CITY OF MARGATE
Together We Make It Great

City of Margate
DEVELOPMENT REVIEW COMMITTEE
Application for Site Plan

5790 Margate Blvd., Margate, FL 33063
954-972-6454

Submittal Date (official use):
06-23-15 P12:59 RCVD

Project Name	Dollar General at Margate
Address	SE Corner of State Road 7 and SW 7th St
Acreage	1.8
Folio Number	4942-06-18-0930, 4942-06-18-0931, 4942-06-18-0932
Existing Use	Vacant Lot
Legal Description	Serino Park Sec 3 81-46 B Tr B S 67.81 of N 432.62,
	SERINO PARK SEC 3 81-46 B TR B N 300
	SERINO PARK SEC 3 81-46 B TR B,S 67.81 OF N 367.81

DRC # 07-15-03

Paid: 4800.00

Describe proposal/request in detail, including non-residential square footage and/or number of dwelling units

Construction of a 7,500 commercial retail store with associated parking lot and additional site improvements.

Agent/Contact Name	Hanlex Margate, LLC
Address	1000 Color Place Apopka, FL 32703
Phone Number	407-889-4154
Fax Number	407-410-0351
Email Address	jbullard@hanlex.com

Property Owner Name	Tiger Investment Group, Inc.
Address	10151 Deerwood Park Blvd 300-110 Jacksonville, FL 32256
Phone Number	904-472-2715
Fax Number	904-472-2701
Email Address	ccash@flcb.com or sbaker@flcb.com

OWNER'S AFFIDAVIT: I certify that I am the owner of record for the above referenced property and give authorization to file this petition. I understand that I, or a representative on my behalf, must be present at the DRC meeting. I further understand that my petition will be subject to the regulations of Chapter 16 ½ of the Margate City Code.

Tiger Investment Group, INC.
By: Cynthia A Cash, V.P.
Property Owner's Signature

6-23-2015
Date

Cynthia A. Cash

City of Margate
*** CUSTOMER RECEIPT ***

Batch ID: CONEILL 6/29/15 00 Receipt no: 137446

Type	SvcCd	Description	Amount
EL	ECDV	SITE PLAN NON RESID.	
	Qty	1.00	$800.00

HANLEX DEVELOPMENT, LLC
1000 COLOR PLACE
APOPKA, FL 32703
RE:SITE PLAN DOLLAR GENERAL
SE CORNER OF SR 7 AND SW 7 ST
407-889-4154

Tender detail

CK Ref#:	3476	$800.00
Total tendered:		$800.00
Total payment:		$800.00

Trans date: 6/29/15 Time: 13:12:46

HAVE A GREAT DAY!

Nathan Wolfe

From: Padovan, Jim <JPadovan@wm.com>
Sent: Thursday, June 25, 2015 3:50 PM
To: Nathan Wolfe
Subject: RE: City of Margate Waste Management Approval

This is approved , thank you.

Happy Connecting. Sent from my Sprint Samsung Galaxy S® 5

-------- Original message --------
From: Nathan Wolfe <NWolfe@hanlex.com>
Date: 06/25/2015 3:44 PM (GMT-05:00)
To: "Padovan, Jim" <JPadovan@wm.com>
Subject: RE: City of Margate Waste Management Approval

Good afternoon Mr. Padovan,

I had been working with Kay Hurley to get a letter of approval from Waste Management, and you were copied along with Adrian Moore.
I had sent over the revised plan on Tuesday, but Kay is out of the office until Monday.
I had tried to call Adrian Moore directly, but only received a voicemail.
We are hoping to submit to Margate on Monday morning, and would like to have the letter today or tomorrow at the latest if possible.

Can you help me with the letter? I have attached the revised plan I had sent on Tuesday.

Thank you,

Nathan Wolfe
Hanlex Civil, LLC
1825 S. Orange Blossom Trail
Apopka, FL 32703
p.407-889-4154
c.407-383-2587
f. 407-410-0351

WE ARE MOVING! **Please note that as of July 1, 2015 our new office will be located at:**

1000 Color Place
Apopka, FL 32703

From: Nathan Wolfe
Sent: Tuesday, June 23, 2015 11:29 AM
To: 'Padovan, Jim'; Hurley, Kay

Cc: 'Amoore@wm.com'; Jason Bullard
Subject: RE: City of Margate Waste Management Approval

Please see the revised Dumpster Enclosure as requested.

The pad is 24 x 24 as requested, but the enclosure itself is 24 x 12'.

We are planning to submit to the City on Friday. If we can have the approval letter by then, it would be greatly appreciated.

Thank you

Nathan Wolfe
Hanlex Civil, LLC
1825 S. Orange Blossom Trail
Apopka, FL 32703
p.407-889-4154
c.407-383-2587
f. 407-410-0351

WE ARE MOVING! **Please note that as of July 1, 2015 our new office will be located at:**

1000 Color Place
Apopka, FL 32703

From: Padovan, Jim [mailto:JPadovan@wm.com]
Sent: Wednesday, June 17, 2015 10:50 AM
To: Hurley, Kay; Nathan Wolfe
Subject: FW: City of Margate Waste Management Approval

Please see Adrians comment below , and the attachment , thanks .

From: Moore, Adrian
Sent: Wednesday, June 17, 2015 10:46 AM
To: Padovan, Jim
Subject: RE: City of Margate Waste Management Approval

Jim,

The enclosure needs to be 12 by 12 for a combined 24 by 24 for a double. I attached the Builders Guide, maybe they can send it to him? Once corrected and resent to us, we can approve.

Adrian Moore
Commercial Supervisor
Amoore@wm.com

Waste Management
3831 Nw 21 Ave
Pompano Beach,Fl 33073

Tel 954-917 0388
Fax 954-917-0261

- Waste Management operates more than 1,600 natural gas trucks across North America, helping to reduce fleet emissions and increasing fuel efficiency by the year 2020. Learn more at www.wm.com.

From: Hurley, Kay
Sent: Tuesday, June 16, 2015 5:26 PM
To: Marcano, Edelsy; Padovan, Jim
Subject: FW: City of Margate Waste Management Approval

I believe the approval is for perm service. Jim Padovan approves them I believe

---

From: Nathan Wolfe [mailto:NWolfe@hanlex.com]
Sent: Tuesday, June 16, 2015 4:09 PM
To: Hurley, Kay
Subject: City of Margate Waste Management Approval

Good afternoon Kay,

We spoke briefly on the phone regarding a project in the City of Margate.

The project is at the southeast corner of SR 7 and SW7th St. A property card is attached.

The City requires as part of the DRC Submittal that we receive a Letter of Approval from Waste Management regarding dumpster enclosures.

Attached is the property card, a copy of the DRC application listing the requirement, and a preliminary site plan showing the dumpster location.

I am asking for a Letter of Approval accepting the proposed dumpster enclosure.

Please let me know if you need any additional information.

Thank you

Nathan Wolfe
Hanlex Civil, LLC
1825 S. Orange Blossom Trail
Apopka, FL 32703
p.407-889-4154
c.407-383-2587
f. 407-410-0351

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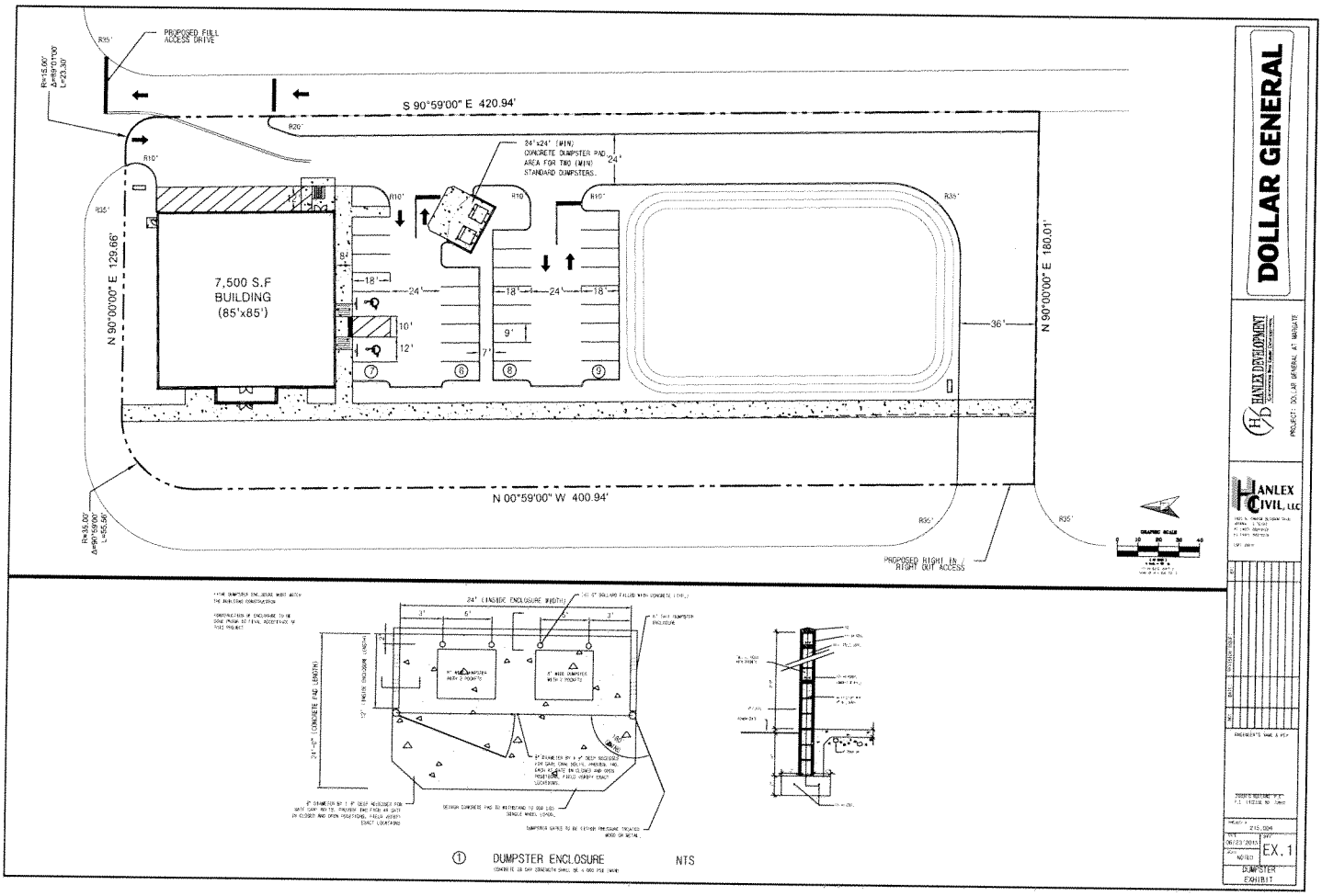
1000 Color Place
Apopka, FL 32703

Recycling is a good thing. Please recycle any printed emails.

APPROVED 6/26/15



① DUMPSTER ENCLOSURE NTS

HANLEX CIVIL, LLC
1825 S Orange Blossom Trail
Apopka, FL 32703
407-889-4154

June 26, 2015

City of Margate
5790 Margate Blvd
Margate, FL 33063

Reference: **Dollar General at Margate**
TRC 1st Submittal
Traffic Impact Statement

This Generalized Traffic Generation Analysis was undertaken in support of the application submitted for the proposed Dollar General located at the Southeast corner of State Road 7 and SW 7th St., in Margate, FL. This analysis assesses the potential traffic generation of the proposed development, in accordance with FDOT Standards. Based on the proposed use and generation figures supplied by the Transportation Engineer's (ITE) *Trip Generation Report, 9th Edition,* the proposed project is expected to generate 475 daily trips.

The proposed development consists of a 7,500 square foot commercial retail store. Access to the site is provided via driveways on State Road 7 and SW 7th St. A right-turn lane off of State Road 7 has been requested by FDOT and it shown on the submitted plans.

Trip Generation:
Trip generation rates for the proposed development were obtained from the Institute of Transportation Engineer's (ITE) *Trip Generation Report, 9th Edition*. The pass-by rates were obtained from the ITE *Trip Generation Handbook, 2nd Edition*.

Trip Generation Calculation Summary				
Description	ITE LU Code	Quantity	Daily	
			Rate	Trips
Variety Store	814	7.500 KSF	64.03	475
			Pass-by Trips (43%)	204
			Net New Trips	271

From the calculation, the proposed site is projected to generate 475 daily trips. When factoring in the 43% pass-by reduction, the net new trips total 271, which is below the required 500 trips for a De Minimus exception.

Based on this calculation, we do not anticipate that a traffic study is required.

Respectfully,

Jason Bullard, MBA P.E.
Hanlex Civil, LLC
(407) 889-4154
jbullard@hanlex.com

DOLLAR GENERAL @ MARGATE
MARGATE, FLORIDA

STORMWATER DRAINAGE REPORT
FOR AN ON-LINE RETENTION SYSTEM

A RETAIL DEVELOPMENT ON A ±1.46 ACRE PARCEL

Prepared for:
Hanlex Development, LLC
1825 S Orange Blossom Trail
Apopka, Florida 32703

Prepared by:
HANLEX CIVIL, LLC
1825 S Orange Blossom Trail
Apopka, Florida 32703
(407) 889-4154

Submitted to:
City of Margate
Broward County
FDOT – District 4

Date:
June 26th, 2015

_____
JASON D. BULLARD, PE
HANLEX CIVIL, LLC
LICENSE NO: 73800
CERTIFICATE OF AUTHORIZATION: 29910

DOLLAR GENERAL AT PEMBROKE PARK
TABLE OF CONTENTS

1. Project Description

2. Existing Conditions

A. Wetland and Flood Plain Consideration
B. Soils
C. Existing Drainage

3. Design Calculations

A. Site Areas and Drainage Basin Discussion with Exhibit
B. Stage Storage Tables
C. Curve Number Calculation
D. Time of Concentration
E. Water Quality Determination and Calculations
F. Attenuation Model

4. Summary Tables

5. Geotechnical Report by PSI

6. District Maintenance Acknowledgement

7. Appendix

Appendix

A. Location Map
B. USDA Soils Map
C. USGS Quadrangle Maps
D. Aerial Map
E. FEMA Map
F. Rainfall Maps
G. Pre-Basin Map
H. Post-Basin Map
I. Calculations and Results
    a) Pre-Development
    b) Post-Development
    c) Recovery Calculations

1. Project Description

The proposed development consists of a 7,500 square foot Dollar General and associated site improvements. The project is located on a 1.79 acre lot, however there is a 30' Roadway easement along the front of the parcel. The roadway easement makes up 0.33 acres and was excluded from the project area as it drains towards the FDOT ROW. The basin area contributing to the stormwater management system will be approximately, 1.46 acres. The location of this development is on the southeast corner of State Road 7 and SW 7th Street. A driver traveling northbound would encounter this parcel on the right, just before SW 7th Street.

Currently, the 1.46 acre site is vacant. Based upon review of existing topography and site conditions, the site drains towards the rear of the property.

The project is proposed to be constructed in a single phase at which time all the improvements shown on the attached site development drawings will be constructed.

We have effectively modeled this project as a single basin composed of the proposed development area contributing to the proposed stormwater system. There is no evidence of significant offsite stormwater flows to the property. Please refer to the Drainage Basin Exhibits located in Section 4, part A, of this report for a graphic depiction of the contributing area.

The proposed storm water system is an on-line dry retention system. We have modeled the proposed stormwater system using the PONDS software in order to ensure adequate recovery of the treatment volume and have included the design hydraulic calculations for the design storm elevations. We have shown that the proposed stormwater pond is adequate to treat the stormwater from the contributing basin area. Furthermore, we have shown that the pond will not stage higher in the post-development when compared to the existing site condition for the SFWMD design year storm (25-year, 72-hour). Please refer to the discussions and calculations within this report.

Please note all elevations provided in NGVD 1929 vertical datum.

2. Existing Conditions

A. Wetland and Flood Plain Consideration

There are no wetlands onsite or adjacent to the site. Based on review of FEMA maps this site is located partial inside a flood plain. FEMA FIRM describes the area as Zone "X", which are described as an area "outside the 0.2% annual chance flood", with a potion of the site within Zone "AE" marked with a flood elevation of 6. Please reference FIRM Panel No 12011C0355H, dated August 18, 2014. The flood plain exhibit is located within the appendix.

B. Historic Soils

Based on the USDA Soil Survey the property is comprised of Immokalee Fine Sands, nearly level soils. The soil type is categorized as a Type B/D soil and is considered poorly drained.

Please refer to the Geotechnical Report contained within this report for a detailed description of the historic nature of soils found on site and their classification. Please also refer to the USDA Soils map located within the appendix of this report.

C. Existing Drainage

Currently, the 1.46 acre site is vacant. Based upon review of existing topography and site conditions, the site drains towards the rear of the property.

Based on FDEP records this site is in the Cypress Creek/Pomano Canal watershed and is presently not impaired for phosphorus or nitrates.

Please refer to sheet C0.2 of the attached construction drawings illustrating the existing conditions.

3. Design Calculations

A. Site Areas and Drainage Basin Discussion

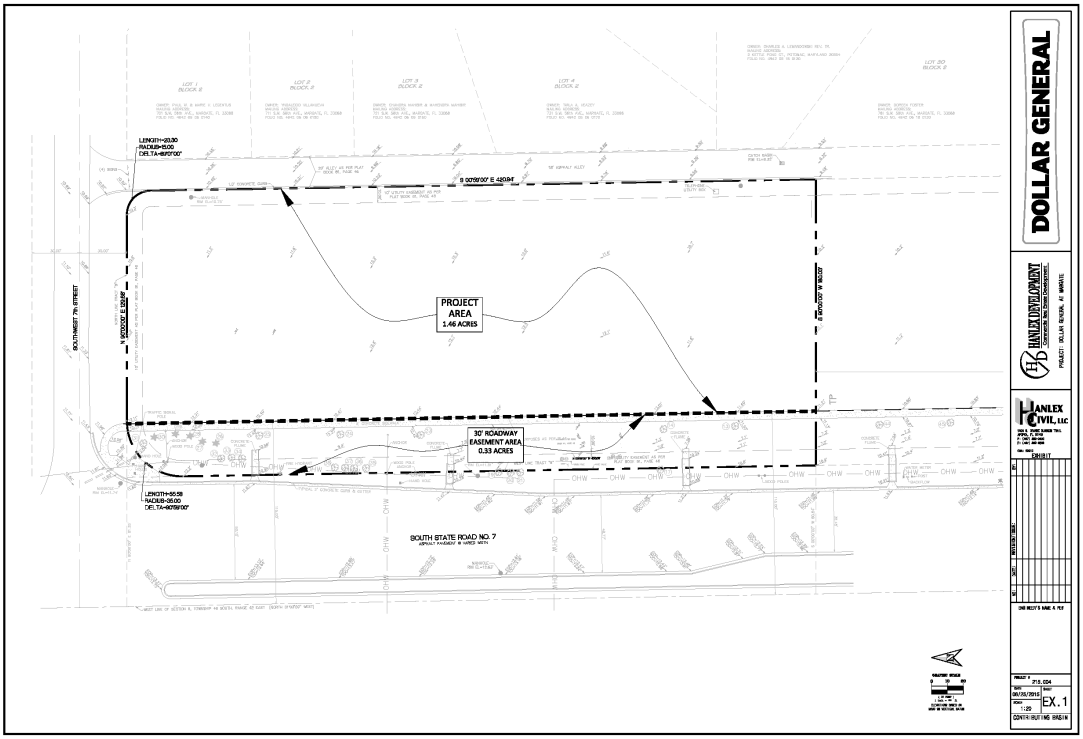
The pre-development and post-development basin area is the same and consists of approximately 1.46 acres. The pre-development condition consists of one basin; which is routed through the existing stormwater management system.

We have modeled the pre-development and post-development system utilizing the contributing basin area and have shown the system will adequately handle the required design criteria. Please refer to the Table 1, listing the areas used in the model, and to the drainage basin exhibits following.

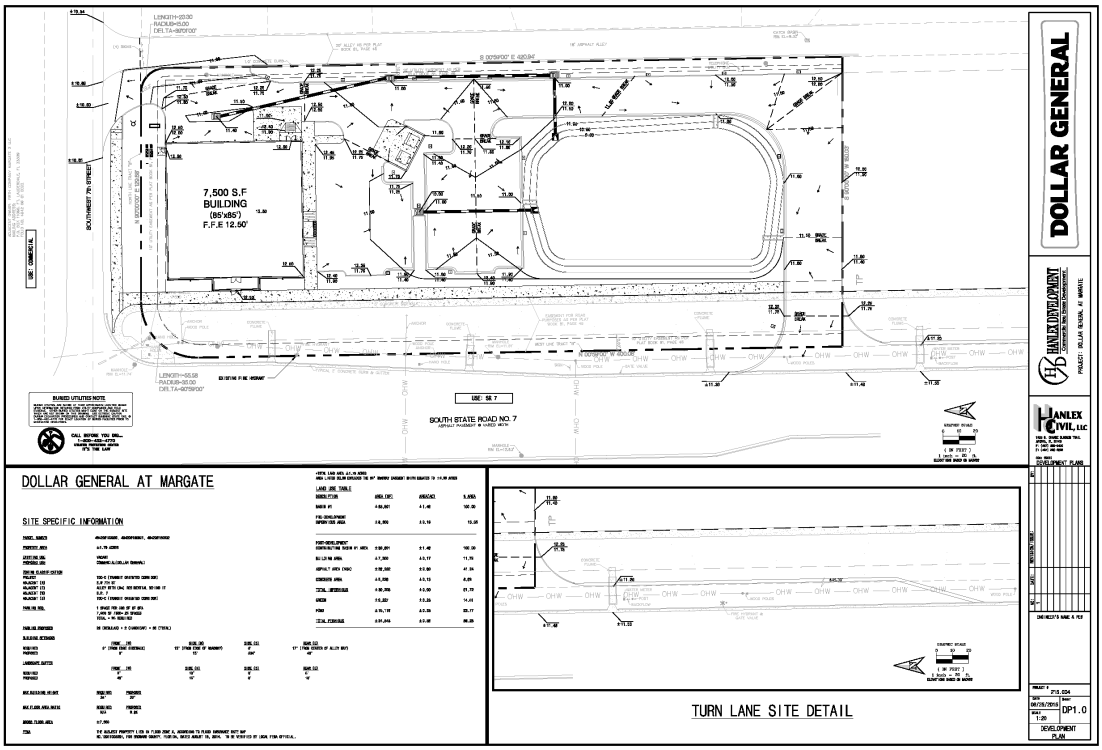
Dollar General at Margate *Pre-Development Conditions Curve Number*						
Existing Conditions						
Description	Total Area (sf)	Total Area (sf)	Total Area (ac)	Percent	Runoff Curve Number	Weighted Curve Number
Total Site area	63,601	63,601	1.46	100.00%		
Building Area	0	8,300	0.19	13.05%	98	55
Asphalt Pavement	0				98	
Concrete/Sidewalk	8,300				98	
Green Area	55,301	55,301	1.27	86.95%	49	
Proposed Conditions						
Description	Total Area (sf)	Total Area (sf)	Total Area (ac)	Percent	Runoff Curve Number	Weighted Curve Number
Basin Area	63,601	63,601	1.46	100.00%		
Building Area	7,500	39,258	0.90	61.73%	98	91
Asphalt Pavement	26,232				98	
Concrete/Sidewalk	5,526				98	
Pond Area	15,116	15,116	0.35	23.77%	100	
Green Area	9,227	9,227	0.21	14.51%	49	

Table 1

Dollar General at Margate
Stormwater Drainage Report
Hanlex Civil, LLC
Project No. 215.004



Pre-Development Drainage Basin Map



Post-Development Drainage Basin Map

B. Stage Storage Tables

Tables 2 show the stage and storage available within the proposed pond.

Dollar General at Margate *Post-Development Stage-Storage*			
Stage	Pond Area (sf)	Incremental Storage (cf)	Total Storage (cf)
9.0	10,766	0.0	0
10.0	12,430	11,598.0	11,598
11.0	15,116	13,773.0	25,371

Table 2

C. Curve Number Calculation

In consideration of the Type B/D historic nature of the soils onsite, and upon review of the Geotechincal Report and recommendations by PSI, including a percolation test and results and proximity to seasonal high groundwater recommendation, we believe that a Type "B" soil classification is an accurate description of the soils on site. Based on the Type "B" soils and a site condition described as "good condition" with grass cover > 75%, we used a Curve Number of 61, with a weighted curve number method, to model the existing and proposed conditions.

Please refer to Table 1 and the Stormwater Model results in the appendix.

Source: U.S. Department of Agriculture *National Engineering Handbook*, Soil Conservation Service U.S. Department of Agriculture Section 4, Chapter 9, Hydraulic Soil Cover Complexes, 1972.

D. Total Site Storage

Based on Broward County's, FDOT and the City's Drainage Requirements the site must not change the stage elevation based on a non-discharge scenario. Table 3 shows the on-site total storage.

Dollar General at Margate

Post-Development Stage-Storage

Stage (NGVD)	Pond Area (sf)	Incremental Storage (cf)	Parking Lot Area (sf)	Incremental Storage (cf)	*Site Area (sf)	Incremental Storage (cf)	Total Storage (Ac-Ft)
9.0	10,766	0.0	0.0	0.0	0.0	353.0	0.01
10.0	12,430	12,430.0	0.0	0.0	0.0	353.0	0.30
11.0	15,116	15,116.0	0.0	0.0	77.1	77.1	0.65
11.5	15,116	7,558.0	18,006.8	18,006.8	3,032.0	1,516.0	1.27
12.00	15,116	7,558.0	26,232.0	13,116.0	9,227.0	4,613.5	1.85
12.50	15,117	7,558.5	26,232.0	13,116.0	10,027.0	5,013.5	2.44

Table 2

*Site (Green Area/Sidewalks)

**Total Storage Starts with total Trench Storage for the storm water pipes system.

E. Water Quality Determination and Calculations

South Florida Water Management District (SFWMD) defines the volumetric requirement for stormwater treatment for an on-line retention system to be ½" over the drainage basin, for a development under 100 acres, however the City of Margate requires that treatment be 1" over the site.

The pond is designed to hold the required treatment volume within the proposed underground trenches.

We modeled the treatment volume as a "slug load" using PONDS, Version 3.0.

Dollar General at Margate *Water Quality Determination for On-Line Retention System*			
Treatment Volume			
	Contributing Basin Area	1" Over Basin Area	2.5" Over Impervious Area
Total Square Feet	63,601		
Acres	1.46		
Impervious Area	39,258		
Cubic Feet		5,300	8,179
Required Treatment: Largest of the Row Above		8,179 CF	

Table 5

*Qualifies for 50% Reduction for Dry Retention Systems

F. Attenuation Model

Existing Conditions

Currently, the 1.46 acre site is vacant. Based upon review of existing topography and site conditions, the site drains towards the rear of the property.

Proposed Conditions

It is our intention to treat and attenuate the stormwater which falls onsite before allowing the stormwater discharge to follow its existing pattern, described above. After the treatment volume has been retained, the proposed stormwater system will attenuate the 25 year-72 hour design storm. Once the design elevation has been met the storm water will discharge to the rear of the property as is does in the pre-development condition.

We used an SFWMD 72 hr hydrograph and a UHG 256 shape factor to define the storms, and the applicable run-off. Please refer to the Summary Tables on the following pages and the model and results found in the appendix.

4. Summary Tables

SFWMD/BROWARD COUNTY Model Results

Perimeter Berm Summary Table (NGVD)					
Storm	Pre-Development		Post-Development		Post < Pre Stage
	Volume (Ac-Ft)	Stage (NGVD, Ft)	Volume (Ac-Ft)	Stage (NGVD, Ft)	
25 Year 72 Hr	0.85	12.19	1.37	11.72	YES
Post Development Perimeter Berm at Elevation 11.75 (NGVD)					

Finished Floor Elevation Summary Table (NGVD)					
Storm	Pre-Development		Post-Development		FFE Set Above FEMA Flood Elevation of 10
	Volume (Ac-Ft)	Stage (NGVD, Ft)	Volume (Ac-Ft)	Stage (NGVD, Ft)	
100 Year 72 Hr	1.27	12.47	1.85	12.00	12.5

5. Geotechnical Report and Permeability Results by PSI

REPORT OF GEOTECHNICAL ENGINEERING SERVICES
PROPOSED DOLLAR GENERAL – BROWARD COUNTY, FLORIDA
(S.E.C.) S.R. 7 AND S.W. 7TH STREET, MARGATE, FLORIDA
PSI PROJECT NO. 0397-937

JUNE 22, 2015

June 22, 2015

Hanlex Development, LLC
1825 S. Orange Blossom Trail
Apopka, Florida 32703

Attention: Mr. Jeremy R. Anderson, P.E.
Vice President

Re: Report of Geotechnical Engineering Services
Proposed Dollar General – Broward County, FL
(S.E.C.) S.R. 7 and S.W. 7th Street, Margate, Florida
PSI Project No. 397-937

Dear Mr. Anderson:

Professional Service Industries, Inc. (PSI) has completed a geotechnical engineering study in connection with the noted project. Our services were provided and authorized in general accordance with the "Dollar General – Work Order Form", dated May 11, 2015.

