SCALE: AS SHOWN
DATE: 03-13-2018
DRAWN: MJC
CHECKED: RSC
APPROVED: RSC

UTILITY PLAN - NEIGHBORHOOD B1
NEW ERROL
CITY OF APOPKA, FLORIDA

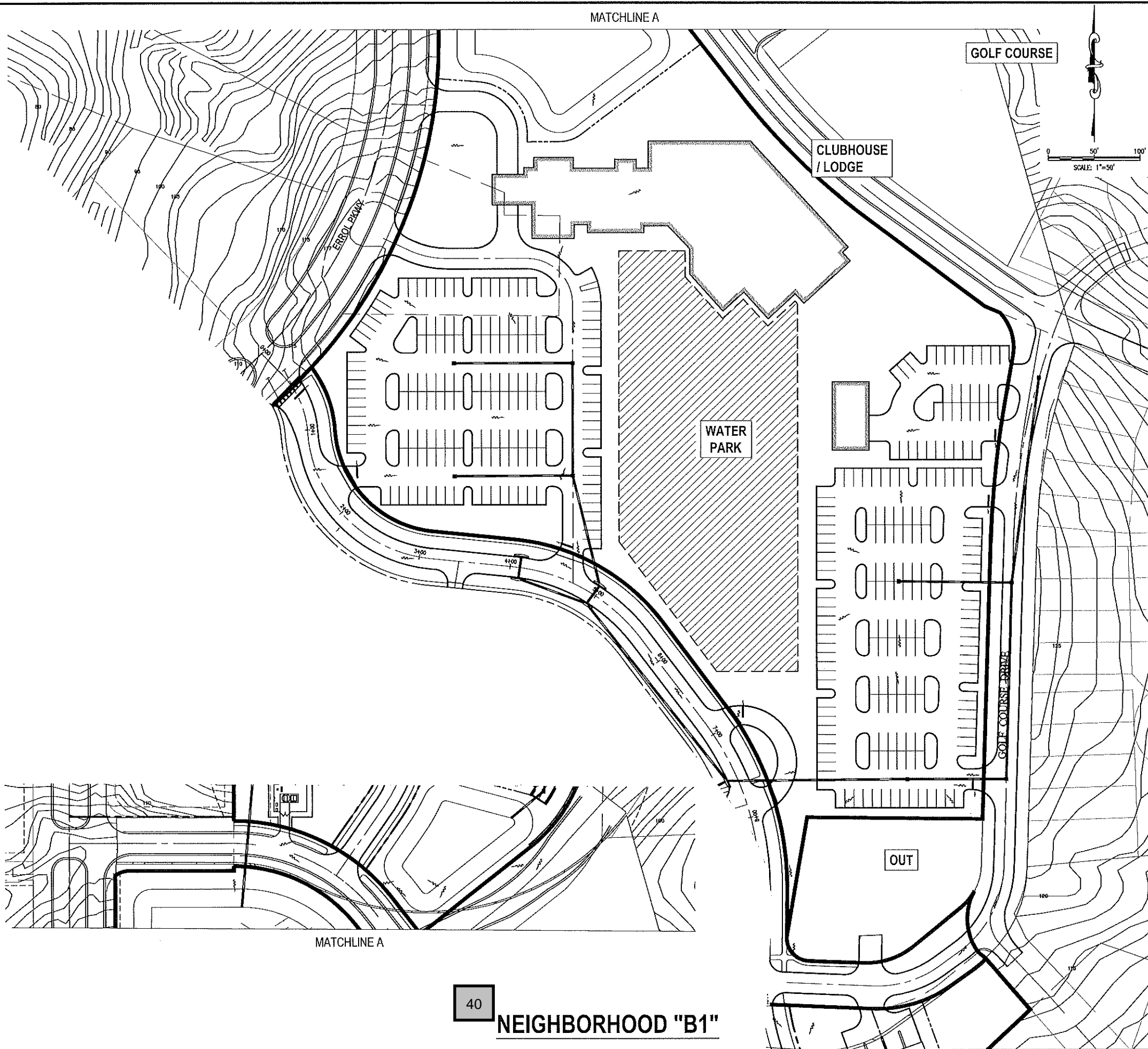
SEAL
RANDALL S. COHEN, P.E.
No. 58581

gai consultants
18 9951
618 EAST SOUTH STREET
ORLANDO, FLORIDA 32801
PHONE: (407) 423-8398

PROJECT NO./DASH NO.
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SHEET
14.7

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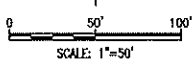
GOLF COURSE

CLUBHOUSE / LODGE

WATER PARK

GOLF COURSE FRAME

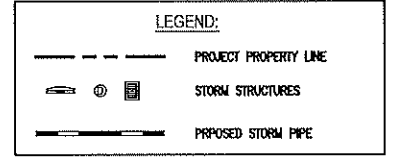
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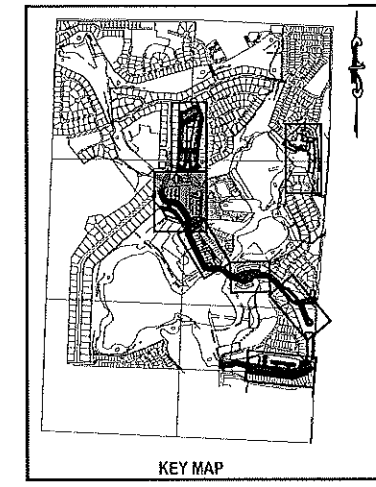
MATCHLINE A

40 NEIGHBORHOOD "B1"

NOTE:
 ADDITIONAL CROSS SECTIONS MAY BE REQUIRED AT PRELIMINARY DEVELOPMENT PLAN INCLUDING BUILDING HEIGHTS AND SIGHT ANGLES TO ADJACENT RESIDENTIAL NEIGHBORHOODS. INCREASED LANDSCAPING MAY BE REQUIRED TO MITIGATE VISUAL IMPACTS CAUSED BY FUTURE MULTI-STORY BUILDINGS WITHIN NEW ERROL.



TYPICAL LOT DETAIL



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APPROVED: RSC

GRADING PLAN - NEIGHBORHOOD B1
 NEW ERROL
 CITY OF APOPKA, FLORIDA

SEAL
 RANDALL S. COHEN, P.E.
 No. 58551

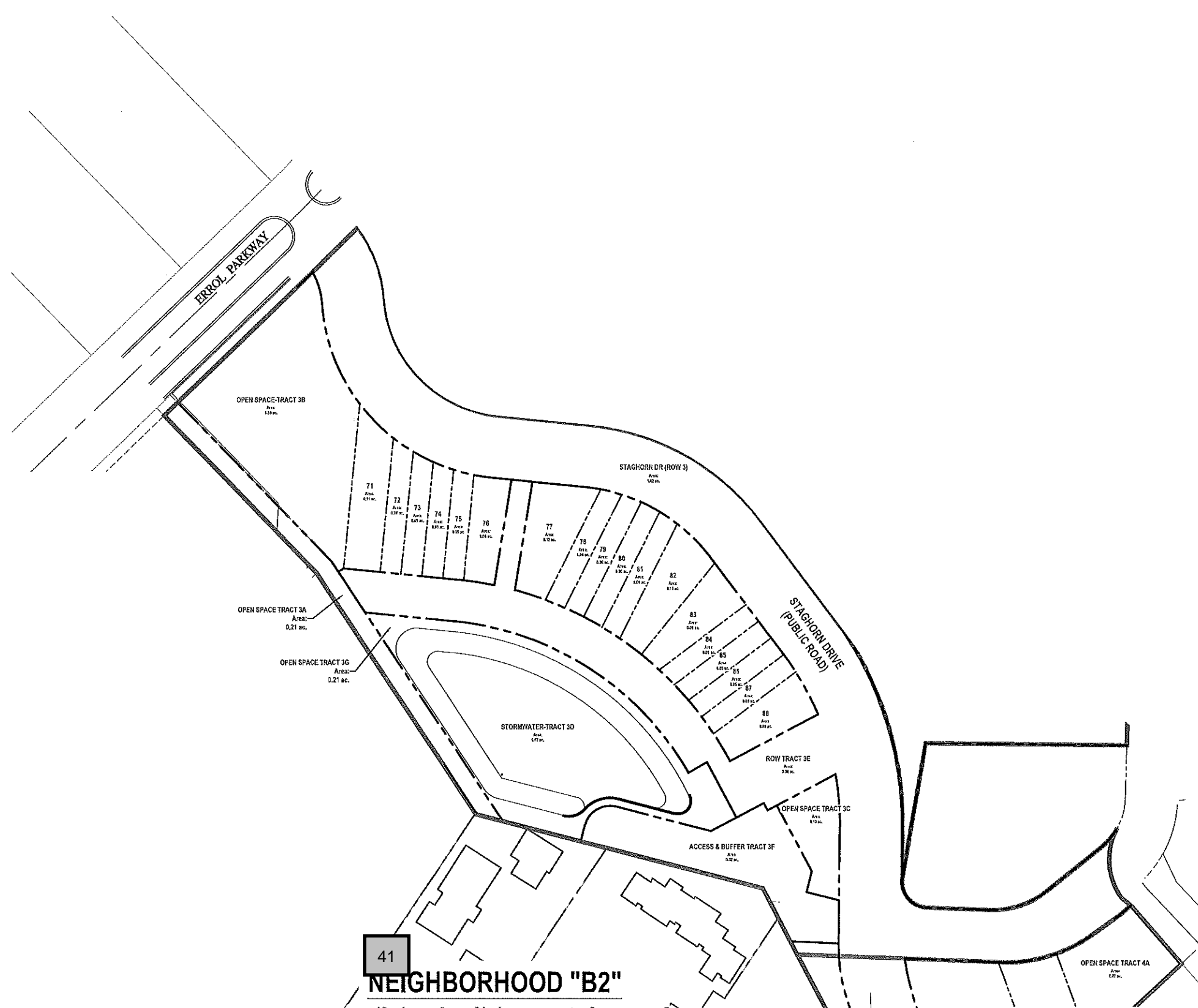
gai consultants
 EB 9951
 618 EAST SOUTH STREET
 ORLANDO, FLORIDA 32801
 PHONE: (407) 423-8398

PROJECT NO./DASH NO.
 A160186.01

SHEET
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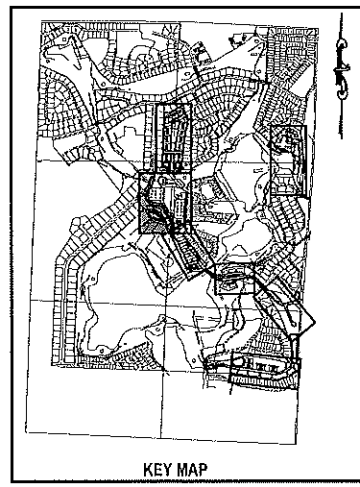
THE SCALE OF THESE PLANS MAY HAVE CHANGED DUE TO REPRODUCTION

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**TABLE 15.1 A
TRACT ACREAGE TABLE**

NEIGHBORHOOD B2	AREA (AC.)
DEVELOPMENT	1.20 ACRES
OPEN SPACE	1.08 ACRES
TRACT 3A	0.21 ACRES
TRACT 3B	0.56 ACRES
TRACT 3C	0.10 ACRES
TRACT 3G	0.21 ACRES
STORMWATER RETENTION	0.67 ACRES
TRACT 3D	0.67 ACRES
RIGHT-OF-WAY	0.56 ACRES
TRACT 3E	0.56 ACRES
ACCESS & BUFFER TRACT 3F	0.32 ACRES
STAGHORN DRIVE ROW	1.62 ACRES
TOTAL	5.45 ACRES



41
NEIGHBORHOOD "B2"

NO.	DATE	BY	CHKD	APPD	DESCRIPTION

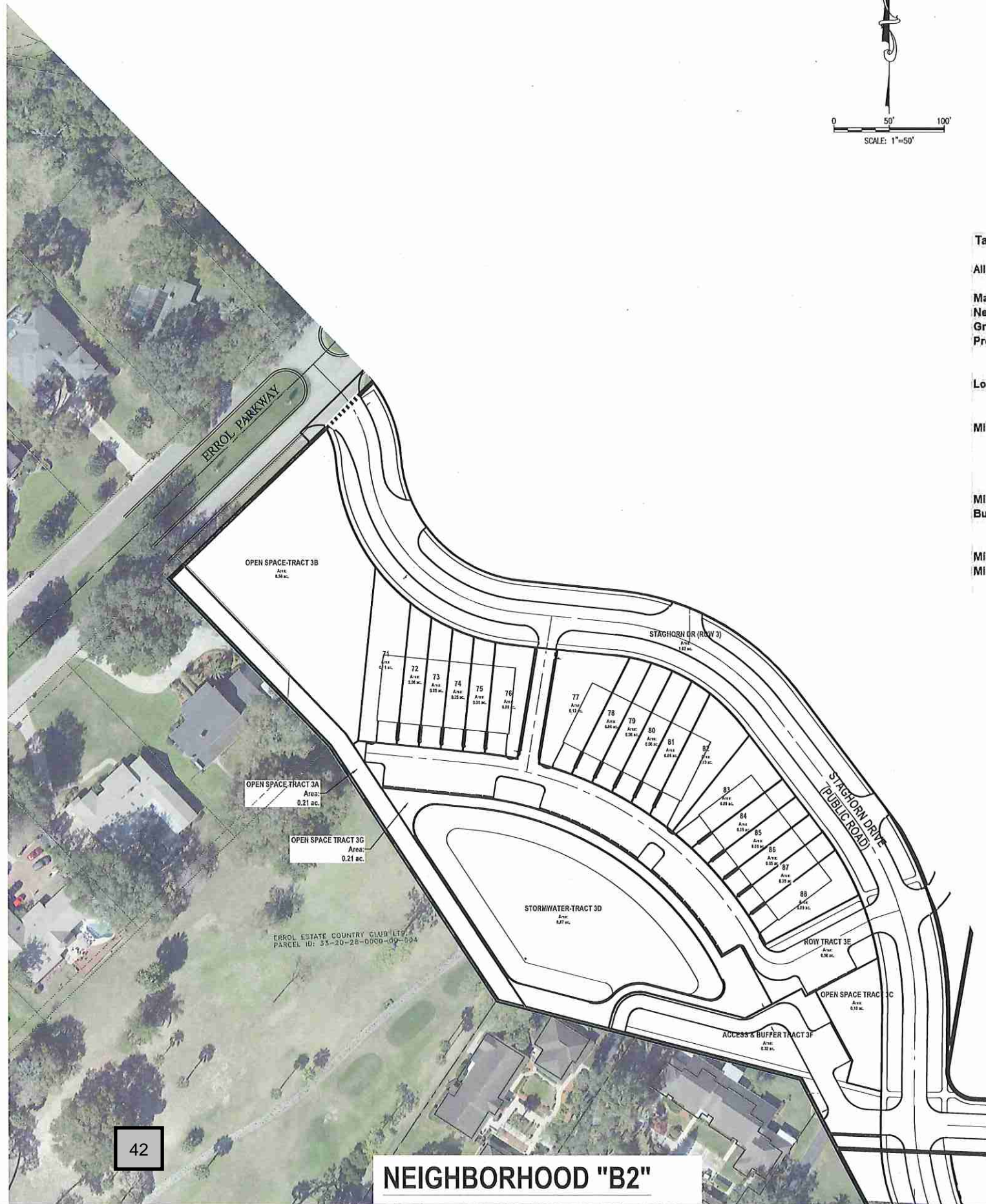
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DATE: 03-13-2018
DRAWN: MJC
CHECKED: RSC
APPROVED: RSC

TRACT MAP - NEIGHBORHOOD B2
NEW ERROL
CITY OF APOPKA, FLORIDA

SCAL
RANDALL S. COHEN, P.E.
No. 56361

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ED 9951
818 EAST SOUTH STREET
ORLANDO, FLORIDA 32801
PHONE: (407) 423-8398

PROJECT NO./DASH NO.
A160186.01
SHEET
15.1



42

NEIGHBORHOOD "B2"

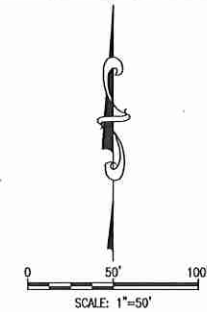
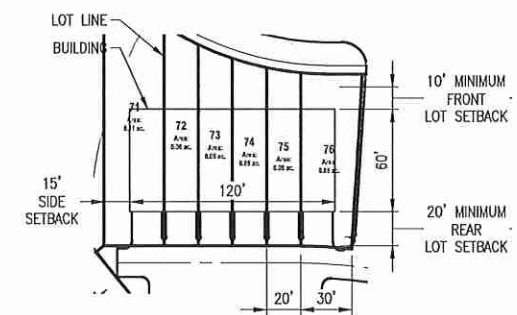
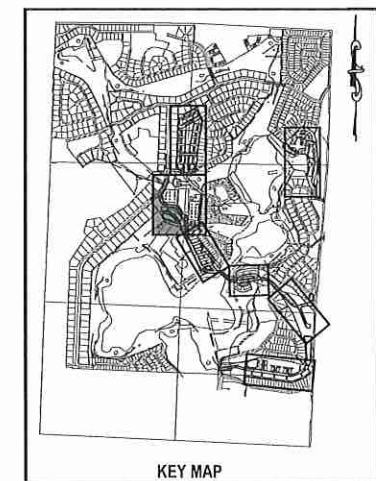


Table 15.2A - Neighborhood B-2 Development Standards

Allowable Uses	Attached Residential (townhomes) Parks
Max Residential Units	18
Neighborhood Acreage	5.45 acres
Gross Neighborhood Density	3.30 du/acre
Proposed Parking Count	36 enclosed spaces (rear loaded) 35 guest spaces
Lot Standards	
Min Lot Width	20'
Min Lot Depth	90'
Minimum Setbacks	
Front	10'
Side	10'
Corner Side	16'
Rear	20'
Minimum Attached Building Separation	
Building Height	20'
Max Stories	3
Max Height	45'
Minimum Living Area	1,350 sq ft
Minimum Parking	2 enclosed spaces per unit



TYPICAL LOT DETAIL



NO.	DATE	BY	CHKD	APPD	DESCRIPTION

SCALE:	AS SHOWN
DATE:	03-13-2018
DRAWN:	MJC
CHECKED:	RSC
APPROVED:	RSC





SUBDIVISION PLAN - NEIGHBORHOOD B2
NEW ERROL
CITY OF APOPKA, FLORIDA

SEAL
RANDALL S. COHEN, P.E.
No. 58581

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618 EAST SOUTH STREET
ORLANDO, FLORIDA 32801
PHONE: (407) 423-8398

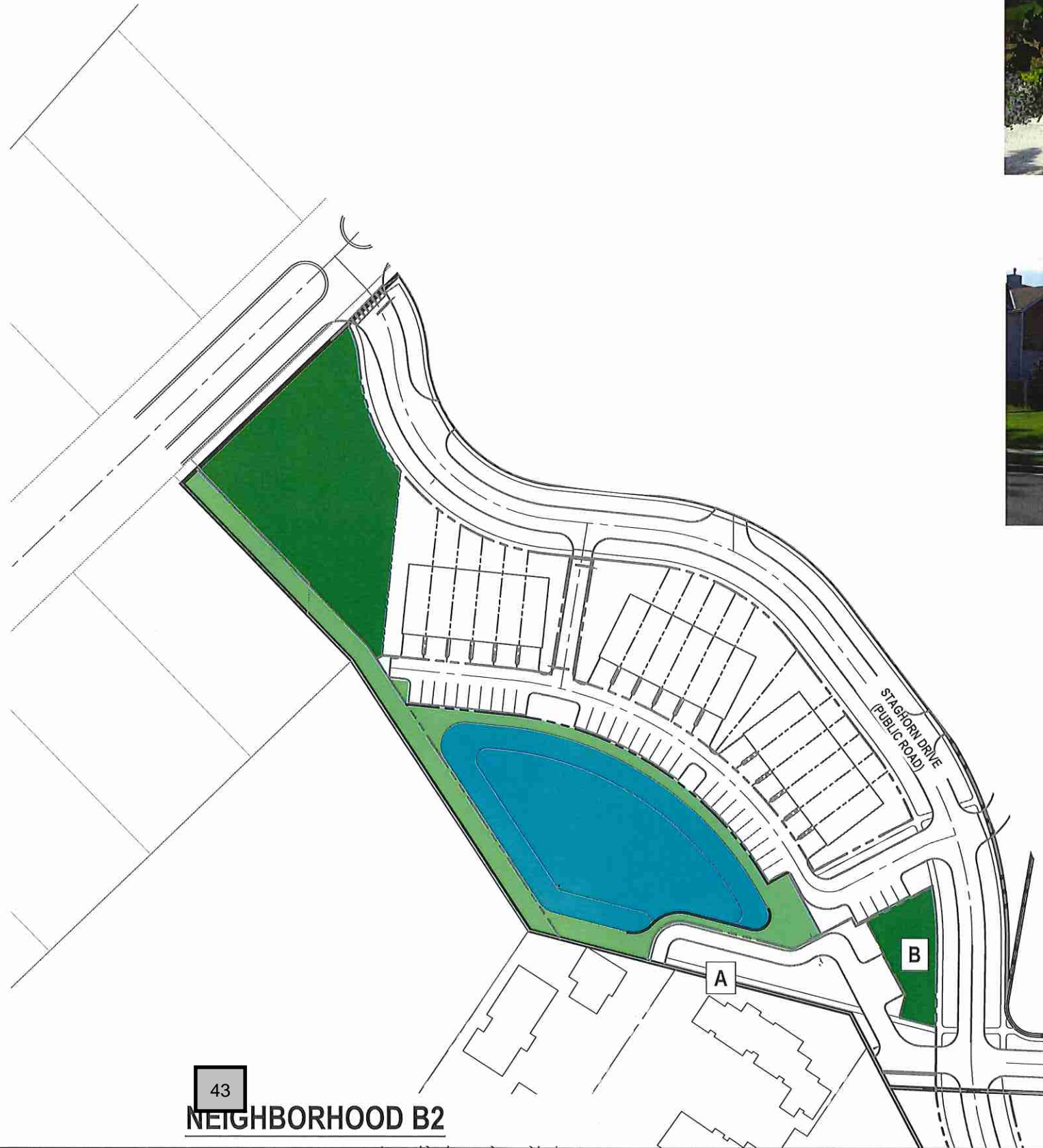
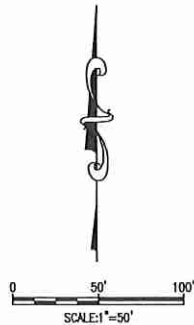
PROJECT NO./DASH NO.
A160186.01
SHEET
15.2

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- OPEN SPACE LEGEND**
-  PARKS and PROGRAMMED OPEN SPACES
 -  BUFFERS and UNPROGRAMMED OPEN SPACES
 -  ENVIRONMENTAL OPEN SPACE
 -  STORMWATER (not included in total unless noted)

**TABLE 15.3 A
OPEN SPACE ACREAGE**

NEIGHBORHOOD B2	AREA (AC.)
OPEN SPACE	1.08 ACRES
TRACT 3A	0.21 ACRES
TRACT 3B	0.56 ACRES
TRACT 3C	0.10 ACRES
TRACT 3G	0.21 ACRES
STORMWATER RETENTION	
TRACT 3D	NOT COUNTED
ACCESS & BUFFER TRACT 3F	0.32 ACRES
TOTAL	1.40 ACRES



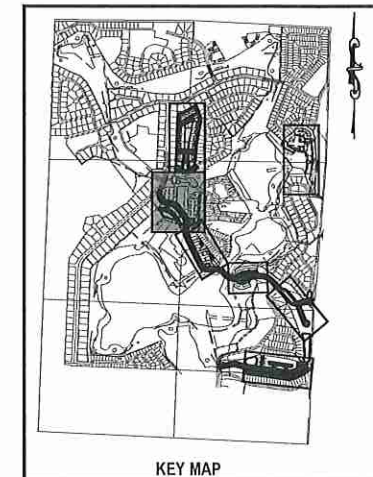
43
NEIGHBORHOOD B2



A. WALKING TRAIL



B. NEIGHBORHOOD PARK



KEY MAP

NOTE:
The specific design and programming of each individual park space will be submitted with future development plan applications. Proposed facilities and typical photos are provided to indicate the character of each proposed space.

NO.	DATE	BY	CHKD	APPD	DESCRIPTION

SCALE: AS SHOWN
DATE: 03-13-2018
DRAWN: MJC
CHECKED: RSC
APPROVED: RSC

OPEN SPACE - NEIGHBORHOOD B2
NEW ERROL
CITY OF APOPKA, FLORIDA

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ORLANDO, FLORIDA 32801
PHONE: (407) 423-8398

PROJECT NO./DASH NO.
A160186.01

SHEET
15.3

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44

NEIGHBORHOOD "B2" BUFFER TYPES

MINIMUM BUFFERYARD: 10'-0" WITH A 6' WALL / FENCE

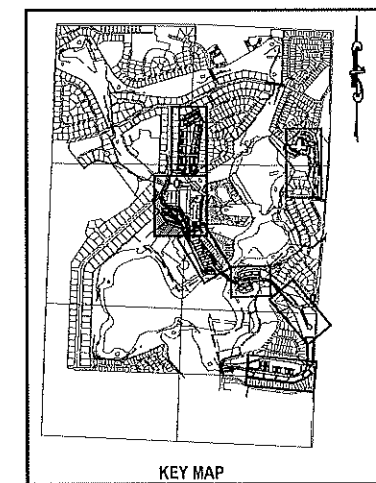
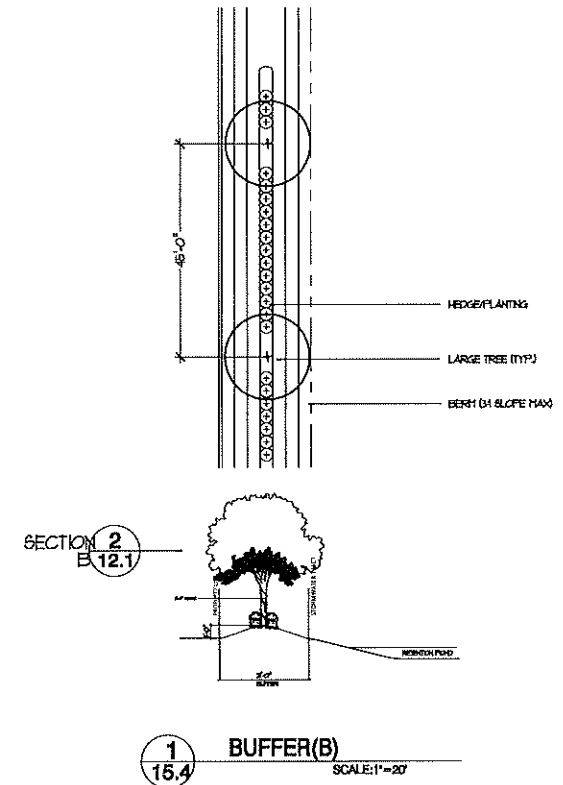
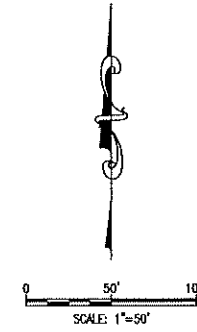
WALLS / FENCES - CAN MEANDER IN THE BUFFERYARD, HOWEVER AT LEAST 25% MUST BE LOCATED WITHIN 1'-0" OF THE INTERIOR EXTENT OF THE BUFFERYARD

BUFFERYARDS ADJACENT TO A RIGHT-OF-WAY: 1 CANOPY TREE (45' O.C.) / CONTINUOUS HEDGE ROW 24" TALL AND 36" APART.

BERMS: MIN OF 3'-0" TALL / MAX SLOPE = 3:1


GROUNDCOVER: MINIMUM OF 25% OF THE BUFFERYARD AREA.

PLANT MATERIALS, MULCH OR OTHER APPROVED MATERIALS = 100% OF THE BUFFERYARD AREA



REVISIONS		DESCRIPTION

SCALE:	AS SHOWN
DATE:	03-13-2018
DRAWN:	MJC
CHECKED:	RSC
APPROVED:	RSC

BUFFER PLAN - NEIGHBORHOOD B2	
NEW ERROL	
CITY OF APOPKA, FLORIDA	
SEAL	
RANDALL S. COHEN, P.E. No. 98561	
 gai consultants EB 9951 618 EAST SOUTH STREET ORLANDO, FLORIDA 32801 PHONE: (407) 423-8398	
PROJECT NO./DASH NO. A160186.01	
SHEET 15.4	

CLUB HOMES



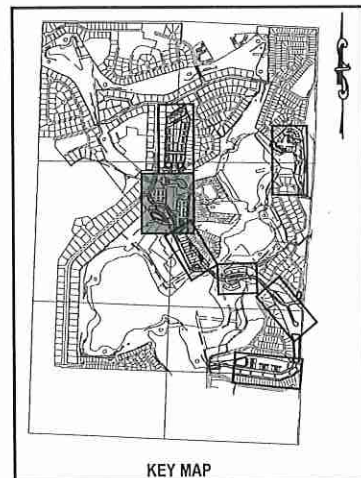
ELEVATION



FLOOR PLAN (N.T.S.)




NEIGHBORHOOD B2



KEY MAP

NOTE:
The floorplans, elevations, and renderings depicted in this plan are conceptual in nature and subject to minor changes. Any such changes submitted in future development plan applications may be approved at the discretion of the Development Director if the proposed changes are determined to be in substantial compliance with the architectural intent of this plan.



SCALE:	AS SHOWN				
DATE:	03-13-2018				
DRAWN:	MJC				
CHECKED:	RSC				
APPROVED:	RSC				
ARCHITECTURE - NEIGHBORHOOD B2					
NEW ERROL					
CITY OF APOPKA, FLORIDA					
SEAL					
RANDALL S. COHEN, P.E. No. 58591					
 gai consultants EB 9951 618 EAST SOUTH STREET ORLANDO, FLORIDA 32801 PHONE: (407) 423-8398					
PROJECT NO./DASH NO. A160186.01					
SHEET 15.5					
NO.	DATE	BY	CHKD	APPROV	DESCRIPTION

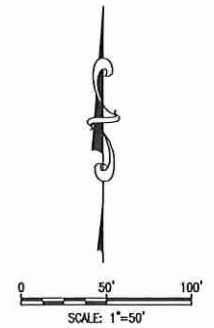
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46

NEIGHBORHOOD "B2"

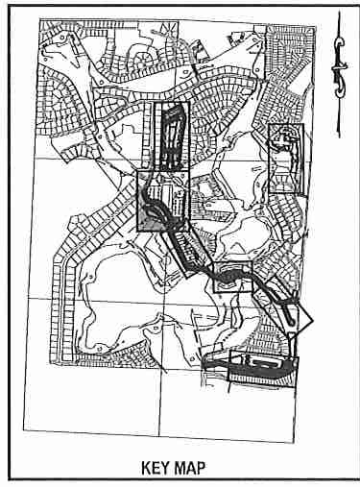


NOTE:
LOCATIONS OF EXISTING UTILITIES PROVIDED BY THE CITY OF APOKA GIS. THESE LOCATIONS HAVE NOT BEEN FIELD VERIFIED.

LEGEND:

---	PROJECT PROPERTY LINE
⊕	WATER STRUCTURES
⊙	SANITARY STRUCTURE
FM	PROPOSED FORCE MAIN
W	PROPOSED WATER PIPE
I	PROPOSED IRRIGATION PIPE
SS	PROPOSED SANITARY PIPE
---	EXISTING WATER PIPE
---	EXISTING STORMWATER PIPE
---	EXISTING SANITARY PIPE (GRAVITY)
---	EXISTING RECLAIMED WATER PIPE

NOTE:
POTABLE WATER AND RECLAIMED WATER LINES TO BE PLACED IN GRASS AREA WHENEVER POSSIBLE.



NO.	DATE	BY	CHKD	APPD	DESCRIPTION

SCALE: AS SHOWN
DATE: 03-13-2018
DRAWN: MJC
CHECKED: RSC
APPROVED: RSC

UTILITY PLAN - NEIGHBORHOOD B2
NEW ERROL
CITY OF APOKA, FLORIDA

SEAL
RANDALL S. COHEN, P.E.
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gai consultants
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PHONE: (407) 423-8398

PROJECT NO./DASH NO.
A160186.01
SHEET
15.7

THE SCALE OF THESE PLANS MAY HAVE CHANGED DUE TO REPRODUCTION

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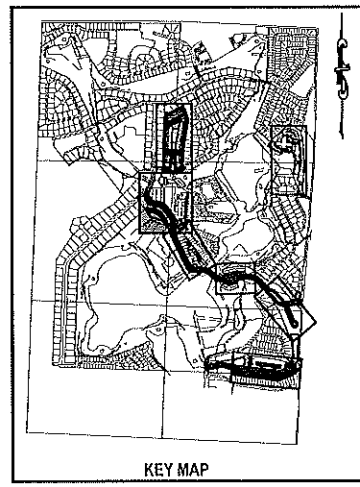
47

NEIGHBORHOOD "B2"

NOTE:
 ADDITIONAL CROSS SECTIONS MAY BE REQUIRED AT PRELIMINARY DEVELOPMENT PLAN INCLUDING BUILDING HEIGHTS AND SIGHT ANGLES TO ADJACENT RESIDENTIAL NEIGHBORHOODS. INCREASED LANDSCAPING MAY BE REQUIRED TO MITIGATE VISUAL IMPACTS CAUSED BY FUTURE MULTI-STORY BUILDINGS WITHIN NEW ERROL.

LEGEND:

	PROJECT PROPERTY LINE
	STORM STRUCTURES
	PROPOSED STORM PIPE



THE SCALE OF THESE PLANS MAY HAVE CHANGED DUE TO REPRODUCTION

SCALE: AS SHOWN													
DATE: 03-13-2018													
DRAWN: MJC													
CHECKED: RSC													
APPROVED: RSC													
GRADING PLAN - NEIGHBORHOOD B2 NEW ERROL CITY OF APOPKA, FLORIDA													
SEAL													
RANDALL S. COHEN, P.E. No. 59391													
 gai consultants EB 9951 818 EAST SOUTH STREET ORLANDO, FLORIDA 32801 PHONE: (407) 423-8398													
PROJECT NO./DASH NO. A160186.01													
SHEET 15.8													
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NO.	DATE	BY	CHKD	APPD	DESCRIPTION								

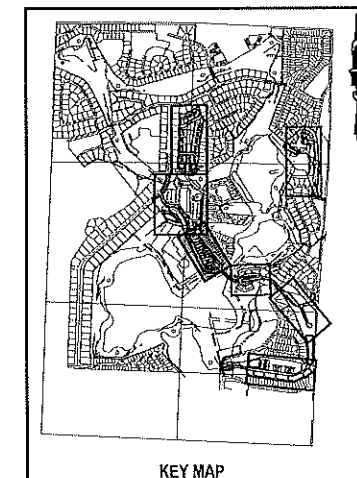
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NEIGHBORHOOD "C"

**TABLE 16.1 A
TRACT ACREAGE TABLE**

NEIGHBORHOOD C	AREA (AC.)
DEVELOPMENT	2.68 ACRES
OPEN SPACE	1.62 ACRES
TRACT 3A	0.97 ACRES
TRACT 3E	0.11 ACRES
TRACT 3F	0.54 ACRES
STORMWATER RETENTION	0.49 ACRES
TRACT 3B	0.08 ACRES
TRACT 3C	0.19 ACRES
TRACT 3D	0.22 ACRES
RIGHT-OF-WAY	0.46 ACRES
TRACT 3G	0.12 ACRES
TRACT 3H	0.14 ACRES
TRACT 3I	0.20 ACRES
RIGHT-OF-WAY (STAGHORN DR)	1.51 ACRES
TOTAL	6.76 ACRES



TRACT MAP - NEIGHBORHOOD C	NEW ERROL CITY OF APOPKA, FLORIDA
SEAL	
<small>RANDALL S. COHEN, P.E. No. 95591</small>	
 <small>gai consultants EE 9951 618 EAST SOUTH STREET ORLANDO, FLORIDA 32801 PHONE: (407) 423-8398</small>	
<small>PROJECT NO./DASH NO. A160186.01</small>	
<small>SHEET 16.1</small>	

NO.	DATE	BY	CHKD	APPROV	DESCRIPTION

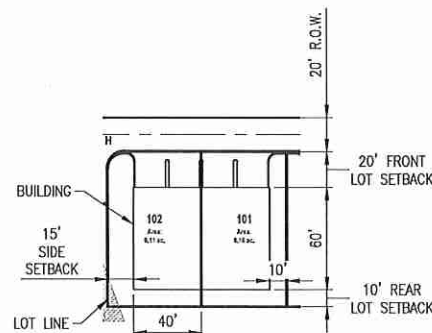
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OWNED BY OTHERS. NOT INCLUDED IN PUD.

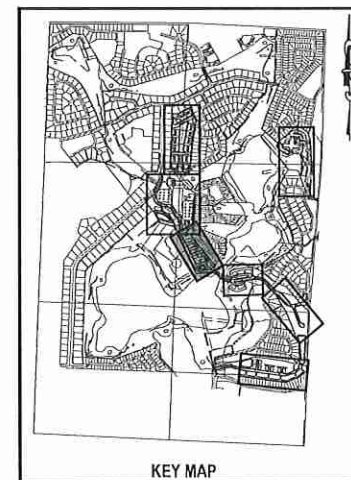
NEIGHBORHOOD "C"



TYPICAL LOT DETAIL

Table 16.2A - Neighborhood C Development Standards

Allowable Uses	Attached Residential (carrage homes)
Max Residential Units	Parks 48
Neighborhood Acreage	6.78 acres
Gross Neighborhood Density	6.90 du/acre
Proposed Parking Count	92 enclosed spaces (rear loaded) 12 on-street spaces
Lot Standards	
Min Lot Width	20'
Min Lot Depth	100'
Minimum Setbacks	
Front	20'
Side	10'
Corner Side	15'
Rear (from common area)	10'
Minimum Attached Building Separation	20'
Building Height	
Max Stories	2
Max Height	35'
Minimum Living Area	1,350 sq ft
Minimum Parking	2 enclosed spaces per unit



KEY MAP

NO.	DATE	BY	CHKD	APPRD	DESCRIPTION

SCALE: AS SHOWN
 DATE: 03-13-2018
 DRAWN: MJC
 CHECKED: RSC
 APPROVED: RSC

SUBDIVISION PLAN - NEIGHBORHOOD C
 NEW ERROL
 CITY OF APOPKA, FLORIDA

SEAL
 RANDALL S. COHEN, P.E.
 No. 58581

gai consultants
 ED 9951
 618 EAST SOUTH STREET
 ORLANDO, FLORIDA 32801
 PHONE: (407) 423-8398

PROJECT NO./DASH NO.
 A160186.01

SHEET
 16.2

THE SCALE OF THESE PLANS MAY HAVE CHANGED DUE TO REPRODUCTION

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NEIGHBORHOOD "C"

**TABLE 16.3 A
OPEN SPACE ACREAGE**

NEIGHBORHOOD C	AREA (AC.)
OPEN SPACE	1.62 ACRES
TRACT 3A	0.97 ACRES
TRACT 3E	0.11 ACRES
TRACT 3F	0.54 ACRES
STORMWATER RETENTION	
TRACT 3B	NOT COUNTED
TRACT 3C	NOT COUNTED
TRACT 3D	NOT COUNTED
TOTAL	1.62 ACRES

NOTE:
The specific design and programming of each individual park space will be submitted with future development plan applications. Proposed facilities and typical photos are provided to indicate the character of each proposed space.

OPEN SPACE LEGEND

- PARKS and PROGRAMMED OPEN SPACES
- BUFFERS and UNPROGRAMMED OPEN SPACES
- ENVIRONMENTAL OPEN SPACE
- STORMWATER (not included in total unless noted)



A. LAWN



B. PLAZA + SEATING



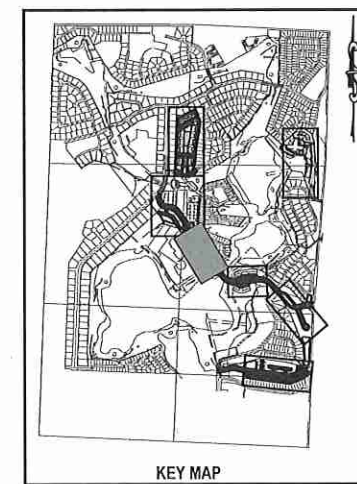
50 MULTI-USE TRAIL



D. ENTRY PARK



E. MAIL KIOSK / GARDEN



KEY MAP

NO.	DATE	BY	CHKD	APPD	DESCRIPTION

SCALE: AS SHOWN
DATE: 03-13-2018
DRAWN: MJC
CHECKED: RSC
APPROVED: RSC

OPEN SPACE - NEIGHBORHOOD C
NEW ERROL
CITY OF APOPKA, FLORIDA

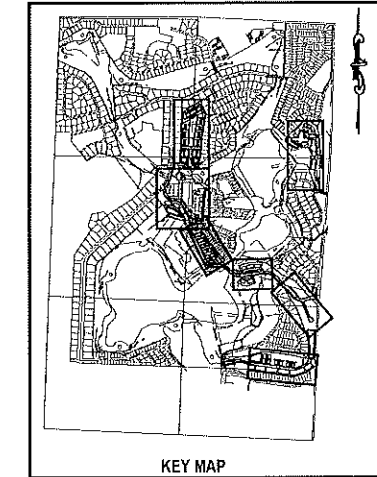
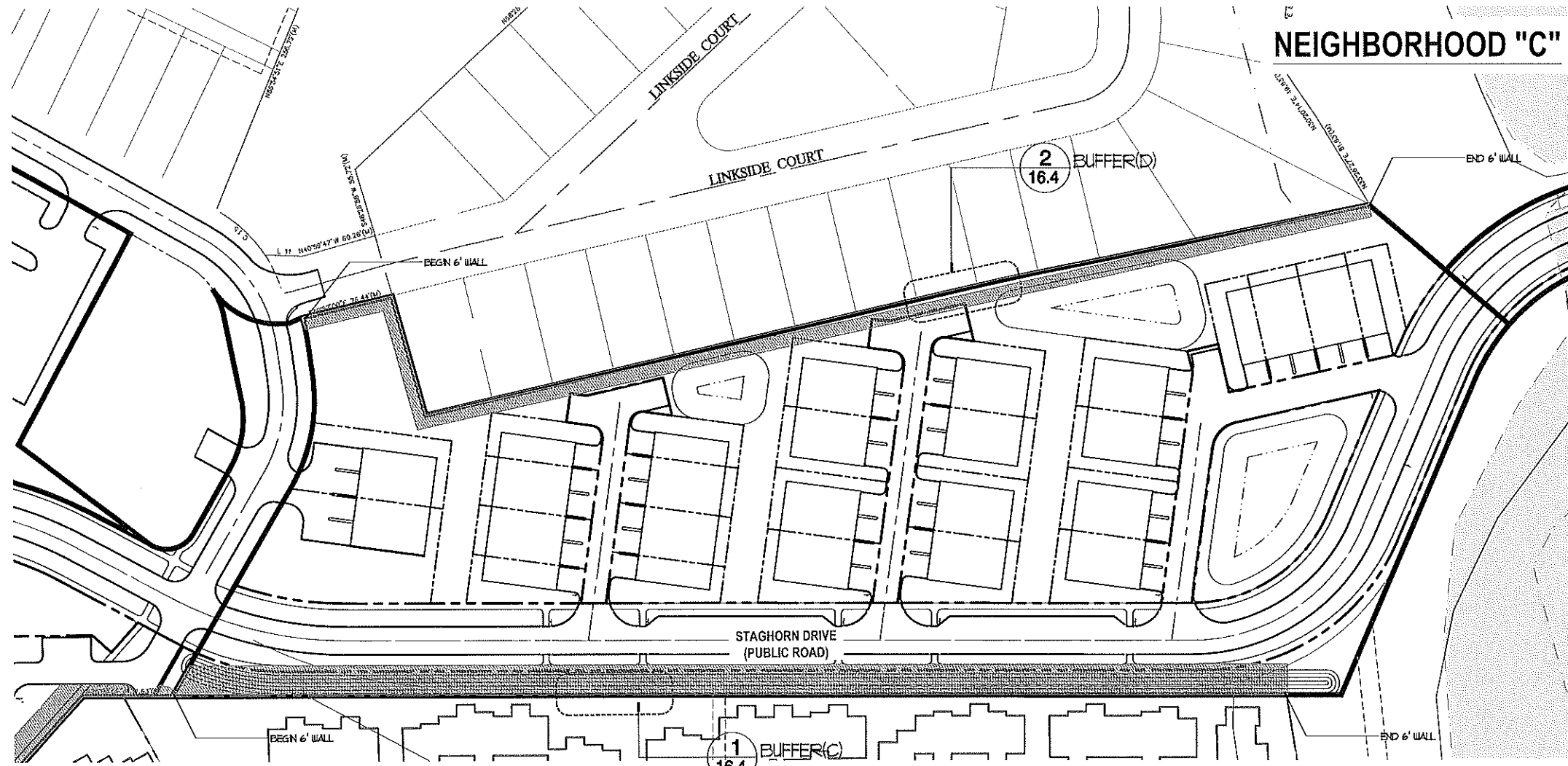
RANDALL S. COHEN, P.E.
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ORLANDO, FLORIDA 32801
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PROJECT NO./DASH NO.
A160186.01

SHEET
16.3

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NO.	DATE	BY	CHKD	APPD	DESCRIPTION

SCALE: AS SHOWN
DATE: 03-13-2018
DRAWN: MJC
CHECKED: RSC
APPROVED: RSC

NEIGHBORHOOD "C" BUFFER TYPES

MINIMUM BUFFERYARD: 10'-0" WITH A 6' WALL / FENCE

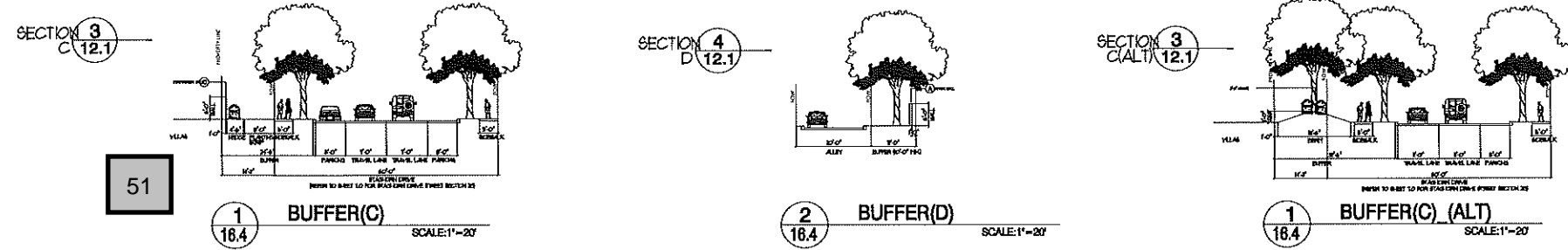
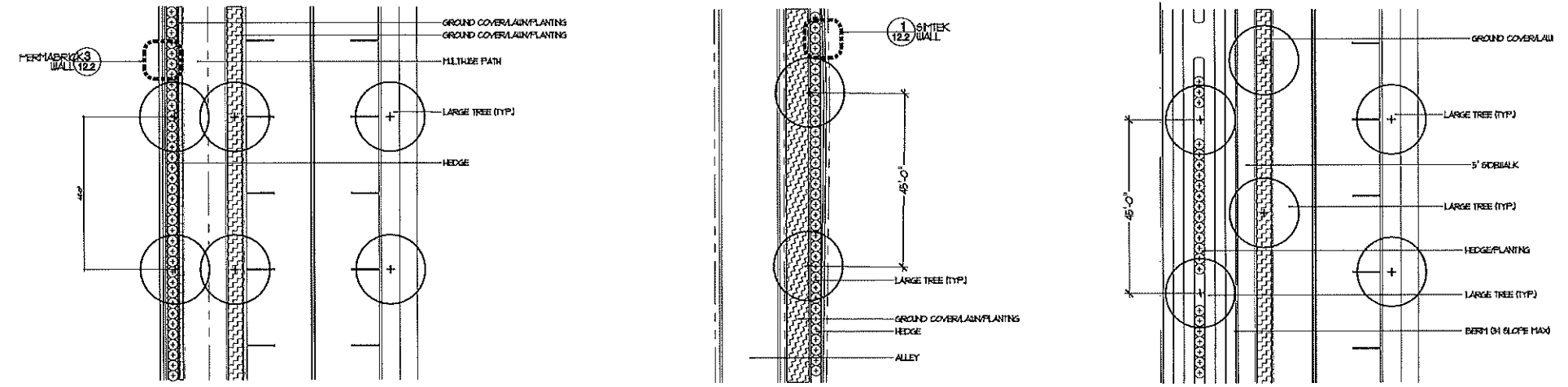
WALLS / FENCES -- CAN MEANDER IN THE BUFFERYARD, HOWEVER AT LEAST 25% MUST BE LOCATED WITHIN 1'-0" OF THE INTERIOR EXTENT OF THE BUFFERYARD

BUFFERYARDS ADJACENT TO A RIGHT-OF-WAY: 1 CANOPY TREE (45' O.C.) / CONTINUOUS HEDGE ROW 24" TALL AND 36" APART.

BERMS: MIN OF 3'-0" TALL / MAX SLOPE = 3:1

GROUND COVER: MINIMUM OF 25% OF THE BUFFERYARD AREA

PLANT MATERIALS, MULCH OR OTHER APPROVED MATERIALS = 100% OF THE BUFFERYARD AREA



(Note: Developer and adjacent Villa owners recommend berm shown in C.ALT as an alternative to the wall. This alternative may be approved by the City as a non-substantial change during PDP or FDP phase.)

BUFFER PLAN - NEIGHBORHOOD C
NEW ERROL
CITY OF APOPKA, FLORIDA

SEAL
RANDALL S. COHEN, P.E.
No. 58581

gai consultants
FB 9951
618 EAST SOUTH STREET
ORLANDO, FLORIDA 32801
PHONE: (407) 423-8398

PROJECT NO./DASH NO.
A160186.01
SHEET
16.4

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CARRIAGE HOME



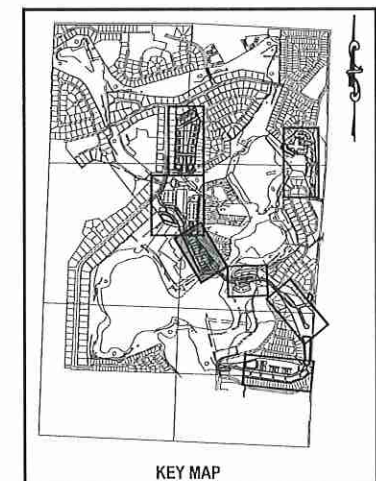
ELEVATION

52



FLOOR PLAN (N.T.S.)

NEIGHBORHOOD "C"



KEY MAP

NOTE:
The floorplans, elevations, and renderings depicted in this plan are conceptual in nature and subject to minor changes. Any such changes submitted in future development plan applications may be approved at the discretion of the Development Director if the proposed changes are determined to be in substantial compliance with the architectural intent of this plan.

NO.	DATE	BY	CHKD	APPD	DESCRIPTION

SCALE: AS SHOWN
DATE: 03-13-2018
DRAWN: MJC
CHECKED: RSC
APPROVED: RSC

ARCHITECTURE - NEIGHBORHOOD C
NEW ERROL
CITY OF APOPKA, FLORIDA

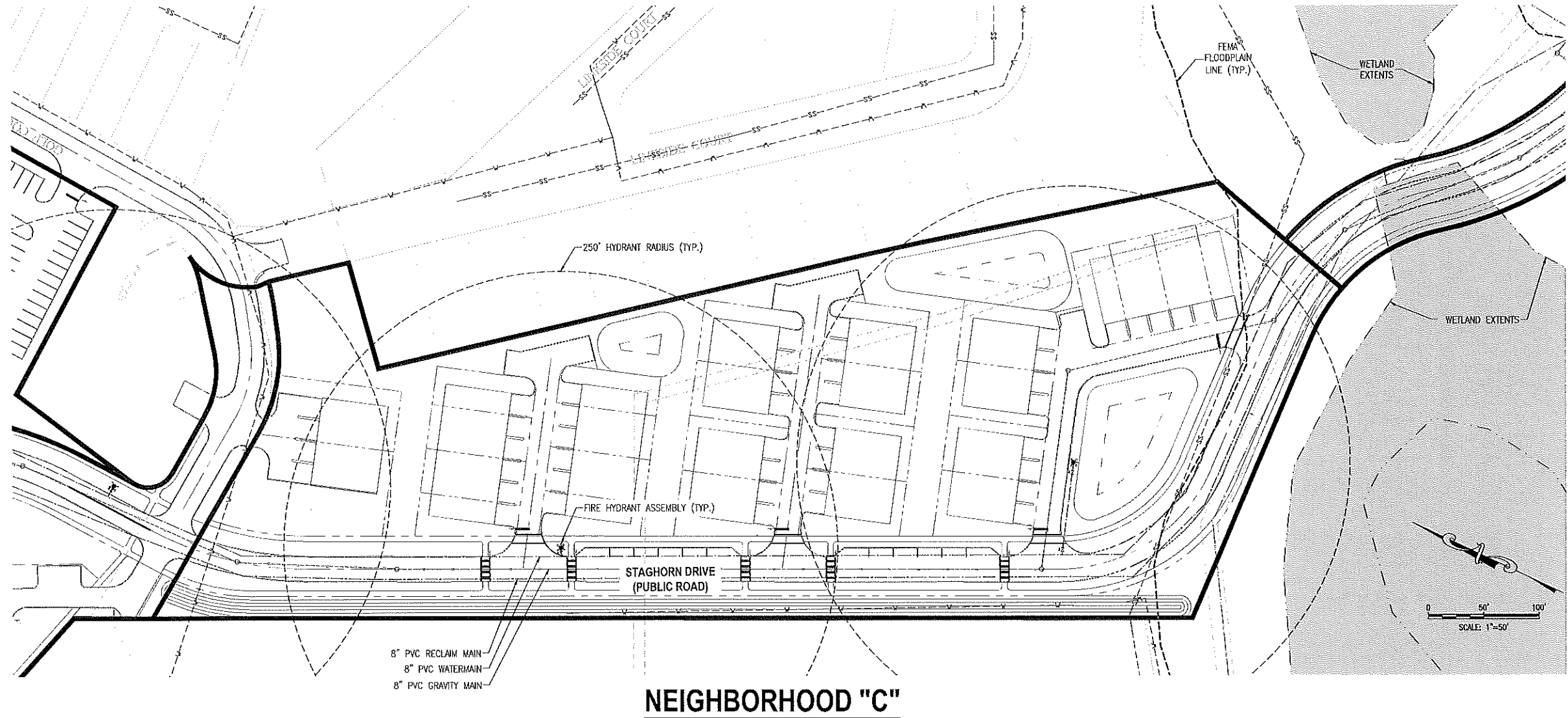
SEAL
RANDALL S. COHEN, P.E.
No. 58581

gai consultants
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618 EAST SOUTH STREET
ORLANDO, FLORIDA 32801
PHONE: (407) 423-8398

PROJECT NO./DASH NO.
A160186.01

SHEET
16.5

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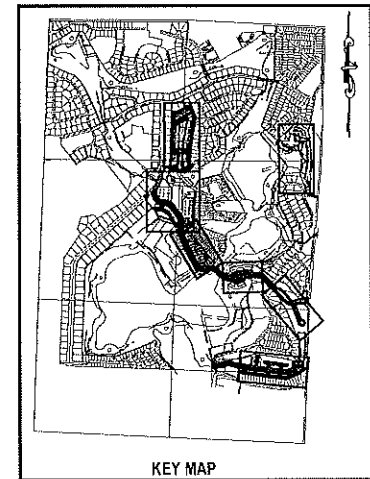
NEIGHBORHOOD "C"

NOTE:
LOCATIONS OF EXISTING UTILITIES
PROVIDED BY THE CITY OF
APOPKA GIS. THESE LOCATIONS
HAVE NOT BEEN FIELD VERIFIED.

