

# PLANNING DIVISION



File No. (internal use only): \_\_\_\_\_

2600 Hollywood Boulevard Room 315  
Hollywood, FL 33022

## GENERAL APPLICATION



Tel: (954) 921-3471

Fax: (954) 921-3347

This application must be completed in full and submitted with all documents to be placed on a Board or Committee's agenda.

The applicant is responsible for obtaining the appropriate checklist for each type of application.

Applicant(s) or their authorized legal agent must be present at all Board or Committee meetings.

At least one set of the submitted plans for each application must be signed and sealed (i.e. Architect or Engineer).

Documents and forms can be accessed on the City's website at

<http://www.hollywoodfl.org/DocumentCenter/Home/View/21>



### APPLICATION TYPE (CHECK ONE):

- ☒ Technical Advisory Committee ☐ Historic Preservation Board  
☐ City Commission ☐ Planning and Development Board

Date of Application: 10-19-2018

Location Address: 2200 MADISON STREET

Lot(s): 22 E 50 Block(s): 2 Subdivision: LITTLE RANCHES

Folio Number(s): 5142 16 01 1780

Zoning Classification: DH-2 Land Use Classification: DIXIE HIGHWAY MED INTENSITY MULT-FAMILY DISTRICT

Existing Property Use: VACANT LAND Sq Ft/Number of Units: 10246 SQFT

Is the request the result of a violation notice? ( ) Yes ☒ No If yes, attach a copy of violation.

Has this property been presented to the City before? If yes, check all that apply and provide File Number(s) and Resolution(s): \_\_\_\_\_

- ☐ Economic Roundtable ☒ Technical Advisory Committee ☐ Historic Preservation Board  
☐ City Commission ☐ Planning and Development

Explanation of Request: Submission for site plan approval, to move forward to submit for permit.

Number of units/rooms: 12 Sq Ft: 10250

Value of Improvement: \$1,250,000 Estimated Date of Completion: DEC 2020

Will Project be Phased? ( ) Yes ☒ No If Phased, Estimated Completion of Each Phase \_\_\_\_\_

Name of Current Property Owner: WILFERZ LEASING LLC

Address of Property Owner: 2239 JACKSON STREET, HOLLYWOOD FL 33020

Telephone: 786-838-7310 Fax: \_\_\_\_\_ Email Address: wilferzco@gmail.com

Name of Consultant /Representative/ Tenant (circle one): PABLO J FERNANDEZ

Address: \_\_\_\_\_ Telephone: 786-838-7310

Fax: \_\_\_\_\_ Email Address: wilferzco@gmail.com

Date of Purchase: 05/17/2017 Is there an option to purchase the Property? Yes ( ) No ☒

If Yes, Attach Copy of the Contract.

List Anyone Else Who Should Receive Notice of the Hearing: \_\_\_\_\_

Address: \_\_\_\_\_

Email Address: \_\_\_\_\_



PLANNING DIVISION



File No. (internal use only): \_\_\_\_\_

2600 Hollywood Boulevard Room 315  
Hollywood, FL 33022

GENERAL APPLICATION

**CERTIFICATION OF COMPLIANCE WITH APPLICABLE REGULATIONS**

The applicant/owner(s) signature certifies that he/she has been made aware of the criteria, regulations and guidelines applicable to the request. This information can be obtained in Room 315 of City Hall or on our website at [www.hollywoodfl.org](http://www.hollywoodfl.org). The owner(s) further certifies that when required by applicable law, including but not limited to the City's Zoning and Land Development Regulations, they will post the site with a sign provided by the Office of Planning and Development Services. The owner(s) will photograph the sign the day of posting and submit photographs to the Office of Planning and Development Services as required by applicable law. Failure to post the sign will result in violation of State and Municipal Notification Requirements and Laws.

(I)(We) certify that (I) (we) understand and will comply with the provisions and regulations of the City's Zoning and Land Development Regulations, Design Guidelines, Design Guidelines for Historic Properties and City's Comprehensive Plan as they apply to this project. (I)(We) further certify that the above statements and drawings made on any paper or plans submitted herewith are true to the best of (my)(our) knowledge. (I)(We) understand that the application and attachments become part of the official public records of the City and are not returnable.

Signature of Current Owner: \_\_\_\_\_

Date: 10.19.2019

PRINT NAME: PABLO J FERNANDEZ - MANAGER

Date: \_\_\_\_\_

Signature of Consultant/Representative: \_\_\_\_\_

Date: \_\_\_\_\_

PRINT NAME: \_\_\_\_\_

Date: \_\_\_\_\_

Signature of Tenant: \_\_\_\_\_

Date: \_\_\_\_\_

PRINT NAME: \_\_\_\_\_

Date: \_\_\_\_\_

**Current Owner Power of Attorney**

I am the current owner of the described real property and that I am aware of the nature and effect the request for \_\_\_\_\_ to my property, which is hereby made by me or I am hereby authorizing \_\_\_\_\_ to be my legal representative before the \_\_\_\_\_ (Board and/or Committee) relative to all matters concerning this application.

Sworn to and subscribed before me  
this \_\_\_\_\_ day of \_\_\_\_\_

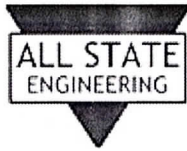
\_\_\_\_\_  
Signature of Current Owner

\_\_\_\_\_  
Notary Public

\_\_\_\_\_  
Print Name

State of Florida

My Commission Expires: \_\_\_\_\_ (Check One) \_\_\_\_\_ Personally known to me; OR \_\_\_\_\_ Produced Identification \_\_\_\_\_



## **All State Engineering & Testing Consultants, Inc.**

TESTING LABORATORIES-ENGINEERS-INSPECTION SERVICES-CHEMISTS-DRILLING-ENVIRONMENTAL SERVICES

May 24, 2019

**Wilferz Company, LLC**  
**2239 Jackson Street**  
**Hollywood, FL 33020**

**RE:      Geotechnical Engineering Study for**  
**Three Story Apartments**  
**2200 Madison Street, Hollywood, FL**

To Whom It May Concern,

This letter presents the results of All State Engineering & Testing Consultants, Inc. (ASETC) Geotechnical Engineering Study for the above referenced project. The purpose of the geotechnical engineering study was to evaluate the site subsurface conditions and provide foundation recommendations for the project.

### **Project Description**

Our understanding of the site is based on our observations during our subsurface investigation. Information you provided to us indicates the project consists of the construction of a Three Storey Apartments.

### **Test Method and Subsurface Investigation**

The borings were conducted in accordance with procedures outlined for Standard Penetration Test and split spoon sampling of soils by ASTM Method D-1586 as described below.

Two (2) feet long, two (2) inches O.D. split spoon sampler was driven into the ground by successive blows with a 140 lbs hammer dropping thirty (30) inches. The soil sampler was driven two (2) feet at a time (continuous method) then extracted for visual examination and classification of the soil samples.

The number of blows required for one (1) foot penetration of the sample is designated as "N" (known as the standard Penetration Resistance Value). The N Value provides an indication of the relative density of non-cohesive soils and the consistency of cohesive soils. A general evaluation of soils is made from the established correlation between "N" and the relative density or consistency of soils. This dynamic method of soil testing has been widely accepted by foundation engineers and architects to conservatively evaluate the bearing capacity of soils.

The subsurface investigation consisted of performing three (3), 15-ft deep Standard Penetration Test (SPT) borings (B-1, B-2 and B-3). The borings were performed on May 21, 2019.





Based on the information obtained from the SPT borings,

Boring B-1 comprised of

Sand with rock particles from 0'-0" to 3'-0" with N values ranging from 11 to 15.

White sand from 3'-0" to 8'-0" with N values ranging from 9 to 11.

Dark brown tan sand from 8'-0" to 15'-0" with N values ranging from 12 to 17.

Boring B-2 comprised of

Sand with rock particles from 0'-0" to 3'-0" with N values ranging from 11 to 12.

White sand from 3'-0" to 7'-0" with N values ranging from 11 to 13.

Dark brown tan sand from 7'-0" to 15'-0" with N values ranging from 13 to 17.

Boring B-3 comprised of

Sand with rock particles from 0'-0" to 2'-0" with an N value of 19.

White sand from 2'-0" to 6'-0" with N values ranging from 11 to 13.

White sand with brown sand traces from 6'-0" to 7'-0" with an N value of 17.

Brown sand from 7'-0" to 8'-0" with an N value of 17.

Dark brown sand from 8'-0" to 15'-0" with N values ranging from 16 to 20.

Detailed subsurface information is provided in the attached SPT Soil Boring Reports.

**Groundwater Conditions**

The groundwater table was encountered between 6'-11" to 7'-2" below the existing ground surface during the performance of the borings. The groundwater elevation is expected to change with seasonal and tidal fluctuations, and during storm/hurricane events. The possibility of groundwater level fluctuations should be considered when developing the design and construction plans for the project.

**Foundation Evaluation and Recommendations**

**Shallow Foundation**

**Site Preparation Procedures**

The site preparation work is expected to include site clearing, subgrade leveling, the placement and compaction of fill and backfill material, proofrolling and compaction grouting (Low Mobility Grouting) in combination with Vibro Replacement (Stone Columns).

The site clearing should be performed in all the areas of proposed foundation construction and support of on-grade site features. Site clearing should encompass removing all unsuitable materials such as topsoil, organics, trash, and any other deleterious materials. Upon clearing, proofrolling of the areas of proposed construction or support of on-grade features should be performed. Any soft area observed during proofrolling should be removed and replaced with approved fill material.

We recommend excavate entire building area plus 5'-0" outside the perimeter of construction and remove all unsuitable subsurface material to the necessary depth. We anticipate an average excavation depth of approximately 2 inches.

Any fill and backfill materials should be placed in lifts which do not exceed twelve (12) inches. The fill and backfill materials are to be compacted to field dry densities of not less than **98%** of their Maximum Dry Density as determined by the Modified Proctor Compaction Test (ASTM D-1557). The fill and backfill materials should consist of inorganic granular soils, free from deleterious materials, and should be pre-approved by our firm.



The footing and slab subgrades should be compacted to field dry densities of not less than **98%** of their Maximum Dry Density as determined by the Modified Proctor Compaction Test (ASTM D-1557).

Based on the proposed construction, our evaluation of the site subsurface conditions, the Site Preparation Procedures given above having been achieved and verified, we confirm that spread footings and single column pads may be appropriately designed for a **safe soil bearing capacity of 4000 lb/ft<sup>2</sup>**.


### Limitations

Regardless of the thoroughness of our geotechnical exploration there is always a possibility that conditions on the subject project may be different from those at the test locations. With this being said, ASETC reserves the right to amend/supplement this report upon discovery of new information. Should any subsoil conditions different from those reported in our boring logs be encountered during construction, All State Engineering and Testing Consultants, Inc. should be notified immediately.

The conclusions provided by All State Engineering & Testing Consultants, Inc. are based solely on the information presented in this report. As a mutual protection to clients, the public and ourselves, all reports are submitted as the confidential property of clients, and authorization for publication of statements, conclusions or extracts from or regarding our reports is reserved pending our written approval.

We appreciate the opportunity to have been of service to you. Please feel free to contact us if there are any questions or comments pertaining to this report.

Sincerely,



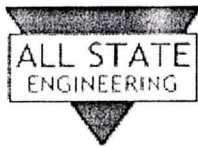
John Buscher PE#41844

**All State Engineering &  
Testing Consultants, Inc.**

ATTACHMENT 1.0 – BORING LOG

## ATTACHMENT 1.0 – BORING LOG





# All State Engineering & Testing Consultants, Inc.

TESTING LABORATORIES-ENGINEERS-INSPECTION SERVICES-CHEMIST-DRILLING-ENVIRONMENTAL SERVICES


12949 West Okeechobee Rd. Unit C-4, Hialeah Gardens, Florida 33018 / Phone: 305-888-3373, Fax: 305-888-7443

## SPT SOIL BORING REPORT

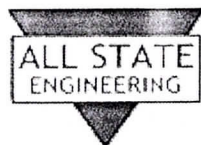
CLIENT:		Wilfrez Company LLC		Page:		1 of 1			
CLIENT ADDRESS:		2239 Jackson Street, Hollywood, FL 33020				Report #:		1	
PROJECT:		3 Storey Apartment				Boring #:		B-1	
PROJECT ADDRESS:		2200 Madison Street, Hollywood, FL				Date:		5/21/19	
BORING LOCATION:		North End of Lot				Driller:		TH	
DEPTH (FEET)	DESCRIPTION OF MATERIALS					Sample No.	Hammer blows on sampler		"N" Value
1	0'-0" to 3'-0" Sand with rock particles					0'-2'	6	8	15
2							7	7	
3							5	6	
4	3'-0" to 8'-0" White sand					2'-4'	5	5	11
5							4	5	
6						4'-6'	4	4	9
7						4	5		
8						6'-8'	5	5	10
9	8'-0" to 15'-0" Dark brown tan sand					8'-10'	7	9	
10							8	8	
11						10'-12'	7	8	14
12							6	7	
13						12'-14'	6	7	14
14							7	6	
15						14'-16'	6	6	12
16							6	6	
17						16'-18'			0
18						18'-20'			
19						20'-22'			0
20									
21						22'-24'			0
22									
23						24'-26'			0
24									
25						26'-28'			
26									
27						28'-30'			
28									
29									
30									

End of Boring @ 15'-0"  
WATER TABLE: 7'-2" below surface

Respectfully Submitted:

  
John Buscher PE#41844  
All State Engineering & Testing Consultants, Inc.

As a mutual protection to clients, the public and ourselves, all reports are submitted as the confidential property of clients, and authorization for publication of statements, conclusions or extracts from or regarding our reports is reserved pending our written approval.



# All State Engineering & Testing Consultants, Inc.

TESTING LABORATORIES-ENGINEERS-INSPECTION SERVICES-CHEMIST-DRILLING-ENVIRONMENTAL SERVICES

12949 West Okeechobee Rd. Unit C-4, Hialeah Gardens, Florida 33018 / Phone: 305-888-3373, Fax: 305-888-7443


## SPT SOIL BORING REPORT

CLIENT:		Wilfrez Company LLC		Page:	1 of 1	
CLIENT ADDRESS:		2239 Jackson Street, Hollywood, FL 33020		Report #:	1	
PROJECT:		3 Storey Apartment		Boring #:	B-2	
PROJECT ADDRESS:		2200 Madison Street, Hollywood, FL		Date:	5/21/19	
BORING LOCATION:		Center of Lot		Driller:	TH	
DEPTH (FEET)	DESCRIPTION OF MATERIALS		Sample No.	Hammer blows on sampler	"N" Value	
1	0'-0" to 3'-0" Sand with rock particles		0'-2'	5	6	12
2				6	5	
3				6	6	
4	3'-0" to 7'-0" White sand		2'-4'	5	4	11
5				4	5	
6			4'-6'	6	5	11
7				5	6	
8	7'-0" to 15'-0" Dark brown tan sand		6'-8'	7	8	13
9				8	8	
10			8'-10'	8	9	16
11				8	7	
12			10'-12'	7	7	14
13				6	8	
14			12'-14'	8	8	16
15				8	9	
16			14'-16'	8	9	17
17						
18			16'-18'			0
19						
20			18'-20'			0
21						
22			20'-22'			0
23						
24			22'-24'			0
25						
26			24'-26'			0
27						
28			26'-28'			
29						
30	28'-30'					

End of Boring @ 15'-0"

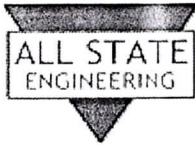
WATER TABLE: 7'-0" below surface

Respectfully Submitted:

  
John Buscher PE#41844  
All State Engineering & Testing Consultants, Inc.

As a mutual protection to clients, the public and ourselves, all reports are submitted as the confidential property of clients, and authorization for publication of statements, conclusions or extracts from or regarding our reports is reserved pending our written approval.





# All State Engineering & Testing Consultants, Inc.


TESTING LABORATORIES-ENGINEERS-INSPECTION SERVICES-CHEMIST-DRILLING-ENVIRONMENTAL SERVICES  
12949 West Okeechobee Rd. Unit C-4, Hialeah Gardens, Florida 33018 / Phone: 305-888-3373, Fax: 305-888-7443

## SPT SOIL BORING REPORT

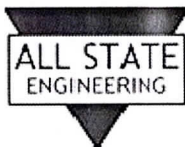
CLIENT:		Wilfrez Company LLC		Page:		1 of 1	
CLIENT ADDRESS:		2239 Jackson Street, Hollywood, FL 33020		Report #:		1	
PROJECT:		3 Storey Apartment		Boring #:		B-3	
PROJECT ADDRESS:		2200 Madison Street, Hollywood, FL		Date:		5/21/19	
BORING LOCATION:		South Side of Lot		Driller:		TH	
DEPTH (FEET)	DESCRIPTION OF MATERIALS			Sample No.	Hammer blows on sampler		"N" Value
1	0'-0" to 2'-0" Sand with rock particles			0'-2'	8	9	19
2					10	8	
3	2'-0" to 6'-0" White sand			2'-4'	6	7	13
4					6	6	
5				4'-6'	6	5	11
6					6	6	
7	6'-0" to 7'-0" White sand with brown sand traces			6'-8'	7	9	17
8	7'-0" to 8'-0" Brown sand				8	8	
9	8'-0" to 15'-0" Dark brown sand			8'-10'	8	10	20
10					10	12	
11				10'-12'	11	9	17
12					8	8	
13				12'-14'	8	7	16
14					9	10	
15				14'-16'	8	9	17
16					8	9	
17				16'-18'			0
18							
19	18'-20'			0			
20							
21	20'-22'			0			
22							
23	22'-24'			0			
24							
25	24'-26'			0			
26							
27	26'-28'						
28							
29	28'-30'						
30							

End of Boring @ 15'-0"  
WATER TABLE: 6'-11" below surface

Respectfully Submitted:

  
John Buscher PE#41844  
All State Engineering & Testing Consultants, Inc.

As a mutual protection to clients, the public and ourselves, all reports are submitted as the confidential property of clients, and authorization for publication of statements, conclusions or extracts from or regarding our reports is reserved pending our written approval.



# All State Engineering & Testing Consultants, Inc.

TESTING LABORATORIES-ENGINEERS-INSPECTION SERVICES-CHEMISTS-DRILLING-ENVIRONMENTAL SERVICES  
12949 W Okeechobee Rd., Hialeah Gardens, FL 33018 Office: 305-888-3373 Fax: 305-888-7443 info@allstateengineering.com

## PERCOLATION TEST USUAL OPEN HOLE - CONSTANT HEAD

DATE:	May 21, 2019	Test Number:	P-1
CLIENT:	Wilfrez Company LLC		
CLIENT ADDRESS:	2239 Jackson Street, Hollywood, FL 33020		
PROJECT:	3 Story Apartment		
PROJECT ADDRESS:	2200 Mdison Street, Hollywood, FL		
LOCATION OF TEST:	Northside of Lot		

INTERVAL	ELAPSED TIME (MINUTES)	GPM
1	1:00	16
2	1:00	16
3	1:00	16
4	1:00	15
5	1:00	14
6	1:00	14
7	1:00	14
8	1:00	14
9	1:00	14
10	1:00	14

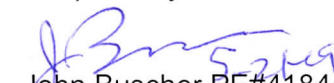
DEPTH OF HOLE : 15 feet      DIA. OF HOLE : 0.5 feet      PERC. RATE: 14.7 GPM  
DEPTH OF WATER TABLE BELOW GROUND SURFACE : 7 feet  
SATURATED HOLE DEPTH : 8 feet      STABILIZED FLOW RATE: 0.032752  
k-VALUE: 2.56E-04

## SUBSURFACE INVESTIGATION

Depth Below Ground Surface	Soil Description
0'-0" to 3'-0"	Sand
3'-0" to 8'-0"	Sand
8'-0" to 15'-0"	Tan sand

Field Technician: TH  
Typed by: YR

Respectfully Submitted

  
John Buscher PE#41844  
All State Engineering & Testing  
Consultants, Inc.