PSI has also conducted a Phase I Environmental Site Assessment for the property, the results of which have been presented under separate cover. The environmental report should be reviewed to assess the potential impact on site/subgrade preparation requirements for this project.

1.0 PROJECT INFORMATION

The area of study is located at the southeast corner of S.R. 7 and S.W. 7th Street in Margate, Broward County, Florida. A site vicinity map identifying the project location with respect to existing streets and features is presented on **Sheet 1** of the **Appendix.**

As we understand, the project will consist of the construction of a Dollar General facility (Standard DG Prototype "D"). The facility will include a one-story, 7,225 square feet (sf) (85 feet by 85 feet) concrete block structure. Structural loads were not provided at this time. However, based on our experience with similar type developments, we have assumed maximum wall and column loads of 3 kips/foot and 100 kips, respectively. Additionally, we understand that the development will include paved parking/drive areas, stormwater management system and associated landscaping.

At the time of our study, the site was a vacant parcel of land with a ground cover consisting of light vegetation. Our truck mounted drilling equipment used for the subsurface exploration did not experience any difficulty in moving around the site. Photographs from our site visit are presented on **Sheet 2** of the **Appendix**.

If any of the noted information is incorrect or has changed, please notify PSI so that we may amend the recommendations presented in this report, if appropriate.

2.0 FIELD EXPLORATION AND SUBSURFACE CONDITIONS

2.1 STANDARD PENETRATION TEST (SPT) BORINGS

To evaluate the subsurface conditions at the site, we drilled/sampled nine SPT borings that were advanced to depths of 10 and 20 feet below grade. The SPT borings were performed using a CME-75 truck mounted drill rig equipped with an automatic hammer. The approximate locations at which the borings where drilled are presented on **Sheet 3** of the **Appendix**.

After seating the sample spoon six inches, the number of successive blows required to drive the sampler twelve inches into the soil constitutes the test result commonly referred to as the "N" value. The “N” value has been empirically correlated with various soil properties and is considered to be indicative of the relative density of cohesionless soils and the consistency of cohesive materials. The recovered split spoon samples were visually classified in the field and transported to the laboratory for further review. Following completion of our field services, all boreholes were backfilled with excavated soil/rock and the site generally cleaned, as required.

2.2 PERCOLATION TESTS

PSI performed two percolation tests at depths of 10 feet below grade within SPT borings PB-1 and PB-3. The percolation tests were performed in general accordance with the South Florida Water Management District (SFWMD) procedures for the "Usual Condition Constant Head" Percolation Test. SPT sampling was performed simultaneously as the boreholes were advanced using a 6-inch diameter casing. A 4-inch diameter perforated PVC pipe was placed in the borehole prior to retrieving the casing. Water was then pumped into the borehole in order to raise the water level as close to the ground surface as possible. Once the inflow equalized with the outflow rate, the average pumping rate and level of the water for this stabilized flow rate was recorded.

The hydraulic conductivity values determined from the tests are presented in **Table 1** of the **Appendix**. The values are in units of cubic feet of flow per second, per square foot of seepage area, per foot of head (cfs/ft^2-ft). The tabulated values are ultimate values. The designer should apply an appropriate factor of safety to the reported values.

2.3 SUBSURFACE CONDITIONS

The soil types encountered at the boring locations are presented on individual logs included in the **Appendix**. The stratification presented is based on visual observation of the recovered soil samples and the interpretation of the field logs by a geotechnical engineer. Included with the logs are the N-values and groundwater levels measured at the time the borings were drilled.

The results of our borings performed for the study generally revealed a surficial cover of topsoil, followed by granular fill material comprising fine sand and limerock that persisted to depths ranging from 0.5 to 2.0 feet below grade. Below the granular fill material, the borings encountered medium dense to dense fine sand to the termination depth of the explorations at 20 feet below grade.

Also encountered in the borings in the 5.5 to 12.5 feet depth interval was a medium dense to dense layer of “hard pan” type material. The hard pan consisted of a 1.0 to 6.5 foot thick stratum of organic stained fine sand. The hard pan soils had percentage organic matter by dry weight and moisture content ranging from 3 to 7% and 15 to 20%, respectively. The organics in the soil are colloidal sized.

Hard pan soils are suitable for supporting shallow foundations of low to mid rise buildings and for typical pavement sections (flexible and rigid).

The Soil Survey of Broward County Florida, identifies the site to consist of Immokalee fine sand as the primary mapping unit. The findings of our field explorations are generally consistent with that of this mapping unit.

The groundwater was noted at depths ranging from 5.9 to 7.5 feet below grade at the time of drilling. It should be noted that groundwater levels fluctuate seasonally in response to rainfall and the infiltration rate of the soil. At a time of the year different from the time of drilling, there is a possibility of a change in the recorded levels. We estimate that during the peak of the wet hydroperiod, with rainfall and recharge at a maximum, groundwater levels at the site could be two feet higher than the values reported herein.

We recommend that the contractor determine the actual groundwater level at the time of construction to assess groundwater impact on the construction procedure.

Please refer to the individual boring logs presented in the **Appendix** for details on the subsurface conditions at specific exploration locations.

3.0 RECOMMENDATIONS

3.1 FOUNDATIONS

After completion of site preparation procedures as noted in **Section 4.0** of the report, the proposed structure can be supported on shallow foundations that are designed using a maximum net allowable bearing pressure of 3,000 pounds per square foot (psf), resting on compacted approved structural fill material or densified native soils.

The bottom of the footings should be at least 18 inches below the finished exterior grade in order to provide confinement. We further recommend that the footings supporting isolated columns have a minimum width of 36 inches and that continuous footings have a minimum width of at least 18 inches, even if those dimensions produce a bearing pressure less than the allowable. The purpose of limiting the minimum footing size is to prevent a "punching" shear failure and to reduce the possibility of bearing on an isolated weak zone.

Foundations subject to transient lateral loads will resist these forces through a combination of base shearing resistance mobilized at the footing-subgrade interface and earth pressure acting on the vertical faces of the footings at right angles to the direction of applied load. Base shearing resistance may be determined using a friction factor of 0.55. Passive earth pressure resistance should be computed using an equivalent fluid pressure of 180 pounds per square foot per foot of depth, for granular backfill material. Resistance to sliding determined in accordance with the noted parameters should be considered available/ultimate resistance. Accordingly, the design for sliding resistance should include a factor of safety. We suggest that a factor of safety of at least 1.5 be used.

To calculate the resistance of a footing to uplift forces, a prismatic failure block with vertical faces should be assumed above the footing base. The resisting forces will be provided by the combination of footing weight, overburden soil weight in the failure block, and shearing resistance along the faces of the soil block. The weight of the soil above the water table should be taken as

110 pounds per cubic foot (pcf). For submerged soil, a buoyant weight of 48 pcf should be used. The factor of safety against uplift should not be less than 1.5.

The amount of settlement of a foundation on top of granular soils is primarily governed by the elastic compressibility of the material, the size and depth of its foundations, and the pressure imposed on the supporting materials by the foundations. Based on the field test data obtained, our experience with similar structures and empirical relationships for bearing capacity and settlement, we have estimated that the maximum total settlement of the foundations will be less than one inch. Differential settlement, between adjacent foundations, should be approximately one-half of the total settlement movement. The majority of the settlement will occur during the construction period.

3.2 Floor Slab Recommendations

We recommend that the procedures described in **Section 4.0** of this report be used to prepare the floor slab subgrade. Ground floor slabs can bear directly on top of compacted structural fill material. A modulus of subgrade reaction value of 150 pounds per cubic inch (pci) may be used for design.

To avoid potential moisture problems, we recommend that floor slab subgrade soils be covered with a vapor barrier (such as visqueen, normally 6 mil thick) prior to constructing the slab-on-grade floors. The floor slabs should be reinforced to make them as rigid as practical. Proper joints should be provided at the junctions of the slabs and foundation system so that a small amount of independent movement can occur without causing structural damage. An ultimate friction factor of 0.21 should be used for the vapor barrier-soil interface with an appropriate factor of safety.

3.3 Stormwater Pond

A stormwater pond is proposed for the subject project. The pond is planned at the south end of the property. The proposed pond should be designed and constructed in accordance with applicable Water Management District criteria.

Based on the borings performed in the vicinity of the proposed stormwater system and the results of our field permeability testing, we are recommending the parameters listed in **Table A** below be used to model the shallow effective aquifer in the system recovery analysis.

Table A: Parameters for Pond Design

Parameter	Value	Unit
Coefficient of Horizontal Permeability	6	feet per day
Depth to SHWT	4	feet
Depth of Confining Layer	8	feet
Porosity of Shallow Aquifer	20	percent

Note: Depths referenced from existing grade at the time of PSI's field exploration program.

The recovery of a given stormwater system is dependent on the soil permeability as well as the groundwater table, pond bottom elevation, pond geometry, confining layer and water level in the system. We recommend a commercially available computer program such as PONDS or MODRET be used by an engineer experienced in groundwater modeling to evaluate the recovery potential of the proposed stormwater system. The system should be designed and constructed in accordance with Water Management District requirements. We recommend an appropriate safety factor be applied to the stormwater model.

4.0 SITE PREPARATION

Based on the results of our field exploration, we anticipate site preparation procedures to include the steps listed below. All work should be carried out in accordance with current regulatory criteria with the site preparation work and construction activities being carried out with care so as not to impact the adjacent existing construction that is to remain. The earthwork observation and testing required herein should be performed under the supervision of PSI personnel.

1. If not already done, provisions should be made to relocate any interfering utility lines within the construction area. Excavations resulting from the removal of unwanted pipes should be infilled with suitable granular soils that are thoroughly compacted.

2. Site preparation for the proposed development should include clearing the vegetation and stripping and removal of the topsoil to expose clean granular soils. All unwanted ground cover should be completely removed from the site and properly disposed of. This work should be carried out in accordance with current regulatory criteria.

3. The cleared exposed subgrade should be densified using a self-propelled vibratory roller which imparts a dynamic force of not less than 10 tons. Densification of the soils should be performed within the proposed development areas plus a 5-foot wide perimeter extending beyond the outside edge of the same, where practical. Densification operations should continue until the subgrade soils are firm and unyielding. Any area of the exposed surface that deflects excessively under the weight of the compaction equipment should be excavated approximately 24 inches and be replaced with compacted structural fill. Soils in this interval should be compacted to at least 95 percent of the Modified Proctor maximum dry density determined per ASTM D-1557.

4. Structural fill material may be composed of either clean sands or limerock. The fill should consist of an inorganic, non-plastic material, free of any man-made debris and limerock with a three inch maximum particle size. Proper control of the placement and compaction of new fills for the project should be exercised by a representative of the geotechnical engineer. The fill materials should be placed in lifts not exceeding 12 inches in loose thickness. Each lift should be compacted to at least 95 percent of the Modified Proctor maximum dry density near the optimum moisture content as determined by ASTM D-1557. Fill to be compacted with a vibratory plate tamper or a small walk behind vibratory roller should be placed in lifts not exceeding six inches in loose thickness.

A) The structural fill to be used above the water table should have a Unified Soil Classification System designation of GP, GW, SP, SW, GP-GM, GW-GM, SW-SM, or SP-SM containing less than 12 percent material passing the No. 200 sieve.

B) The structural fill or backfill to be placed below the water table and to a height of one foot above it should consist of a combination of FDOT 57 Stone and structural fill material mixed in an approximate 50% proportion by volume. Once above the water table, the exposed FDOT 57 Stone layer should be systematically stabilized using a plate compactor. Density testing will not be required within this layer, however the subgrade preparation work should be observed by a representative from our office to confirm that the material is in a stable and unyielding condition.

C) The use of a commercially available fill material by the name "Cyclone sand" should not be permitted for the project. Cyclone sand contains large amounts of fines and is therefore very sensitive to moisture. The moisture sensitivity of the material makes it difficult to compact and achieve the desired densities.

5. The footings for the proposed structure should be placed on compacted approved structural fill material or densified native soils.

   A) It is recommended that the soils exposed at the bottom of the footing excavations be compacted to at least 95 percent of the Modified Proctor maximum dry density just before pouring concrete. If the footing bearing materials become disturbed due to surface water resulting from precipitation and runoff, the disturbed soils should be overexcavated and replaced with compacted limerock which is densified to at least 95 percent of the materials Modified Proctor maximum dry density as determined by ASTM designation D-1557.

   B) All open foundation excavations should be observed and approved by a licensed geotechnical engineer or his representative prior to pouring concrete.

6. Groundwater control may be required at this site, if required for either excavation dewatering or removal of temporarily perched water from a rain event. Such water can be controlled by pumping from sumps located in ditches or pits. Groundwater should be maintained at least one foot below the bottom of any excavation made during construction operations, or, at least two feet below the surface of any compaction operations.

7. It is mandated by federal regulations that all excavations, whether they be utility trenches, basement excavations or footing excavations, be constructed in accordance with OSHA guidelines. It is our understanding that these regulations are being strictly enforced and if they are not closely followed, the owner and the contractor could be liable for substantial penalties.

5.0 PAVEMENT SECTION SUGGESTIONS

Flexible pavement sections in this geographic area typically consist of an asphaltic concrete wearing course, a limerock base course and a stabilized subgrade (sub-base). Based on the expected traffic loading and our experience in the area, the typical pavement section thicknesses noted in **Table B** shown on the following page are considered suitable for this project.

Table B: Typical Pavement Section Suggestions

Type of Pavement	Layer	Material Description	Layer Thickness (inches)	
			Light Duty	Medium Duty
Flexible	(A)	Florida DOT Asphalt Type S	1.5	2.5
	(B)	Crushed limerock with a minimum LBR of 100, compacted to 98% of the Modified Proctor maximum dry density	6.0	8.0
	(SB)	Stabilized sub-grade (sub-base) fill with a minimum LBR of 40 compacted to 95% of the Modified Proctor maximum dry density	12.0	12.0
Rigid	(C)	Florida DOT Portland Cement Concrete	5.0	6.0
	(SB)	Granular subgrade compacted to 95% or more of the Modified Proctor maximum dry density	12.0	12.0
(A) = Asphaltic Concrete, (B) = Base Course, (SB) = Stabilized Sub-grade (Sub-base) (C) = Concrete				

The base course materials in the pavements should consist of crushed limerock having a minimum Limerock Bearing Ratio (LBR) of 100. Base materials should meet the requirements presented in the latest revisions of the Florida Department of Transportation "Specifications for Road and Bridge Construction", Section 911 (limestone). The base course should be compacted to at least 98 percent of the material's maximum dry density (ASTM D-1557). The subgrade should be stabilized to a depth of 12 inches to achieve a minimum LBR of 40. This can be obtained by blending base material (limerock) with the existing subgrade soils. The required mixing ratio should be determined by laboratory testing. The stabilized subgrade should be compacted to at least 95 percent of the maximum dry density (ASTM D-1557).

Where dumpsters are to be parked on the pavement, so that considerable load is transferred from relatively small steel supports, it is recommended that rigid concrete pavement be constructed. In addition, in areas utilized for loading and unloading heavy duty-trucks considerations should also be given to using a rigid pavement. A minimum portland concrete pavement thickness of 5 inches should be used in parking areas (light duty) and 6 inches in loading areas (medium duty), if rigid pavements are to be employed. The subgrade soils below concrete pavements should be compacted to a minimum density of 95% of the modified Proctor maximum dry density (ASTM D-1557). The LBR requirement for the subgrade soils is only required for the "flexible" pavement section.

The concrete should be reinforced as necessary to withstand the traffic loadings anticipated and jointed to reduce the potential for crack development. The minimum rigid pavement thickness recommended herein is based upon concrete with an unconfined compressive strength of 4,000 pounds per square inch (psi) and a modulus of rupture of 450 psi. Fill that may be required to raise grades in pavement areas should be compacted to at least 95 percent of the material's maximum dry density (ASTM D-1557).

Finally, we recommend that a minimum separation of at least two feet be maintained between the bottom of the base and the estimated seasonal high groundwater table levels.

Actual pavement section thicknesses and the reinforcement details for the rigid pavement section should be provided by the Design Civil Engineer based on traffic loads, volume, and the owner's design life requirements. The noted sections represent minimum thicknesses for typical local construction practices and, as such, periodic maintenance should be anticipated. All pavement materials and construction procedures should conform to FDOT, American Concrete Institute (ACI), or appropriate city/county requirements.

6.0 REPORT LIMITATIONS

Our professional services have been performed, findings obtained, and recommendations prepared in accordance with generally accepted geotechnical engineering principles and practices at the time of this report. This company is not responsible for the conclusions, opinions or recommendations made by others based on this data. No other warranties are implied or expressed. After the plans and specifications are complete, it is recommended that PSI be provided the opportunity to review the final design and specifications, in order to verify that the earthwork and recommendations are properly interpreted and implemented. At that time, it may be necessary to submit supplemental recommendations.

The scope of investigation was intended to evaluate soil conditions within the influence of the proposed shallow foundations. The analyses and recommendations submitted in this report are based upon the data obtained from the soil borings performed at the locations indicated. If any subsoil variations become evident during the course of this project, a re-evaluation of the recommendations contained in this report will be necessary after we have had an opportunity to observe the characteristics of the conditions encountered. The applicability of the report should also be reviewed in the event significant changes occur in the design, nature or location of the project.

The scope of our services did not include a formal environmental assessment for the presence or absence of hazardous or toxic materials in the soil and groundwater. Any statements in this report regarding odors, staining of soils, or other unusual conditions observed are strictly for the information of our client.

This report has been prepared for the exclusive use of Hanlex Development, LLC and their design consultants, for the specific application to the design and construction of the proposed Dollar General store in Margate, Broward County, Florida.

7.0 CLOSURE

We trust this report is adequate for your current needs; however, should you have any questions or should additional information be required, please do not hesitate to contact our office at (305) 471-7725.

Respectfully submitted,

Professional Service Industries, Inc.
Certificate of Authorization No: 3684

Ian Kinnear, P.E.
Chief Engineer
FL. License No. 32614

Dhuruva (Dru) Badri, P.E.
Department Manager
FL. License No. 68718

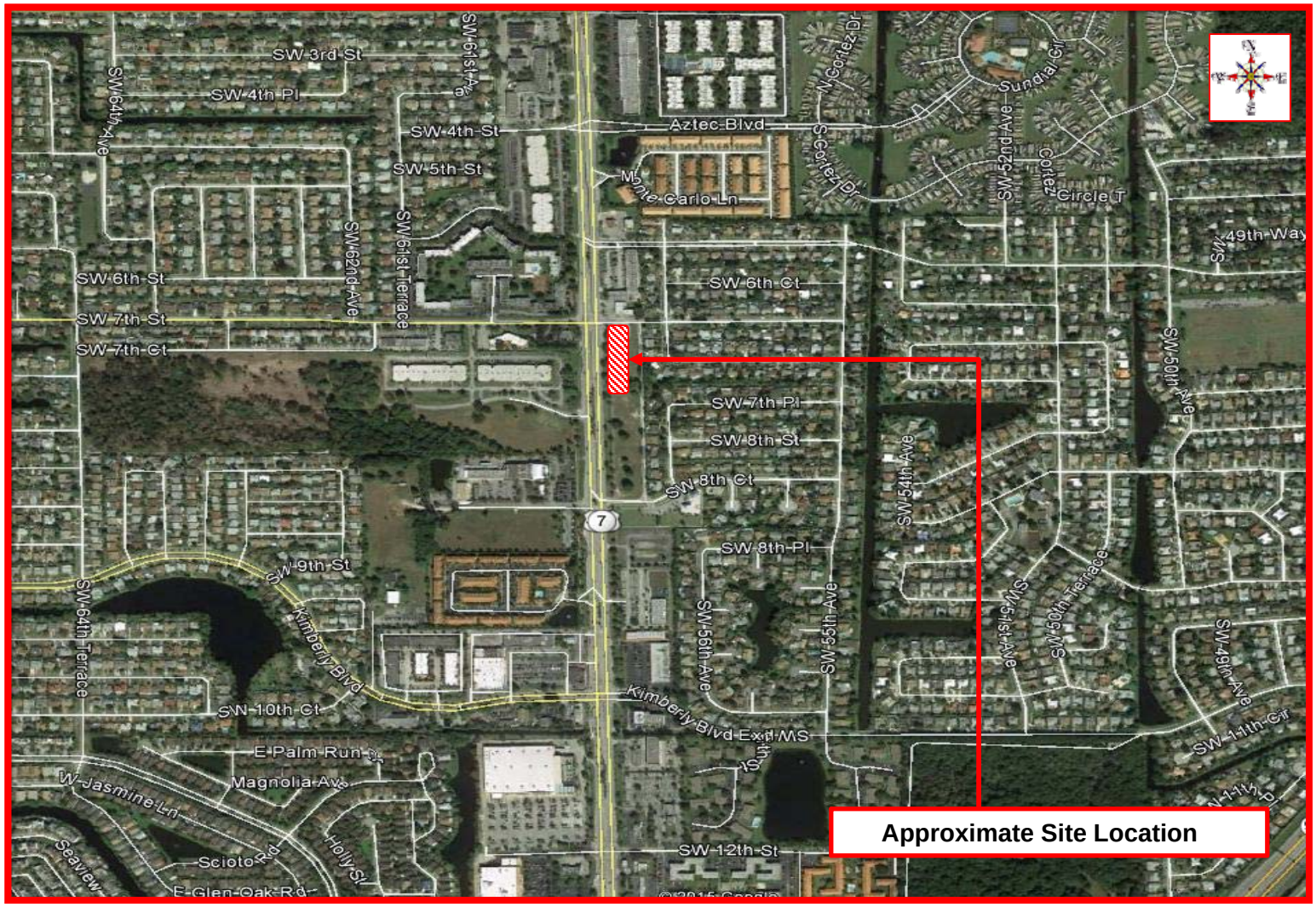
cc: Addressee (3 and PDF)
PSI NCG, Attention: Ms. Teri Hebner, P.E. (PDF)
PSI NCG, Attention: Ms. Lindsey Wright (PDF)
File (1 and PDF)

APPENDIX

Sheet 1:	Site Vicinity Map
Sheet 2:	Site Photographs
Sheet 3:	Boring Location Plan
	Boring Logs
Table 1:	Summary of Percolation Test Result
	Schematic of Usual Open-Hole Percolation Test

APPENDIX

SITE VICINITY MAP



GEOTECHNICAL ENGINEERING SERVICES
Proposed Dollar General
(S.E.C.) S.R. 7 and South West 7th Street, Margate, Florida

DATE: 06/22/2015

DRAWN: CA

CHKD:: DB

SHEET No.: 1

PSI PROJECT No.: 0397-937

psi Information To Build On
Engineering • Consulting • Testing

SITE PHOTOGRAPHS

GEOTECHNICAL ENGINEERING SERVICES
Proposed Dollar General
(S.E.C.) S.R. 7 and South West 7th Street, Margate, Florida

DATE: 06/22/2015

DRAWN: CA

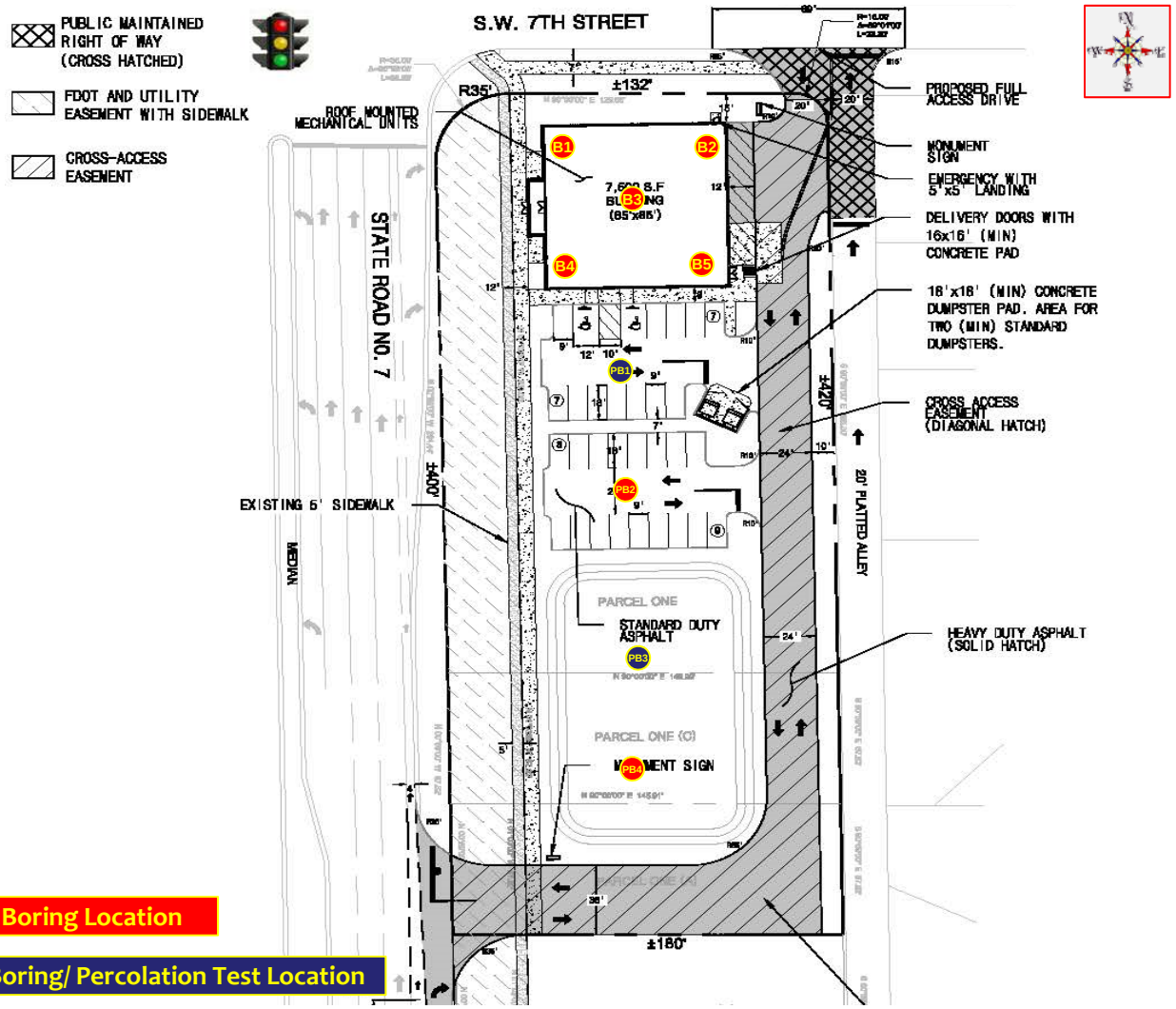
CHKD:: DB

SHEET No.: 2

PSI PROJECT No.: 0397-937

psi Information To Build On
Engineering • Consulting • Testing

BORING LOCATION PLAN



Approximate SPT Boring Location

Approximate SPT Boring/ Percolation Test Location

GEOTECHNICAL ENGINEERING SERVICES
Proposed Dollar General
(S.E.C.) S.R. 7 and South West 7th Street, Margate, Florida

DATE: 06/22/2015

DRAWN: CA

CHKD:: DB

SHEET No.: 3

PSI PROJECT No.: 0397-937

psi Information To Build On
Engineering • Consulting • Testing

Professional Service Industries, Inc.
7950 N.W. 64th Street
Miami, FL 33166
Telephone: (305) 471-7725
Fax: (305) 593-1915

LOG OF BORING B-1

PSI Job No.: 0397-937
Project: Proposed Dollar General
Location: (S.E.C.) S.R. 7 and South West 7th Street
Margate, Florida

Drilling Method: SPT
Sampling Method: SS
Hammer Type: Automatic
Boring Location: Refer to Sheet 3

WATER LEVELS	
While Drilling	6.5 feet
Upon Completion	6.5 feet
Delay	N/A

Station: N/A
Offset: N/A

Elevation (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	Additional Remarks
	0					Light Brown/Gray Fine SAND with Limerock	SP			
				1		Light Brown/Gray Fine SAND		17-10-12-11 N=22		
				2				8-8-10-11 N=18		
							SP			
	5			3				8-7-7-8 N=14		
				4				6-8-9-10 N=17		
						Dark Brown/Gray Organic Stained Fine SAND (Hard Pan) Organic Content = 3% Moisture Content = 20%				
				5				10-9-12-18 N=21		
	10						SP-SM			
				6				15-12-14-15 N=26		
						Light Brown/Gray Fine SAND				
				7				7-8-9 N=17		
	15						SP			
				8				7-6-7 N=13		
	20									

STANDARD PENETRATION TEST DATA
N in blows/ft ◎
× Moisture ◪ PL ✚ LL
0 25 50

STRENGTH, tsf
▲ Qu ✳ Qp
0 2.0 4.0

Completion Depth: 20.0 ft
Date Boring Started: 6/17/15
Date Boring Completed: 6/17/15
Logged By: I.L
Drilling Contractor: PSI, Inc.

Sample Types:
Auger Cutting
Split-Spoon
Rock Core
Shelby Tube
Hand Auger
Calif. Sampler
Texas Cone

Latitude:
Longitude:
Drill Rig: CME-75
Remarks:

The stratification lines represent approximate boundaries. The transition may be gradual.