LEGEND:

	PROJECT PROPERTY LINE
	WATER STRUCTURES
	SANITARY STRUCTURE
	PROPOSED FORCE MAIN
	PROPOSED WATER PIPE
	PROPOSED IRRIGATION PIPE
	PROPOSED SANITARY PIPE
	EXISTING WATER PIPE
	EXISTING STORMWATER PIPE
	EXISTING SANITARY PIPE (GRAVITY)
	EXISTING RECLAIMED WATER PIPE

NOTE:
POTABLE WATER AND RECLAIMED WATER LINES TO BE
PLACED IN GRASS AREA WHENEVER POSSIBLE.



SCALE: AS SHOWN					
DATE: 03-13-2018					
DRAWN: MJC					
CHECKED: RSC					
APPROVED: RSC					
UTILITY PLAN - NEIGHBORHOOD C					
NEW ERROL					
CITY OF APOPKA, FLORIDA					
SEAL					
RANDALL S. COHEN, P.L.C. No. 98981					
 gai consultants CB 9951 619 EAST SOUTH STREET ORLANDO, FLORIDA 32801 PHONE: (407) 423-8398					
PROJECT NO./DASH NO. A160186.01					
SHEET 16.7					
NO.	DATE	BY	CHKD.	APPROV.	REVISIONS

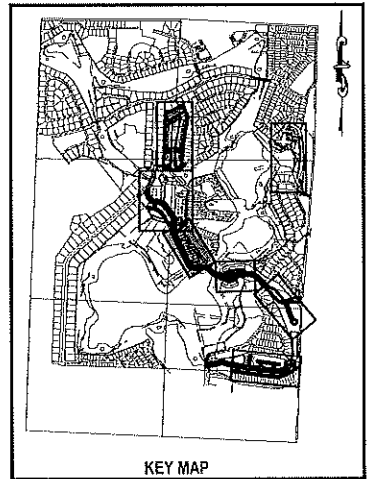
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NEIGHBORHOOD "C"

LEGEND:

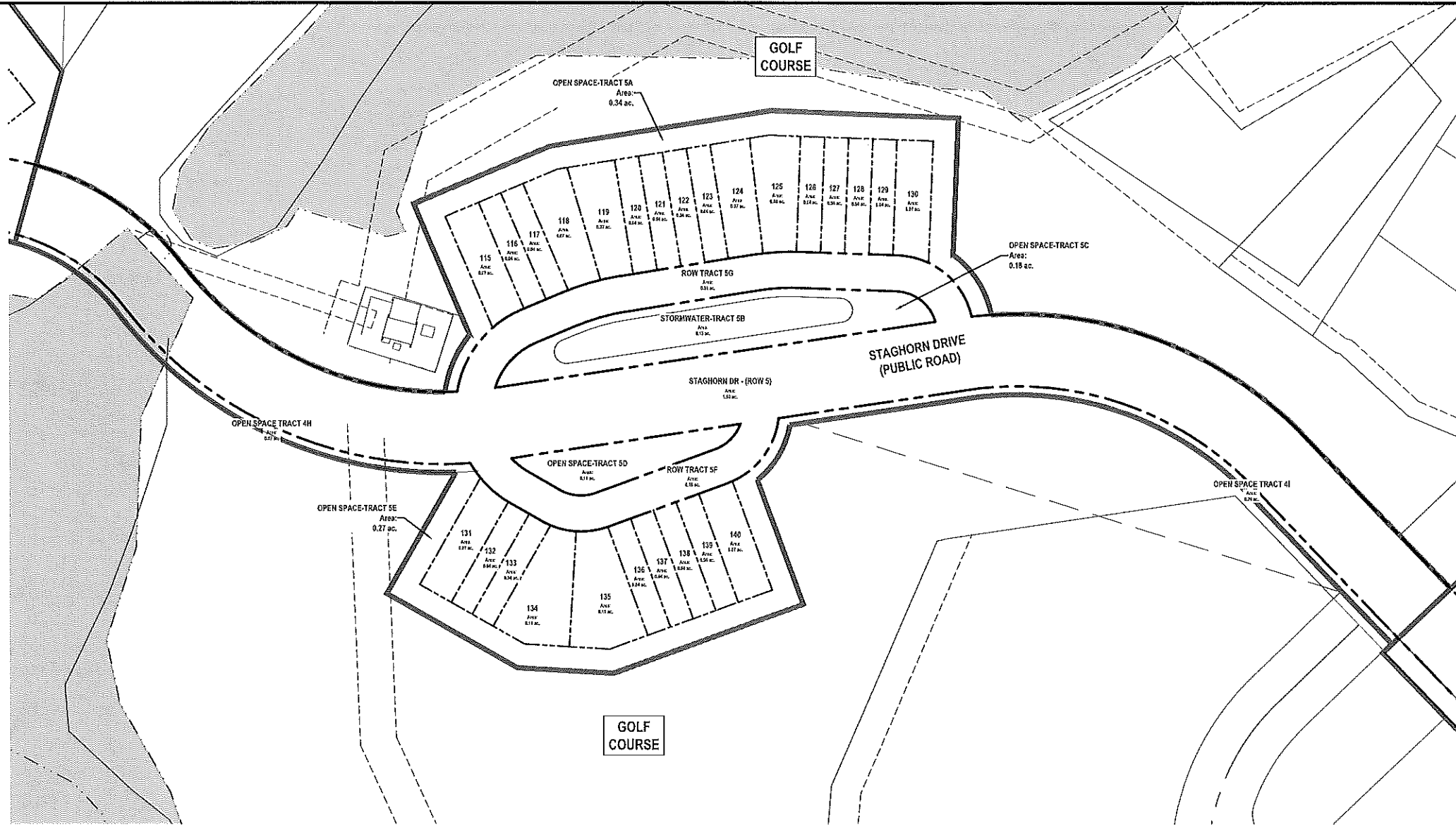
	PROJECT PROPERTY LINE
	STORM STRUCTURES
	PROPOSED STORM PIPE



NOTE:
 ADDITIONAL CROSS SECTIONS MAY BE REQUIRED AT PRELIMINARY DEVELOPMENT PLAN INCLUDING BUILDING HEIGHTS AND SIGHT ANGLES TO ADJACENT RESIDENTIAL NEIGHBORHOODS. INCREASED LANDSCAPING MAY BE REQUIRED TO MITIGATE VISUAL IMPACTS CAUSED BY FUTURE MULTI-STORY BUILDINGS WITHIN NEW ERROL.

SCALE: AS SHOWN					
DATE: 03-13-2018					
DRAWN: MJC					
CHECKED: RSC					
APPROVED: RSC					
GRADING PLAN - NEIGHBORHOOD C NEW ERROL CITY OF APOPKA, FLORIDA					
SEAL					
RANDALL S. COHEN, P.E. No. 58581					
<p>gai consultants 619 EAST SOUTH STREET ORLANDO, FLORIDA 32801 PHONE: (407) 423-8298</p>					
PROJECT NO./DASH NO. A160186.01					
SHEET 16.8					
NO.	DATE	BY	CHKD.	APP'D.	DESCRIPTION

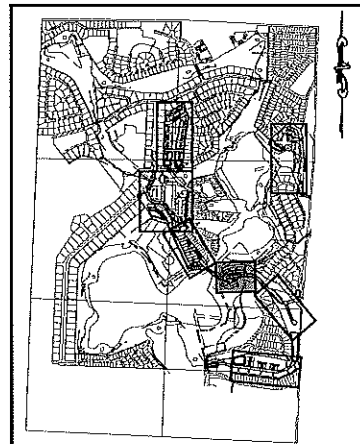
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NEIGHBORHOOD "D"

**TABLE 17.1 A
TRACT ACREAGE TABLE**

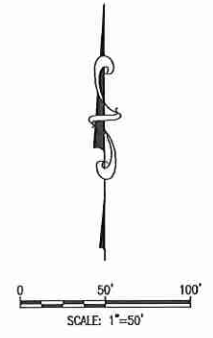
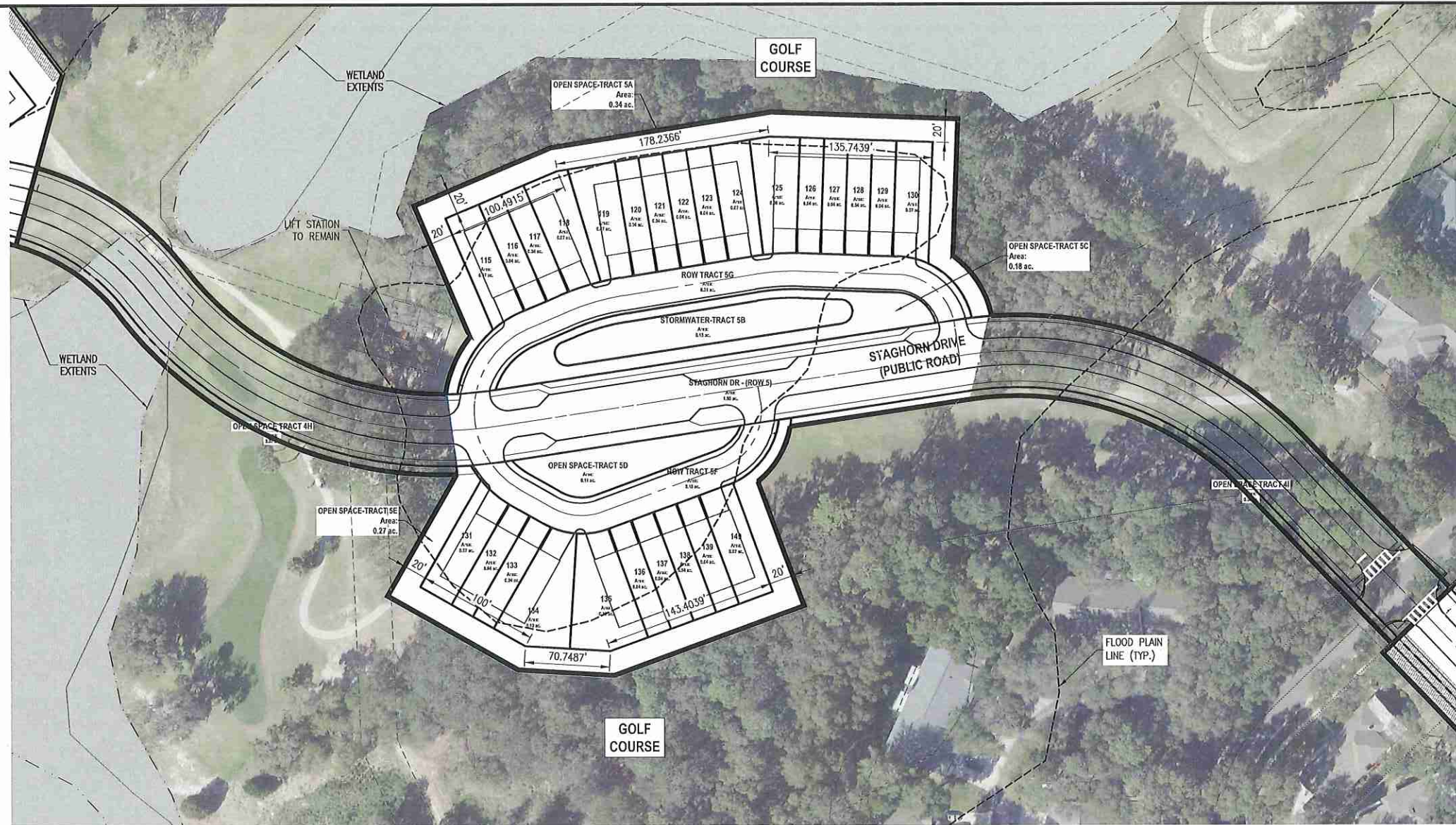
NEIGHBORHOOD D	AREA (AC.)
DEVELOPMENT	1.47 ACRES
OPEN SPACE	1.06 ACRES
TRACT 4A	0.34 ACRES
TRACT 4C	0.18 ACRES
TRACT 4D	0.11 ACRES
TRACT 4E	0.27 ACRES
TRACT 4H	0.07 ACRES
TRACT 4I	0.09 ACRES
STORMWATER RETENTION	0.15 ACRES
TRACT 4B	0.15 ACRES
RIGHT-OF-WAY	0.49 ACRES
TRACT 4F	0.18 ACRES
TRACT 4G	0.31 ACRES
RIGHT-OF-WAY (STAGHORN DR)	1.80 ACRES
TOTAL	4.97 ACRES



KEY MAP

SCALE: AS SHOWN	
DATE: 03-13-2018	
DRAWN: MJC	
CHECKED: RSC	
APPROVED: RSC	
TRACT MAP - NEIGHBORHOOD D	
NEW ERROL	
CITY OF APOPKA, FLORIDA	
SEAL	
RANDALL S. COHEN, P.E. No. 58581	
 gai consultants 80 9951 618 EAST SOUTH STREET ORLANDO, FLORIDA 32801 PHONE: (407) 423-8398	
PROJECT NO./DASH NO. A160186.01	
SHEET 17.1	

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NEIGHBORHOOD "D"

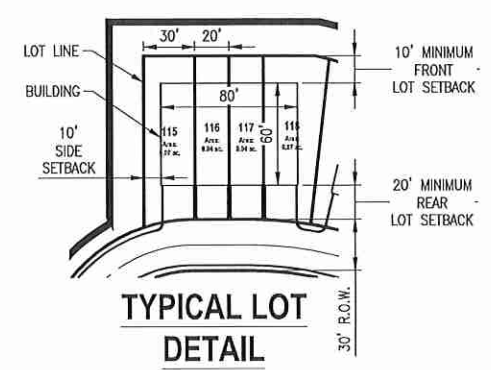
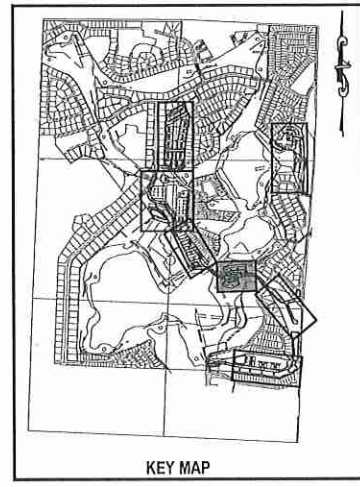


Table 17.2A - Neighborhood D Development Standards

Allowable Uses	Attached Residential (townhouse) Parks
Max Residential Units	28
Neighborhood Acreage	4.97 acres
Gross Neighborhood Density	5.29 du/acre
Proposed Parking Count	52 enclosed spaces (rear loaded) 14 on-street spaces
Lot Standards	
Min Lot Width	20'
Min Lot Depth	80'
Minimum Setbacks	
Front (from common area)	10'
Side	10'
Corner Side	15'
Rear	20'
Minimum Attached Building Separation	20'
Building Height	
Max Stories	3
Max Height	45'
Minimum Living Area	1,350 sq ft
Minimum Parking	2 enclosed spaces per unit



REVISIONS			
NO.	DATE	BY	DESCRIPTION

SCALE: AS SHOWN
 DATE: 03-13-2018
 DRAWN: MJC
 CHECKED: RSC
 APPROVED: RSC

SUBDIVISION PLAN - NEIGHBORHOOD D
 NEW ERROL
 CITY OF APOPKA, FLORIDA

SEAL

RANDALL S. COHEN, P.E.
 No. 58581

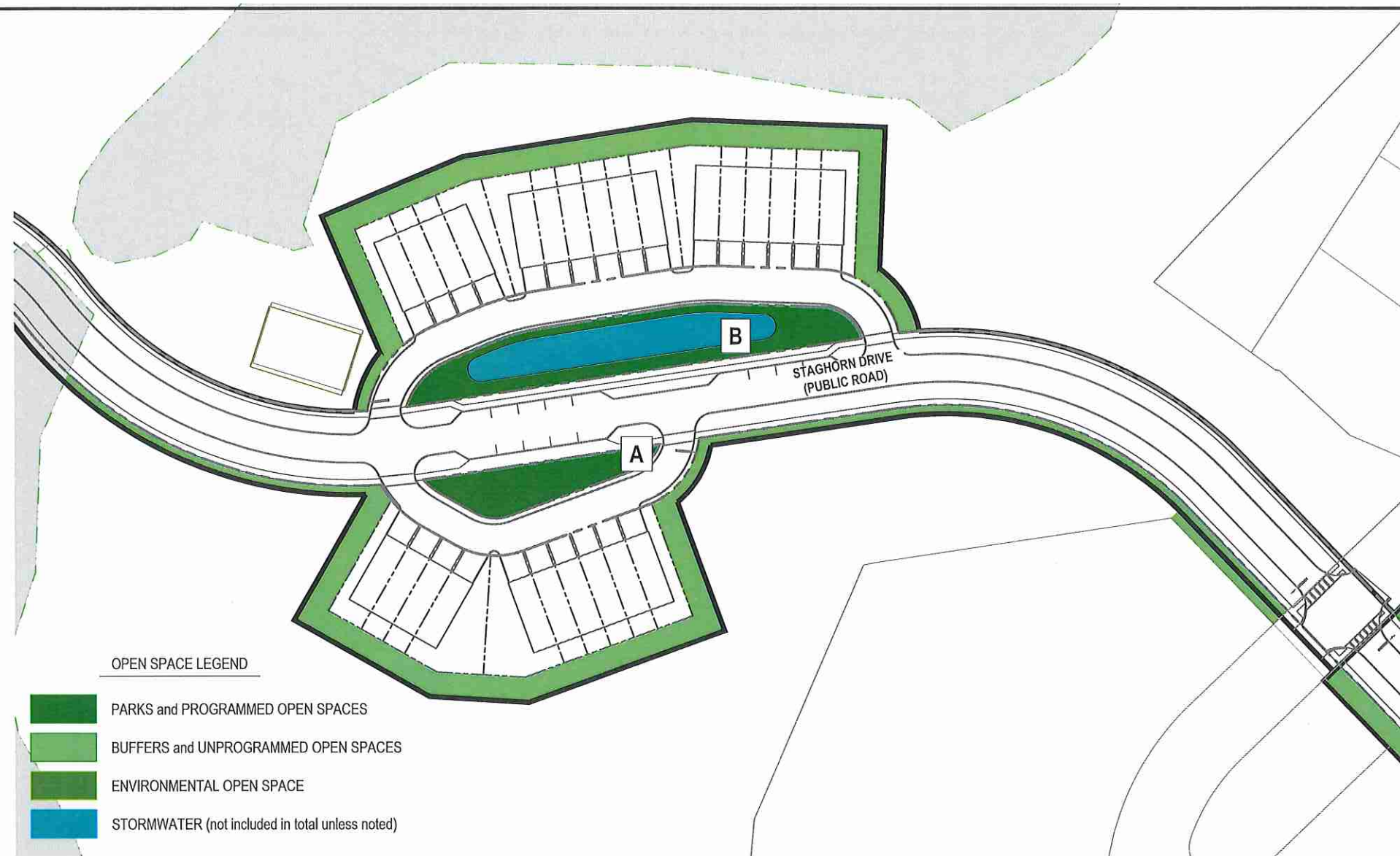
gai consultants
 EB 9951
 618 EAST SOUTH STREET
 ORLANDO, FLORIDA 32801
 PHONE: (407) 423-8398

PROJECT NO./DASH NO.
 A160186.01

SHEET
 17.2

THE SCALE OF THESE PLANS MAY HAVE CHANGED DUE TO REPRODUCTION

Z:\ComDev\2018\160186.01 - errol_eda\studies_entitlement\CAD\Drawings\preliminary_development_plan\160186.01 MASTER SITE PLAN_OPEN SPACE PLAN.dwg Mar 12, 2018 - 4:41 pm



NEIGHBORHOOD "D"

TABLE 17.3 A
OPEN SPACE ACREAGE

NEIGHBORHOOD D	AREA (AC.)
OPEN SPACE	1.06 ACRES
TRACT 4A	0.34 ACRES
TRACT 4C	0.18 ACRES
TRACT 4D	0.11 ACRES
TRACT 4E	0.27 ACRES
TRACT 4H	0.07 ACRES
TRACT 4I	0.09 ACRES
STORMWATER RETENTION	
TRACT 4B	NOT COUNTED
TOTAL	1.06 ACRES

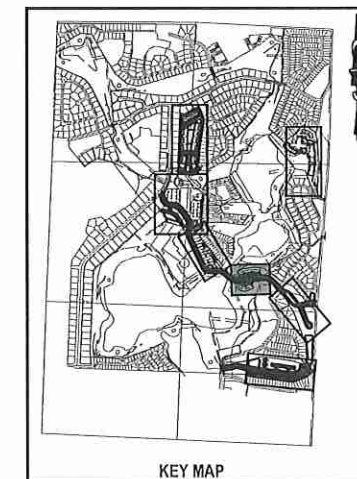
NOTE:
The specific design and programming of each individual park space will be submitted with future development plan applications. Proposed facilities and typical photos are provided to indicate the character of each proposed space.



A. MULTI-USE TRAIL



B. PARK



KEY MAP

REVISIONS	
NO.	DESCRIPTION

SCALE: AS SHOWN
DATE: 03-13-2018
DRAWN: MJC
CHECKED: RSC
APPROVED: RSC

OPEN SPACE - NEIGHBORHOOD D
NEW ERROL
CITY OF AOPKA, FLORIDA

SEAL

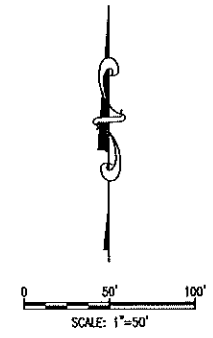
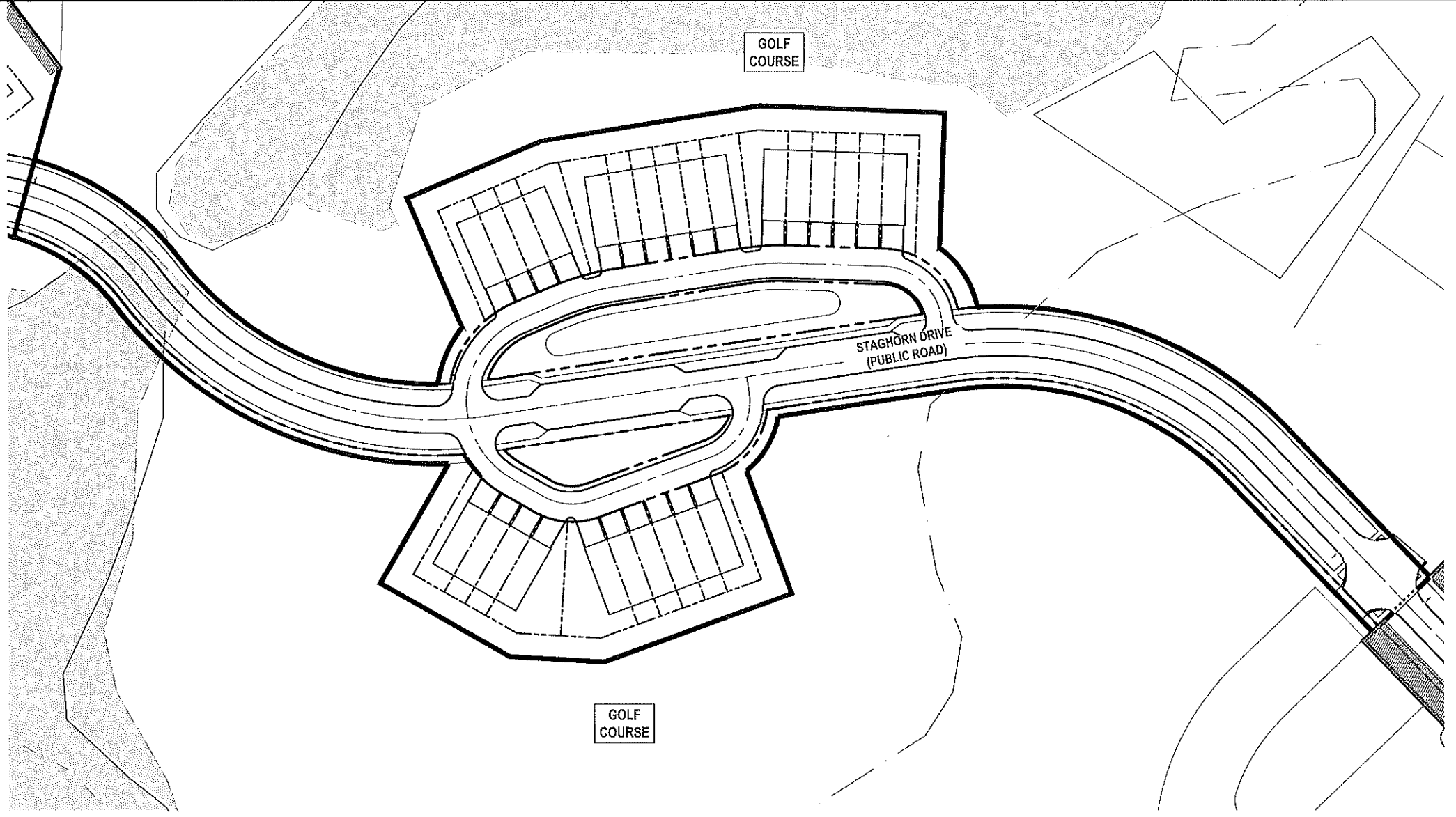
RANDALL S. COHEN, P.E.
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PROJECT NO./DASH NO.
A160186.01

SHEET
17.3

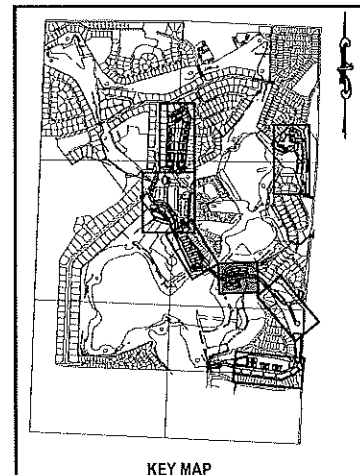
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NEIGHBORHOOD "D"

NEIGHBORHOOD "D" BUFFER TYPES

NO BUFFERYARDS ARE NECESSARY



KEY MAP

NO.	DATE	BY	CHKD	APPD	DESCRIPTION

SCALE: AS SHOWN
 DATE: 03-13-2018
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 APPROVED: RSC

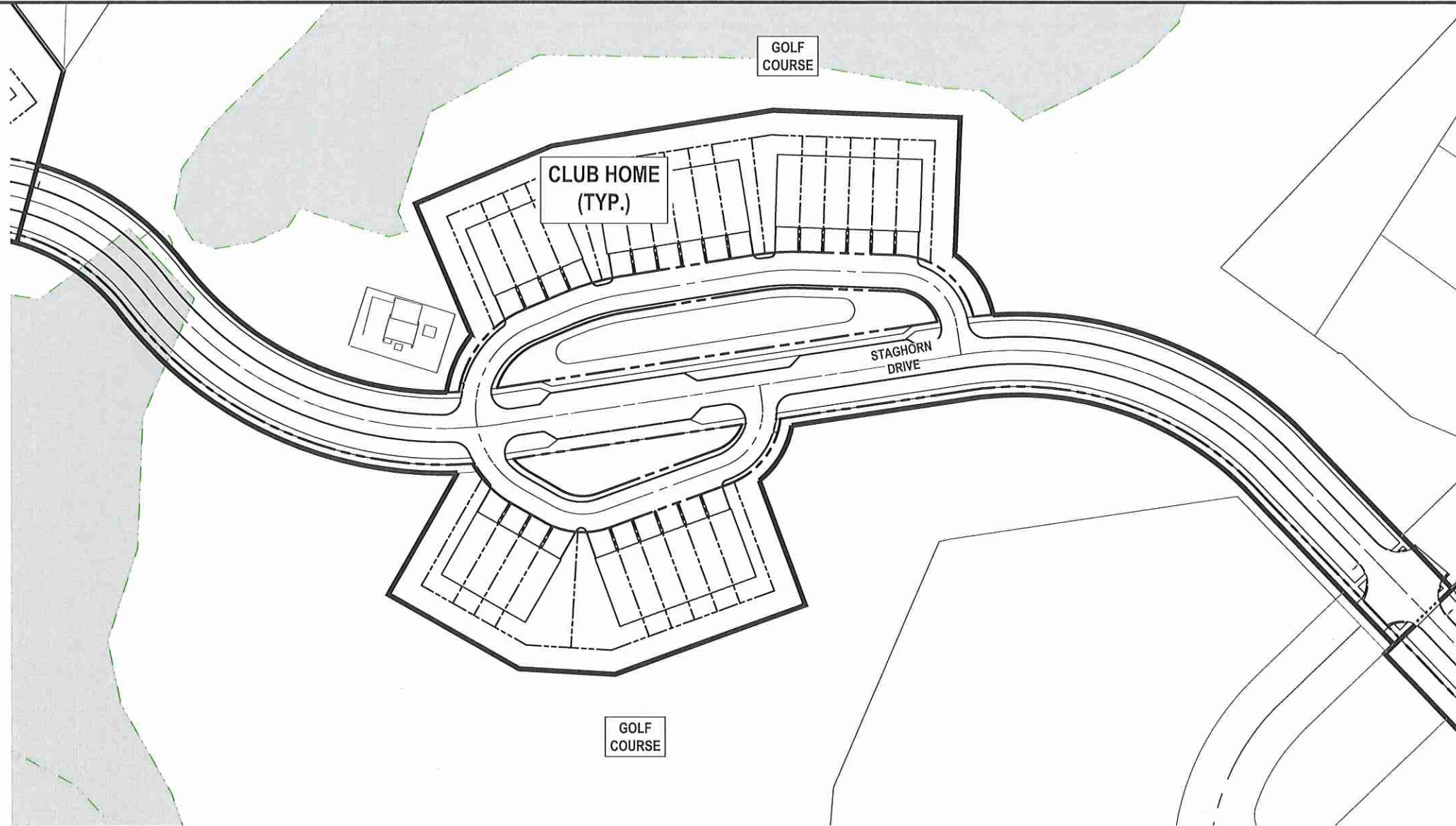
BUFFER PLAN - NEIGHBORHOOD D
 NEW ERROL
 CITY OF APOPKA, FLORIDA

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PROJECT NO./DASH NO.
 A160186.01
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CLUB HOME



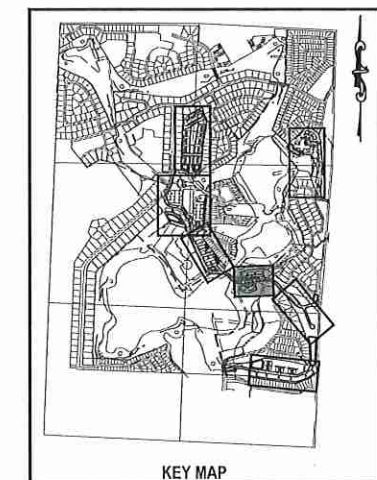
ELEVATION

59



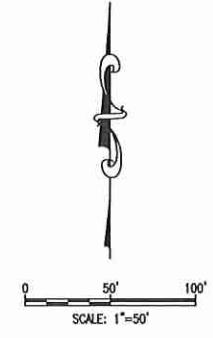
FLOOR PLAN (N.T.S.)

NEIGHBORHOOD "D"



KEY MAP

NOTE:
The floorplans, elevations, and renderings depicted in this plan are conceptual in nature and subject to minor changes. Any such changes submitted in future development plan applications may be approved at the discretion of the Development Director if the proposed changes are determined to be in substantial compliance with the architectural intent of this plan.



NO.	DATE	BY	CHKD	APPD	DESCRIPTION

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DATE: 03-13-2018
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CHECKED: RSC
APPROVED: RSC

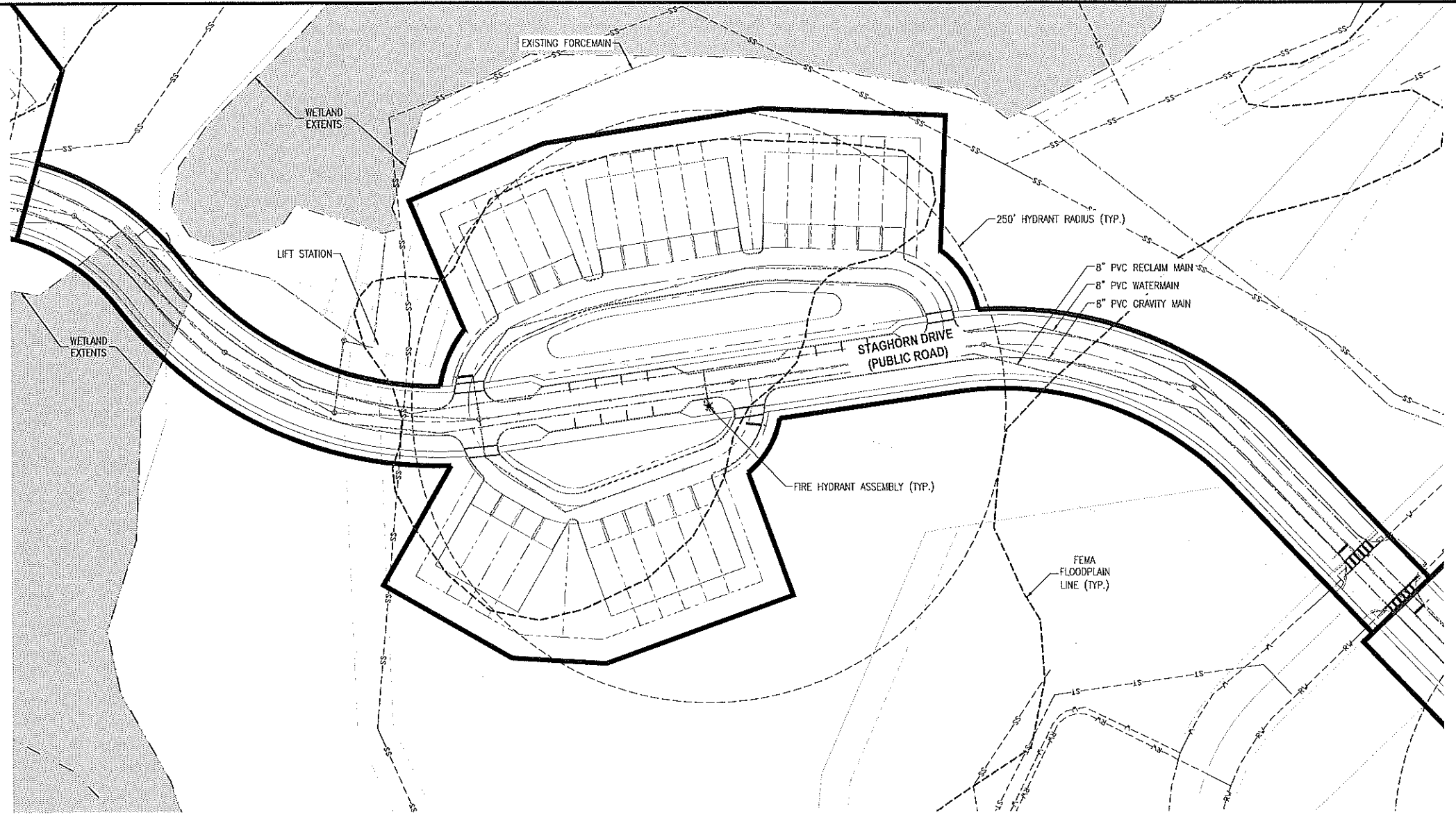
ARCHITECTURE - NEIGHBORHOOD D
NEW ERROL
CITY OF APOPKA, FLORIDA

SEAL
RANDALL S. COHEN, P.E.
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ORLANDO, FLORIDA 32801
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PROJECT NO./DASH NO.
A160186.01
SHEET
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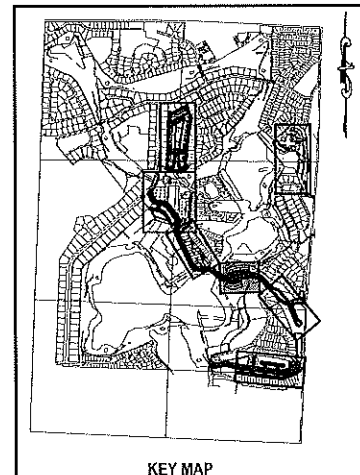
NEIGHBORHOOD "D"

NOTE:
LOCATIONS OF EXISTING UTILITIES PROVIDED BY THE CITY OF APOPKA GIS. THESE LOCATIONS HAVE NOT BEEN FIELD VERIFIED.

LEGEND:	
	PROJECT PROPERTY LINE
	WATER STRUCTURES
	SANITARY STRUCTURE
	PROPOSED FORCE MAIN
	PROPOSED WATER PIPE
	PROPOSED IRRIGATION PIPE
	PROPOSED SANITARY PIPE
	EXISTING WATER PIPE
	EXISTING STORMWATER PIPE
	EXISTING SANITARY PIPE (GRAVITY)
	EXISTING RECLAIMED WATER PIPE

NOTES:
POTABLE WATER AND RECLAIMED WATER LINES TO BE PLACED IN GRASS AREA WHENEVER POSSIBLE.

THE EXISTING MASTER LIFT STATION WILL NEED TO BE EVALUATED TO DETERMINE IF IMPROVEMENTS WILL BE NECESSARY TO ACCOMMODATE THIS NEW GROWTH.



KEY MAP

REVISIONS					
NO.	DATE	BY	CHKD	APPD	DESCRIPTION

SCALE: AS SHOWN
DATE: 03-13-2018
DRAWN: MJC
CHECKED: RSC
APPROVED: RSC

UTILITY PLAN - NEIGHBORHOOD D
NEW ERROL
CITY OF APOPKA, FLORIDA

SEAL

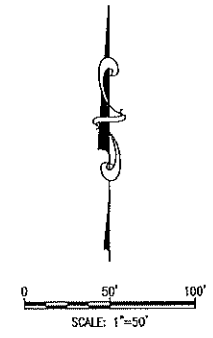
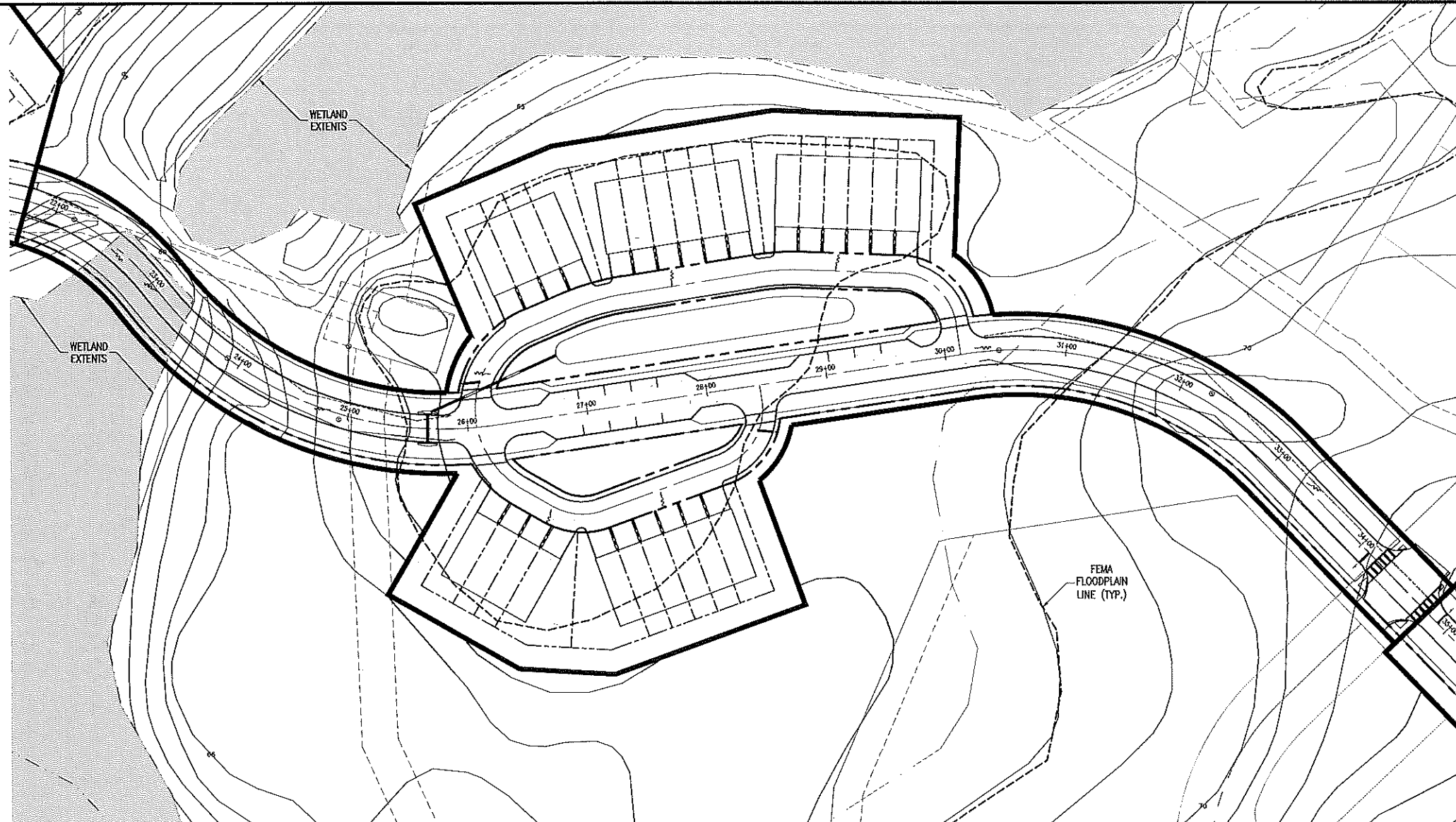
RANGALL S. COHEN, P.E.
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ORLANDO, FLORIDA 32801
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PROJECT NO./DASH NO.
A160186.01

SHEET
17.7

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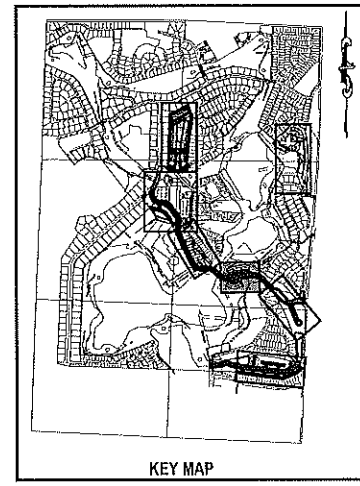


NEIGHBORHOOD "D"

LEGEND:

	PROJECT PROPERTY LINE
	STORM STRUCTURES
	PROPOSED STORM PIPE

NOTE:
 ADDITIONAL CROSS SECTIONS MAY BE REQUIRED AT PRELIMINARY DEVELOPMENT PLAN INCLUDING BUILDING HEIGHTS AND SIGHT ANGLES TO ADJACENT RESIDENTIAL NEIGHBORHOODS. INCREASED LANDSCAPING MAY BE REQUIRED TO MITIGATE VISUAL IMPACTS CAUSED BY FUTURE MULTI-STORY BUILDINGS WITHIN NEW ERROL.



REVISIONS		DESCRIPTION
NO.	DATE	
	BY	
	CHKD	
	APPD	

SCALE: AS SHOWN
 DATE: 03-13-2018
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 CHECKED: RSC
 APPROVED: RSC

GRADING PLAN - NEIGHBORHOOD D
 NEW ERROL
 CITY OF APOPKA, FLORIDA

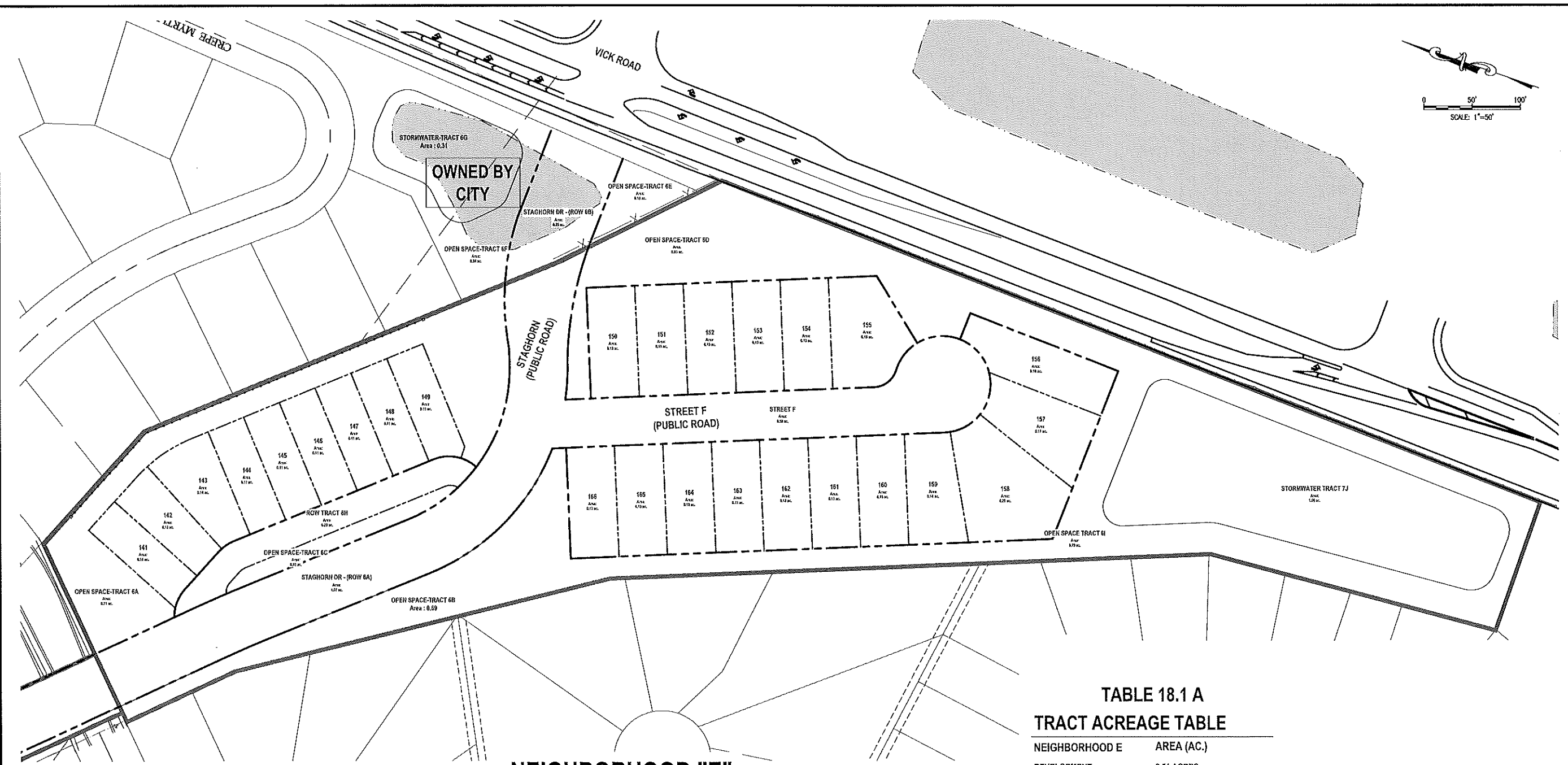
SEAL
 RANDALL S. COHEN, P.E.
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 EB 9951
 619 EAST SOUTH STREET
 ORLANDO, FLORIDA 32801
 PHONE: (407) 423-8199

PROJECT NO./DASH NO.
 A160186.01

SHEET
 17.8

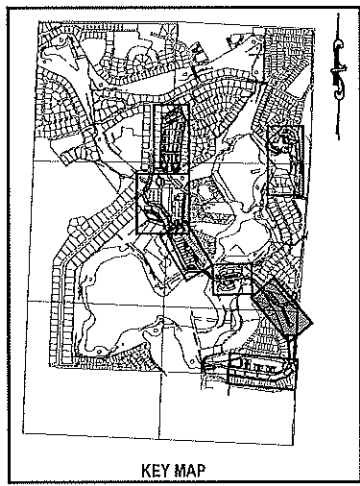
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NEIGHBORHOOD "E"

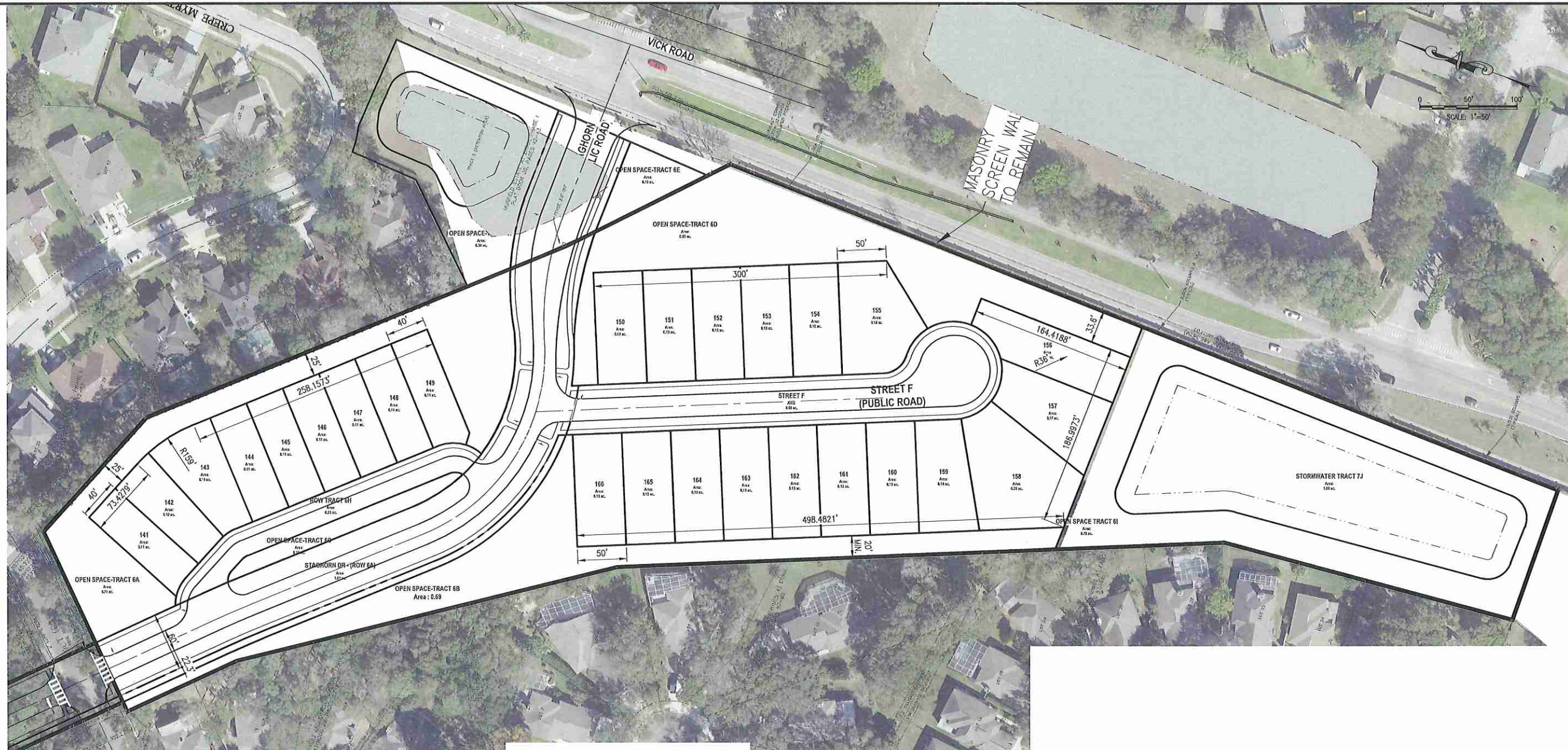
**TABLE 18.1 A
TRACT ACREAGE TABLE**

NEIGHBORHOOD E	AREA (AC.)
DEVELOPMENT	2.51 ACRES
OPEN SPACE	3.56 ACRES
TRACT 6A	0.71 ACRES
TRACT 6B	0.69 ACRES
TRACT 6C	0.10 ACRES
TRACT 6D	0.83 ACRES
TRACT 6E (City)	0.10 ACRES
TRACT 6F (City)	0.34 ACRES
TRACT 6I	0.79 ACRES
STORMWATER RETENTION	1.37 ACRES
TRACT 6G (City)	0.31 ACRES
TRACT 6J	1.06 ACRES
RIGHT-OF-WAY	0.23 ACRES
TRACT 6H	0.23 ACRES
RIGHT-OF-WAY STAGHORN 6A	1.07 ACRES
RIGHT-OF-WAY STAGHORN 6B	0.25 ACRES
STREET F	0.58 ACRES
TOTAL	9.57 ACRES



TRACT MAP - NEIGHBORHOOD E NEW ERROL CITY OF APOPKA, FLORIDA	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;">NO.</td> <td style="width: 10%;">DATE</td> <td style="width: 10%;">BY</td> <td style="width: 10%;">CHKD</td> <td style="width: 10%;">APPROD</td> <td style="width: 50%;">DESCRIPTION</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table> <p>SCALE: AS SHOWN DATE: 03-13-2018 DRAWN: M.J.C. CHECKED: RSC APPROVED: RSC</p> <p style="text-align: center;">SEAL</p> <p style="text-align: center;">RANDALL S. COHEN, P.E. No. 56561</p> <p style="text-align: center;">gai consultants EB 9951 618 EAST SOUTH STREET ORLANDO, FLORIDA 32801 PHONE: (407) 423-8398</p> <p>PROJECT NO./DASH NO. A160186.01</p> <p style="text-align: center;">SHEET 18.1</p>	NO.	DATE	BY	CHKD	APPROD	DESCRIPTION																		
NO.	DATE	BY	CHKD	APPROD	DESCRIPTION																				

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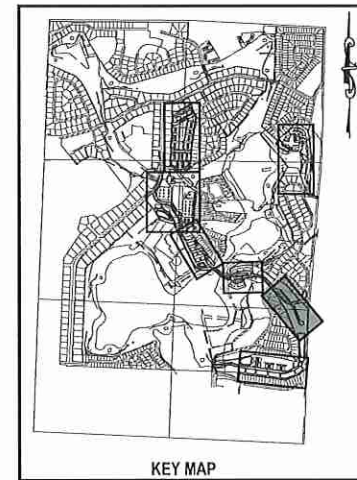
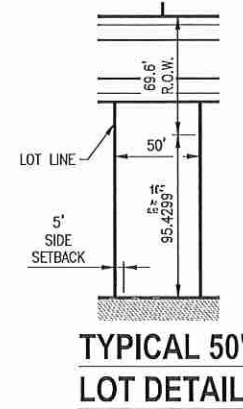
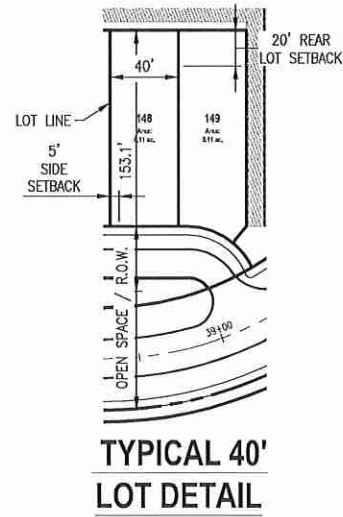
REVISIONS			
NO.	DATE	BY	DESCRIPTION

SCALE: AS SHOWN
DATE: 03-13-2018
DRAWN: MJC
CHECKED: RSC
APPROVED: RSC

NEIGHBORHOOD "E"

Table 18.2A - Neighborhood E Development Standards

Allowable Uses	Single Family Detached Parks
Max Residential Units	10 (40'x115' lots) 16 (50'x115' lots)
Neighborhood Acreage	8.57 acres
Gross Neighborhood Density	3.03 du/acre
Proposed Parking Count	52 enclosed spaces
Lot Standards	
Min Lot Width	40'
Min Lot Depth	100'
Minimum Setbacks	
Front	20'
Side	5'
Corner Side	10'
Rear	20'
Front-Facing Garage	30'
Building Height	
Max Stories	2
Max Height	35'
Minimum Living Area	1,600 sq ft
Minimum Parking	2 enclosed spaces per unit



SUBDIVISION PLAN - NEIGHBORHOOD E
NEW ERROL
CITY OF APOPKA, FLORIDA

SEAL

RANDALL S. COHEN, P.E.
No. 98581

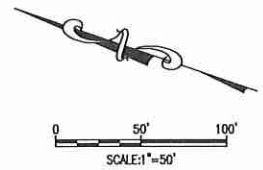
gai consultants
EB 9951
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ORLANDO, FLORIDA 32801
PHONE: (407) 423-8398

PROJECT NO./DASH NO.
A160186.01

SHEET
18.2

THE SCALE OF THESE PLANS MAY HAVE CHANGED DUE TO REPRODUCTION

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NO.	DATE	BY	CHKD.	APPD.	DESCRIPTION

SCALE: AS SHOWN
 DATE: 03-13-2018
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OPEN SPACE - NEIGHBORHOOD E
 NEW ERROL
 CITY OF APOPKA, FLORIDA

OPEN SPACE LEGEND

- PARKS and PROGRAMMED OPEN SPACES
- BUFFERS and UNPROGRAMMED OPEN SPACES
- ENVIRONMENTAL OPEN SPACE
- STORMWATER (not included in total unless noted)

TABLE 18.3 A

OPEN SPACE ACREAGE

NEIGHBORHOOD E	AREA (AC.)
OPEN SPACE	3.12 ACRES
TRACT 6A	0.71 ACRES
TRACT 6B	0.69 ACRES
TRACT 6C	0.10 ACRES
TRACT 6D	0.83 ACRES
TRACT 6E	OWNED BY CITY
TRACT 6F	OWNED BY CITY
TRACT 6I	0.79 ACRES
STORMWATER RETENTION	1.06 ACRES
TRACT 6G	NOT COUNTED
TRACT 6J	1.06 ACRES
TOTAL	4.18 ACRES

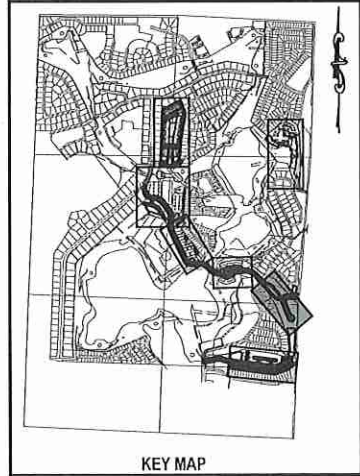
NOTE:
 The specific design and programming of each individual park space will be submitted with future development plan applications. Proposed facilities and typical photos are provided to indicate the character of each proposed space.