## TECHNICAL ADVISORY COMMITTEE REPORT

September 17, 2018

Wilferz Leasing LLC  
5845 SW 21 Street  
West Park, FL 33023

**FILE NUMBER:** 18-DP-58

**SUBJECT:** Site Plan review for a 12 unit residential development (Madison Apartments).

---

### SITE DATA

<b>Owner/Applicant:</b>	Wilferz Leasing LLC
<b>Address/Location:</b>	2200 Madison Street
<b>Gross Area of Property:</b>	11,250.00 sq. ft. (0.25 acres)
<b>Net Area of Property:</b>	10,250.00 sq. ft. (0.23 acres)
<b>Land Use:</b>	Regional Activity Center
<b>Zoning:</b>	Dixie Highway Medium Intensity Multi-Family District (DH-2)
<b>Existing Use of Land:</b>	Vacant Residential

### ADJACENT LAND USE

<b>North:</b>	Regional Activity Center
<b>South:</b>	Regional Activity Center
<b>East:</b>	Regional Activity Center
<b>West:</b>	Regional Activity Center

### ADJACENT ZONING

<b>North:</b>	Dixie Highway Medium Intensity Multi-Family District (DH-2)
<b>South:</b>	Dixie Highway Medium Intensity Multi-Family District (DH-2)
<b>East:</b>	Dixie Highway High Intensity Mixed-Use District (DH-3)
<b>West:</b>	Dixie Highway Medium Intensity Multi-Family District (DH-2)

---

**APPLICANTS MUST ADDRESS ALL COMMENTS AND FINDINGS AS IDENTIFIED BY MEMBERS OF THE TECHNICAL ADVISORY COMMITTEE BOTH IN WRITING (IDENTIFY PAGE NUMBER OF THE CORRECTION) AND ON THE SITE PLAN (ALL CHANGES MUST BE IDENTIFIED, I.E. BUBBLED).**

**A. APPLICATION SUBMITTAL**

*Fitz Murphy, Planning Administrator ([fmurphy@hollywoodfl.org](mailto:fmurphy@hollywoodfl.org)) 954-921-3471*

1. Ownership & Encumbrance Report:
  - a. Must be dated within 30 days of submittal packet.
  - b. Work with the Engineering Division to ensure the O&E is accurate and all easements and dedications are indicated.
2. Revise ALTA Survey as follows:
  - a. Work with the Engineering Division to ensure the survey includes the appropriate elements such as all easements and dedications are indicated.
  - b. Include net and gross property size in square feet and acreage.
3. Revise the Cover Sheet to
  - a. Indicate Page Index.
  - b. Clarify site location on Location Map.
4. Revise the following on Site Plan:
  - a. Indicate all required setback dimensions.
  - b. Indicate location for recycling.
  - c. Drawing shall be fully dimensioned, including but not limited to, architectural projections and parking stalls.
  - d. Include existing utility poles on site, including dimensions from the proposed building.
  - e. Include note on Site Plan indicating that all changes to the design will require planning review and may be subject to Board approval.
  - f. Work with the City's Landscape Architect to ensure that all landscape requirements are met.
5. Revise the following on Site Data Table:
  - a. Current Land Use and Zoning designations not provided. Revise accordingly.
  - b. Include required and provided height of structures.
  - c. Total square footage of each building or structure not provided. Revise accordingly.
  - d. Provide breakdown of all building areas including amenities, lobby, retail, etc.
  - e. Provide total floor area (A/C + balconies) for each unit type.



- f. FAR calculation incorrect. Revise accordingly.
  - g. Staff has identified several inconsistencies in the pervious and impervious area calculations. Review and revise accordingly.
- 6. Complete and submit to Broward County School Board an impact fee application prior to submitting for Board consideration. Website:  
<http://www.broward.k12.fl.us/propertymgmt/new/growthmanagement/docs/PublicSchoolImpactApplication.pdf>
- 7. Staff encourages Applicant to meet with surrounding homeowner's associations prior to submitting for any Boards. Provide update with next submittal.
- 8. Additional comments may be forthcoming.
- 9. Provide written responses to all comments with next submittal.

**B. ZONING**

*Fitz Murphy, Planning Administrator ([fmurphy@hollywoodfl.org](mailto:fmurphy@hollywoodfl.org)) 954-921-3471*

- 1. Revise mechanical equipment:
  - a. Required mechanical equipment setback is three feet. Revise accordingly.
  - b. Mechanical equipment must be adequately screened with more than just landscape.
- 2. Walls and other structural elements shall not encroach into required driveways. Work with Engineering to ensure that sufficient back-out is provided.
- 3. Provide the height of the proposed building.

**C. ARCHITECTURE AND URBAN DESIGN**

*Fitz Murphy, Planning Administrator ([fmurphy@hollywoodfl.org](mailto:fmurphy@hollywoodfl.org)) 954-921-3471*

- 1. Ensure that all plumbing, mechanical and electrical fixtures and equipment are indicated on Site Plan and Elevations.
- 2. Staff has found several discrepancies between the floor plan and elevations. Revise floor plans to include all architectural projections.
- 3. All renderings shall reflect actual proposed landscape material. Work with the City's Landscape Architect to ensure species proposed are appropriate.
- 4. Provide detail of guardrail. Indicate materials and maintenance requirements.
- 5. Ensure a fence or screen is reflected on the plans and elevations to screen the parking areas.
- 6. Provide dimensions on all elevations, including any projections above roof line.
- 7. Label all materials, including all changes in paint color and a typical note for score lines on each elevation.

8. Will there be a security gate to access parking area?
9. Clarify egress path of rear stair at ground level. Provide walkway.
10. Clarify intent for utility pole currently on site in the rear of the property.
11. Consider providing accessible balconies for each unit.
12. Consider revising North (Front) Elevation:
  - a. Front elevation does not match rendering. Revise accordingly.
  - b. Consider removing smaller frames to reduce clutter of architectural elements.
13. Consider revising North portion of East Elevation:
  - a. Include additional window on bedroom in unit A to evenly distribute blank wall.
  - b. Scoring to a texture and detail to large blank walls.
14. Consider revising South (Rear) Elevation:
  - a. Include additional window in bedroom in Unit-F to balance rear façade.
  - b. Consider removing window in living room in Unit-F on third floor.
  - c. Scoring to a texture and detail to large blank walls.

*Terrence Comiskey A.I.A., Architect ([tcomiskey@hollywoodfl.org](mailto:tcomiskey@hollywoodfl.org)) 954-921-3900*

1. Sheet 1: The Dumpster enclosure does not have any details to review. How is recycling being accommodated?
2. Sheet 1: The A/C compressors are shown on the ground level where they can be vandalized. Consideration should be given to relocating them to the roof of the building.
3. Sheet 1: Is the elevator hydraulic? I don't see machine room.
4. Sheet 1. There is no room dedicated to janitorial supplies with a mop sink. How is the property to be maintained?
5. Sheet 2: Neither exit stair is in a fire rated enclosure.
6. No roof plan was included for review.
7. Parking appears to be inadequate for the number of units.

**D. SIGNAGE**

*Fitz Murphy, Planning Administrator ([fmurphy@hollywoodfl.org](mailto:fmurphy@hollywoodfl.org)) 954-921-3471*

1. For review, full signage package shall be provided, including signage details, signs illustrated on Elevations, dimensions on Site Plan, etc.
2. All signs, which are electrically illuminated by neon or other means, shall require a separate electrical permit and inspection. Separate permits are required for each sign.

**E. LIGHTING**

*Fitz Murphy, Planning Administrator ([fmurphy@hollywoodfl.org](mailto:fmurphy@hollywoodfl.org)) 954-921-3471*

1. Application is substantially compliant.

**F. GREEN BUILDING & ENVIRONMENTAL SUSTAINABILITY**

*Fitz Murphy, Planning Administrator ([fmurphy@hollywoodfl.org](mailto:fmurphy@hollywoodfl.org)) 954-921-3471*

1. Application is substantially Compliant.

**G. ENGINEERING**

*Luis Lopez, City Engineer ([llopez@hollywoodfl.org](mailto:llopez@hollywoodfl.org)) 954-921-3251*

*Clarissa Ip, Engineering Support Services Manager ([cip@hollywoodfl.org](mailto:cip@hollywoodfl.org)) 954-921-3915*

1. Driveway and drive aisle minimum width is 22 feet for two-way traffic.
2. Provide civil plans for the proposed work. Provide and indicate items such as but not limited, curbing, all vehicle turning radii, vehicular sight triangles, pavement marking and signage plans and details. Indicate and show all change in elevations. Show any utility work within City rights-of-way for utility connection, indicate any pavement restoration. Full road width pavement restoration required, provide pavement restoration detail.
3. Indicate existing sidewalk along Madison Street to be replaced on plans.
4. All outside agency permits must be obtained prior to issuance of building permit.
5. Park impact fees will be required prior to issuance of Building Permit.
6. More comments may follow upon review of the requested information.

**H. LANDSCAPING**

*Guillermo Salazar, Landscape Reviewer ([gsalazar@hollywoodfl.org](mailto:gsalazar@hollywoodfl.org)) 954-921-3900*

1. Provide a detailed landscape plan by a Landscape Architect that complies with all the requirements according to City of Hollywood Landscape manual, chapter 155.52, Article 9 LDR and section 6 landscape Plan details and specifications for technical review process. Landscape plan set to include and clarify what is been provided as per city code requirements for landscape for project zone type and any trees of compensation or mitigation if any trees are to be removed.

Landscape plans to provide the following:

1. Provide information for existing trees on site including location, species, estimated ht./spread, and caliper diameter of trunks



2. Provide a detailed tree disposition plan in separate (if any trees to be removed) and landscape plan by a registered professional licensed Landscape Architect in the State of Florida that compliments the building architecture and uses, provides for shade, beautifies the site, accentuates site features, and serves as a buffer where appropriate. Provide tabular data chart on plan that identifies City of Hollywood landscape requirements and how they are being met for Perimeter landscape, Interior landscape for at grade parking lots and vehicular use areas, open space, view triangle, planning and development board and historic preservation board and irrigation.
3. Provide irrigation plans for an automatic underground irrigation system for the project. Irrigation plans shall be prepared, signed and sealed by a registered professional licensed to do such design under State of Florida Statute 481.303(6)(c) or as otherwise prescribed under Florida Statutes.
4. Additional comments may be forthcoming.

According to Chapter 155.52 of the Code of Ordinances and the City of Hollywood Landscape Manual. Shade trees to be installed at a minimum size of 2" DBH/ 12' height. Existing trees meeting this criteria may be used as credit toward total requirement. Palm trees count toward tree requirements on a 3:1 basis, meaning 3 palms equal 1 broadleaf tree. The following palm species are the exception and count 1:1 as trees: Royal Palm, Phoenix sylvestris/Medjool/reclinata/canariensis, Bismarkia, and Coconut. Minimum height requirements for all palms at planting is 8' of CT.

5. No tree removals without a tree removal sub- permit. Supplemental arborist report might be required as needed to approve any tree removal permit. Applicant to submit a complete Broward County Uniform Building Application and separate application for tree removal and planting sub-permit. Submit approved and signed total final landscape installation estimate from Landscape contractor/installer for two separate sub-permits in separate to comply with existing pending city code tree planting and removal requirements.

Coordinate meeting with Guillermo Salazar Landscape plan reviewer for any further questions or clarifications at [gsalazar@hollywoodfl.org](mailto:gsalazar@hollywoodfl.org).

#### **I. UTILITIES**

*Wilford Zephyr, Engineer ([wzephyr@hollywoodfl.org](mailto:wzephyr@hollywoodfl.org)) 954-924-2985*

*Alicia Vereia-Feria, Engineer ([averea-feria@hollywoodfl.org](mailto:averea-feria@hollywoodfl.org)) 954-921-3302*

Water & Sewer Comments:

1. Provide water and sewer demand calculations on water and sewer plans.
2. Contractor to verify condition and size of water service and sewer lateral prior to connection.
3. Provide civil plans indicating location and size of proposed water and sewer connections to existing 8-inch water main and 8-inch sanitary sewer line.
4. Provide civil plans showing existing elevations as shown on survey.
5. Provide swales and cross sections for each property side to ensure onsite retention of stormwater runoff.
6. Indicate how roof drainage will be collected and retained onsite.
7. Provide pre vs post development drainage calculations.

8. Finished floor elevations (FFE) and equipment shall be at a minimum elevation of 10' NAVD88 minimum per FEMA FIRM Zone AH, with BFE at 9-feet NAVD 88.
9. Landscape architect should coordinate with civil plans to accommodate for drainage swales and retention areas accordingly.

**J. BUILDING**

*Dean Decker, Interim Chief Building Official ([ddecker@hollywoodfl.org](mailto:ddecker@hollywoodfl.org)) 954-921-3025*

1. Application is substantially compliant.

**K. FIRE**

*Janet A. Washburn, Fire Marshal/Division Chief ([jwashburn@hollywoodfl.org](mailto:jwashburn@hollywoodfl.org)) 954-921-3554*

No Fire review for TAC is limited to water supply for firefighting purposes and fire dept. access. A full architectural review will be completed when an application and plans are submitted to the third floor building dept.

1. Water supply must meet NFPA 1, 18.4.5.2. In order to determine the minimum fire flow for firefighting, calculations are required by the civil engineer. The civil engineer shall show on civil drawings the calculations using table 18.4.5.1.2 found in NFPA 1, 2015 edition. See also NFPA 1, 18.5.4 Minimum Number of Fire Hydrants for Fire flow.
2. As a result of that test, show any existing and new (if needed) fire hydrants on civil drawings. The minimum distance to a fire hydrant shall not exceed 400' per NFPA 1, 18.5.3. It's unclear if any are needed as no civil drawings were included.
3. Provide a note on required civil drawings that underground fire main work will be completed by a contractor holding a Class I, II, or V license per FS 633.102.
4. A fire alarm system is required per NFPA 101, 30.3.4.1.1.

**L. PUBLIC WORKS**

*Charles Lassiter, Environmental Services Supervisor ([classiter@hollywoodfl.org](mailto:classiter@hollywoodfl.org)) 954-967-4207*

1. No comments received.

**M. PARKS, RECREATION AND CULTURAL ARTS**

*David Vazquez, Assistant Director ([dvazquez@hollywoodfl.org](mailto:dvazquez@hollywoodfl.org)) 954-921-3404*

1. Park impact fee application.

**N. COMMUNITY DEVELOPMENT**

*Clay Milan, Community Development Manager ([cmilan@hollywoodfl.org](mailto:cmilan@hollywoodfl.org)) 954-921-3271*

1. Are units for rent or for sale?
2. If for sale, are any units affordable to households making less than 80% of the Area Median Income (\$51,750 for household of 2)?
3. If rental, do rents meet HUD's criteria for Fair Market Rent in local area (\$1,080 – 1 bedroom)?

4. Is there a perimeter fence?
5. Why is no landscape buffer shown at rear property line?
6. HVAC condensers must be screened from street view.
7. How is access to lobby controlled?
8. Show details of dumpster room doors. Space may need hose bib and floor drain.
9. What type of surface is parking area?
10. Rendering of front doesn't reflect 4' deep balcony shown on plan (sheet 2) for Unit B. Please clarify.
11. Sheet 2 – Is balcony of Unit A accessible from inside?
12. Show details of second floor on separate sheet.
13. Notify the two area civic associations:  
 Highland Gardens Civic Asso. Meets on 4th Wed at 7:00 p.m., 1411 S. 28th Ave., David Kout, President, dlkpa@aol.com  
 United Neighbors of South Hollywood. Meets on 3rd Thurs at 7:00 p.m., 1411 S. 28th Ave., Helen Chervin, President, helenandred@gmail.com

**O. ECONOMIC DEVELOPMENT**

Raelin Storey, Director ([rstorey@hollywoodfl.org](mailto:rstorey@hollywoodfl.org)) 954-924-2922

1. Check side and rear setbacks 5' required – check screening of A/C unit.
2. Garage turning seems too tight for collection of dumpsters and entrance is under 22 ft. for drive aisle.
3. What is sq. footage per unit and what are anticipated asking rents?

**P. POLICE DEPARTMENT**

Christine Adamcik, Police ([cadamcik@hollywoodfl.org](mailto:cadamcik@hollywoodfl.org)) 954-967-4371

Steven Bolger, Police ([sbolger@hollywoodfl.org](mailto:sbolger@hollywoodfl.org)) 954-967-4500

Doreen Avitabile, Police ([davitabile@hollywoodfl.org](mailto:davitabile@hollywoodfl.org)) 954-967-4371

1. No comments received.

**Q. DOWNTOWN AND BEACH CRA**

Jorge Camejo, Executive Director ([jcamejo@hollywoodfl.org](mailto:jcamejo@hollywoodfl.org)) 954-924-2980

Susan Goldberg, Deputy Director ([sgoldberg@hollywoodfl.org](mailto:sgoldberg@hollywoodfl.org)) 954-924-2980

1. Not applicable.

**R. PARKING**

Harold King, Parking Administrator ([hking@hollywoodfl.org](mailto:hking@hollywoodfl.org)) 954-921-3549

Tamikia Bacon, Parking Operations Manager ([tbacon@hollywoodfl.org](mailto:tbacon@hollywoodfl.org)) 954-921-3548

1. Application is substantially compliant.



**S. ADDITIONAL COMMENTS**

*Fitz Murphy, Planning Administrator ([fmurphy@hollywoodfl.org](mailto:fmurphy@hollywoodfl.org)) 954-921-3471*

1. Additional comments may be forthcoming.

---

The Technical Advisory Committee finds this application substantially compliant with the requirements of Preliminary Review; therefore, the Applicant should submit for Final TAC review.

Please be advised, in the future any additional review by the TAC may result in the payment of additional review fees.

**If these comments have not been addressed within 120 days of this dated report the application will expire. As a result, a new application and fee will be required for additional review by the TAC.**

Note that any use proposed for the site shall be consistent with Zoning and Land Development Regulations.

Should you have any questions, please do not hesitate to contact your Project Planner at 954-921-3471.

Sincerely,



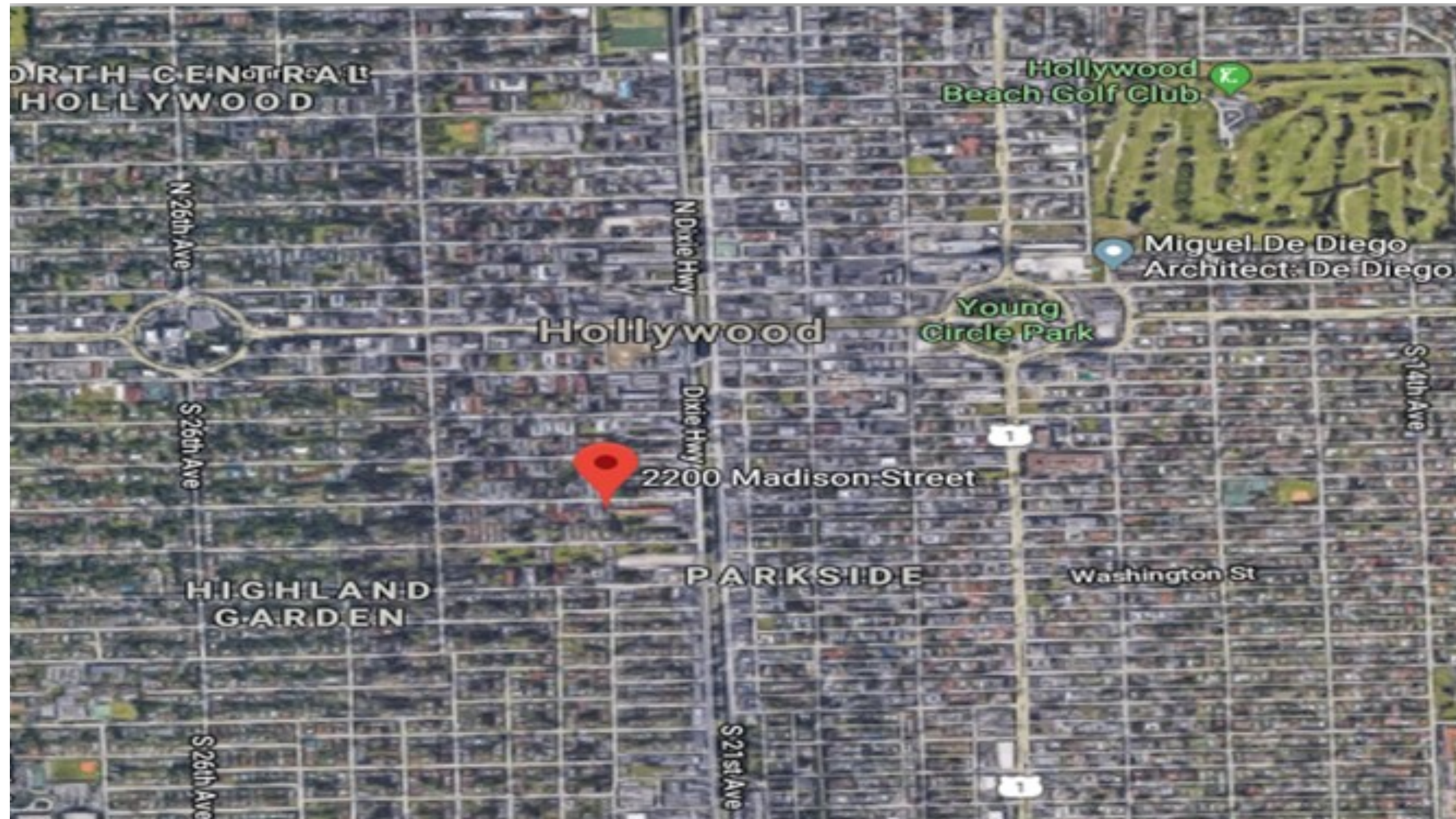
Deandrea Moise  
Planning Administrator

C: Pablo J Fernandez via email [wilferzco@gmail.com](mailto:wilferzco@gmail.com)





**PROJECT NAME:** 2200 MADISON  
**MEETING:** PRELIMINARY TAC  
**MEETING DATE:** NOV /2019  
**PROJECT:** 12 APARTMENT BUILDING  
**DESTINATION:** RENT



WILFERZ COMPANY, LLC – WILFERZ LEASING, LLC  
 WILFERZ BUILDERS, LLC  
 2239 JACKSON ST HOLLYWOOD FL 33020  
 786-838-7310 / 786-838-8159  
[WILFERZCO@GMAIL.COM](mailto:WILFERZCO@GMAIL.COM)  
[WWW.WILFERZ.COM](http://WWW.WILFERZ.COM)





## **INDEX:**

- 1) OWNERSHIP AND ENCUMBRANCE REPORT (O&E)
- 2) CERTIFIED ALTA SURVEY
- 3) SITE PLAN & FLOOR PLAN
- 4) LANDSCAPING AND IRRIGATION PLANS
- 5) CIVIL & DRAINAGE PLANS
- 6) STREET PROFILE
- 7) RENDERS

WILFERZ COMPANY, LLC – WILFERZ LEASING, LLC  
WILFERZ BUILDERS, LLC  
2239 JACKSON ST HOLLYWOOD FL 33020  
786-838-7310 / 786-838-8159  
[WILFERZCO@GMAIL.COM](mailto:WILFERZCO@GMAIL.COM)  
[WWW.WILFERZ.COM](http://WWW.WILFERZ.COM)



(PLATTED AS FIRST STREET)  
S. 24TH AVENUE  
E. RIGHT-OF-WAY

#### LEGAL DESCRIPTION

THE EAST 1/2 OF LOT 22, BLOCK 2, "HOLLYWOOD LITTLE RANCHES AMENDED", ACCORDING TO THE PLAT THEREOF, RECORDED IN PLAT BOOK 1, PAGE 26, OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA.