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LOG OF BORING B-2

PSI Job No.: 0397-937
Project: Proposed Dollar General
Location: (S.E.C.) S.R. 7 and South West 7th Street
Margate, Florida

Drilling Method: SPT
Sampling Method: SS
Hammer Type: Automatic
Boring Location: Refer to Sheet 3

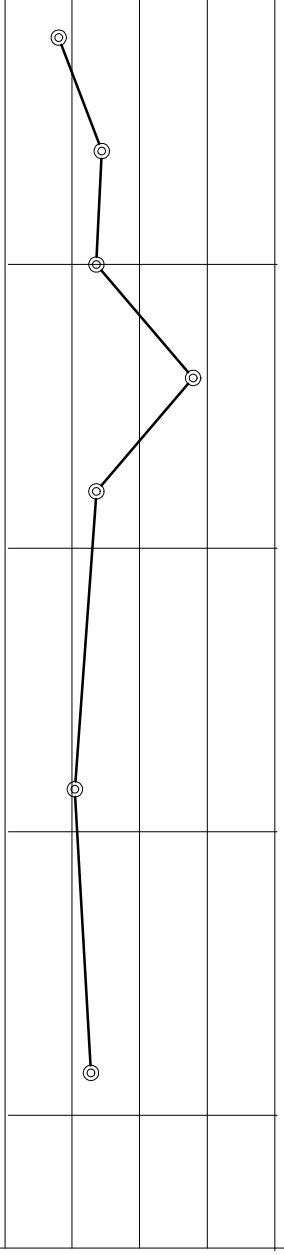
WATER LEVELS	
While Drilling	5.9 feet
Upon Completion	5.9 feet
Delay	N/A

Station: N/A
Offset: N/A

Elevation (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	Additional Remarks
	0					Light Brown/Gray Fine SAND with Limerock	SP			
				1		Light Brown/Gray Fine SAND		5-5-5-9 N=10		
				2			SP	7-8-10-10 N=18		
	5			3				8-7-10-14 N=17		
						Dark Brown/Gray Organic Stained Fine SAND (Hard Pan) Organic Content = 7% Moisture Content = 18%				
				4				16-20-15-16 N=35		
				5			SP-SM	7-8-9-9 N=17		
	10									
						Light Brown/Gray Fine SAND				
				6				6-6-7 N=13		
	15						SP			
				7				8-7-9 N=16		
	20									

STANDARD PENETRATION TEST DATA
N in blows/ft ◎
× Moisture ◪ PL ✚ LL
0 25 50

STRENGTH, tsf
▲ Qu ✳ Qp
0 2.0 4.0



Completion Depth:	20.0 ft
Date Boring Started:	6/17/15
Date Boring Completed:	6/17/15
Logged By:	I.L
Drilling Contractor:	PSI, Inc.

Sample Types:
- Auger Cutting
- Split-Spoon
- Rock Core
- Shelby Tube
- Hand Auger
- Calif. Sampler
- Texas Cone

Latitude:
Longitude:
Drill Rig: CME-75
Remarks:

The stratification lines represent approximate boundaries. The transition may be gradual.

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LOG OF BORING B-3

PSI Job No.: 0397-937
Project: Proposed Dollar General
Location: (S.E.C.) S.R. 7 and South West 7th Street
Margate, Florida

Drilling Method: SPT
Sampling Method: SS
Hammer Type: Automatic
Boring Location: Refer to Sheet 3

WATER LEVELS

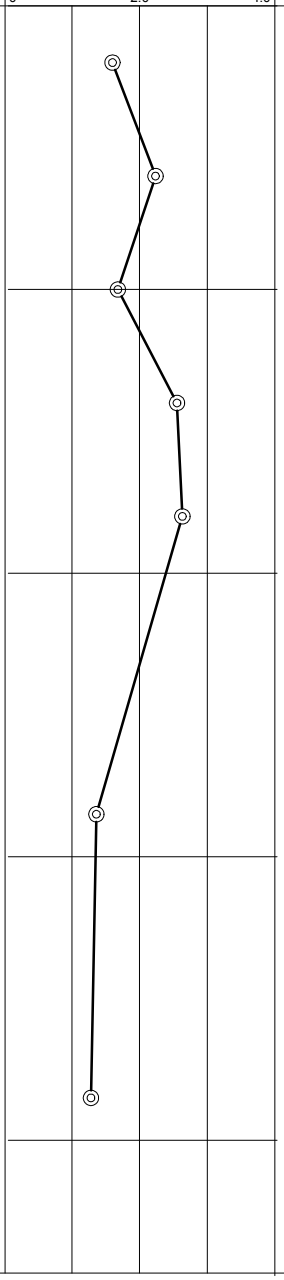
While Drilling	6.3 feet
Upon Completion	6.3 feet
Delay	N/A

Station: N/A
Offset: N/A

Elevation (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	Additional Remarks
	0					Light Brown/Gray LIMEROCK with Fine Sand and Traces of Asphalt Fragments	GP			
				1		Light Brown/Gray Fine SAND		18-12-8-9 N=20		
				2			SP	9-12-16-17 N=28		
	5			3				11-10-11-10 N=21		
				4		Dark Brown/Gray Organic Stained Fine SAND (Hard Pan) Organic Content = 6% Moisture Content = 18%	SP-SM	8-9-23-27 N=32		
				5		Light Brown/Gray Fine SAND		19-17-16-16 N=33		
	10									
				6			SP	6-8-9 N=17		
	15									
				7				8-7-9 N=16		
	20									

STANDARD PENETRATION TEST DATA
N in blows/ft ◎
× Moisture ◪ PL ✚ LL
0 25 50

STRENGTH, tsf
▲ Qu ✳ Qp
0 2.0 4.0



Completion Depth:	20.0 ft
Date Boring Started:	6/17/15
Date Boring Completed:	6/17/15
Logged By:	I.L
Drilling Contractor:	PSI, Inc.

Sample Types:
Auger Cutting
Split-Spoon
Rock Core
Shelby Tube
Hand Auger
Calif. Sampler
Texas Cone

Latitude:
Longitude:
Drill Rig: CME-75
Remarks:

The stratification lines represent approximate boundaries. The transition may be gradual.

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LOG OF BORING B-4

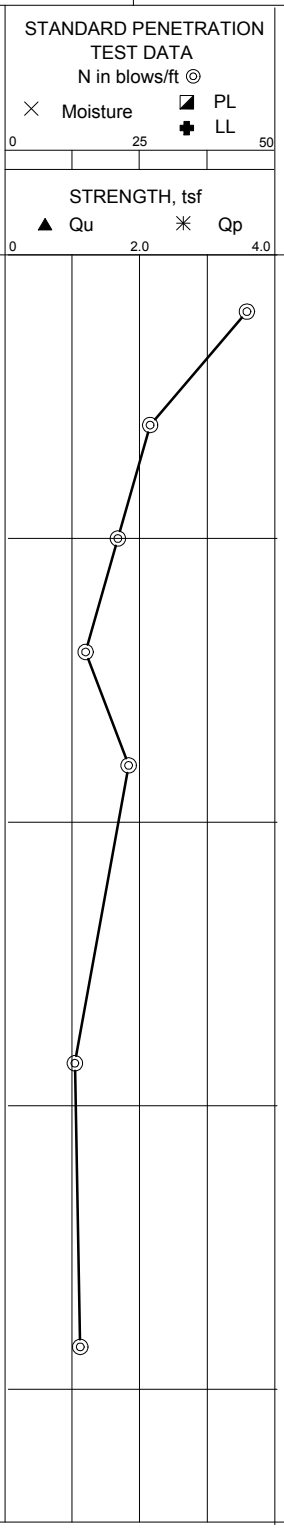
PSI Job No.: 0397-937
Project: Proposed Dollar General
Location: (S.E.C.) S.R. 7 and South West 7th Street
Margate, Florida

Drilling Method: SPT
Sampling Method: SS
Hammer Type: Automatic
Boring Location: Refer to Sheet 3

WATER LEVELS	
While Drilling	6.7 feet
Upon Completion	6.7 feet
Delay	N/A

Station: N/A
Offset: N/A

Elevation (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	Additional Remarks
	0					Dark Brown Organic Fine SAND with Traces of Roots	OL			
				1		Light Brown/Gray Fine SAND with Limerock	SP	15-24-21-20 N=45		
						Light Brown/Gray Fine SAND				
				2				13-12-15-16 N=27		
	5			3			SP	11-10-11-10 N=21		
				4				9-7-8-20 N=15		
						Dark Brown/Gray Organic Stained Fine SAND (Hard Pan) Organic Content = 5% Moisture Content = 15%				
				5				10-10-13-12 N=23		
	10						SP-SM			
						Light Brown/Gray Fine SAND				
				6				6-7-6 N=13		
	15						SP			
				7				5-7-7 N=14		
	20									



Completion Depth: 20.0 ft
Date Boring Started: 6/17/15
Date Boring Completed: 6/17/15
Logged By: I.L
Drilling Contractor: PSI, Inc.

Sample Types:
Auger Cutting
Split-Spoon
Rock Core
Shelby Tube
Hand Auger
Calif. Sampler
Texas Cone

Latitude:
Longitude:
Drill Rig: CME-75
Remarks:

The stratification lines represent approximate boundaries. The transition may be gradual.

Professional Service Industries, Inc.
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LOG OF BORING B-5

PSI Job No.: 0397-937
Project: Proposed Dollar General
Location: (S.E.C.) S.R. 7 and South West 7th Street
Margate, Florida

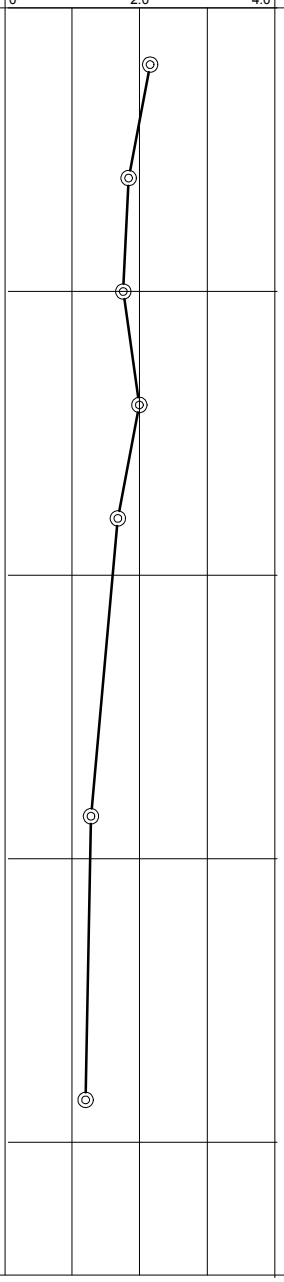
Drilling Method: SPT
Sampling Method: SS
Hammer Type: Automatic
Boring Location: Refer to Sheet 3

WATER LEVELS	
While Drilling	6.3 feet
Upon Completion	6.3 feet
Delay	N/A

Station: N/A
Offset: N/A

Elevation (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	Additional Remarks
	0					Dark Brown Organic Fine SAND with Traces of Roots	OL			
				1		Light Brown/Gray Fine SAND with Limerock	SP	7-15-12-14 N=27		
						Light Brown/Gray Fine SAND				
				2				9-9-14-16 N=23		
	5			3			SP	11-10-12-13 N=22		
				4				10-12-13-19 N=25		
						Dark Brown/Gray Organic Stained Fine SAND (Hard Pan)				
				5				11-10-11-13 N=21		
	10						SP-SM			
						Light Brown/Gray Fine SAND				
				6				7-8-8 N=16		
	15						SP			
				7				7-7-8 N=15		
	20									

STANDARD PENETRATION TEST DATA
N in blows/ft ◎
× Moisture ◪ PL ✚ LL
0 25 50
STRENGTH, tsf
▲ Qu ✳ Qp
0 2.0 4.0



Completion Depth: 20.0 ft
Date Boring Started: 6/17/15
Date Boring Completed: 6/17/15
Logged By: I.L
Drilling Contractor: PSI, Inc.

Sample Types:
Auger Cutting
Split-Spoon
Rock Core
Shelby Tube
Hand Auger
Calif. Sampler
Texas Cone

Latitude:
Longitude:
Drill Rig: CME-75
Remarks:

The stratification lines represent approximate boundaries. The transition may be gradual.

Professional Service Industries, Inc.
7950 N.W. 64th Street
Miami, FL 33166
Telephone: (305) 471-7725
Fax: (305) 593-1915

LOG OF BORING PB-1

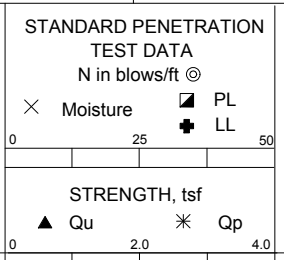
PSI Job No.:	0397-937	Drilling Method:	SPT
Project:	Proposed Dollar General	Sampling Method:	SS
Location:	(S.E.C.) S.R. 7 and South West 7th Street Margate, Florida	Hammer Type:	Automatic
		Boring Location:	Refer to Sheet 3

WATER LEVELS

While Drilling	7.5 feet
Upon Completion	7.5 feet
Delay	N/A

Station: N/A
Offset: N/A

Elevation (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	Additional Remarks
	0					Dark Brown Organic Fine SAND with Traces of Roots	OL			
				1		Light Brown/Gray Fine SAND with Limerock	SP	12-14-13-12 N=27		
						Light Brown/Gray Fine SAND				
				2				8-7-9-12 N=16		
	5			3			SP	9-8-11-12 N=19		
				4				10-9-11-13 N=20		
						Dark Brown/Gray Organic Stained Fine SAND (Hard Pan)				
				5			SP-SM	6-5-5-7 N=10		
	10					Note: Percolation Test Performed at 10 Feet Below the Ground Surface				



Completion Depth:	10.0 ft	Sample Types:	Shelby Tube	Latitude:	
Date Boring Started:	6/17/15	Auger Cutting	Hand Auger	Longitude:	
Date Boring Completed:	6/17/15	Split-Spoon	Calif. Sampler	Drill Rig:	CME-75
Logged By:	I.L	Rock Core	Texas Cone	Remarks:	
Drilling Contractor:	PSI, Inc.				

The stratification lines represent approximate boundaries. The transition may be gradual.

Professional Service Industries, Inc.
7950 N.W. 64th Street
Miami, FL 33166
Telephone: (305) 471-7725
Fax: (305) 593-1915

LOG OF BORING PB-2

PSI Job No.: 0397-937
Project: Proposed Dollar General
Location: (S.E.C.) S.R. 7 and South West 7th Street
Margate, Florida

Drilling Method: SPT
Sampling Method: SS
Hammer Type: Automatic
Boring Location: Refer to Sheet 3

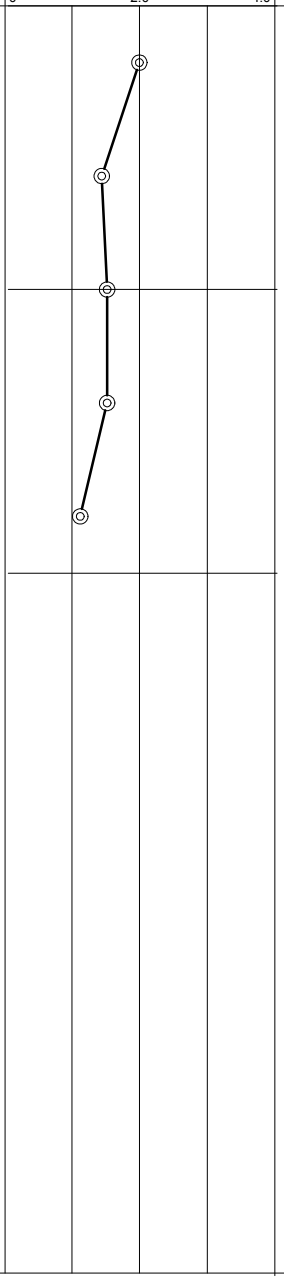
WATER LEVELS	
While Drilling	7.5 feet
Upon Completion	7.5 feet
Delay	N/A

Station: N/A
Offset: N/A

Elevation (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	Additional Remarks
	0					Dark Brown Organic Fine SAND with Traces of Roots	OL			
				1		Light Brown/Gray Fine SAND with Limerock	SP	10-13-12-12 N=25		
						Light Brown/Gray Fine SAND				
				2				9-8-10-11 N=18		
	5			3			SP	9-10-9-11 N=19		
				4				10-10-9-12 N=19		
						Dark Brown/Gray Organic Stained Fine SAND (Hard Pan)				
				5			SP-SM	7-6-8-7 N=14		
	10									

STANDARD PENETRATION TEST DATA
N in blows/ft ◎
× Moisture ◪ PL ✚ LL
0 25 50

STRENGTH, tsf
▲ Qu ✳ Qp
0 2.0 4.0



Completion Depth:	10.0 ft
Date Boring Started:	6/17/15
Date Boring Completed:	6/17/15
Logged By:	I.L
Drilling Contractor:	PSI, Inc.

Sample Types:
Auger Cutting
Split-Spoon
Rock Core
Shelby Tube
Hand Auger
Calif. Sampler
Texas Cone

Latitude:
Longitude:
Drill Rig: CME-75
Remarks:

The stratification lines represent approximate boundaries. The transition may be gradual.

Professional Service Industries, Inc.
7950 N.W. 64th Street
Miami, FL 33166
Telephone: (305) 471-7725
Fax: (305) 593-1915

LOG OF BORING PB-3

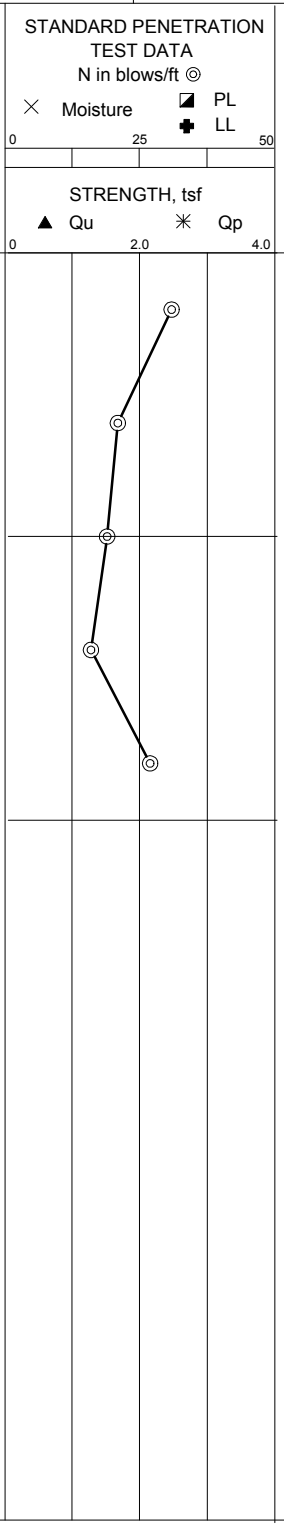
PSI Job No.:	0397-937	Drilling Method:	SPT
Project:	Proposed Dollar General	Sampling Method:	SS
Location:	(S.E.C.) S.R. 7 and South West 7th Street Margate, Florida	Hammer Type:	Automatic
		Boring Location:	Refer to Sheet 3

WATER LEVELS

While Drilling	7.3 feet
Upon Completion	7.3 feet
Delay	N/A

Station: N/A
Offset: N/A

Elevation (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	Additional Remarks
	0					Dark Brown Organic Fine SAND with Traces of Roots	OL			
				1		Light Brown/Gray Fine SAND with Limerock	SP	21-18-13-16 N=31		
						Light Brown/Gray Fine SAND				
				2				9-9-12-15 N=21		
	5			3			SP	10-9-10-11 N=19		
				4				8-7-9-10 N=16		
						Dark Brown/Gray Organic Stained Fine SAND (Hard Pan)				
				5			SP-SM	11-12-15-19 N=27		
	10					Note: Percolation Test Performed at 10 Feet Below the Ground Surface				



Completion Depth:	10.0 ft
Date Boring Started:	6/17/15
Date Boring Completed:	6/17/15
Logged By:	I.L
Drilling Contractor:	PSI, Inc.

Sample Types:
- Auger Cutting
- Split-Spoon
- Rock Core
- Shelby Tube
- Hand Auger
- Calif. Sampler
- Texas Cone

Latitude:
Longitude:
Drill Rig: CME-75
Remarks:

The stratification lines represent approximate boundaries. The transition may be gradual.

Professional Service Industries, Inc.
7950 N.W. 64th Street
Miami, FL 33166
Telephone: (305) 471-7725
Fax: (305) 593-1915

LOG OF BORING PB-4

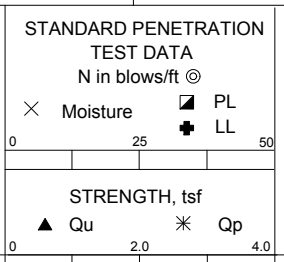
PSI Job No.:	0397-937	Drilling Method:	SPT
Project:	Proposed Dollar General	Sampling Method:	SS
Location:	(S.E.C.) S.R. 7 and South West 7th Street Margate, Florida	Hammer Type:	Automatic
		Boring Location:	Refer to Sheet 3

WATER LEVELS

While Drilling	7.2 feet
Upon Completion	7.2 feet
Delay	N/A

Station: N/A
Offset: N/A

Elevation (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	Additional Remarks
	0					Dark Brown Organic Fine SAND with Traces of Roots	OL			
				1		Light Brown/Gray Fine SAND with Limerock	SP	18-15-14-12 N=29		
						Light Brown/Gray Fine SAND				
				2				10-9-11-13 N=20		
	5			3			SP	10-9-10-10 N=19		
				4				9-8-9-9 N=17		
						Dark Brown/Gray Organic Stained Fine SAND (Hard Pan)				
				5			SP-SM	11-11-13-21 N=24		
	10									



Completion Depth:	10.0 ft	Sample Types:	Shelby Tube	Latitude:	
Date Boring Started:	6/17/15	Auger Cutting	Hand Auger	Longitude:	
Date Boring Completed:	6/17/15	Split-Spoon	Calif. Sampler	Drill Rig:	CME-75
Logged By:	I.L	Rock Core	Texas Cone	Remarks:	
Drilling Contractor:	PSI, Inc.				

The stratification lines represent approximate boundaries. The transition may be gradual.

TABLE 1: SUMMARY OF PERCOLATION TEST RESULTS
PROPOSED DOLLAR GENERAL - BROWARD COUNTY, FL
(S.E.C.) S.R. 7 AND S.W. 7TH STREET
MARGATE, FLORIDA
PSI PROJECT No.: 0397-937

Test No.	Date Performed	Diameter		Depth of Hole (Feet)	Depth to Groundwater Level Below Ground Surface (Feet)		Hydraulic Head, H2 (Feet)	Saturated Hole Depth, Ds (Feet)	Average Flow Rate, Q (gpm)	K, Hydraulic Conductivity cfs/ft^2-ft
		Casing (Inches)	Perforated PVC (Inches)		Prior to Test	During Test				
PB-1	17-Jun-15	6	4	10.0	6.6	0.0	6.6	3.4	2.3	7.1E-05
PB-3	17-Jun-15	6	4	10.0	6.3	0.0	6.3	3.7	2.2	7.0E-05

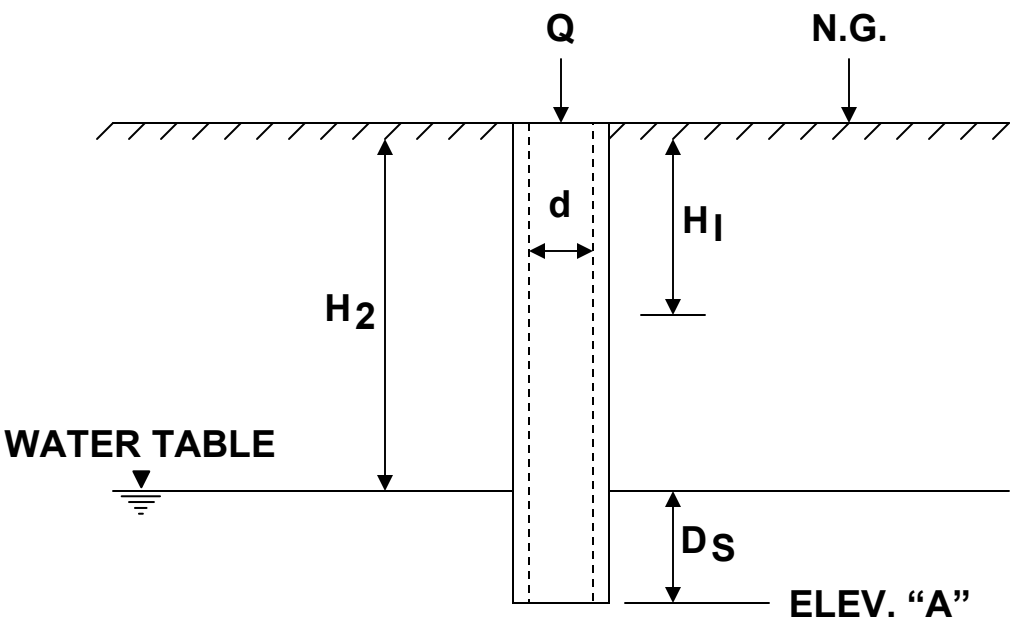
Note:

(1) The above hydraulic conductivity values are for a french drain installed to the same depth as the borehole tests. The values represent an ultimate value. The designer should apply the appropriate factor of safety.

(2) The hydraulic conductivity values were calculated based on the South Florida Water Management District's USUAL OPEN HOLE CONSTANT HEAD percolation test procedure as shown on the following page.

(3) A diameter of six inches was used in the computation of the Hydraulic Conductivity value presented in the above table.

USUAL OPEN – HOLE TEST



$$K = \frac{4Q}{\pi d (2H_2^2 + 4H_2D_S + H_2d)}$$

K= HYDRAULIC CONDUCTIVITY (CFS/FT.^{2} - FT.HEAD)

Q= "STABILIZED" FLOW RATE (CFS)

d= DIAMETER OF TEST HOLE (FEET)

H_2 = DEPTH TO WATER TABLE (FEET)

D_S = SATURATED HOLE DEPTH (FEET)

ELEV. "A"= PROPOSED TRENCH BOTTOM ELEV.

H_I = AVERAGE HEAD ON UNSATURATED HOLE SURFACE (FT.HEAD)

psi Information To Build On
Engineering • Consulting • Testing

6. District Maintenance Acknowledgement

I, Hanlex Development, LLC, acknowledge the stormwater maintenance requirements established by the Florida Department of Environmental Protection (FDEP) including, but not limited to, (a) Removal of trash and debris, (b) Inspection of inlets and outlets, (c) Removal of sediments or vegetation when the storage volume or conveyance capacity of the stormwater management system is below design levels, and (d) Stabilization and restoration of eroded areas. As the owner of the project, I agree to adhere to said maintenance requirements for the proposed development.