A. NEIGHBORHOOD PARK



B. CONNECTED POCKET PARKS



SEAL

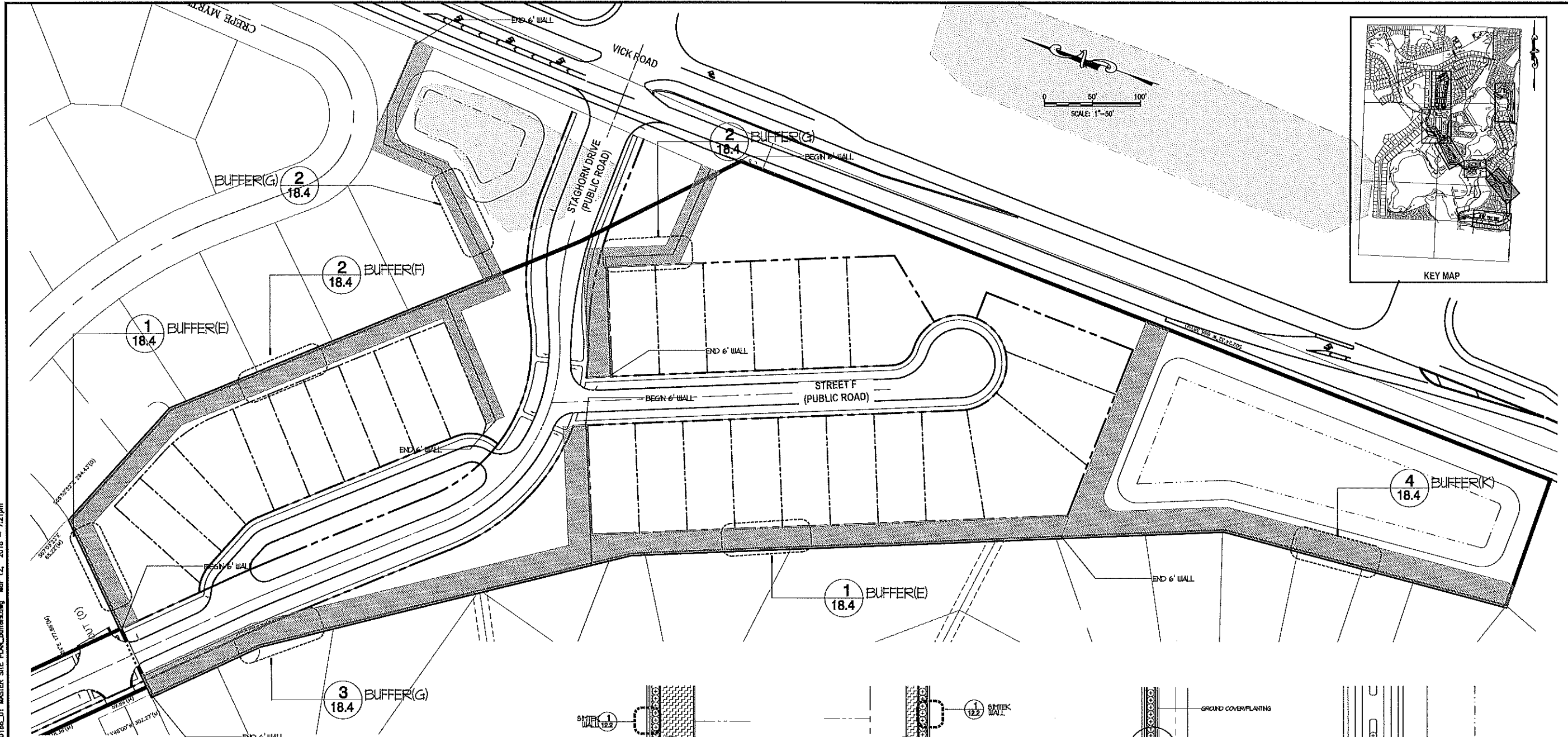
RANDALL S. COHEN, P.E.
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PROJECT NO./DASH NO.
 A160186.01

SHEET
 18.3

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NO.	DATE	BY	CHKD	APPD	DESCRIPTION

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BUFFER PLAN - NEIGHBORHOOD E
 NEW ERROL
 CITY OF APOPKA, FLORIDA

SEAL

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PROJECT NO./DASH NO.
 A160186.01
 SHEET
 18.4

NEIGHBORHOOD "E" BUFFER TYPES

MINIMUM BUFFERYARD: 10'-0" WITH A 6' WALL / FENCE

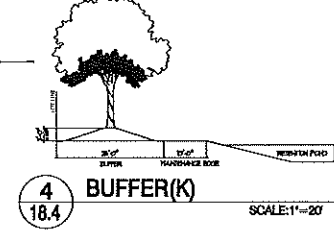
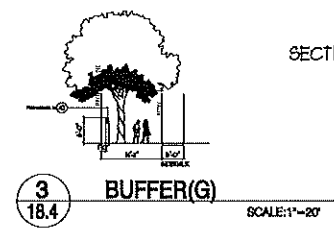
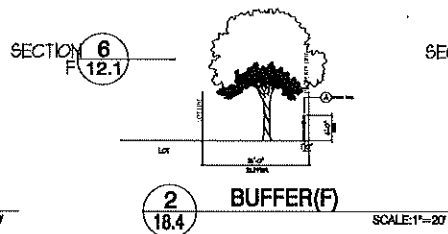
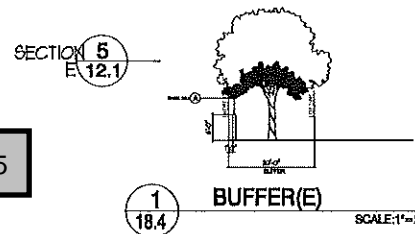
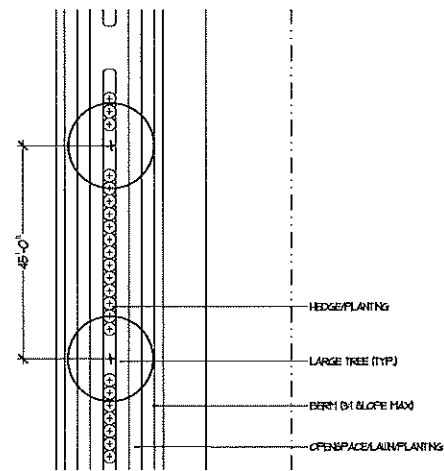
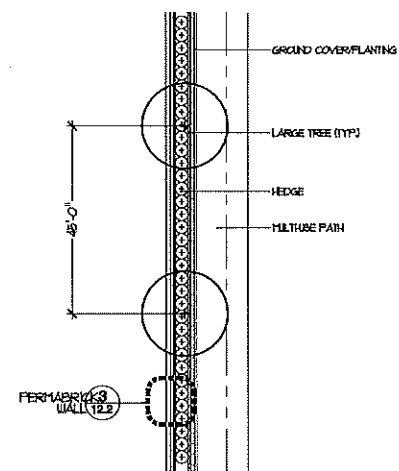
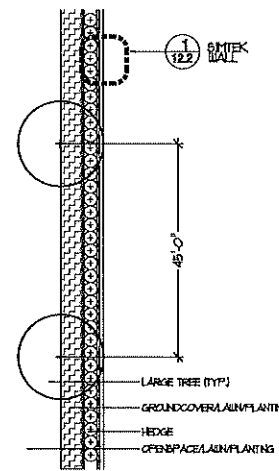
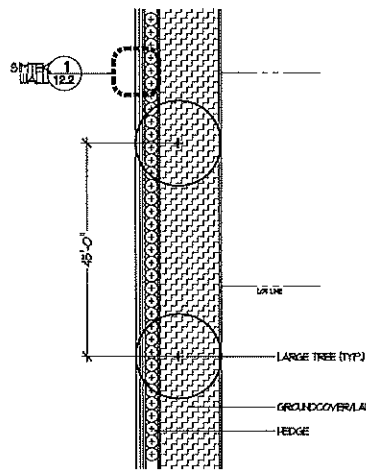
WALLS / FENCES - CAN MEANDER IN THE BUFFERYARD, HOWEVER AT LEAST 25% MUST BE LOCATED WITHIN 1'-0" OF THE INTERIOR EXTENT OF THE BUFFERYARD

BUFFERYARDS ADJACENT TO A RIGHT-OF-WAY: 1 CANOPY TREE (45' O.C.) / CONTINUOUS HEDGE ROW 24" TALL AND 36" APART.

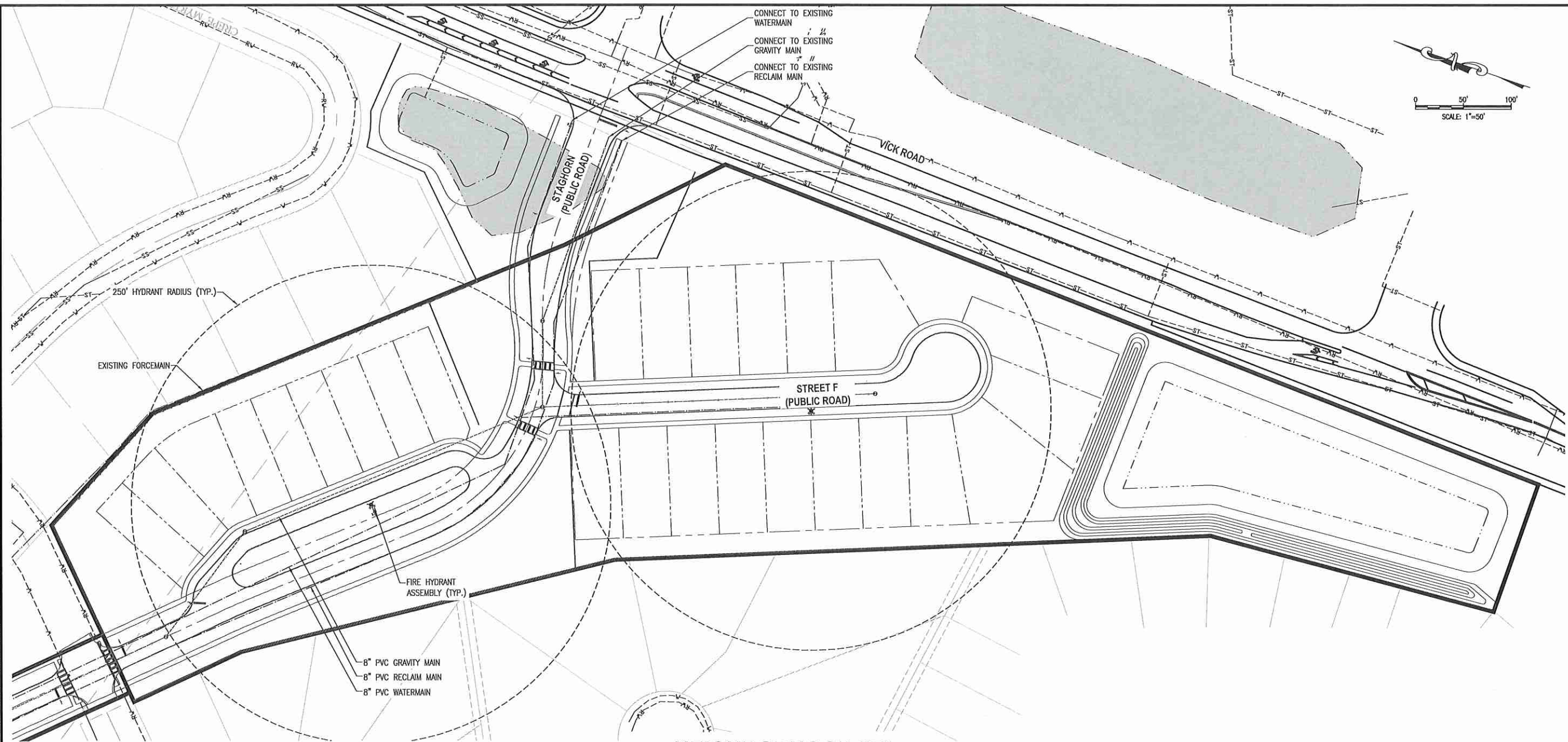
BERMS: MIN OF 3'-0" TALL / MAX SLOPE = 3:1

GROUND COVER: MINIMUM OF 25% OF THE BUFFERYARD AREA.

PLANT MATERIALS, MULCH OR OTHER APPROVED MATERIALS = 100% OF THE BUFFERYARD AREA



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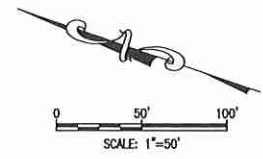
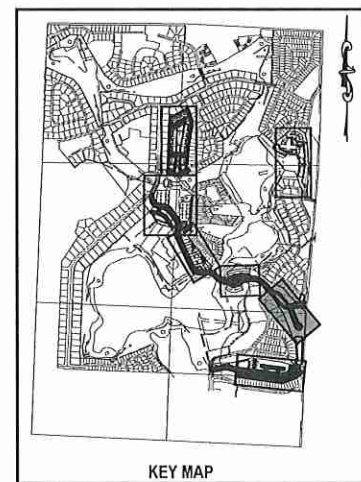
NEIGHBORHOOD "E"

NOTE:
LOCATIONS OF EXISTING UTILITIES PROVIDED BY THE CITY OF APOPKA GIS. THESE LOCATIONS HAVE NOT BEEN FIELD VERIFIED.

LEGEND:

	PROJECT PROPERTY LINE
	WATER STRUCTURES
	SANITARY STRUCTURE
	PROPOSED FORCE MAIN
	PROPOSED WATER PIPE
	PROPOSED IRRIGATION PIPE
	PROPOSED SANITARY PIPE
	EXISTING WATER PIPE
	EXISTING STORMWATER PIPE
	EXISTING SANITARY PIPE (GRAVITY)
	EXISTING RECLAIMED WATER PIPE

NOTE:
POTABLE WATER AND RECLAIMED WATER LINES TO BE PLACED IN GRASS AREA WHENEVER POSSIBLE.



NO.	DATE	BY	CHKD	APPD	DESCRIPTION

SCALE: AS SHOWN
DATE: 03-13-2018
DRAWN: MJC
CHECKED: RSC
APPROVED: RSC

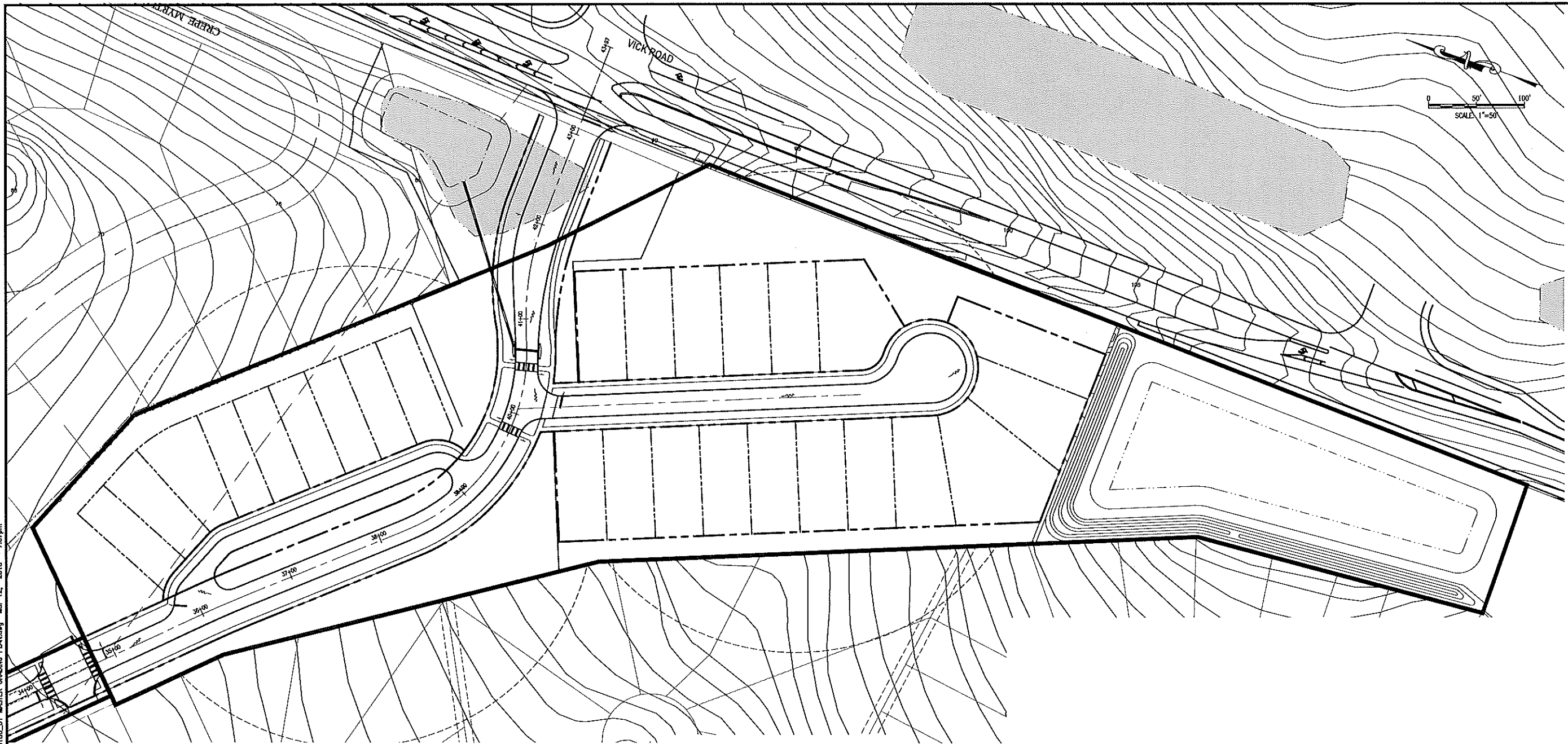
UTILITY PLAN - NEIGHBORHOOD E
NEW ERROL
CITY OF APOPKA, FLORIDA

SEAL
RANDALL S. COHEN, P.E.
No. 98981

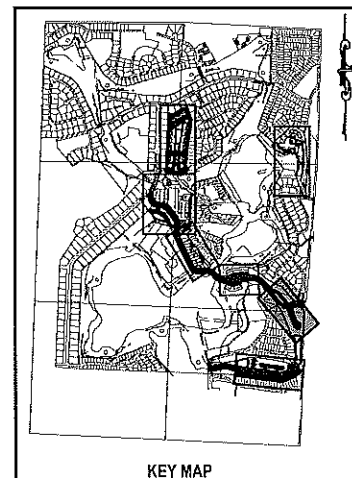
gai consultants
EII 9951
618 EAST SOUTH STREET
ORLANDO, FLORIDA 32801
PHONE: (407) 423-8398

PROJECT NO./DASH NO.
A160186.01
SHEET
18.7

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NEIGHBORHOOD "E"



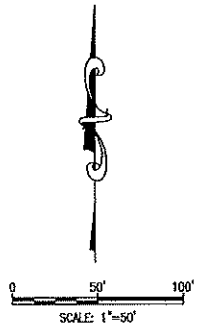
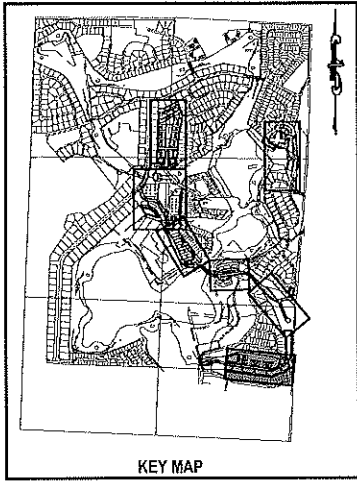
KEY MAP

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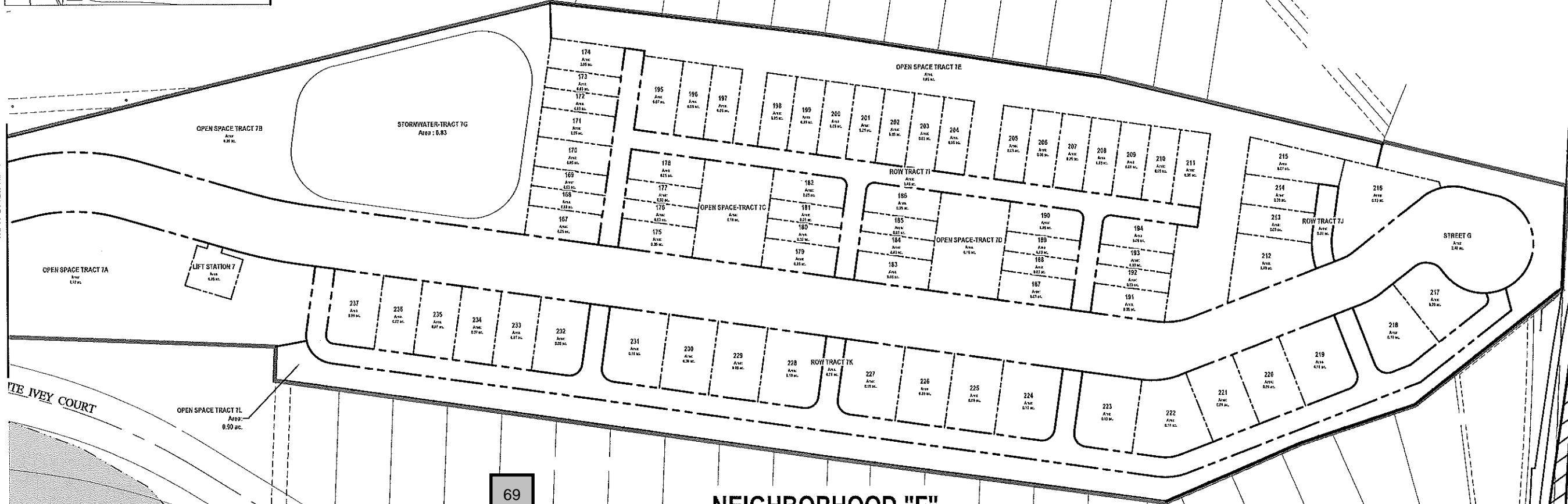
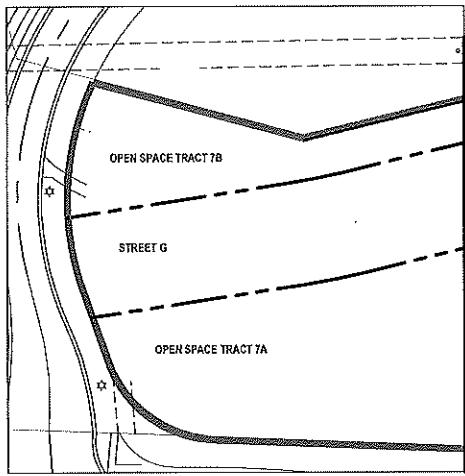
- PROJECT PROPERTY LINE
- ⊙ □ STORM STRUCTURES
- - - PROPOSED STORM PIPE

NOTE:
 ADDITIONAL CROSS SECTIONS MAY BE REQUIRED AT PRELIMINARY DEVELOPMENT PLAN INCLUDING BUILDING HEIGHTS AND SIGHT ANGLES TO ADJACENT RESIDENTIAL NEIGHBORHOODS. INCREASED LANDSCAPING MAY BE REQUIRED TO MITIGATE VISUAL IMPACTS CAUSED BY FUTURE MULTI-STORY BUILDINGS WITHIN NEW ERROL.

REVISIONS			
NO.	DATE	BY	DESCRIPTION
SCALE: AS SHOWN			
DATE: 03-13-2018			
DRAWN: MJC			
CHECKED: RSC			
APPROVED: RSC			
GRADING PLAN - NEIGHBORHOOD E		NEW ERROL	
		CITY OF APOPKA, FLORIDA	
SEAL			
RANDALL S. COHEN, P.E. No. 58581			
<p>gai consultants EB 9951 618 EAST SOUTH STREET ORLANDO, FLORIDA 32801 PHONE: (407) 423-8398</p>			
PROJECT NO./DASH NO. A160186.01			
SHEET			
18.8			



NEIGHBORHOOD F	AREA (AC.)
DEVELOPMENT	4.40 ACRES
OPEN SPACE	4.29 ACRES
TRACT 7A	1.12 ACRES
TRACT 7B	0.90 ACRES
TRACT 7C	0.16 ACRES
TRACT 7D	0.16 ACRES
TRACT 7E	1.05 ACRES
TRACT 7L	0.90 ACRES
STORMWATER RETENTION	0.83 ACRES
TRACT 7G	0.83 ACRES
RIGHT-OF-WAY	1.25 ACRES
TRACT 7I	0.45 ACRES
TRACT 7J	0.04 ACRES
TRACT 7K	0.76 ACRES
RIGHT-OF-WAY STREET G	2.48 ACRES
LIFT STATION	0.05 ACRES
TOTAL	13.30 ACRES



69

NEIGHBORHOOD "F"

REVISIONS			
NO.	DATE	BY	DESCRIPTION

SCALE: AS SHOWN
DATE: 03-13-2018
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CHECKED: RSC
APPROVED: RSC

TRACT MAP - NEIGHBORHOOD F
NEW ERROL
CITY OF APOPKA, FLORIDA

SEAL

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PROJECT NO./DASH NO.
A160186.01
SHEET
19.1

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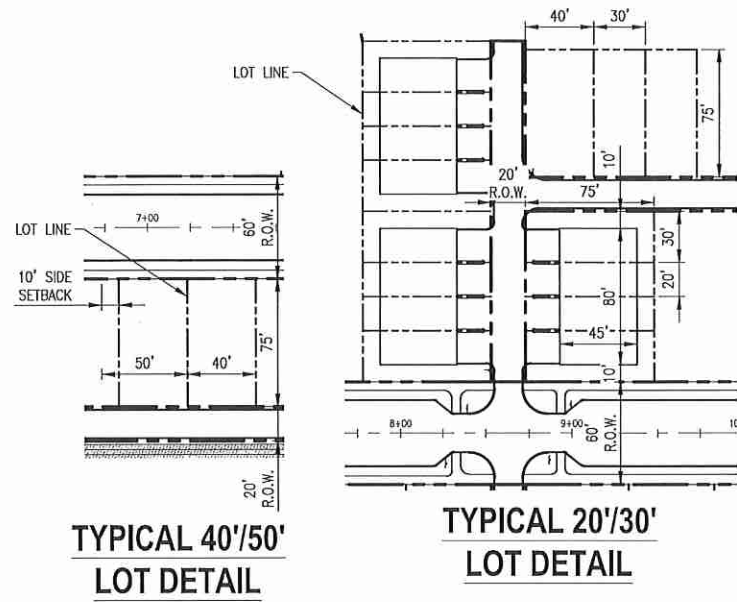
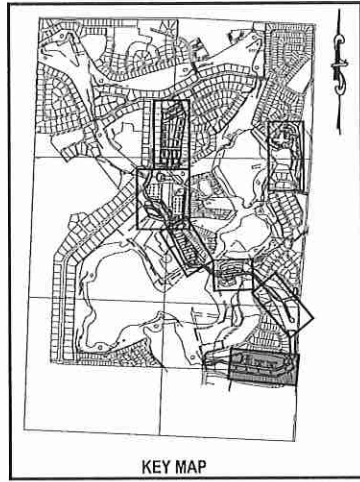
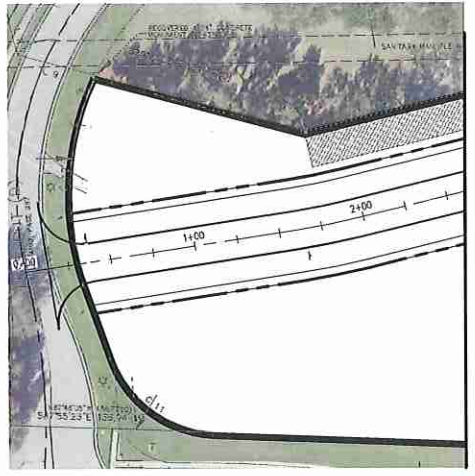


Table 19.2A - Neighborhood F Development Standards

Allowable Uses	Single Family Detached Attached Residential (townhomes) Parks
Max Residential Units	19 (30x75' lots) 9 (40x75' lots) 13 (50x75' lots) 32 townhomes
Neighborhood Acreage	13.3 acres
Gross Neighborhood Density	6.49 du/acre
Proposed Parking Count	148 enclosed spaces 48 on-street/guest spaces
Lot Standards	
Min Lot Width (detached unit)	30'
Min Lot Width (attached unit)	20'
Min Lot Depth	75'
Minimum Setbacks (attached units)	
Front	20'
Side	10'
Rear (to common area)	10'
Minimum Setbacks (30' detached lots)	
Front	20'
Side	0/5' 1'
Rear (to common area)	10'
Minimum Setbacks (all other detached lots)	
Front	10'
Side	5'
Corner Side	15'
Rear (from alley)	10'
Building Height	
Max Stories	2
Max Height	35'
Minimum Living Area	1,350 sq ft
Minimum Parking	1 enclosed space per unit

Notes 1 Setbacks will alternate 0' on one side and 5' on the other



MATCHLINE A



70

NEIGHBORHOOD "F"

THE SCALE OF THESE PLANS MAY HAVE CHANGED DUE TO REPRODUCTION

NO.	DATE	BY	CHKD	APP'D	DESCRIPTION

SCALE: AS SHOWN
DATE: 03-13-2018
DRAWN: MJC
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APPROVED: RSC

SUBDIVISION PLAN - NEIGHBORHOOD F

NEW ERROL
CITY OF APOPKA, FLORIDA

SEAL

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ORLANDO, FLORIDA 32801
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PROJECT NO./DASH NO.
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SHEET
19.2

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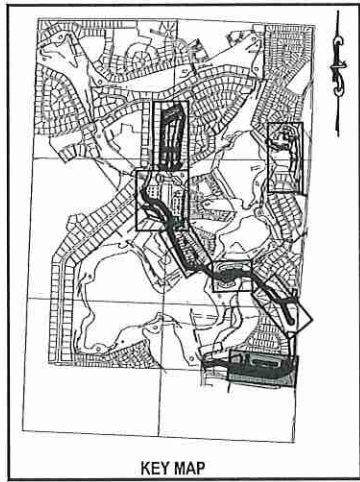


TABLE 19.3 A
OPEN SPACE ACREAGE

NEIGHBORHOOD F	AREA (AC.)
OPEN SPACE	4.29 ACRES
TRACT 7A	1.12 ACRES
TRACT 7B	0.90 ACRES
TRACT 7C	0.16 ACRES
TRACT 7D	0.16 ACRES
TRACT 7E	1.05 ACRES
TRACT 7L	0.90 ACRES
STORMWATER RETENTION	
TRACT 7G	NOT COUNTED
TOTAL	4.29 ACRES

NOTE:
The specific design and programming of each individual park space will be submitted with future development plan applications. Proposed facilities and typical photos are provided to indicate the character of each proposed space.



A. BBQ AMENITIES



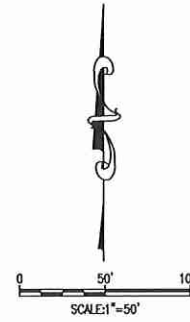
B. PICNIC PAVILION



C. NEIGHBORHOOD PARK + TRAIL



D. PLAYGROUND



OPEN SPACE LEGEND

- PARKS and PROGRAMMED OPEN SPACES
- BUFFERS and UNPROGRAMMED OPEN SPACES
- ENVIRONMENTAL OPEN SPACE
- STORMWATER (not included in total unless noted)



71

NEIGHBORHOOD "F"

NO.	DATE	BY	CHKD	APPD	DESCRIPTION

SCALE: AS SHOWN
DATE: 03-13-2018
DRAWN: MJC
CHECKED: RSC
APPROVED: RSC

OPEN SPACE - NEIGHBORHOOD F
NEW ERROL
CITY OF APOPKA, FLORIDA

SEAL

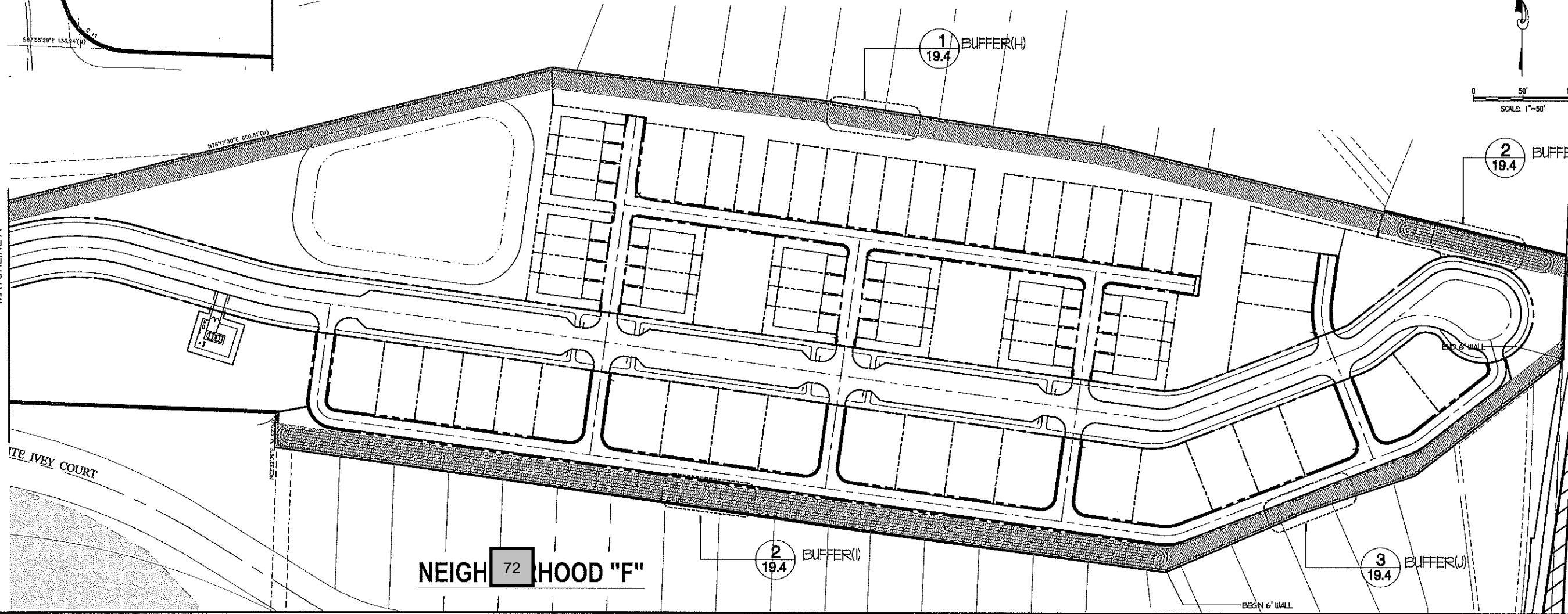
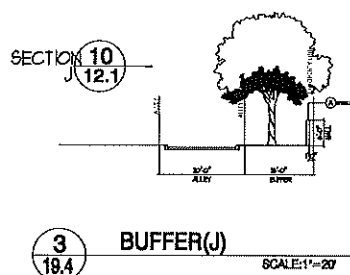
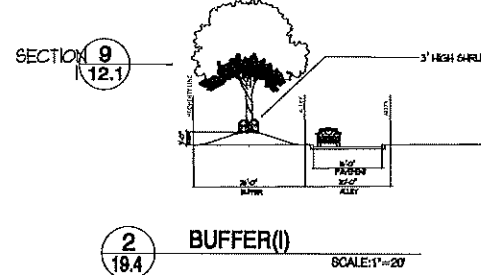
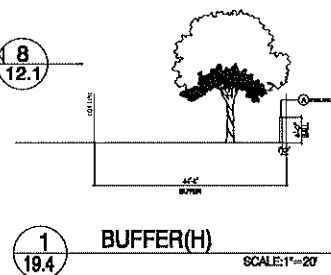
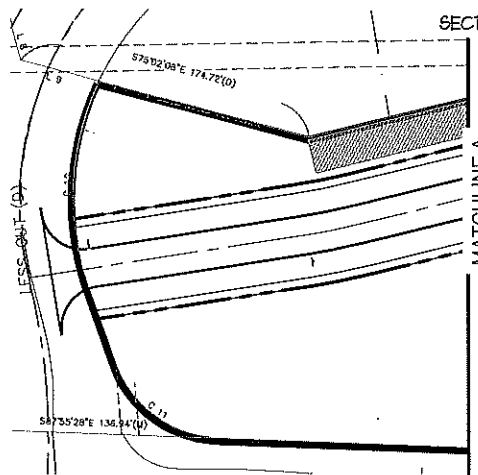
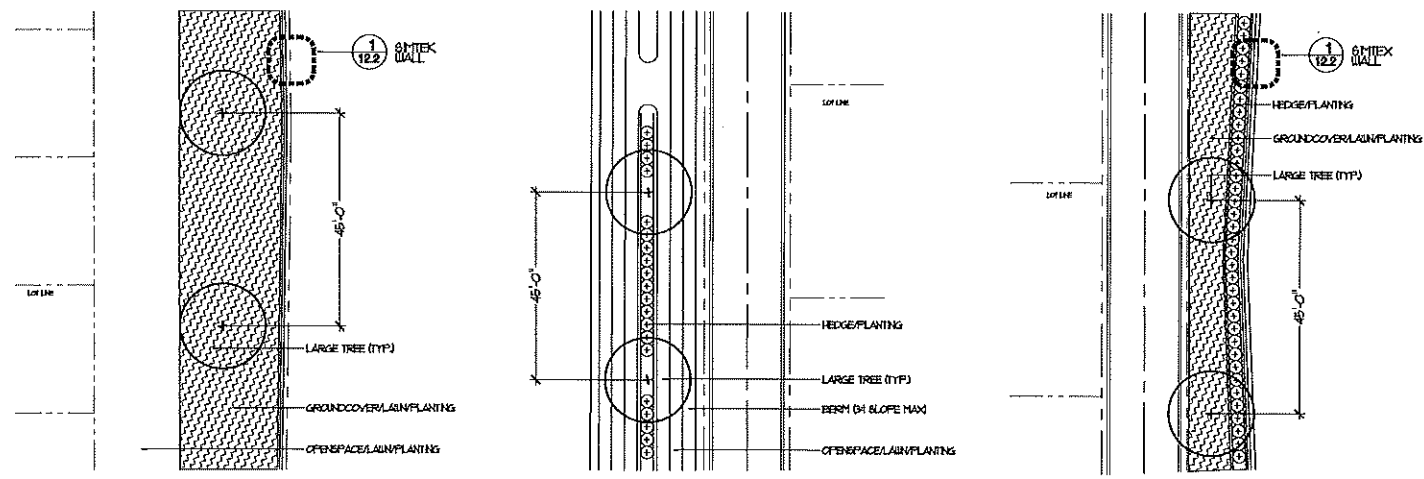
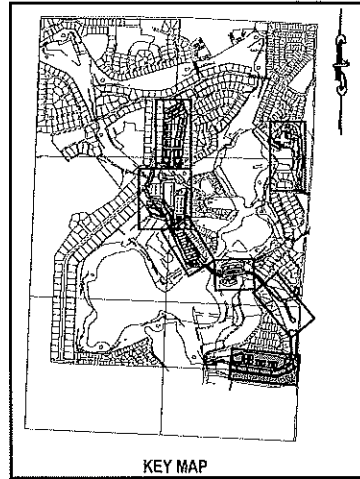
RANDALL S. COHEN, P.E.
No. 58581

gai consultants
EST 1991
818 EAST SOUTH STREET
ORLANDO, FLORIDA 32801
PHONE: (407) 423-8398

PROJECT NO./DASH NO.
A160186.01

SHEET
19.3

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SEAL

RANDALL S. COFFIN, P.E.
 No. 58981

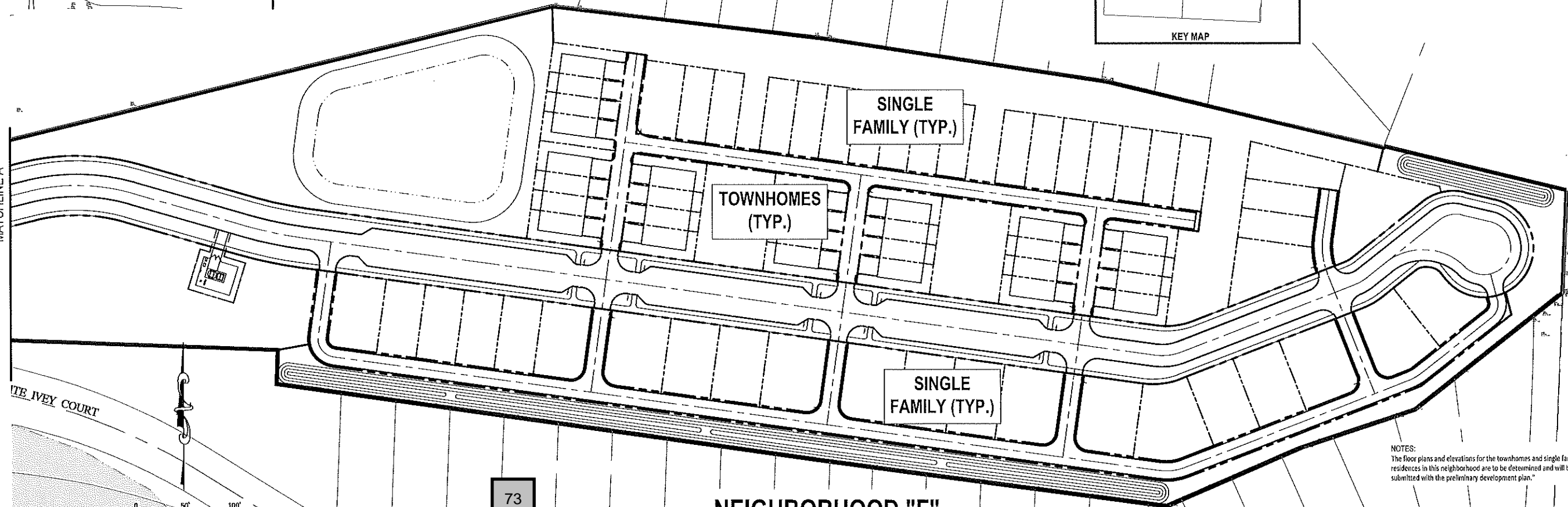
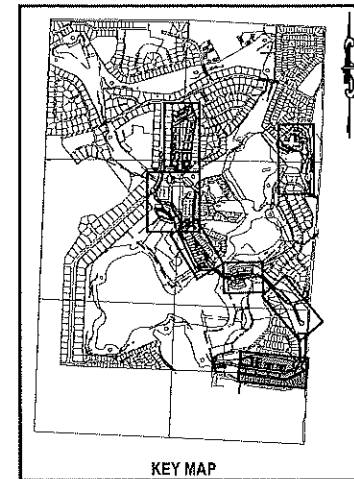
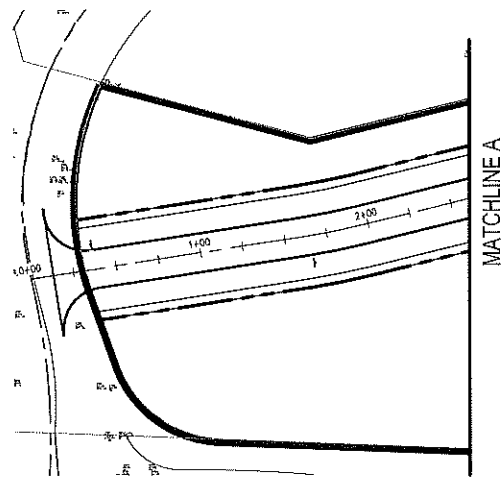
gai consultants
 618 EAST SOUTH STREET
 ORLANDO, FLORIDA 32801
 PHONE: (407) 423-9398

PROJECT NO./DASH NO.
 A160186.01

SHEET
 19.4

BUFFER PLAN - NEIGHBORHOOD F
 NEW ERROL
 CITY OF APOPKA, FLORIDA

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73

NEIGHBORHOOD "F"

NOTES:
The floor plans and elevations for the townhomes and single family residences in this neighborhood are to be determined and will be submitted with the preliminary development plan.

NO.	DATE	BY	CHKD	APPROV	DESCRIPTION

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DATE: 03-13-2018
DRAWN: MJC
CHECKED: RSC
APPROVED: RSC

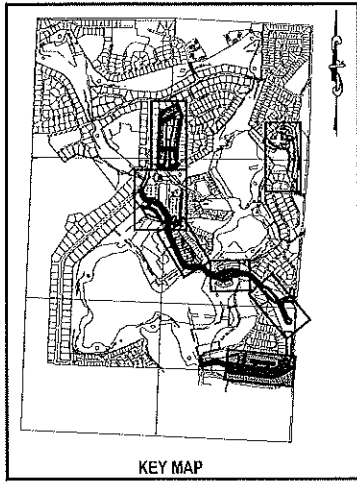
ARCHITECTURE - NEIGHBORHOOD F
NEW ERROL
CITY OF APOPKA, FLORIDA

SEAL
RANDALL S. COHEN, P.E.
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618 EAST SOUTH STREET
ORLANDO, FLORIDA 32801
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PROJECT NO./DASH NO.
A160186.01

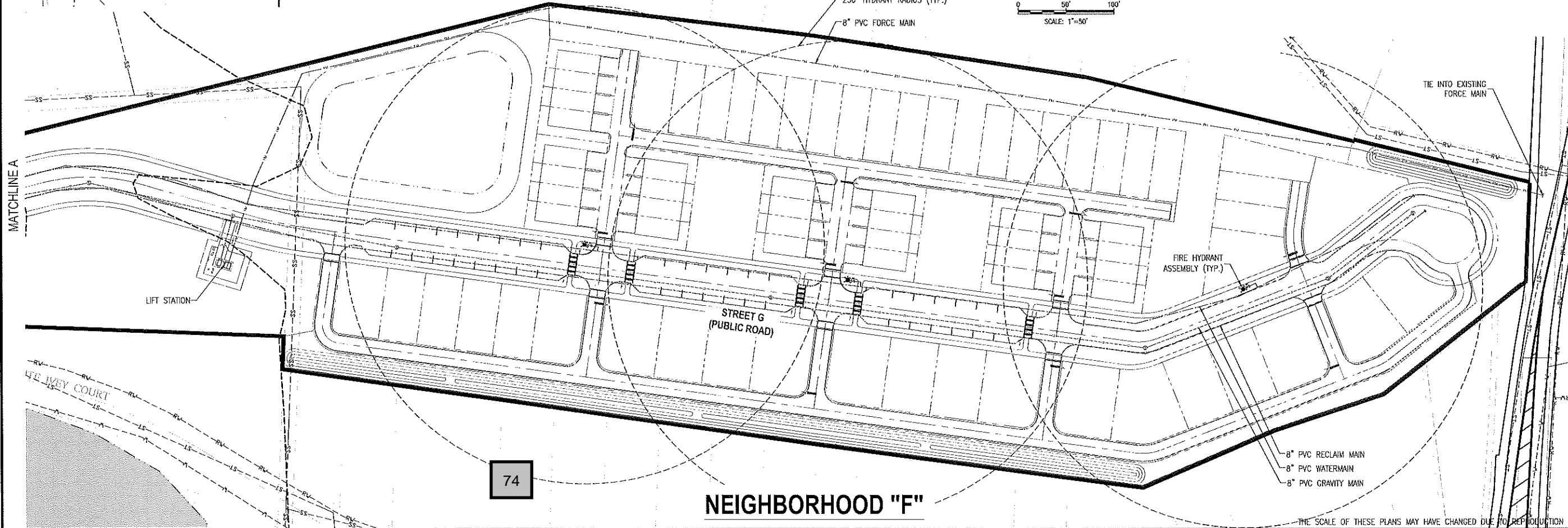
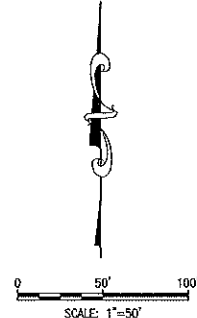
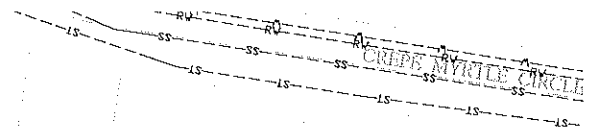
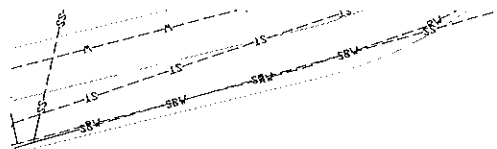
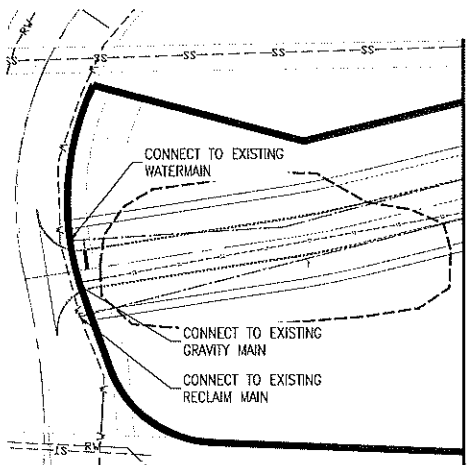
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19.5



LEGEND:

---	PROJECT PROPERTY LINE
⊕	WATER STRUCTURES
⊙	SANITARY STRUCTURE
FM	PROPOSED FORCE MAIN
W	PROPOSED WATER PIPE
I	PROPOSED IRRIGATION PIPE
SS	PROPOSED SANITARY PIPE
W	EXISTING WATER PIPE
ST	EXISTING STORMWATER PIPE
SS	EXISTING SANITARY PIPE (GRAVITY)
RV	EXISTING RECLAIMED WATER PIPE

NOTE:
POTABLE WATER AND RECLAIMED WATER LINES TO BE
PLACED IN GRASS AREA WHENEVER POSSIBLE.