CERTIFIED TO:  
WILFERZ LEASING LLC

PROPERTY ADDRESS  
2200 MADISON STREET  
HOLLYWOOD, FL 33020

BOUNDARY SURVEY  
INVOICE # 40540U3  
SURVEY DATE 06/06/17  
UPDATED SURVEY DATE 08/15/18  
UPDATED SURVEY DATE 07/25/19

FLOOD ZONE AH-9  
MAP DATE 08/18/14  
MAP NUMBER 125113 0569H

#### OWNERSHIP AND ENCUMBRANCE REPORT

PLANT ORDER# 18-42471  
PERIOD SEARCHED: FROM 05/14/1943 TO 07/17/2019 @ 8:00 A.M.  
DATED: JULY 18, 2019

ITEM 1-5: NOT PLOTTABLE

#### PRE-CLOSING UPDATE

WESTCORE LAND TITLE INSURANCE COMPANY  
PLANT ORDER# 18-41796  
CUSTOMER CODE: FL1178  
CUSTOMER NO.: MADISON  
EFFECTIVE DATE: JANUARY 1, 1900 @ 8:00 AM

EFFECTIVE DATE IS AMENDED TO: OCTOBER 09, 2019@ 8:00 A.M.

ITEM 1: PROMISSORY NOTE RECORDED ON 10/09/2018 IN INSTRUMENT NO. 115373521 IS NOT A SURVEY MATTER

NEW ITEM FOUND

ITEM 1. MORTGAGE RECORDED ON 09/23/2019 IN INSTRUMENT NO 116067921 IS NOT A SURVEY MATTER

#### SURVEYOR'S NOTE

1. 10,250 SQUARE FEET MORE OR LESS (0.24 ACRES MORE OR LESS)

ABBREVIATIONS  
BC BUILDING CORNER  
BW BACK OF WALK  
C CALCULATED  
M MEASURED  
N.T.S. NOT TO SCALE  
OP OPEN PORCH  
ORB OFFICIAL RECORDS BOOK  
PC POINT OF CURVATURE  
POB POINT OF BEGINNING  
POC POINT OF COMMENCEMENT  
PS PAGE  
PRC POINT OF REVERSE CURVE  
PRM PERMANENT REFERENCE MONUMENT  
PT POINT OF TANGENCY  
E/F END OF FENCE  
E/W EDGE OF WATER  
F/C FENCE CORNER  
F/L FENCE LINE  
FIP FOUND IRON PIPE  
FIN FOUND IRON ROD  
FN FOUND NAIL  
FN&D FOUND NAIL & DISC  
FP&L FLORIDA POWER AND LIGHT RECORD  
RAD RADIAL  
SN&D SET NAIL & DISC # 5495  
SP&C SCREENED PORCH SET 1/2" PIN & CAP # 5495

LEGEND  
CABLE JUNCTION BOX  
CATCH BASIN  
CLEAN OUT  
CONTROL VALVE  
ELECTRIC SERVICE  
FIRE HYDRANT  
FP&L PAD  
GUY ANCHOR  
MANHOLE  
POOL EQUIPMENT  
POWER/LIGHT POLE  
SPRINKLER SYSTEM  
WATER METER  
WATER VALVE  
WELL

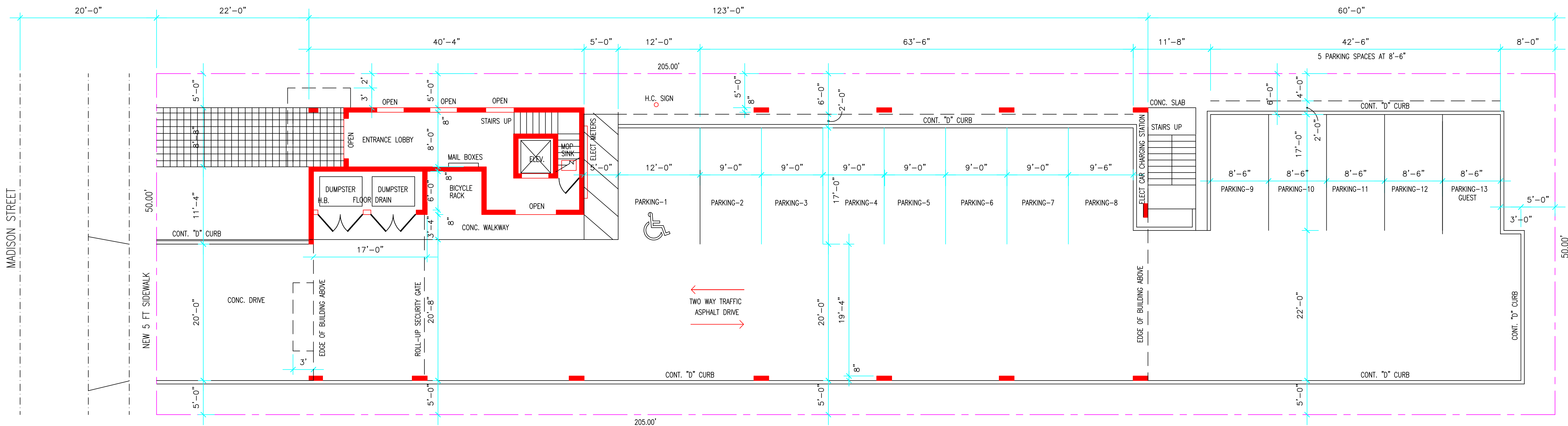
BRICK PAVERS  
CENTERLINE  
CONCRETE/CHAT  
CONCRETE WALL  
ELEVATION  
METAL FENCE  
OVERHEAD WIRES  
WOOD DECK/DOCK  
WOOD FENCE

SURVEYOR'S CERTIFICATE  
This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2018 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes items 3, 4, 5, 7A, 7B1, 7C, 11, 13, 14 and 21 of Table A thereof. The field work was completed on JULY 25, 2019. Date of Plat or Map: OCTOBER 11, 2019.  
  
PAUL J. STOWELL  
PROFESSIONAL LAND SURVEYOR  
FLORIDA CERTIFICATION NO. 5241  
ATLANTIC COAST SURVEYING, INC.  
6129 STIRLING RD SUITE 2 DAVIE, FLORIDA 33314  
OFFICE: 954.587.2100 FAX: 954.587.5418

FOLIO: 5142 16 01 1140  
OWNER: ITALIAN AMERICAN CIVIC LEAGUE OF BROWARD COUNTY

Scale 1" = 20'

ALTA/NSPS LAND TITLE SURVEY

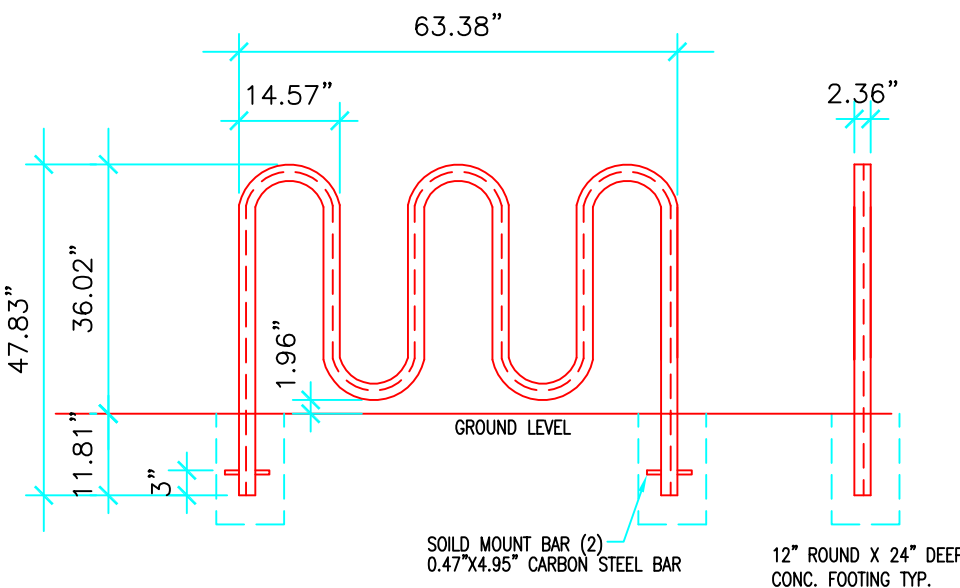


**SITE PLAN**  
SCALE: 1/8"=1'-0"  
ZONED DH-2 EXISTING VACANT RESIDENTIAL

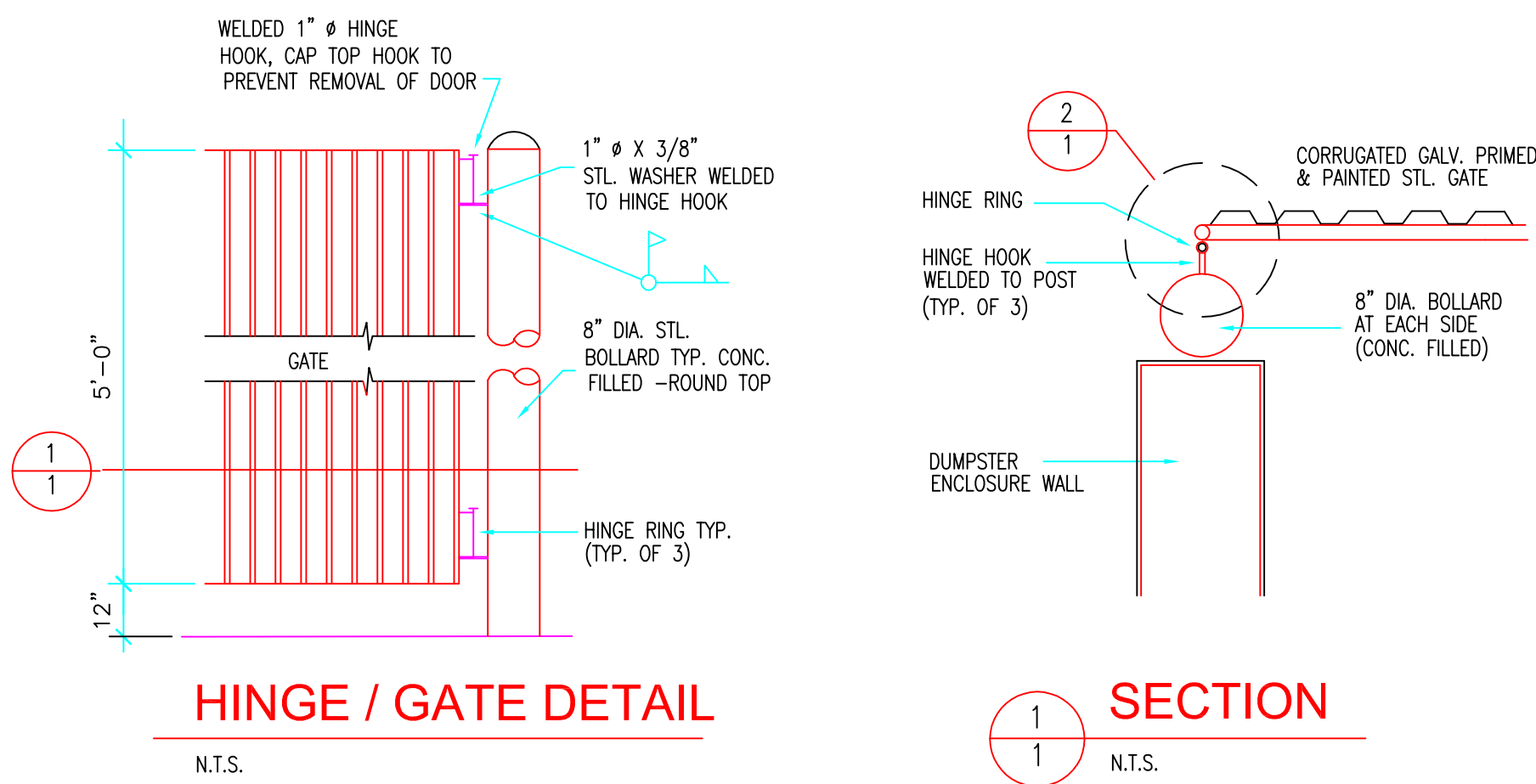
LEGAL DESCRIPTION:  
THE EAST 1/2 OF LOT 22 BLOCK-2  
HOLLYWOOD LITTLE RANCHES AMENDED  
PLAT BOOK 1 PAGE 26 BROWARD COUNTY FLORIDA

SETBACKS		
	REQUIRED	PROVIDED
FRONT	15'-0"	22'-0"
REAR	20'-0"	60'-0"
SIDE	5'-0"	5'-0"
BLDG HEIGHT	40'-0"	35'-0"

PARKING CALCULATIONS:  
REQUIRED ONE SPACE FOR EACH UNIT  
12 UNITS = 12 PARKING SPACE REQUIRED  
13 PARKING SPACES PROVIDED

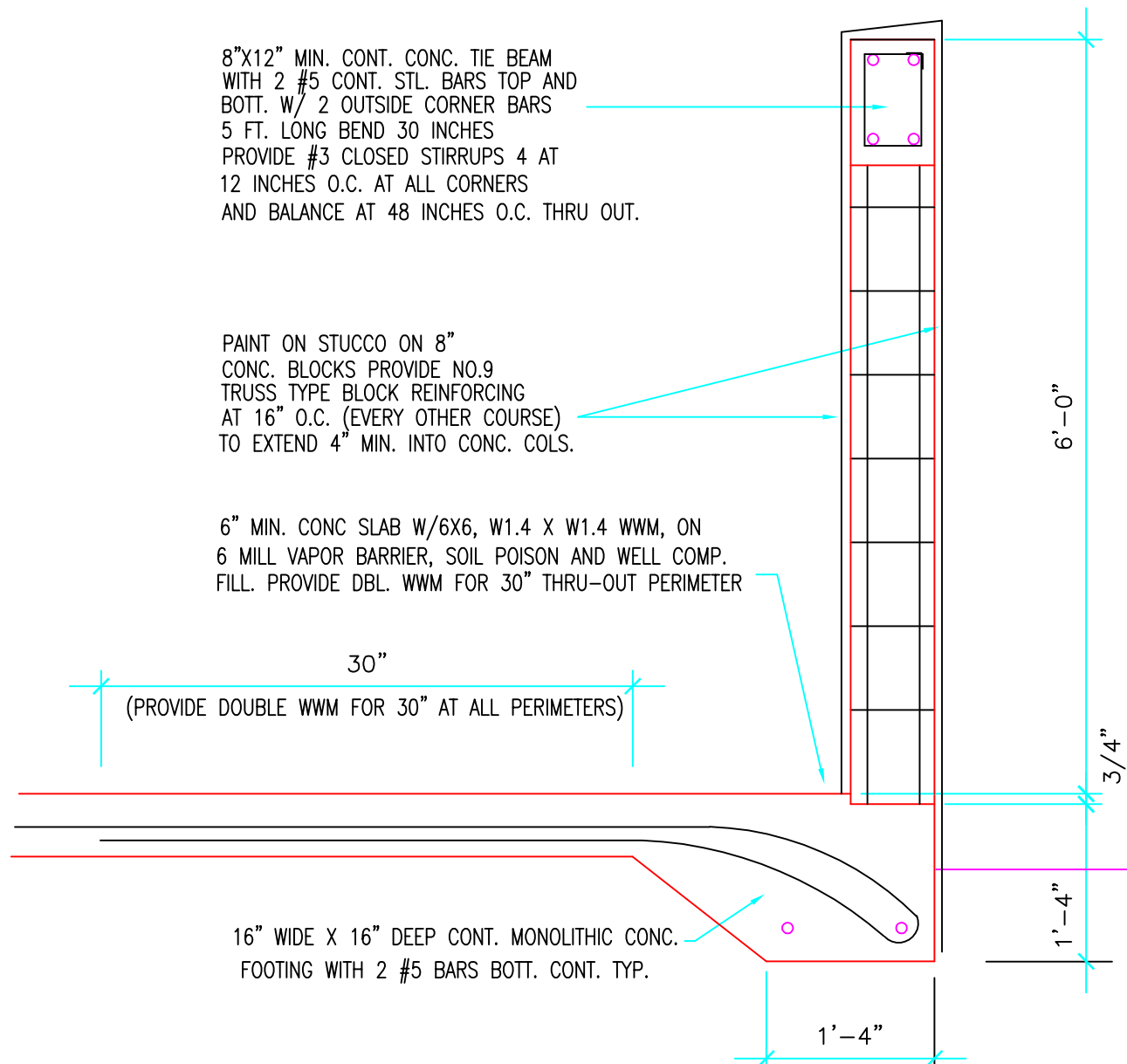


**BICYCLE RACK DETAIL**  
N.T.S.



**HINGE / GATE DETAIL**  
N.T.S.

**SECTION**  
N.T.S.



**DUMPSTER ENCLOSURE SECTION**  
SCALE: 3/4"=1'-0"

UNIT-A (1 BEDROOM 520 S.F.)	UNIT-A (1 BEDROOM 520 S.F.)
UNIT-B (1 BEDROOM 850 S.F.)	UNIT-B (1 BEDROOM 850 S.F.)
UNIT-C (1 BEDROOM 690 S.F.)	UNIT-C (1 BEDROOM 690 S.F.)
UNIT-D (1 BEDROOM 690 S.F.)	UNIT-D (1 BEDROOM 690 S.F.)
UNIT-E (1 BEDROOM 690 S.F.)	UNIT-E (1 BEDROOM 690 S.F.)
UNIT-F (1 BEDROOM 690 S.F.)	UNIT-F (1 BEDROOM 690 S.F.)
TOTAL SIX BEDROOMS PER FLOOR	TOTAL SIX BEDROOMS PER FLOOR

**GREEN BUILDING REQUIREMENTS (151.153)**

- ALL DOORS SHALL CONFORM TO THE ENERGY STAR RATING CRITERIA FOR SOUTH FLORIDA
- PROVIDE PROGRAMMABLE THERMOSTATS
- PROVIDE DUAL FLUSH TOILETS. VERIFY TO USE LESS THAN ONE GALLON TO FLUSH LIQUIDS AND 1.6 GALLONS OR LESS FOR SOLIDS.
- PROVIDE MERV OF AIR FILTERS ON ALL AIR CONDITIONING UNITS AT LEAST 8 WITH ANTIMICROBIAL AGENT. MERV OF AT LEAST 8 SHALL BE VERIFIED BY THE MECHANICAL INSPECTOR ON SITE AT FINAL INSPECTION.
- ALL OUTDOORS LIGHTS INCLUDING FLUORESCENT BULBS AND FIXTURES WITH ELECTRONIC BALLAST LOW PRESSURE SODIUM OR MERCURY VAPOR, PHOTOVOLTAIC SYSTEM, LED LIGHTING AND LOW VOLTAGE LANDSCAPE LIGHTS THAT RUN ON TIMER. ALL ENERGY EFFICIENT OUTDOOR LIGHTING SHALL BE VERIFIED BY THE ELECTRICAL INSPECTOR AT FINAL INSPECTION.
- AT LEAST 80% OF PLANTS, TREES AND GRASSES PER SO. FL. WATER MANAGEMENT DISTRICT RECOMMENDATIONS
- PROVIDE ALL ENERGY EFFICIENT OUTDOOR LIGHTING
- ALL HOT WATER PIPES TO BE INSULATED
- ALL UNITS TO HAVE TANKLESS WATER HEATERS
- ROOF MATERIAL TO BE ENERGY STAR COMPLIANCE

**NOTE:**

- ALL SIGNAGE SHALL COMPLY WITH THE ZONING AND LAND DEVELOPMENT REGULATIONS
- ROOF MATERIAL TO BE HIGH ALBEDO (TO BE DETERMINED BY THE OWNER)
- 8,328 TOTAL S.F. /12 = 694 AVERAGE CUMULATIVE SQ. FT. FOR DWELING UNITS
- FOOT CANDLE LEVEL AT PROPERTY LINE TO BE 0.5 MAX.
- RAILINGS AT BALCONIES TO BE ALUM. AND SLAB TO BE CONCRETE
- ALL CHANGES TO THE DESIGN WILL REQUIRE PLANNING REVIEW AND MAY BE SUBJECT TO BOARD APPROVAL.