7. Appendix

A. LOCATION MAP

LOCATION MAP

EXHIBIT 'A'

PROJECT NAME:
DOLLAR GENERAL AT MARGATE

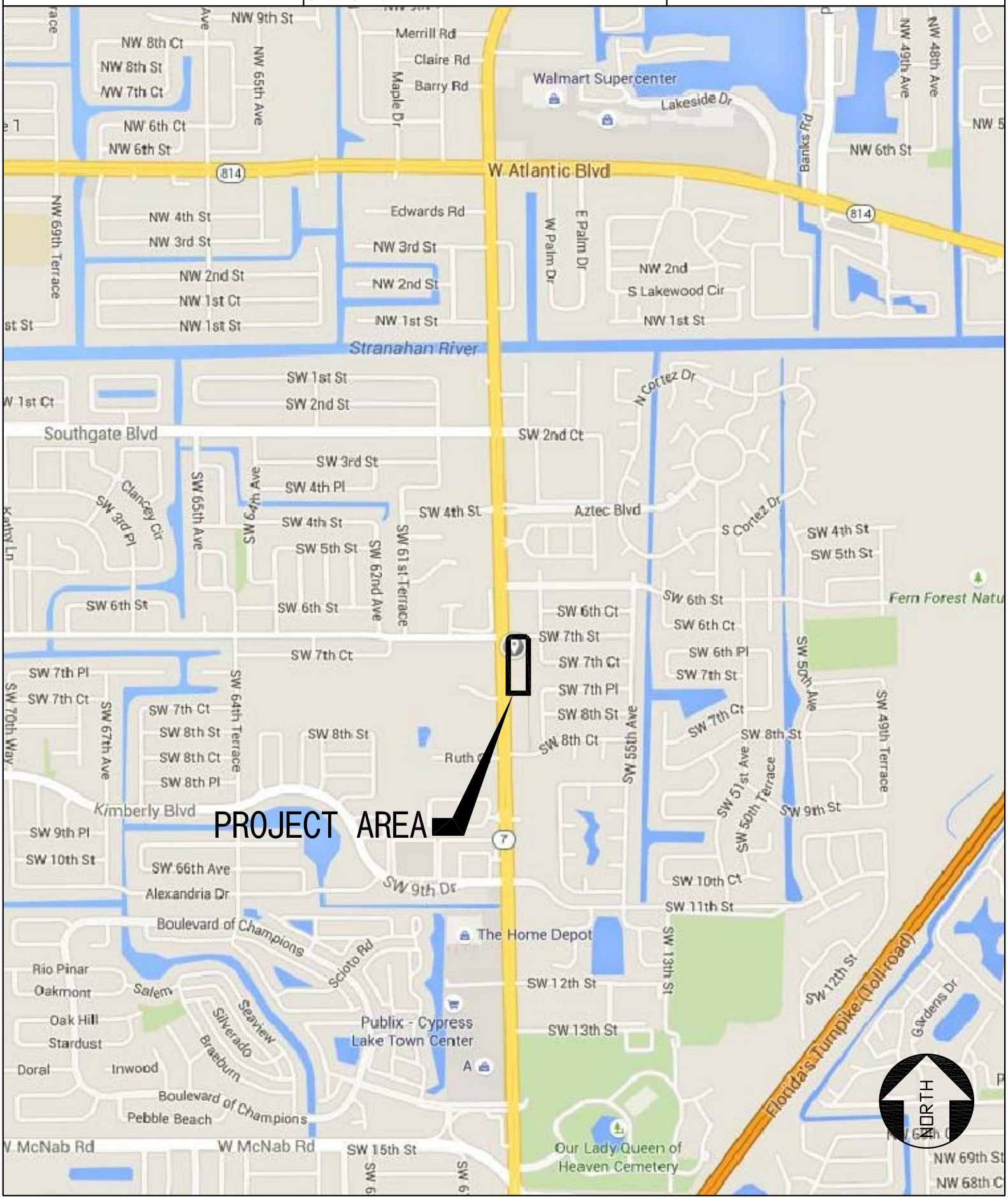
CITY OR COUNTY,STATE - STREET/INTERSECTION:
BROWARD COUNTY, FL - STATE ROAD 7 & S.W 7TH STREET

SECTION 6, T49S, R42E

PARCEL ID: 494206180930, 494206180931, 494206180932

SITE ACREAGE: ±1.79

HANLEX CIVIL, LLC
1825 S. ORANGE BLOSSOM TRAIL
APOPKA, FL 32703
P: (407) 889-9400
F: (407) 889-8328
COA: 29910



B. USDA SOILS MAP

SCS SOILS MAP

EXHIBIT 'B'

PROJECT NAME:
DOLLAR GENERAL AT MARGATE

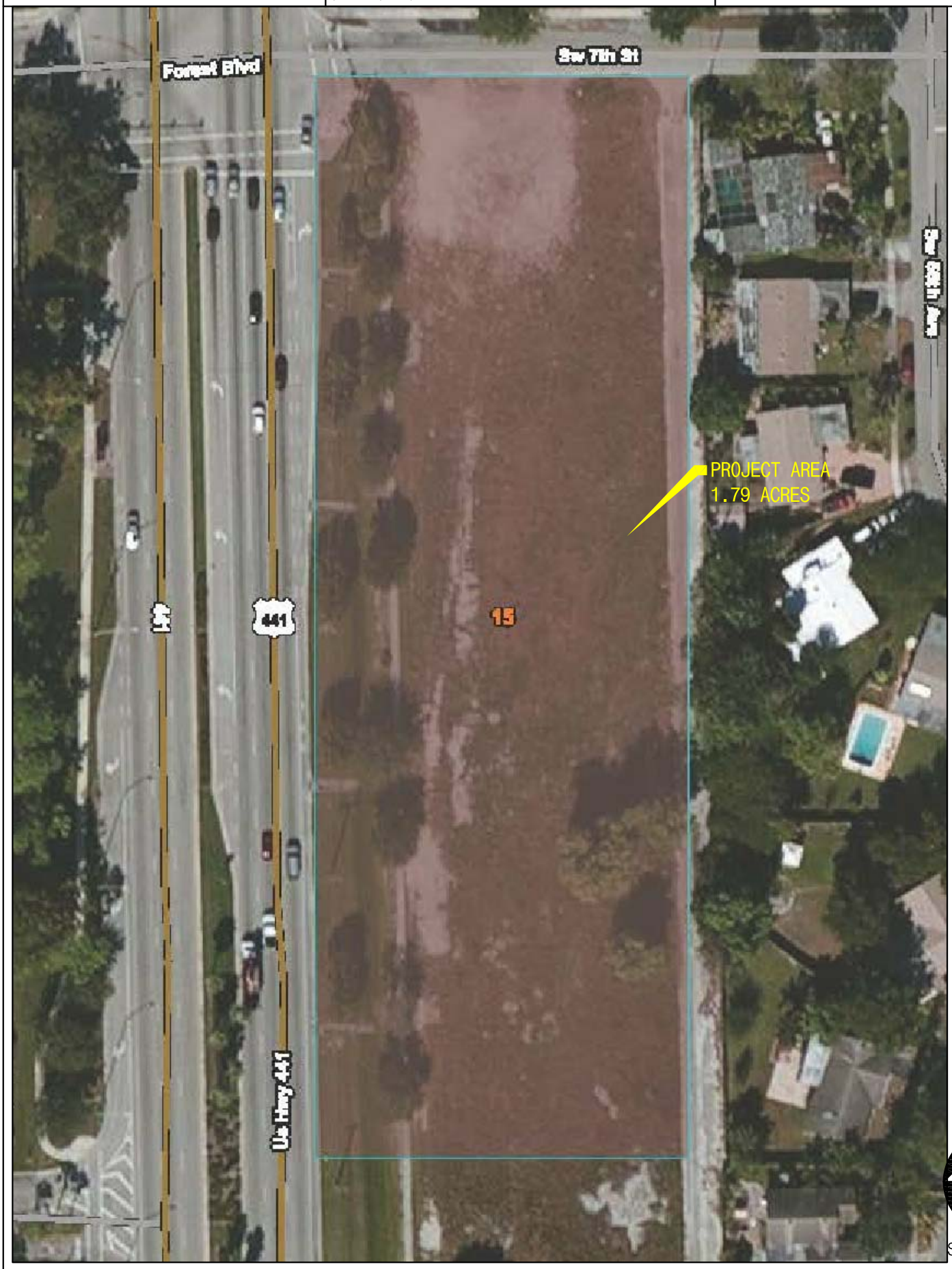
CITY OR COUNTY,STATE - STREET/INTERSECTION:
BROWARD COUNTY, FL - STATE ROAD 7 & S.W 7TH STREET

SECTION 6, T49S, R42E

PARCEL ID: 494206180930, 494206180931, 494206180932

SITE ACREAGE: ±1.79

HANLEX CIVIL, LLC
1825 S. ORANGE BLOSSOM TRAIL
APOPKA, FL 32703
P: (407) 889-9400
F: (407) 889-8328
COA: 29910



NORTH

SCALE = NTS

HYDROLOGIC SOILS GROUP	PROJECT NAME: DOLLAR GENERAL AT MARGATE	HANLEX CIVIL, LLC	1825 S. ORANGE BLOSSOM TRAIL APOPKA, FL 32703 P: (407) 889-9400 F: (407) 889-8328 COA: 29910
	CITY OR COUNTY,STATE - STREET/INTERSECTION: BROWARD COUNTY, FL - STATE ROAD 7 & S.W 7TH STREET		
EXHIBIT 'B2'	SECTION 6, T49S, R42E		
	PARCEL ID: 494206180930, 494206180931, 494206180932		
	SITE ACREAGE: ±1.79		

Hydrologic Soil Group

Hydrologic Soil Group— Summary by Map Unit — Broward County, Florida, East Part (FL606)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
15	Immokalee fine sand, 0 to 2 percent slopes	B/D	2.7	100.0%
Totals for Area of Interest			**2.7**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

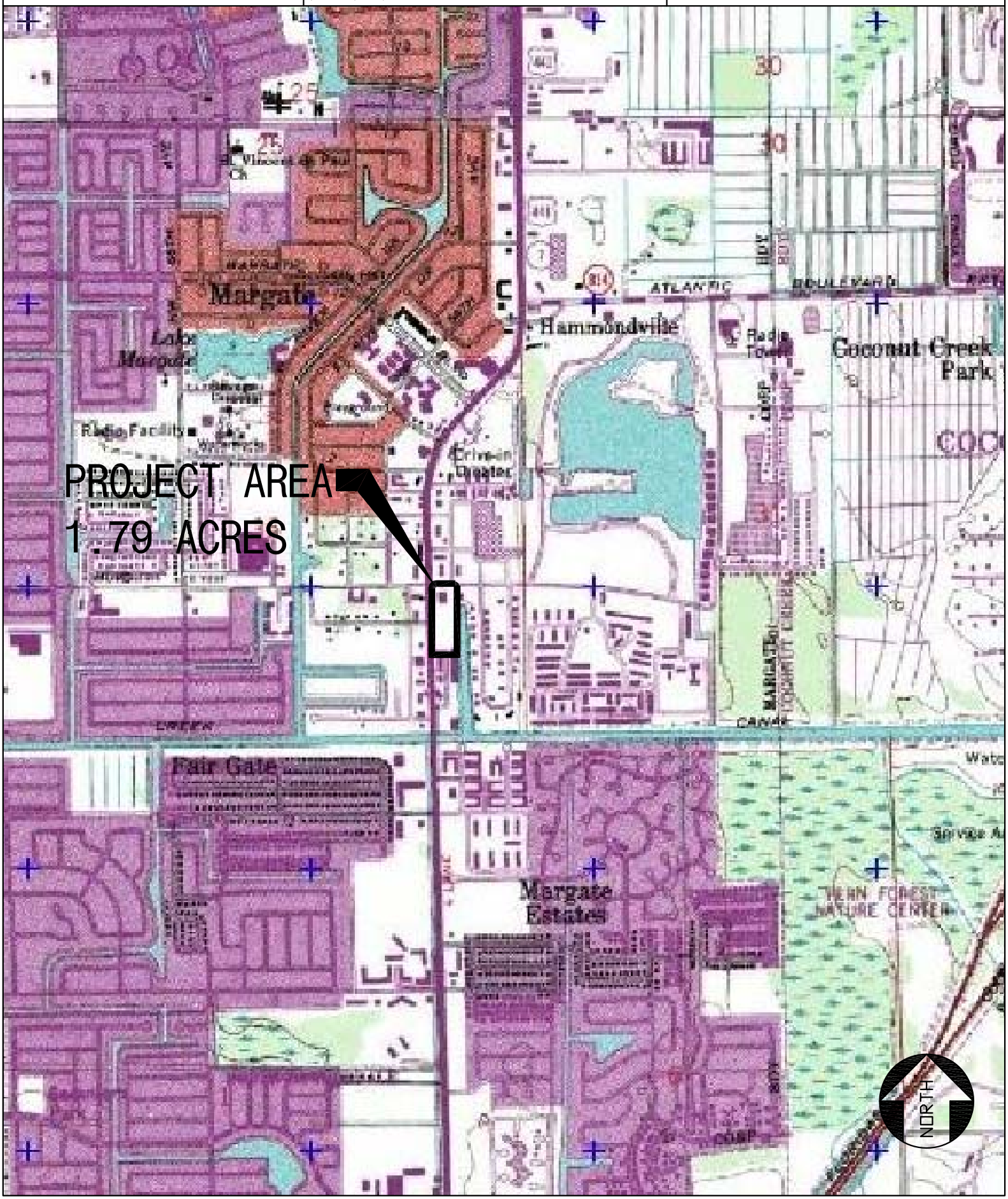
Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

C. USGS Quad Maps

USGS QUADRANGLE MAP	PROJECT NAME: DOLLAR GENERAL AT MARGATE
	CITY OR COUNTY,STATE - STREET/INTERSECTION: BROWARD COUNTY, FL - STATE ROAD 7 & S.W 7TH STREET
EXHIBIT 'C'	SECTION 6, T49S, R42E
	PARCEL ID: 494206180930, 494206180931, 494206180932
	SITE ACREAGE: ±1.79

HANLEX CIVIL, LLC
1825 S. ORANGE BLOSSOM TRAIL
APOPKA, FL 32703
P: (407) 889-9400
F: (407) 889-8328
COA: 29910



D. AERIAL MAP

AERIAL PHOTOGRAPH

EXHIBIT 'D'

PROJECT NAME:
DOLLAR GENERAL AT MARGATE

CITY OR COUNTY,STATE - STREET/INTERSECTION:
BROWARD COUNTY, FL - STATE ROAD 7 & S.W 7TH STREET

SECTION 6, T49S, R42E

PARCEL ID: 494206180930, 494206180931, 494206180932

SITE ACREAGE: ±1.79

HANLEX CIVIL, LLC
1825 S. ORANGE BLOSSOM TRAIL
APOPKA, FL 32703
P: (407) 889-9400
F: (407) 889-8328
COA: 29910

NORTH

E. FEMA FLOOD INSURANCE RATE MAP

FEMA 100-YEAR FLOODPLAIN MAP	PROJECT NAME: DOLLAR GENERAL AT MARGATE
	CITY OR COUNTY,STATE - STREET/INTERSECTION: BROWARD COUNTY, FL - STATE ROAD 7 & S.W 7TH STREET
EXHIBIT 'E'	SECTION 6, T49S, R42E
	PARCEL ID: 494206180930, 494206180931, 494206180932
	SITE ACREAGE: ±1.79

HANLEX CIVIL, LLC
1825 S. ORANGE BLOSSOM TRAIL
APOPKA, FL 32703
P: (407) 889-9400
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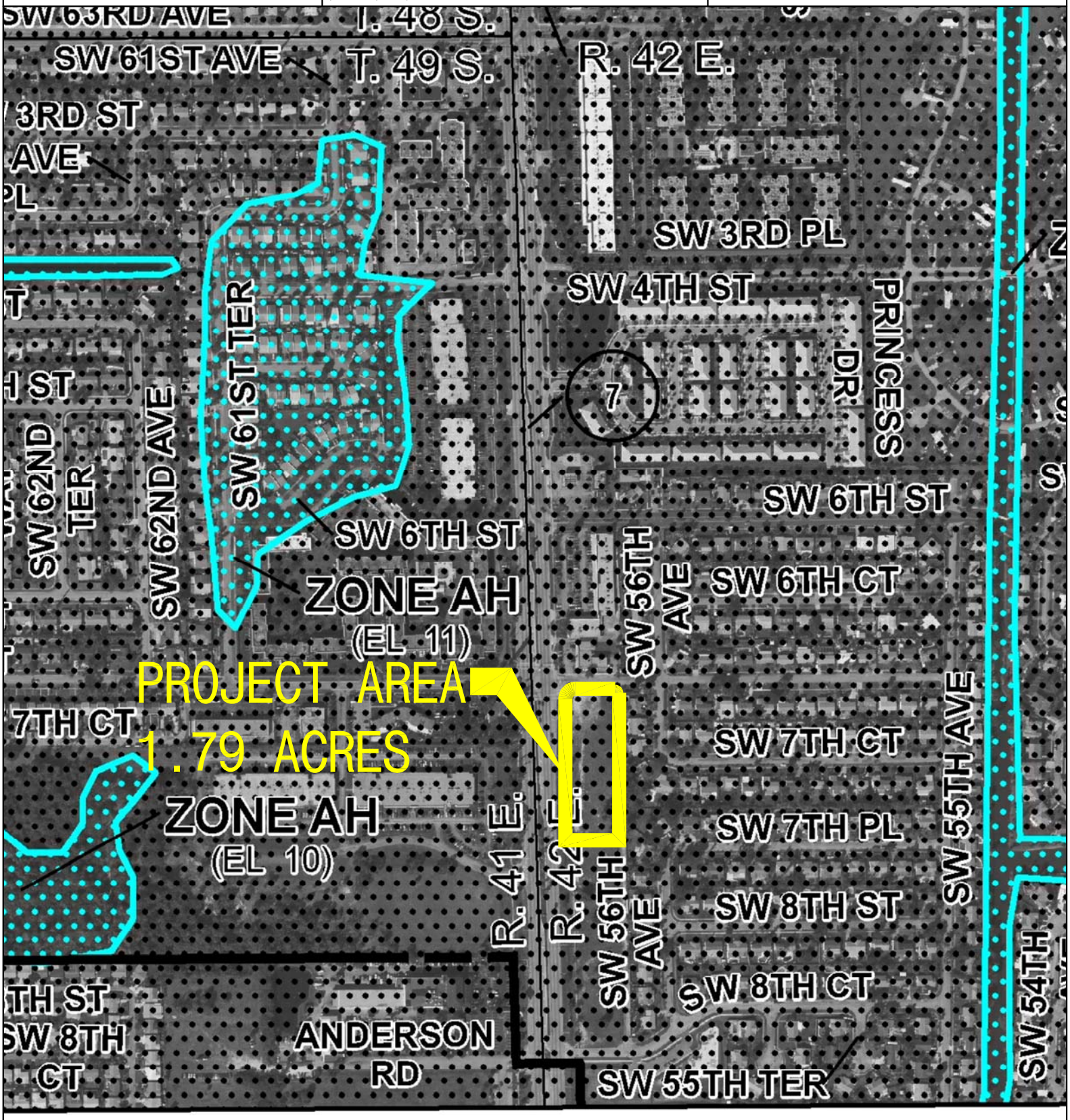
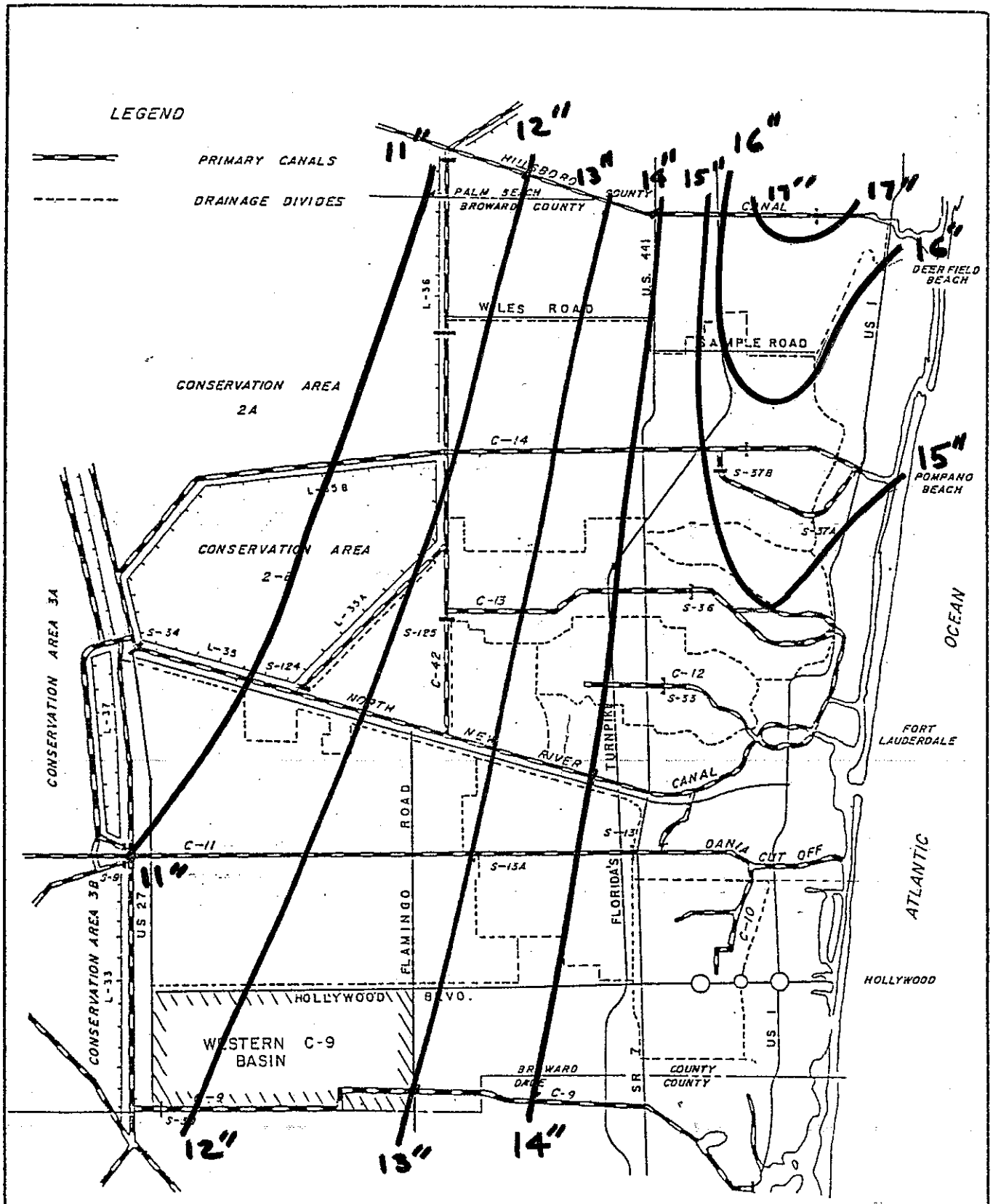
COA: 29910



NORTH

F. RAINFALL MAPS

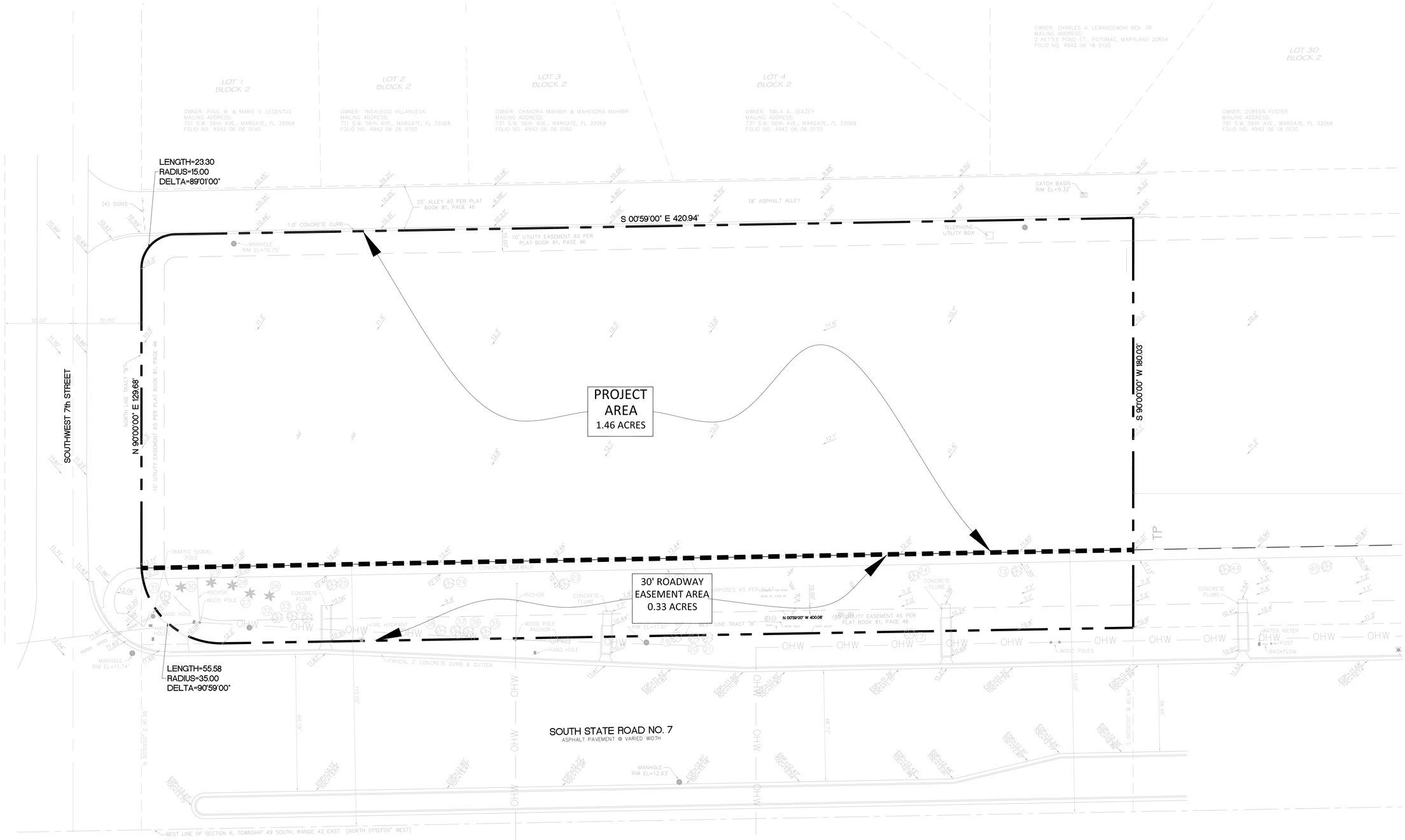


NOTE: This map available on 24"x36" sheet

BROWARD COUNTY PUBLIC WORKS DEPARTMENT Water Resources Management Division		DRAINAGE DIVIDES	W.M. 1.1 1 OF 1 SHEETS

7 SUR-3D

G. PRE-BASIN MAP



DOLLAR GENERAL

HANLEX DEVELOPMENT
Commercial Real Estate Development

PROJECT: DOLLAR GENERAL AT MARGATE

HANLEX CIVIL, LLC
1825 S. ORANGE BLOSSOM TRAIL
APOPKA, FL 32703
P: (407) 889-9400
F: (407) 889-8328
COA: 29910

EXHIBIT

NO:	DATE:	REVISION/ISSUE:	BY:

ENGINEER'S NAME & PE#

PROJECT # 215.004

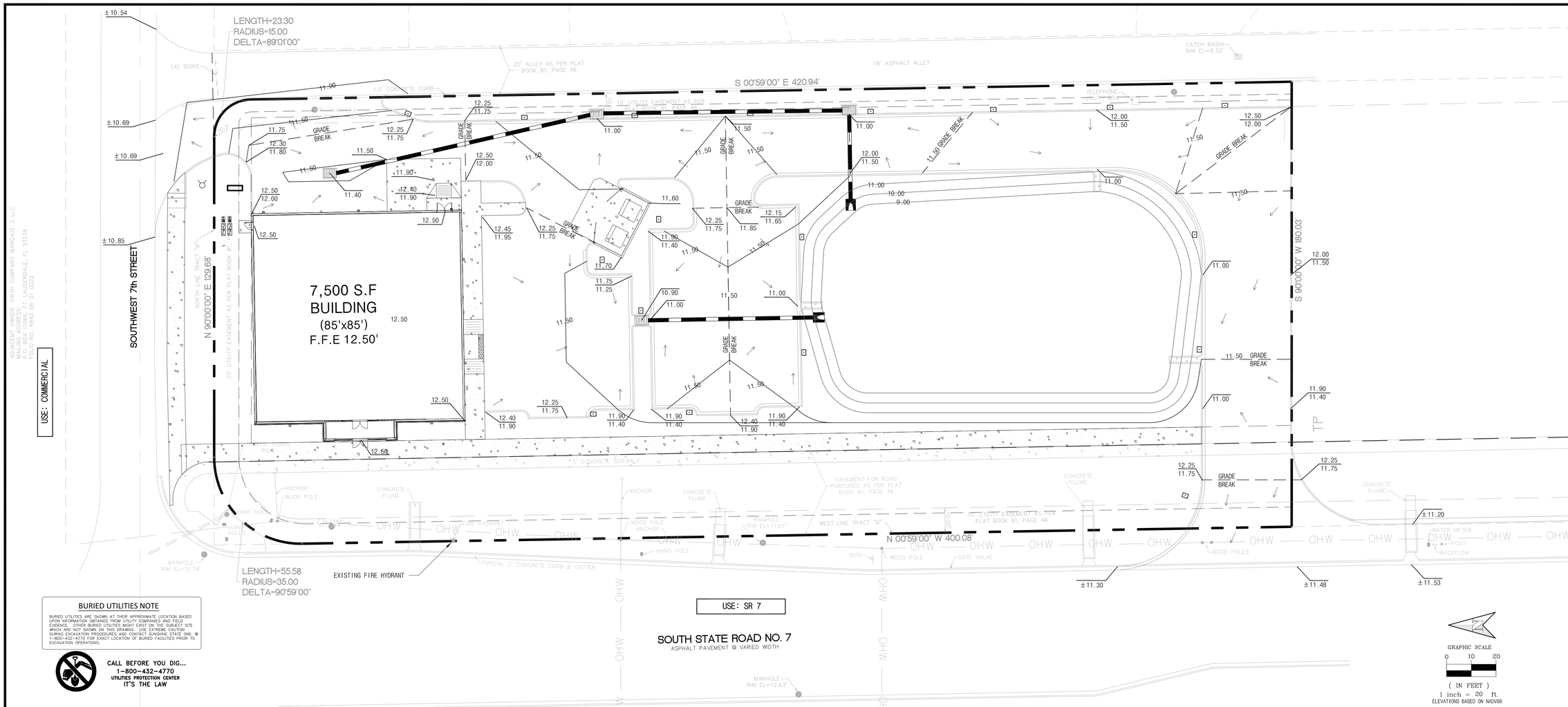
DATE 06/25/2015

SHEET EX.1

SCALE 1:20

CONTRIBUTING BASIN

H. POST-BASIN MAP



BURIED UTILITIES NOTE

BURIED UTILITIES ARE SHOWN AT THER APPROXIMATE LOCATION BASED UPON INFORMATION OBTAINED FROM UTILITY COMPANIES AND FIELD EVIDENCE. OTHER BURIED UTILITIES MIGHT EXIST ON THE SUBJECT SITE WHICH ARE NOT SHOWN ON THIS DRAWING. USE EXTREME CAUTION DURING EXCAVATION PROCEDURES AND CONTACT SUNSHINE STATE ONE, @ 1-800-432-4770 FOR EXACT LOCATION OF BURIED FACILITIES PRIOR TO EXCAVATION OPERATIONS.