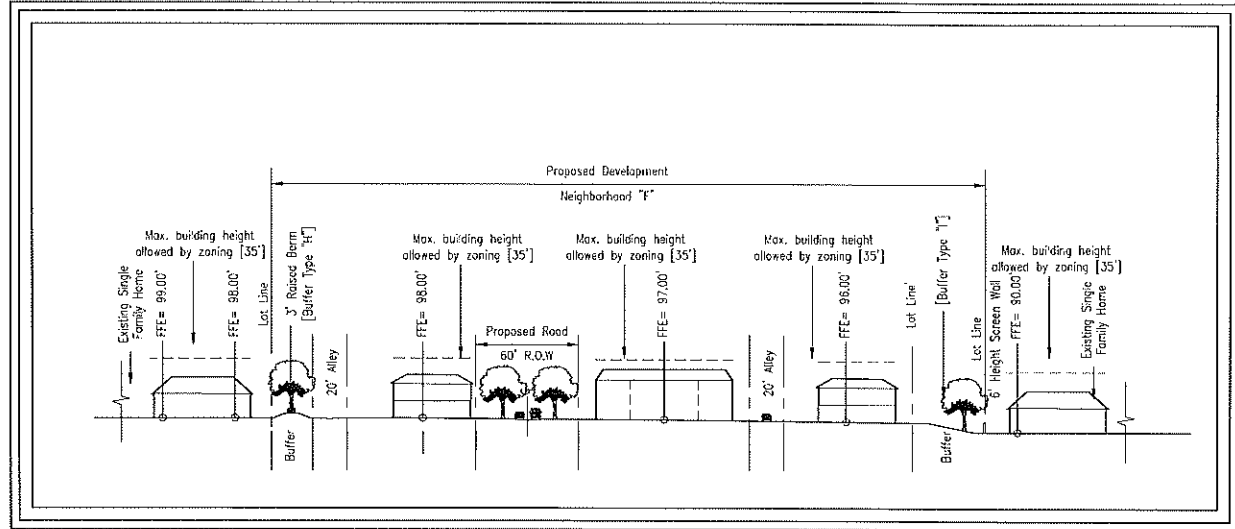
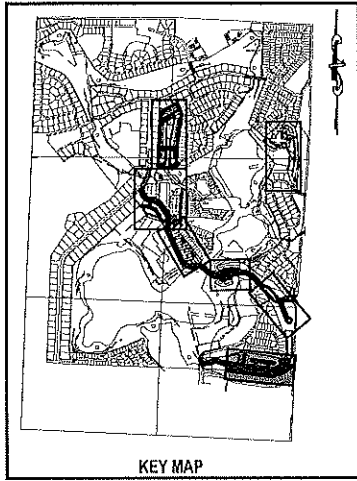
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NEIGHBORHOOD "F"

THE SCALE OF THESE PLANS MAY HAVE CHANGED DUE TO REPRODUCTION

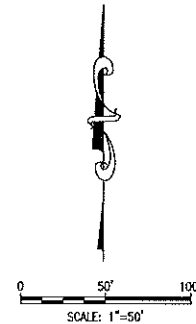
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UTILITY PLAN - NEIGHBORHOOD F		REVISIONS	
NEW ERROL		DATE	DESCRIPTION
CITY OF APOPKA, FLORIDA		DATE	DESCRIPTION
SEAL		DATE	DESCRIPTION
RANDALL S. COHEN, P.E. No. 58581		DATE	DESCRIPTION
 gai consultants ED 9951 618 EAST SOUTH STREET ORLANDO, FLORIDA 32801 PHONE: (407) 423-8398		DATE	DESCRIPTION
PROJECT NO./DASH NO. A160186.01		DATE	DESCRIPTION
SHEET 19.7		DATE	DESCRIPTION
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APPROVED: RSC		DATE	DESCRIPTION



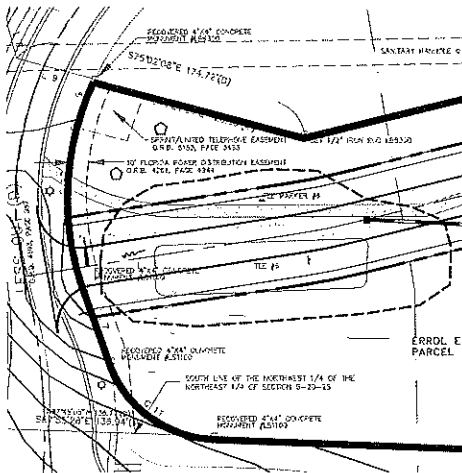
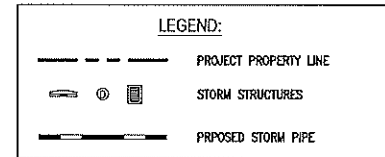
SECTION F

SCALE: 1"=50'



NOTE:

ADDITIONAL CROSS SECTIONS MAY BE REQUIRED AT PRELIMINARY DEVELOPMENT PLAN INCLUDING BUILDING HEIGHTS AND SIGHT ANGLES TO ADJACENT RESIDENTIAL NEIGHBORHOODS. INCREASED LANDSCAPING MAY BE REQUIRED TO MITIGATE VISUAL IMPACTS CAUSED BY FUTURE MULTI-STORY BUILDINGS WITHIN NEW ERROR.



NEIGHBORHOOD "F"

75

NO.	DATE	BY	CHKD	APP'D	DESCRIPTION

SCALE: AS SHOWN

DATE: 03-13-2018

DRAWN: MJC

CHECKED: RSC

APPROVED: RSC

GRADING PLAN - NEIGHBORHOOD F
NEW ERROR
CITY OF APOKA, FLORIDA

SEAL
RANDALL S. COHEN, P.E.
No. 58991



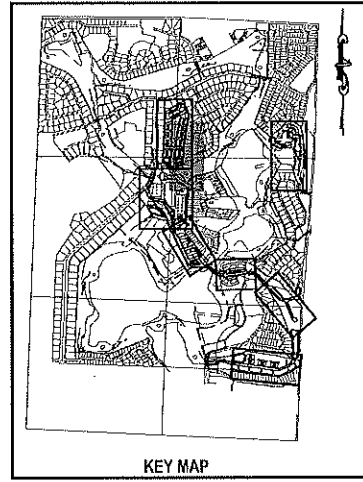
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SHEET
19.8

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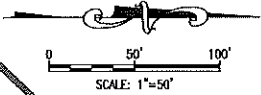
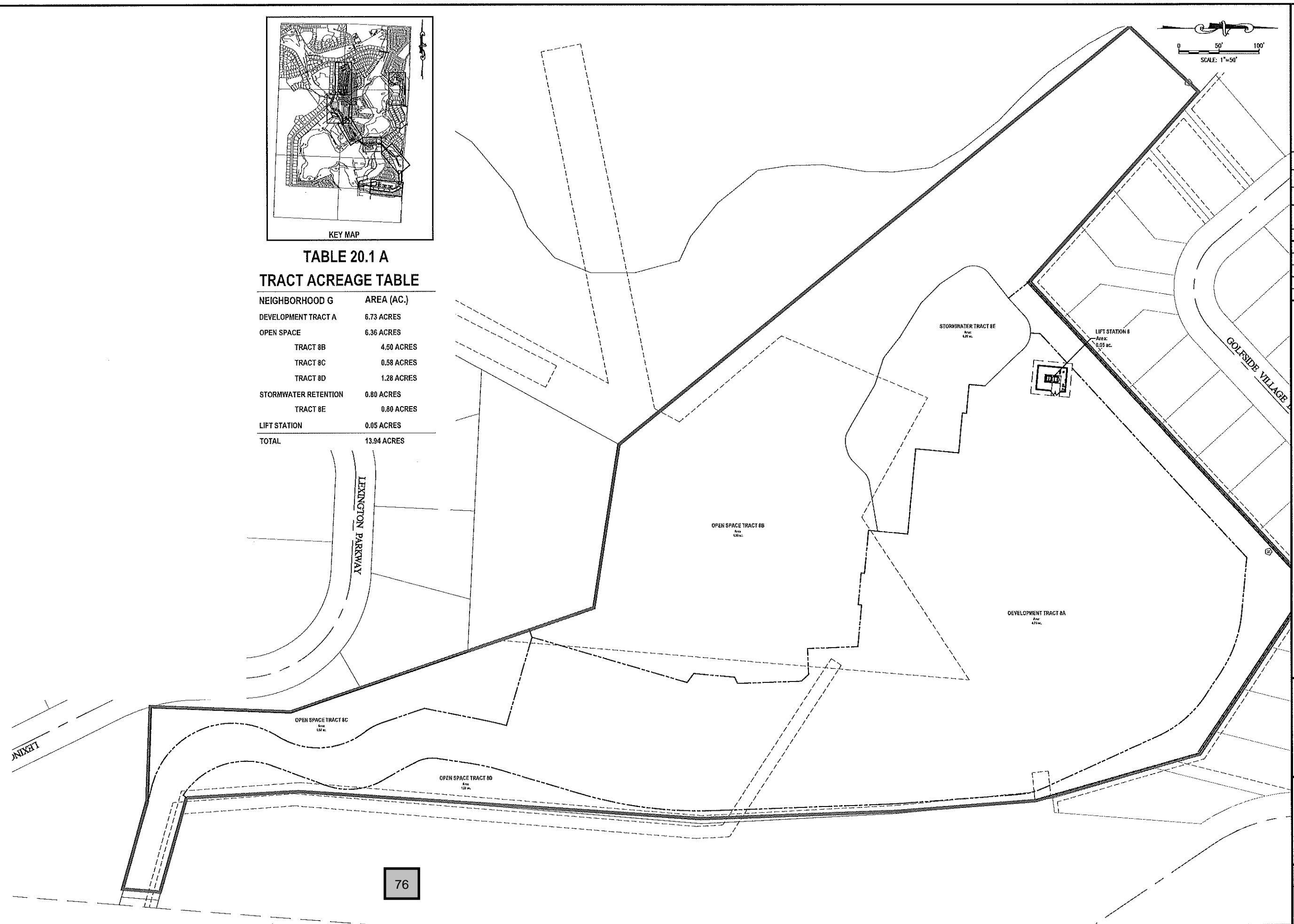
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**TABLE 20.1 A
TRACT ACREAGE TABLE**

NEIGHBORHOOD G	AREA (AC.)
DEVELOPMENT TRACT A	6.73 ACRES
OPEN SPACE	6.36 ACRES
TRACT 8B	4.50 ACRES
TRACT 8C	0.58 ACRES
TRACT 8D	1.28 ACRES
STORMWATER RETENTION	0.80 ACRES
TRACT 8E	0.80 ACRES
LIFT STATION	0.05 ACRES
TOTAL	13.94 ACRES



NO.	DATE	BY	CHKD	APPROV	DESCRIPTION

SCALE: AS SHOWN
DATE: 03-13-2018
DRAWN: MJC
CHECKED: RSC
APPROVED: RSC

TRACT MAP - NEIGHBORHOOD G
NEW ERROL
CITY OF APOPKA, FLORIDA

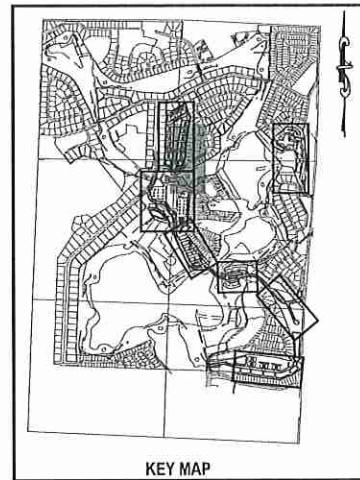
SEAL

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ORLANDO, FLORIDA 32801
PHONE: (407) 423-8398

PROJECT NO./DASH NO.
A160186.01
SHEET
20.1

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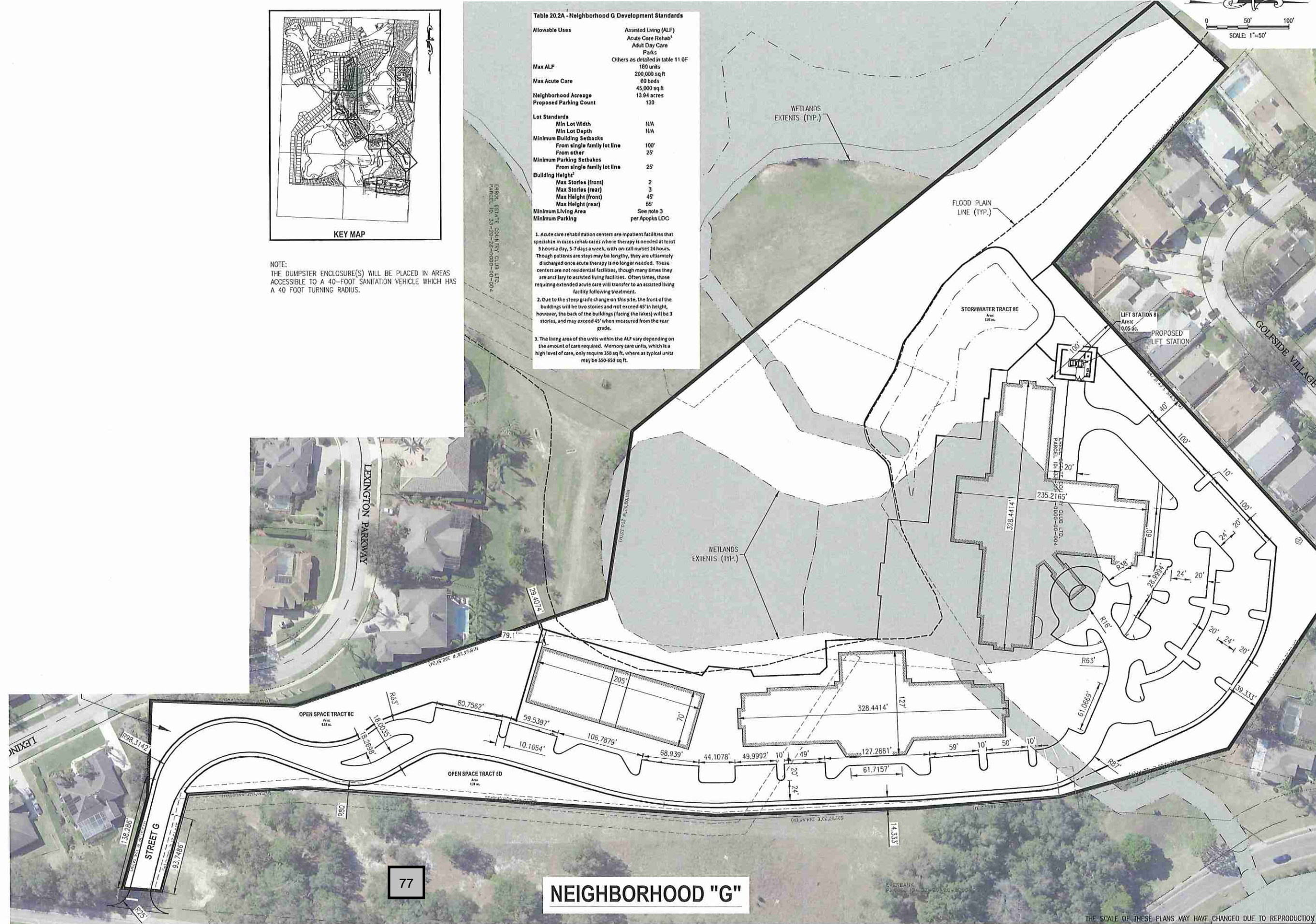


NOTE:
THE DUMPSTER ENCLOSURE(S) WILL BE PLACED IN AREAS ACCESSIBLE TO A 40-FOOT SANITATION VEHICLE WHICH HAS A 40 FOOT TURNING RADIUS.

Table 20.2A - Neighborhood G Development Standards

Allowable Uses	Assisted Living (ALF) Acute Care Rehab ¹ Adult Day Care Parks Others as detailed in table 11 OF
Max ALF	180 units
Max Acute Care	200,000 sq ft 80 beds
Neighborhood Acreage	45,000 sq ft
Proposed Parking Count	130
Lot Standards	
Min Lot Width	N/A
Min Lot Depth	N/A
Minimum Building Setbacks	
From single family lot line	100'
From other	25'
Minimum Parking Setbacks	
From single family lot line	25'
Building Height²	
Max Stories (front)	2
Max Stories (rear)	3
Max Height (front)	45'
Max Height (rear)	65'
Minimum Living Area	See note 3
Minimum Parking	per Apopka LDC

1. Acute care rehabilitation centers are inpatient facilities that specialize in acute rehab cases where therapy is needed at least 3 hours a day, 5-7 days a week, with on-call nurses 24 hours. Though patients are stays may be lengthy, they are ultimately discharged once acute therapy is no longer needed. These centers are not residential facilities, though many times they are ancillary to assisted living facilities. Often times, those requiring extended acute care will transfer to an assisted living facility following treatment.
2. Due to the steep grade change on this site, the front of the buildings will be two stories and not exceed 45' in height, however, the back of the buildings (facing the lakes) will be 3 stories, and may exceed 45' when measured from the rear grade.
3. The living area of the units within the ALF vary depending on the amount of care required. Memory care units, which is a high level of care, only require 330 sq ft, where as typical units may be 550-650 sq ft.



NO.	DATE	BY	CHKD	APPRD	DESCRIPTION

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DATE: 03-13-2018
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APPROVED: RSC

SUBDIVISION PLAN - NEIGHBORHOOD G
NEW ERROL
CITY OF APOPKA, FLORIDA

SEAL
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SHEET
20.2

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A. INFORMAL TRAIL / SEATING



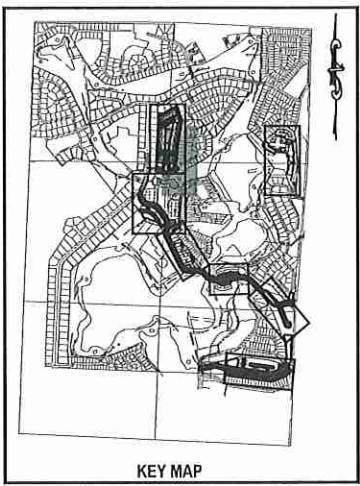
B. WETLAND OVERLOOK



C. POOL AMENITY



D. INFORMAL PARK



KEY MAP

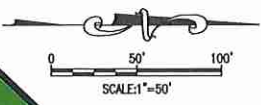
TABLE 20.3 A
OPEN SPACE ACREAGE

NEIGHBORHOOD G	AREA (AC.)
OPEN SPACE	6.36 ACRES
TRACT 8B	4.50 ACRES
TRACT 8C	0.58 ACRES
TRACT 8D	1.28 ACRES
STORMWATER RETENTION	
TRACT 8E	NOT COUNTED
TOTAL	6.36 ACRES

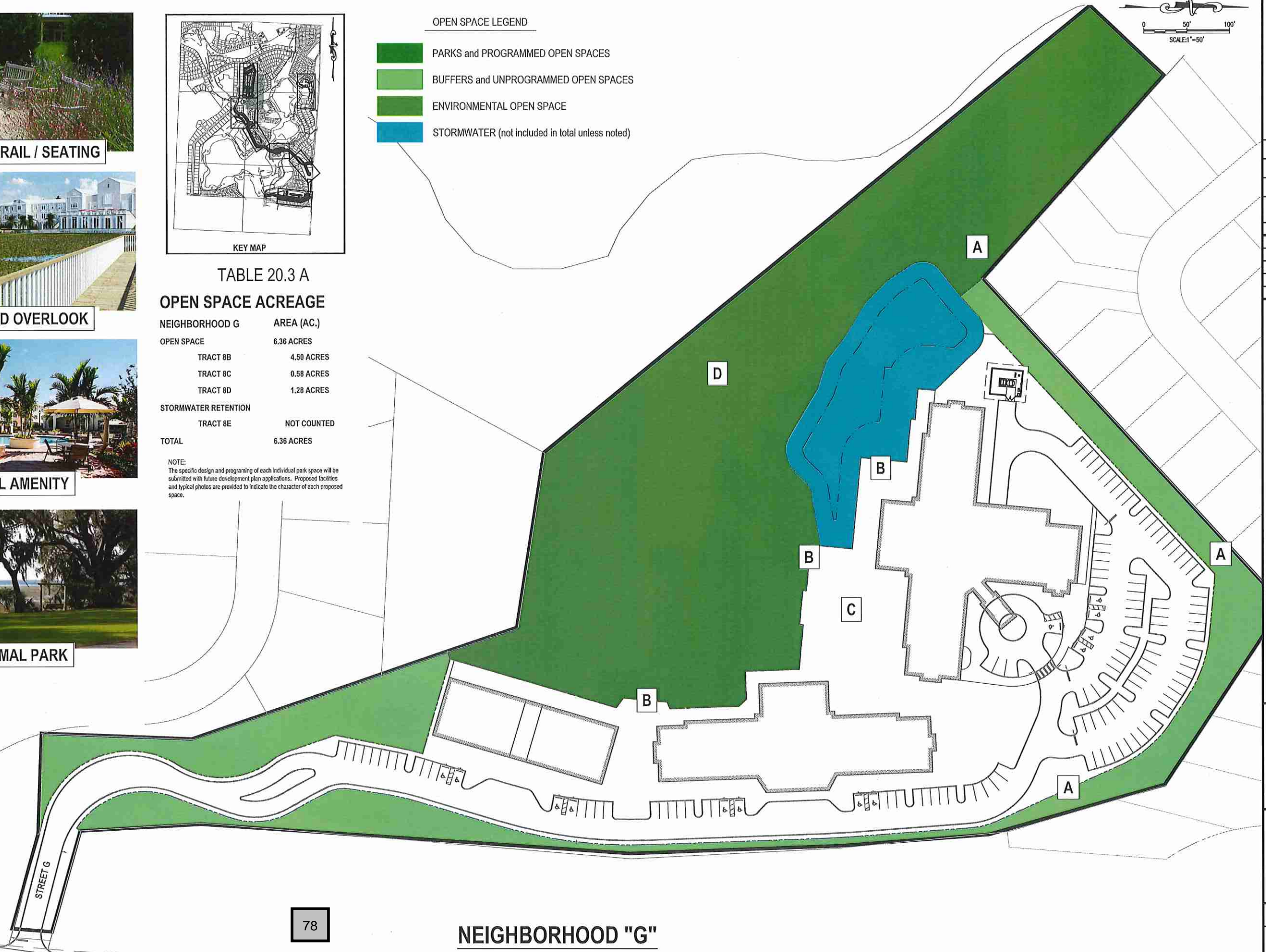
NOTE:
The specific design and programming of each individual park space will be submitted with future development plan applications. Proposed facilities and typical photos are provided to indicate the character of each proposed space.

OPEN SPACE LEGEND

- PARKS and PROGRAMMED OPEN SPACES
- BUFFERS and UNPROGRAMMED OPEN SPACES
- ENVIRONMENTAL OPEN SPACE
- STORMWATER (not included in total unless noted)



SCALE: 1"=50'



78

NEIGHBORHOOD "G"

REVISIONS	
NO.	DESCRIPTION

SCALE: AS SHOWN
DATE: 03-13-2018
DRAWN: MJC
CHECKED: RSC
APPROVED: RSC

OPEN SPACE - NEIGHBORHOOD G
NEW ERROL
CITY OF APOPKA, FLORIDA

SEAL

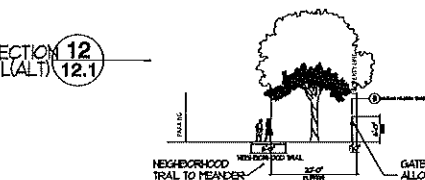
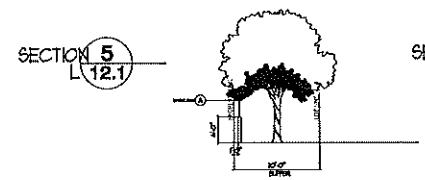
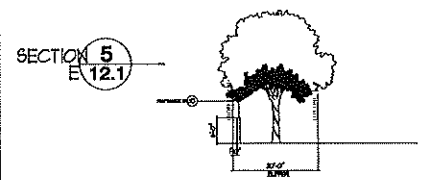
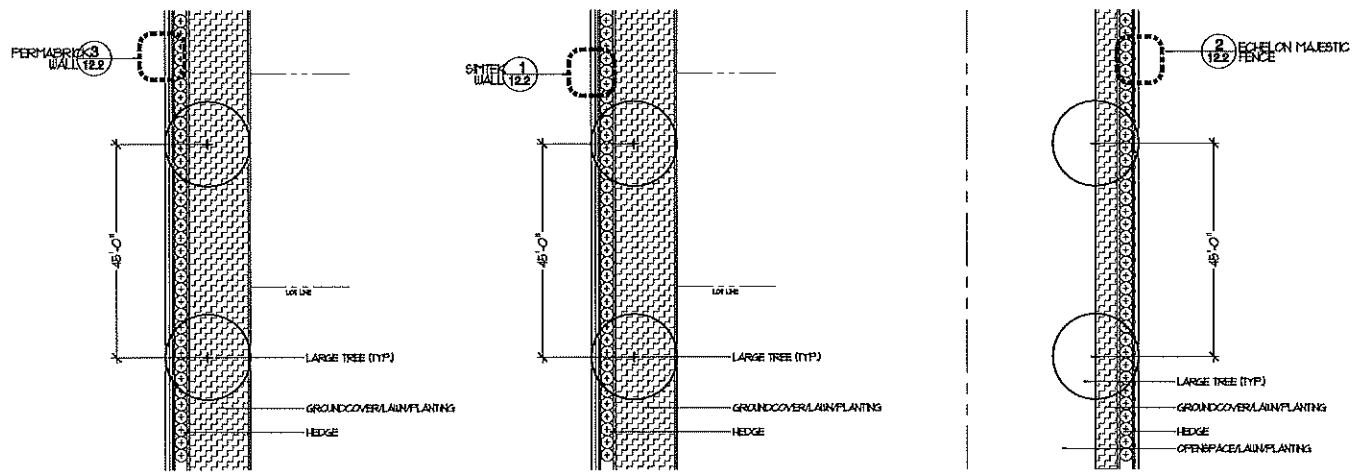
RANDALL S. COHEN, P.E.
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PHONE: (407) 423-8398

PROJECT NO./DASH NO.
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SHEET
20.3

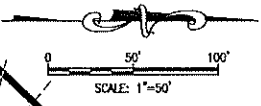
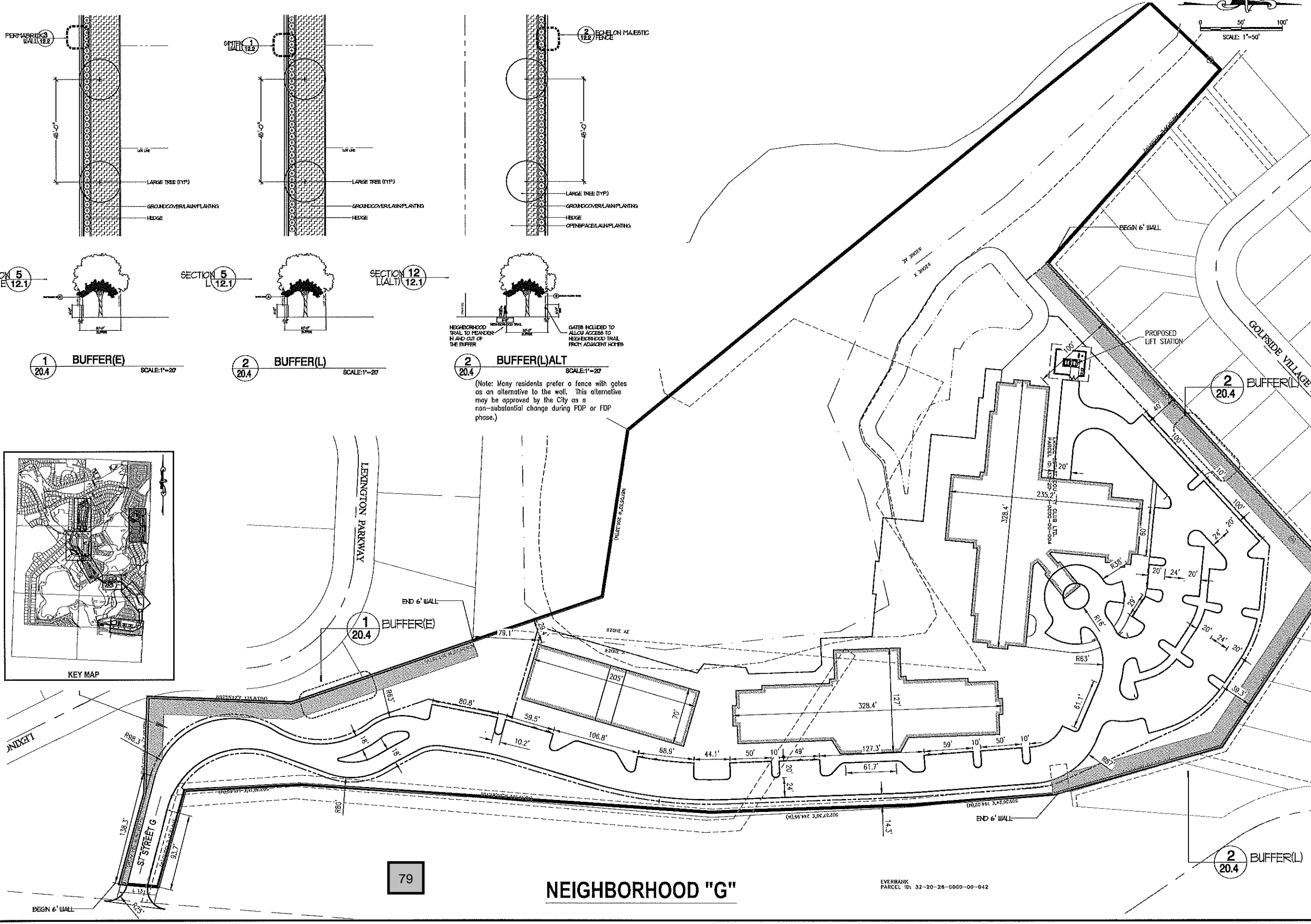
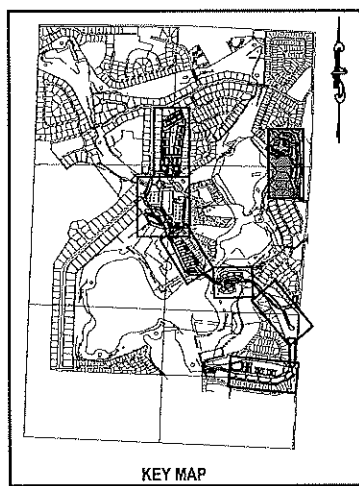
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1 BUFFER(E) SCALE: 1"=20'

2 BUFFER(L) SCALE: 1"=20'

2 BUFFER(L)ALT SCALE: 1"=20'
 (Note: Many residents prefer a fence with gates as an alternative to the wall. This alternative may be approved by the City as a non-substantial change during FDP or FDP phase.)



NO.	DATE	BY	CHKD	APP'D	DESCRIPTION

SCALE: AS SHOWN

DATE: 03-13-2018

DRAWN: MJC

CHECKED: RSC

APPROVED: RSC

BUFFER PLAN - NEIGHBORHOOD G
 NEW ERROL
 CITY OF APOPKA, FLORIDA

SEAL

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 No. 58881



PROJECT NO./DASH NO.
 A160186.01

SHEET
 20.4

ASSISTED LIVING FACILITY

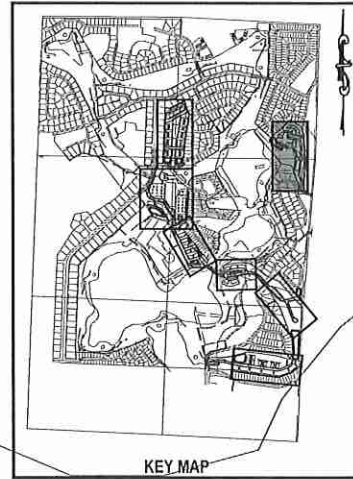


REAR ELEVATION

ACUTE CARE FACILITY

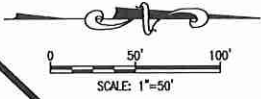


ELEVATION



KEY MAP

NOTE:
The floorplans, elevations, and renderings depicted in this plan are conceptual in nature and subject to minor changes. Any such changes submitted in future development plan applications may be approved at the discretion of the Development Director if the proposed changes are determined to be in substantial compliance with the architectural intent of this plan.



ACCUTE CARE FACILITY

ASSISTED LIVING FACILITY

ASSISTED LIVING FACILITY

80

NEIGHBORHOOD "G"

NO.	DATE	BY	CHKD	APP'D	DESCRIPTION

SCALE: AS SHOWN

DATE: 03-13-2018

DRAWN: MJC

CHECKED: RSC

APPROVED: RSC

ARCHITECTURE - NEIGHBORHOOD G
NEW ERROL
CITY OF APOPKA, FLORIDA

SEAL

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PROJECT NO./DASH NO.
A160186.01

SHEET
20.5

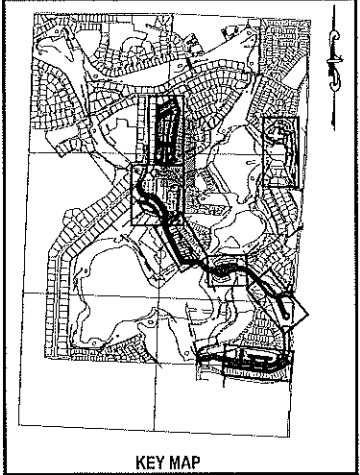
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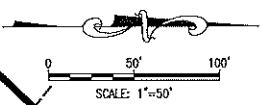
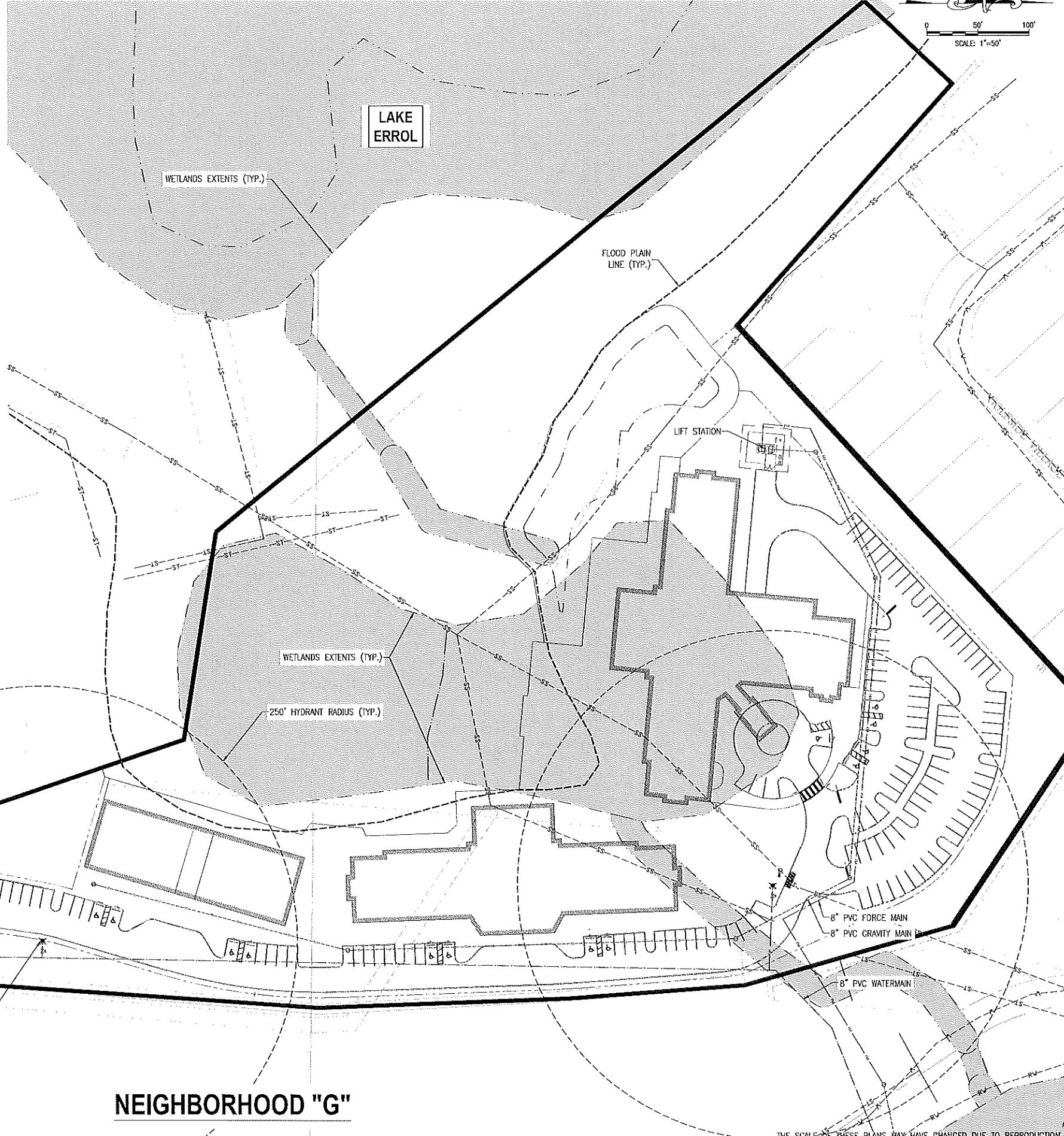
LEGEND:

	PROJECT PROPERTY LINE
	WATER STRUCTURES
	SANITARY STRUCTURE
	PROPOSED FORCE MAIN
	PROPOSED WATER PIPE
	PROPOSED IRRIGATION PIPE
	PROPOSED SANITARY PIPE
	EXISTING WATER PIPE
	EXISTING STORMWATER PIPE
	EXISTING SANITARY PIPE (GRAVITY)
	EXISTING RECLAIMED WATER PIPE

NOTES:
 POTABLE WATER AND RECLAIMED WATER LINES TO BE PLACED IN GRASS AREA WHENEVER POSSIBLE.
 EXISTING RECORDED SANITARY EASEMENT IS PLANNED TO BE ABANDONED.



NOTE:
 LOCATIONS OF EXISTING UTILITIES PROVIDED BY THE CITY OF APOPKA GIS. THESE LOCATIONS HAVE NOT BEEN FIELD VERIFIED.



NO.	DATE	BY	CHKD.	APP'D.	DESCRIPTION

SCALE: AS SHOWN
 DATE: 03-13-2018
 DRAWN: MJC
 CHECKED: RSC
 APPROVED: RSC

UTILITY PLAN - NEIGHBORHOOD G
 NEW ERROL
 CITY OF APOPKA, FLORIDA

SEAL

RANDALL S. COHEN, P.E.
 No. 59581



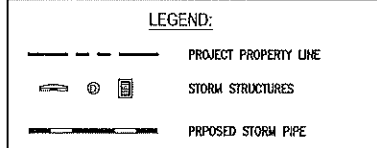
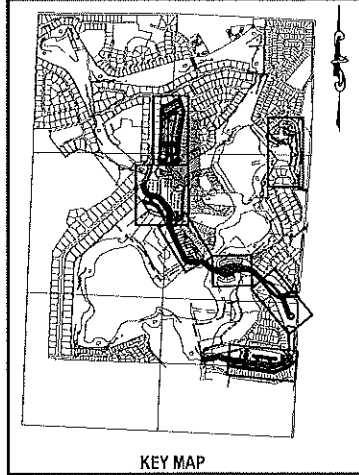
PROJECT NO./DASH NO.
 A160186.01
 SHEET
 20.7

81

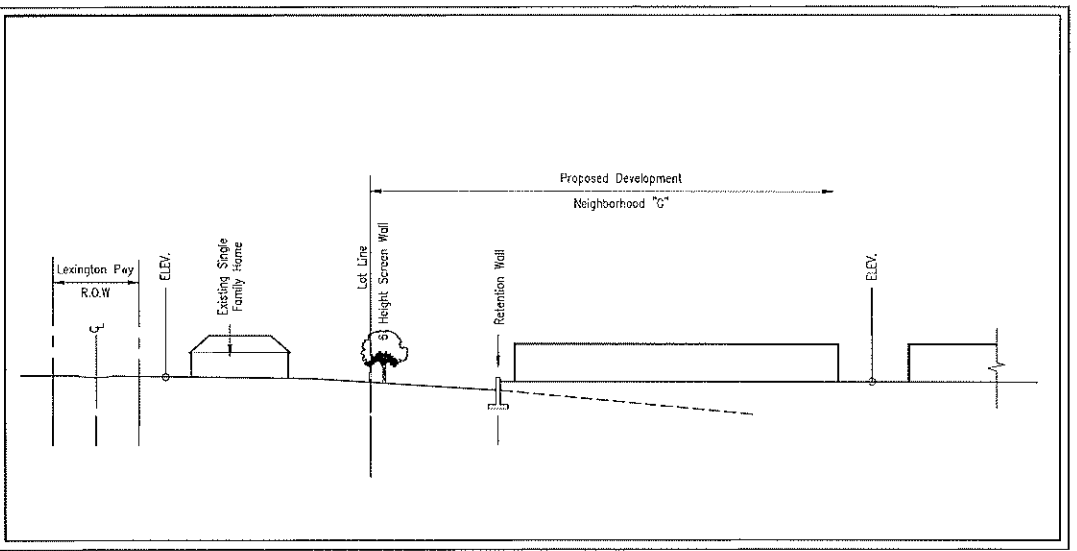
NEIGHBORHOOD "G"

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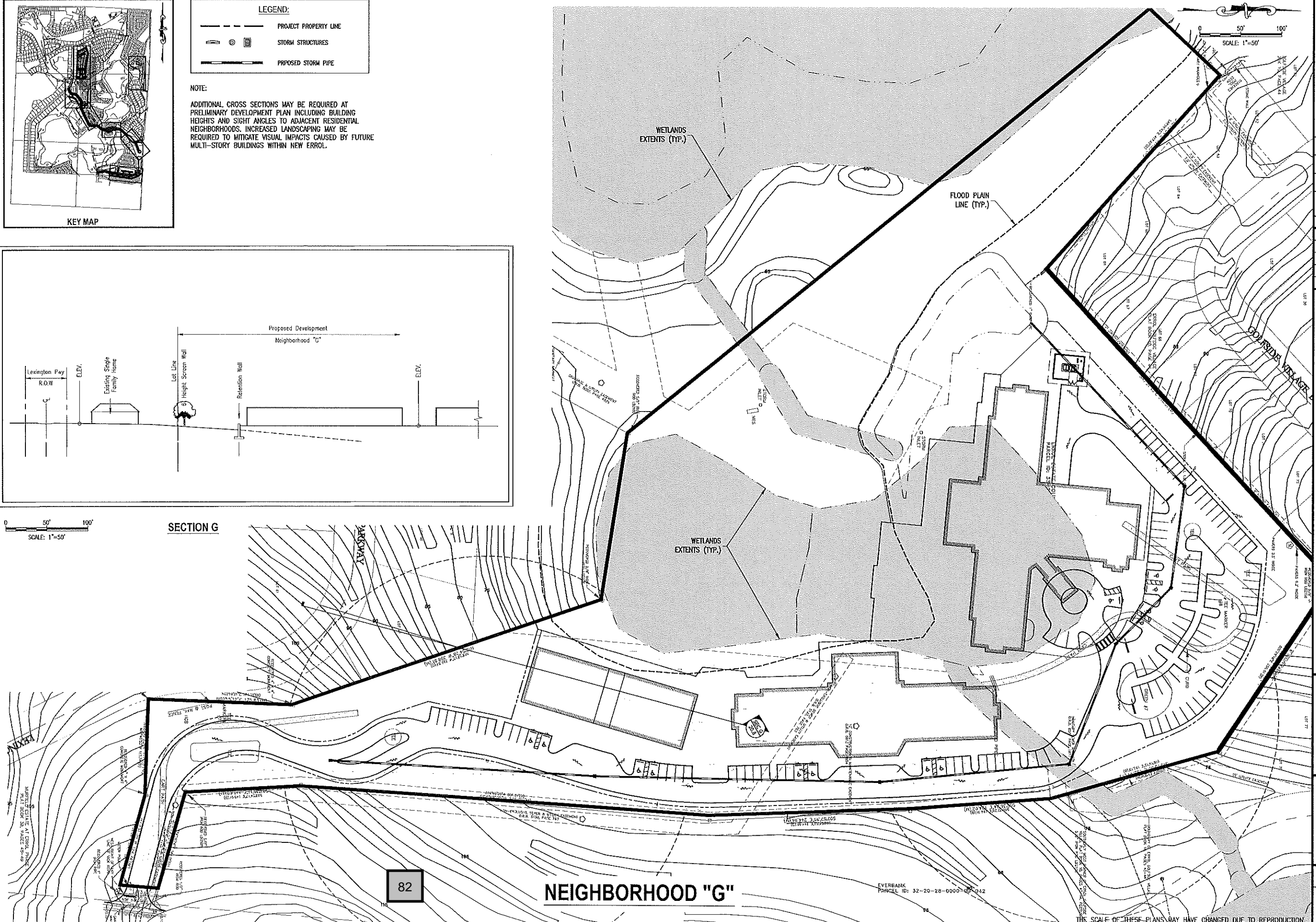


NOTE:
 ADDITIONAL CROSS SECTIONS MAY BE REQUIRED AT PRELIMINARY DEVELOPMENT PLAN INCLUDING BUILDING HEIGHTS AND SIGHT ANGLES TO ADJACENT RESIDENTIAL NEIGHBORHOODS. INCREASED LANDSCAPING MAY BE REQUIRED TO MITIGATE VISUAL IMPACTS CAUSED BY FUTURE MULTI-STORY BUILDINGS WITHIN NEW ERROL.



SCALE: 1"=50'

SECTION G



82

NEIGHBORHOOD "G"

EVERBANK PARCEL ID: 32-20-28-0000-00-042

THE SCALE OF THESE PLANS MAY HAVE CHANGED DUE TO REPRODUCTION

NO.	DATE	BY	CHKD	APP'D	DESCRIPTION

SCALE: AS SHOWN
 DATE: 03-13-2018
 DRAWN: MJC
 CHECKED: RSC
 APPROVED: RSC

GRADING PLAN - NEIGHBORHOOD G
 NEW ERROL
 CITY OF APOPKA, FLORIDA

SEAL
 RANDALL S. COHEN, P.E.
 No. 58581



PROJECT NO./DASH NO.
 A160186.01
 SHEET
 20.8

TRAFFIC IMPACT STUDY

ERROL ESTATES REDEVELOPMENT
CITY OF APOPKA, FLORIDA



Prepared for:

GAI Consultants, Inc.
618 East South Street, Suite 700
Orlando, FL 32801

Prepared by:

Traffic Planning and Design, Inc.
535 Versailles Drive
Maitland, Florida 32751
407-628-9955

March 2018 (Revised)

TPD № 4892.2

PROFESSIONAL ENGINEERING CERTIFICATION

I hereby certify that I am a Professional Engineer properly registered in the State of Florida practicing with Traffic Planning & Design, Inc., a corporation authorized to operate as an engineering business, EB-3702, by the State of Florida Department of Professional Regulation, Board of Professional Engineers, and that I have prepared or approved the evaluations, findings, opinions, conclusions, or technical advice attached hereto for:

PROJECT: Errol Estates Redevelopment

LOCATION: Apopka, Florida

CLIENT: GAI Consultants, Inc.

I hereby acknowledge that the procedures and references used to develop the results contained in these computations are standard to the professional practice of Transportation Engineering as applied through professional judgment and experience.

NAME: Turgut Dervish, P.E.

P.E. No: 20400

DATE: March 2nd, 2018

SIGNATURE:



TABLE OF CONTENTS

	Page
INTRODUCTION	3
Development Program	
Project Access and Internal Connectivity	
Phasing for Traffic Analysis	
Study Methodology	
PROPOSED DEVELOPMENT AND TRIP GENERATION	6
Trip Generation	
Trip Distribution/Assignment	
FUTURE LAND USE MAP (FLUM) AMENDMENT	10
Trip Generation and Distribution	
ArtPlan Analysis	
Existing Conditions Analysis	
Future Conditions Analysis	
FLUMA Analysis Summary	
STUDY CONCLUSIONS	17
APPENDICES.....	18
A Preliminary Concept Plan	
B Methodology Coordination	
C ITE Graphs	
D OUATS Model Plot	
E ArtPlan Analysis	

TABLE OF CONTENTS, continued

LIST OF TABLES

	Page
Table 1 Development Program	3
Table 2 Trip Generation Summary	7
Table 3 Existing Year (2017) FLUMA Roadway Capacity Analysis	12
Table 4 Phase 1/3 Buildout Year (2021) FLUMA Roadway Capacity Analysis	13
Table 5 Phase 2 Buildout Year (2021) FLUMA Roadway Capacity Analysis	14
Table 6 Phase 1/3 Horizon Year (2031) FLUMA Roadway Capacity Analysis	15
Table 7 Phase 2 Horizon Year (2031) FLUMA Roadway Capacity Analysis	16

LIST OF FIGURES

Figure 1 Project Location Map	5
Figure 2 Trip Distribution Map (Phase 1 & 3).....	8
Figure 3 Trip Distribution Map (Phase 2)	9

INTRODUCTION

This traffic analysis was conducted to assess the traffic impact of the Errol Estates Planned Unit Redevelopment (PUD) project proposed for nine (9) holes on the existing Errol Estates Golf Course located west of Vick Road and north of Old Dixie Highway in the City of Apopka, Florida. **Figure 1** depicts the site location and its one-mile impact area.

In addition to a PUD application, a future Land Use Map Amendment (FLUMA) is also being requested. This traffic analysis is being prepared in support of the Master Plan Agreement being submitted for the project.

Development Program

The proposed project will involve the redevelopment of nine (9) holes of the existing golf course comprising the land uses listed in **Table 1** and illustrated in the concept plan in **Appendix A**. The project will be constructed in phases with the anticipated project build out year being the first quarter of 2021.

**Table 1
Development Program**

Zone	Land Use	Quantity
Phase 1		
A	Townhomes	70 Townhomes
B-1	Hotel	40 Rooms
	Clubhouse	23,500 sq. ft.
B-2	Town Homes	18 Townhomes
Golf	Holes	9 holes removed
Community Park	Park	4.04 acres (internal use only)
Phase 2		
C	Carriage Homes (Townhomes)	46 Townhomes
D	Townhomes	26 Townhomes
E	Single Family Units	26 Single Family Units
F	Townhomes	32 Townhomes
	Single Family Units	41 Single Family Units
G	Assisted Living Facility	180 Beds
Phase 3		
	Acute Care Facility	60 Beds

Phase 1 of the Phasing Plan represents the golf course, clubhouse, commercial amenities complex, community parks, the first phase of the spine road, multi-use trail and residential



townhomes in Neighborhoods “A” and “B” and the portion of the assisted living campus in Neighborhood “G”. Phase 2 represents the second phase of the spine road and the residential townhomes and single family homes in Neighborhoods “C”, “D”, “E” and “F” of the project. Phase 3 represents the remaining assisted living campus in Neighborhood “G” of the project.

Project Access and Internal Connectivity

A new two-lane roadway (also termed spine road) connecting Errol Parkway and Vick Road is proposed as part of the redevelopment project. This roadway will connect to Vick Road at the Vick Road and Sun Bluff Lane intersection. This roadway will serve as the primary internal collector roadway for the land uses proposed as part of the redevelopment.

The first phase of the spine road is from Errol Parkway to Golf Course Drive. The second phase of the spine road from Golf Course Drive to Vick Road.