**ELECTRIC VEHICLE CHARGING**

PROVIDE TWO EMPTY 3/4" COND. IN EACH GARAGE TO A DBL. TWO GANG JUNCTION BOX WITH BLANK PLATE. PROVIDE AS PER N.E.C. AND SAE J1772 TO A TWO GANG JUNCTION BOX WITH BLANK PLATE

SITE NET: 10,250.00 S.F. 0.23 ACRES  
SITE GROSS: 11,250.00 S.F. 0.25 ACRES

**SITE CALCULATIONS**

SITE:	10,250.00 S.F.	0.23 ACRES
BLDG FOOTPRINT	425.00 S.F.	4.14 %
INTERIOR WALKWAYS	325.00 S.F.	3.17 %
INTERIOR WALKWAYS	235.00 S.F.	2.29 %
PARKING AND DRIVES	6,170.00 S.F.	60.19 %
LANDSCAPE	3,095.00 S.F.	30.19 %

DENSITY CALCULATION:  
F.A.R. = 1.75 MAX  
LOT 10,250 X 1.75 = 17,937 S.F. ALLOWED  
10,667 S.F. PROVIDED

**SECOND FLOOR**

LIVING AREA	4,164.00 S.F.
WALKWAYS	625.00 S.F.
ELEVATOR AND STAIRS	200.00 S.F.
BALCONIES	132.00 S.F.
TOTAL FLOOR	5,121.00 S.F.

**THIRD FLOOR**

LIVING AREA	4,164.00 S.F.
WALKWAYS	625.00 S.F.
ELEVATOR AND STAIRS	200.00 S.F.
BALCONIES	132.00 S.F.
TOTAL FLOOR	5,121.00 S.F.

**GROUND FLOOR**

LOBBY	425.00 S.F.
EXTERIOR STAIRS	84.00 S.F.
DUMPSTER ENCLOSURE	126.00 S.F.
BIKE RACK	50.00 S.F.
CONC. WALKS	300.00 S.F.
PARKING AND DRIVES	6,170.00 S.F.
LANDSCAPE	3,095.00 S.F.
TOTAL	10,250.00 S.F.

**Miguel de Diego**  
ARCHITECT P.A.  
A-A-26001641 AP-13378  
1657 TYLER STREET SUITE 107 HOLLYWOOD, FLORIDA 33020  
PH. (954) 926-3358

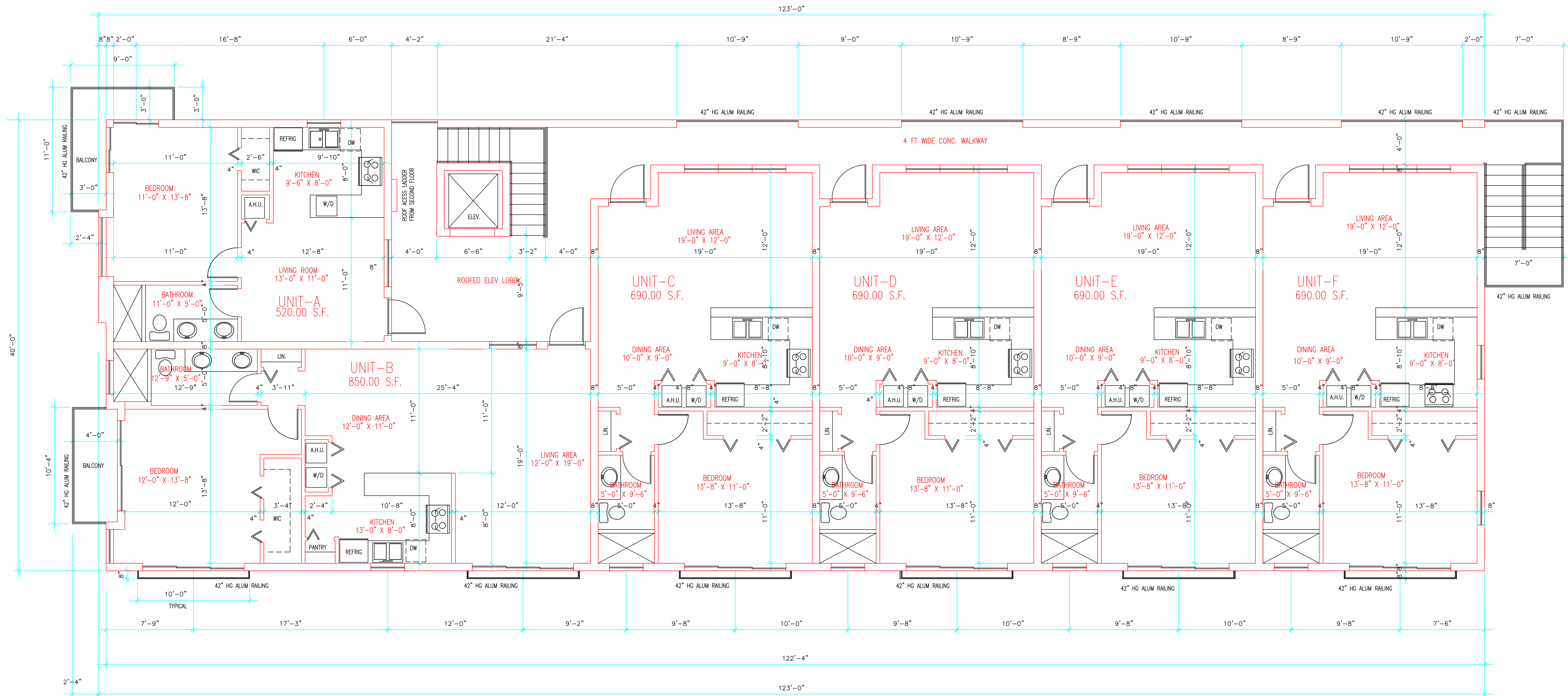
CHECKED \_\_\_\_\_  
DRAWN \_\_\_\_\_  
DATE 9-5-2019  
COMM. NO. 17-160

1  
4

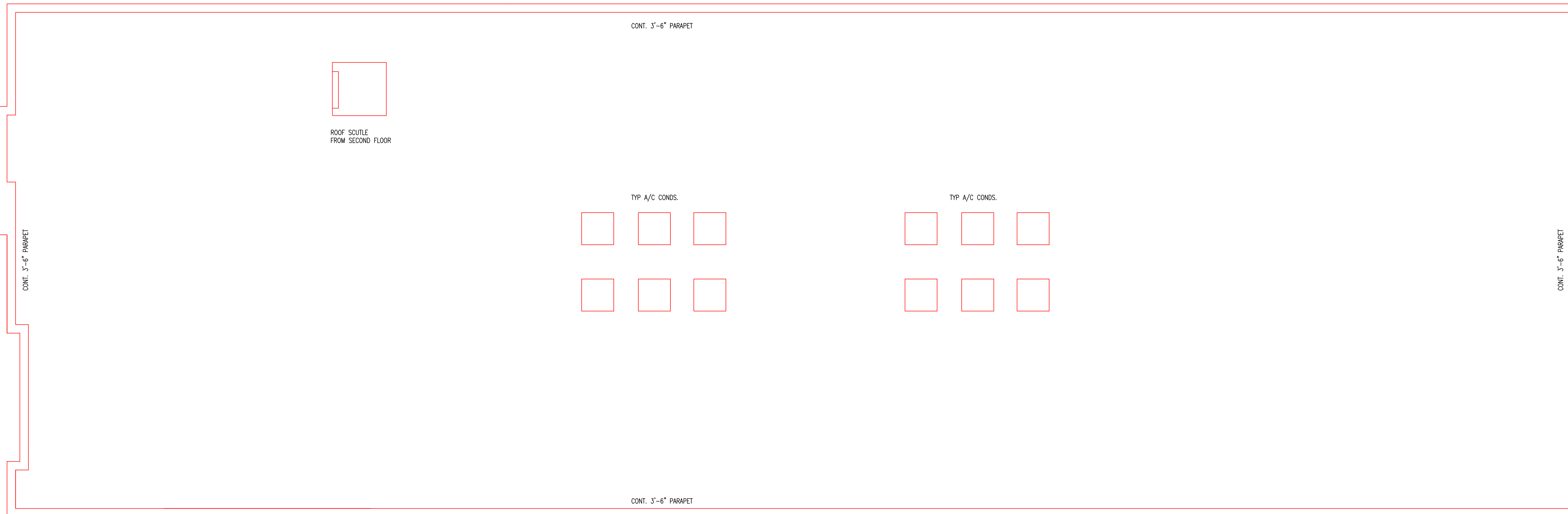
**12 UNIT APARTMENTS**  
**SITE DESIGN**  
2200 MADISON STREET  
HOLLYWOOD, FLORIDA  
CONTACT: JUAN F. WILKES (786) 838-8159  
PABLO FERNANDEZ (786) 638-7310

ALL DESIGN DRAWINGS, REPORTS, SPECIFICATIONS, COMPUTER FILES, FIELD DATA, NOTES AND ALL OTHER DOCUMENTS ARE THE PROPERTY OF THE ARCHITECT. INSTRUMENTS OF SERVICE SHALL REMAIN THE PROPERTY OF THE ARCHITECT AND NOT TO BE REPRODUCED, COPIED OR USED IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT. THE ARCHITECT SHALL RETAIN ALL COMMON LAW AND STATUTORY RIGHTS AND ALL RIGHTS THEREIN. NO OTHER RIGHTS SHALL BE TRANSFERRED BY THIS AGREEMENT.





**TYP. FLOOR PLAN**  
SCALE: 1/4"=1'-0"  
6 UNITS PER FLOOR



**ROOF PLAN**  
SCALE: 1/4"=1'-0"

**Miguel de Diego**  
ARCHITECT P.A.  
AA-26001641 AP-13378  
1657 TYLER STREET SUITE 107 HOLLYWOOD, FLORIDA 33020  
PH. (954) 926-3358

CHECKED \_\_\_\_\_  
DRAWN \_\_\_\_\_  
DATE 9-5-2019  
COMM. NO. 17-160

**12 UNIT APARTMENTS**  
SITE DESIGN  
2200 MADISON STREET  
HOLLYWOOD, FLORIDA  
CONTACT: JUAN F. WILKES (786) 838-8159  
PABLO FERNANDEZ (786) 638-7310

ALL DESIGN DRAWINGS, REPORTS, SPECIFICATIONS, COMPUTER FILES, FIELD DATA, NOTES AND ALL OTHER DOCUMENTS ARE THE PROPERTY OF MIGUEL DE DIEGO ARCHITECT P.A. AND SHALL REMAIN THE PROPERTY OF MIGUEL DE DIEGO ARCHITECT P.A. IF ANY PART OF THESE DOCUMENTS IS REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF MIGUEL DE DIEGO ARCHITECT P.A., THE ARCHITECT SHALL RETAIN ALL COMMON LAW AND STATUTE RIGHTS THEREIN. NO OTHER RIGHTS SHALL BE GRANTED BY THIS AGREEMENT. PRELIMINARY DESIGN. NOT TO BE USED FOR CONSTRUCTION.



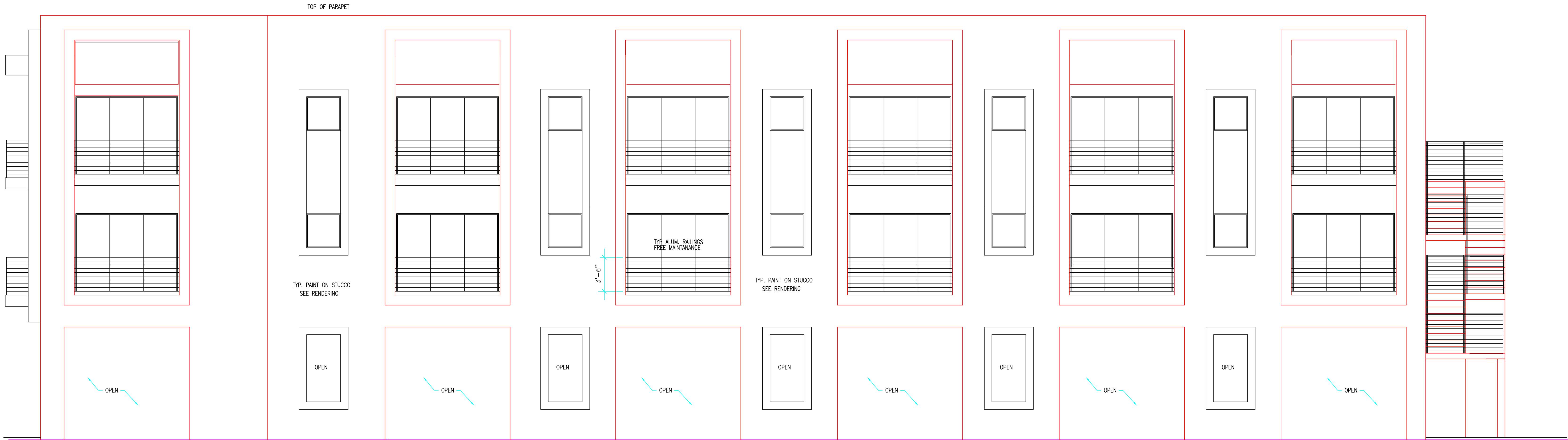




LEFT SIDE ELEVATION

SCALE: 1/4"=1'-0"

EAST



RIGHT SIDE ELEVATION

SCALE: 1/4"=1'-0"

ALL DESIGN, DRAWING, REPORTS, SPECIFICATIONS, COMPUTER FILES, FIELD DATA, NOTES AND ALL OTHER DOCUMENTS OF SERVICE SHALL REMAIN THE PROPERTY OF THE ARCHITECT AND SHALL NOT BE REPRODUCED, COPIED OR USED IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT. THE ARCHITECT SHALL RETAIN ALL COMMON LAW AND OTHER RESERVED RIGHTS THEREIN. NO OTHER RIGHTS SHALL BE TRANSFERRED BY SALE.

No.	Date	Revision	By

12 UNIT APARTMENTS

SITE DESIGN

2200 MADISON STREET

HOLLYWOOD, FLORIDA

CONTACT: JUAN F. WILKES (786) 838-8159

PABLO FERNANDEZ (786) 638-7310

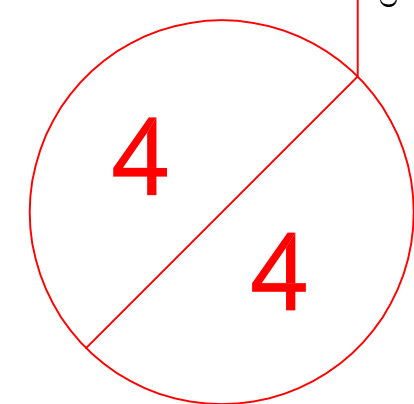
Miguel de Diego  
ARCHITECT P.A.

AA-26001641 AP-13378

1657 TYLER STREET SUITE 107 HOLLYWOOD, FLORIDA 33020

PH. (954) 926-3358

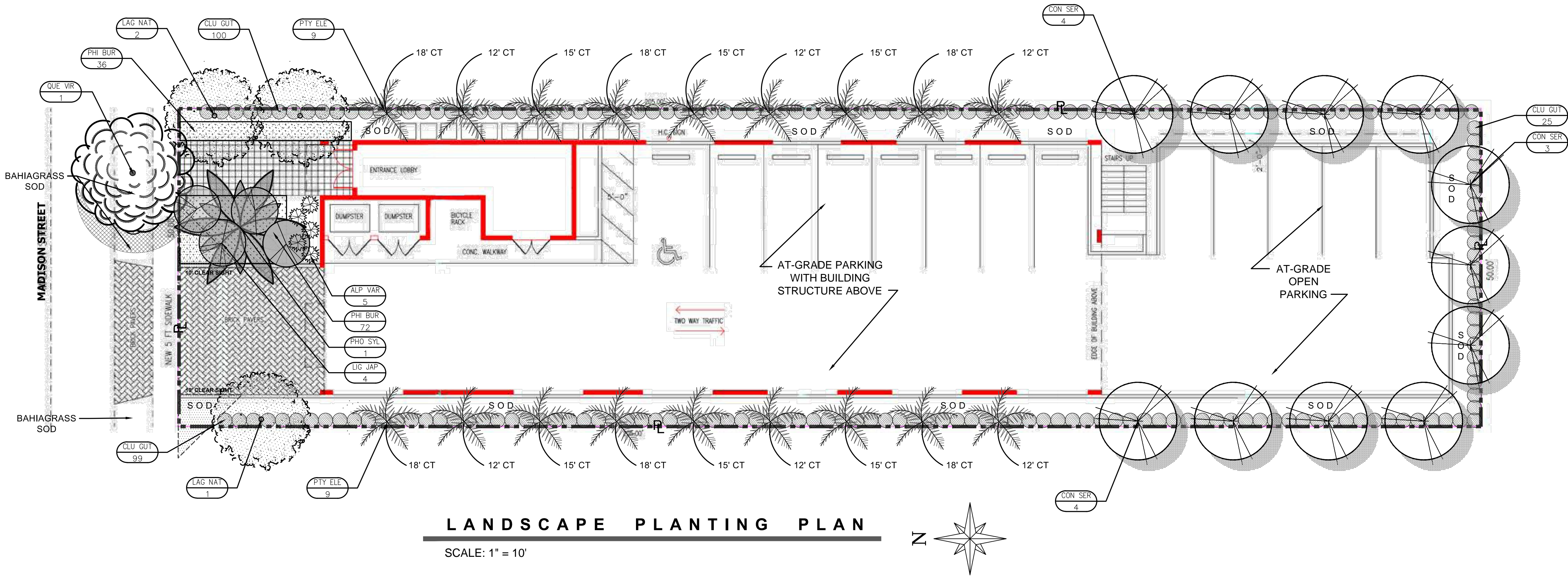
CHECKED  
DRAWN  
DATE 9-5-2019  
COMM. NO. 17-160



CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, NOTES AND CONDITIONS PRIOR TO PROCEEDING WITH ANY WORK



This document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Green Earth Landscape Architect, shall be without liability to Green Earth Landscape Architecture.