CALL BEFORE YOU DIG...
1-800-432-4770
UTILITIES PROTECTION CENTER
IT'S THE LAW

DOLLAR GENERAL AT MARGATE

SITE SPECIFIC INFORMATION

PARCEL NUMBER	494206180930, 494206180931, 494206180932
PROPERTY AREA	±1.79 ACRES
EXISTING USE	VACANT
PROPOSED USE	COMMERCIAL(DOLLAR GENERAL)
ZONING CLASSIFICATION	
PROJECT	TOC-C (TRANSIT ORIENTED CORRIDOR)
ADJACENT (N)	S.W 7TH ST
ADJACENT (E)	ALLEY WITH (R4) RESIDENTIAL BEHIND IT
ADJACENT (W)	S.R. 7
ADJACENT (S)	TOC-C (TRANSIT ORIENTED CORRIDOR)
PARKING REQ.	1 SPACE PER 300 SF OF GFA 7,500 SF /300= 25 SPACES TOTAL = 25 REQUIRED
PARKING PROPOSED	28 (REGULAR) + 2 (HANDICAP) = 30 (TOTAL)

BUILDING SETBACKS

	FRONT (W)	SIDE (N)	SIDE (S)	REAR (E)
REQUIRED	0' (FROM EDGE SIDEWALK)	15' (FROM EDGE OF ROADWAY)	0'	17' (FROM CENTER OF ALLEY WAY)
PROPOSED	0'	15'	334'	46'

LANDSCAPE BUFFER

	FRONT (W)	SIDE (N)	SIDE (S)	REAR (E)
REQUIRED	8'	10'	0'	5'
PROPOSED	49'	15'	0'	10'

	REQUIRED	PROPOSED
MAX BUILDING HEIGHT	24'	22'
MAX FLOOR AREA RATIO	N/A	9.6%

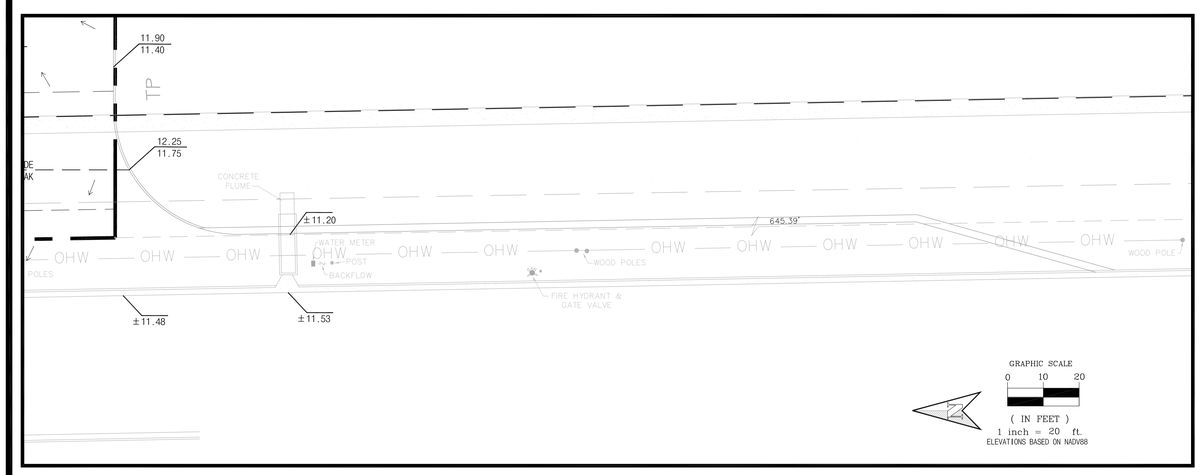
GROSS FLOOR AREA ±7,500

FEMA THE SUBJECT PROPERTY LIES IN FLOOD ZONE X, ACCORDING TO FLOOD INSURANCE RATE MAP NO.12011C0335H, FOR BROWARD COUNTY, FLORIDA, DATED AUGUST 18, 2014. TO BE VERIFIED BY LOCAL FEMA OFFICIAL.

*TOTAL LAND AREA ±1.79 ACRES
AREA LISTED BELOW EXCLUDES THE 30' ROADWAY EASEMENT WHICH EQUATES TO ±0.33 ACRES

LAND USE TABLE

DESCRIPTION	AREA (SF)	AREA(AC)	% AREA
BASIN #1	±63,601	±1.46	100.00
PRE-DEVELOPMENT IMPERVIOUS AREA	±8,300	±0.19	13.05
POST-DEVELOPMENT CONTRIBUTING BASIN #1 AREA	±63,601	±1.46	100.00
BUILDING AREA	±7,500	±0.17	11.79
ASPHALT AREA (VUA)	±26,232	±0.60	41.24
CONCRETE AREA	±5,526	±0.13	8.69
TOTAL IMPERVIOUS	±39,258	±0.90	61.72
GREEN	±9,227	±0.23	14.51
POND	±15,116	±0.33	23.77
TOTAL PERVIOUS	±24,343	±0.56	38.28



TURN LANE SITE DETAIL

DOLLAR GENERAL

HANLEX DEVELOPMENT
Commercial Real Estate Development

PROJECT: DOLLAR GENERAL AT MARGATE

HANLEX CIVIL, LLC
1825 S. ORANGE BLOSSOM TRAIL
APOPKA, FL 32703
P: (407) 889-9400
F: (407) 889-8328
COA: 29910

DEVELOPMENT PLANS

NO:	DATE:	REVISION/ISSUE:	BY:
1			

ENGINEER'S NAME & PE#

PROJECT # 215.004
DATE 06/25/2015
SCALE 1:20
SHEET DP1.0

DEVELOPMENT PLAN

I. CALCULATIONS AND RESULTS

a.) Pre-Development

Pre-Development Site Summary for Dollar General Margate

Pre-Development
Total Site/Pervious Area 1.46 Acres

Soil Storage Calculations

Wet Season Water El 7.6 Feet
Average Groundwater El 7.6 Feet
Average Site El 11.6 Feet
Depth to water table 4.0 Feet (4' Max allowed)

Soil Storage Per Broward County Flatwoods Soil	
Depth To Water Table	Cumulative Water Storage
1	0.6"
2	2.5"
3	5.4"
4	9.0"

*Reduced by 25% if it is compacted

Available Ground Storage 9 inches
Storage Available in pervious area 1.10 acre-ft
Converting to site wide moisture storage, S 9 inches

Flood Stage Criteria

$$Q = \frac{(P - (0.2 * S))^2}{(P + (0.8 * S))}$$

100 Year 3 Day Storm

P = 18 inches
S = 9 inches
Q = 10.414 inches

Volume 1.267 acre-ft
Stage 12.47 Feet
**The Stage is calculated by dividing the volume by the Site area as the pre-development condition is an undeveloped parcel*

25 Year 3 Day Storm

P = 14 inches
S = 9 inches
Q = 7.021 inches

Volume 0.854 acre-ft
Stage 12.19 Feet
**The Stage is calculated by dividing the volume by the Site area, as the pre-development condition is an undeveloped parcel*

5 Year 24 Hour Storm

P = 7 inches
S = 9 inches
Q = 1.904 inches

Volume 0.232 acre-ft
Stage 11.76 Feet
**The Stage is calculated by dividing the volume by the Site area, as the pre-development condition is an undeveloped parcel*

I. CALCULATIONS AND RESULTS

b.) Post-Development

Post-Development Site Summary for Dollar General Margate

Pervious Area	0.57	Acres
Total Site Area	1.46	Acres

Soil Storage Per Broward County Flatwoods Soil	
Depth To Water Table	Cumulative Water Storage
1	0.6"
2	2.5"
3	5.4"
4	9.0"

*Reduced by 25% if it is compacted

Soil Storage Calculations

Wet Season Water El	7.5	
Average Groundwater El	7.5	
Average Site El	11.5	
Depth to water table	4.0	Feet

(4' Max allowed)

Available Ground Storage, Flatwoods Soils	6.75	inches
Storage Available in pervious area	0.32	acre-ft
Converting to site wide moisture storage, S	2.61	inches

Flood Stage Criteria

$$Q = \frac{(P - (0.2 * S))^2}{(P + (0.8 * S))}$$

100 Year 3 Day Storm

P =	18	inches
S =	2.61	inches
Q =	15.20	inches
Volume	1.850	acre-ft
Stage	12.00	Feet

**The Stage was interpolated based off the Stage-Storage chart and graph*

25 Year 3 Day Storm

P =	14	inches
S =	2.61	inches
Q =	11.29	inches
Volume	1.374	acre-ft
Stage	11.72	Feet

**The Stage was interpolated based off the Stage-Storage chart and graph*

5 Year 24 Hour Storm

P =	7	inches
S =	2.61	inches
Q =	4.62	inches
Volume	0.562	acre-ft
Stage	10.75	Feet

**The Stage was interpolated based off the Stage-Storage chart and graph*

Site Data Summary for Dollar General Margate

Dollar General at Margate *Pre-Development Vs. Post Development Areas*				
Pre-Development Conditions				
Description	Total Area (sf)	Total Area (sf)	Total Area (ac)	Percent
Total Site area	63,601	63,601	1.46	100.00%
Building Area	0	8,300	0.19	13.05%
Asphalt Pavement	0			
Concrete/Sidewalk	8,300			
Green Area	55,301	55,301	1.27	86.95%
Post Development Conditions				
Description	Total Area (sf)	Total Area (sf)	Total Area (ac)	Percent
Basin Area	63,601	63,601	1.46	100.00%
Building Area	7,500	39,258	0.90	61.73%
Asphalt Pavement	26,232			
Concrete/Sidewalk	5,526			
Pond Area	15,116	15,116	0.35	23.77%
Green Area	9,227	9,227	0.21	14.51%

Dollar General at Margate *Post-Development Stage-Storage*							
Stage (NGVD)	Pond Area (sf)	Incremental Storage (cf)	Parking Lot Area (sf)	Incremental Storage (cf)	*Site Area (sf)	Incremental Storage (cf)	Total Storage (Ac-Ft)
9.0	10,766	0.0	0.0	0.0	0.0	353.0	0.01
10.0	12,430	12,430.0	0.0	0.0	0.0	353.0	0.30
11.0	15,116	15,116.0	0.0	0.0	77.1	77.1	0.65
11.5	15,116	7,558.0	18,006.8	18,006.8	3,032.0	1,516.0	1.27
12.00	15,116	7,558.0	26,232.0	13,116.0	9,227.0	4,613.5	1.85
12.50	15,117	7,558.5	26,232.0	13,116.0	10,027.0	5,013.5	2.44

Table 2

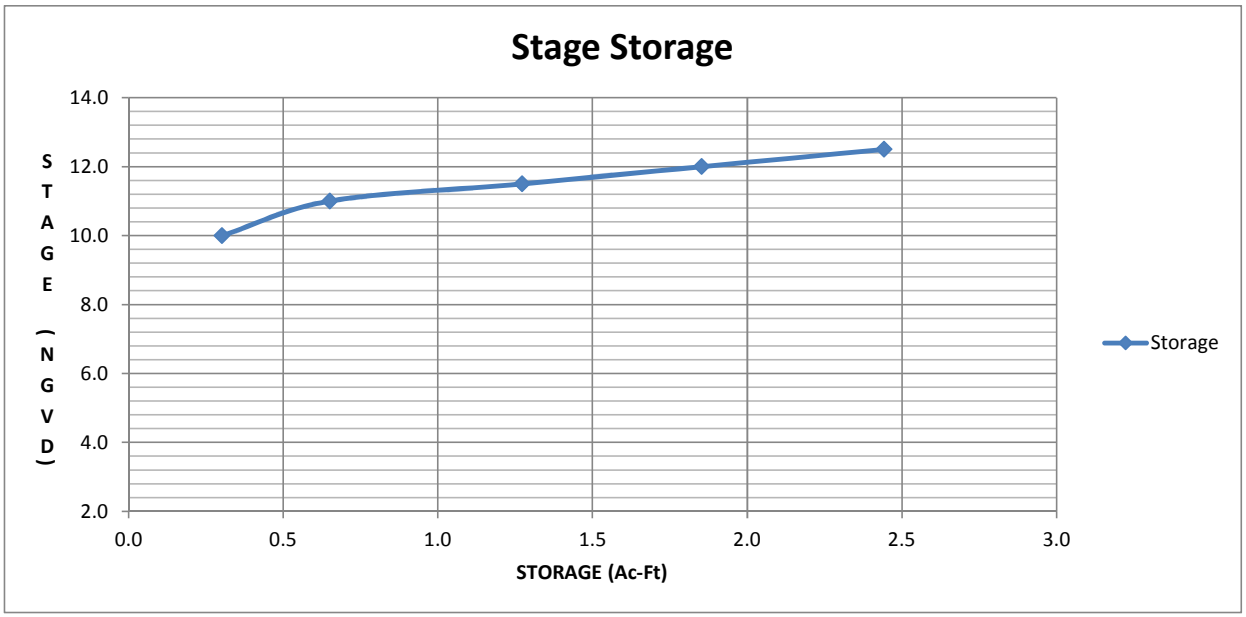
*Site (Green Area/Sidewalks)

**Total Storage Starts with total Trench Storage for the storm water pipes system.

Site Summary for Dollar General Margate

Perimeter Berm Summary Table (NGVD)					
Storm	Pre-Development		Post-Development		Post < Pre Stage
	Volume (Ac-Ft)	Stage (NGVD, Ft)	Volume (Ac-Ft)	Stage (NGVD, Ft)	
25 Year 72 Hr	0.85	12.19	1.37	11.72	YES
Post Development Perimeter Berm at Elevation 11.75 (NGVD)					

Finished Floor Elevation Summary Table (NGVD)					
Storm	Pre-Development		Post-Development		FFE Set Above FEMA Flood Elevation of 10
	Volume (Ac-Ft)	Stage (NGVD, Ft)	Volume (Ac-Ft)	Stage (NGVD, Ft)	
100 Year 72 Hr	1.27	12.47	1.85	12.00	12.5



I. CALCULATIONS AND RESULTS

c.) Treatment Volume Per SFWMD Guidelines

PONDS Version 3.3.0265
Retention Pond Recovery - Refined Method
Copyright 2012
Devo Seereeram, Ph.D., P.E.

Project Data

Project Name:	Dollar General At Margate
Simulation Description:	Recovery Analysis
Project Number:	215.004
Engineer :	
Supervising Engineer:	Jason Bullard
Date:	06-26-2015

Aquifer Data

Base Of Aquifer Elevation, [B] (ft datum):	5.60
Water Table Elevation, [WT] (ft datum):	7.60
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day):	6.00
Fillable Porosity, [n] (%):	20.00
Unsaturated Vertical Infiltration Rate, [Iv] (ft/day):	3.0
Maximum Area For Unsaturated Infiltration, [Av] (ft^2):	15116.0

Geometry Data

Equivalent Pond Length, [L] (ft):	190.0
Equivalent Pond Width, [W] (ft):	80.0

Ground water mound is expected to intersect the pond bottom

Stage vs Area Data

Stage (ft datum)	Area (ft^2)
9.00	10766.0
10.00	12430.0
11.00	15116.0

Scenario Input Data

Scenario 1 :: Recovery Analysis

Hydrograph Type: Slug Load
Modflow Routing: Routed with infiltration

Treatment Volume (ft^3) 8179

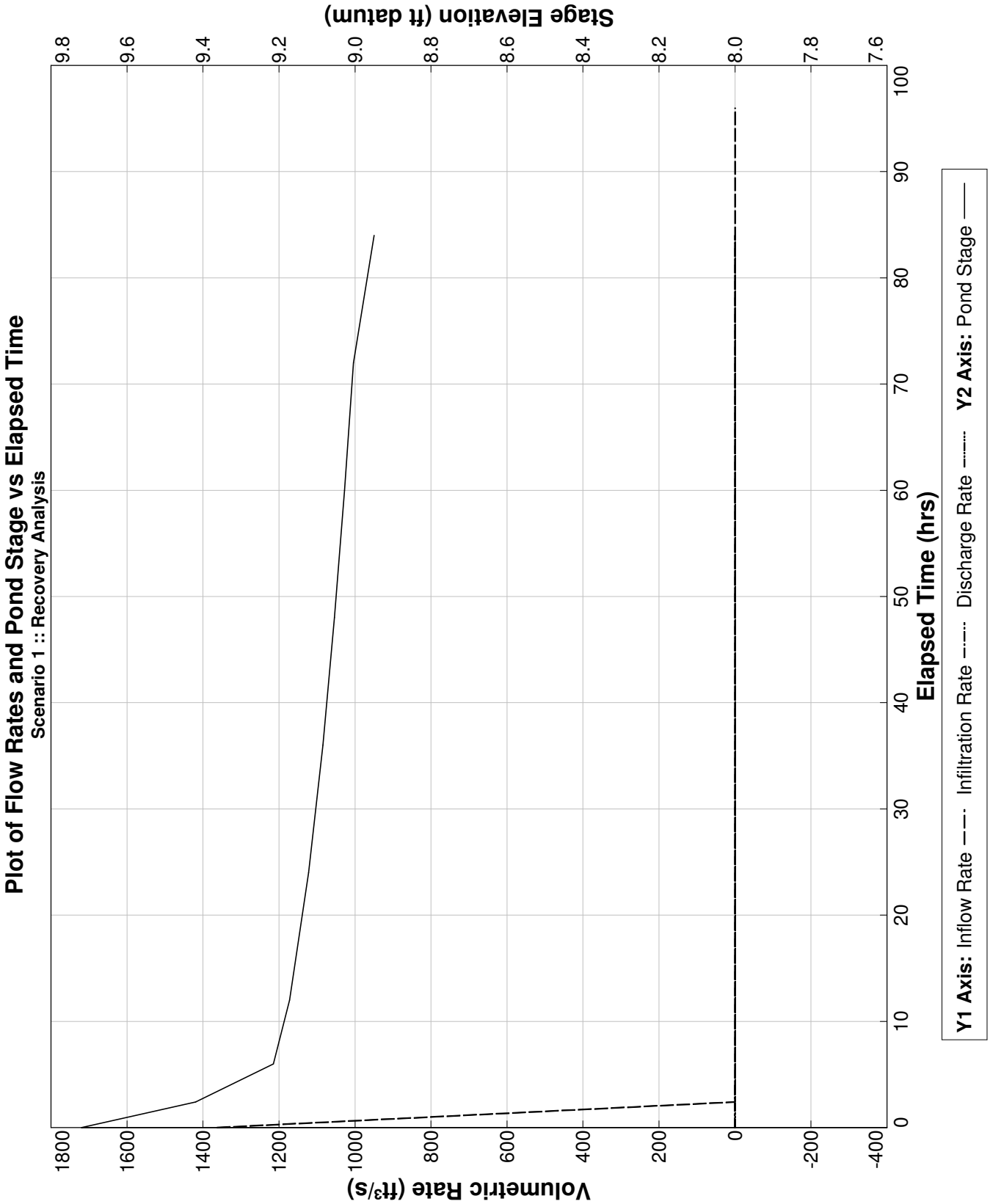
Initial ground water level (ft datum) 7.60 (default)

Time After Storm Event (days)	Time After Storm Event (days)
0.100	2.000
0.250	2.500
0.500	3.000
1.000	3.500
1.500	4.000

Summary of Results *:: Scenario 1 :: Recovery Analysis*

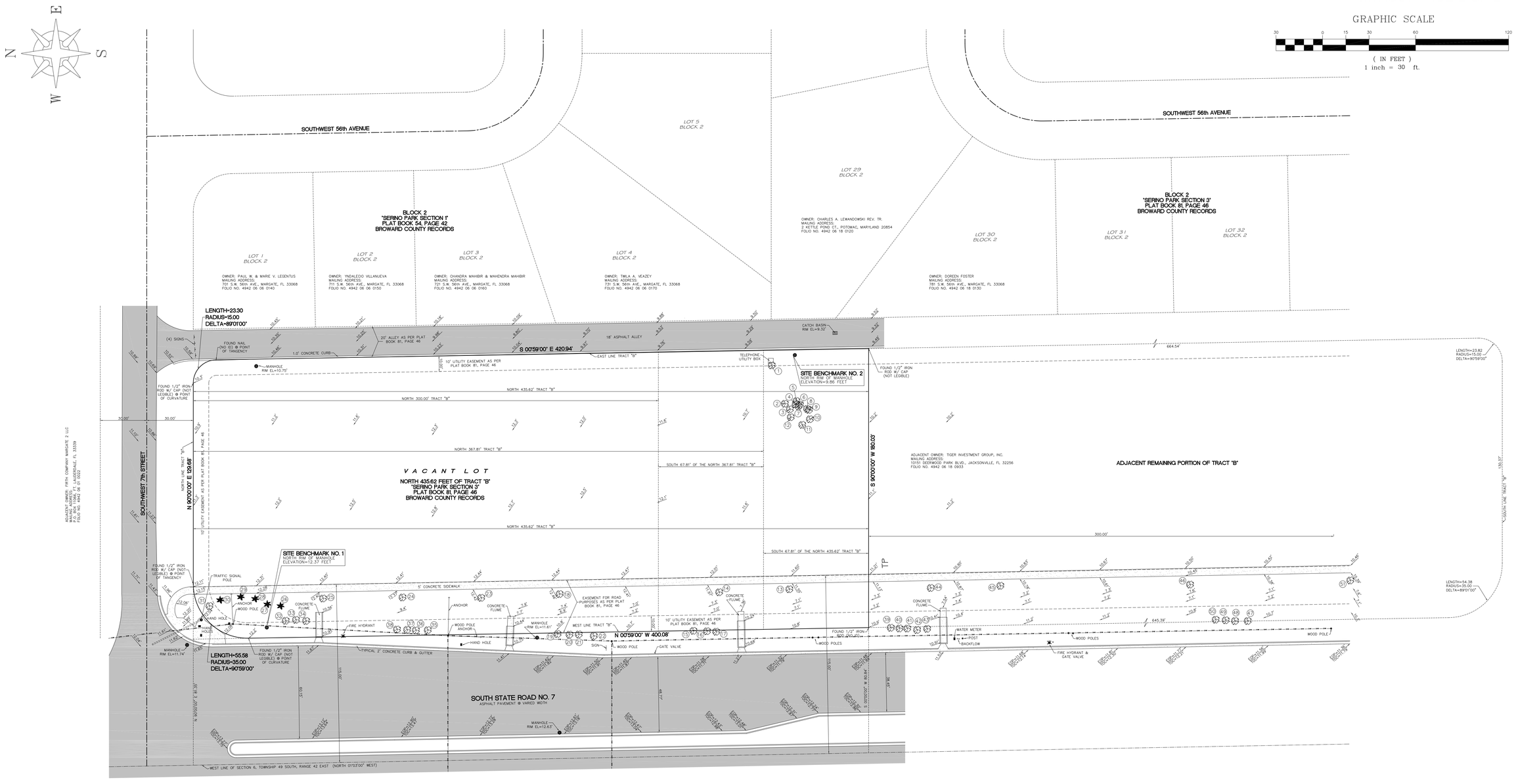
	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	7.60		
Maximum	0.002	9.72		
Inflow				
Rate - Maximum - Positive	0.002		1363.1670	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	0.002			8179.0
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	96.000			8179.0
Infiltration				
Rate - Maximum - Positive	0.002		0.4154	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	84.000			8179.0
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	96.000			8179.0
Combined Discharge				
Rate - Maximum - Positive	None		None	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	None			None
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	96.000			0.0
Discharge Structure 1 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	36.000	9.08		7263.7
72 Hour Stage and Infiltration Volume	72.000	9.00		8133.3

POND RECOVERS WITHIN 72 HOURS


Plot of Flow Rates and Pond Stage vs Elapsed Time
Scenario 1 :: Recovery Analysis
Volumetric Rate (ft3/s)
Stage Elevation (ft datum)
Elapsed Time (hrs)
1800
1600
1400
1200
1000
800
600
400
200
0
-200
-400
9.8
9.6
9.4
9.2
9.0
8.8
8.6
8.4
8.2
8.0
7.8
7.6
0
10
20
30
40
50
60
70
80
90
100
Y1 Axis: Inflow Rate
Infiltration Rate
Discharge Rate
Y2 Axis: Pond Stage

GRAPHIC SCALE

(IN FEET)
1 inch = 30 ft.



KERI LAND SURVEYING
1840 NORTH PINE ISLAND ROAD
PLANTATION, FLORIDA 33322
PHONE (954) 473-8010 FAX (954) 473-8020
CERTIFICATE OF AUTHORIZATION LB-7086
E:MAIL: KERILANDSURVEYING@YAHOO.COM

HANLEX DEVELOPMENT, LLC
SEC OF S. STATE RD NO. 7 / S.W. 7th ST.
MARGATE, FLORIDA 33327

ALTA/ACSM LAND TITLE SURVEY

NO.	DATE	REVISION COMMENT

FLOOD INFORMATION
FLOOD ZONE: X (0.2%) [BASE FLOOD ELEV.: N/A
COMMUNITY PANEL #12-0047 C0315 H
BUILDING DIAGRAM N/A | MAP DATE: 8-18-14
LOWEST FLOOR ELEVATION: N/A
GARAGE FLOOR ELEVATION: N/A

PAGE 1 OF 2

CLIENT: HANLEX DEVELOPMENT, LLC
PROJECT NO.: 20768
SURVEY DATE: JUNE 17, 2015
SE CORNER, S. ST. RD. NO. 7 / S.W. 7th ST.
MARGATE, FLORIDA 33327
SCALE: 1"=30'
FILE: HANLEX DEVELOPMENT, LLC

LEGAL DESCRIPTION:

PARCEL I:
THE SOUTH 67.81 FEET OF THE NORTH 367.81 FEET OF TRACT "B" OF "SERINO PARK SECTION 3" ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 81 AT PAGE 46 OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA.

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THE NORTH 300 FEET OF TRACT "B" OF "SERINO PARK SECTION 3" ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 81 AT PAGE 46 OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA.

PARCEL III:
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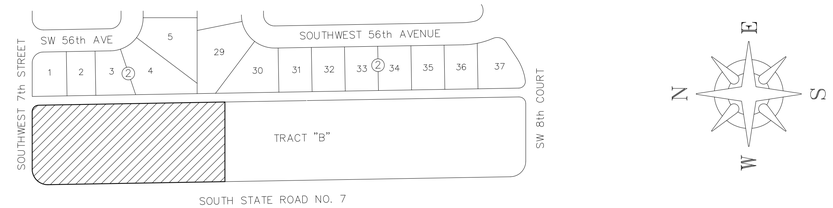
TITLE COMMITMENT NOTES:
THE SURVEY SHOWN HEREON WAS PREPARED WITH THE BENEFIT OF A TITLE COMMITMENT ISSUED BY OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY (AGENT FILE NO.: XXX-XXXX, WITH AN EFFECTIVE DATE OF JUNE XX, 2015. ITEMS NUMBER 1 THROUGH XX OF SCHEDULE B-II WERE REVIEWED AND SHOWN HEREON WHEN APPLICABLE.



LOCATION SKETCH
NOT TO SCALE

NOTES
1) ELEVATIONS SHOWN HEREON ARE RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988. BASED ON BROWARD COUNTY BENCHMARK NO. 2543, ELEVATION = 13.050 FEET.
2) UNDERGROUND IMPROVEMENTS AND/OR UNDERGROUND ENCROACHMENTS NOT LOCATED OR SHOWN.
3) BEARINGS SHOWN HEREON ARE BASED ON THE NORTH LINE OF TRACT "B" BEING DUE EAST. (AS PER RECORD PLAT)
4) ROOF OVERHANG NOT LOCATED UNLESS OTHERWISE SHOWN.
5) LANDS SHOWN HEREON CONTAINING 78,105 SQUARE FEET, (1.7930 ACRES), MORE OR LESS.
6) THIS SURVEY IS FOR BUILDING PERMITTING PURPOSES ONLY.
7) REASONABLE EFFORTS WERE MADE REGARDING THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES. THIS FIRM, HOWEVER, DOES NOT ACCEPT RESPONSIBILITY FOR THIS INFORMATION. BEFORE EXCAVATION, CONTACT THE APPROPRIATE UTILITY COMPANIES FOR FIELD VERIFICATION.
8) THIS SURVEY IS CERTIFIED EXCLUSIVELY TO:
   HANLEX DEVELOPMENT, LLC, A FLORIDA LIMITED LIABILITY COMPANY
   OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY
9) THIS SITE LIES IN SECTION 6, TOWNSHIP 49 SOUTH, RANGE 42 EAST, BROWARD COUNTY, FLORIDA.
10) ALL BEARINGS/ANGLES AND DISTANCES SHOWN HEREON ARE BOTH MEASURED ON THE GROUND AND RECORD (AS PER PLAT) UNLESS OTHERWISE SHOWN.
11) —OHW—OHW—OHW— DENOTES OVERHEAD WIRES.
12) 20.00 DENOTES EXISTING GRADE ELEVATION.