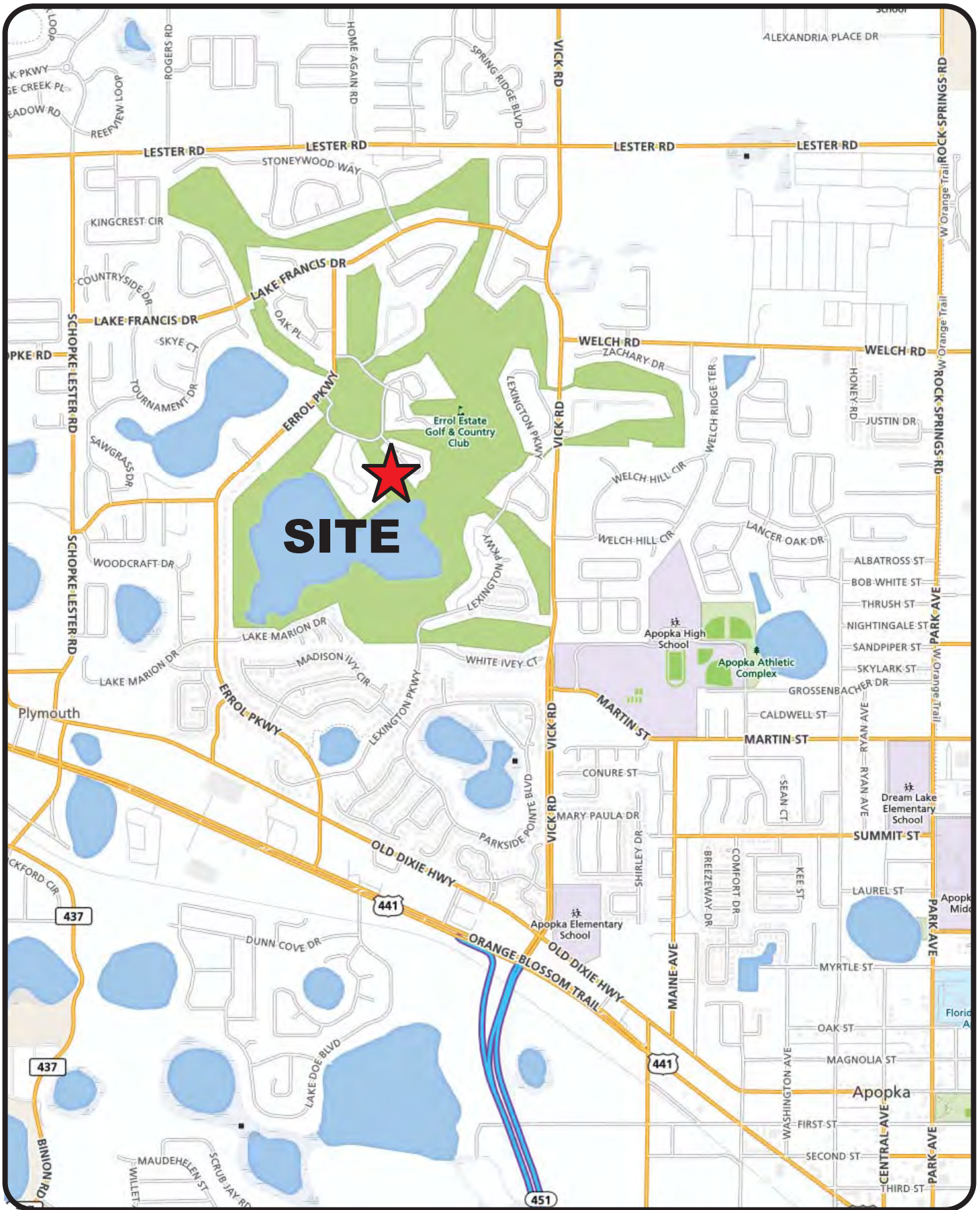
Phasing for Traffic Analysis

For the purposes of this traffic analysis, it was assumed that Phase 1 and 3 will be built along with the first phase of the spine road (i.e. no spine road connection to Vick Road) with the full buildout of the spine road (i.e. connection to Vick Road) being completed as part of all the full buildout of the project (i.e. Phase 1, 2 and 3).

Study Methodology

The traffic analysis for the application was conducted in accordance with the study methodology discussed with the City of Apopka staff over a series of meetings and phone calls. A summary of the study methodology coordination is included in **Appendix B**.





Errol Estates Redevelopment
 Project № 4892.1
Figure 1

Project Location Map



PROPOSED DEVELOPMENT AND TRIP GENERATION

To determine the traffic impact of this development on the area roadways, an analysis of its trip generation characteristics was conducted. This included the determination of the trips to be generated and the distribution/assignment of these trips to the roadways and intersections in the area.

Trip Generation

The trip generation for the proposed development was calculated using the trip generation rates published by the Institute of Transportation Engineers (ITE) in their *Trip Generation Manual, 9th Edition*. The calculation is summarized in **Table 2** which shows that Phase 1/3 of the development will generate 1,742 net new daily trips of which 176 will occur in the P.M. peak hour. Phase 2 (full buildout) of the development will generate 3,291 net new daily trips and of which 325 will occur during the P.M. peak hour. The individual uses in the Clubhouse are based on the building architectural plan which, along with the ITE trip generation graphs, are provided in **Appendix C**.

Trip Distribution/Assignment

A trip distribution pattern for the full project buildout was estimated using the currently adopted *Orlando Urban Area Transportation Study (OUATS)* model. A Select Zone Analysis (SZA) was conducted by modifying the 2020 interim year model network to include a Traffic Analysis Zone (TAZ) representing the proposed project as well as adding the proposed roadway connecting Errol Parkway and Vick road not previously coded/included into the model network. The model's socio-economic data was also updated to reflect the proposed project buildout. The resulting trip distribution model plot is provided in the **Appendix D**.

As a phased analysis is being conducted for this study, a Phase 1/3 and Phase 2 trip distribution pattern was developed as illustrated in **Figure 2** and **Figure 3**, respectively. For the purposes of this study, the Phase 1/3 trip distribution was developed by adjusting the full buildout (i.e. Phase 2) model run trip distribution to account for the fact that, as part of Phase 1/3, the spine road will not connect to Vick Road.



**Table 2
Trip Generation Summary**

ITE Code	Land Use	Size	Daily		PM Peak Hour			
			Rate	Trips	Rate	Total	Enter	Exit
Existing								
430	Golf Course	9 Holes	35.74	322	2.92	26	13	13
Proposed								
Phase 1 & 3								
230	Residential Townhomes	88 DU	6.54	576	0.62	55	37	18
310	Hotel	40 Rms	8.17	327	0.60	24	12	12
620	Nursing Home	60 Beds	2.01	121	0.22	13	4	9
Clubhouse Uses								
495	Recreational Community Center	14.399 KSF	33.82	487	2.74	39	19	20
482	Water Slide Park	145 spaces	2.27	329	0.28	41	9	32
565	Day Care	1.142 KSF	74.06	85	12.34	14	7	7
918	Hair Salon	0.653 KSF	--	--	1.45	1	0	1
925	Drinking Place	1.074 KSF	--	--	11.34	12	8	4
931	Quality Restaurant	4.879 KSF	89.95	439	7.49	37	25	12
826	Specialty Retail	1.353 KSF	71.00	96	18.00	24	11	13
<i>Clubhouse Subtotal</i>			--	1,436	--	168	79	89
<i>Clubhouse Internal Capture Reduction (50%)</i>			--	718	--	84	40	44
<i>Clubhouse External Trips</i>			--	718	--	84	39	45
New Net Phase 1 Trips			--	1,742	--	176	92	84
Phase 2								
210	Single Family Residential	67 DU	10.84	726	1.09	73	46	27
230	Residential Townhomes	104 DU	6.40	666	0.60	62	42	20
254	Assisted Living	180 Beds	2.66	479	0.22	40	18	22
New Phase 2 Trips			--	1,871	--	175	106	69
NEW NET PROJECT TRIPS			--	3,291	--	325	185	140

Note:

(1) The ITE equation derived rates are used in cases where the R-squared correlation coefficient is greater than 0.7.

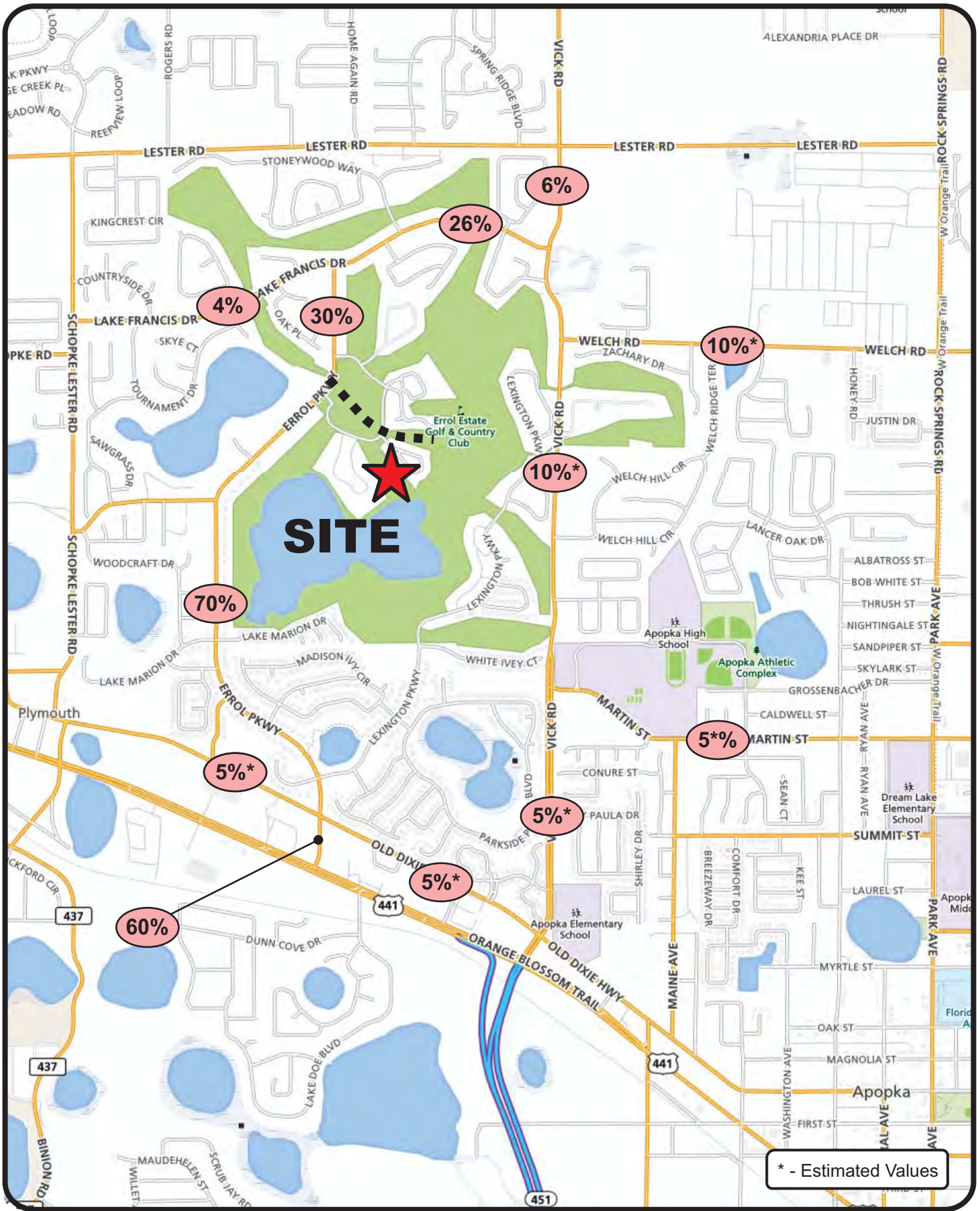
(2) As the hotel is a smaller scale hotel, the ITE rates was used in lieu of using the equations.

(3) Per the ITE LUC 310 description, the hotel use incorporates the meeting/office and banquets facilities.

(4) A 50% internal capture reduction was utilized because the Clubhouse is primarily intended to be for Errol Estates residents who will walk, use golf carts, etc. to travel to the Clubhouse. This rate was also utilized to account for the trips between the various uses internal to the Clubhouse.

(5) The New Net Project trips = New Net Phase 1 Trips + New Phase 2 Trip – Golf Course Trips being eliminated as part of redevelopment





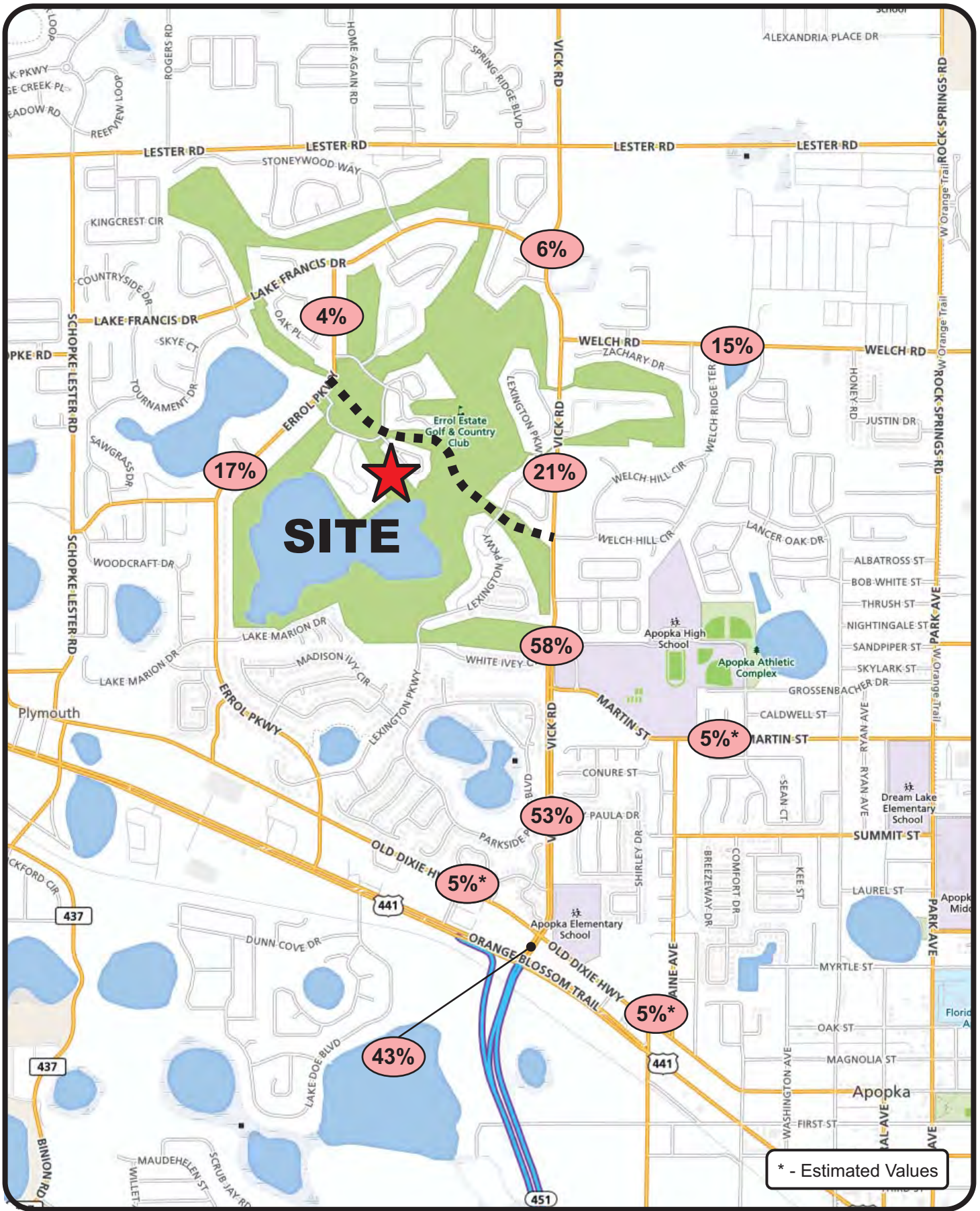
* - Estimated Values



Errol Estates Redevelopment
Project № 4892.2
Figure 2

**Trip Distribution Map
(Phase 1 & 3)**





Errol Estates Redevelopment
Project No 4892.2
Figure 2



FUTURE LAND USE MAP (FLUM) AMENDMENT

An analysis was conducted in support of an application to amend the City of Apopka's Future Land Use Map (FLUM). The requested amendment, to be done concurrent to the Planned Unit Development (PUD) application, is to change the FLUM designation of portions of the Errol Estates property that are being redeveloped from Parks/Recreation (currently Golf Course use) to the uses in the PUD program previously provided in **Table 1** (including residential, hotel, clubhouse and assisted living/acute care uses). Roadway segments within a one-mile radius impact area were analyzed.

Trip Generation and Distribution

Based on discussion with City staff, the trip generation for the FLUMA analysis will be the same as that provided in **Table 4** since the development program (and therefore the maximum buildout) for the project will be specified in the PUD agreement. Similarly, the same trip distribution is utilized.

ArtPlan Analysis

Based on discussion with the City of Apopka staff, an ArtPlan analysis was conducted for the segments of Vick Road as provided in **Appendix E**. Based on this analysis, the maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln (as highlighted in yellow on page 2 of the ArtPlan capacity worksheets).

Existing Conditions Analysis

The existing traffic conditions were evaluated within the project's primary influence area. The results of the analysis, as shown in **Table 3**, indicate that all the study segments are currently operating within their adopted Level of Service (LOS) standard.

Future Conditions Analysis

Based on discussion with City staff, the Existing plus 5-year (Build-out year - 2021) and 10-year (Horizon year - 2031) conditions were evaluated for the Base/Background only conditions (assuming the proposed project is not constructed) and the Proposed/Projected conditions



(assuming the proposed project is constructed).

For the purposes of the FLUMA analysis, the 1% growth rate utilized for the PUD application analysis discussed earlier in this report was utilized for consistency and because higher growth rates, based on historical data, applied over a 15-year horizon was not considered realistic given the advent of culture changing technologies such as ride/car sharing, same day product delivery, video conferencing, virtual offices, increased telecommuting, etc.

Existing plus 5-year (Build-out year - 2021) Analysis

Table 4 and **Table 5** provide the results of the Existing plus 5 year (Build-out year 2021) analysis for the Base/Background and the Proposed/Projected scenarios for both the Phase 1/3 and Phase 2 (full buildout) scenarios, respectively. As shown, all the study roadway segments are projected to operate within their adopted LOS standard except the segments of Vick Road from Old Dixie Highway to Welch Road. These segments are projected to generally operate below the adopted LOS standards with or without the project (see discussion in next paragraph).

Existing plus 10-year (Horizon year - 2031) Analysis

Table 6 and **Table 7** provide the results of the Existing plus 10 year (Horizon year - 2031) for both the Base/Background and the Proposed/Projected scenarios for both the Phase 1/3 and Phase 2 (full buildout) scenarios, respectively. As shown, all the study roadway segments are projected to continue to operate within their adopted LOS standard except the segments of Vick Road from Old Dixie Highway to Welch Road. These segments are projected to continue to operate below their adopted LOS standards with or without the project.

FLUMA Analysis Summary

Based on the traffic analysis conducted in support of the FLUMA, the segments listed below will operate below the adopted LOS standard with or without the project. As this deficiency is projected to occur with or without the proposed project, no mitigation is proposed per Florida Statutes 163.3180.

- Vick Road
 - Old Dixie Highway to Martin Street
 - Martin Street to Welch Road



**Table 3
Existing Year (2017) FLUMA Roadway Capacity Analysis**

Roadway	Segment	Lns	LOS Stnd	Capacity		Existing Vols			Existing LOS	
				Daily	PH/PD	Daily	Pk Dir	PH/PD	Daily	PH/PD
Errol Pkwy	Lake Francis Dr to Lake Alden Dr	2L	E	13,990	710	2,290	NB/EB	107	C	B
	Lake Alden Dr to Old Dixie Hwy	2L	E	13,320	680	7,760	NB/EB	420	D	C
	Old Dixie Hwy to US 441	2L	E	14,000	710	6,849	SB/WB	386	C	B
Martin St	Park Ave to Lake Ave	2L	E	14,000	720	3,811	SB/WB	183	C	C
	Maine Ave to Vick Rd	2L	E	14,000	720	4,387	NB/EB	198	C	C
Old Dixie Hwy	Errol Pkwy to Vick Rd	2L	E	14,000	720	8,139	SB/WB	448	D	D
	Vick Rd to Bradshaw Rd	2L	E	14,000	720	9,428	NB/EB	461	D	D
Vick Rd	US 441 to Old Dixie Hwy	4LD	E	33,800	1,700	16,843	NB/EB	964	D	D
	Old Dixie Hwy to Martin St	2L	E	16,400	840	15,958	NB/EB	862	E	E
	Martin St to Welch Rd	2L	E	16,400	840	14,246	NB/EB	751	D	D
	Welch Rd to Lake Francis Dr	2L	E	14,000	720	11,359	NB/EB	591	D	D
Welch Rd	Vick Rd to Rock Springs Rd (CR 535)	2L	E	16,400	840	11,047	NB/EB	557	D	D
Lester Rd	Rock Springs Rd to Vick Road	2L	E	14,000	720	4,529	NB/EB	225	C	C
	Vick Road to Schopke Lester Rd	2L	E	14,000	720	4,529	NB/EB	225	C	C
	Schopke Lester Rd to to Plymouth Sorrento Rd	2L	E	14,000	720	3,502	NB/EB	202	C	C
Schopke-Lester Rd	Lester Rd to Old Dixie Hwy	2L	E	14,000	720	2,911	NB/EB	206	C	C
US 441	Yothers Rd to SR 429 Connector Rd	4LD	E	49,500	2,480	42,949	SB/WB	1861	A	A
	SR 429 Connector Rd to Plymouth Sorrento Rd	4LD	E	49,500	2,480	25,872	SB/WB	1111	A	A
	Plymouth Sorrento Rd to Boy Scout Blvd	4LD	E	49,500	2,480	26,313	SB/WB	1,119	A	A
	Boy Scout Blvd to Errol Pkwy	4LD	E	55,400	2,600	29,698	SB/WB	1174	A	A
	Errol Pkwy to SR 451	4LD	E	54,400	2,600	38,707	SB/WB	1588	A	A



**Table 4
Phase 1/3 Buildout Year (2021) FLUMA Roadway Capacity Analysis**

Roadway	Segment	Lns	LOS Stnd	Capacity		B'grnd Vols		B'grnd LOS		Project Trips			Total Traffic		Projected LOS	
				Daily	PH/PD	Daily	Pk Dir	Daily	PH/PD	Trip Dist	Daily	Pk Dir	Daily	PH/PD	Daily	PH/PD
Errol Pkwy	Lake Francis Dr to Lake Alden Dr	2L	E	13990	710	2405	112	C	C	30%	523	28	2928	140	C	C
	Lake Alden Dr to Old Dixie Hwy	2L	E	13320	680	8148	441	D	D	70%	1219	64	9367	505	D	D
	Old Dixie Hwy to US 441	2L	E	14000	710	7191	405	D	D	70%	1219	64	8410	469	D	D
Martin St	Park Ave to Lake Ave	2L	E	14,000	720	4,002	192	C	C	5%	87	5	4,089	197	C	C
	Maine Ave to Vick Rd	2L	E	14,000	720	4,606	208	C	C	5%	87	4	4,693	212	C	C
Old Dixie Hwy	Errol Pkwy to Vick Rd	2L	E	14,000	720	8,546	470	D	D	5%	87	5	8,633	475	D	D
	Vick Rd to Bradshaw Rd	2L	E	14,000	720	9,899	484	D	D	5%	87	4	9,986	488	D	D
Vick Rd	US 441 to Old Dixie Hwy	4LD	E	33,800	1,700	17,685	1,012	D	D	5%	87	5	17,772	1,017	D	D
	Old Dixie Hwy to Martin St	2L	E	16,400	840	16,756	905	F	E	5%	87	5	16,843	910	F	E
	Martin St to Welch Rd	2L	E	16,400	840	14,958	789	D	D	10%	174	8	15,132	797	D	E
	Welch Rd to Lake Francis Dr	2L	E	14,000	720	11,927	621	D	D	20%	348	17	12,275	638	D	D
Welch Rd	Vick Rd to Rock Springs Rd (CR 535)	2L	E	16,400	840	11,599	585	D	D	10%	174	8	11,773	593	D	D
Lester Rd	Rock Springs Rd to Vick Road	2L	E	14,000	720	4,755	236	C	C	6%	105	6	4,860	242	C	C
	Vick Road to Schopke Lester Rd	2L	E	14,000	720	4,755	236	C	C	6%	105	6	4,860	242	C	C
	Schopke Lester Rd to to Plymouth Sorrento Rd	2L	E	14,000	720	3,677	212	C	C	6%	105	6	3,782	218	C	C
Schopke-Lester Rd	Lester Rd to Old Dixie Hwy	2L	E	14,000	720	3,057	216	C	C	4%	70	3	3,127	219	C	C
US 441	Yothers Rd to SR 429 Connector Rd	4LD	E	49,500	2,480	45,096	1,954	A	A	5%	87	5	45,183	1,959	A	A
	SR 429 Connector Rd to Plymouth Sorrento Rd	4LD	E	49,500	2,480	27,166	1,167	A	A	5%	87	5	27,253	1,172	A	A
	Plymouth Sorrento Rd to Boy Scout Blvd	4LD	E	49,500	2,480	27,629	1,175	A	A	5%	87	5	27,716	1,180	A	A
	Boy Scout Blvd to Errol Pkwy	4LD	E	55,400	2,600	31,183	1,233	A	A	5%	87	5	31,270	1,238	A	A
	Errol Pkwy to SR 451	4LD	E	54,400	2,600	40,642	1,667	A	A	55%	958	46	41,600	1,713	A	A



**Table 5
Phase 2 Buildout Year (2021) FLUMA Roadway Capacity Analysis**

Roadway	Segment	Lns	LOS Stnd	Capacity		B'grnd Vols		B'grnd LOS		Project Trips			Total Traffic		Projected LOS	
				Daily	PH/PD	Daily	Pk Dir	Daily	PH/PD	Trip Dist	Daily	Pk Dir	Daily	PH/PD	Daily	PH/PD
Errol Pkwy	Lake Francis Dr to Lake Alden Dr	2L	E	13990	710	2405	112	C	C	17%	559	31	2964	143	C	C
	Lake Alden Dr to Old Dixie Hwy	2L	E	13320	680	8148	441	D	D	17%	559	31	8707	472	D	D
	Old Dixie Hwy to US 441	2L	E	14000	710	7191	405	D	D	17%	559	31	7750	436	D	D
Martin St	Park Ave to Lake Ave	2L	E	14,000	720	4,002	192	C	C	5%	165	9	4,167	201	C	C
	Maine Ave to Vick Rd	2L	E	14,000	720	4,606	208	C	C	5%	165	7	4,771	215	C	C
Old Dixie Hwy	Errol Pkwy to Vick Rd	2L	E	14,000	720	8,546	470	D	D	5%	165	9	8,711	479	D	D
	Vick Rd to Bradshaw Rd	2L	E	14,000	720	9,899	484	D	D	5%	165	7	10,064	491	D	D
Vick Rd	US 441 to Old Dixie Hwy	4LD	E	33,800	1,700	17,685	1,012	D	D	43%	1415	80	19,100	1,092	D	D
	Old Dixie Hwy to Martin St	2L	E	16,400	840	16,756	905	F	E	53%	1744	98	18,500	1,003	F	F
	Martin St to Welch Rd	2L	E	16,400	840	14,958	789	D	D	58%	1909	81	16,867	870	F	E
	Welch Rd to Lake Francis Dr	2L	E	14,000	720	11,927	621	D	D	6%	197	8	12,124	629	D	D
Welch Rd	Vick Rd to Rock Springs Rd (CR 535)	2L	E	16,400	840	11,599	585	D	D	15%	494	21	12,093	606	D	D
Lester Rd	Rock Springs Rd to Vick Road	2L	E	14,000	720	4,755	236	C	C	2%	66	4	4,821	240	C	C
	Vick Road to Schopke Lester Rd	2L	E	14,000	720	4,755	236	C	C	2%	66	4	4,821	240	C	C
	Schopke Lester Rd to to Plymouth Sorrento Rd	2L	E	14,000	720	3,677	212	C	C	2%	66	4	3,743	216	C	C
Schopke-Lester Rd	Lester Rd to Old Dixie Hwy	2L	E	14,000	720	3,057	216	C	C	1%	33	1	3,090	217	C	C
US 441	Yothers Rd to SR 429 Connector Rd	4LD	E	49,500	2,480	45,096	1,954	A	A	4%	132	7	45,228	1,961	A	A
	SR 429 Connector Rd to Plymouth Sorrento Rd	4LD	E	49,500	2,480	27,166	1,167	A	A	4%	132	7	27,298	1,174	A	A
	Plymouth Sorrento Rd to Boy Scout Blvd	4LD	E	49,500	2,480	27,629	1,175	A	A	5%	165	9	27,794	1,184	A	A
	Boy Scout Blvd to Errol Pkwy	4LD	E	55,400	2,600	31,183	1,233	A	A	2%	66	4	31,249	1,237	A	A
	Errol Pkwy to SR 451	4LD	E	54,400	2,600	40,642	1,667	A	A	24%	790	34	41,432	1,701	A	A



**Table 6
Phase 1/3 Horizon Year (2031) FLUMA Roadway Capacity Analysis**

Roadway	Segment	Lns	LOS Stnd	Capacity		B'grnd Vols		B'grnd LOS		Project Trips			Total Traffic		Projected LOS	
				Daily	PH/PD	Daily	Pk Dir	Daily	PH/PD	Trip Dist	Daily	Pk Dir	Daily	PH/PD	Daily	PH/PD
Errol Pkwy	Lake Francis Dr to Lake Alden Dr	2L	E	13990	710	2611	122	C	C	30%	523	28	3134	150	C	C
	Lake Alden Dr to Old Dixie Hwy	2L	E	13320	680	8846	479	D	D	70%	1219	64	10065	543	D	D
	Old Dixie Hwy to US 441	2L	E	14000	710	7808	440	D	D	70%	1219	64	9027	504	D	D
Martin St	Park Ave to Lake Ave	2L	E	14,000	720	4,345	209	C	C	5%	87	5	4,432	214	C	C
	Maine Ave to Vick Rd	2L	E	14,000	720	5,001	226	C	C	5%	87	4	5,088	230	C	C
Old Dixie Hwy	Errol Pkwy to Vick Rd	2L	E	14,000	720	9,278	511	D	D	5%	87	5	9,365	516	D	D
	Vick Rd to Bradshaw Rd	2L	E	14,000	720	10,748	526	D	D	5%	87	4	10,835	530	D	D
Vick Rd	US 441 to Old Dixie Hwy	4LD	E	33,800	1,700	19,201	1,099	D	D	5%	87	5	19,288	1,104	D	D
	Old Dixie Hwy to Martin St	2L	E	16,400	840	18,192	983	F	E	5%	87	5	18,279	988	F	E
	Martin St to Welch Rd	2L	E	16,400	840	16,240	856	E	E	10%	174	8	16,414	864	F	E
	Welch Rd to Lake Francis Dr	2L	E	14,000	720	12,949	674	D	D	20%	348	17	13,297	691	D	E
Welch Rd	Vick Rd to Rock Springs Rd (CR 535)	2L	E	16,400	840	12,594	635	D	D	10%	174	8	12,768	643	D	D
Lester Rd	Rock Springs Rd to Vick Road	2L	E	14,000	720	5,163	257	C	C	6%	105	6	5,268	263	C	C
	Vick Road to Schopke Lester Rd	2L	E	14,000	720	5,163	257	C	C	6%	105	6	5,268	263	C	C
	Schopke Lester Rd to to Plymouth Sorrento Rd	2L	E	14,000	720	3,992	230	C	C	6%	105	6	4,097	236	C	C
Schopke-Lester Rd	Lester Rd to Old Dixie Hwy	2L	E	14,000	720	3,319	235	C	C	4%	70	3	3,389	238	C	C
US 441	Yothers Rd to SR 429 Connector Rd	4LD	E	49,500	2,480	48,962	2,122	B	A	5%	87	5	49,049	2,127	B	A
	SR 429 Connector Rd to Plymouth Sorrento Rd	4LD	E	49,500	2,480	29,494	1,267	A	A	5%	87	5	29,581	1,272	A	A
	Plymouth Sorrento Rd to Boy Scout Blvd	4LD	E	49,500	2,480	29,997	1,276	A	A	5%	87	5	30,084	1,281	A	A
	Boy Scout Blvd to Errol Pkwy	4LD	E	55,400	2,600	33,856	1,338	A	A	5%	87	5	33,943	1,343	A	A
	Errol Pkwy to SR 451	4LD	E	54,400	2,600	44,126	1,810	A	A	55%	958	46	45,084	1,856	A	A



**Table 7
Phase 2 Horizon Year (2031) FLUMA Roadway Capacity Analysis**

Roadway	Segment	Lns	LOS Stnd	Capacity		B'grnd Vols		B'grnd LOS		Project Trips			Total Traffic		Projected LOS	
				Daily	PH/PD	Daily	Pk Dir	Daily	PH/PD	Trip Dist	Daily	Pk Dir	Daily	PH/PD	Daily	PH/PD
Errol Pkwy	Lake Francis Dr to Lake Alden Dr	2L	E	13990	710	2611	122	C	C	17%	559	31	3170	153	C	C
	Lake Alden Dr to Old Dixie Hwy	2L	E	13320	680	8846	479	D	D	17%	559	31	9405	510	D	D
	Old Dixie Hwy to US 441	2L	E	14000	710	7808	440	D	D	17%	559	31	8367	471	D	D
Martin St	Park Ave to Lake Ave	2L	E	14,000	720	4,345	209	C	C	5%	165	9	4,510	218	C	C
	Maine Ave to Vick Rd	2L	E	14,000	720	5,001	226	C	C	5%	165	7	5,166	233	C	C
Old Dixie Hwy	Errol Pkwy to Vick Rd	2L	E	14,000	720	9,278	511	D	D	5%	165	9	9,443	520	D	D
	Vick Rd to Bradshaw Rd	2L	E	14,000	720	10,748	526	D	D	5%	165	7	10,913	533	D	D
Vick Rd	US 441 to Old Dixie Hwy	4LD	E	33,800	1,700	19,201	1,099	D	D	43%	1415	80	20,616	1,179	D	D
	Old Dixie Hwy to Martin St	2L	E	16,400	840	18,192	983	F	E	53%	1744	98	19,936	1,081	F	F
	Martin St to Welch Rd	2L	E	16,400	840	16,240	856	E	E	58%	1909	81	18,149	937	F	E
	Welch Rd to Lake Francis Dr	2L	E	14,000	720	12,949	674	D	D	6%	197	8	13,146	682	D	E
Welch Rd	Vick Rd to Rock Springs Rd (CR 535)	2L	E	16,400	840	12,594	635	D	D	15%	494	21	13,088	656	D	D
Lester Rd	Rock Springs Rd to Vick Road	2L	E	14,000	720	5,163	257	C	C	2%	66	4	5,229	261	C	C
	Vick Road to Schopke Lester Rd	2L	E	14,000	720	5,163	257	C	C	2%	66	4	5,229	261	C	C
	Schopke Lester Rd to to Plymouth Sorrento Rd	2L	E	14,000	720	3,992	230	C	C	2%	66	4	4,058	234	C	C
Schopke-Lester Rd	Lester Rd to Old Dixie Hwy	2L	E	14,000	720	3,319	235	C	C	1%	33	1	3,352	236	C	C
US 441	Yothers Rd to SR 429 Connector Rd	4LD	E	49,500	2,480	48,962	2,122	B	A	4%	132	7	49,094	2,129	B	A
	SR 429 Connector Rd to Plymouth Sorrento Rd	4LD	E	49,500	2,480	29,494	1,267	A	A	4%	132	7	29,626	1,274	A	A
	Plymouth Sorrento Rd to Boy Scout Blvd	4LD	E	49,500	2,480	29,997	1,276	A	A	5%	165	9	30,162	1,285	A	A
	Boy Scout Blvd to Errol Pkwy	4LD	E	55,400	2,600	33,856	1,338	A	A	2%	66	4	33,922	1,342	A	A
	Errol Pkwy to SR 451	4LD	E	54,400	2,600	44,126	1,810	A	A	24%	790	34	44,916	1,844	A	A



STUDY CONCLUSIONS

This traffic analysis was conducted to assess the traffic impact of the Errol Estates Planned Unit Redevelopment (PUD) project proposed for nine (9) holes on the existing Errol Estates Golf Course located west of Vick Road and north of Old Dixie Highway in the City of Apopka, Florida. Phase 1 of the Phasing Plan represents the golf course, clubhouse, commercial amenities complex, community parks, the first phase of the spine road, multi-use trail and residential townhomes in Neighborhoods “A” and “B” and the portion of the assisted living campus in Neighborhood “G”. Phase 2 represents the second phase of the spine road and the residential townhomes and single family homes in Neighborhoods “C”, “D”, “E” and “F” of the project. Phase 3 represents the remaining assisted living campus in Neighborhood “G” of the project.

The results of the traffic impact analysis as documented herein are summarized below:

- Phase 1 and 3 of the development will generate 1,742 net new daily trips of which 176 will occur in the P.M. peak hour. Phase 2 (full buildout) of the development will generate 3,291 net new daily trips and of which 325 will occur during the P.M. peak hour.
- A new two-lane roadway connecting Errol Parkway and Vick Road is proposed as part of the redevelopment project. This roadway will connect to Vick Road at the Vick Road and Sun Bluff Lane intersection. The first phase of the spine road is from Errol Parkway to Golf Course Drive. The second phase of the spine road from Golf Course Drive to Vick Road. For the purposes of this traffic analysis, it was assumed that Phase 1 and 3 will be built along with the first phase of the spine road (i.e. no spine road connection to Vick Road) with the full buildout of the spine road (i.e. connection to Vick Road) being completed as part of all the phases (i.e. Phase 1, 2 and 3). This roadway will serve as the primary internal collector roadway for the land uses proposed as part of the redevelopment.
- Based on the traffic analysis conducted in support of the FLUMA, Vick Road from Old Dixie Highway to Welch Road will operate below the adopted LOS standard with or without the proposed project. As this deficiency is projected to occur with or without the proposed project, no mitigation is proposed per Florida Statutes 163.3180.



APPENDIX A

Preliminary Concept Plan

Z:\Corpor\2018\160186.01 - erol address additonal\GD\Drawings\preliminary development plan\160186_01_OVERALL CONCEPT PLAN Mar 02, 2018 - 10:25am
 THE SCALE OF THESE PLANS MAY HAVE CHANGED DUE TO REPRODUCTION

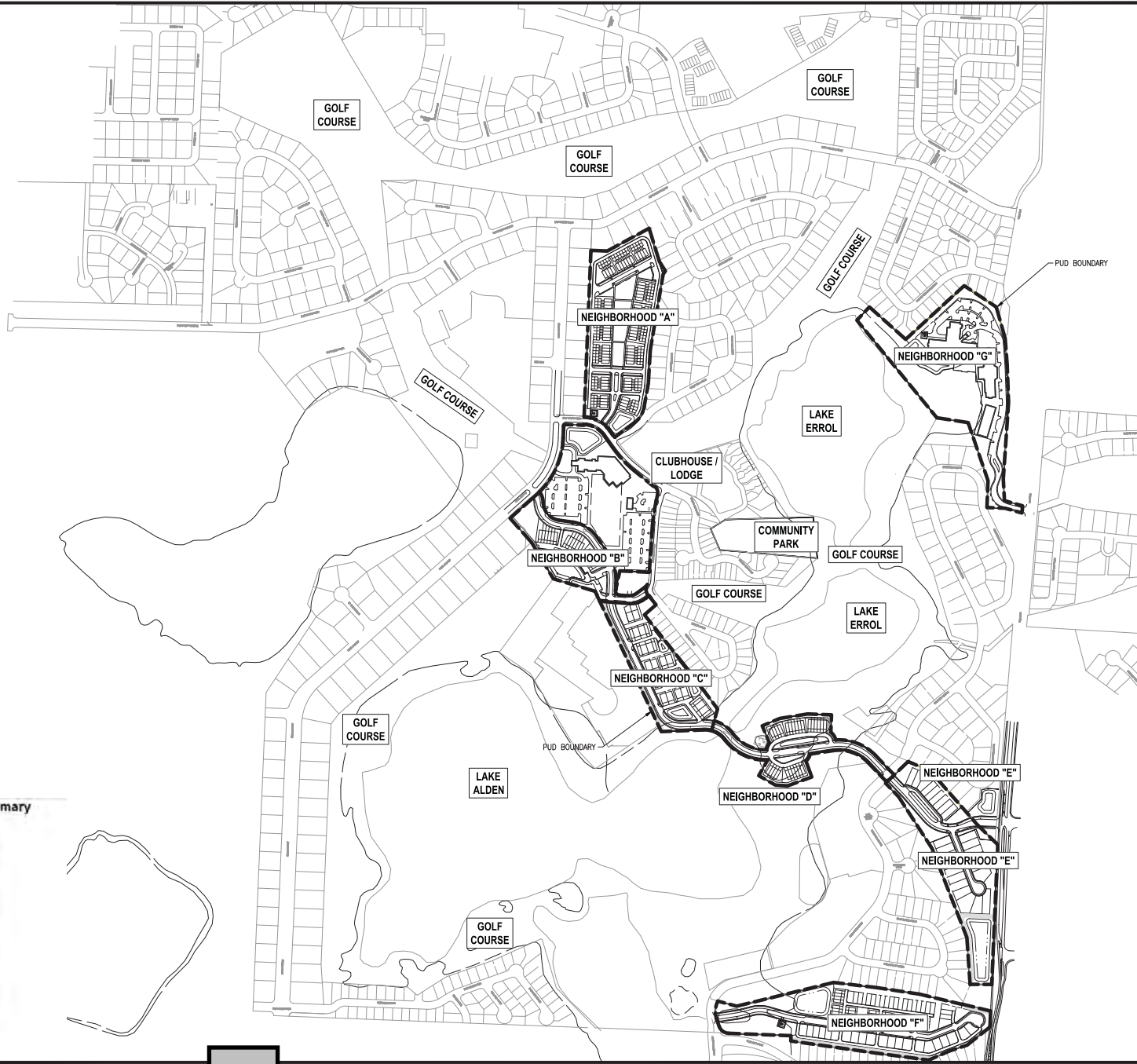


Table 5.0A - Maximum Development Program Summary

Neighborhood	Acres	Program
A	11.84 acres	70 townhomes
B-1	9.95 acres	26,000 sq ft clubhouse; 40 (21,200 sq ft) room hotel
B-2	5.45 acres	18 townhomes
C	6.76 acres	46 carriage homes (townhomes)
D	4.97 acres	26 townhomes
E	8.57 acres	26 single family units
F	13.3 acres	32 townhomes 41 single family units
G	13.94 acres	180 ALF units (200,000 sq ft) 60 acute care beds (45,000 sq ft)
Community Park	4.04 acres	Park

Notes 1 Total conditioned space.

OVERALL CONCEPT PLAN NEW ERROL CITY OF APOPKA, FLORIDA	REVISIONS <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>NO.</th> <th>DATE</th> <th>BY</th> <th>CHKD</th> <th>APP'D</th> <th>DESCRIPTION</th> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	NO.	DATE	BY	CHKD	APP'D	DESCRIPTION						
NO.	DATE	BY	CHKD	APP'D	DESCRIPTION								
SCALE: AS SHOWN DATE: 03-02-2018 DRAWING: MJC CHECKED: RSC APPROVED: RSC													
RANDALL S. COHEN, P.E. No. 55581 gai consultants EB 9951 618 EAST SOUTH STREET ORLANDO, FLORIDA 32801 PHONE: (407) 423-8398													
PROJECT NO./DASH NO. A160186.01 SHEET 5.0													

APPENDIX B

Methodology Coordination

*Available as part of the electronic project file

APPENDIX C

ITE Graphs

Single-Family Detached Housing (210)

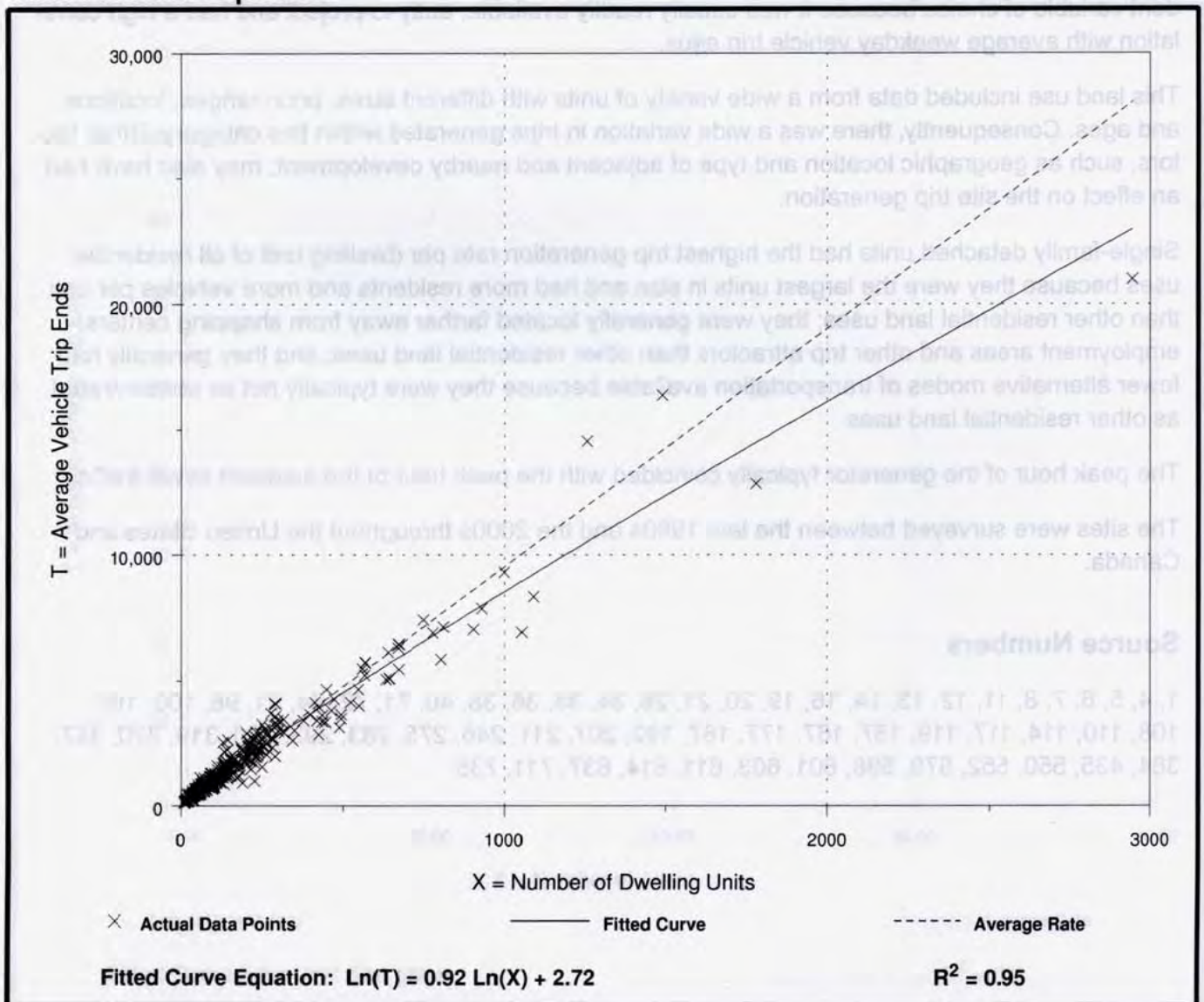
Average Vehicle Trip Ends vs: Dwelling Units On a: Weekday

Number of Studies: 355
 Avg. Number of Dwelling Units: 198
 Directional Distribution: 50% entering, 50% exiting

Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
9.52	4.31 - 21.85	3.70

Data Plot and Equation



Single-Family Detached Housing (210)

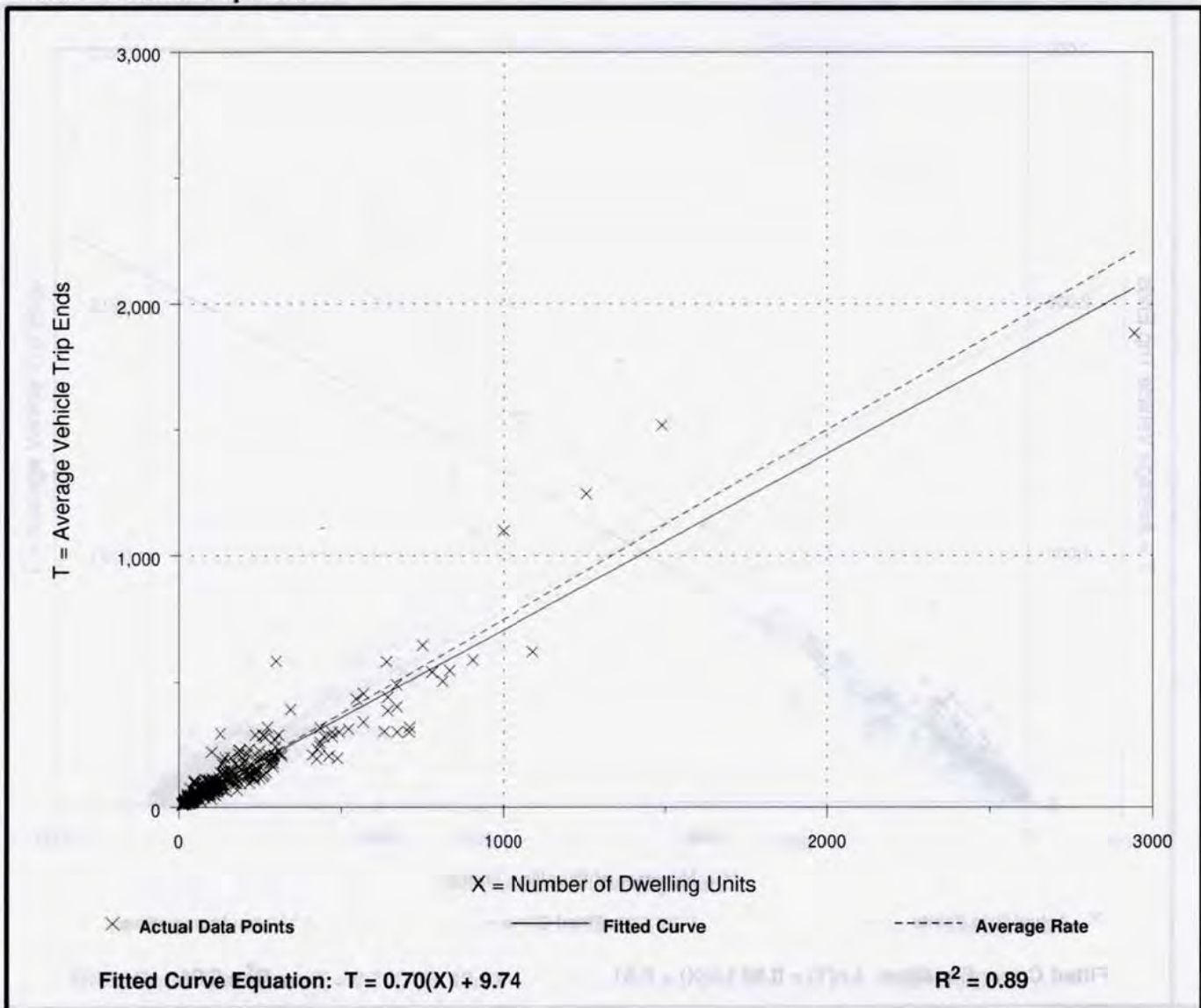
Average Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.