## PLANT LIST AND SPECIFICATIONS

TREE AND PALMS						
SYMBOL	QUANTITY	LATIN NAME	COMMON NAME	SIZE	SPREAD	DESCRIPTION
*N CON SER	11	Conocarpus erectus 'Sericeus'	SILVER BUTTONWOOD	2" DBH/12' HT.	5'	SINGLE STRAIGHT TRUNK STANDARD, HEAVY BRANCHING
LAG NAT	3	Lagerstroemia x 'Natchez'	NATCHEZ CRAPE MYRTLE	2" DBH/12' HT.	6'	SINGLE STRAIGHT TRUNK STANDARD, HEAVY BRANCHING
PTY ELE	18	Ptychosperma elegans	SOLITAIRE PALM	12/15/18' CT	10'	SIZE CT PER PLAN, FULL CROWNS, STRAIGHT EVEN TRUNKS
*N CLU VIR	1	Quercus virginiana	LIVE OAK	2" DBH/12' HT.	6'	STRAIGHT TRUNK, HEAVY BRANCHING
PHO SYL	1	Phoenix sylvestris	SYLVESTER PALM	8' CLEAR WOOD	6"	FULL CROWN, STRAIGHT THICK EVEN TRUNK, DIAMOND CUT
*N CALLOUT	1	Coccoloba uvifera	EXISTING SEAGRAPE	18" COMBINED	25'X25'	EXISTING SEAGRAPE TO REMAIN
*N CALLOUT	1	Quercus virginiana	EXISTING LIVE OAK	20" DBH	35'X45'	EXISTING LIVE OAK IN SWALE TO REMAIN
SHRUBS AND GROUNDCOVER						
SYMBOL	QUANTITY	LATIN NAME	COMMON NAME	SIZE	SPREAD	DESCRIPTION
*N ALP VAR	5	Alpinia zerumbet 'Variegata'	VARIEGATED SHELL GINGER	30" HT	30"	FULL, SPACE 36" ON CENTER
CLU GUT	224	Clusia guttifera	LITTLELEAF CLUSIA	24" HT	24"	FULL, SPACE 24" ON CENTER
LIG JAP	4	Ligustrum japonicum	LIGUSTRUM	8' HT	72"	PRUNED TO 4' CT WITH 4-5 STRONG LEADERS, SPACE PER PLAN
PHI BUR	108	Philodendron 'Burle Marx'	BURLE MARX PHILODENRON	16" HT	16"	FULL, SPACE 18" ON CENTER

WHERE 'SOD' IS INDICATED SPECIES SHALL BE ST. AUGUSTINE 'FLORATAM' VARIETY AND 'BAHIAGRASS SOD' SHALL BE ARGENTINE VARIETY BAHIA SOD

NOTE: ALL SPECIES ARE SUBJECT TO APPROVED ALTERNATIVES DEPENDING ON AVAILABILITY IN THE REQUIRED SIZES AT THE TIME OF INSTALLATION.

## TABULAR DATA CODE CHART

REGULATING DOCUMENT: ARTICLE 9 LAND DEVELOPMENT & ZONING REGULATIONS		
ZONING/LAND USE: RM-18		
ARTICLE 9.3 & 9.5 (CROSS-REFERENCE LANDSCAPE MANUAL 2.2 MULTI-FAMILY DISTRICTS)	REQUIRED	PROVIDED
STREET TREE REQUIREMENTS 1 TREE/50LF STREET FRONTAGE @ 50LF	1 TREES	1 TREE
OPEN SPACE REQUIREMENTS 1 TREE/1,000 SF OF REQUIRED OPEN SPACE AREA @ 3,095 SF	4 TREES	4 TREES
AT-GRADE PARKING LOTS (CROSS-REFERENCE LANDSCAPE MANUAL 2.12)	MINIMUM 24" DURABLE LANDSCAPE BUFFER 1 TREE PER LANDSCAPE ISLAND	24" CONTINUOUS HEDGE + PERIMETER TREES 1 TREE PER LANDSCAPE ISLAND
ARTICLE 9.5.E: NATIVE SPECIES REQUIREMENTS	60% TREES/50% SHRUBS	62% TREES/66% SHRUBS
ARTICLE 9.9:TREE MITIGATION REQUIREMENTS MITIGATION ON AN INCH-PER-INCH CALIPER BASIS FOR NON-EXEMPT SPECIES @ 57 CALIPER INCHES + 1 PALM	28.5 TREES @ 2" DBH + 1 PALM	29 TREES @ 2" DBH (18 PALMS @ 3:1 = 6 TREES) + 1 PALM

## NOTES & SPECIFICATIONS

- CONTRACTOR TO VISIT SITE AND REVIEW PLANS PRIOR TO SUBMITTING A PROPOSAL TO OWNER. CONTRACTOR SHALL VERIFY SITE AND TREE INFORMATION, AND BRING ANY AND ALL DISCREPANCIES, CONFLICTS, SHORTAGES, OR OTHER SCOPE/QUANTITY/ TIME RELATED ISSUES, INCOMPLETENESS OR CONSISTENCY WITHIN THE PLANS TO THE ATTENTION OF THE LANDSCAPE ARCHITECT IMMEDIATELY FOR CLARIFICATION PRIOR TO SUBMITTING A PROPOSAL OR BASING A PROPOSAL ON THE SCOPE OF WORK.
- THESE PLANS WERE PREPARED BASED ON THE BEST INFORMATION AVAILABLE AT THE TIME OF DESIGN AND AS PROVIDED. ALL FINAL PLANS SHALL BE COORDINATED WITH FINAL APPROVED SITE PLAN.
- CONTRACTOR TO VERIFY ALL UNDERGROUND UTILITIES BEFORE WORK COMMENCES AND SHALL PROTECT ALL UNDERGROUND/ABOVE GROUND UTILITIES AND EXISTING CONDITIONS-TO-REMAIN DURING CONSTRUCTION.
- SEE TREE PROTECTION DETAIL ON LANDSCAPE DETAILS SHEET FOR TREE PROTECTION TO BE ERECTED BEFORE ANY CONSTRUCTION ACTIVITIES BEGIN FOR TREES AND PALMS TO REMAIN, AND TO REMAIN INTACT AS ERECTED UNTIL FINAL COMPLETION OF PROJECT.
- IN THE EVENT OF DISPUTE, THE LANDSCAPE ARCHITECT'S INTERPRETATION SHALL BE FINAL.
- ALL WORK TO BE IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS AND ADJUST IF NECESSARY TO AVOID CONFLICTS OR SAFETY HAZARDS.
- ALL WORK TO BE PERFORMED IN A PROFESSIONAL, WORKMANLIKE MANNER AND ONLY DURING THOSE TIMES PERMITTED BY THE CITY OF HOLLYWOOD. PROTECT THE PUBLIC AND GENERAL PASSERSBY AT ALL TIMES AND PROTECT ALL TREES SPECIFIED TO REMAIN.
- ALL NEW PLANT MATERIAL SHALL BE FLORIDA NO. 1 OR BETTER ACCORDING TO 'GRADES AND STANDARDS FOR NURSERY PLANTS' PUBLICATION BY THE FLORIDA DEPT. OF AGRICULTURE AND CONSUMER SERVICES. ALL TREES OR PLANTS NOT MEETING THIS MINIMUM SPECIFICATION AS DEFINED IN THE PUBLICATION WILL BE REJECTED.
- ALL TREES AND PALMS MUST BE PLANTED SO THE TOP OF THE ROOT BALL, ROOT FLARE, AND FIRST ORDER ROOTS ARE SLIGHTLY ABOVE THE FINAL GRADE (ADVENTITIOUS ROOTS ARE NOT CONSIDERED FIRST ORDER ROOTS).
- ALL SYNTHETIC BURLAP, SYNTHETIC STRINGS, CORDS OR OTHER NON-BIODEGRADABLE MATERIALS SHALL BE **COMPLETELY REMOVED IN THEIR ENTIRETY** FROM THE ROOTBALLS BEFORE ANY TREES ARE PLANTED.
- FOR BIODEGRADABLE BURLAP ROOTBALL CONTAINMENT THE TOP PORTION OF BURLAP MUST BE REMOVED FROM THE TOP OF THE ROOTBALLS. THE TOP 1/3RD OF WIRE BASKETS SHALL BE REMOVED, THE BOTTOM 2/3RDS SHALL BE CUT BEFORE THE TREES ARE INSTALLED.
- ALL SYNTHETIC TAPE (I.E., TAGGING TAPE, NURSERY TAPE) SHALL BE REMOVED FROM TRUNKS, BRANCHED, ETC. BEFORE INSPECTION. REMOVE ALL BAMBOO AND METAL STAKES FROM TREES.
- TREES SHALL HAVE A MULCH RING WITH A MINIMUM DIAMETER OF 4'. MULCH WILL BE A GRADE B SHREDDED WOOD HARVESTED FROM EXISTING MELALEUCA OR EUCALYPTUS STANDS (STERILIZED TO DESTROY ANY SEEDS) OVER HEAVY WEED BARRIER FABRIC, SECURED IN PLACE USING SOD STRIPS, STAPLES, AND APPROXIMATELY 3" DEPTH WHEN SETTLED. USE COMMERCIAL GRADE BLACK PLASTIC EDGING FOR SHAPE AND CONTAINMENT OF SHRUB & GROUNDCOVER LANDSCAPE PLANTING AREAS, STAKED IN PLACE.
- ALL TREES AND PALMS SHALL BE GUYED WITH PROPER HORTICULTURAL AND ARBORICULTURAL TECHNIQUES. DO NOT USE WIRE, BLACK STRAPPING, OR OTHER SYNTHETIC MATERIAL FOR THE DIRECT STAKING OF TREES. PLEASE USE BIODEGRADABLE MATERIAL FOR STAKING DIRECTLY AROUND TRUNKS SUCH AS SISAL TWINE. NAILING INTO TREES AND PALMS FOR ANY REASON IS PROHIBITED. ALL STAKING MATERIAL SHALL BE REMOVED ONCE TREES ARE ESTABLISHED.
- ALL PERVIOUS LANDSCAPED AREAS SHALL RECEIVE 100% IRRIGATION COVERAGE, AS DEFINED BY CITY OF HOLLYWOOD, SFWMD AND INDUSTRY STANDARDS (BEING HEAD-TO-HEAD ARC THROW WITH 50% OVERLAP) BY MEANS OF AN AUTOMATIC, FULLY PROGRAMMABLE UNDERGROUND IRRIGATION SYSTEM UTILIZING PVC PIPE, RAINBIRD 1800 SERIES POP-UP SPRAY TYPE HEADS, REMOTE ELECTRONIC ZONE VALVES, A PROGRAMMABLE AUTOMATIC CONTROLLER WITH INTEGRATED RAIN SENSOR, BACKFLOW PREVENTION DEVICE, SCHEDULED 80 PVC SLEEVES FOR PIPING BENEATH PAVEMENT, ETC. ADDITIONALLY, ALL NEWLY PLANTED TREES AND PALMS WILL RECEIVE A MINIMUM OF ONE (1) BUBBLER NOZZLE TO WATER THE ROOT SYSTEMS FOR ESTABLISHMENT. ADJUST SET SCREW TO EMIT NO MORE THAN 25 GPM FLOW EACH. THIS PLAN IS NOT COMPLETE WITHOUT IRRIGATION PLAN AND IRRIGATION DETAILS L-300 AND L-301. IRRIGATION CONTRACTOR TO INSURE THAT FINAL SYSTEM AND ANY REQUIRED ADJUSTMENTS PROVIDE 100% COVERAGE AND ADDITIONAL ZONES OR HEADS MAY NEED TO BE ADDED TO ACHIEVE THIS. ALL WORK SHALL COMPLY WITH MUNICIPAL AND COUNTY ORDINANCES, SFWMD REGULATIONS AND RESTRICTIONS AND THE STATE OF FLORIDA.
- FOLLOW APPROVED LANDSCAPE PLANS FOR SPECIES, SIZES, LOCATIONS, QUANTITIES, QUALITY, ETC. IF CONTRACTOR IS UNABLE TO LOCATE PLANT MATERIAL AT REQUIRED SPECIFICATIONS CONTACT THE LANDSCAPE ARCHITECT PRIOR TO ANY CHANGES OR SUBSTITUTIONS BEING ASSUMED, ORDERED, OR MADE.
- PLANT LIST IS PROVIDED FOR CONVENIENCE ONLY. IF DISCREPANCIES EXIST BETWEEN PLANT TABLE AND PLAN, PLAN DRAWING AND ON-CENTER SPACING SHALL TAKE PRECEDENCE.
- ALL TREES ARE TO HAVE PROTECTIVE LAYER OF BURLAP OR SIMILAR HEAVY WOVEN PROTECTIVE FABRIC AROUND THE TRUNKS WHEN LOADING AND UNLOADING WITH MACHINE EQUIPMENT. NO SCARRING OF TRUNKS WILL BE ACCEPTED AND MATERIALS THAT ARE SCARRED WILL BE REJECTED.
- ALL MATERIALS AND WORKMANSHIP WILL BE GUARANTEED FOR A PERIOD OF ONE YEAR AFTER FINAL ACCEPTANCE FROM FAILURE, DEATH, TERMINAL DECLINE, ETC. THE WARRANTY PERIOD MAY BE EXTENDED BEYOND THAT TIMEFRAME IF, AT THE END OF ONE YEAR, ANY PLANTS ARE NOT IN A THRIVING STATE, INDICATIVE OF HEALTHY PLANTS OF EACH SPECIES.
- BEGIN WATERING ALL PLANT MATERIALS IMMEDIATELY AFTER INSTALLATION OR RELOCATION. FOR RELOCATIONS SEE CARE AND WATERING SCHEDULE ABOVE. FOR ALL NEW PLANTS, WATER ACCORDING TO SFWMD, BROWARD COUNTY AND CITY OF HOLLYWOOD REGULATIONS FOR NEW LANDSCAPE INSTALLATIONS UP TO 90 DAYS AND BEGIN PHASE II WATER RESTRICTION SCHEDULE FOLLOWING THAT. A SUMMARY IS: LANDSCAPING FROM 0-30 DAYS AFTER INSTALLATION WATERING CAN OCCUR ON ALL DAYS EXCEPT ON FRIDAYS. FROM 30-90 DAYS, WATERING FOR NEW LANDSCAPING CAN OCCUR ON MONDAY, WEDNESDAY, THURSDAY, AND SATURDAY. FOR BOTH ESTABLISHMENT WATERING PERIODS AND FINAL ESTABLISHED PERIOD, NO WATERING SHALL OCCUR BETWEEN 10 A.M. IN THE MORNING AND 4 P.M. IN THE AFTERNOON.
- ALL WORK WITHIN THESE PLANS TO BE DONE IN A SOUND, WORKMANLIKE MANNER, INDICATIVE OF THE PROFESSIONAL STANDARDS REGULATING EACH DISCIPLINE AND THE PERTINENT DIVISION OF THE CONSTRUCTION SPECIFICATIONS INSTITUTE, THE CITY OF HOLLYWOOD, AND ANY OTHER REGULATING OR GOVERNING AUTHORITY. WORK WILL ONLY OCCUR WITHIN THE DAYS AND HOURS SPECIFIED WITHIN THE CODE OF ORDINANCES AND CONTRACTORS AND SUB-CONTRACTORS SHALL PERFORM WORK IN A SAFE, PROFESSIONAL MANNER WITHOUT UNNECESSARY DISTURBANCE TO THE SURROUNDING COMMUNITY, OTHER ON-SITE WORKERS OR PASSERSBY.
- ANY DAMAGE TO EXISTING CONDITIONS INCLUDING EXISTING LAWN AREA WILL BE RESTORED TO A CONDITION EQUAL TO OR EXCEEDING THE CONDITION AT TIME OF WORK COMMENCEMENT. EXISTING LAWN REPAIR WILL BE DONE COMPLETE FOR ANY AND ALL DAMAGED AREAS AFFECTED BY WORK. THIS INCLUDES MATCHING OF EXISTING GRASS SPECIES WITH WHOLE, CERTIFIED SOD LAID OVER 2" BLANKET OF HAND-RAKED, FINELY-GRADED TOPSOIL AFTER ANY NECESSARY EXCAVATION REQUIRED SO THAT NEW SOD MATCHES EXISTING OR PREVIOUS SOD IN APPEARANCE, ELEVATION, EXTENT, WITH CLEAN AND TIGHT JOINTS AND CUT IN PROPERLY SO THAT NEW AND EXISTING EDGES MEET SEAMLESSLY. STAGGER JOINTS OF ALL NEW SOD. SPECIES SHALL BE ST. AUGUSTINE 'FLORATAM' VARIETY CERTIFIED TRUE TO NONENCLATURE BY THE SUPPLIER ON RECEIPT. IF EXISTING PLANTING BEDS ARE DAMAGED, RESTORE TO SAME CONDITION WITH SAME MATERIALS.
- ANY REFERENCE, MENTION OR INFERENCE OF 'PLANTING SOIL', 'AMENDED SOIL', 'SOIL MIX' OR 'SOIL' SHALL MEAN A SPECIFIC SOIL MIX AS FOLLOWS: MIX PERCENTAGE-BY-VOLUME RATIO, PRE-MIXED OFF SITE, AND COMPRISED OF 50% CLEAN, SCREENED SILICA SAND, AND 50% PULVERIZED FLORIDA MUCK, ALSO REFERRED TO AS 'TOPSOIL', FREE FROM ANY WEEDS, NEMATODES, SEEDS, AGGREGATE (OTHER THAN SPECIFIED SAND) OR OTHER DELETERIOUS MATERIALS, AND PREPARED SPECIFICALLY FOR USE AS A SOIL AMENDMENT IN LANDSCAPING APPLICATIONS. AN AMENDED ORGANIC OF COW MANURE OR ORGANIC PEAT IS ACCEPTABLE UP TO 10% OF THE TOTAL VOLUME OF THE MIX.
- CONTRACTOR SHALL SECURE ALL NECESSARY PERMITS PRIOR TO COMMENCING WORK BASED ON THESE PLANS.
- ALL BEDLINES FOR SHRUBS AND GROUNDCOVER TO HAVE FLOWING ARCS AS SHOWN CREATING AN ATTRACTIVE, ORGANIC AESTHETIC. MULCHED BEDLINE EDGES WITH FLAT OR 'DEAD' AREAS THAT BREAK FROM THE CURVILINEAR NATURE WILL BE REJECTED.
- UNLESS OTHERWISE NOTED, ALL PERVIOUS AREAS NOT COVERED WITH TREES, SHRUBS, OR GROUNDCOVER SHALL BE PLANTED WITH SOD GRASS. ALL SOD SHALL BE WHOLE SOLID SQUARE PIECES, CERTIFIED TO SPECIES AND CULTIVAR, LAID OVER 2" BLANKET OF HAND-RAKED, FINELY-GRADED TOPSOIL AFTER ANY NECESSARY EXCAVATION REQUIRED SO THAT NEW SOD MATCHES EXISTING ELEVATIONS OF CURBS, WALKS AND OTHER SURROUNDING HARDSCAPE PAVEMENT. SOD SHALL BE LAID WITH TIGHT JOINTS, STAGGER JOINTS ONE WAY SO THAT EDGES MEET SEAMLESSLY WITH NO GAPS GREATER THAN 1/2" IN WIDTH. USE COARSE CONCRETE SAND TO FILL ANY JOINTS. WHERE 'SOD' IS INDICATED SPECIES SHALL BE ST. AUGUSTINE 'FLORATAM' VARIETY AND 'BAHIAGRASS SOD' SHALL BE ARGENTINE VARIETY BAHIA SOD.
- SPECIES SUBJECT TO AVAILABILITY AT TIME OF INSTALLATION IN THE REQUIRED.