TREE TABLE

NO.	SPECIES	DIAMETER	HEIGHT	CANOPY
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X

TREE TABLE

NO.	SPECIES	DIAMETER	HEIGHT	CANOPY
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X

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HANLEX DEVELOPMENT, LLC
S. STATE RD NO. 7 / S.W. 7th ST.
MARGATE, FLORIDA 33327

NO.	DATE	REVISION COMMENT

ALTA/ACSM LAND TITLE SURVEY

CERTIFICATION:
TO: HANLEX DEVELOPMENT, LLC, A FLORIDA LIMITED LIABILITY COMPANY, OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY, XXXX

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2011 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/ACSM LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 7a, 8, 11a, 13 AND 14 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED ON JULY 17, 2015.

JAY KERI — SIGNATURE DATE
PROFESSIONAL SURVEYOR AND MAPPER NO. 5721
STATE OF FLORIDA

FLOOD INFORMATION
FLOOD ZONE: X (0.2%) BASE FLOOD ELEV.: NA
COMMUNITY PANEL #120047 0355 H
BUILDING DIAGRAM NA 1 MAP DATE: 8-18-14
LOWEST FLOOR ELEVATION : N/A
GARAGE FLOOR ELEVATION: N/A

PAGE 2 OF 2

CLIENT: HANLEX DEVELOPMENT, LLC
PROJECT NO.: 20768
SURVEY DATE: JUNE 17, 2015
SE CORNER, S. ST. RD. NO. 7 / S.W. 7th ST.
MARGATE, FLORIDA 33327
SCALE: 1"=30'
FILE: HANLEX DEVELOPMENT, LLC

DEVELOPMENT PLANS

FOR HANLEX DEVELOPMENT, LLC

DOLLAR GENERAL AT MARGATE

PARCEL:494206180930
494206180931
494206180932
MARGATE, FLORIDA 33068

PROJECT DIRECTORY

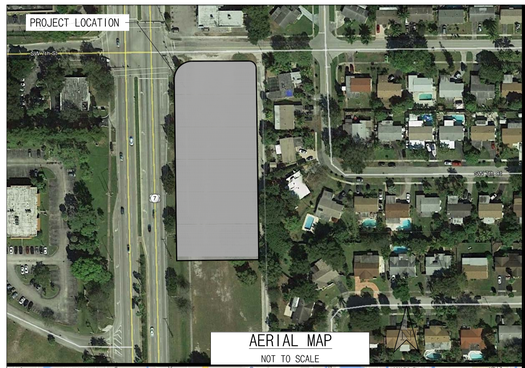
OWNER:	TIGER INVESTMENT GROUP INC. 10151 DEERWOOD PARK BLVD JACKSONVILLE, FL 32256
DEVELOPER:	HANLEX MARGATE, LLC 1825 S. ORANGE BLOSSOM TRAIL APOPKA, FL 32703 PHONE: (407) 889-9400 FAX: (407) 889-8328
CIVIL ENGINEER:	HANLEX CIVIL, LLC 1825 S. ORANGE BLOSSOM TRAIL APOPKA, FL 32703 PHONE: (407) 889-4154 FAX: (407) 410-0351
GEOTECH ENGINEER:	PROFESSIONAL SERVICES INDUSTRIES, INC. 7950 N.W. 64 STREET MIAMI, FLORIDA 33166 PHONE: (305) 471-7721 FAX: (305) 593-1915
SURVEYOR:	KERI LAND SURVEY 1840 NORTH PINE ISLAND ROAD PLANTATION, FL 33322 PHONE: (954) 473-8010 FAX: (954) 473-8020
ARCHITECT:	RABITS & ROMANO 245 SOUTH HIGHLAND STREET SUITE 9 MOUNT DORA, FL 32757 PHONE: (352) 385-1030 FAX: (352) 385-1035

PLAN SHEET INDEX

C0.0	COVER SHEET
	SURVEY
DP1.0	DEVELOPMENT PLAN
CP.1	PHOTOMETRIC PLAN
L1.0	LANDSCAPE PLAN
L2.0	IRRIGATION PLAN
L3.0	TREE DEMOLITION PLAN

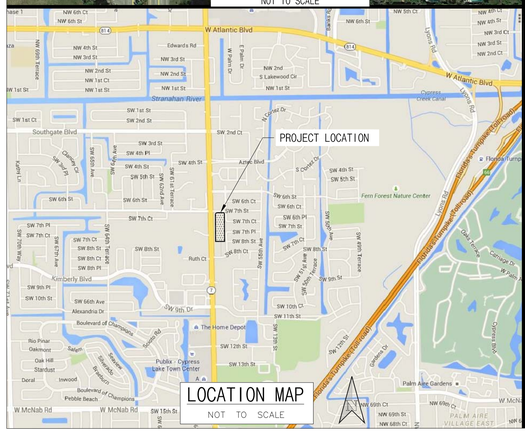
GENERAL REVISION LOG

NO:	DATE:	REVISION/ISSUE:	BY:
1			
2			
3			
4			
5			
6			
7			
8			



AERIAL MAP
NOT TO SCALE

VICINITY MAP
NOT TO SCALE



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UTILITY PROVIDERS

POWER:	DUKE ENERGY 452 EAST CROWN POINTE RD WINTER GARDEN, FL 33787 P: (407) 905-3321
WATER/SEWER:	BROWARD COUNTY OES 2300 W. COMMERCIAL BOULEVARD FT. LAUDERDALE, FL 33309 P: (954) 847-2761
GAS:	TECO PEOPLES GAS - SOUTH FLORIDA 5101 NW 21ST AVENUE, SUITE 460 FT. LAUDERDALE, FL 33309 P: (954) 453-0824
TELEPHONE:	AT&T 8601 W. SUNRISE BOULEVARD PLANTATION, FL 33322 P: (954) 723-2540

LEGEND:

#	:	NO. OF PARKING SPACES
# / CX.X	:	DETAIL NO. / SHEET
	:	HEAVY DUTY ASPHALT PAVEMENT
	:	PROPOSED CONCRETE SURFACE
W	:	WATER LINE
UGE	:	ELECTRIC LINE
SS	:	WASTEWATER LINE
UGT	:	TELEPHONE LINE
	:	FIRE HYDRANT
	:	VALVE
M	:	WATER METER
	:	BACKFLOW PREVENTER WITH CONCRETE PAD
75.40	:	SPOT ELEVATION (TO TOP OF PAVEMENT UNLESS SPECIFIED OTHERWISE)
	:	FLOW ARROW
#	:	REVISION NUMBER
FDC	:	FIRE DEPARTMENT CONNECTION

DOLLAR GENERAL

HANLEX DEVELOPMENT
Commercial Real Estate Development

PROJECT: DOLLAR GENERAL AT MARGATE

HANLEX CIVIL, LLC
1825 S. ORANGE BLOSSOM TRAIL
APOPKA, FL 32703
P: (407) 889-9400
F: (407) 889-8328
COA: 29910

DEVELOPMENT PLANS

NO:	DATE:	REVISION/ISSUE:	BY:
1			

ENGINEER'S NAME & PE#

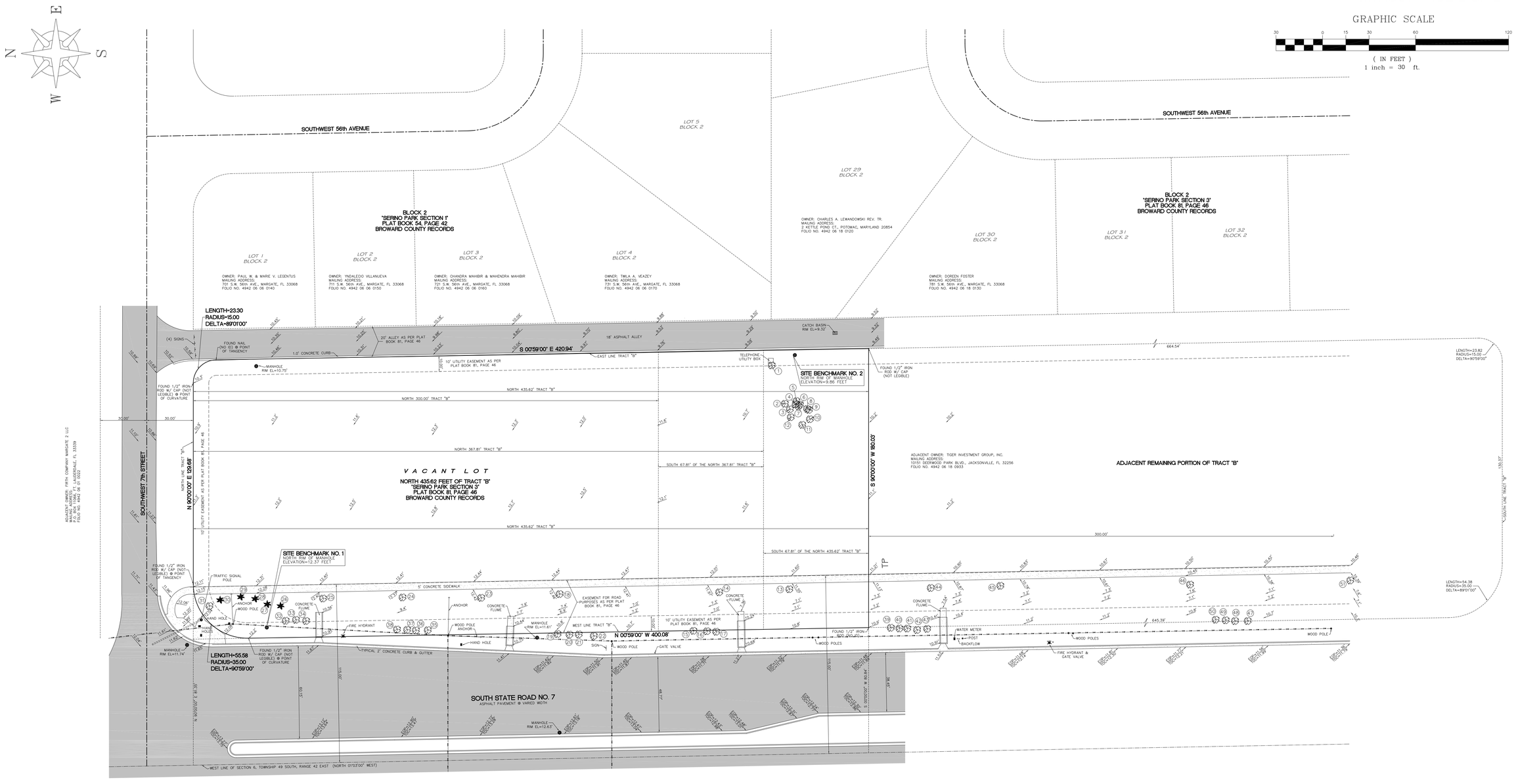
JASON D. BULLARD, P.E.
P.E. LICENSE NO. 73800

PROJECT # 215.004
DATE 06/25/2015
SCALE NTS
SHEET C0.0

COVER SHEET

GRAPHIC SCALE

(IN FEET)
1 inch = 30 ft.



KERI LAND SURVEYING
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HANLEX DEVELOPMENT, LLC
SEC OF S. STATE RD NO. 7 / S.W. 7th ST.
MARGATE, FLORIDA 33327

ALTA/ACSM LAND TITLE SURVEY

NO.	DATE	REVISION COMMENT

FLOOD INFORMATION
FLOOD ZONE: X (0.2%) [BASE FLOOD ELEV.: N/A
COMMUNITY PANEL #12-0047 C0315 H
BUILDING DIAGRAM N/A | MAP DATE: 8-18-14
LOWEST FLOOR ELEVATION: N/A
GARAGE FLOOR ELEVATION: N/A

PAGE 1 OF 2

CLIENT: HANLEX DEVELOPMENT, LLC
PROJECT NO.: 20768
SURVEY DATE: JUNE 17, 2015
SE CORNER, S. ST. RD. NO. 7 / S.W. 7th ST.
MARGATE, FLORIDA 33327
SCALE: 1"=30'
FILE: HANLEX DEVELOPMENT, LLC

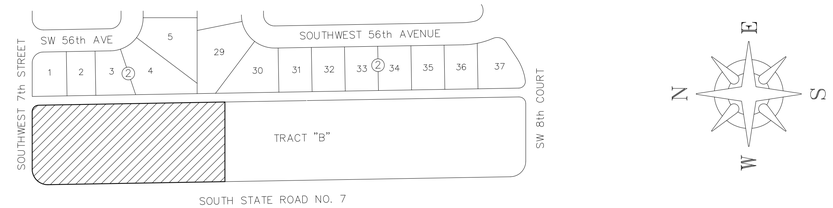
LEGAL DESCRIPTION:

PARCEL I:
THE SOUTH 67.81 FEET OF THE NORTH 367.81 FEET OF TRACT "B" OF "SERINO PARK SECTION 3" ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 81 AT PAGE 46 OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA.

PARCEL II:
THE NORTH 300 FEET OF TRACT "B" OF "SERINO PARK SECTION 3" ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 81 AT PAGE 46 OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA.

PARCEL III:
THE SOUTH 67.81 FEET OF THE NORTH 435.62 FEET OF TRACT "B" OF "SERINO PARK SECTION 3" ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 81 AT PAGE 46 OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA.

TITLE COMMITMENT NOTES:
THE SURVEY SHOWN HEREON WAS PREPARED WITH THE BENEFIT OF A TITLE COMMITMENT ISSUED BY OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY (AGENT FILE NO.: XXX-XXXX, WITH AN EFFECTIVE DATE OF JUNE XX, 2015. ITEMS NUMBER 1 THROUGH XX OF SCHEDULE B-II WERE REVIEWED AND SHOWN HEREON WHEN APPLICABLE.



LOCATION SKETCH
NOT TO SCALE

NOTES
1) ELEVATIONS SHOWN HEREON ARE RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988. BASED ON BROWARD COUNTY BENCHMARK NO. 2543, ELEVATION = 13.050 FEET.
2) UNDERGROUND IMPROVEMENTS AND/OR UNDERGROUND ENCROACHMENTS NOT LOCATED OR SHOWN.
3) BEARINGS SHOWN HEREON ARE BASED ON THE NORTH LINE OF TRACT "B" BEING DUE EAST. (AS PER RECORD PLAT)
4) ROOF OVERHANG NOT LOCATED UNLESS OTHERWISE SHOWN.
5) LANDS SHOWN HEREON CONTAINING 78,105 SQUARE FEET, (1.7930 ACRES), MORE OR LESS.
6) THIS SURVEY IS FOR BUILDING PERMITTING PURPOSES ONLY.
7) REASONABLE EFFORTS WERE MADE REGARDING THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES. THIS FIRM, HOWEVER, DOES NOT ACCEPT RESPONSIBILITY FOR THIS INFORMATION. BEFORE EXCAVATION, CONTACT THE APPROPRIATE UTILITY COMPANIES FOR FIELD VERIFICATION.
8) THIS SURVEY IS CERTIFIED EXCLUSIVELY TO:
   HANLEX DEVELOPMENT, LLC, A FLORIDA LIMITED LIABILITY COMPANY
   OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY
9) THIS SITE LIES IN SECTION 6, TOWNSHIP 49 SOUTH, RANGE 42 EAST, BROWARD COUNTY, FLORIDA.
10) ALL BEARINGS/ANGLES AND DISTANCES SHOWN HEREON ARE BOTH MEASURED ON THE GROUND AND RECORD (AS PER PLAT) UNLESS OTHERWISE SHOWN.
11) —OHW—OHW—OHW— DENOTES OVERHEAD WIRES.
12) 20.00 DENOTES EXISTING GRADE ELEVATION.

TREE TABLE

NO.	SPECIES	DIAMETER	HEIGHT	CANOPY
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X

TREE TABLE

NO.	SPECIES	DIAMETER	HEIGHT	CANOPY
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
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X	X	X	X	X
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X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X

KERI LAND SURVEYING
1840 NORTH PINE ISLAND ROAD
PLANTATION, FLORIDA 33322
PHONE (954) 473-8010 FAX (954) 473-8020
CERTIFICATE OF AUTHORIZATION LB-7086
E:MAIL: KERILANDSURVEYING@YAHOO.COM

HANLEX DEVELOPMENT, LLC
S. STATE RD NO. 7 / S.W. 7th ST.
MARGATE, FLORIDA 33327

NO.	DATE	REVISION COMMENT

ALTA/ACSM LAND TITLE SURVEY

CERTIFICATION:
TO: HANLEX DEVELOPMENT, LLC, A FLORIDA LIMITED LIABILITY COMPANY, OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY, XXXX

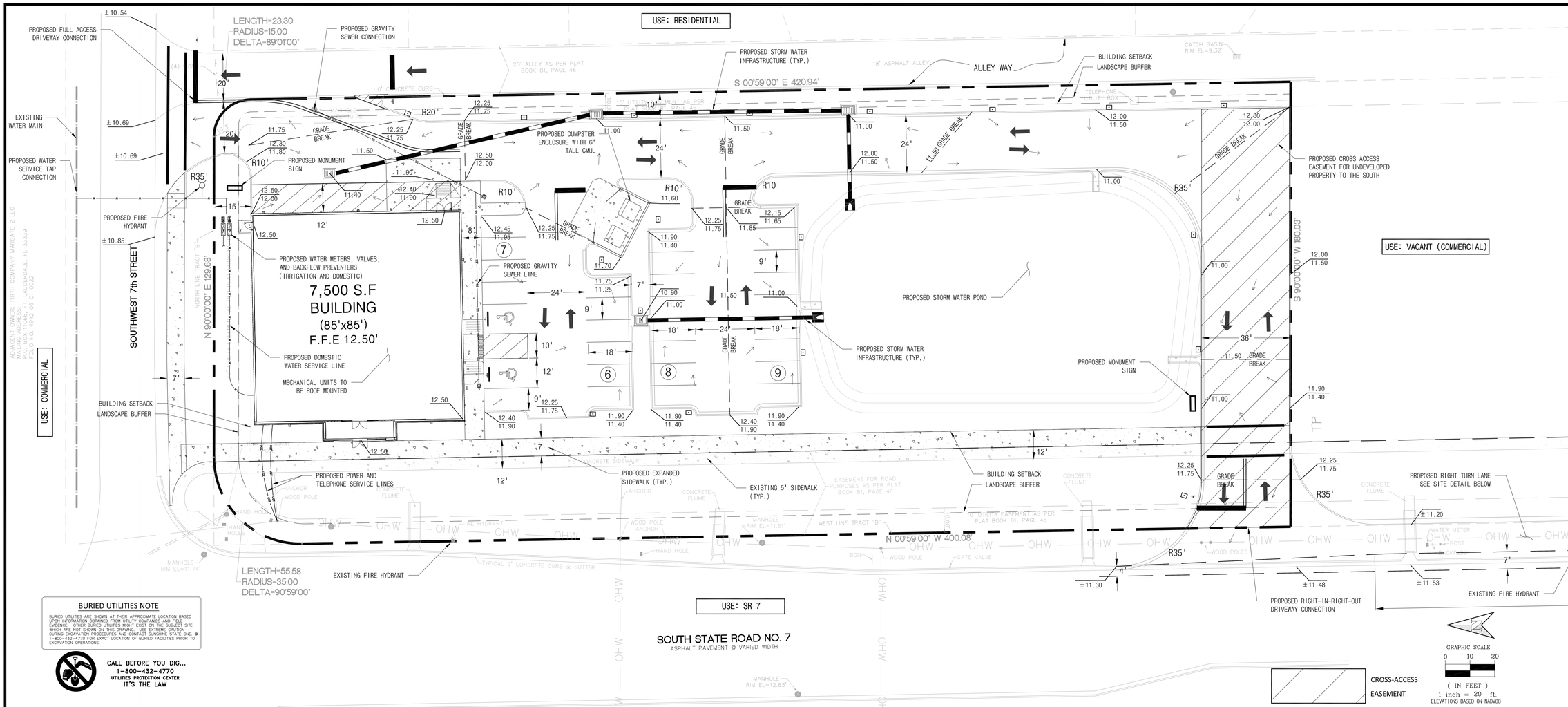
THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2011 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/ACSM LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 7a, 8, 11a, 13 AND 14 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED ON JULY 17, 2015.

JAY KERI — SIGNATURE DATE
PROFESSIONAL SURVEYOR AND MAPPER NO. 5721
STATE OF FLORIDA

FLOOD INFORMATION
FLOOD ZONE: X (0.2%) BASE FLOOD ELEV.: NA
COMMUNITY PANEL #120047 0355 H
BUILDING DIAGRAM NA 1 MAP DATE: 8-18-14
LOWEST FLOOR ELEVATION : N/A
GARAGE FLOOR ELEVATION: N/A

PAGE 2 OF 2

CLIENT: HANLEX DEVELOPMENT, LLC
PROJECT NO.: 20768
SURVEY DATE: JUNE 17, 2015
SE CORNER, S. ST. RD. NO. 7 / S.W. 7th ST.
MARGATE, FLORIDA 33327
SCALE: 1"=30'
FILE: HANLEX DEVELOPMENT, LLC



BURIED UTILITIES NOTE

BURIED UTILITIES ARE SHOWN AT THER APPROXIMATE LOCATION BASED UPON INFORMATION OBTAINED FROM UTILITY COMPANIES AND FIELD EVIDENCE. OTHER BURIED UTILITIES MIGHT EXIST ON THE SUBJECT SITE WHICH ARE NOT SHOWN ON THIS DRAWING. USE EXTREME CAUTION DURING EXCAVATION PROCEDURES AND CONTACT SUNSHINE STATE ONE, @ 1-800-432-4770 FOR EXACT LOCATION OF BURIED FACILITIES PRIOR TO EXCAVATION OPERATIONS.

CALL BEFORE YOU DIG...
1-800-432-4770
UTILITIES PROTECTION CENTER
IT'S THE LAW

DOLLAR GENERAL AT MARGATE

SITE SPECIFIC INFORMATION

PARCEL NUMBER	494206180930, 494206180931, 494206180932
PROPERTY AREA	±1.79 ACRES
EXISTING USE	VACANT
PROPOSED USE	COMMERCIAL(DOLLAR GENERAL)
ZONING CLASSIFICATION	
PROJECT	TOC-C (TRANSIT ORIENTED CORRIDOR)
ADJACENT (N)	S.W 7TH ST
ADJACENT (E)	ALLEY WITH (R4) RESIDENTIAL BEHIND IT
ADJACENT (W)	S.R. 7
ADJACENT (S)	TOC-C (TRANSIT ORIENTED CORRIDOR)
PARKING REQ.	1 SPACE PER 300 SF OF GFA 7,500 SF /300= 25 SPACES TOTAL = 25 REQUIRED
PARKING PROPOSED	28 (REGULAR) + 2 (HANDICAP) = 30 (TOTAL)

BUILDING SETBACKS

	FRONT (W)	SIDE (N)	SIDE (S)	REAR (E)
REQUIRED	0' (FROM EDGE SIDEWALK)	15' (FROM EDGE OF ROADWAY)	0'	17' (FROM CENTER OF ALLEY WAY)
PROPOSED	0'	15'	334'	46'

LANDSCAPE BUFFER

	FRONT (W)	SIDE (N)	SIDE (S)	REAR (E)
REQUIRED	8'	10'	0'	5'
PROPOSED	49'	15'	0'	10'

	REQUIRED	PROPOSED
MAX BUILDING HEIGHT	24'	22'
MAX FLOOR AREA RATIO	N/A	9.6%

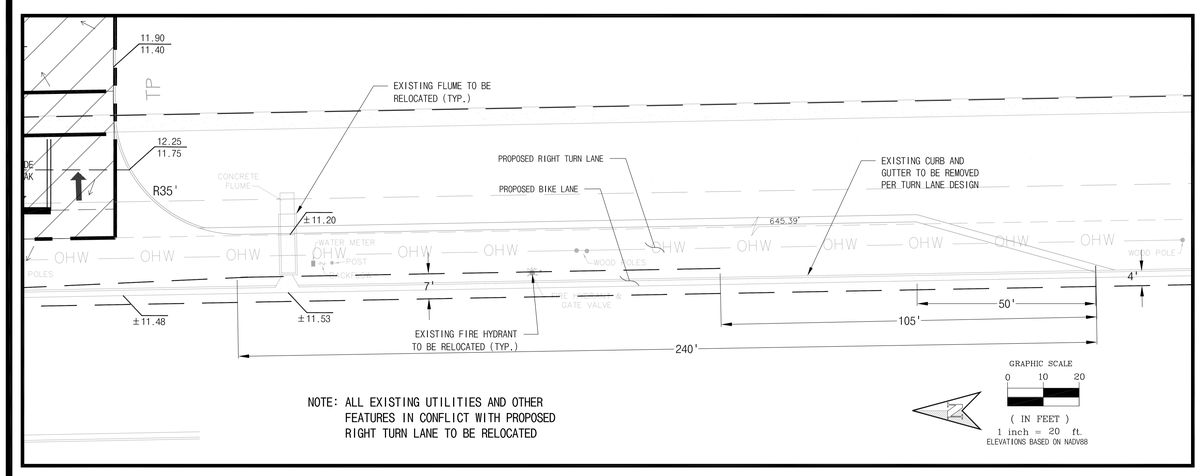
GROSS FLOOR AREA ±7,500

FEMA THE SUBJECT PROPERTY LIES IN FLOOD ZONE X, ACCORDING TO FLOOD INSURANCE RATE MAP NO.12011C0355H, FOR BROWARD COUNTY, FLORIDA, DATED AUGUST 18, 2014. TO BE VERIFIED BY LOCAL FEMA OFFICIAL.

*TOTAL LAND AREA ±1.79 ACRES
AREA LISTED BELOW EXCLUDES THE 30' ROADWAY EASEMENT WHICH EQUATES TO ±0.33 ACRES

LAND USE TABLE

DESCRIPTION	AREA (SF)	AREA(AC)	% AREA
BASIN #1	±63,601	±1.46	100.00
PRE-DEVELOPMENT IMPERVIOUS AREA	±8,300	±0.19	13.05
POST-DEVELOPMENT CONTRIBUTING BASIN #1 AREA	±63,601	±1.46	100.00
BUILDING AREA	±7,500	±0.17	11.79
ASPHALT AREA (VUA)	±26,232	±0.60	41.24
CONCRETE AREA	±5,526	±0.13	8.69
TOTAL IMPERVIOUS	±39,258	±0.90	61.72
GREEN	±9,227	±0.23	14.51
POND	±15,116	±0.33	23.77
TOTAL PERVIOUS	±24,343	±0.56	38.28



NOTE: ALL EXISTING UTILITIES AND OTHER FEATURES IN CONFLICT WITH PROPOSED RIGHT TURN LANE TO BE RELOCATED

TURN LANE SITE DETAIL

DOLLAR GENERAL

HANLEY DEVELOPMENT
Commercial Real Estate Development

PROJECT: DOLLAR GENERAL AT MARGATE

HANLEX CIVIL, LLC
1825 S. ORANGE BLOSSOM TRAIL
APOPKA, FL 32703
P: (407) 889-9400
F: (407) 889-8328
COA: 29910

DEVELOPMENT PLANS

NO:	DATE:	REVISION/ISSUE:	BY:
1			

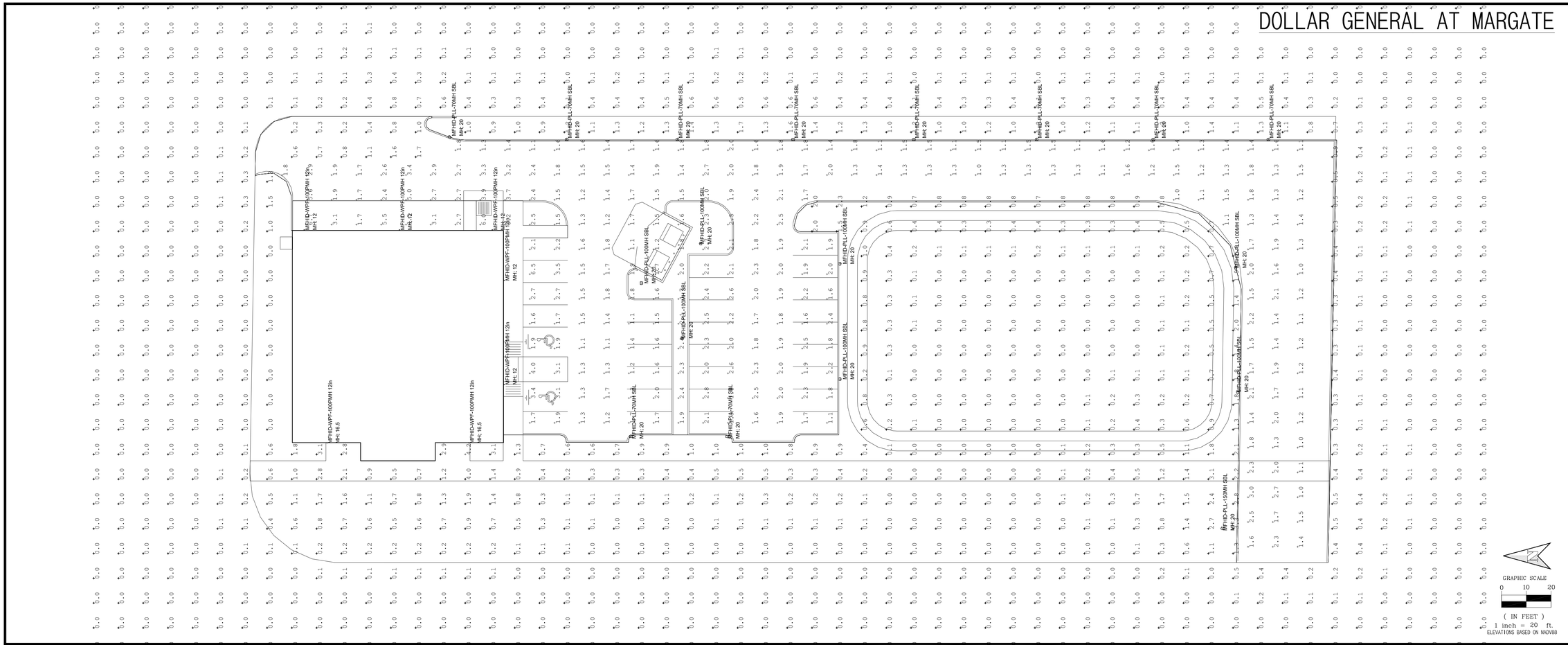
ENGINEER'S NAME & PE#

JASON D. BULLARD, P.E.
P.E. LICENSE NO. 73800

PROJECT # 215.004
DATE 06/25/2015
SCALE 1:20
SHEET DP1.0

DEVELOPMENT PLAN

DOLLAR GENERAL AT MARGATE



Luminaire Schedule						
Symbol	Qty	Label	Description	Arrangement	Lumens	LLF
	7	MFHID-WPF-100PMH 12in	100W Full Cutoff Wall Pack	SINGLE	7600	0.720
	7	MFHID-PLL-100MH SBL	100W Parking Lot Lighting w. SBL	SINGLE	7600	0.720
	1	MFHID-PLL-150MH SBL	150W Parking Lot Lighting w. SBL	SINGLE	13300	0.720
	10	MFHID-PLL-70MH SBL	70W Parking Lot Lighting w. SBL	SINGLE	5300	0.720

Calculation Summary						
Label	CalcType	Units	Avg	Max	Min
Parking Lot Lighting	Illuminance	Fc	1.94	8.7	1.0
Site Lighting	Illuminance	Fc	0.18	4.2	0.0

BOM Schedule		
Qty	Part Number	Description
7	MFHID-WPF-100PMH	100W Full Cutoff Wall Packs
7	MFHID-P-L-100MH	100W Parking Lot Lighting ***NOTE: DO NOT tilt fixtures up, keep at 0 degree horizontal plane.
1	MFHID-P-L-150MH	150W Parking Lot Lighting ***NOTE: DO NOT tilt fixtures up, keep at 0 degree horizontal plane.
18	HW-HID-20POLE4	20' Parking Lot Pole
18	HW-HID-PLL-400MOUNT	Single Tenon Mounting Bracket
18	HW-HID-PLL-SBL16	16" Housing Backlight Shield
10	MFHID-P-L-70MH	70W Parking Lot Lighting ***NOTE: DO NOT tilt fixtures up, keep at 0 degree horizontal plane.