Number of Studies: 292
 Avg. Number of Dwelling Units: 194
 Directional Distribution: 25% entering, 75% exiting

Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.75	0.33 - 2.27	0.90

Data Plot and Equation



Single-Family Detached Housing (210)

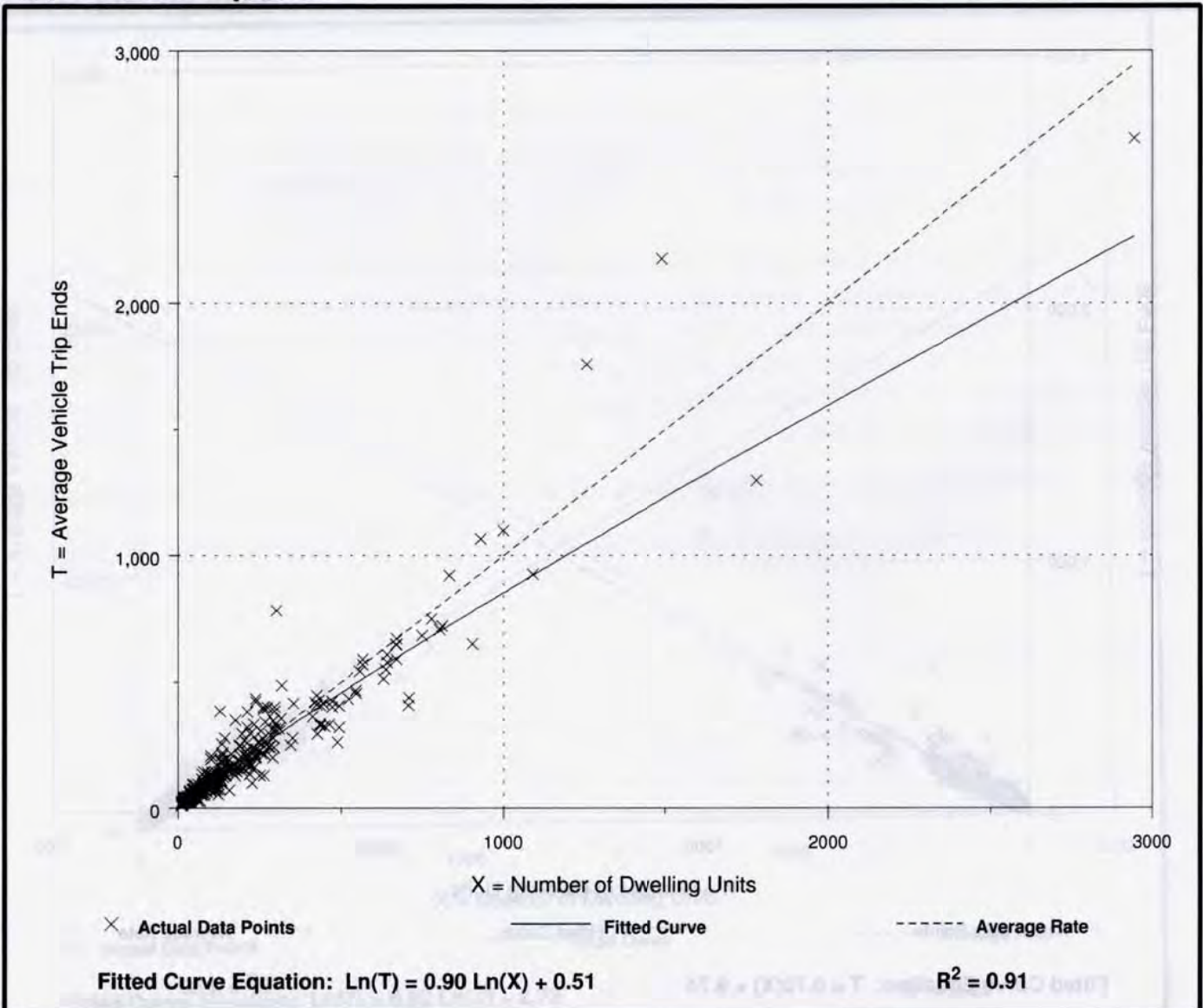
Average Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

Number of Studies: 321
 Avg. Number of Dwelling Units: 207
 Directional Distribution: 63% entering, 37% exiting

Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
1.00	0.42 - 2.98	1.05

Data Plot and Equation



Residential Condominium/Townhouse (230)

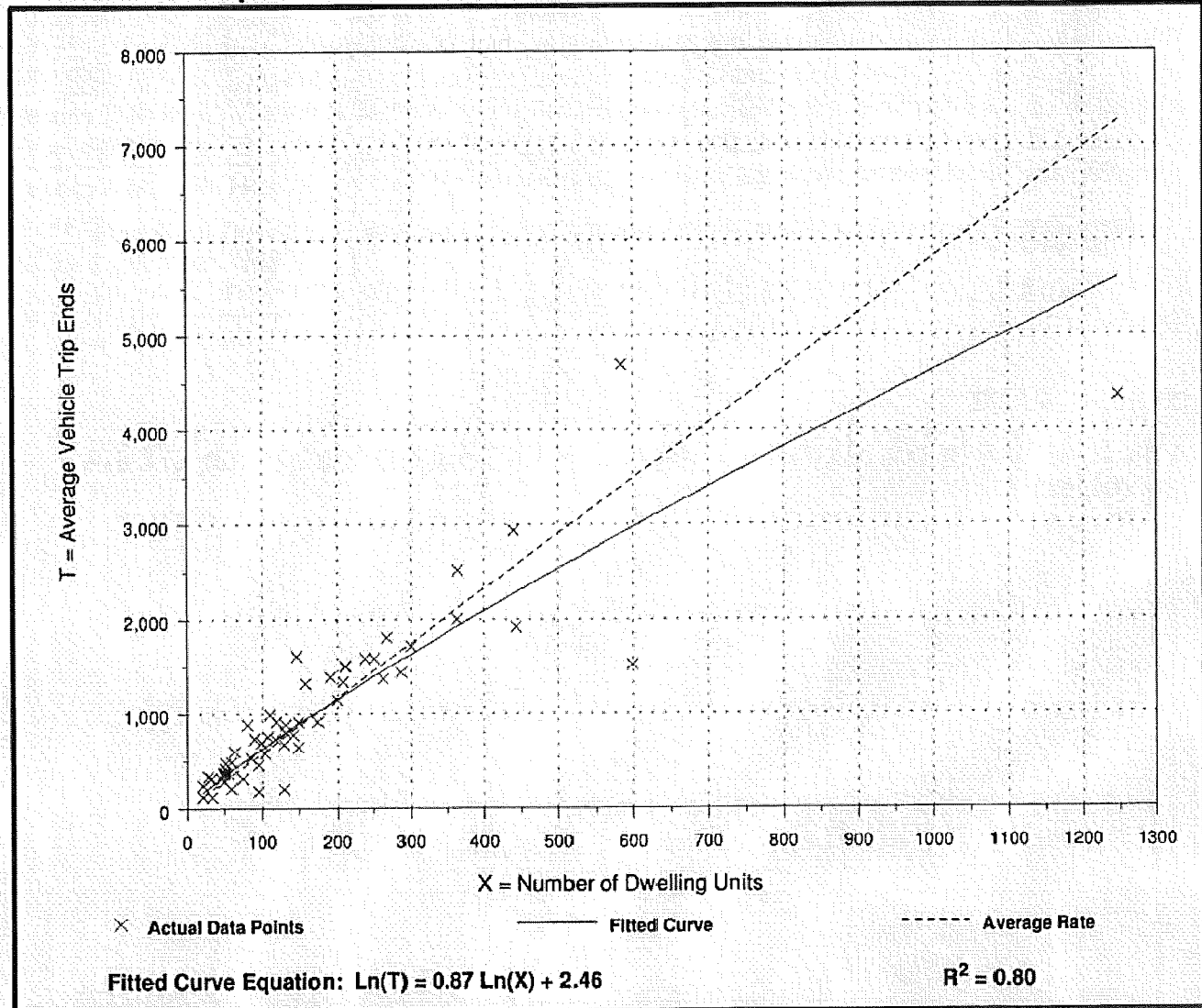
**Average Vehicle Trip Ends vs: Dwelling Units
On a: Weekday**

Number of Studies: 56
Avg. Number of Dwelling Units: 179
Directional Distribution: 50% entering, 50% exiting

Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
5.81	1.53 - 11.79	3.11

Data Plot and Equation



Residential Condominium/Townhouse (230)

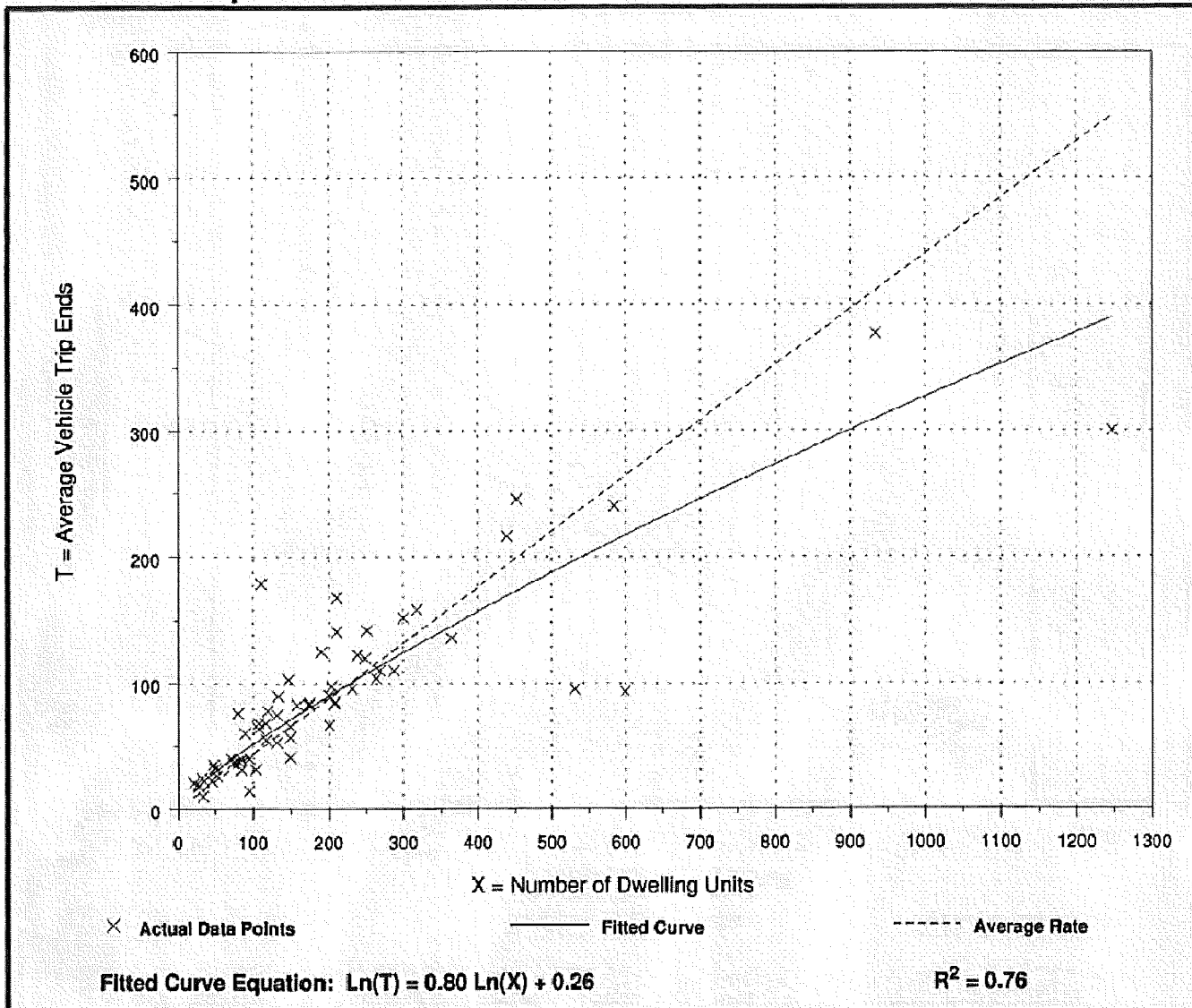
Average Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.

Number of Studies: 59
 Avg. Number of Dwelling Units: 213
 Directional Distribution: 17% entering, 83% exiting

Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.44	0.15 - 1.61	0.69

Data Plot and Equation



Residential Condominium/Townhouse (230)

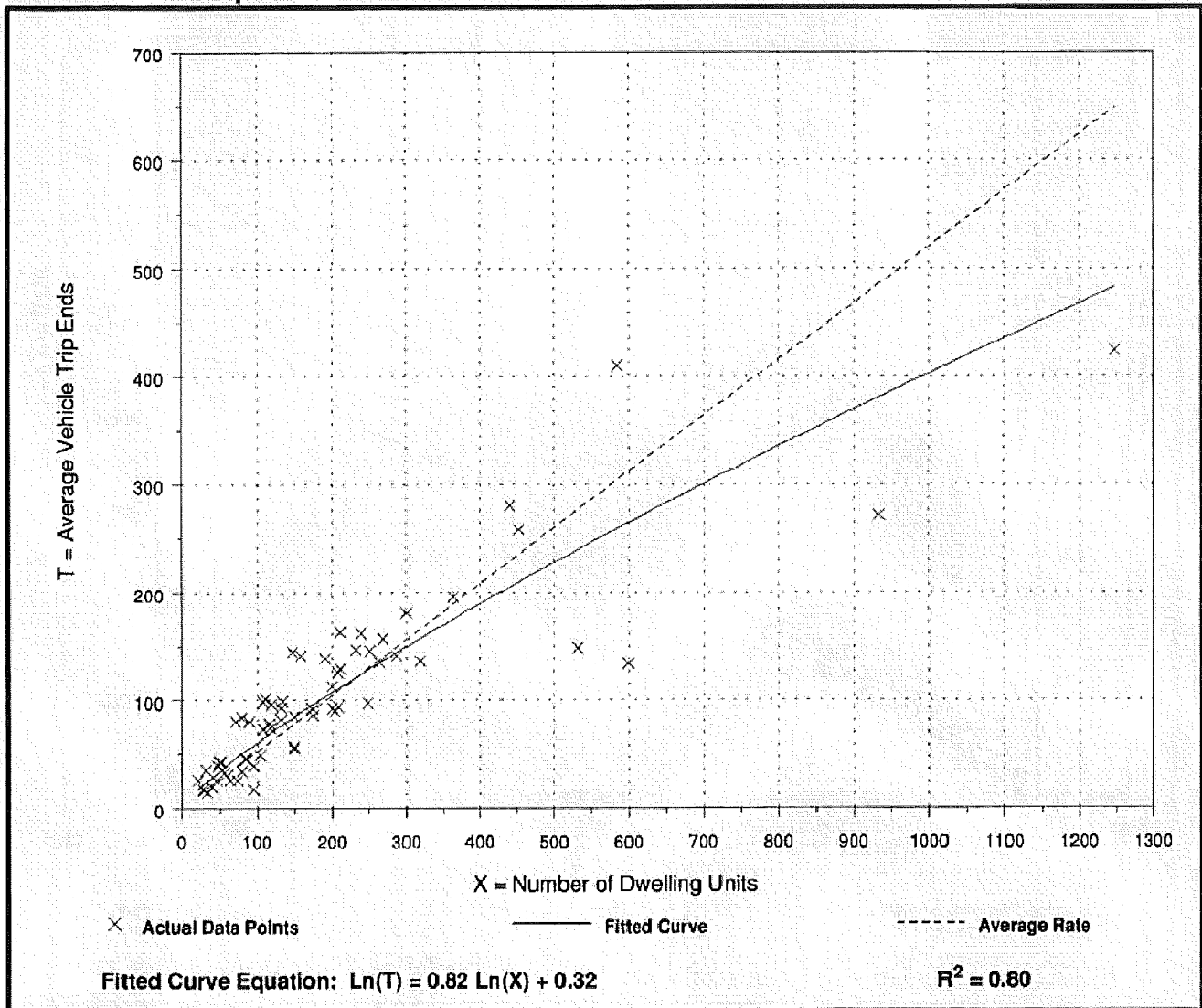
Average Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

Number of Studies: 62
 Avg. Number of Dwelling Units: 205
 Directional Distribution: 67% entering, 33% exiting

Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.52	0.18 - 1.24	0.75

Data Plot and Equation



Assisted Living (254)

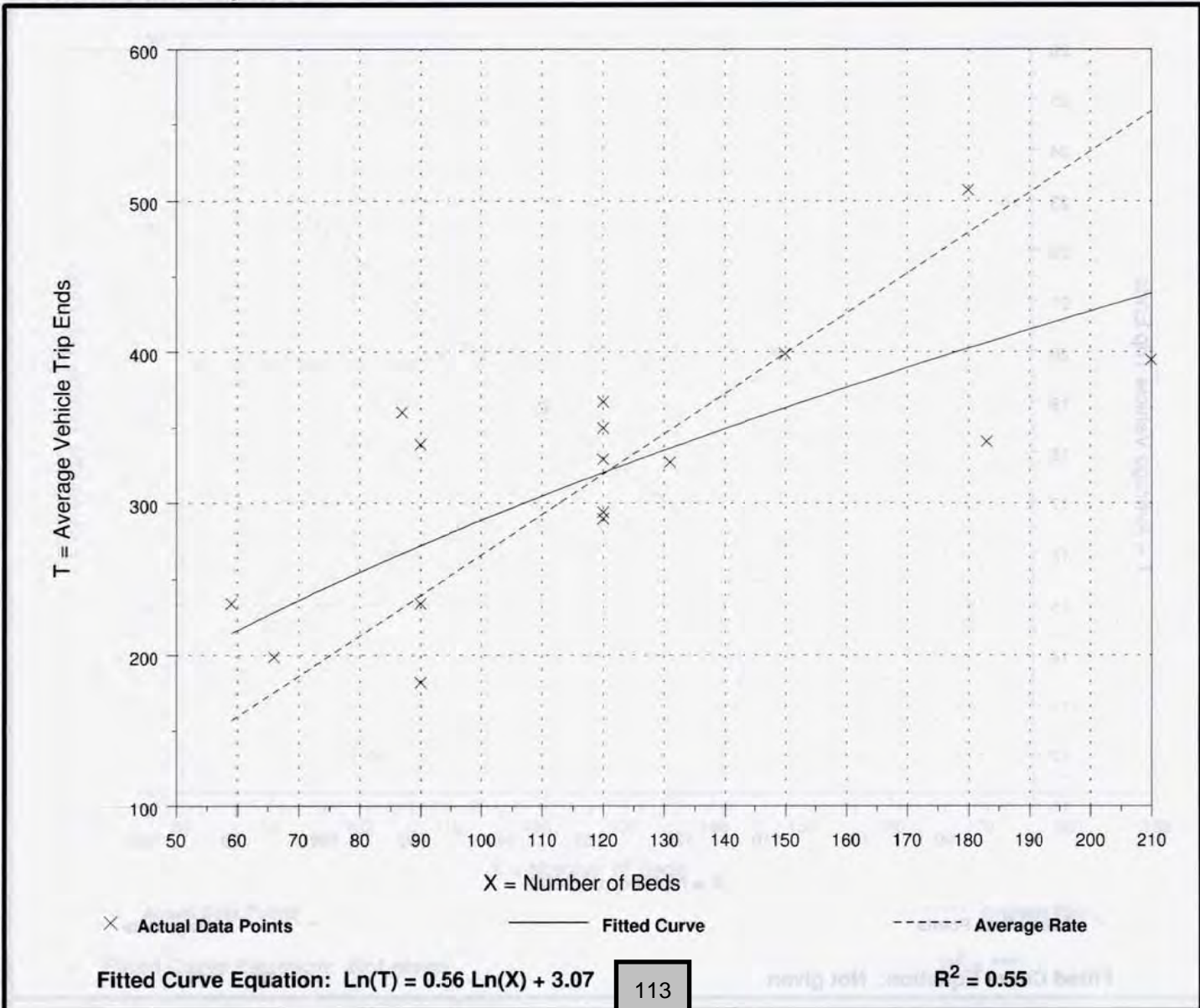
Average Vehicle Trip Ends vs: Beds
On a: Weekday

Number of Studies: 16
Average Number of Beds: 121
Directional Distribution: 50% entering, 50% exiting

Trip Generation per Bed

Average Rate	Range of Rates	Standard Deviation
2.66	1.86 - 4.14	1.74

Data Plot and Equation



Assisted Living (254)

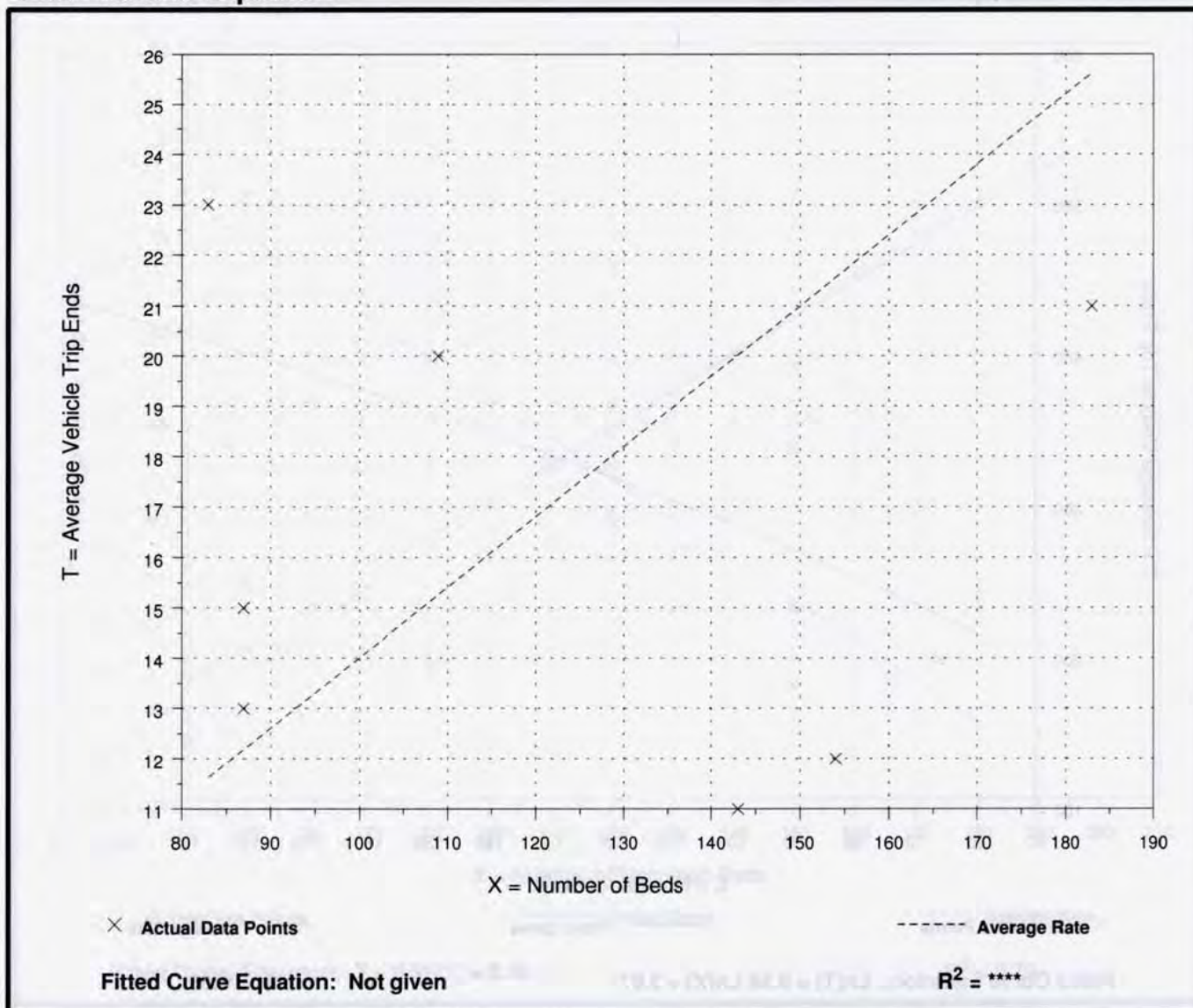
Average Vehicle Trip Ends vs: Beds
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.

Number of Studies: 7
 Average Number of Beds: 121
 Directional Distribution: 65% entering, 35% exiting

Trip Generation per Bed

Average Rate	Range of Rates	Standard Deviation
0.14	0.08 - 0.28	0.37

Data Plot and Equation



Assisted Living (254)

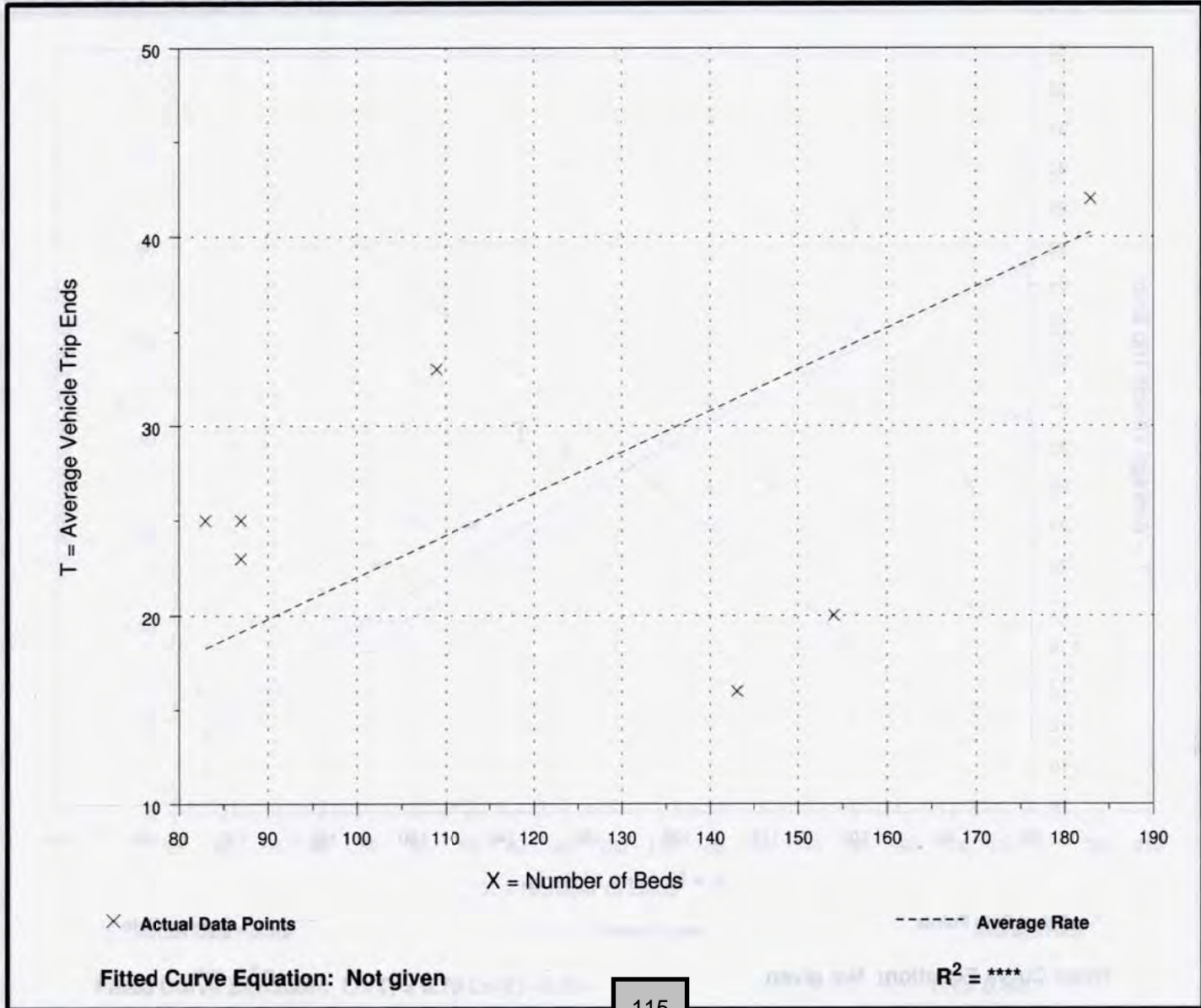
Average Vehicle Trip Ends vs: Beds
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

Number of Studies: 7
 Average Number of Beds: 121
 Directional Distribution: 44% entering, 56% exiting

Trip Generation per Bed

Average Rate	Range of Rates	Standard Deviation
0.22	0.11 - 0.30	0.47

Data Plot and Equation



Hotel (310)

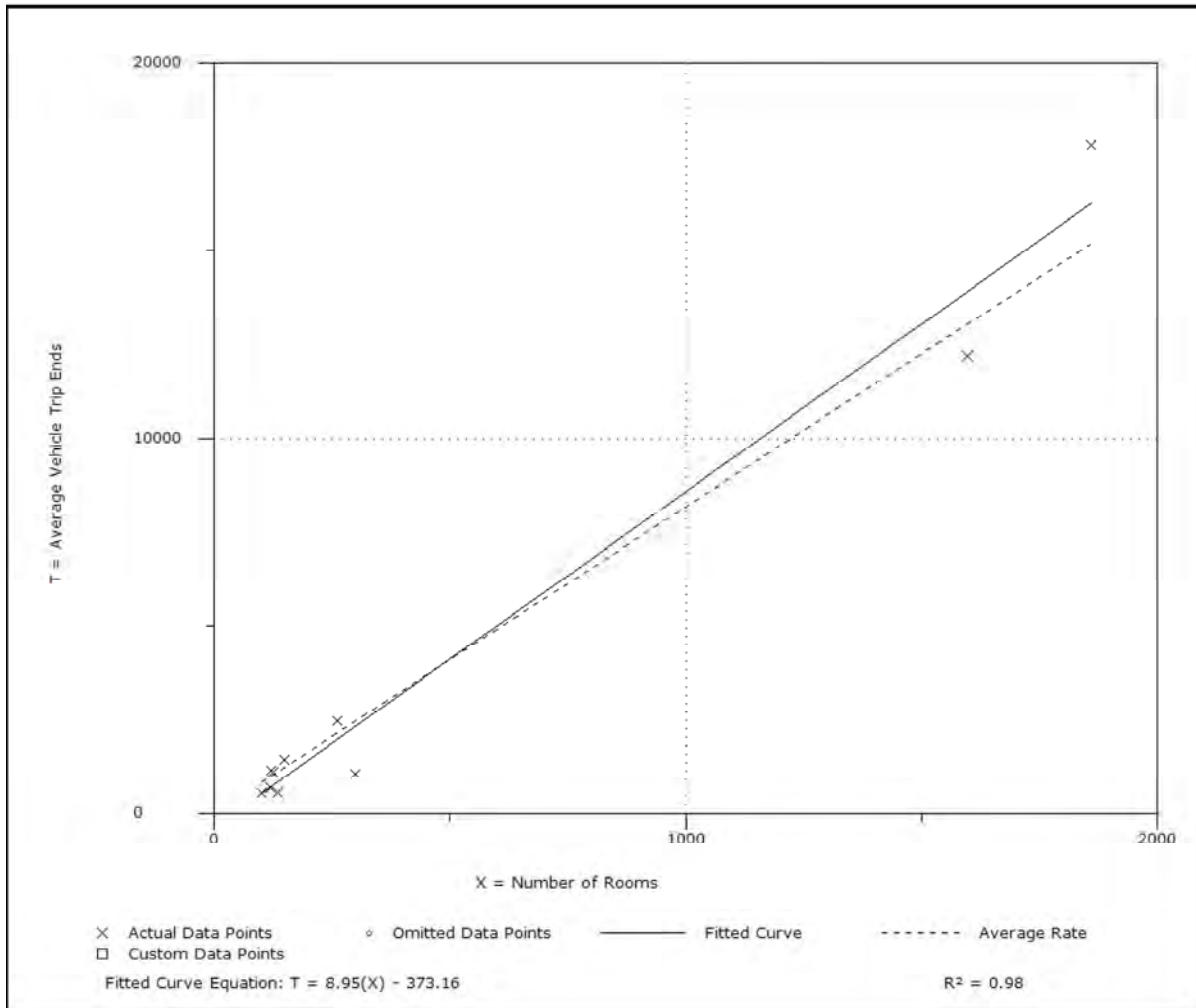
Average Vehicle Trip Ends vs: Rooms
On a: Weekday

Number of Studies: 10
Average Number of Rooms: 476
Directional Distribution: 50% entering, 50% exiting

Trip Generation per Room

Average Rate	Range of Rates	Standard Deviation
8.17	3.47 - 9.58	3.38

Data Plot and Equation



Trip Generation, 9th Edition

Hotel (310)

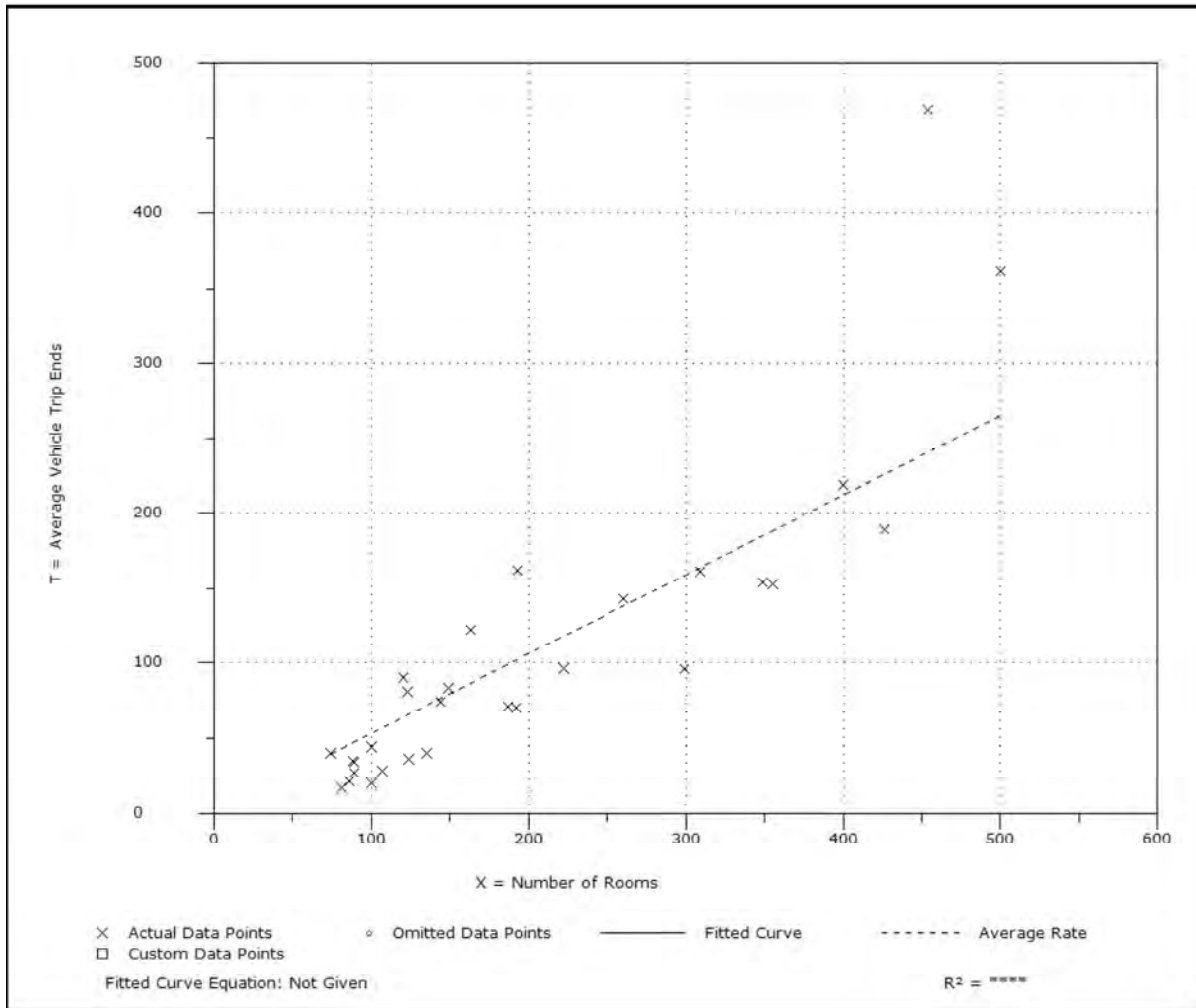
Average Vehicle Trip Ends vs: Rooms
On a: Weekday
Peak Hour of Adjacent Street Traffic
One Hour Between 7 and 9 a.m.

Number of Studies: 29
 Average Number of Rooms: 204
 Directional Distribution: 59% entering, 41% exiting

Trip Generation per Room

Average Rate	Range of Rates	Standard Deviation
0.53	0.20 - 1.03	0.76

Data Plot and Equation



Trip Generation, 9th Edition

Hotel (310)

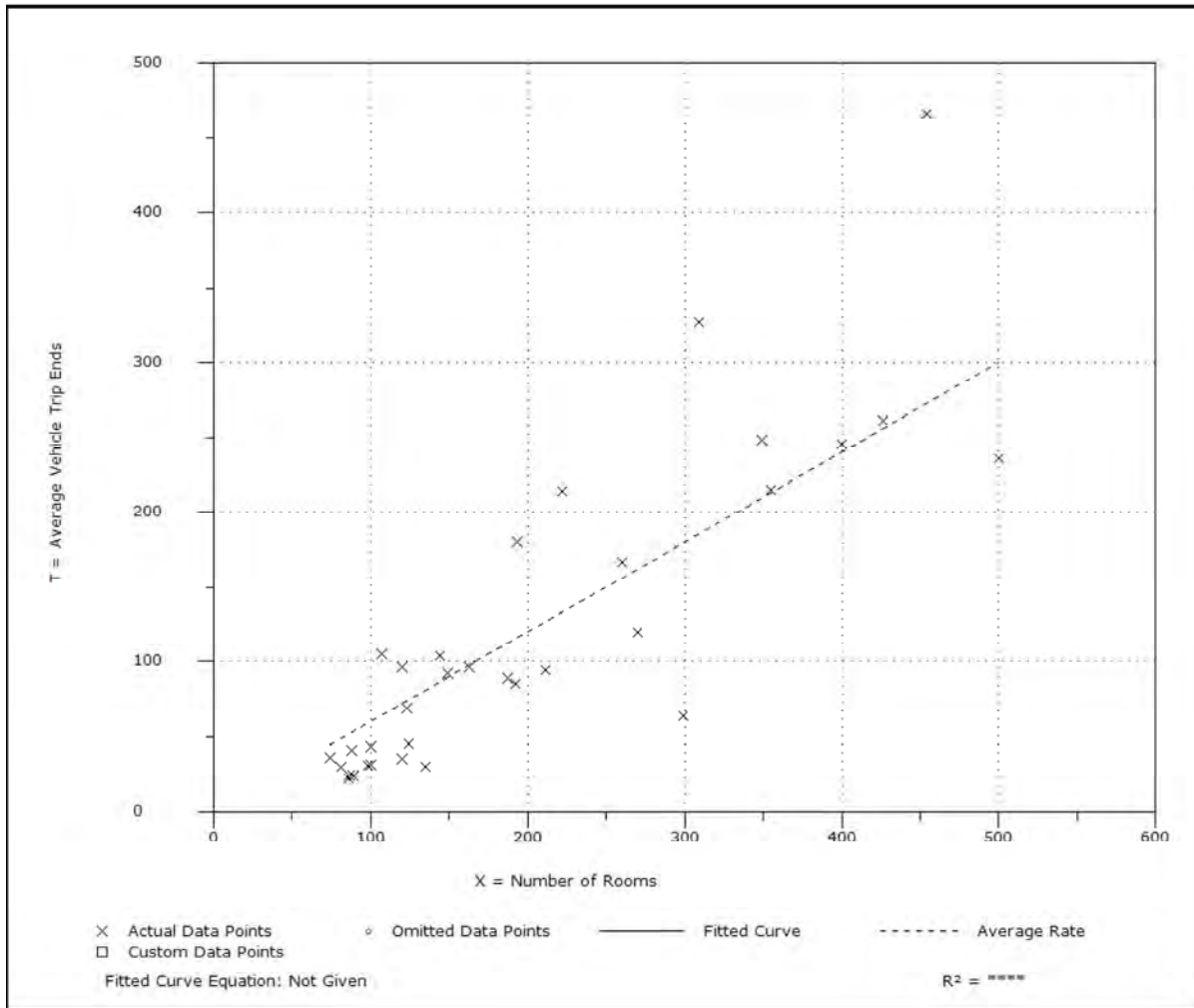
Average Vehicle Trip Ends vs: Rooms
On a: Weekday
Peak Hour of Adjacent Street Traffic
One Hour Between 4 and 6 p.m.

Number of Studies: 33
 Average Number of Rooms: 200
 Directional Distribution: 51% entering, 49% exiting

Trip Generation per Room

Average Rate	Range of Rates	Standard Deviation
0.60	0.21 - 1.06	0.81

Data Plot and Equation



Trip Generation, 9th Edition

Hotel (310)

Average Vehicle Trip Ends vs: Occupied Rooms
On a: Weekday

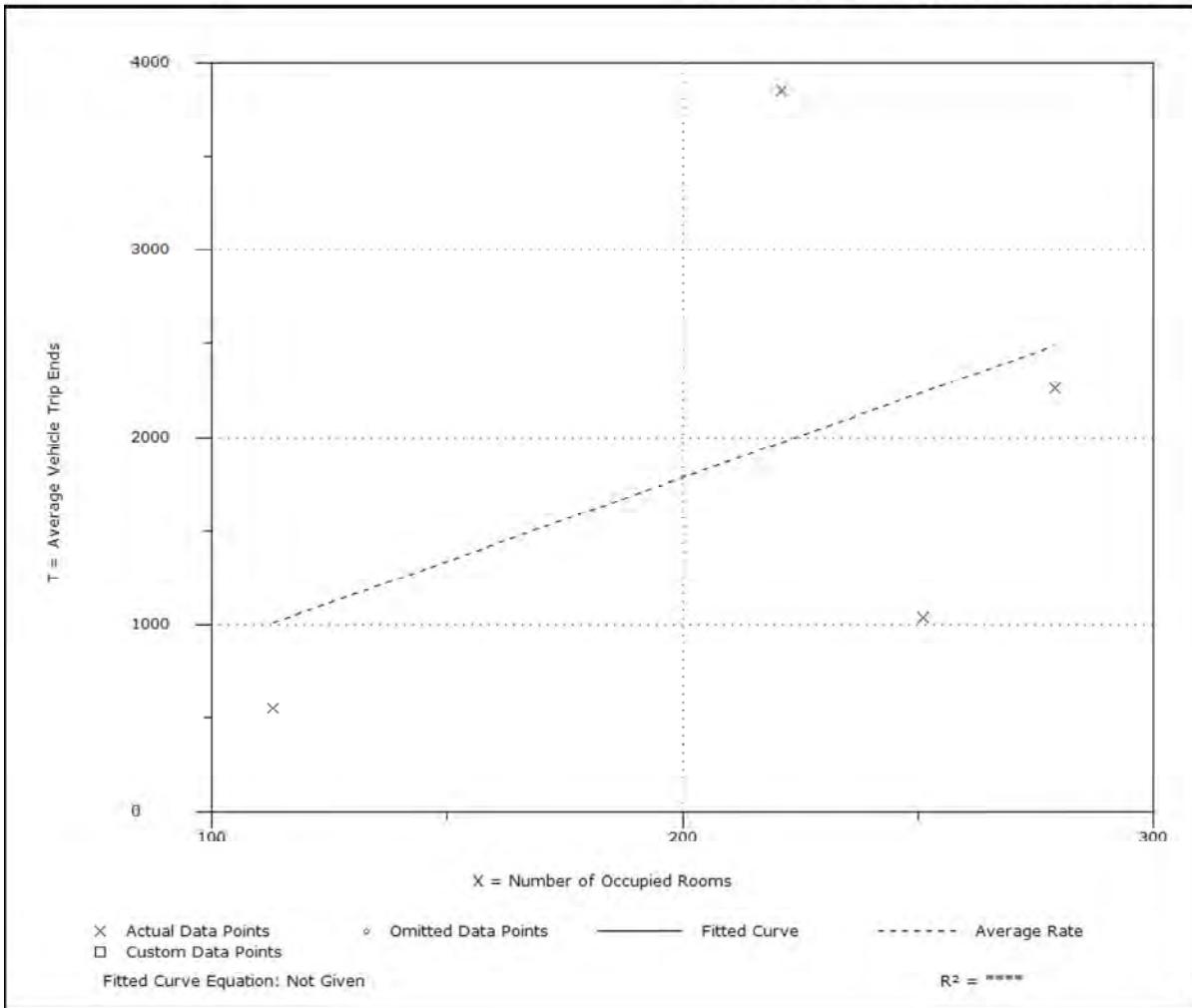
Number of Studies: 4
Average Number of Occupied Rooms: 216
Directional Distribution: 50% entering, 50% exiting

Trip Generation per Occupied Room

Average Rate	Range of Rates	Standard Deviation
8.92	4.14 - 17.44	6.04

Data Plot and Equation

Caution - Use Carefully - Small Sample Size



Trip Generation, 9th Edition

Hotel (310)

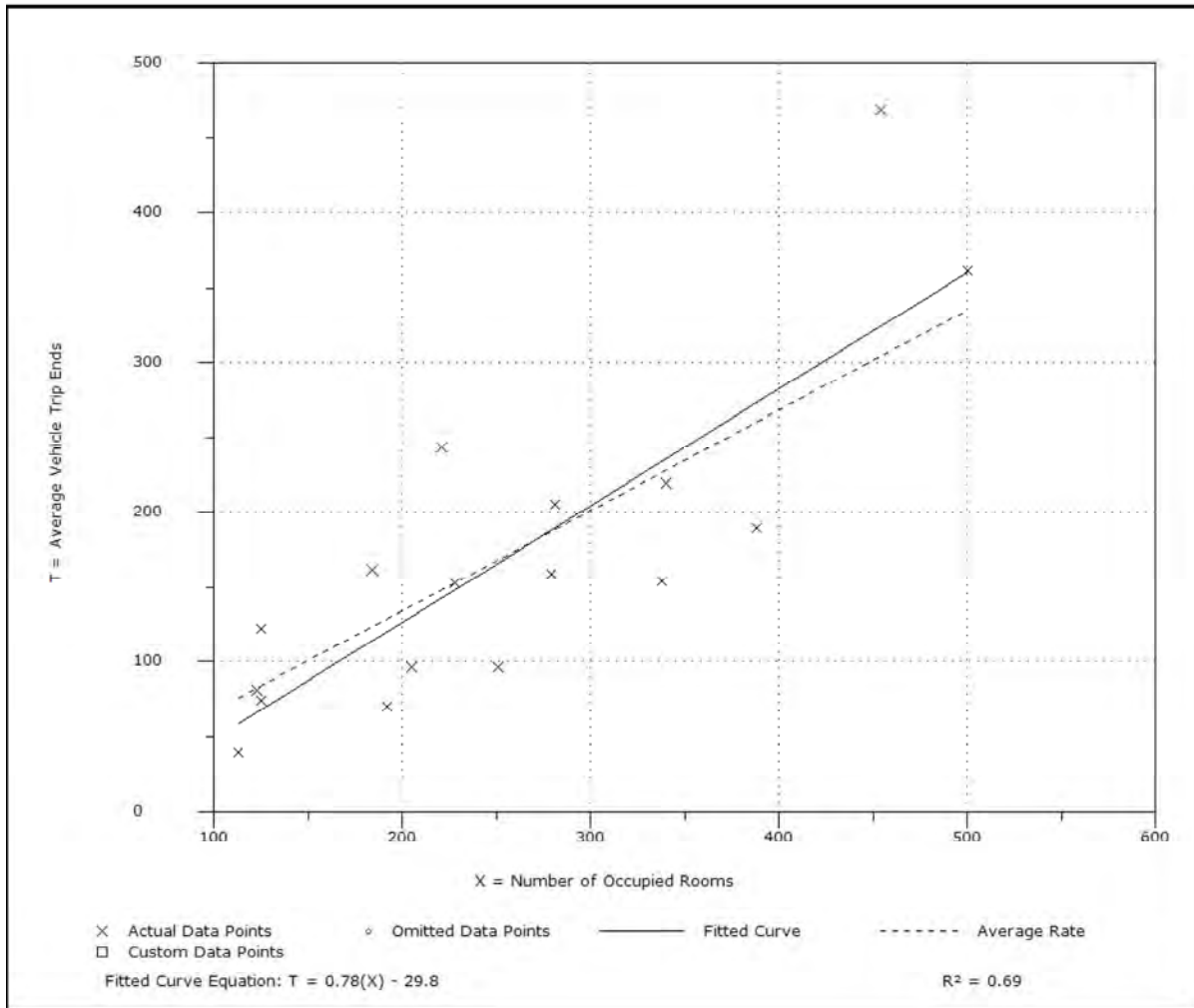
Average Vehicle Trip Ends vs: Occupied Rooms
On a: Weekday
Peak Hour of Adjacent Street Traffic
One Hour Between 7 and 9 a.m.

Number of Studies: 17
 Average Number of Occupied Rooms: 256
 Directional Distribution: 58% entering, 42% exiting

Trip Generation per Occupied Room

Average Rate	Range of Rates	Standard Deviation
0.67	0.35 - 1.10	0.84

Data Plot and Equation



Trip Generation, 9th Edition

Hotel (310)

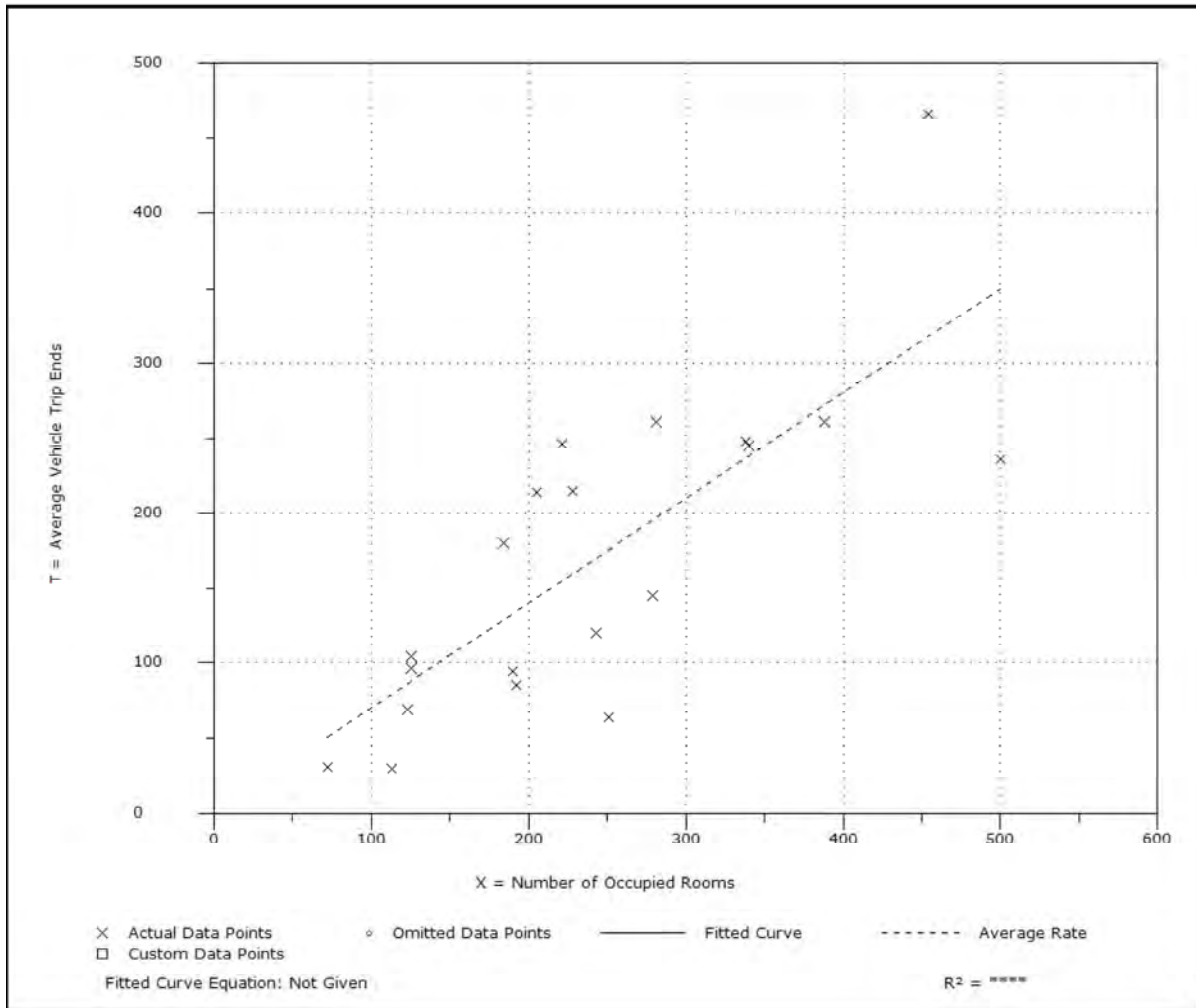
Average Vehicle Trip Ends vs: Occupied Rooms
On a: Weekday
Peak Hour of Adjacent Street Traffic
One Hour Between 4 and 6 p.m.