LICENSED PROFESSIONAL  
William Dale Bryant  
FL LICENSE NUMBER  
LA6666943

PROJECT #  
19-110  
DATE  
June 06, 2019  
SCALE  
AS NOTED  
DESIGNED BY  
WDB  
DRAWN BY  
WDB  
CHECKED BY  
WDB  
NO.  
DATE  
REVISIONS

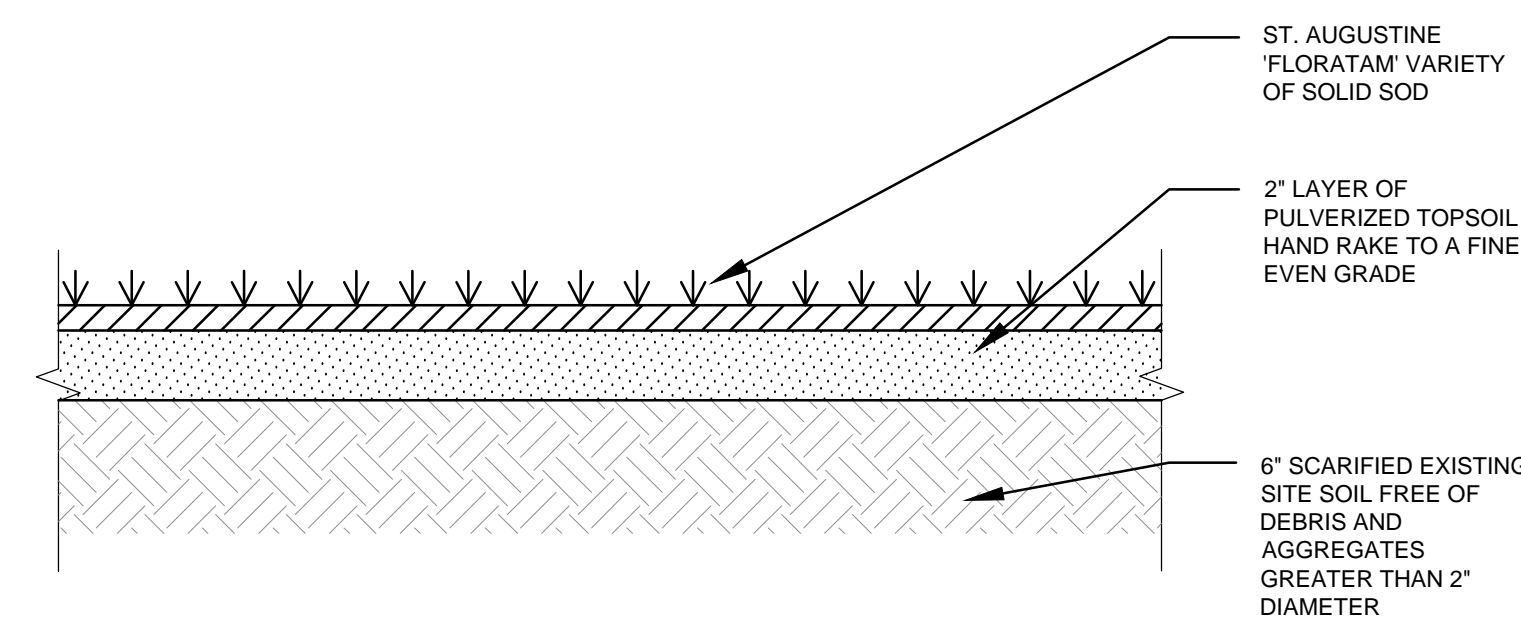
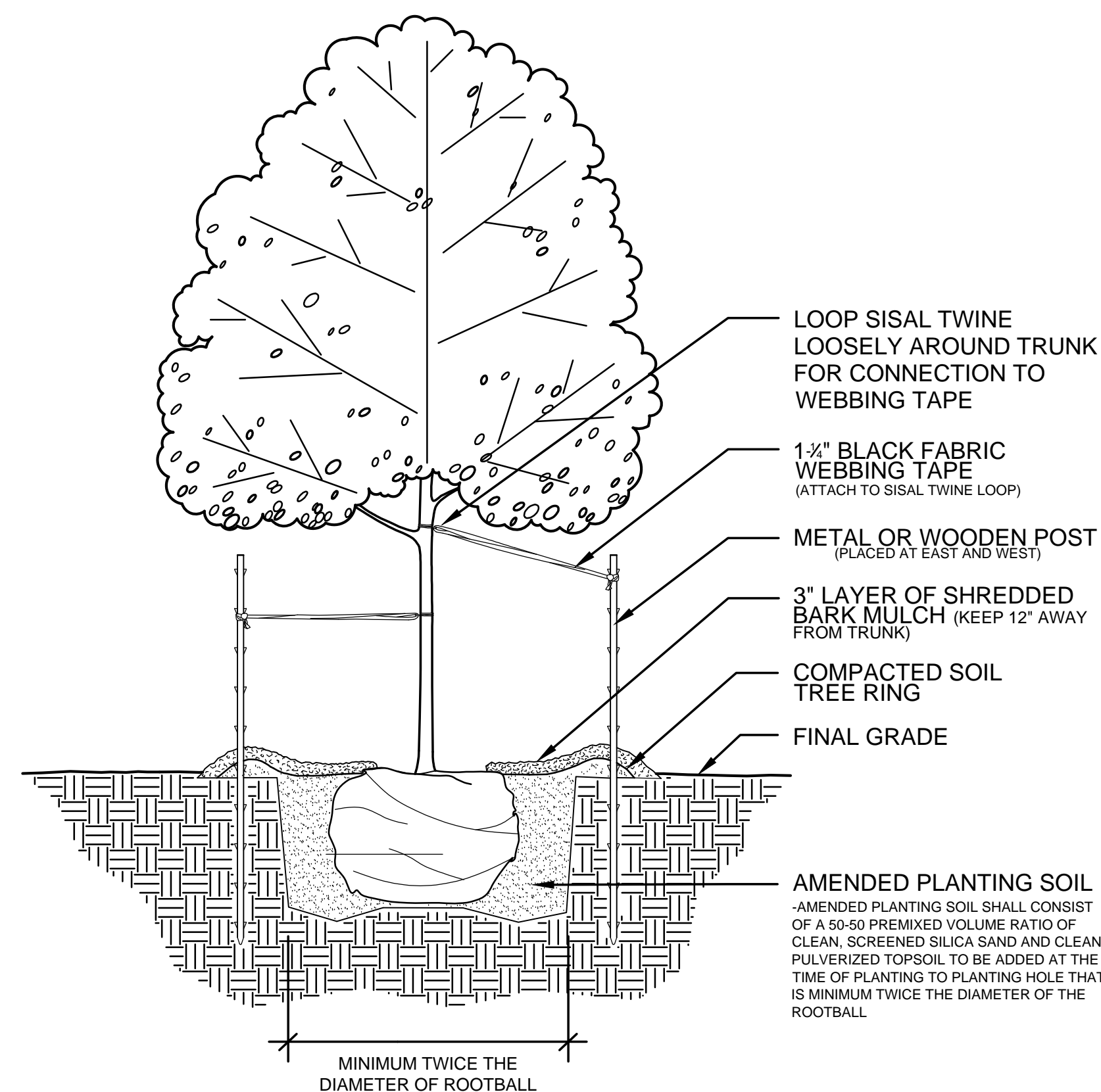
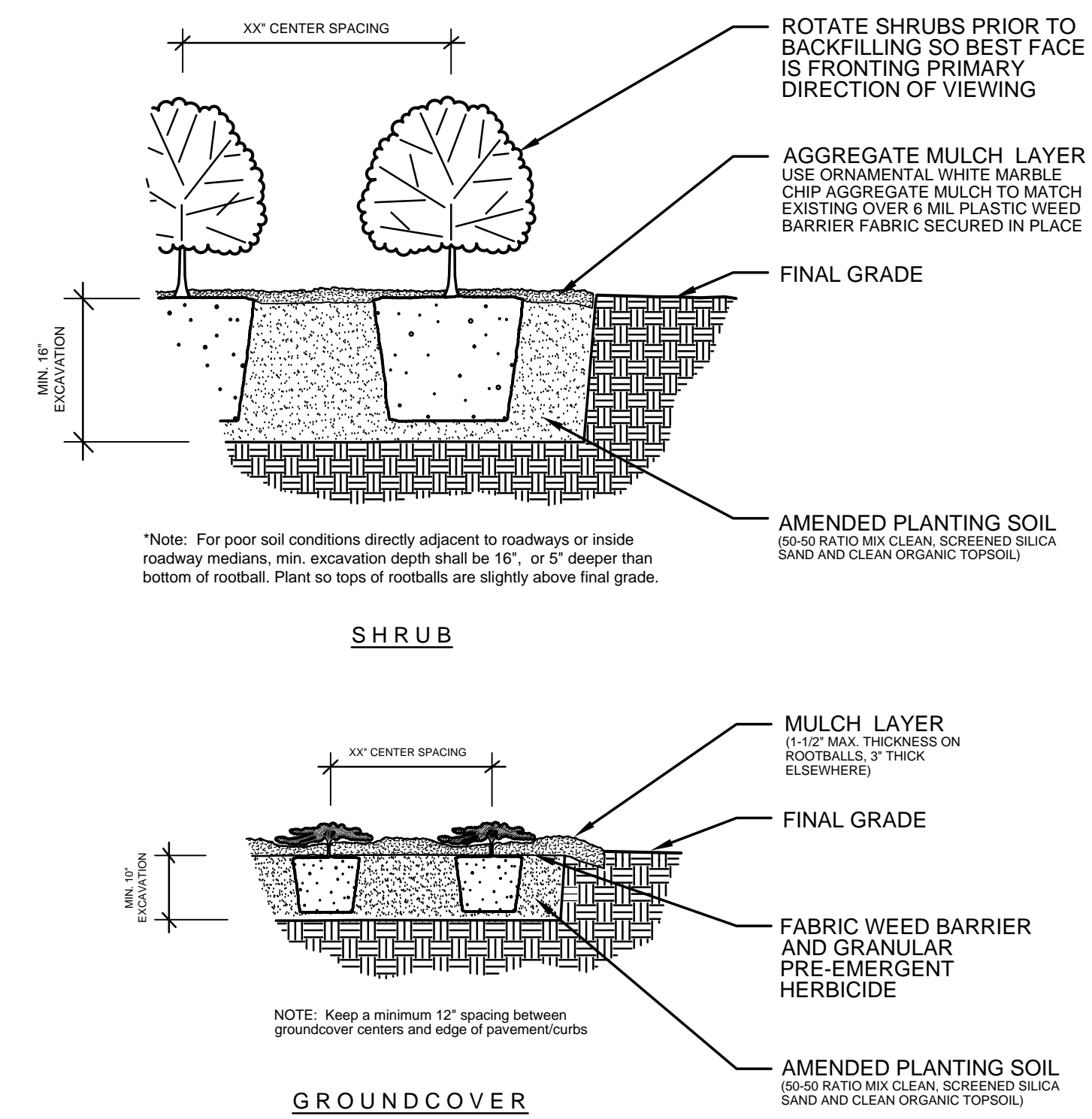
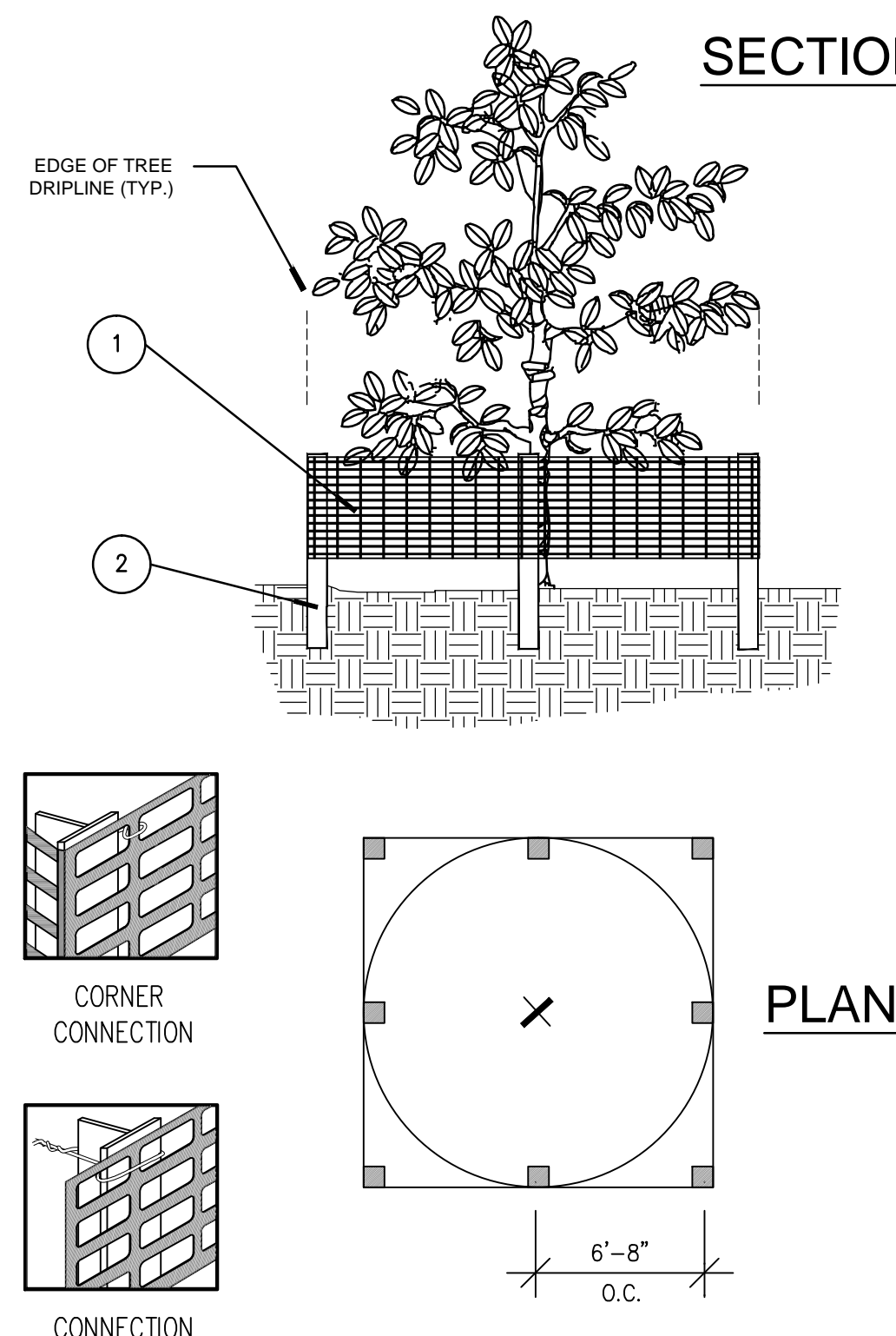
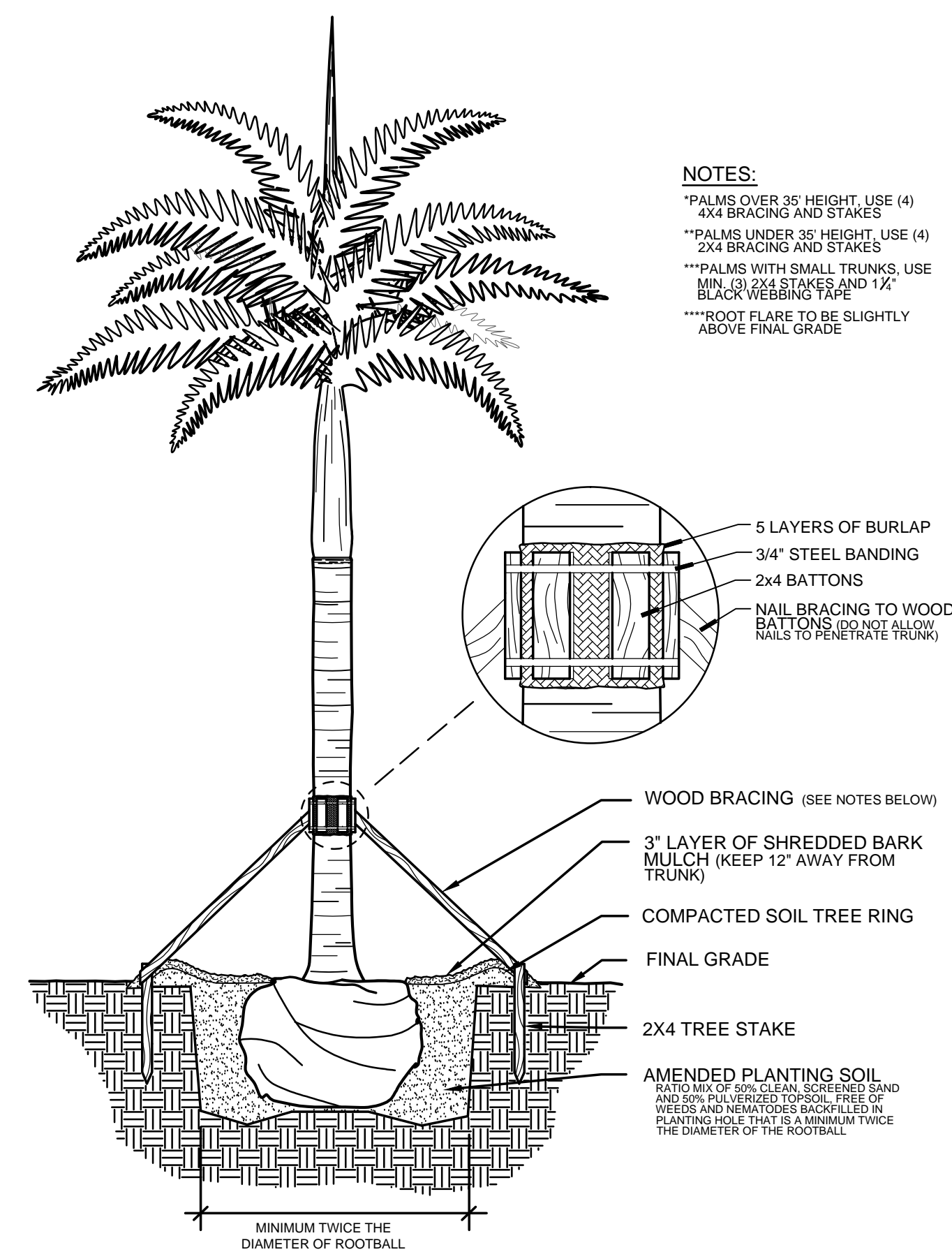
12 Unit Apartments  
2200 Madison St.  
Hollywood, FL 33020  
FLORIDA  
BROWARD COUNTY

GREEN EARTH  
LANDSCAPE ARCHITECTURE  
HOLLYWOOD, FLORIDA  
C:DALE.BRYANT@greeneearth.com PHONE: 954-638-7423

LANDSCAPE  
PLANTING PLAN

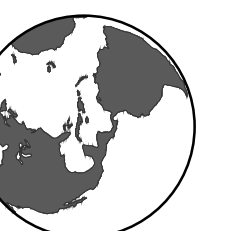
SHEET NUMBER  
L-200



[illegible]

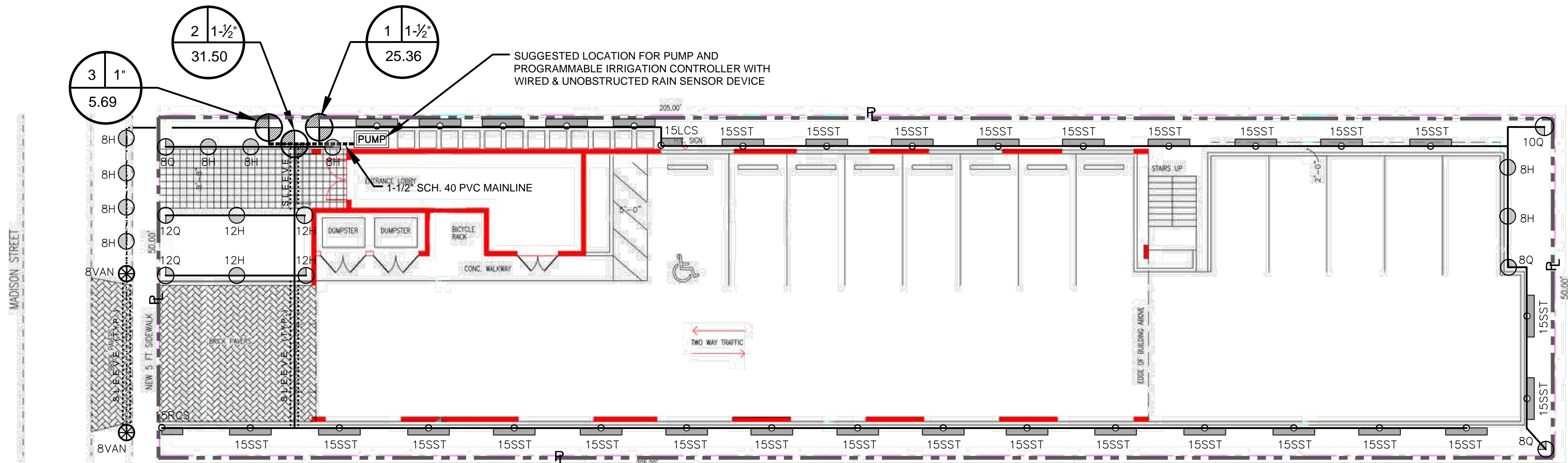
12 Unit Apartments  
2200 Madison St.  
Hollywood, FL 33020

**GREEN EARTH**  
LANDSCAPE ARCHITECTURE  
HOLLYWOOD, FLORIDA  
PHONE: 954-632-9825  
E-MAIL: [dave.bryant@greeneearthfla.com](mailto:dave.bryant@greeneearthfla.com)



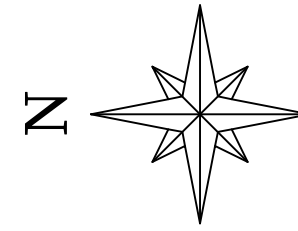


This document, together with the concepts and designs presented herein, is an instrument of service, as an instrument of service, it is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Green Earth Landscape Architect, shall be without liability to Green Earth Landscape Architecture.



## IRRIGATION PLAN

SCALE: 1" = 10'



## IRRIGATION SYMBOL LEGEND

- RAINBIRD PGB REMOTE ELECTRIC ZONE VALVE
- 1-1/2" SCHEDULE 40 PVC MAIN LINE PIPE
- SCHEDULE 200 LATERAL (CIRCUIT) PVC PIPE
- IRRIGATION ZONE CALLOUT
- SCHEDULE 80 PVC SLEEVE PIPE (MINIMUM TWICE THE SIZE OF PIPE BEING SLEEVED)
- 1-1/2 HP PUMP STATION INCLUDING:
  - 1-1/2 HP CENTRIFUGAL SINGLE PHASE 240V SELF PRIMING PUMP
  - RAINBIRD ESP-RZX 4-STATION PROGRAMMABLE CONTROLLER WITH INTEGRAL RAIN SENSOR SHUT-OFF DEVICE (CLEAR OF OVERHEAD OBSTRUCTIONS)
  - ELECTRICAL CIRCUIT OVERLOAD PROTECTION
  - 3,000 PSI 4" CONCRETE PAD WITH SHOCK ABSORBING PUMP MOUNTS

NOTE: INSTALL ONE BUBBLER NOZZLE FOR EACH NEW TREE ON FLEXIBLE PIPING. ADJUST SET SCREW TO EMIT NO MORE THAN .25 GPM.