Dollar General
Margate, FL

CONFIDENTIAL INFORMATION Please Note: This data is based upon certain specific assumed reflectances and characteristics of the proposed environment. Any deviation from these reflectances or assumed characteristics may affect the actual performance of the luminaries. Based on the factors, Harris Manufacturing, Inc. can not guarantee these results.

Orion Energy Systems
9143 Phillips Hwy. Suite 420
Jacksonville, FL 32256
Tel: (904) 284-1220
Email: bhartt@oesx.com

ORION LIGHT YEARS AHEAD.

Date:6/22/2015 Page 1 of 4

Luminaire Location Summary			
Label	Fix. Ht.	Orient	Tilt
MFHID-PLL-70MH SBL	20	180	0
MFHID-PLL-70MH SBL	20	180	0
MFHID-PLL-70MH SBL	20	180	0
MFHID-PLL-100MH SBL	20	270	0
MFHID-PLL-150MH SBL	20	343.379	0
MFHID-PLL-100MH SBL	20	90	0
MFHID-WPF-100PMH 12in	16.5	180	0
MFHID-WPF-100PMH 12in	16.5	180	0
MFHID-WPF-100PMH 12in	12	270	0
MFHID-WPF-100PMH 12in	12	270	0
MFHID-PLL-70MH SBL	20	139.805	0
MFHID-PLL-70MH SBL	20	0	0
MFHID-PLL-100MH SBL	20	90	0
MFHID-PLL-70MH SBL	20	180	0
MFHID-PLL-70MH SBL	20	180	0
MFHID-PLL-70MH SBL	20	180	0
MFHID-PLL-100MH SBL	20	270	0
MFHID-PLL-70MH SBL	20	180	0
MFHID-WPF-100PMH 12in	12	0	0
MFHID-WPF-100PMH 12in	12	0	0
MFHID-WPF-100PMH 12in	12	0	0
MFHID-PLL-70MH SBL	20	0	0
MFHID-PLL-100MH SBL	20	270	0
MFHID-PLL-100MH SBL	20	270	0
MFHID-PLL-100MH SBL	20	90	0

Dollar General
Margate, FL

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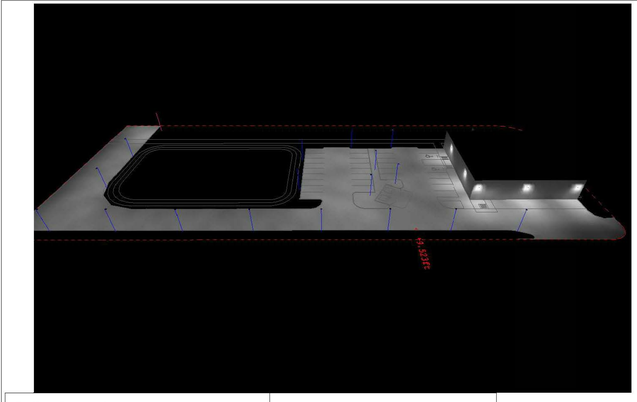
Orion Energy Systems
9143 Phillips Hwy. Suite 420
Jacksonville, FL 32256
Tel: (904) 284-1220
Email: bhartt@oesx.com

ORION LIGHT YEARS AHEAD.

Date:6/22/2015 Page 2 of 4



Dollar General
Margate, FL

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ORION LIGHT YEARS AHEAD.

Date:6/22/2015 Page 4 of 4

DOLLAR GENERAL

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Commercial Real Estate Development

PROJECT: DOLLAR GENERAL AT MARGATE

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1825 S. ORANGE BLOSSOM TRAIL
APOPKA, FL 32703
P: (407) 889-9400
F: (407) 889-8328

COA: 29910

DEVELOPMENT PLANS

NO:	DATE:	REVISION/ISSUE:	BY:
1			

ENGINEER'S NAME & PE#

JASON D. BULLARD, P.E.
P.E. LICENSE NO. 73800

PROJECT # 215.004

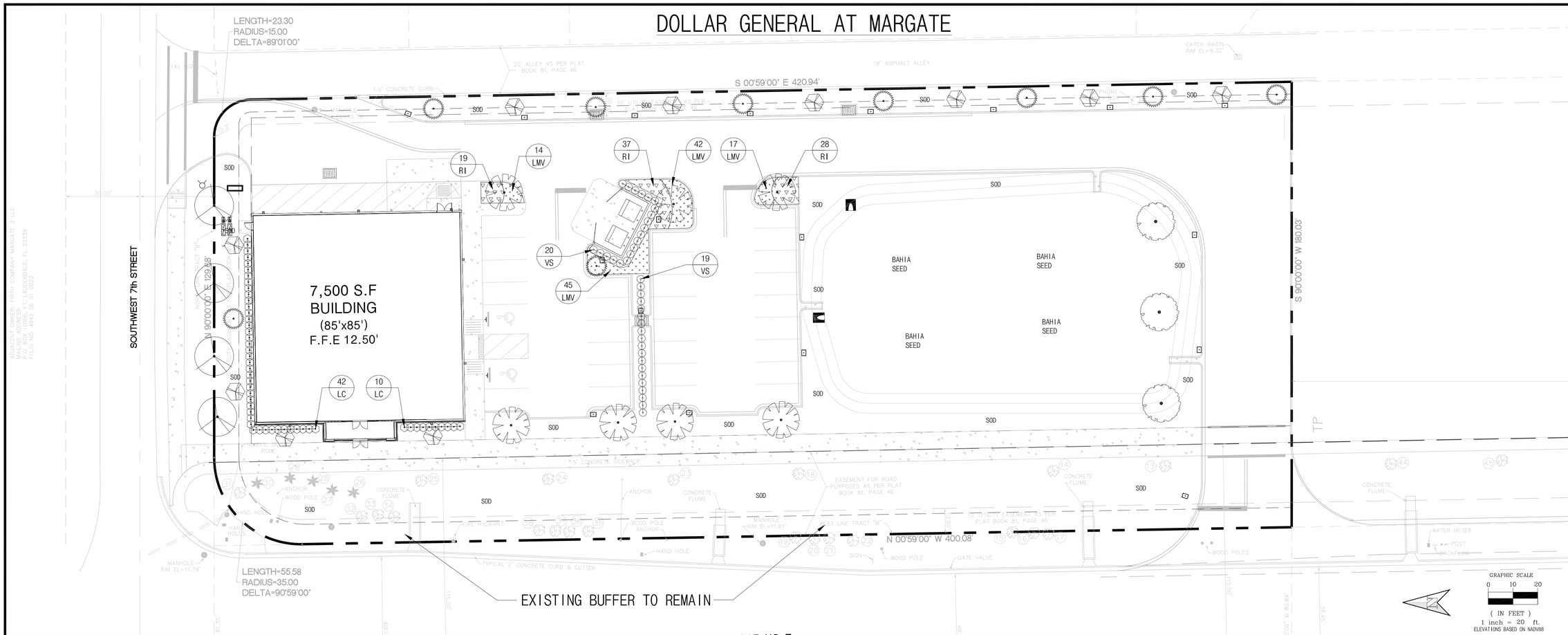
DATE 06/25/2015

SHEET CP1.0

SCALE 1:20

PHOTOMETRIC PLAN

DOLLAR GENERAL AT MARGATE

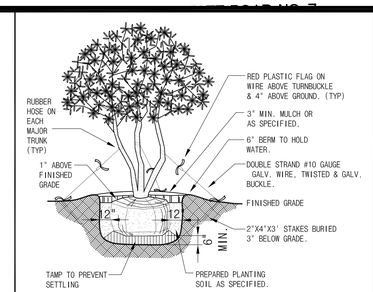


PLANT LIST

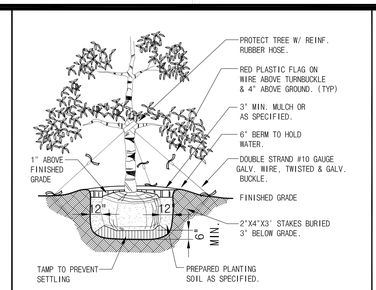
SYMBOL	BOTANICAL NAME (COMMON NAME)	MINIMUM SIZE/SPACING	DROUGHT TOLERANCE	NATIVE FLORIDA	QUANTITY
QV	QUERCUS VIRGINIANA (LIVE OAK)	12'-14' MIN.HT. 2" DBH. 5'-6'MIN.SPREAD. 25 GAL.	YES	YES	4
MG	MAGNOLIA GRANDIFLORA (SOUTHERN MAGNOLIA)	12'-14' MIN.HT. 2" DBH. 5'-6'MIN.SPREAD. 30 GAL.	YES	YES	7
TD	TAXIODIUM DISTICHUM (BALD CYPRESS)	12'-14' MIN.HT. 2" DBH. 5'-6'MIN.SPREAD. 25 GAL.	YES	YES	3
LI	LAGERSTROMIA INDICA (CREPE MYRTLE)	4-5' MIN.HT. 1" CAL.SINGLE TRUNK 3' MIN.SPREAD.	YES	NO	10
IV	ILEX VOMITORIA (YAUPON HOLLY)	5' MIN.HT. 1" CAL. 3' MIN.SPREAD.	YES	NO	9
LMV	LIRIOPE MUSCARI (VARIGATED LIRIOPE)	8"-12" MIN.HT. 1 GAL. 24" O.C.	YES	NO	118
RI	RAPHIOLEPIS INDICA (INDIAN HAWTHORNE)	12" MIN.HT. 3 GAL. 24" O.C.	YES	NO	84
VS	VIBURNUM SUSPENSUM (SANDANKWA VIBURNUM)	24" MIN.HT. 24" MIN.SPREAD 5 GAL. 36" O.C.	YES	NO	39
LC	LOROPETALUM 'RUBRUM' (LOROPETALUM)	24" MIN.HT. 24" MIN.SPREAD 3 GAL. 30" O.C.	YES	NO	52
SOD	BAHIA	QUANTITY TO BE CALCULATED BY CONTRACTOR	YES	YES	

PLANT QUANTITY — 00
XX — PLANT SYMBOL

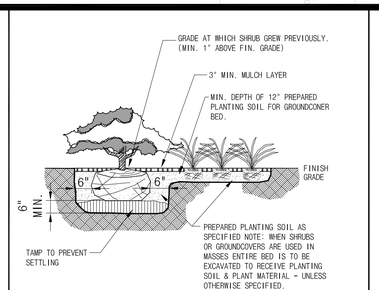
NOTE:
WHERE GALLON REFERENCES MAY CONFLICT WITH HEIGHT/SPREAD AND CALIPER MEASUREMENTS, THE HEIGHT/SPREAD AND CALIPER MEASUREMENTS SHALL GOVERN.



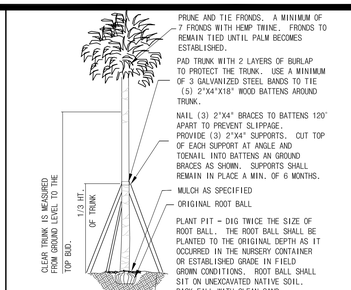
① MULTI-TRUNK DETAIL NTS



② TREE PLANTING DETAIL NTS



③ SHRUB AND GROUND COVER DETAIL NTS



④ PALM PLANTING DETAIL NTS

GENERAL LANDSCAPE NOTES

1. ALL PLANTS TO BE FLORIDA NO. 1, OR BETTER AS OUTLINED UNDER 'GRADES AND STANDARDS FOR NURSERY PLANTS, PART I, 1963 AND PART II, STATE OF FLORIDA DEPARTMENT OF AGRICULTURE, TALLAHASSEE, FLORIDA, AND ANY AMENDMENTS THERETO.
2. ALL TREES AND PLANT MATERIAL SHALL BE PLANTED IN ACCORDANCE WITH THE SPECIFICATIONS DESCRIBED IN THE STATE DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES, DIVISION OF FORESTRY, "TREE PROTECTION MANUAL FOR BUILDERS AND DEVELOPERS", OCTOBER, 1980.
3. THE LANDSCAPE CONTRACTOR (CONTRACTED BY OWNER, N.J.C.) SHALL BE RESPONSIBLE FOR ALL MATERIALS AND ALL WORK AS CALLED FOR ON THE LANDSCAPE PLANS. THE LIST OF PLANT QUANTITIES ACCOMPANYING THE PLANS SHALL BE USED AS A GUIDE ONLY. IF A VARIATION OCCURS BETWEEN THE PLANS AND THE PLANT LIST, THE PLANS SHALL CONTROL.
4. ALL TREES, SHRUBS AND GROUND COVERS SHALL BE PLANTED USING A SOIL MIXTURE PREPARED ACCORDINGLY (2/3 EXISTING SOIL, 1/3 PEAT).
5. THE LANDSCAPE CONTRACTOR SHALL INSURE ADEQUATE VERTICAL DRAINAGE IN ALL PLANT BEDS AND PLANTERS. VERTICAL DRILLING THROUGH ANY COMPACTED FILL TO NATIVE SOIL SHALL BE ACCOMPLISHED TO AID DRAINAGE.
6. ALL PLANT BEDS AND TREE WATERING BASINS SHALL BE TOP DRESSED WITH THREE INCHES (3") OF SHREDDED CYPRESS MULCH
7. NO TREES SHALL BE PLANTED CLOSER THAN 3 FEET (3') FROM THE EDGE OF PAVEMENT TO ALLOW ADEQUATE TREE TRUNK PROTECTION.
8. LANDSCAPE CONTRACTOR SHALL BE WHOLLY RESPONSIBLE FOR STABILITY AND PLUMB CONDITION OF ALL TREES AND SHALL BE LEGALLY LIABLE FOR ANY DAMAGE CAUSED BY THE INSTABILITY OF ANY PLANT MATERIAL.
9. ALL LAWN AREAS TO RECEIVE SOD SHALL BE DISKED FOUR(4) TO SIX(6) INCHES AND DRAGGED TO ESTABLISH A LEVEL FINISH GRADE. ALL DEBRIS TO BE REMOVED FROM THE SITE.
10. SOD SHALL BE FREE OF WEEDS AND PESTS. IT SHALL BE LAID EVENLY AND ROLLED, WITH TIGHT FITTING JOINTS. THE SOD SHALL CONTAIN MOIST SOIL WHICH DOES NOT FALL APART OR TEAR WHEN LIFTED. ALL AREAS NOT PAVED OR OTHERWISE LANDSCAPED SHALL BE SODDED. SOD SHALL BE ARGENTINE BAHIA OR EQUAL.
11. ALL LANDSCAPE AREAS TO BE IRRIGATED WITH AN AUTOMATIC UNDERGROUND SYSTEM, WITH 100% COVERAGE, BACKFLOW PREVENTOR, & RAIN SENSOR DEVICE, DIRECT SPRAY HEADS AWAY FROM ANY NATURAL AREAS AND PAVED SURFACES.
12. THE TREE CALIPER OF ALL CANOPY TREES SPECIFIED ON THE PLANT LIST SHALL BE AT LEAST TWO 1/2 (2.5) INCHES IN DIAMETER WHEN MEASURED AT SIX (6) INCHES ABOVE GRADE.
13. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE OCCURRING ON SITE OR ADJACENT AREAS, INCLUDING BUT NOT LIMITED TO BUILDINGS, PAVING, UTILITIES, ETC., WHICH IS CAUSED BY PREPARING OR INSTALLING ANY AND ALL PLANT MATERIAL.

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BURIED UTILITIES NOTE

BURIED UTILITIES ARE SHOWN AT THEIR APPROXIMATE LOCATION BASED UPON INFORMATION OBTAINED FROM UTILITY COMPANIES AND FIELD EVIDENCE. OTHER BURIED UTILITIES MIGHT EXIST ON THE SUBJECT SITE WHICH ARE NOT SHOWN ON THIS DRAWING. USE EXTREME CAUTION DURING EXCAVATION PROCEDURES AND CONTACT SUNSHINE STATE ONE, @ 1-800-432-4770 FOR EXACT LOCATION OF BURIED FACILITIES PRIOR TO EXCAVATION OPERATIONS.

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IT'S THE LAW

Ravensdale Planning & Design
Land Planning • Landscape Architecture • Project Management Expert Witness •
703 Greens Avenue, Winter Park, Florida 32789
(407) 647-1213 (407) 647-6359 FAX.

DOLLAR GENERAL

HANLEX DEVELOPMENT
Commercial Real Estate Development
PROJECT: DOLLAR GENERAL AT MARGATE

HANLEX CIVIL, LLC
1825 S. ORANGE BLOSSOM TRAIL
APOPKA, FL 32703
P: (407) 889-9400
F: (407) 889-8328
COA: 29910

DEVELOPMENT PLANS

NO:	DATE:	REVISION/ISSUE:	BY:
1			

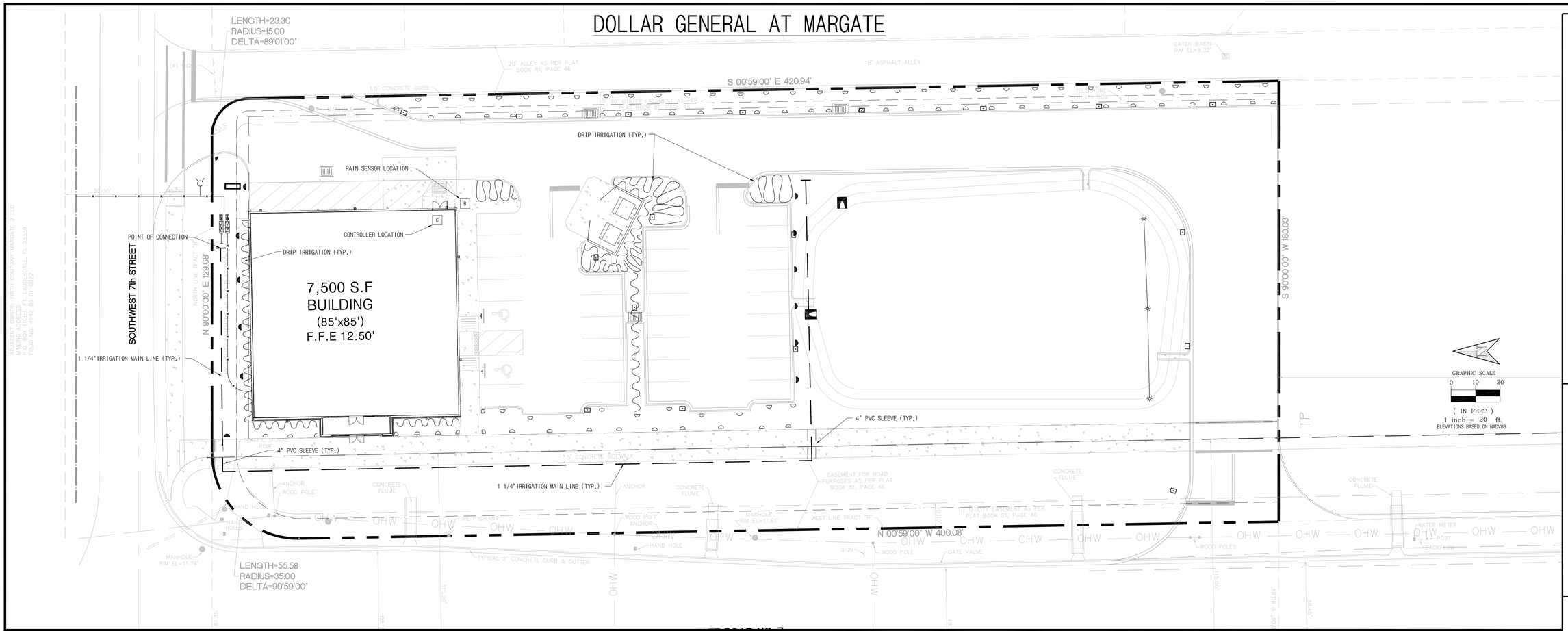
ENGINEER'S NAME & PE#

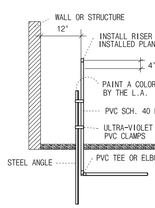
SCOTT V. MOORE
FLORIDA RLA #1020

PROJECT # 215.004
DATE 06/25/2015
SCALE 1:20
SHEET L1.0

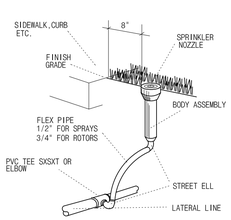
LANDSCAPE PLAN

DOLLAR GENERAL AT MARGATE

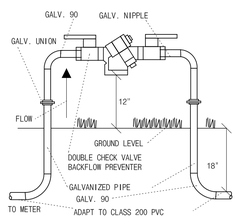




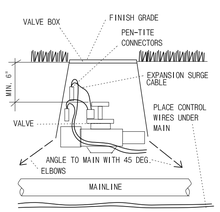
① SHRUB RISER DETAIL NTS



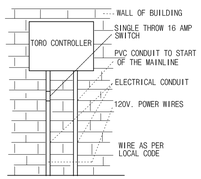
② HEAD DETAIL NTS



③ BACKFLOW PREVENTER NTS



④ ELECTRIC VALVE DETAIL NTS

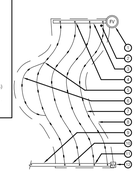


⑤ CONTROLLER DETAIL NTS

LEGEND

1. TORO DL2000 AUTOMATIC FLUSH VALVE (FQV-H-FIPT) PLUMBED TO FLUSH MANIFOLD AT LOW POINT.	7. TORO DL2000 DRIPLINE LATERAL (RKP-600-XR).
2. TORO DL2000 OPERATION INDICATOR (DL-MPH). OPTIONAL.	8. AREA PERIMETER.
3. PVC FLUSH MANIFOLD.	9. PVC LATERAL LINE FROM DRIP ZONE KIT.
4. TORO DL2000 MANIFOLD-TO-ELBOW CONNECTION (TFP).	10. PVC SUPPLY MANIFOLD.
5. TORO LOC-EZE TEE (FTT-16).	11. TORO DL2000 MANIFOLD-TO-ELL CONNECTION.
6. PERIMETER LATERALS 2" TO 4" FROM EDGE.	12. TORO DL2000 AIR/VACUUM RELIEF VALVE (VB-500-34) PLUMBED TO SUPPLY MANIFOLD AT HIGH POINT.

NOTE:
THE TOTAL LENGTH OF ALL INTERCONNECTED DRIP LINE SHALL NOT EXCEED THE MAXIMUM RUN LENGTH. SEE TORO SUBSURFACE IRRIGATION DESIGN GUIDE (FORM #4LT11).



⑥ DRIP IRRIGATION DETAIL NTS

IRRIGATION LEGEND

FULL 6" POP-UP SPRAY HEAD	570-8-F
1/4 6" POP-UP SPRAY HEAD	570-8-Q
1/2 6" POP-UP SPRAY HEAD	570-8-H
1/3 6" POP-UP SPRAY HEAD	570-8-T
2/3 6" POP-UP SPRAY HEAD	570-8-TT
3/4 6" POP-UP SPRAY HEAD	570-8-TQ
FULL 6" POP-UP SPRAY HEAD	570-15-F
1/4 6" POP-UP SPRAY HEAD	570-15-Q
1/2 6" POP-UP SPRAY HEAD	570-15-H
1/3 6" POP-UP SPRAY HEAD	570-15-T
2/3 6" POP-UP SPRAY HEAD	570-15-TT
3/4 6" POP-UP SPRAY HEAD	570-15-TQ
CENTER STRIP SPRAY HEAD	570-4-CST
SIDE STRIP SPRAY HEAD	570-4-SST
END STRIP SPRAY HEAD	570-4-EST
DENOTES VARIABLE 6" POP-UP SPRAY HEAD IN 15' PATTERN	570-15-ADJ
DENOTES 4" POP-UP SPRAY HEAD OR ROTOR ON PVC RISER	
POP-UP STREAM ROTOR	
500 SERIES STREAM BUBBLER	
TORO PLASTIC VALVE	
CLASS 200 PVC MAIN LINE	
CLASS 160 PVC LATERAL LINE	
PVC SLEEVE 4" IN DIAMETER	
PIPE CROSSOVER	
BACKFLOW PREVENTER	
IRRIGATION METER	
C — CONTROLLER LOCATION TORO MODEL # CC-P09	
R — RAIN SENSOR LOCATION	

2 / 28.8 / 1" — VALVE ZONE NO. / VALVE SIZE / VALVE GPM

VALVES

254-06-03	3/4" VALVES
252-06-04	1" VALVES
252-25-06	1.5" VALVES

NOTE: MODEL NOS. SHOWN REFLECT TORO SPRINKLER HEADS. ANY HEADS OF EQUAL QUALITY MAY BE USED WITH THE APPROVAL OF THE OWNER. CONTRACTOR TO SIZE ALL LATERAL LINES AND INSURE THE PERFORMANCE OF ALL HEADS.

IRRIGATION NOTE:

LANDSCAPE CONTRACTOR IS TO PROVIDE AN ENTIRE IRRIGATION SYSTEM WHICH PROVIDES 100% COVERAGE OF ALL PLANT AND GRASSED AREAS WITH HEAD TO HEAD SPACING OF SPRAY HEADS. PROVIDE ALL ITEMS NECESSARY FOR A COMPLETE AND OPERATIONAL SYSTEM TO INCLUDE, BUT NOT LIMITED TO CONTROLLER, VALVES, PIPING, HEADS, RISERS, BACKFLOW PREVENTER, METER, WIRING, ELECTRICAL SUPPLY. PROVIDE AS-BUILT DRAWINGS UPON COMPLETION AND PRIOR TO FINAL PAYMENT. PROVIDE A RAIN SENSOR IN A CONSPICUOUS LOCATION OPEN TO RAINFALL. COORDINATE ALL WORK AND SLEEVE LOCATIONS WITH GENERAL CONTRACTOR. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR OWNER/ARCHITECT REVIEW AND APPROVAL PRIOR TO INSTALLATION. LANDSCAPE CONTRACTOR IS TO PROVIDE AND INSTALL A SEPARATE WATER METER FOR IRRIGATION PURPOSES. LANDSCAPE CONTRACTOR SHALL OBTAIN ANY PERMITS REQUIRED FOR THE INSTALLATION OF THE IRRIGATION SYSTEM.