Number of Studies: 20
 Average Number of Occupied Rooms: 243
 Directional Distribution: 49% entering, 51% exiting

Trip Generation per Occupied Room

Average Rate	Range of Rates	Standard Deviation
0.70	0.25 - 1.11	0.87

Data Plot and Equation



Trip Generation, 9th Edition

Golf Course (430)

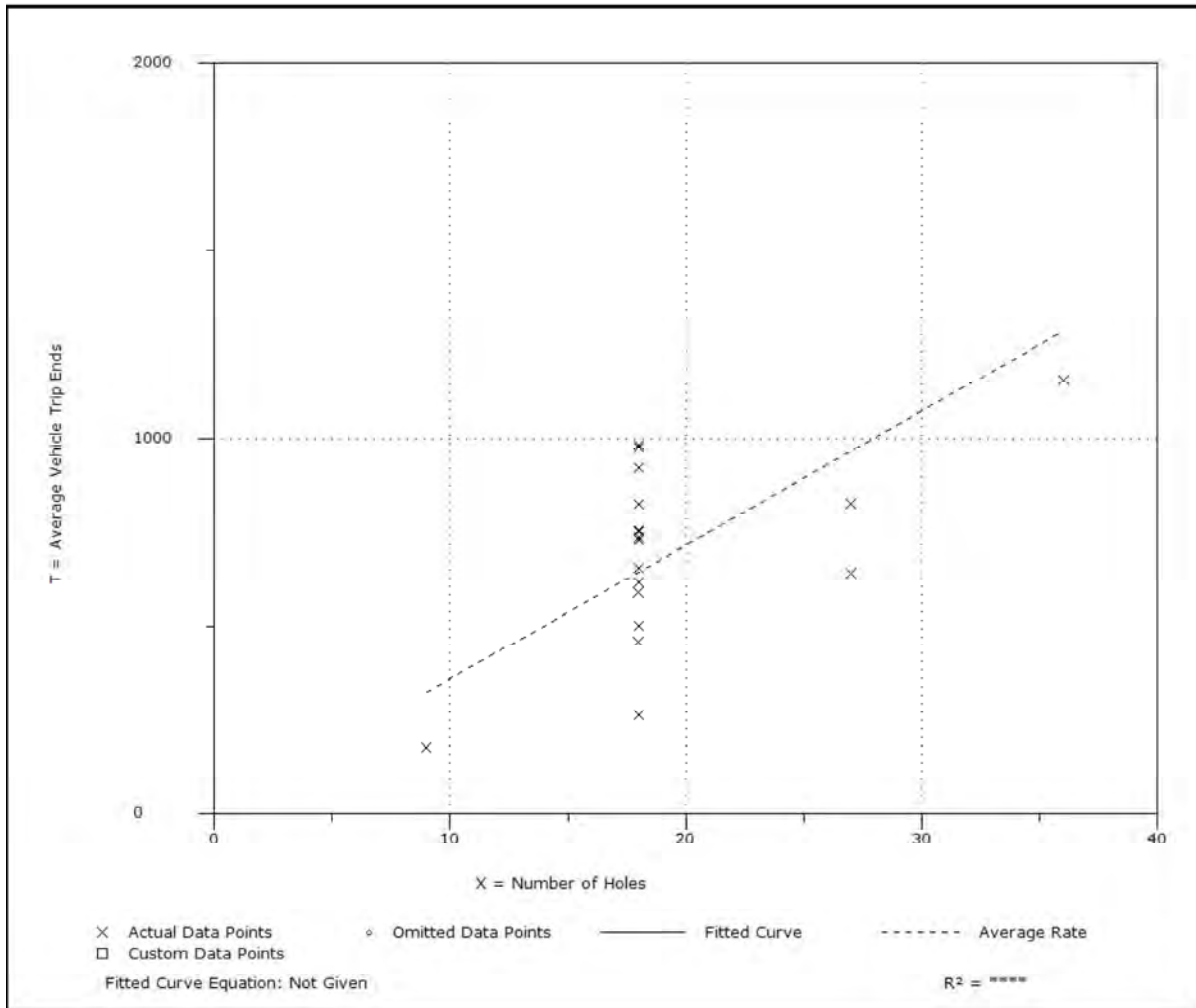
Average Vehicle Trip Ends vs: Holes
On a: Weekday

Number of Studies: 18
Average Number of Holes: 20
Directional Distribution: 50% entering, 50% exiting

Trip Generation per Hole

Average Rate	Range of Rates	Standard Deviation
35.74	14.50 - 54.44	12.12

Data Plot and Equation



Trip Generation, 9th Edition

Golf Course (430)

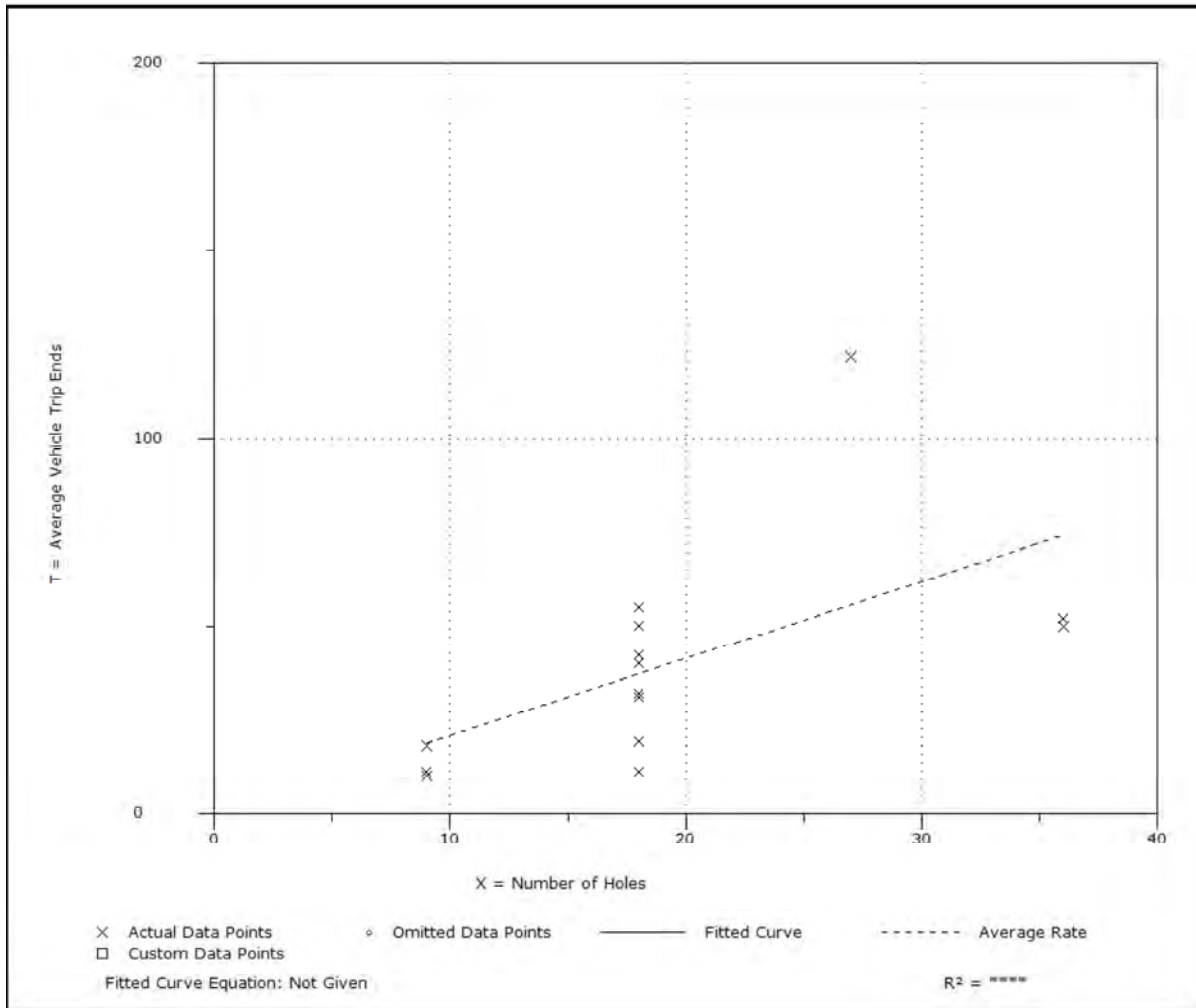
Average Vehicle Trip Ends vs: Holes
On a: Weekday
Peak Hour of Adjacent Street Traffic
One Hour Between 7 and 9 a.m.

Number of Studies: 15
 Average Number of Holes: 19
 Directional Distribution: 79% entering, 21% exiting

Trip Generation per Hole

Average Rate	Range of Rates	Standard Deviation
2.06	0.61 - 4.52	1.74

Data Plot and Equation



Trip Generation, 9th Edition

Golf Course (430)

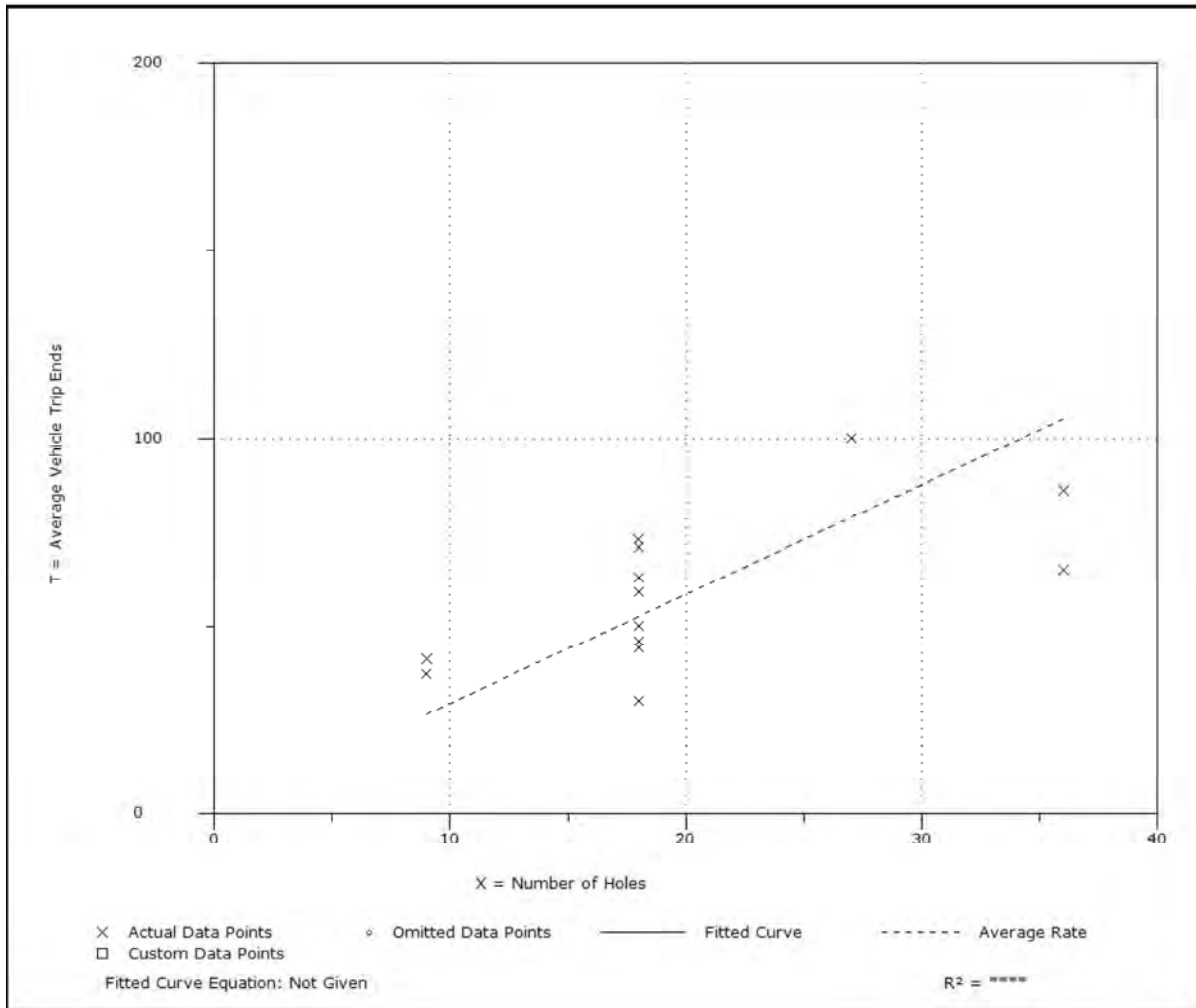
Average Vehicle Trip Ends vs: Holes
On a: Weekday
Peak Hour of Adjacent Street Traffic
One Hour Between 4 and 6 p.m.

Number of Studies: 14
 Average Number of Holes: 20
 Directional Distribution: 51% entering, 49% exiting

Trip Generation per Hole

Average Rate	Range of Rates	Standard Deviation
2.92	1.67 - 4.56	1.86

Data Plot and Equation



Trip Generation, 9th Edition

Water Slide Park (482)

Vehicle Trip Ends vs: Parking Spaces
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 2
Avg. Num. of Parking Spaces: 900
Directional Distribution: 50% entering, 50% exiting

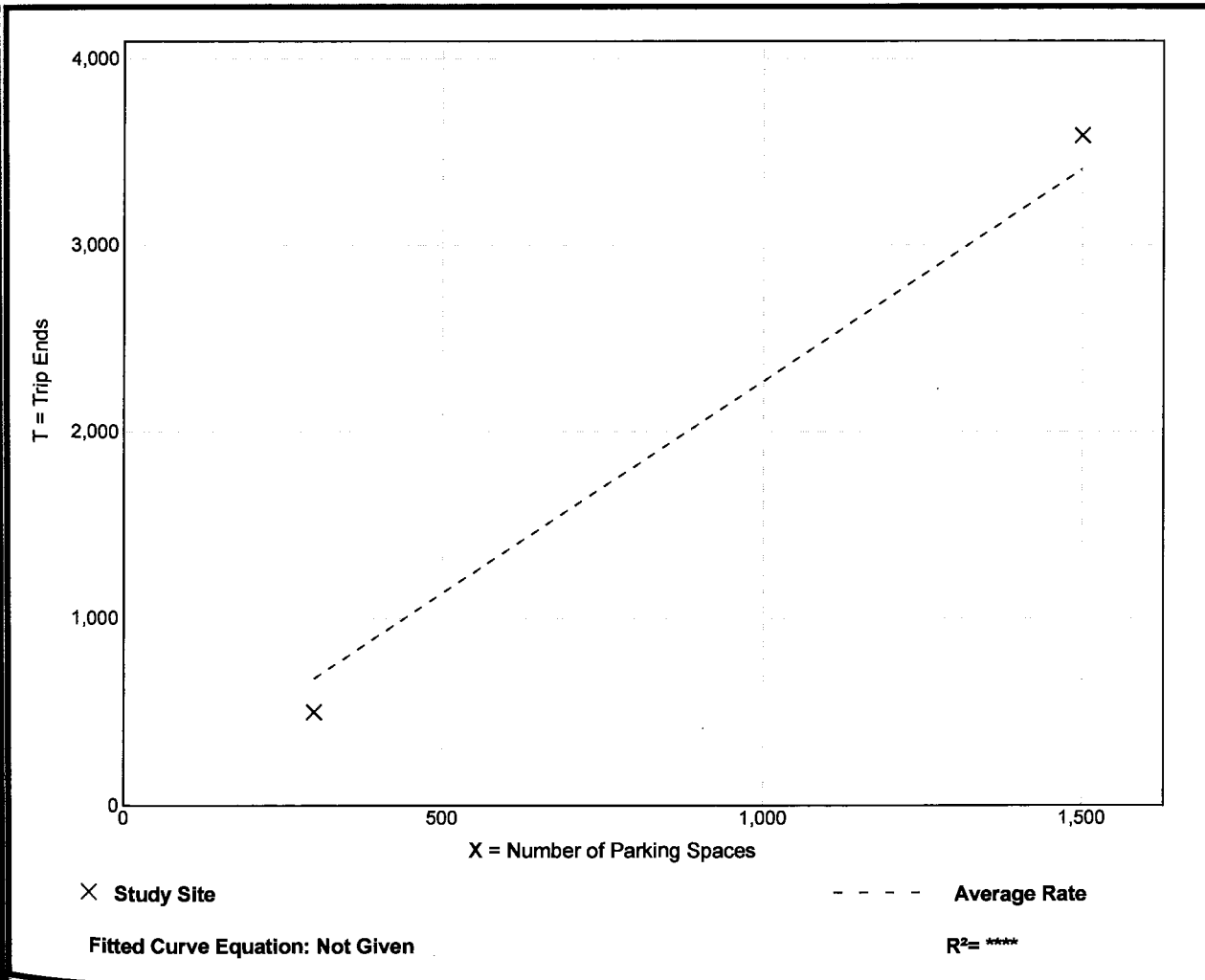
501-590

Vehicle Trip Generation per Parking Space

Average Rate	Range of Rates	Standard Deviation
2.27	1.67 - 2.39	*

Data Plot and Equation

Caution – Small Sample Size



Water Slide Park (482)

Vehicle Trip Ends vs: Parking Spaces
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.

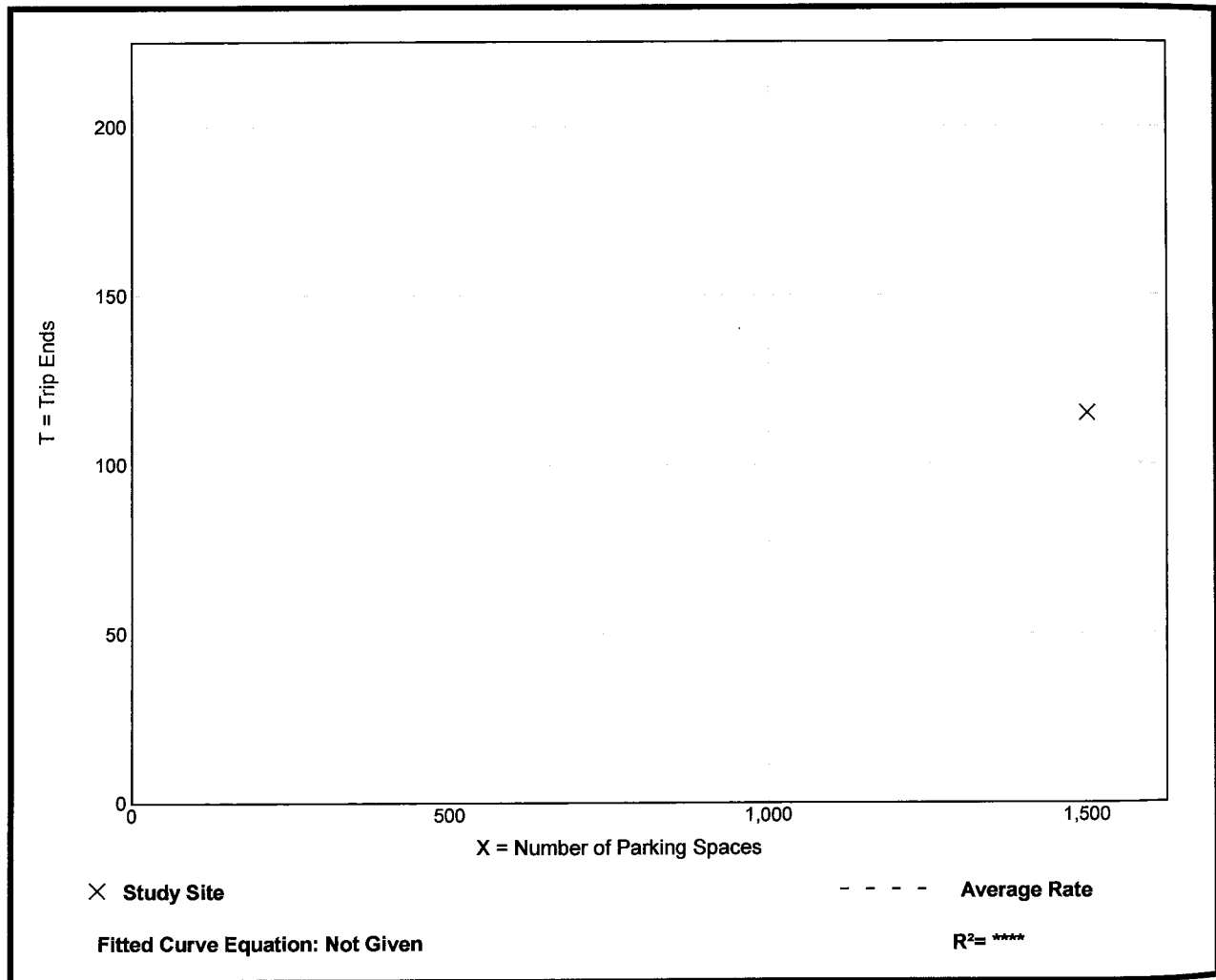
Setting/Location: General Urban/Suburban
 Number of Studies: 1
 Avg. Num. of Parking Spaces: 1500
 Directional Distribution: 70% entering, 30% exiting

Vehicle Trip Generation per Parking Space

Average Rate	Range of Rates	Standard Deviation
0.08	0.08 - 0.08	*

Data Plot and Equation

Caution – Small Sample Size



Water Slide Park (482)

501-590

Vehicle Trip Ends vs: Parking Spaces
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: 1

Avg. Num. of Parking Spaces: 1500

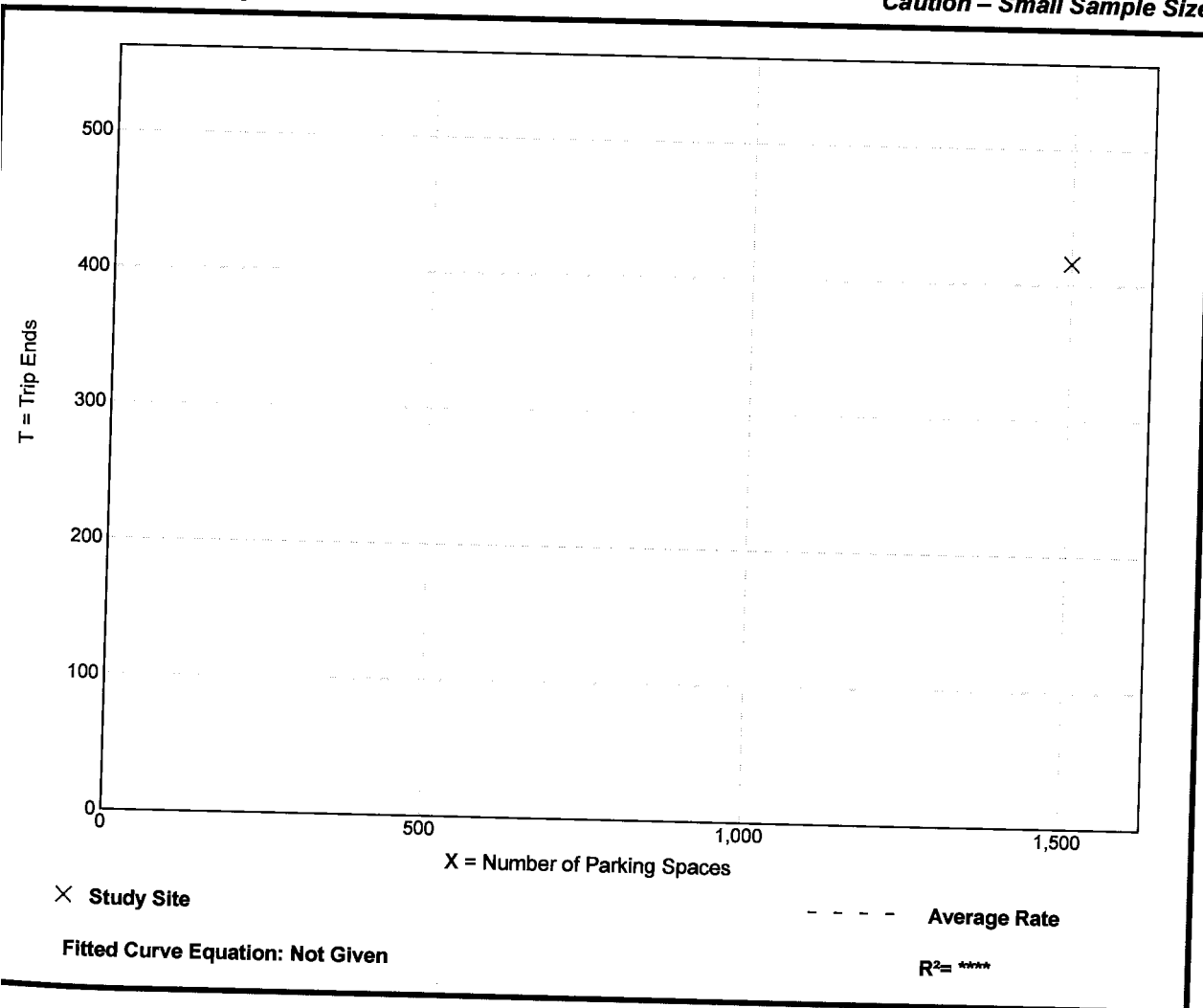
Directional Distribution: 21% entering, 79% exiting

Vehicle Trip Generation per Parking Space

Average Rate	Range of Rates	Standard Deviation
0.28	0.28 - 0.28	*

Data Plot and Equation

Caution – Small Sample Size



Land Use: 495

Recreational Community Center

Description

Recreational community centers are stand-alone public facilities similar to and including YMCAs. These facilities often include classes and clubs for adults and children; a day care or nursery school; meeting rooms; swimming pools and whirlpools; saunas; tennis, racquetball, handball, basketball and volleyball courts; outdoor athletic fields/courts; exercise classes; weightlifting and gymnastics equipment; locker rooms; and a restaurant or snack bar. Public access is typically allowed, but a fee may be charged. Racquet/tennis club (Land Use 491), health/fitness club (Land Use 492) and athletic club (Land Use 493) are related land uses.

Additional Data

One surveyed site recorded significant pedestrian trips.

The sites were surveyed in the 1990s and 2000s throughout the United States.

Source Numbers

281, 410, 443, 571, 618, 705, 719

Recreational Community Center (495)

**Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday**

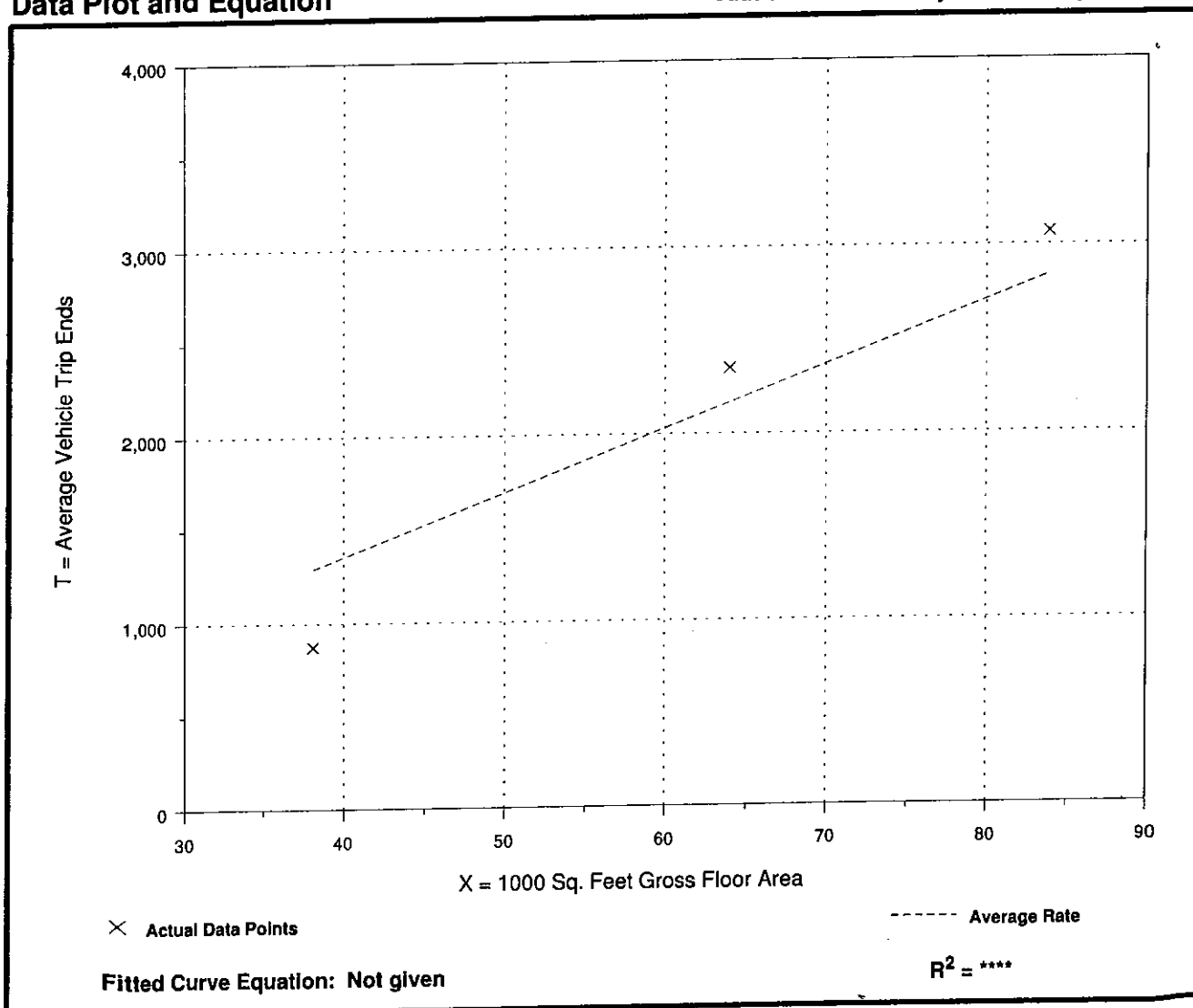
Number of Studies: 3
Average 1000 Sq. Feet GFA: 62
Directional Distribution: 50% entering, 50% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
33.82	22.88 - 36.71	8.03

Data Plot and Equation

Caution - Use Carefully - Small Sample Size



Recreational Community Center (495)

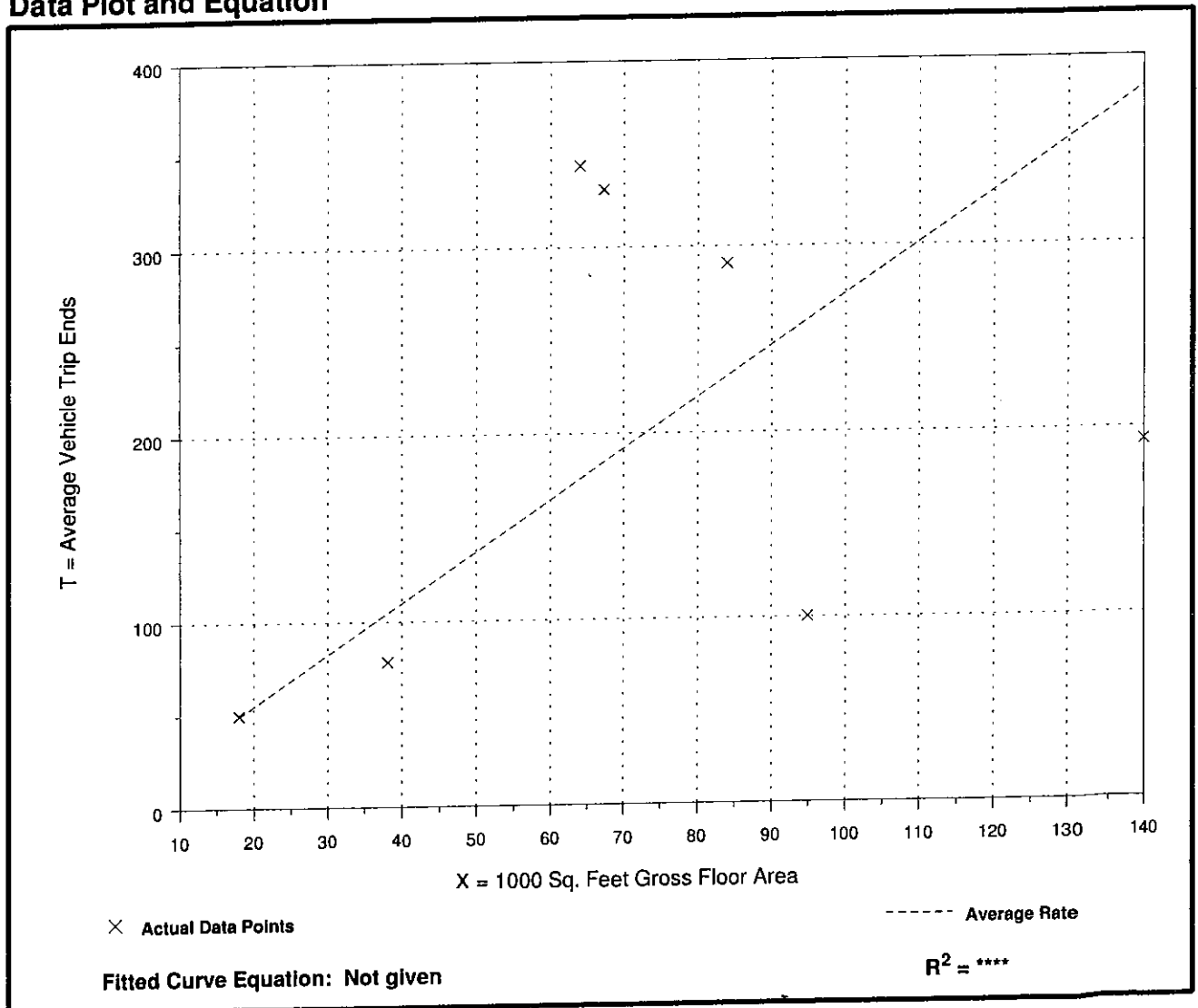
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

Number of Studies: 7
 Average 1000 Sq. Feet GFA: 72
 Directional Distribution: 49% entering, 51% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
2.74	1.05 - 5.37	2.32

Data Plot and Equation



Private School (K-12) (536)

Average Vehicle Trip Ends vs: Students
On a: Weekday

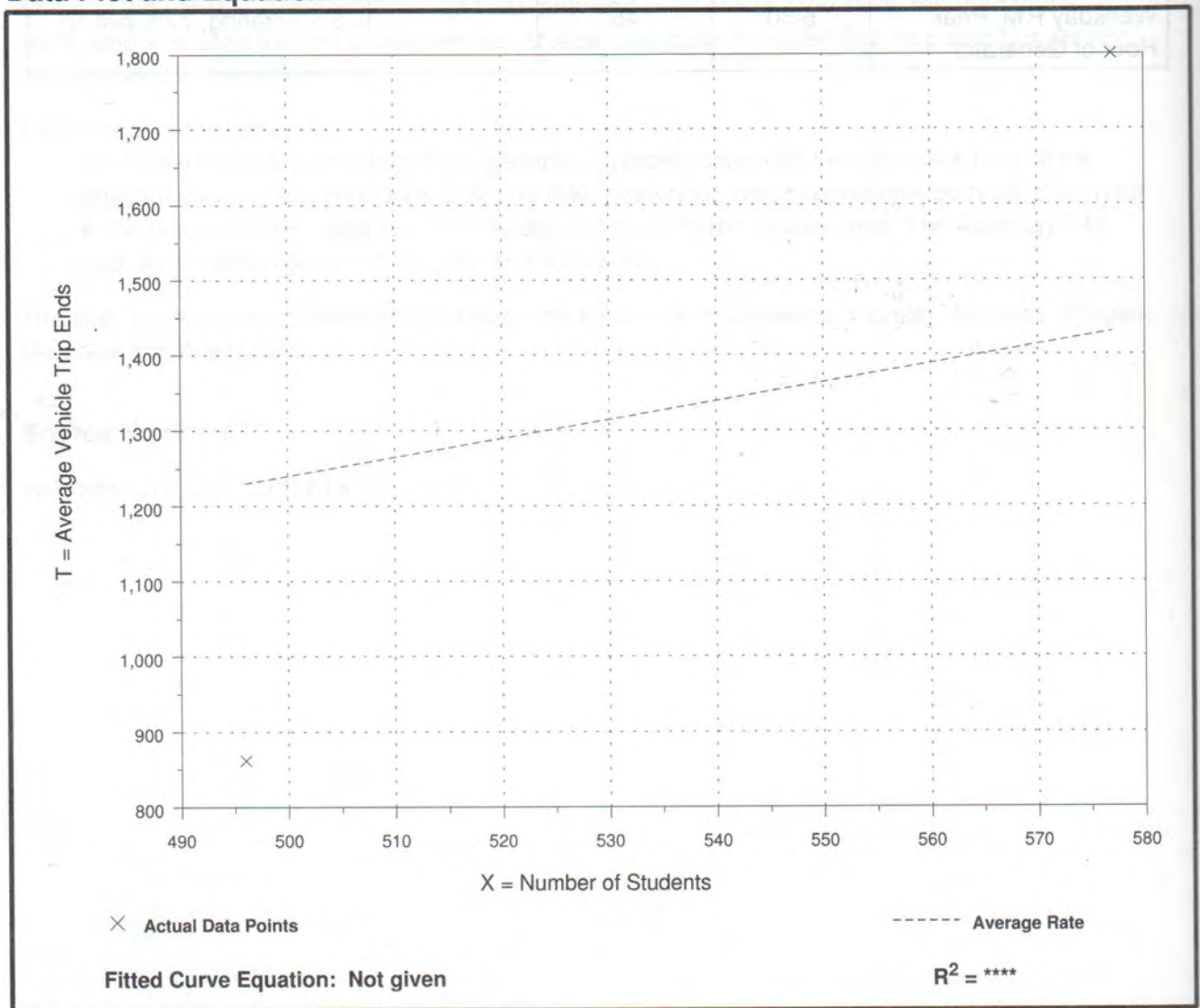
Number of Studies: 2
Average Number of Students: 537
Directional Distribution: 50% entering, 50% exiting

Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
2.48	1.74 - 3.12	*

Data Plot and Equation

Caution - Use Carefully - Small Sample Size



Private School (K-12) (536)

Average Vehicle Trip Ends vs: Students
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

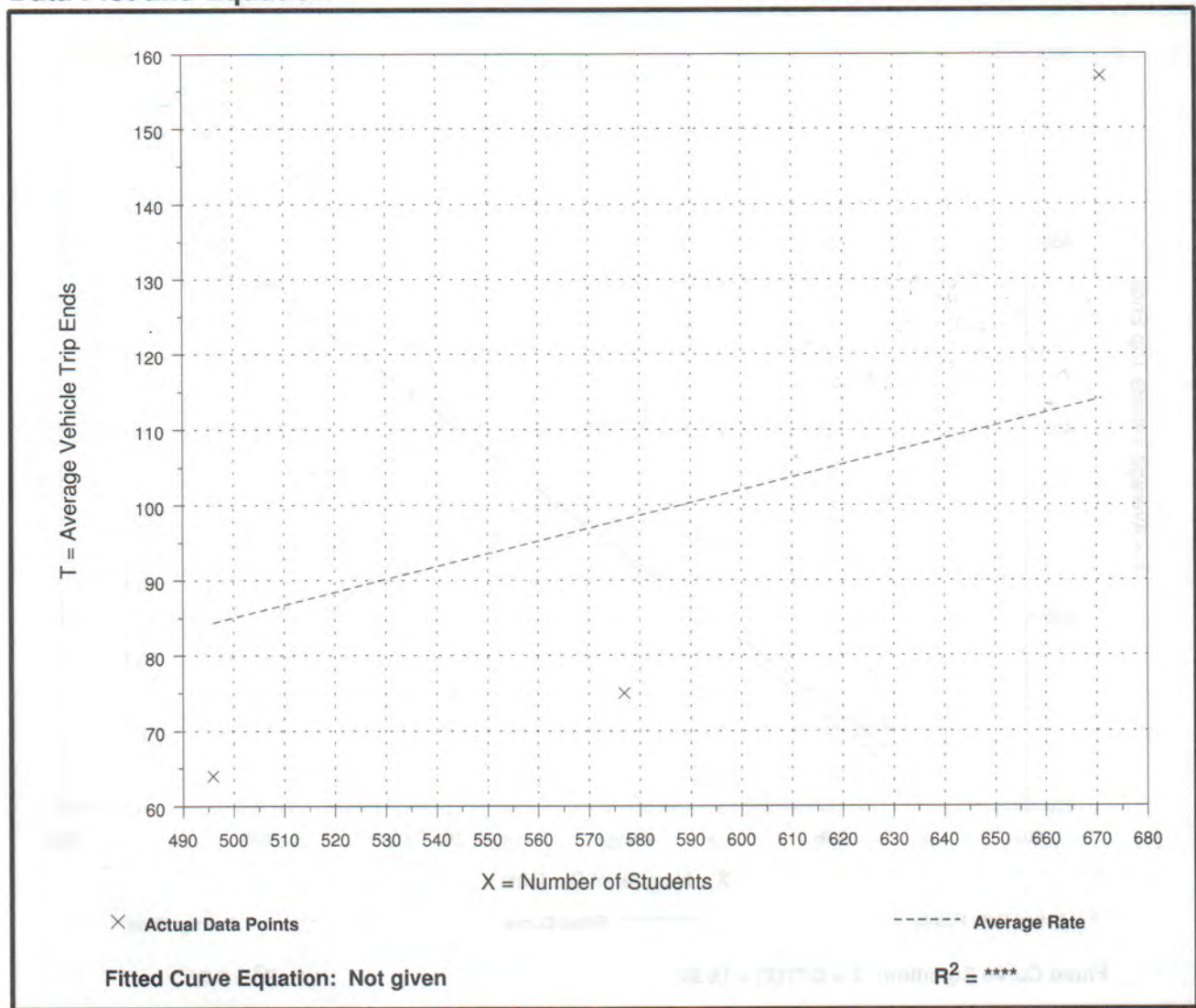
Number of Studies: 3
 Average Number of Students: 581
 Directional Distribution: 43% entering, 57% exiting

Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.17	0.13 - 0.23	0.41

Data Plot and Equation

Caution - Use Carefully - Small Sample Size



Private School (K-12) (536)

Average Vehicle Trip Ends vs: Students
On a: Weekday

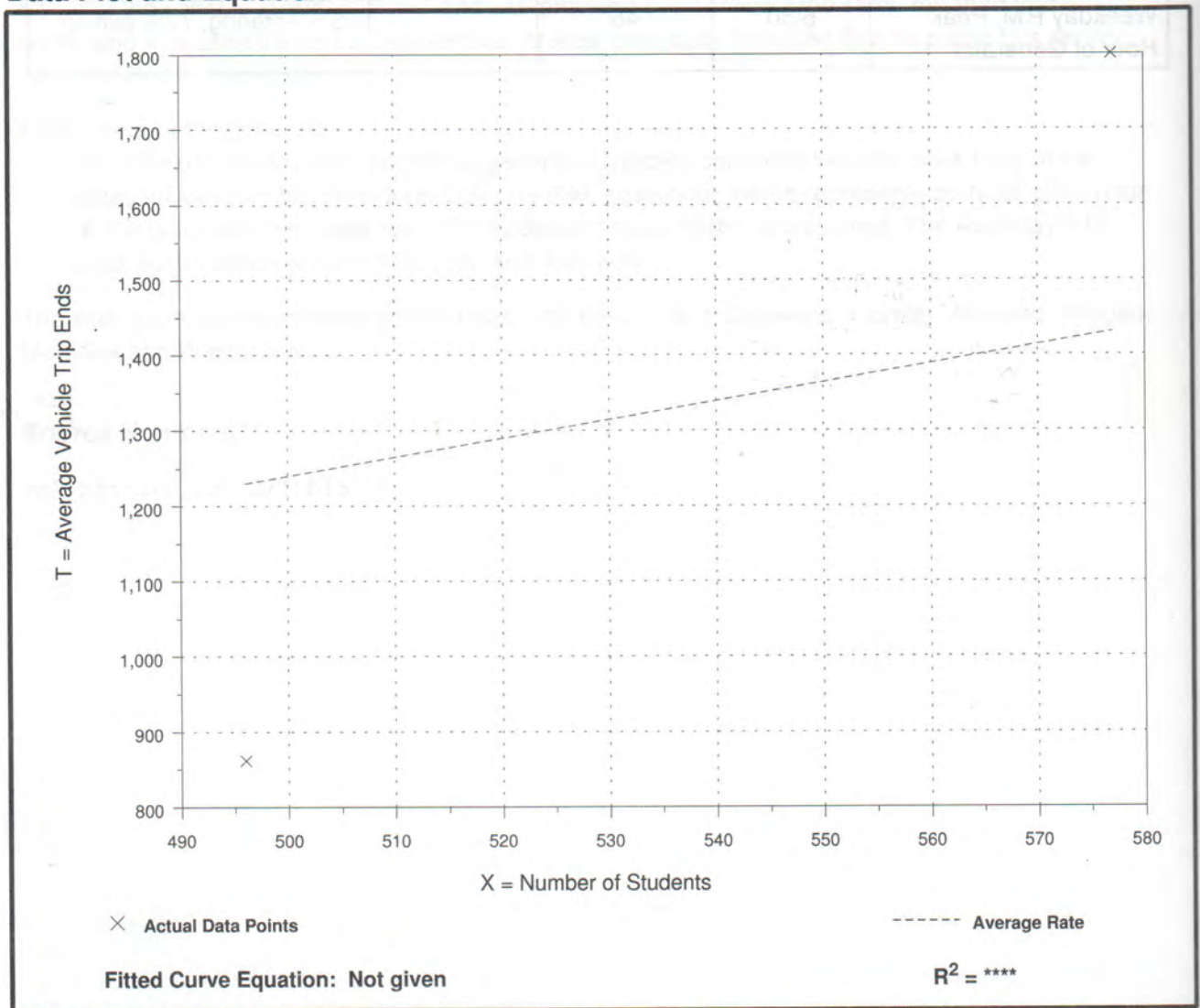
Number of Studies: 2
Average Number of Students: 537
Directional Distribution: 50% entering, 50% exiting

Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
2.48	1.74 - 3.12	*

Data Plot and Equation

Caution - Use Carefully - Small Sample Size



Private School (K-12) (536)

Average Vehicle Trip Ends vs: Students
On a: Weekday,
A.M. Peak Hour

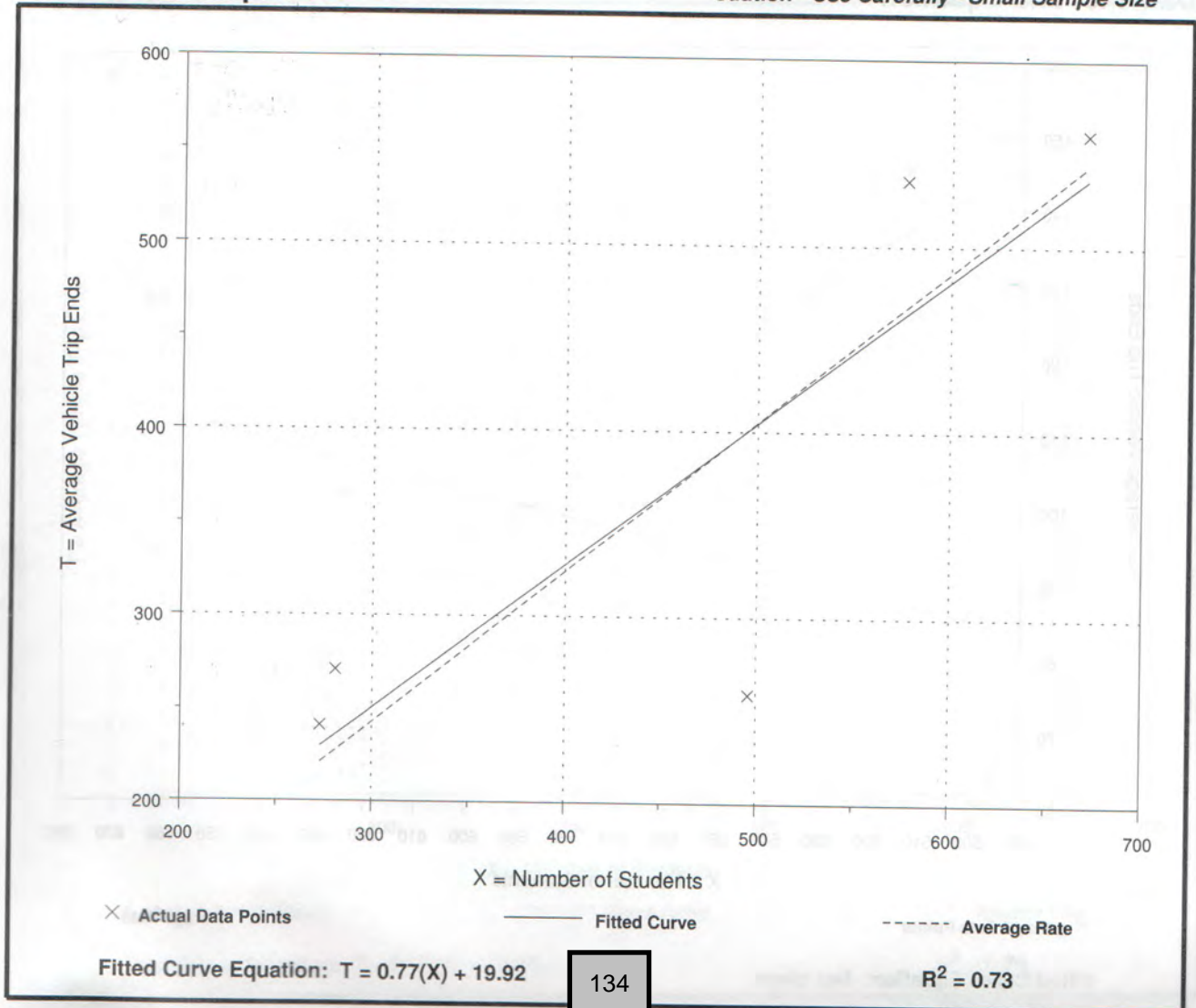
Number of Studies: 5
 Average Number of Students: 460
 Directional Distribution: 61% entering, 39% exiting

Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.81	0.52 - 0.96	0.91

Data Plot and Equation

Caution - Use Carefully - Small Sample Size



Private School (K-12) (536)

Average Vehicle Trip Ends vs: Students
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

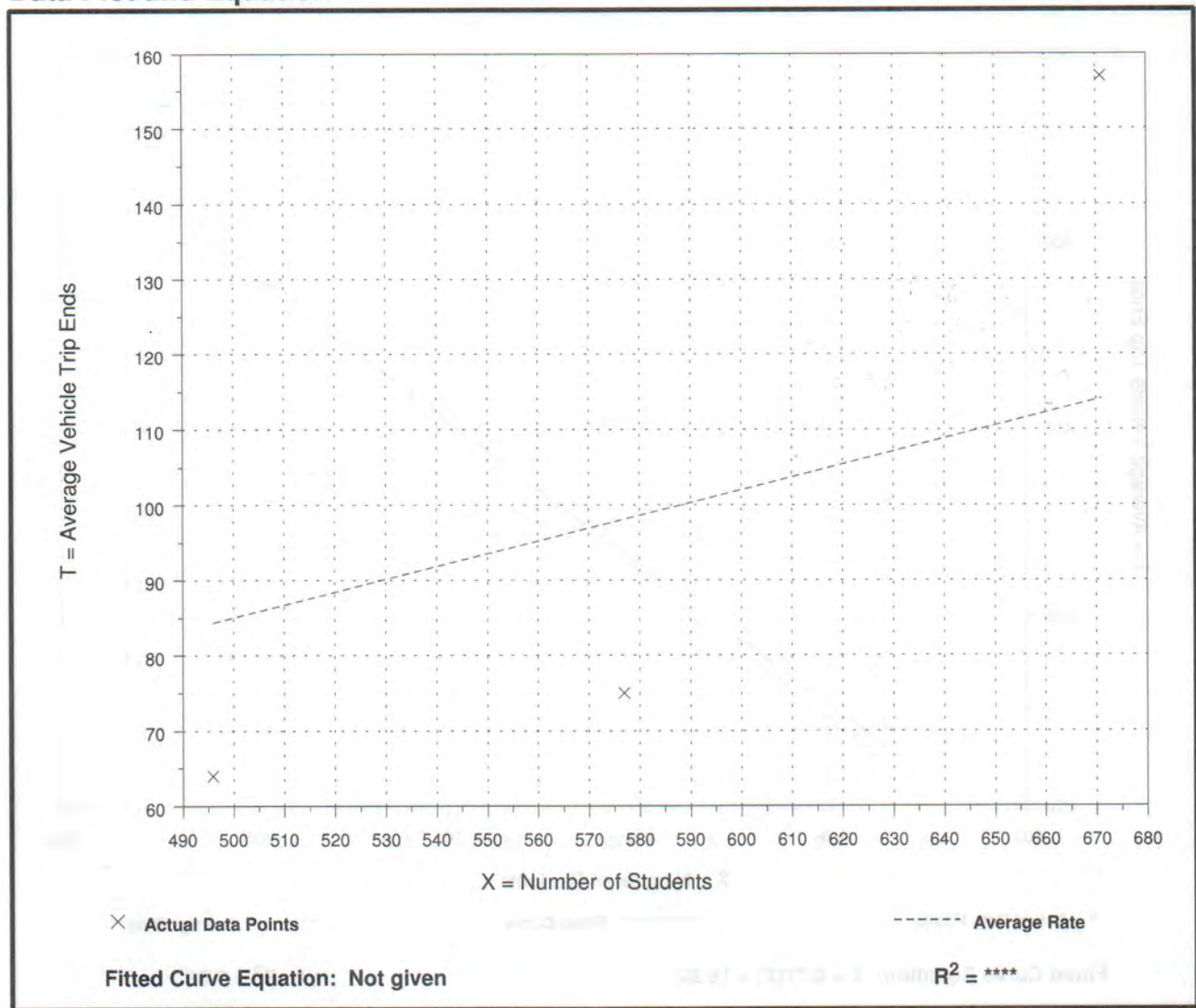
Number of Studies: 3
 Average Number of Students: 581
 Directional Distribution: 43% entering, 57% exiting

Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.17	0.13 - 0.23	0.41

Data Plot and Equation

Caution - Use Carefully - Small Sample Size



Day Care Center (565)

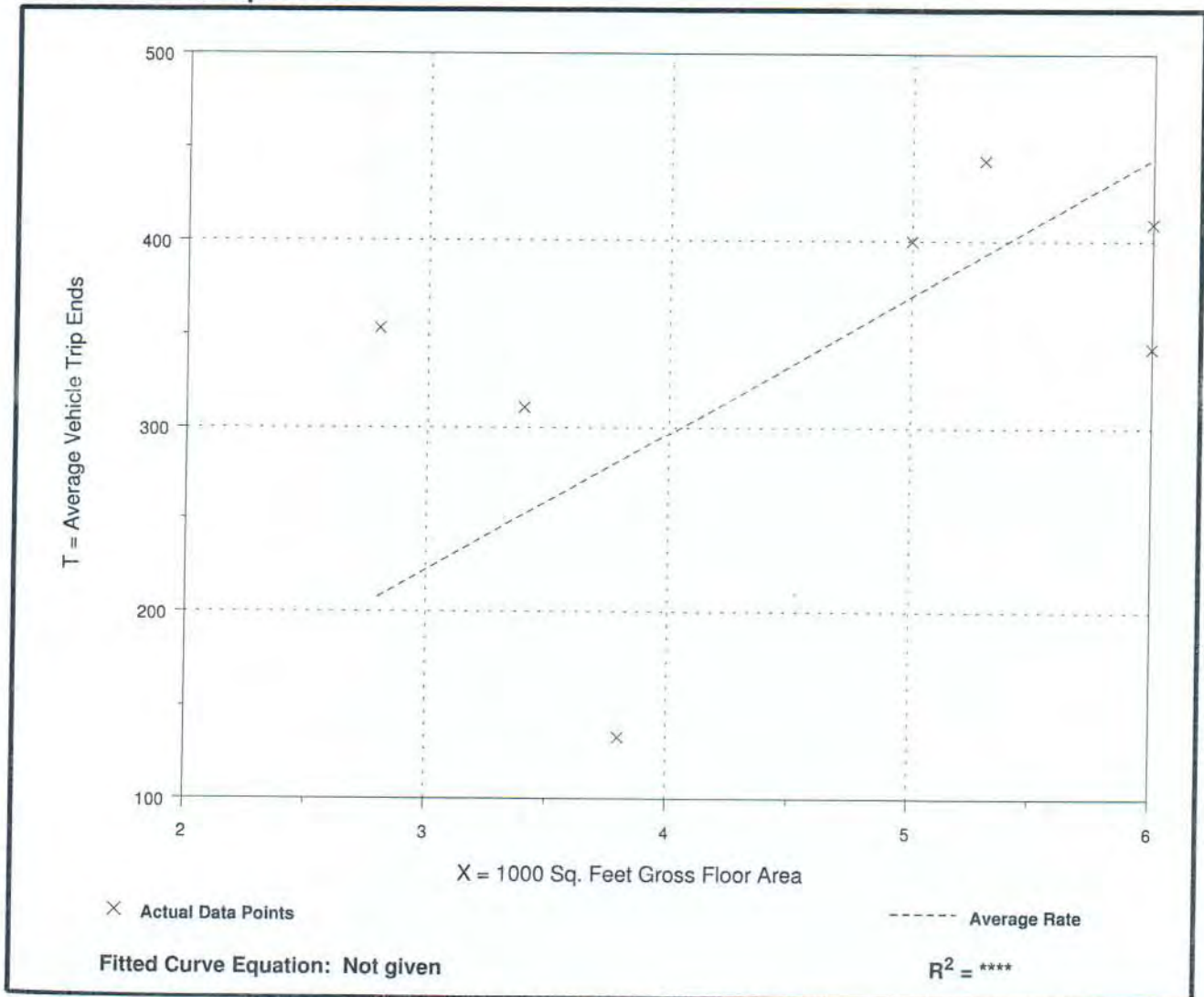
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: **Weekday**