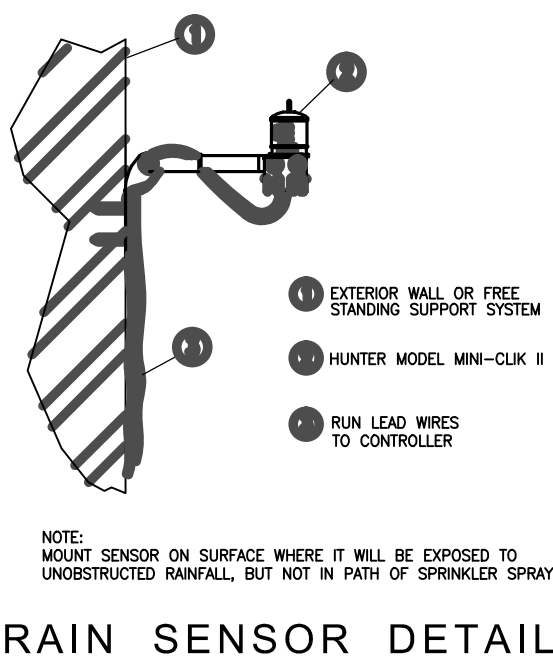
## SPRINKLER AND NOZZLE SCHEDULE

SYMBOL	DESCRIPTION	G.P.M.	THROW
8Q	RAINBIRD 1806 PRS OR 1812 PRS (SEE CRITERIA IN NOTES) WITH 8Q MPR SPRAY NOZZLE	.26	8'
8H	RAINBIRD 1806 PRS OR 1812 PRS (SEE CRITERIA IN NOTES) WITH 8H MPR SPRAY NOZZLE	.52	8'
8VAN	RAINBIRD 1806 PRS OR 1812 PRS WITH 8 VARIABLE ARC MPR SPRAY NOZZLE	VARIES	8'
10Q	RAINBIRD 1806 PRS OR 1812 PRS (SEE CRITERIA IN NOTES) WITH 10Q MPR SPRAY NOZZLE	.39	10'
12Q	RAINBIRD 1806 PRS OR 1812 PRS (SEE CRITERIA IN NOTES) WITH 12Q MPR SPRAY NOZZLE	.65	12'
12H	RAINBIRD 1806 PRS OR 1812 PRS (SEE CRITERIA IN NOTES) WITH 12H MPR SPRAY NOZZLE	1.30	12'
15LCS	RAINBIRD 1806 PRS OR 1812 PRS (SEE CRITERIA IN NOTES) WITH 15LCS MPR SPRAY NOZZLE	.49	4X15'
15RCS	RAINBIRD 1806 PRS OR 1812 PRS (SEE CRITERIA IN NOTES) WITH 15RCS MPR SPRAY NOZZLE	.49	4X15'
15SST	RAINBIRD 1806 PRS OR 1812 PRS (SEE CRITERIA IN NOTES) WITH 15SST MPR SPRAY NOZZLE	1.21	4X30'

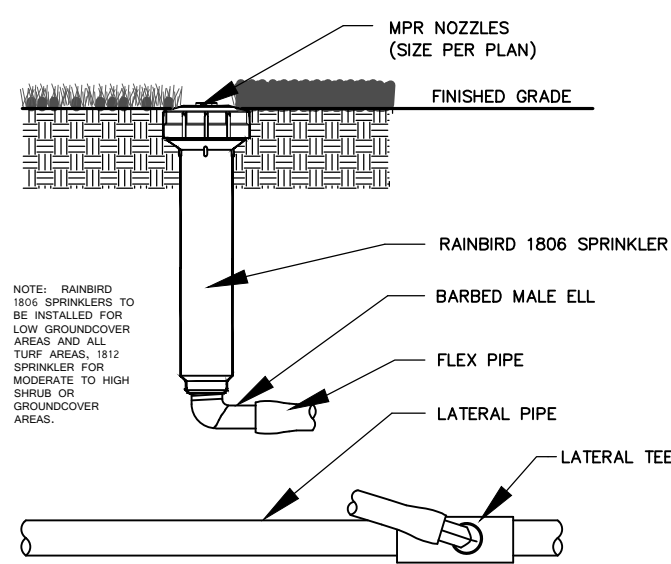
## IRRIGATION NOTES

- CONTRACTOR TO VISIT SITE AND REVIEW PLANS PRIOR TO SUBMITTING A PROPOSAL TO OWNER, AND SHALL BRING ANY DISCREPANCIES WITHIN THE PLANS TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO SUBMITTING A PROPOSAL.
- THESE PLANS WERE PREPARED BASED ON THE BEST INFORMATION AVAILABLE AT THE TIME OF DESIGN.
- CONTRACTOR TO VERIFY ALL UNDERGROUND UTILITIES BEFORE WORK COMMENCES AND SHALL PROTECT ALL UNDERGROUND/ABOVE GROUND UTILITIES AND EXISTING CONDITIONS TO REMAIN DURING CONSTRUCTION. ALL TREES TO REMAIN SHALL RECEIVE A FENCE BARRIER PROTECTION DURING CONSTRUCTION. SEE LANDSCAPE DETAILS FOR MORE INFORMATION ON TREE PROTECTION.
- THIS PLAN NOT COMPLETE WITHOUT ALL LANDSCAPE SHEETS.
- IRRIGATION SYSTEM WILL BE A NEW 1-1/2 HP PUMP CENTRIFUGAL PUMP WITH ELECTRONIC CONTROL VALVES, POP-UP SPRINKLER SPRAY HEADS AND AN AUTOMATIC PROGRAMMABLE TIMER WITH RAIN SENSOR SHUT-OFF DEVICE.
- IRRIGATION CONTRACTOR TO COORDINATE WITH MEP ENGINEER AND GENERAL CONTRACTOR TO COORDINATE POWER NEEDS FOR 220V PUMP STATION AND CONTROLLER. THIS MUST BE DONE BEFORE PROJECT CONSTRUCTION BEGINS SO PROPER CALCULATIONS CAN BE DETERMINED AND PROPER INFRASTRUCTURE FOR IRRIGATION AND ELECTRICAL REQUIREMENTS ARE PROVIDED BEFORE PAVING OCCURS. CONTROLLER LOCATION SHOWN IS RECOMMENDED LOCATION ONLY. FINAL DETERMINATION TO BE BY OWNER OR OWNER'S REPRESENTATIVE FOR CONVENIENCE, EASE OF MAINTENANCE AND ACCESS.
- THE SCOPE OF WORK INTENDED WHEN BIDDING ON THESE IRRIGATION PLANS IS TO PROVIDE A COMPLETE, COMPLIANT, SAFE, FULLY-OPERATIONAL, INSTALLED IRRIGATION SYSTEM ACCORDING TO THE DESIGNED IRRIGATION SYSTEM HEREIN. THE IRRIGATION CONTRACTOR IS RESPONSIBLE FOR ALL COMPONENTS, APPROVALS, AND WORKMANSHIP TO MAKE THE SYSTEM FUNCTION PROPERLY AND PROVIDE 100% (HEAD-TO-HEAD) COVERAGE OF ALL PVIOUS AREAS WITHIN THE SCOPE OF WORK.
- THE IRRIGATION CONTRACTOR SHALL VISIT THE SITE PRIOR TO PLACING A BID AND BECOME FAMILIAR WITH EXISTING CONDITIONS. AFTER REVIEWING THE PLANS AND VISITING THE SITE, CONTRACTOR SHALL BRING ALL QUESTIONS OR POTENTIAL CONFLICTS TO THE WRITTEN ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO PLACING A BID.
- ALL SLEEVING SHALL BE SCHEDULE 80 PVC TO SIZE INDICATED ON PLAN, OR IF NOT INDICATED, A MIN. OF 2 PIPE SIZES LARGER THAN THE SUPPLY LINE(S) CONTAINED. ALL SLEEVES SHALL BE INSTALLED A MIN. OF 12" BELOW FINISHED GRADE OF PAVEMENT OR AS REQUIRED BY CODE. ALL PIPE AND CONTROL WIRING SHALL BE INSTALLED IN SLEEVES WHEN BENEATH PAVEMENT.
- ALL AUTOMATIC RAINBIRD VALVES SHALL BE INSTALLED IN A RECTANGULAR FIBERGLASS BOX AND SHALL BE ARRANGED FOR EASY ADJUSTMENT AND ACCESS. THE FLOW ADJUSTMENT FEATURE OF EACH VALVE SHALL BE UTILIZED TO BALANCE OPERATING PRESSURES THROUGHOUT THE SYSTEM. VALVE BOXES SHALL BE INSTALLED FLUSH WITH GRADE AND SHALL INSURE PERCOLATION THROUGH THE BOX.
- WATERING TIME PER STATION WILL BE DETERMINED IN THE FIELD AND PER LOCAL REQUIREMENTS OR RESTRICTIONS. REFER TO MANUFACTURER'S INSTRUCTIONS FOR PRECIPITATION RATES OF SPRINKLERS SPECIFIED.
- IRRIGATION PLAN IS SCHEMATIC. IRRIGATION CONTRACTOR TO ADJUST TO FIELD CONDITIONS AND INACCURACIES THAT ARE INHERENT WITH DRAWINGS AT THIS SCALE. IRRIGATION CONTRACTOR TO CONTACT LANDSCAPE ARCHITECT FOR ANY SUBSTANTIAL CHANGES THAT WOULD NOT CONFORM TO THE INTENT OF THE IRRIGATION PLANS. NO SUBSTITUTIONS IN MANUFACTURER MATERIALS WILL BE ACCEPTED UNLESS ACCEPTED IN WRITING BY THE LANDSCAPE ARCHITECT OF RECORD PRIOR TO ORDERING, PLANNING, OR INSTALLATION.
- ALL MAIN AND LATERAL PIPING RUNS TO HAVE SOLVENT WELD JOINTS.
- CONTROLLER SHALL BE RAINBIRD ESP-RZX 4-STATION CONTROLLER WITH INTEGRATED RAIN SENSOR SHUT-OFF.
- PLAN WAS DESIGNED BASED ON ASSUMPTION OF AT LEAST 30 PSI TO END OF ZONES INCLUDING PRESSURE LOSS FROM PIPE RUN LENGTHS, TURNS, ZONE VALVES, FITTINGS AND ELEVATION CHANGES.
- ALL ZONE VALVE WIRING TO BE DIRECT BURIAL TYPE AS RECOMMENDED BY ZONE VALVE MANUFACTURER.
- INSTALL A MINIMUM OF ONE (1) BUBBLER NOZZLE AT EACH TREE OR PALM ROOTBALL SET AT A RATE OF .25 GPM. BUBBLER NOZZLES ARE NOT SHOWN ON THE PLAN FOR GRAPHIC CLARITY OF OTHER COMPONENTS.

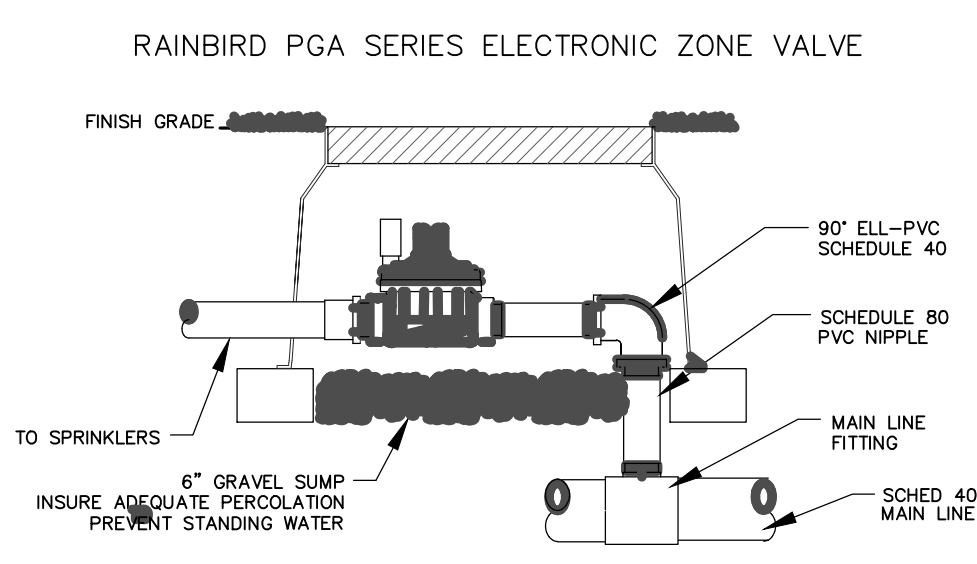
## IRRIGATION DETAILS N.T.S.



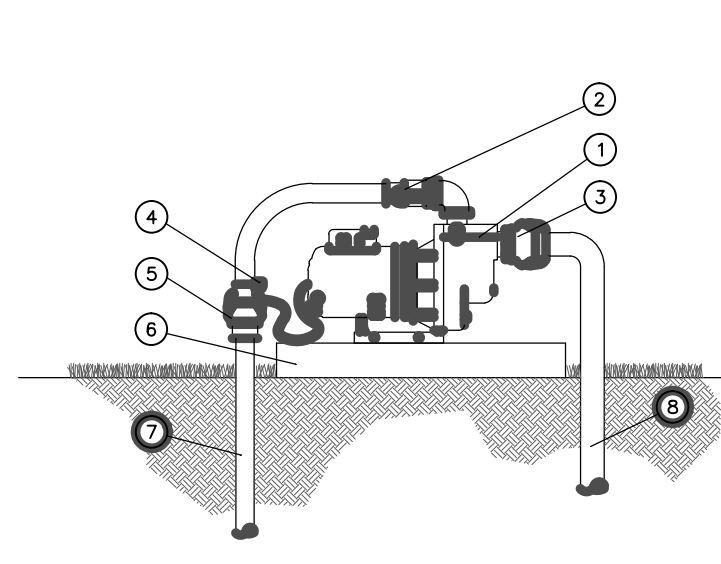
RAIN SENSOR DETAIL



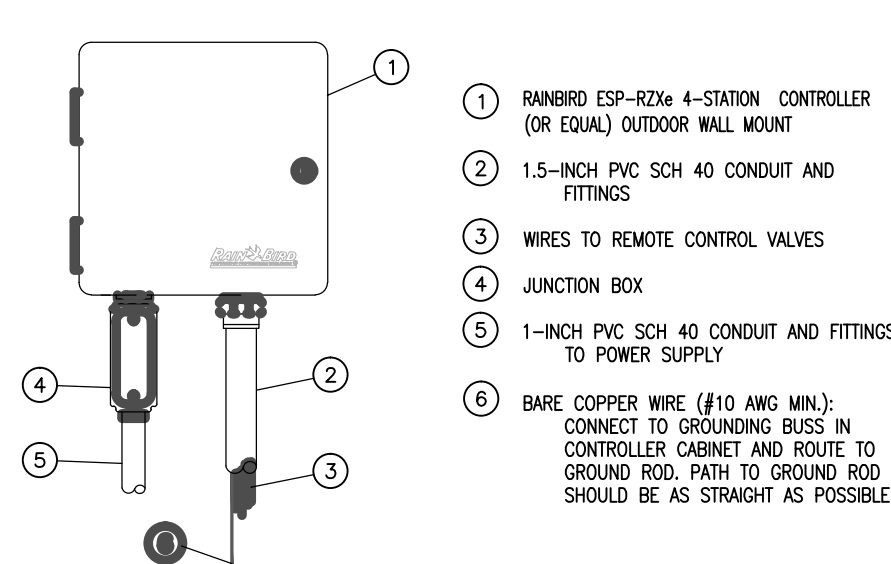
SPRINKLER HEAD DETAIL



ZONE VALVE DETAIL



CENTRIFUGAL PUMP DETAIL



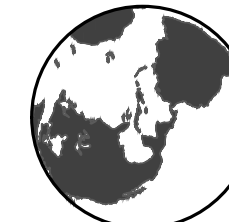
PROGRAMMABLE CONTROLLER DETAIL

LICENSED PROFESSIONAL  
William Dale Bryant  
FL LICENSE NUMBER  
LA6666943

PROJECT #	DATE	SCALE	DESIGNED BY	DRAWN BY	CHECKED BY	REVISIONS	DATE	BY
19-110	June 06, 2019	AS NOTED	WDB	WDB	WDB			

12 Unit Apartments  
2200 Madison St.  
Hollywood, FL 33020

GREEN EARTH  
LANDSCAPE ARCHITECTURE  
HOLLYWOOD, FLORIDA  
E-MAIL: dale.bryant@greeneearth.com PHONE: 954-618-7425



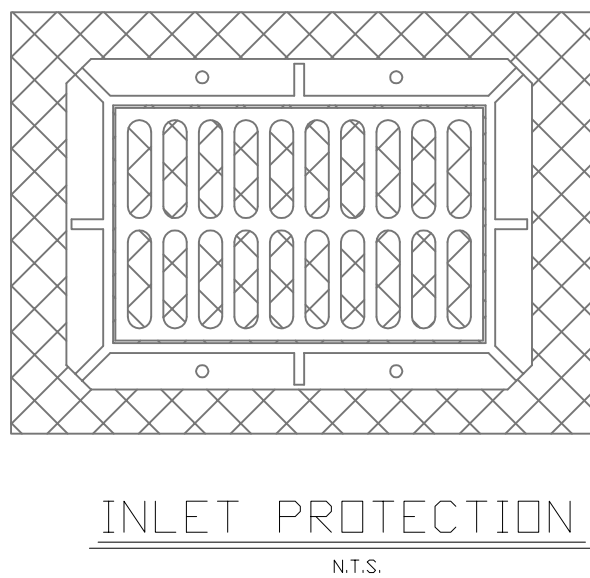
IRRIGATION PLAN

SHEET NUMBER  
L-300

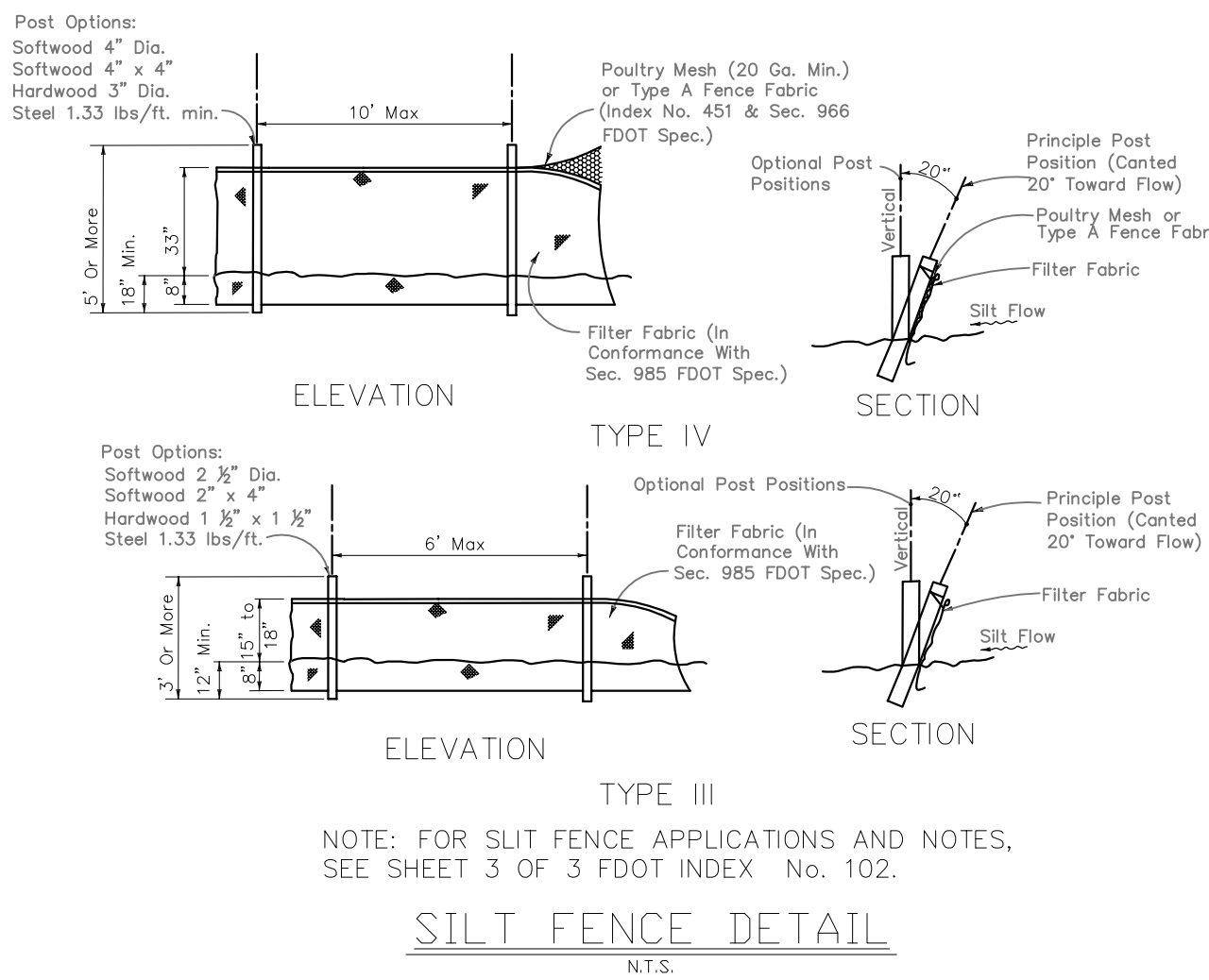
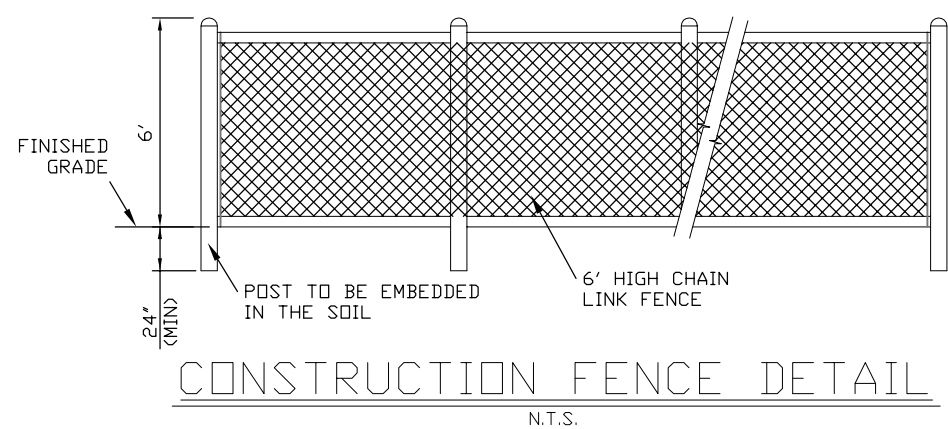