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NO:	DATE:	REVISION/ISSUE:	BY:
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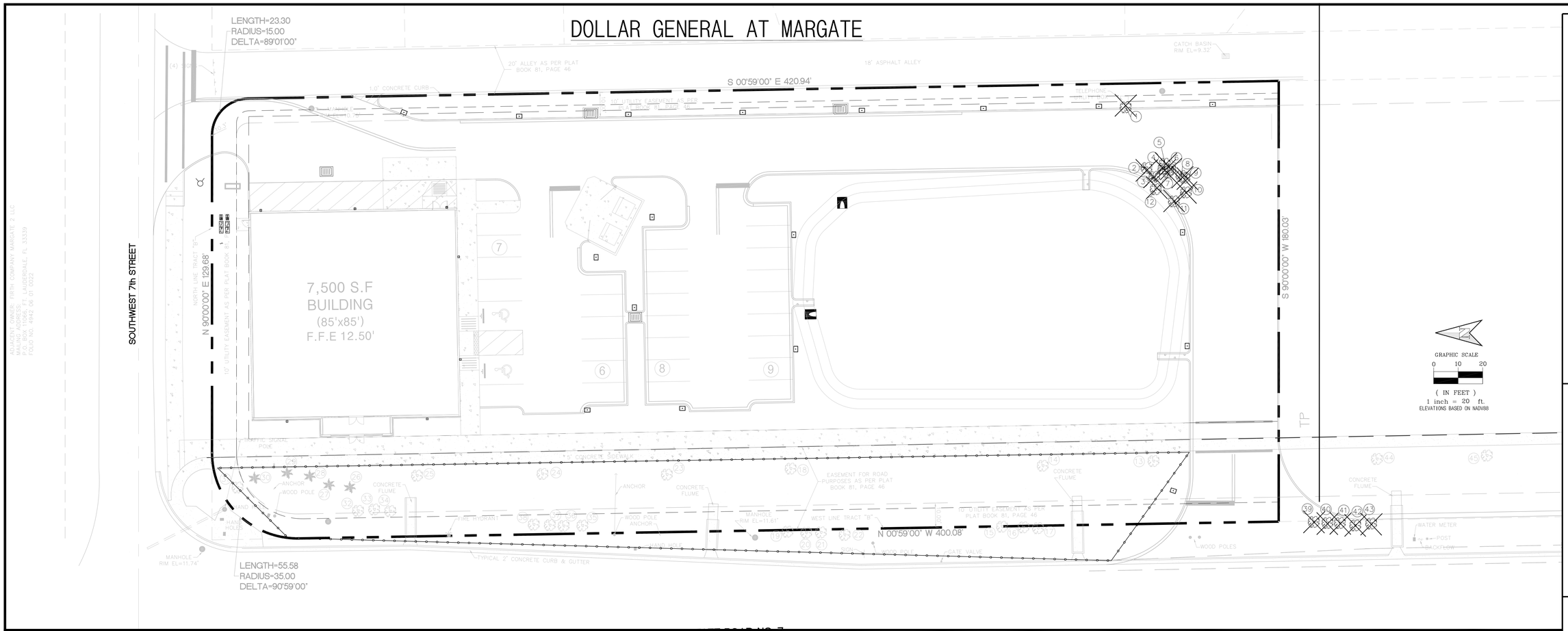
ENGINEER'S NAME & PE#

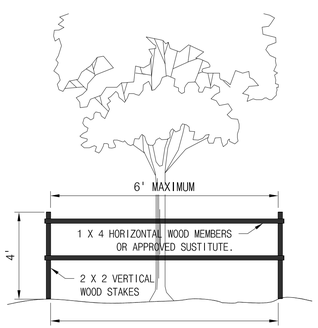
SCOTT V. MOORE
FLORIDA RLA #1020

PROJECT # 215.004
DATE 06/25/2015
SCALE 1:20
SHEET L2.0

IRRIGATION PLAN

DOLLAR GENERAL AT MARGATE





BARRIERS PLACED AT PROTECTED RADIUS
20' FOR GRAND TREES
10' FOR PROTECTED TREES

TREE PROTECTION NOTES

1. DURING CONSTRUCTION, PROTECTIVE BARRIERS SHALL BE PLACED BY SITE CONTRACTOR TO PREVENT DESTRUCTION OF TREES WHICH ARE DESIGNATED TO REMAIN. PROTECTION BARRIERS SHALL BE ERECTED PRIOR TO CONSTRUCTION OF ANY KIND ON THE SITE.
2. BARRIERS SHALL CONSIST OF PROTECTIVE WOODEN POSTS TWO (2) INCHES BY TWO (2) INCHES OR LARGER PLANTED IN SUFFICIENT DEPTH TO BE STABLE WITH AT LEAST FOUR (4) FEET OF POST VISIBLE ABOVE THE GROUND. POSTS SHALL BE PLACED NO CLOSER THAN TEN (10) FEET TO THE TRUNK UNLESS PROPOSED PAVING CONSTRUCTION WILL NOT PERMIT. POSTS SHALL BE NO FURTHER THAN SIX (6) FEET APART. REFER TO TREE PROTECTION BARRIER DETAIL. .
3. PROPOSED GRADES AROUND TREES TO REMAIN SHALL BE MAINTAINED TO WITHIN FOUR (4) INCHES OF THE EXISTING GRADE.
4. THE CONTRACTOR SHALL FOLLOW TREE REMOVAL, TREE PROTECTION AND GENERAL PLANTING REQTS. AS DEFINED BY LOCAL JURISDICTION.
5. PROTECTIVE BARRIERS SHALL REMAIN IN PLACE AND INTACT UNTIL SUCH TIME AS CONSTRUCTION IS COMPLETE AND ALL EQUIPMENT IS REMOVED FROM SITE.
6. NO BUILDING MATERIALS SUCH AS MACHINERY OR TEMPORARY SOIL DEPOSITS SHALL BE PLACED WITHIN THE PROTECTIVE BARRIER ZONES.
7. BARRIERS SHALL BE PLACED AT THE TREE CANOPY LINE EXCEPT ADJACENT TO THE PROPERTY CONSTRUCTION AREA WHERE IT MAY BE AT ONE HALF OF THE CANOPY DISTANCE ON ONE SIDE ONLY.

6" 0 — TREE PROTECTION BARRICADE LOCATION
20' RADIUS FOR GRAND TREES AND
10' RADIUS FOR PROTECTED TREES

6" 0 — EXISTING TREE TO BE REMOVED

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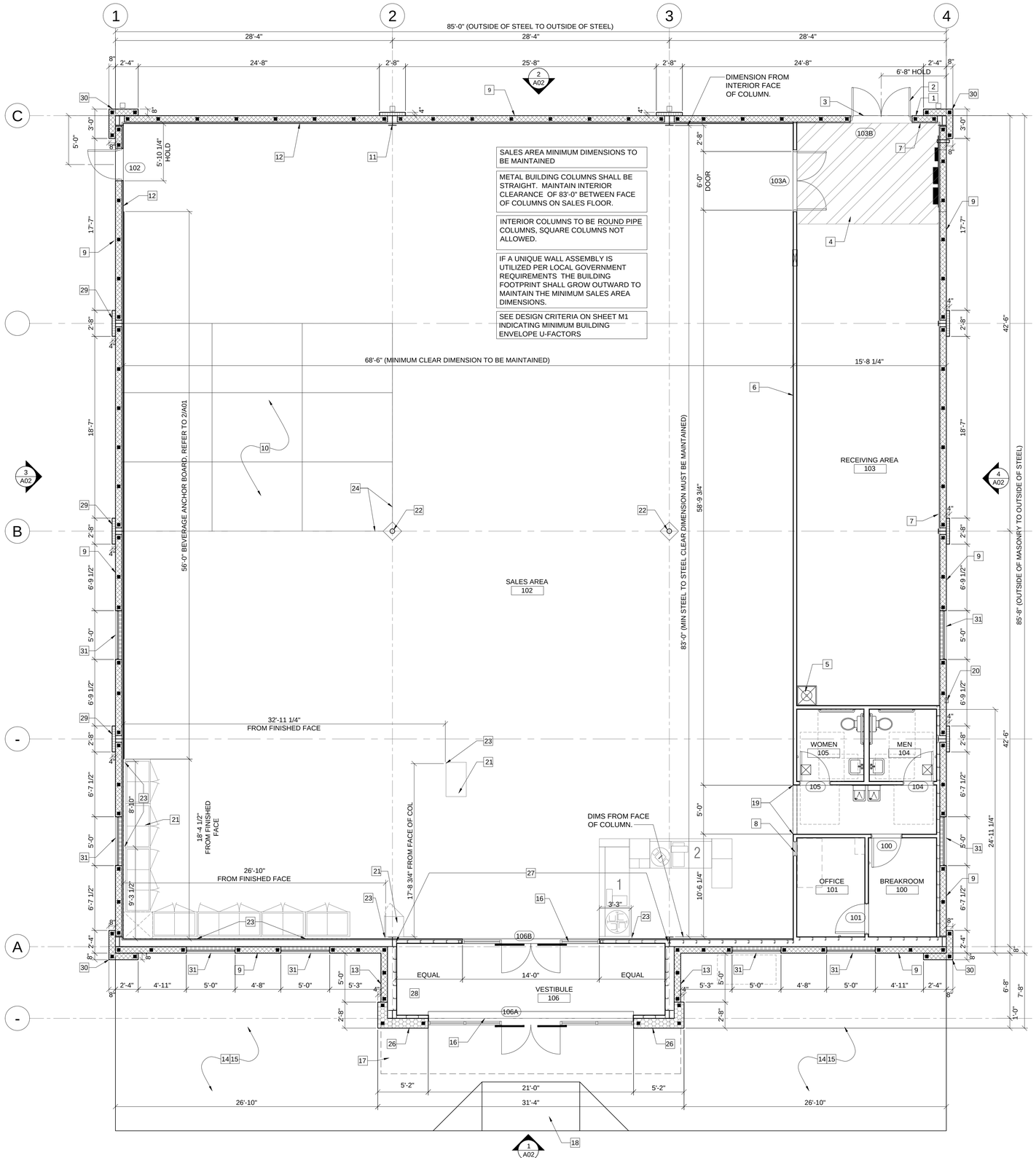
SCOTT V. MOORE
FLORIDA RLA #1020

PROJECT # 215.004	
DATE 06/25/2015	SHEET L3.0
SCALE 1:20	

TREE PRES. PLAN



1 A01 FLOOR PLAN - RIGHT DELIVERY

SCALE: 3/16" = 1'-0"

FLOOR PLAN KEYED NOTES

1. RECEIVING DOOR BUZZER - TORK MDL.#TA725 OR EQUAL
2. DOOR SCOPE, PROVIDED BY BASS SECURITY. REFER TO T01 AND DOOR SCHEDULE.
3. WEATHER STRIP & LOW PROFILE THRESHOLD PROVIDED BY BASS SECURITY. SEE TO T01 AND DOOR SCHEDULE.
4. STRIPE FLOOR FOR DESIGNATED EGRESS PATH (PAINT YELLOW).
5. PROVIDE AND INSTALL A TEN GALLON WATER HEATER (OR LARGER IF REQUIRED BY CODE) ABOVE THE MOP SINK.
6. 3 5/8" METAL STUD WITH 1/2" MINIMUM GYPSUM BOARD (BOTH SIDES). REFER TO NOTED WALL SECTION. REFER TO ROOM FINISH SCHEDULE FOR GYPSUM BOARD HEIGHT AT ANY PARTICULAR WALL.
7. METAL LINER PANELS TO 8'-0" A.F.F. AT RECEIVING AREA. (BY PRE-ENGINEERED BUILDING MANUFACTURER).
8. 18" x 18" ONE WAY WINDOW, BOTTOM @ 36" A.F.F.
9. 8" SPLIT FACE C.M.U. (SEE ELEVATIONS FOR COLORS)
10. CONCRETE SLAB WITH 6X6XW1.4 WELDED WIRE MESH OVER POLYETHYLENE VAPOR BARRIER (MIN. 10 MM THICK) OVER CRUSHED STONE BASE, TYPICAL. PROVIDE CONTROL JOINTS AS SHOWN ON S03.
11. METAL BUILDING FRAME. REFER TO NOTED WALL SECTION FOR ADDITIONAL INFORMATION.
12. 1/2" MIN GYPSUM BOARD (TO 10'-0" A.F.F.) OVER METAL LINER PANELS AND INSULATION WITH VAPOR BARRIER. REFER TO INTERIOR SALES AREA ELEVATIONS.
13. 8" C.M.U. W/ STUCCO FINISH. (SEE ELEVATIONS FOR COLORS)
14. SLOPE CONCRETE 1/8" PER FOOT AWAY FROM BUILDING.
15. BROOM FINISH CONCRETE SIDEWALK, TYPICAL.
16. BRONZE STOREFRONT SYSTEM. REFER TO NOTED WALL SECTION FOR ADDITIONAL INFORMATION.
17. LINE OF METAL AWNING ABOVE (BY PEMB). REFER TO REFLECTED CEILING PLAN AND NOTED SECTION.
18. A.D.A. COMPLIANT ACCESSIBLE RAMP WITH YELLOW PAINTED SIDES TO ACCESSIBLE PARKING STALLS.
19. MC CUE CART AND BUMPER GUARDS. TOP INSTALLED @ 3'-5" A.F.F. ORDER TRIM KIT FOR THIS PROTOTYPE.
20. WALL HYDRANT. REFER TO PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
21. REFRIGERATION BY DOLLAR GENERAL.
22. STEEL COLUMN, ROUND (BY PEMB) WITH RECESSED BASE-PLATE. PAINT SW7005 PURE WHITE. WRAP STEEL COLUMN WITH TIGHT LOOP CARPET (BLACK) FROM BASE TO 48" A.F.F.
23. POWER POLE. COORDINATE FINAL LOCATION WITH ELECTRICAL DRAWINGS AND FINAL DOLLAR GENERAL FIXTURE PLAN (F01).
24. CONTROL JOINTS ARE TO BE PLACED ALONG COLUMN LINES AND DIVIDING COLUMN BAYS AS INDICATED. COORDINATE WITH STRUCTURAL DRAWINGS.
25. FLOOR AREA AT BASE OF COLUMNS, WITHIN THE CONSTRUCTION JOINTS, TO BE PAINTED BLACK MAGIC TINT.
26. 12" C.M.U. W/ STUCCO FINISH
27. 20 GA. METAL STUD FRAMING TO DECK ABOVE BETWEEN COLUMNS AT INTERIOR ENTRY DOORS. STUDS TO BE INSTALLED FLUSH WITH THE INTERIOR FACE OF THE ADJACENT COLUMNS. FINISH AS NOTED.
28. CART AREA, REFER TO 5 & 6/A06 FOR ADDITIONAL DETAILS.
29. 4" SPLIT FACE C.M.U. PILASTER ATTACH TO CMU W/ (2) GALV. MTL BRICK TIES AT 16" O.C. VERT.
30. 8" SPLIT FACE C.M.U. PILASTER ATTACH TO CMU W/ (2) GALV. MTL BRICK TIES AT 16" O.C. VERT.
31. FALSE WINDOW SEE ELEVATIONS ON SHEET A02. PROVIDE 4" C.M.U. INFILL BEHIND FALSE WINDOW.

REVISIONS
1 2 3 4 5 6 7 8

PROJECT NO. 13CB1805-01
DATE 6-25-15

FLOOR PLAN

PROPOSED NEW LOCATION
FOR:
DOLLAR GENERAL
SR 7 & SW 7TH ST.
MARGATE , FLORIDA

AA26002490
RABITS & ROMANO
ARCHITECTURE
PLANNING AND DESIGN
245 SOUTH HIGHLAND ST.
SUITE 9 MOUNT DORA, FL. 32757
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FAX - 352-385-1035
info@rabits-architect.com
www.rabits-architect.com

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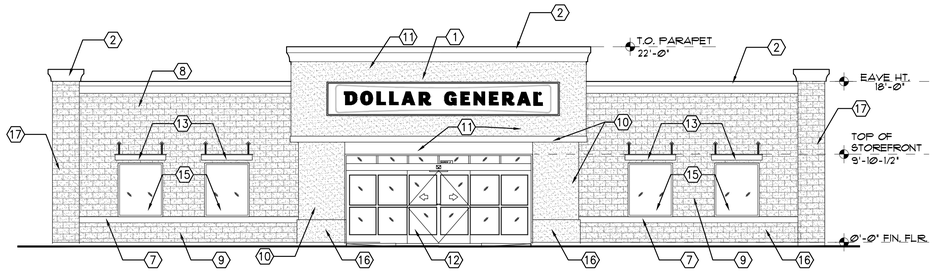
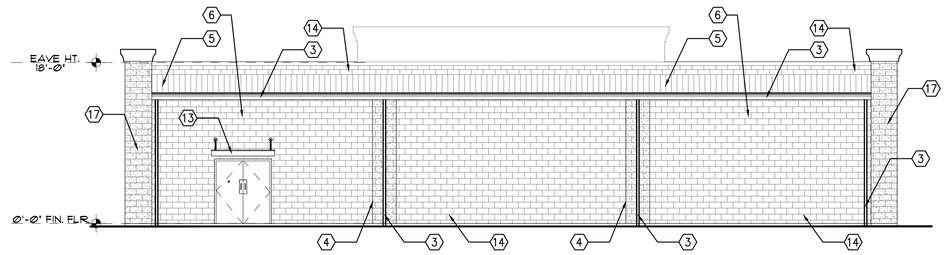
DATE

SHEET
A01
OF
4



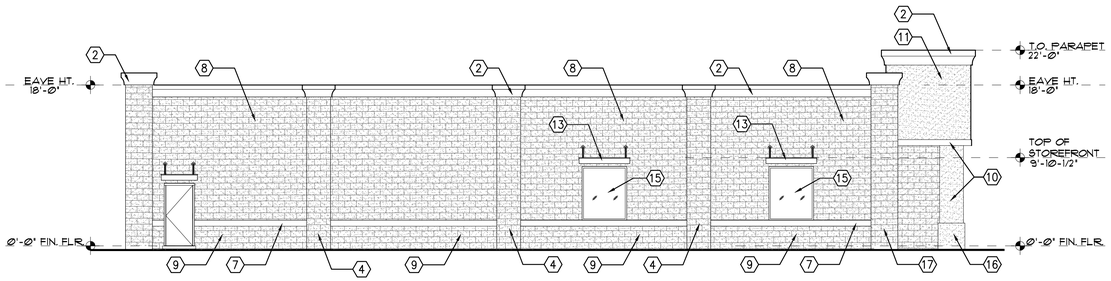
1 A01 FRONT ELEVATION

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



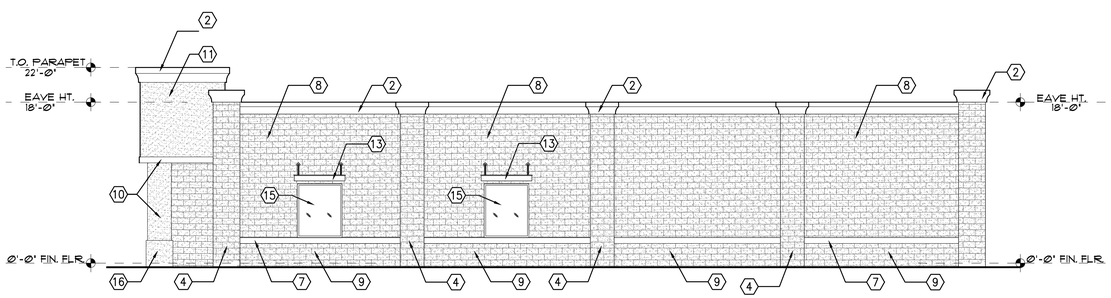
2 A01 REAR ELEVATION

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



3 A01 LEFT SIDE ELEVATION

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

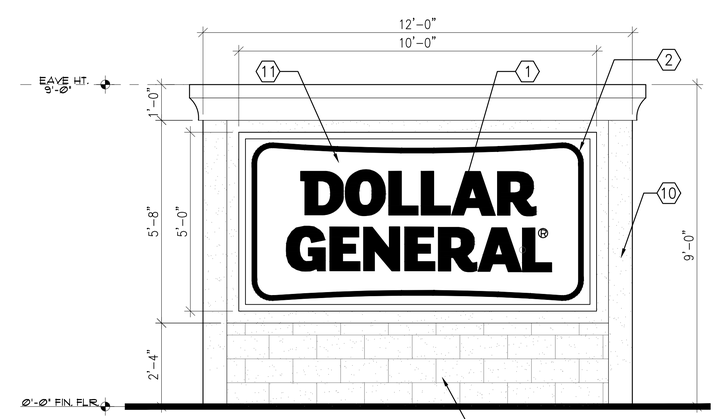


4 A01 RIGHT SIDE ELEVATION

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

KEYED NOTES

1. SIGN FURNISHED AND INSTALLED BY DOLLAR GENERAL CORP. WITH CIRCUIT AS NOTED ON ELECTRICAL PLAN. SIGN TO BE CENTERED ON FRONT OF BUILDING. CONTRACTOR IS TO PROVIDE ADEQUATE BLOCKING AS REQUIRED BY SIGN MANUFACTURER TO SUPPORT SIGN WEIGHT OF UP TO 1,400 LBS. EXTERIOR CANOPY SIGN SHALL BE SUPPORTED BY THE FACE OF CANOPY. COORDINATE THE PROPER SIGNAGE TO BE USED WITH DOLLAR GENERAL.
2. PRE-MANUF. TRIM - (COLOR: VAN-DYKE BROWN - SW7041)
3. GUTTER AND DOWNSPOUT TO DAYLIGHT. (COLOR: HARVESTER - SW6373) WHERE NO SIDEWALK EXISTS, MIN. 5' LONG 4" PERFORATED LANDSCAPE PIPE, STRAPPED TO A 12"X24" CONCRETE SPLASHBLOCK.
4. 4" THICK MASONRY PILASTER, SPLIT-FACE BLOCK. (COLOR: DAYBREAK - SW6700)
5. METAL ROOF. GALVALUME FINISH.
6. METAL PANEL. (COLOR: DAYBREAK - SW6700)
7. 8" CONC. SPLIT-FACE BLOCK.(COLOR: DAYBREAK - SW6700)
8. 8" CONC. SPLIT-FACE BLOCK. (COLOR: HARVESTER - SW6373)
9. 8" CONC. SPLIT-FACE BLOCK. (COLOR: VAN-DYKE BROWN - SW7041)
10. 12" CONC. BLOCK W/ STUCCO FINISH. (COLOR: DAYBREAK - SW6700)
11. 8" CONC. BLOCK W/ STUCCO FINISH. (COLOR: HARVESTER - SW6373)
12. TRANSPARENT STORE FRONT WINDOWS.
13. PRE-MANUF. METAL AWNING. (COLOR: VAN-DYKE BROWN - SW7041)
14. 8" CONC. BLOCK PAINTED W/ STRUCK JOINTS HORIZONTAL ONLY. (COLOR: HARVESTER - SW6373)
15. DARKENED WINDOWS.
16. 12" CONC. BLOCK W/ STUCCO FINISH. (COLOR: VAN-DYKE BROWN - SW7041)
17. 8" THICK MASONRY PILASTER, SPLIT-FACE BLOCK. (COLOR: DAYBREAK - SW6700)



5 A01 9 FT HEIGHT SIGN

SCALE: 1 / 2 " = 1'-0"

REVISIONS

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PROJECT NO. 13CB1805-01

DATE 6-25-15

EXTERIOR ELEVATIONS

PROPOSED NEW LOCATION
FOR:
DOLLAR GENERAL

SR 7 & SW 7TH ST.
MARGATE , FLORIDA

AA26002490

RABITS & ROMANO
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SIGN/SEAL

DATE

SHEET
A02
OF
4

SOUTH-WEST ELEVATION

NORTH-WEST ELEVATION

REVISIONS
1
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PROJECT NO.
13CB1805-01

DATE
6-25-15

RENDERINGS

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DOLLAR GENERAL
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MARGATE , FLORIDA

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SUITE 9 MOUNT DORA , FL. 32757

SIGN/SEAL

DATE

SHEET
A03
OF
4

NORTH-EAST ELEVATION

SOUTH-EAST ELEVATION

REVISIONS
1
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245 SOUTH HIGHLAND ST.
SUITE 9 MOUNT DORA , FL 32757

SIGN/SEAL

DATE

SHEET
A04
OF
4

Letter of Authorization

I, the undersigned, owner or legal representative of the owner of the properties located at the Southeast corner of SW 7th St and SR 7 (PID #s 4942-06-18-0930, 4942-06-18-0931, and 4942-06-18-0932); in Margate, FL hereby authorize Jeremy Anderson, Will Anderson, Jason Bullard, Maria Peña, Felix Granados, Sean Sherlin, and Nathan Wolfe of Hanlex Civil, LLC to act as my agent to obtain permits associated with the development of the properties, as required from City of Margate, Broward County, FDOT, SFWMD, FDEP and/or any other jurisdictional entity authorized to issue permits associated with the development of the subject property referenced above.

Any reproduced copy of this signed original shall be deemed to be an original counterpart of this Letter of Authorization.

Tiger Investment Group, Inc.

Signed: By: Cynthia A Cash V.P.

Printed Name: Cynthia A. Cash

Address: 10151 Deerwood Park Blvd.
Bldg 300 Suite 110
Jacksonville, FL 32256

Sworn to and subscribed before me this 23rd day of June, 2015.

Notary Public, State of Florida
My Commission Expires:

SUSANNA M. DAUGHERTY
Commission # FF 032740
Expires July 20, 2017
Bonded Thru Troy Fain Insurance 800-385-7019

CERTIFICATE OF CORPORATE RESOLUTION BY CONSENT OF SOLE DIRECTOR

The undersigned, ROBERT HIGEL, being the sole Director of TIGER INVESTMENT GROUP, INC. (hereinafter referred to as "Corporation"), a corporation organized and existing under the laws of the State of Florida, does hereby certify the following:

1. The undersigned is the sole Director of the Corporation

2. The undersigned has personal knowledge of the matters set forth in this Certificate

3. The Corporation is a duly formed and validly existing Corporation in good standing under the laws of the State of Florida

4. The Articles and By-Laws of the Corporation are in full force and effect and are unamended as of the date of this Certificate.

5. On June 23, 2015, in accordance with the Corporation's By-Laws, the undersigned as sole Director hereby consented to, approved and adopted the following resolutions as if adopted at a meeting of the Board of Directors held for this purpose, which resolutions have not been amended or revoked in any manner whatsoever and are in full force and effect on the date hereof:

WHEREAS, Tiger Investment Group, Inc. (the "Corporation") has entered into an agreement (together with all addenda, amendments, extensions and exhibits thereto, the ""Contract") with Hanlex Development, LLC and/or its assigns (collectively, the "Purchaser") to sell to Purchaser certain real property located in Broward County, Florida and more particularly described in such Contract (the "Property");

WHEREAS, the Corporation wishes to consent to the terms and conditions of said Contract;

THEREFORE RESOLVED, that the Corporation, approves, ratifies and accepts the terms and provisions of that certain Contract with regard to the sale of the Property to Purchaser;

FURTHER RESOLVED , that CYNTHIA A. CASH, as Vice President of the Corporation, is hereby authorized to execute the Contract and to execute any and all documentation required by the Contract and to evidence the consent of the Corporation to the sale and conveyance of the Property to the Purchaser;

FURTHER RESOLVED, that such documents and instruments executed and delivered as aforesaid shall be and constitute the acts and obligations of the Corporation hereby ratifying and confirming the acts of CYNTHIA A. CASH executing and delivering all such documents and instruments, irrespective of whether such acts were performed before or subsequent to the date of adoption hereof, and directing the officers and employees of the Corporation to perform all of the Corporation's obligations and undertakings under each and all such documents and instruments;

FURTHER RESOLVED , that the Corporation is hereby authorized and directed to pay any and all costs and fees associated with the sale of the Property to the extent

expressly required to be paid by the Corporation under the Contract;

FURTHER RESOLVED, that these resolutions shall remain in full force and effect and may be relied upon by the Purchaser and the closing agent until receipt of written notice of any change therein from the Corporation.

6. The following person is duly elected or appointed to the office of the Corporation set forth opposite her name and incumbent in such office as of the date hereof:

NAME	OFFICE
Cynthia A. Cash	Vice President

IN WITNESS WHEREOF, the undersigned has executed this certificate as of the date and year set forth as follows:

Dated: June 23, 2015.

Witnesses:

(sign) _____

(print) Charles T. Magee

(sign) _____

(print) Claudia Mendez

_____
Name: Robert Higel
Title: Director

STATE OF FLORIDA
COUTNY OF DUVAL

The foregoing Resolution was sworn to, subscribed and acknowledged before me this 23 day of June, 2015, by ROBERT HIGEL, as the Director of Tiger Investment Group, Inc., a Florida Corporation and who (X) is personally known to me or (produced _____ as identification.

_____
NOTARY PUBLIC
Name:_____
Commission expires:_____
Serial number:_____

ANDREA W. ALEXANDER
Commission # EE 221626
Expires August 1, 2016
Bonded Thru Troy Fain Insurance 800-385-7019