Number of Studies: 7
Average 1000 Sq. Feet GFA: 5
Directional Distribution: 50% entering, 50% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
74.06	35.00 - 126.07	24.53

Data Plot and Equation



Day Care Center (565)

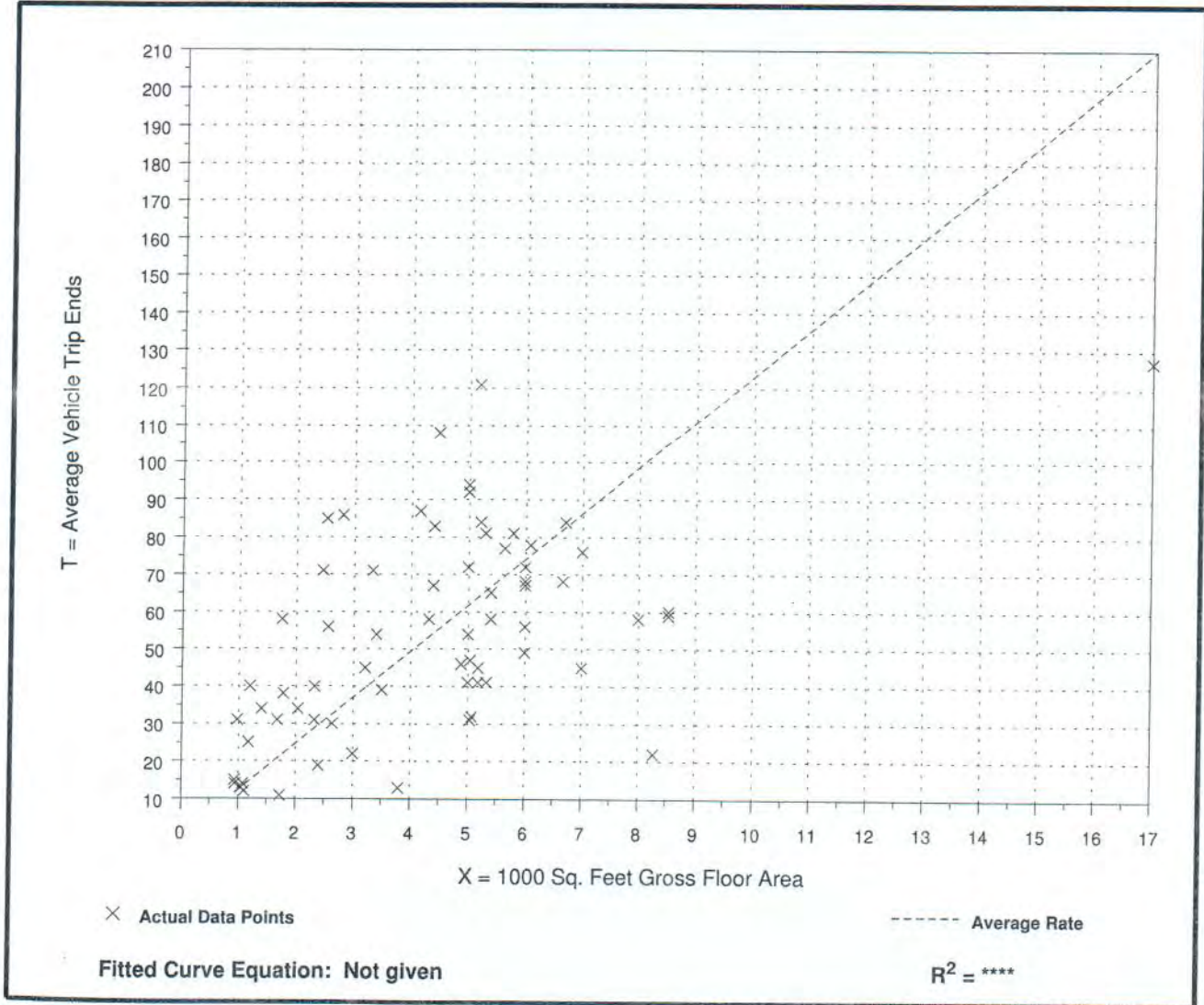
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

Number of Studies: 68
 Average 1000 Sq. Feet GFA: 4
 Directional Distribution: 47% entering, 53% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
12.34	2.66 - 33.66	6.93

Data Plot and Equation



Day Care Center (565)

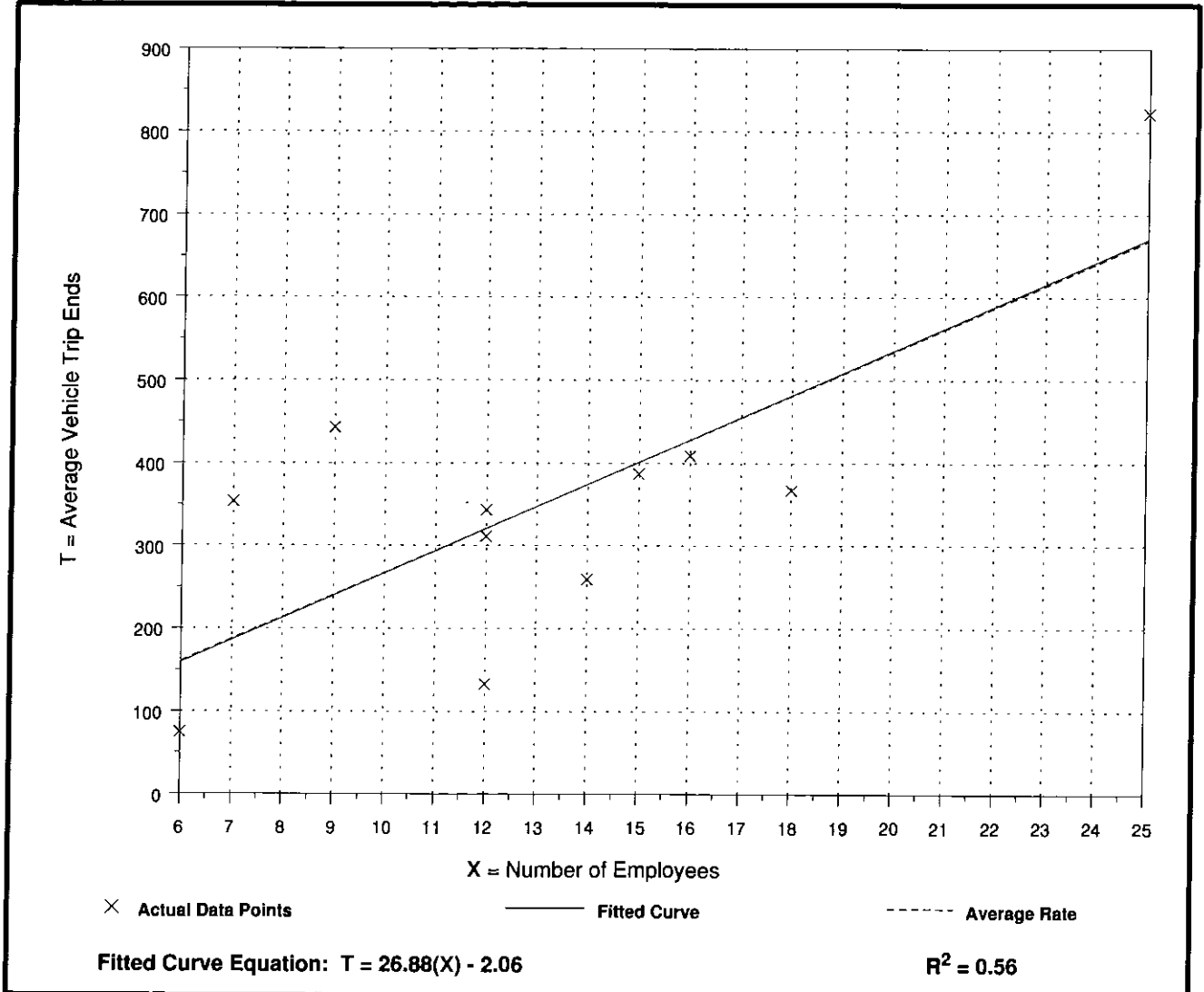
Average Vehicle Trip Ends vs: Employees On a: Weekday

Number of Studies: 11
Avg. Number of Employees: 13
Directional Distribution: 50% entering, 50% exiting

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
26.73	11.08 - 50.43	11.43

Data Plot and Equation



Day Care Center (565)

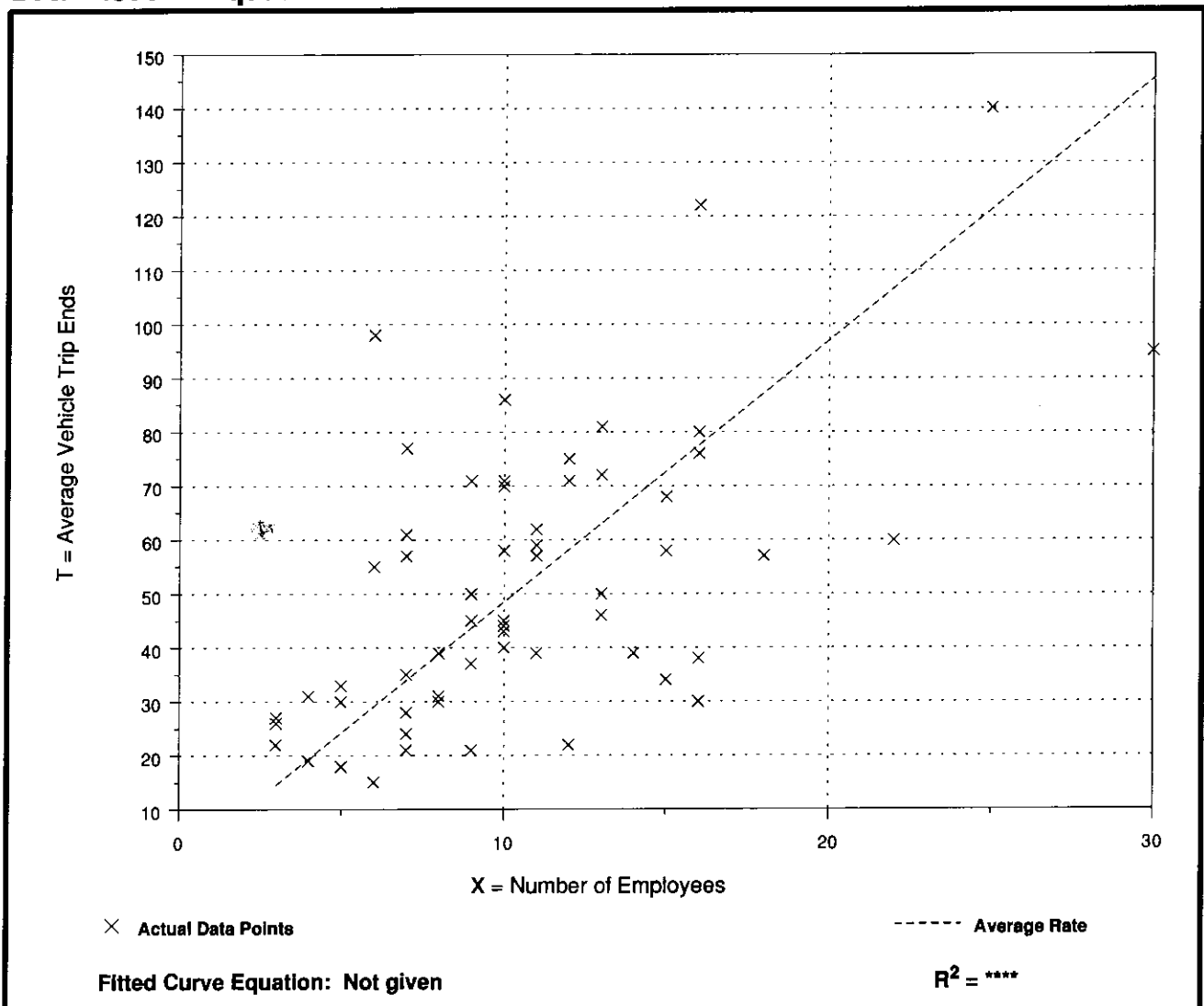
Average Vehicle Trip Ends vs: Employees
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.

Number of Studies: 60
 Avg. Number of Employees: 10
 Directional Distribution: 53% entering, 47% exiting

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
4.85	1.83 - 16.33	3.04

Data Plot and Equation



Day Care Center (565)

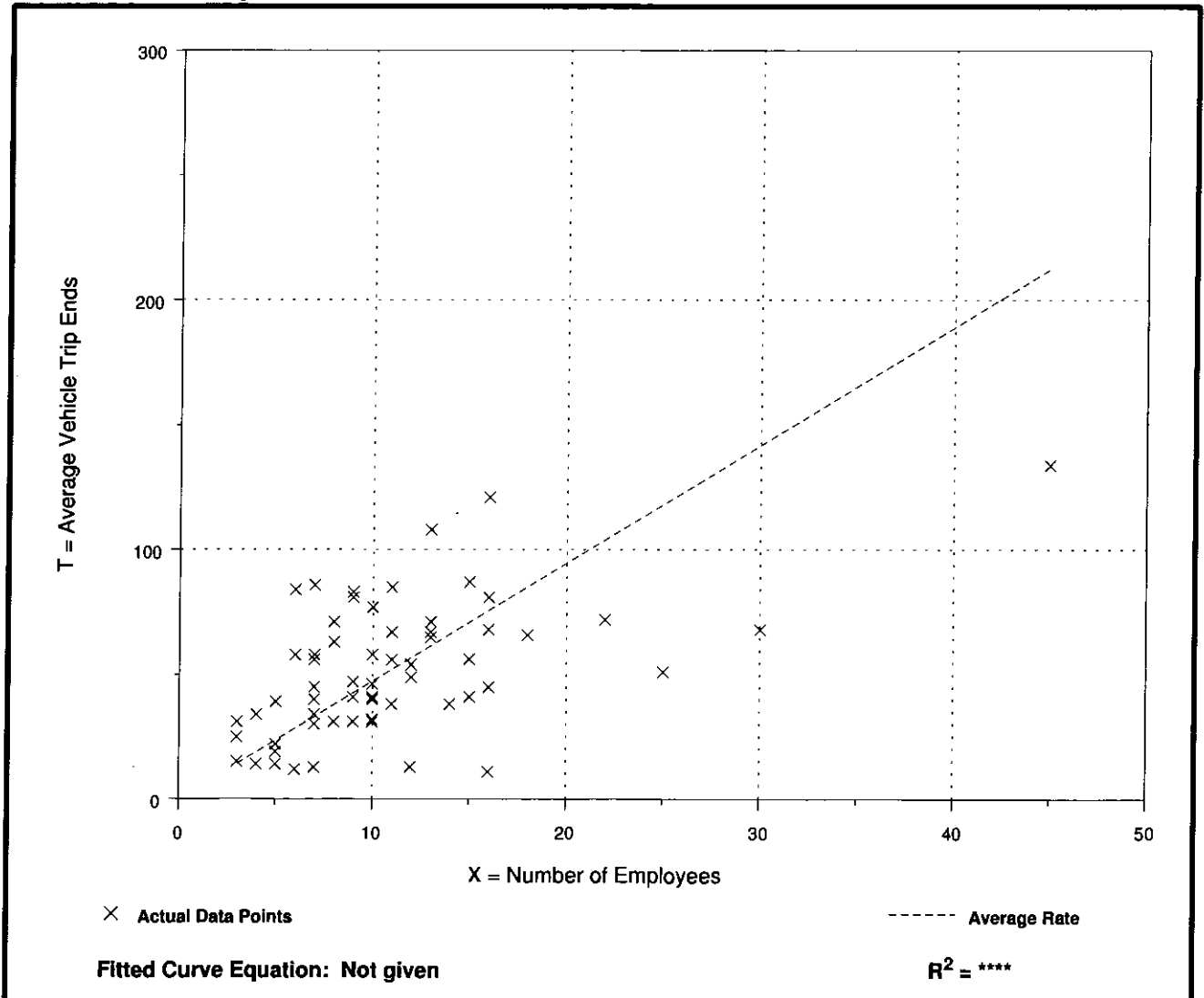
Average Vehicle Trip Ends vs: Employees
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

Number of Studies: 61
 Avg. Number of Employees: 11
 Directional Distribution: 47% entering, 53% exiting

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
4.73	0.69 - 14.00	3.20

Data Plot and Equation



Specialty Retail Center (826)

**Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Leasable Area
On a: Weekday**

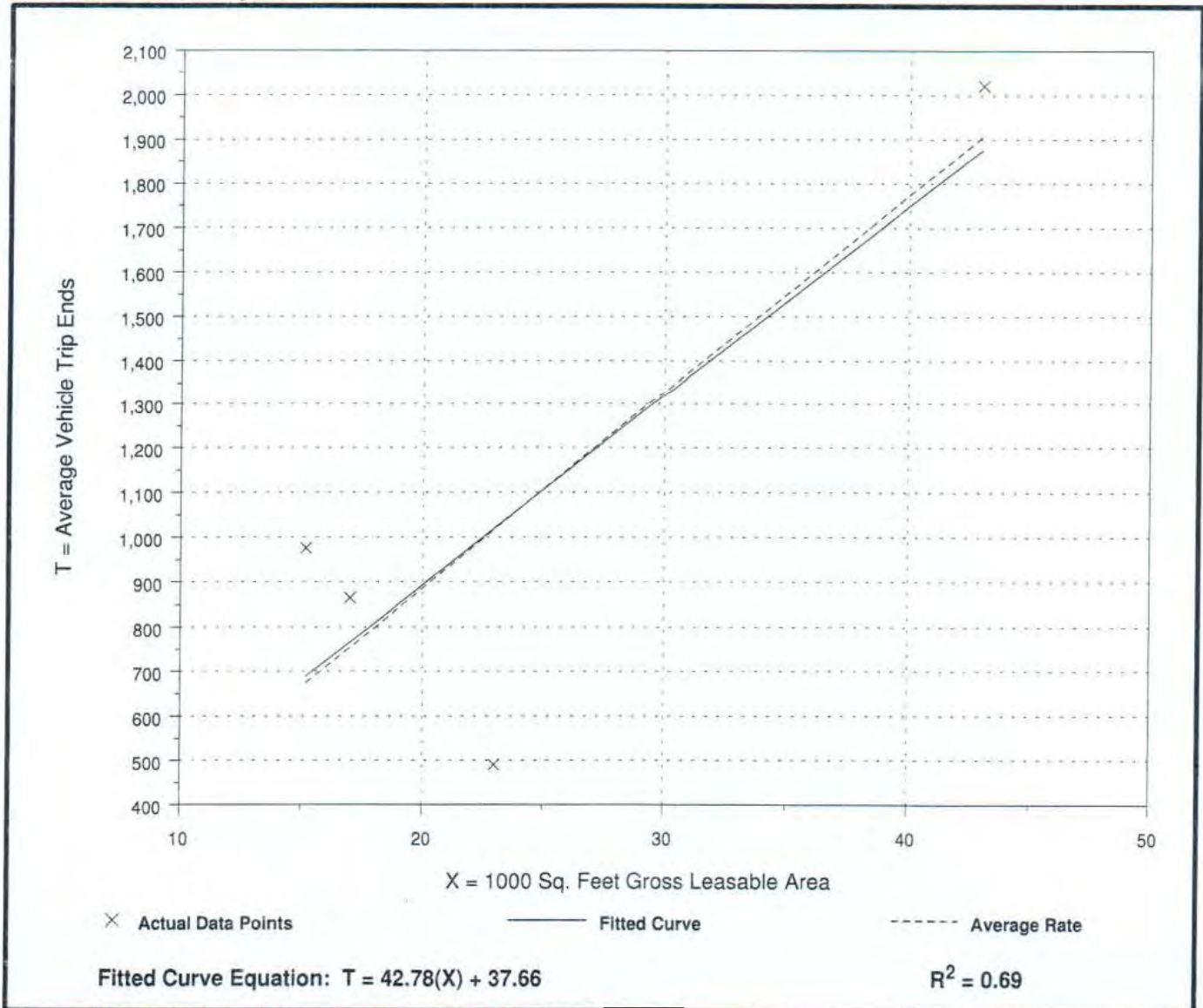
Number of Studies: 4
Average 1000 Sq. Feet GLA: 25
Directional Distribution: 50% entering, 50% exiting

Trip Generation per 1000 Sq. Feet Gross Leasable Area

Average Rate	Range of Rates	Standard Deviation
44.32	21.30 - 64.21	15.52

Data Plot and Equation

Caution - Use Carefully - Small Sample Size



Specialty Retail Center (826)

Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Leasable Area
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

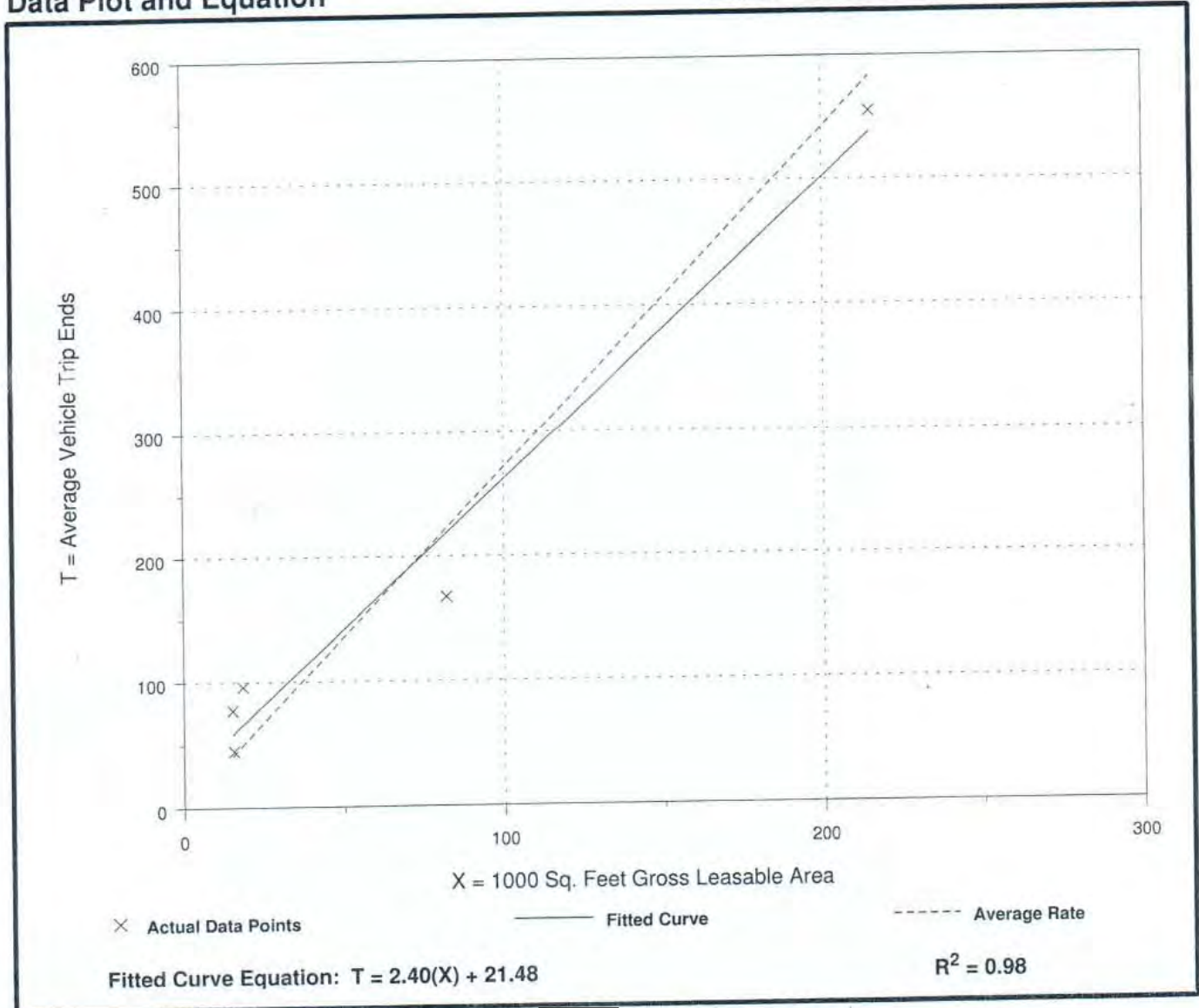
Number of Studies: 5
Average 1000 Sq. Feet GLA: 69
Directional Distribution: 44% entering, 56% exiting

Trip Generation per 1000 Sq. Feet Gross Leasable Area

Average Rate	Range of Rates	Standard Deviation
2.71	2.03 - 5.16	1.83

Data Plot and Equation

Caution - Use Carefully - Small Sample Size



Land Use: 918 Hair Salon

Description

Hair salons are facilities that specialize in cosmetic and beauty services including hair cutting and styling, skin and nail care, and massage therapy. Hair salons may also contain spa facilities.

Additional Data

The surveyed site had 15 parking spaces.

The site was surveyed in 2007 in New York.

Source Number

586

Land Use: 918 Hair Salon

Independent Variables with One Observation

The following trip generation data are for independent variables with only one observation. This information is shown in this table only; there are no related plots for these data.

Users are cautioned to use data with care because of the small sample size.

<u>Independent Variable</u>	<u>Trip Generation Rate</u>	<u>Size of Independent Variable</u>	<u>Number of Studies</u>	<u>Directional Distribution</u>
1,000 Square Feet Gross Floor Area				
Weekday A.M. Peak Hour of Adjacent Street Traffic	1.21	4	1	100% entering, 0% exiting
Weekday P.M. Peak Hour of Adjacent Street Traffic	1.45	4	1	17% entering, 83% exiting
Weekday A.M. Peak Hour of Generator	1.21	4	1	100% entering, 0% exiting
Weekday P.M. Peak Hour of Generator	1.93	4	1	38% entering, 62% exiting
Saturday Peak Hour of Generator	5.08	4	1	36% entering, 64% exiting

Land Use: 925 Drinking Place

Description

A drinking place contains a bar, where alcoholic beverages and food are sold, and possibly some type of entertainment, such as music, television screens, video games, or pool tables. Establishments that specialize in serving food but also have bars are not included in this land use.

Additional Data

The sites were surveyed in 1987, 1995 and 1997 in Colorado, Oregon and South Dakota.

Source Numbers

291, 358, 583

Drinking Place (925)

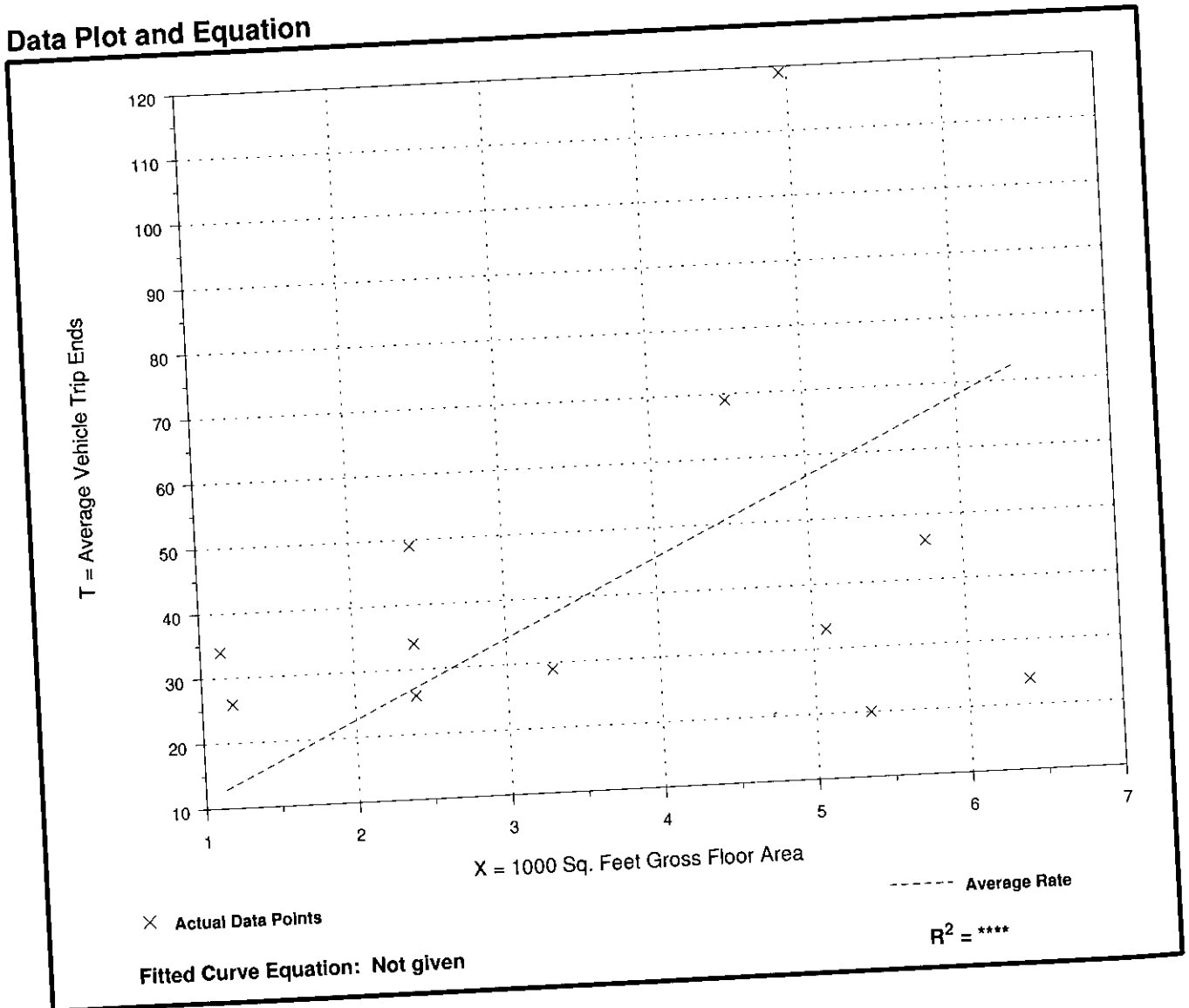
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

Number of Studies: 12
Average 1000 Sq. Feet GFA: 4
Directional Distribution: 66% entering, 34% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
11.34	3.73 - 29.98	8.04

Data Plot and Equation



Land Use: 931

Quality Restaurant

Description

This land use consists of high quality, full-service eating establishments with typical duration of stay of at least one hour. Quality restaurants generally do not serve breakfast; some do not serve lunch; all serve dinner. This type of restaurant often requests and sometimes requires reservations and is generally not part of a chain. Patrons commonly wait to be seated, are served by a waiter/waitress, order from menus and pay for meals after they eat. While some of the study sites have lounge or bar facilities (serving alcoholic beverages), they are ancillary to the restaurant. High-turnover (sit-down) restaurant (Land Use 932) is a related use.

Additional Data

Truck trips accounted for approximately 1 to 4 percent of the weekday traffic. The average for the sites that were surveyed was approximately 1.6 percent.

Vehicle occupancy ranged from 1.59 to 1.98 persons per automobile on an average weekday. The average for the sites that were surveyed was approximately 1.78.

The outdoor seating area is not included in the overall gross floor area. Therefore, the number of seats may be a more reliable independent variable on which to establish trip generation rates for facilities having significant outdoor seating.

The sites were surveyed between the 1970s and the 1990s throughout the United States.

Source Numbers

13, 73, 88, 90, 98, 100, 126, 172, 260, 291, 301, 338, 339, 368, 437, 440

Quality Restaurant (931)

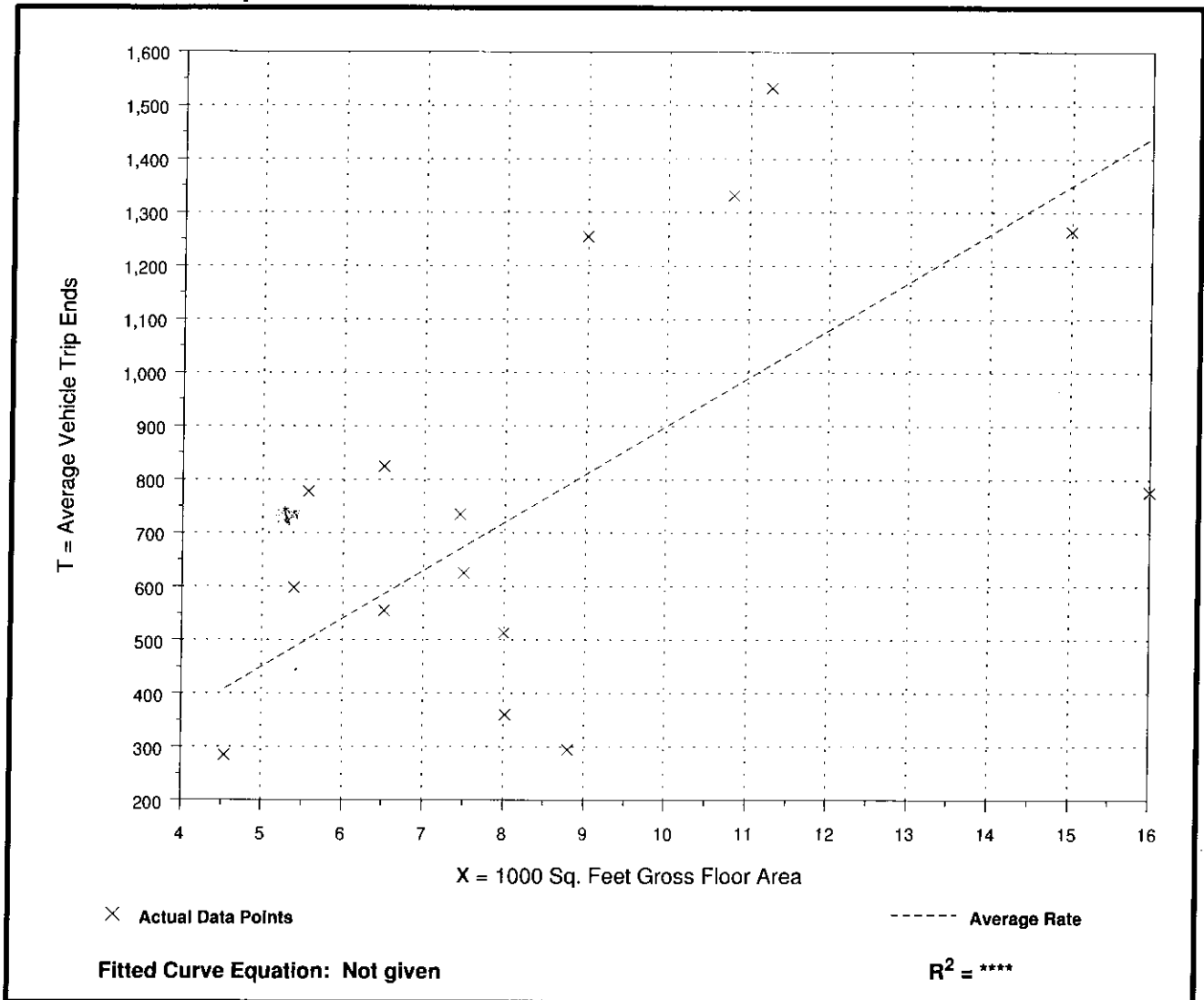
**Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday**

Number of Studies: 15
Average 1000 Sq. Feet GFA: 9
Directional Distribution: 50% entering, 50% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
89.95	33.41 - 139.80	36.81

Data Plot and Equation



Quality Restaurant (931)

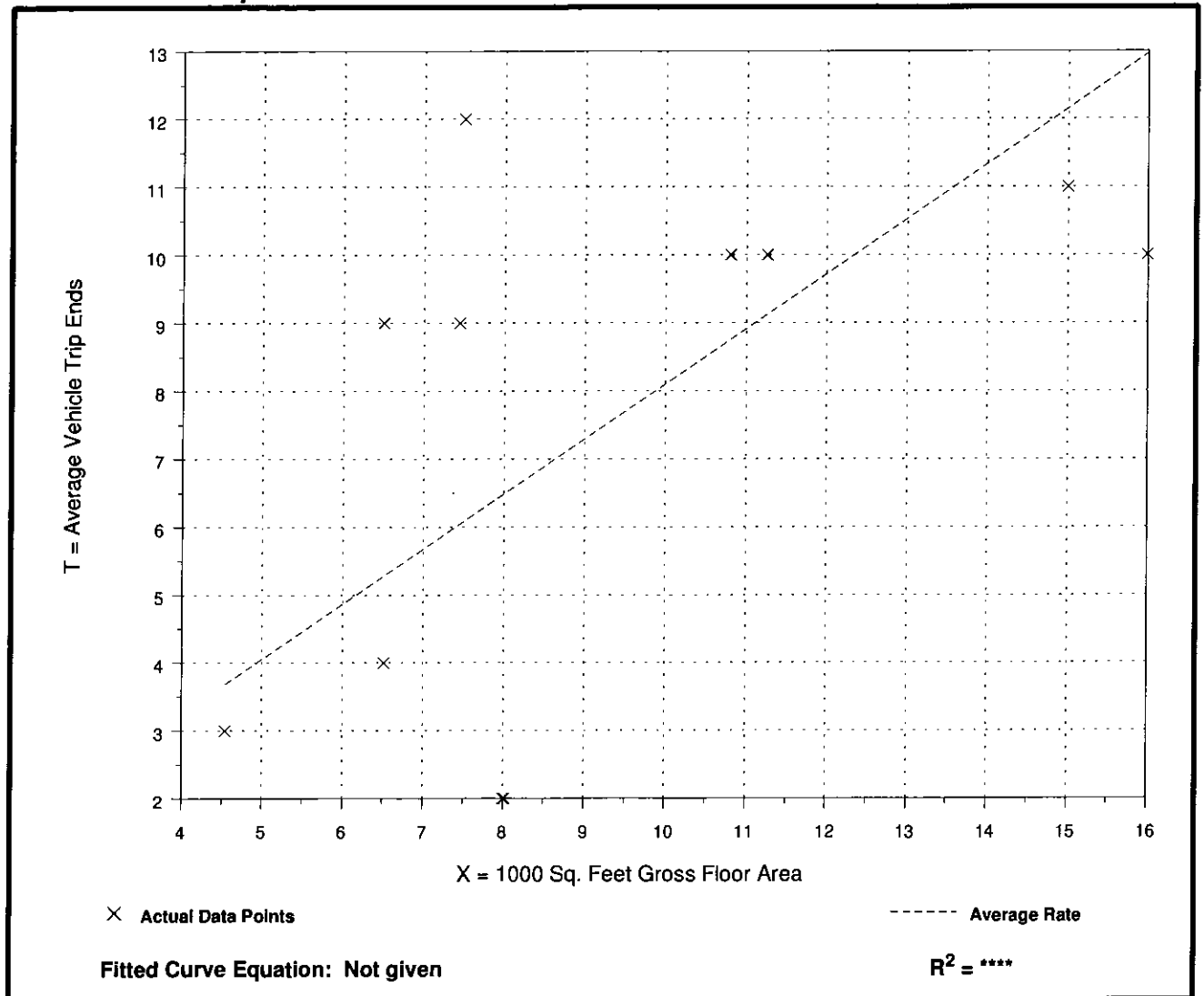
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.

Number of Studies: 11
 Average 1000 Sq. Feet GFA: 9
 Directional Distribution: Not available

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
0.81	0.25 - 1.60	0.93

Data Plot and Equation



Quality Restaurant (931)

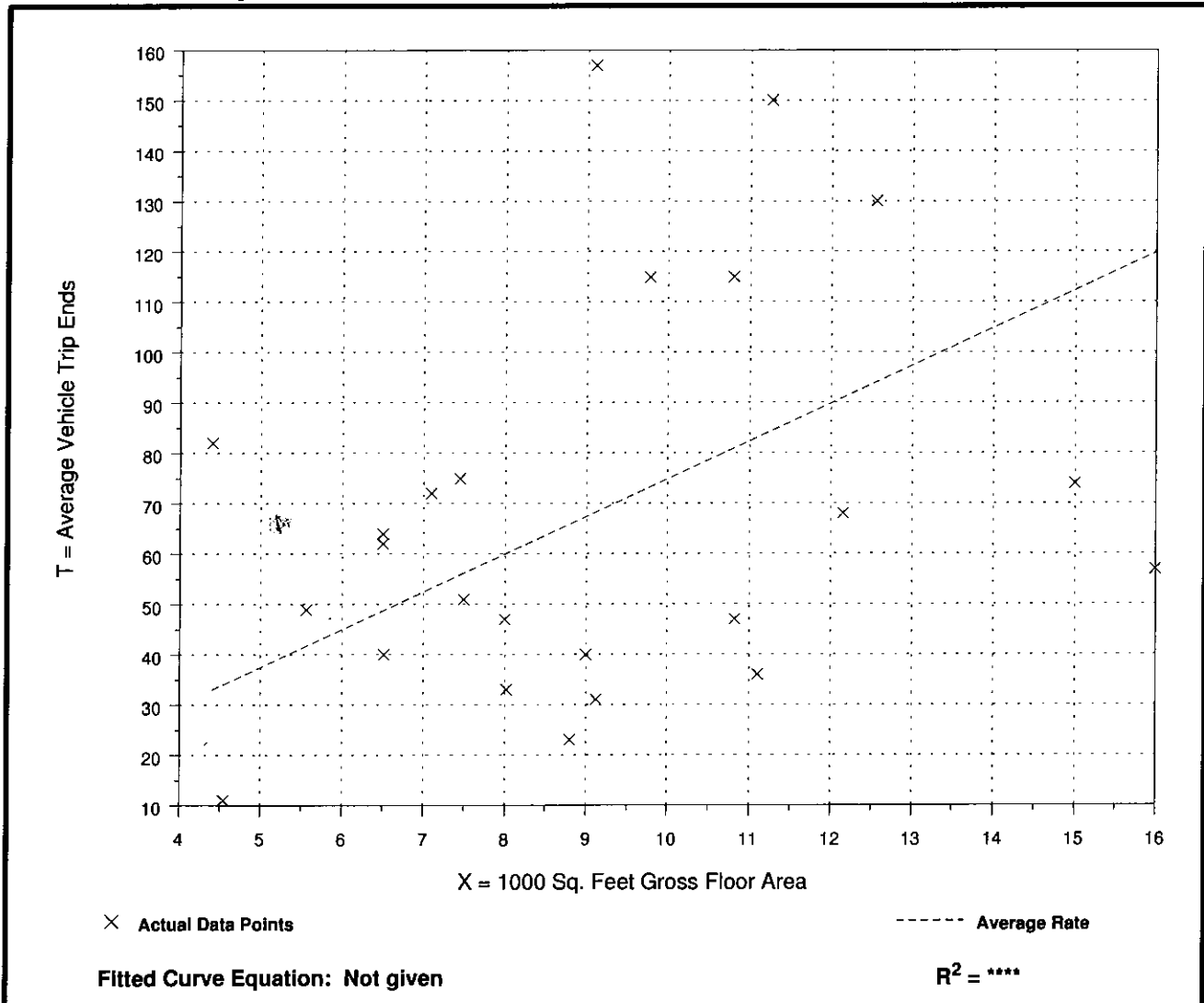
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

Number of Studies: 24
 Average 1000 Sq. Feet GFA: 9
 Directional Distribution: 67% entering, 33% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
7.49	2.42 - 18.64	4.89

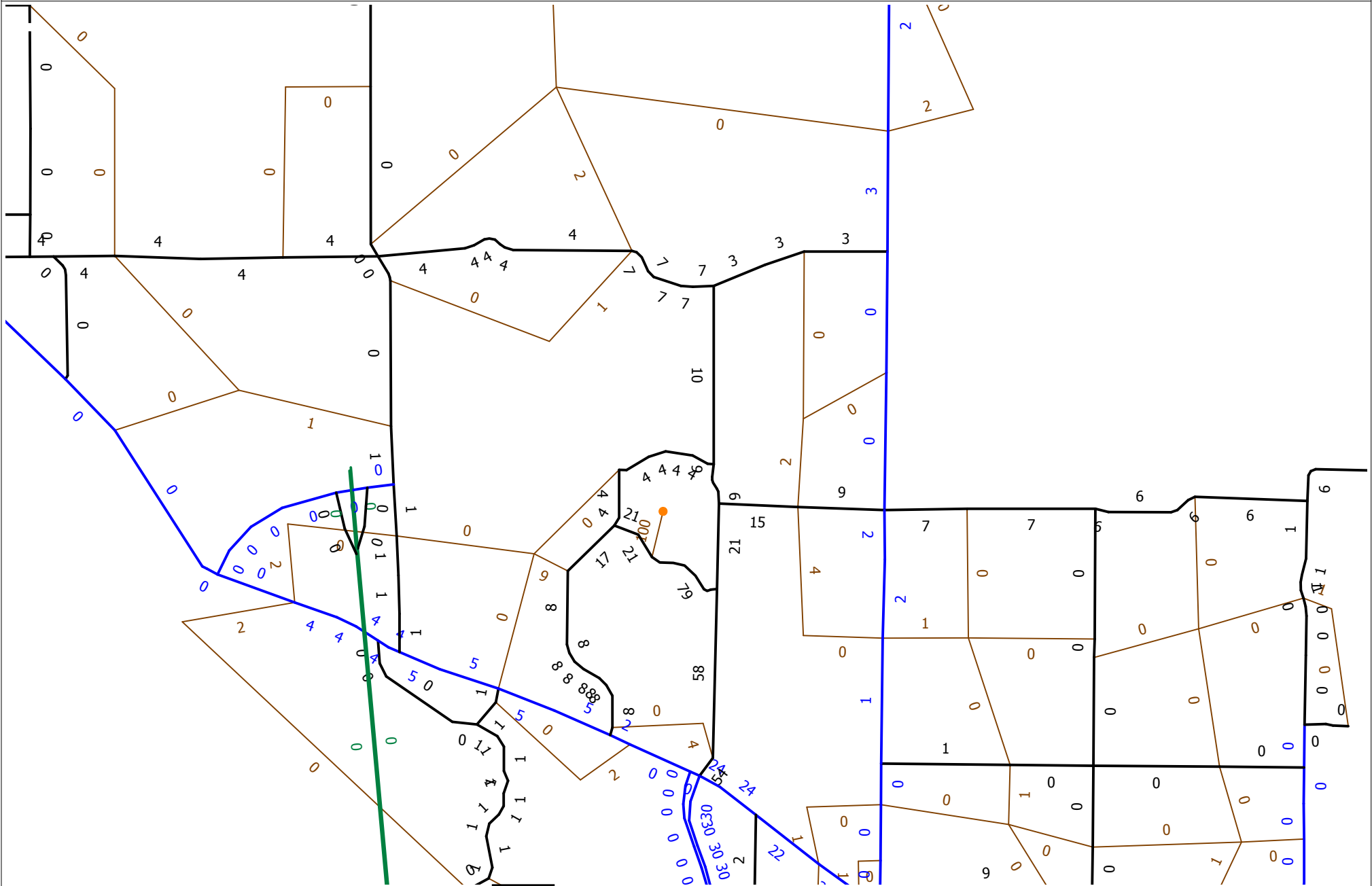
Data Plot and Equation



APPENDIX D

OUATS Model Plot

Errol Estates Redevelopment TIA
Trip Distribution
OUATS 2020 Inter Year Model



153

APPENDIX E

ArtPlan Analysis

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TPD Inc.	Arterial Name	Vick Road	Study Period	Standard K
Date Prepared	4/4/2017 1:52:23 PM	From	Matin St	Modal Analysis	Multimodal
Agency	TPD Inc.	To	Welch Rd	Program	ARTPLAN 2012
Area Type	Large Urbanized	Peak Direction	Northbound	Version Date	12/12/2012
Arterial Class	1				
File Name	\\HQDC01\Shared Folders\Company\Public\Project\4800-4899\4892 Errol Estates\ArtPlan\Vick Rd.xap				
User Notes					

Arterial Data

K	0.09	PHF	1	Control Type	Fully Actuated
D	0.565	% Heavy Vehicles	2	Base Sat. Flow Rate	1950

Automobile Intersection Data

Cross Street	Cycle Length	Thru g/C	Arr. Type	INT # Dir.Lanes	% Left Turns	% Right Turns	Left Turn Lanes	Left Turn Phasing	# Left Turn Lanes	LT Storage Length	Left g/C	Right Turn Lanes
Welch Rd	120	0.44	3	2	0	45	No	None	N/A	N/A	N/A	No

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to Welch Rd)	4800	15000	763	2	35	40	Restrictive	No	N/A

Automobile LOS

Segment #	Thru Mvmt Flow Rate	Adj. Sat. Flow Rate	v/c	Control Delay	Int. Approach LOS	Queue Ratio	Speed (mph)	Segment LOS			
1 (to Welch Rd)	763	3252	0.533	24.75	C	0.00	30.00	C			
Arterial Length	0.9205	Weighted g/C	0.44	FFS Delay	28.63	Threshold Delay	0.00	Auto Speed	30.00	Auto LOS	C

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

	A	B	C	D	E
Lanes	Hourly Volume In Peak Direction				
1	**	230	740	***	***
2	**	470	1480	***	***
3	**	730	2240	***	***
4	**	980	3000	***	***
*	**	470	1480	***	***
Lanes	Hourly Volume In Both Directions				
2	**	410	1300	***	***
4	**	840	2640	***	***
6	**	1300	3970	***	***
8	**	1740	5310	***	***
*	**	840	2640	***	***
Lanes	Annual Average Daily Traffic				
2	**	4600	14400	***	***
4	**	9300	29300	***	***
6	**	14400	44200	***	***
8	**	19300	59000	***	***
*	**	9300	29300	***	***

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr / Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to Welch Rd)	Typical	Typical	No	No	N/A	Yes	Typical	No	2	0.8	Excellent	Typical

Pedestrian SubSegment Data

Segment #	% of Segment			Sidewalk			Separation			Barrier		
	1	2	3	1	2	3	1	2	3	1	2	3
1 (to Welch Rd)	100			Yes			Typical				No	

Multimodal LOS

Link #	Bicycle Street		Bicycle Sidepath		Pedestrian			Bus						
	Score	LOS	Score	LOS	1	2	3	Score	LOS	Adj. Buses	LOS			
1 (to Welch Rd)	3.97	D	N/A	N/A				2.87	C	2.77	D			
	Bicycle LOS	3.97	D					Pedestrian LOS	2.87	C		Bus LOS	2.77	D

MultiModal Service Volume Tables

Bicycle

	A	B	C	D	E
Lanes	Hourly Volume In Peak Direction				
1	**	**	190	530	1000
2	**	**	380	1080	2000
3	**	**	560	1620	3000
4	**	**	750	2170	4000
*	**	**	380	1080	2000
Lanes	Hourly Volume In Both Directions				
2	**	**	340	940	1770
4	**	**	670	1910	3540
6	**	**	1000	2870	5310
8	**	**	1330	3840	7080
*	**	**	670	1910	3540
Lanes	Annual Average Daily Traffic				
2	**	**	3700	10400	19700
4	**	**	7400	21200	39400
6	**	**	11100	31900	59000
8	**	**	14800	42700	78700
*	**	**	7400	21200	39400

Pedestrian

	A	B	C	D	E
Lanes	Hourly Volume In Peak Direction				
1	1000	> 1000	***	***	***
2	2000	> 2000	***	***	***
3	3000	> 3000	***	***	***
4	4000	> 4000	***	***	***
*	2000	> 2000	***	***	***
Lanes	Hourly Volume In Both Directions				
2	1770	> 1770	***	***	***
4	3540	> 3540	***	***	***
6	5310	> 5310	***	***	***
8	7080	> 7080	***	***	***
*	3540	> 3540	***	***	***
Lanes	Annual Average Daily Traffic				
2	19700	> 19700	***	***	***
4	39400	> 39400	***	***	***
6	59000	> 59000	***	***	***
8	78700	> 78700	***	***	***
*	39400	> 39400	***	***	***

Bus

A	B	C	D	E
Buses Per Hour In Peak Direction				
>= 6	>= 4	>= 3	>= 2	>= 1
Buses in Study Hour in Peak Direction (Daily)				

≥ 5.28	≥ 3.52	≥ 2.64	≥ 1.76	≥ 0.88
-------------	-------------	-------------	-------------	-------------

*** Service Volumes for the specific facility being analyzed, based on # of lanes from the intersection and segment data screens.**

**** Cannot be achieved based on input data provided.**

***** Not applicable for that level of service letter grade. See generalized tables notes for more details.**

Under the given conditions, left turn lane storage is highly likely to overflow. The number of directional thru lanes should be reduced accordingly.

Facility weighted g/C exceeds normally acceptable upper range (0.5); verify that g/C inputs are correct.

Intersection capacity (ies) are exceeded for the full hour; an operational level analysis tool is more appropriate for this situation.