EROSION AND SEDIMENT CONTROL NOTES

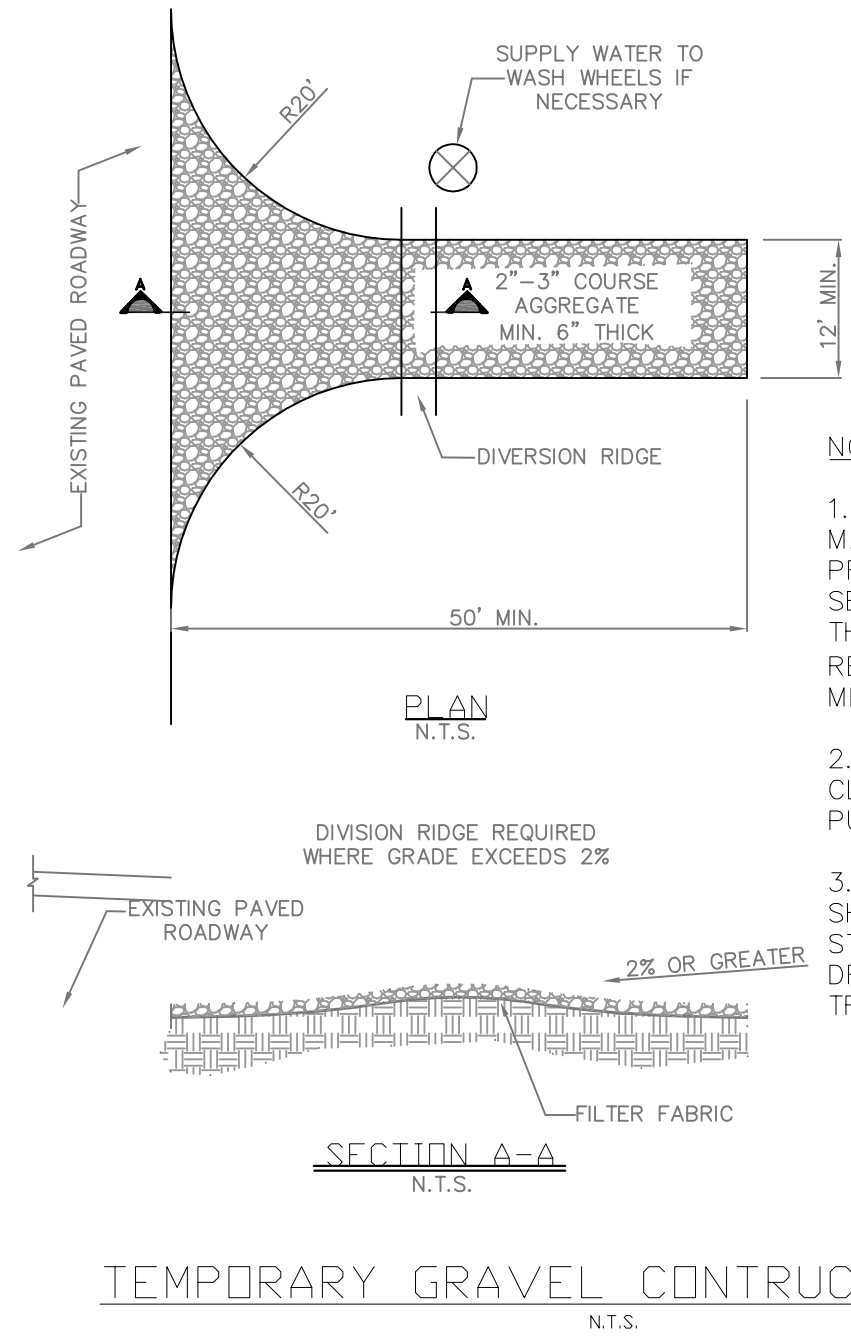
1. THE CONTRACTOR IS RESPONSIBLE FOR FOLLOWING THE BEST EROSION AND SEDIMENT CONTROL PRACTICES AS OUTLINED IN THE PLANS, SPECIFICATIONS AND APPLICABLE WATER MANAGEMENT DISTRICT PERMIT(S) FOR THIS PROJECT.
2. FOR ADDITIONAL INFORMATION ON SEDIMENT AND EROSION CONTROL REFER TO "THE STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWERS MANUAL" FROM THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION (FDER).
3. THIS PLAN INDICATES THE MINIMUM EROSION AND SEDIMENT CONTROL MEASURES REQUIRED FOR THIS PROJECT THE CONTRACTOR IS RESPONSIBLE FOR MEETING ALL APPLICABLE RULES, REGULATIONS AND WATER QUALITY GUIDELINES AND MAY NEED TO INSTALL ADDITIONAL CONTROLS.
4. ALL EXCAVATIONS AND EARTHWORK SHALL BE DONE IN A MANNER TO MINIMIZE WATER TURBIDITY AND POLLUTION. DISCHARGE SHALL BE CONTROLLED AND REROUTED THROUGH FILTERS, SILTATION DIAPERS AND SUMPS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PREVENTION, CORRECTION, CONTROL AND ABATEMENT OF EROSION AND WATER POLLUTION IN ACCORDANCE WITH CHAPTER 62-302, FLORIDA ADMINISTRATIVE CODE.
5. THE CONTRACTOR SHALL PAY FOR ANY WATER QUALITY CONTROL VIOLATIONS FROM ANY AGENCY THAT RESULTS IN FINES BEING ASSESSED TO THE OWNER BECAUSE OF THE CONTRACTOR'S FAILURE TO ELIMINATE TURBID RUNOFF FROM LEAVING THE SITE AND RAISING BACKGROUND LEVELS ABOVE EXISTING BACKGROUND LEVEL.
6. THE SITE CONTRACTOR IS RESPONSIBLE FOR REMOVING THE TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES AFTER COMPLETION OF CONSTRUCTION AND ONLY WHEN AREAS HAVE BEEN STABILIZED.
7. ADDITIONAL PROTECTION - ON-SITE PROTECTION MUST BE PROVIDED THAT WILL NOT PERMIT SILT TO LEAVE THE PROJECT CONFINES DO TO UNFORSEEN CONDITIONS OR ACCIDENTS.
8. SILT FENCES SHALL BE USED ALONG THE PROPERTY LINES TO MINIMIZE OFFSITE SILTATION MITGRATION.
9. SILT FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEASE DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
10. SHOULD THE FABRIC ON A SILT FENCE DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER IS STILL NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
11. FILER FABRIC SHALL BE INSTALL UNDER INLET GRATES AND EXTEND A MINIMUM OF 1 FOOT BEYOND EACH SIDE OF THE INLET STRUCTURE. IF MORE THAN ONE STRIP OF FABRIC IS NECESSARY, THE STRIPS SHALL BE OVERLAPPED 1 FOOT.
12. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH RAINFALL AND AS NEEDED.
13. ANY DISCHARGE FROM DEWATERING ACTIVITY SHALL BE FILTERED AND CONVEYED TO THE OUTFALL IN A MANNER WHICH PREVENTS EROSION AND TRANSPORTATION OF SUSPENDED SOLIDS TO THE RECEIVING OUTFALL.
14. DEWATERING PUMPS SHALL NOT EXCEED THE CAPACITY OF THAT WHICH REQUIRES A CONSUMPTIVE USE PERMIT FROM THE APPLICABLE WATER MANAGEMENT DISTRICT.
15. ALL DISTURBED AREAS SHALL BE GRASSED, FERTILIZED, MULCHED AND MAINTAINED UNTIL A PERMANENT VEGETATIVE COVER IS ESTABLISHED.
16. SOD SHALL BE PLACED IN AREAS WHICH MAY REQUIRE IMMEDIATE EROSION PROTECTION TO ENSURE WATER QUALITY STANDARDS ARE MAINTAINED.
17. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER BARRIER ARE NO LONGER REQUIRED SHALL BE DRESSED TO CONFROM TO THE EXISTING GRADE, PREPARED AND SEEDED.
18. CONTRACTOR SHALL INSURE THAT ALL DRAINAGE STRUCTURES, PIPES, ETC. ARE CLEANED OUT AND WORKING PROPERLY AT TIME OF ACCEPTANCE.
19. FLOATING TURBIDITY BARRIERS WILL BE PLACED OFF SET FROM THE SEAWALL ADJACENT TO THE PROPERTY. IF SEAGRASSES ARE PRESENT BARRIERS WILL NOT BE PLACED OVER THEM. THE FLOATING TURBIDITY BARRIERS SHALL ALSO BE INSTALLED IN A MANNER TO PREVENT MANATEE ENTANGLEMENT.
20. ALL DEATERING, EROSION, AND SEDIMENT CONTROL SHALL REMAIN IN PLACE UNTIL AFTER COMPLETION OF CONSTRUCTION AND SHALL BE REMOVED WHEN AREAS HAVE BEEN STABILIZED.



NOTE: **INSTALL FILTER FABRIC UNDER ALL GRATES TO PREVENT SILT AND CONSTRUCTION DEBRIS FROM ENTERING THE SYSTEM.**



EROSION AND SEDIMENT CONTROL PLAN  
SCALE: 1"=20'



- NOTES:
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.



11390 TEMPLE STREET  
COOPER CITY, FL 33330  
TEL: (854) 434-5905 FAX: (854) 434-5904  
CERTIFICATE OF AUTHORIZATION NUMBER 30230

DATE: REGINA BOBO-JACKSON, P.E.  
FL P.E. NO.: 38550

12 UNIT APPARTMENTS  
2200 MADISON STREET  
HOLLYWOOD, FL

REVISIONS	DESCRIPTION	
	NO.	DATE

GEA PROJECT NO.: 19028  
DATE: 08-15-2019  
SCALE: AS SHOWN  
DESIGNED BY: R.B.J.  
DRAWN BY: L.B.  
CHECKED BY: R.B.J.  
APPROVED BY: R.B.J.

SHEET TITLE  
**EROSION & SEDIMENT CONTROL PLAN**  
C1 of 4

LEGAL DESCRIPTION

THE EAST 1/2 OF LOT 22 BLOCK-2, HOLLYWOOD LITTLE RANCHES AMENDED, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 1, AT PAGE 26, OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA.

GENERAL NOTES:

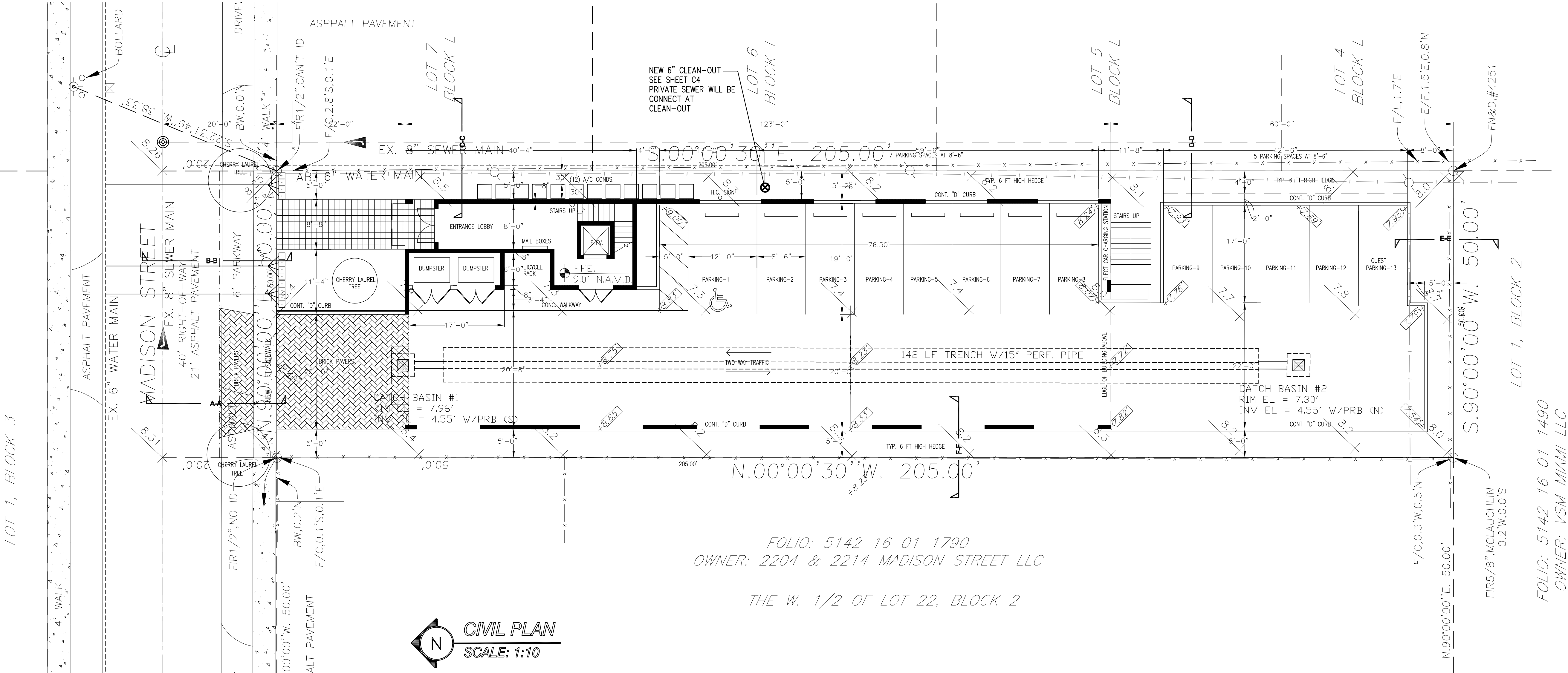
1. BASE SURVEY WAS PROVIDED BY ATLANTIC COAST SURVEYING, INC.
2. ELEVATIONS SHOWN REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D.).
3. HORIZONTAL AND VERTICAL CONTROL SHALL BE PROVIDED BY THE CONTRACTOR'S SURVEYOR. LAYOUT IS THE RESPONSIBILITY OF THE CONTRACTOR.
4. IT IS THE INTENT OF THESE DRAWINGS TO BE IN ACCORDANCE WITH APPLICABLE CODES AND AUTHORITIES HAVING JURISDICTION. ANY DISCREPANCIES BETWEEN THESE DRAWINGS AND APPLICABLE CODES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER AND OWNER REPRESENTATIVE.
5. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL UNDERGROUND UTILITIES VERIFIED AND LOCATED PRIOR TO THE START OF CONSTRUCTION. ALL TRENCH EXCAVATION SHALL PROCEED WITH EXTREME CAUTION. IN THE EVENT THAT EXISTING UTILITIES ARE DAMAGED, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR OR REPLACE SUCH DAMAGES.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR RESETTling ANY DISTURBED EXISTING MANHOLES, VALVE BOXES, BLOW-OFF RISERS OR ANY OTHER POINT OF ACCESSIBILITY TO UTILITIES, AND TO MATCH ASPHALT GRADES, AS REQUIRED, WHETHER SPECIFICALLY SHOWN ON THE DRAWINGS OR NOT.
7. TO AVOID MISUNDERSTANDING AND TO INSURE COMPLIANCE WITH SPECIFICATIONS, BEFORE PURCHASING MATERIALS OR EQUIPMENT FOR THIS WORK, THE CONTRACTOR SHALL FURNISH A COPY OF SHOP DRAWINGS OR ILLUSTRATION SHEETS FOR APPROVAL BY THE ENGINEER. THE APPROVAL OF SHOP OR WORKING DRAWINGS BY THE ENGINEER SHALL NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR ERRONEOUS OR INCONSISTENT DIMENSIONS, NOTATIONS, OMISSIONS OR OTHER ERRORS, OR FOR THE PROPER FUNCTIONING OF THE COMPLETE INSTALLATION.
8. THE LOCATION OF EXISTING FACILITIES WERE PLOTTED FROM AVAILABLE RECORDS. THE CONTRACTOR SHALL FIELD LOCATE ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
9. ALL SIDEWALKS AND PATIOS SHALL BE SLOPED AWAY FROM HOUSE.
10. MAXIMUM GRASS SLOPES SHALL NOT EXCEED 4:1.
11. CONTRACTOR SHALL COORDINATE THIS PLAN WITH THE PLUMBING AND LANDSCAPE PLANS.

SPECIFIC NOTES:

1. AT ALL TIMES DURING CONSTRUCTION, ALL STORMWATER MUST REMAIN ONSITE. NO DISCHARGE IS ALLOWED INTO THE PUBLIC RIGHT OF WAY.
2. SIDEWALKS, PAVEMENT, SWALES AND DRAINAGE SYSTEMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THESE PLANS AND DETAILS.
3. THESE PLANS SHALL BE COORDINATED WITH THE LANDSCAPE PLANS. NO TREE SHALL BE INSTALL SUCH THAT THE SWALE BOTTOM ELEVATIONS AND VOLUMES ARE MINIMIZED.
4. CONTRACTOR SHALL CHECK FOR THE PRESENCE OF A SEWER LATERAL TO THE PROPERTY, IF ONE IS FOUND ITS INTERGITY SHALL BE EVALUATED. IF NONE IS FOUND A NEW LATERAL SHALL BE INSTALLED. SEE DETAIL SHEET C4. COORDINATE ALL NEW WORK WITH THE UTILITIES DEPARTMENT.
5. BE ADVISED THAT ANY ROAD CUTS FOR UTILITIES WITHIN THE CITY RIGHT OF WAY SHALL BE RESTORED TO FULL LANE WIDTH, AND PROVIDE FINAL RESURFACE OF 25-FT. IN EACH DIRECTION OF CUT, THIS APPLIES TO THE PROPOSED ROAD CUTS FOR THE PORPOSED WATER SERVICE LINES.
6. PROVIDE 5 FEET MINIMUM SEPARATION TO ANY EXISTING OR PROPOSED TREE. COORDINATE WITH LANDSCAPING PLAN.

SITE CALCULATIONS:

BUILDING FOOTPRINT	425 SQ FT	4.14 %
PARKING AREA	6,170 SQ FT	60.19 %
WALKWAYS	325 SQ FT	3.17 %
WALKWAYS	235 SQ FT	2.29 %
GREEN AREA	3,095 SQ FT	30.19 %
TOTAL AREA	10,250 SQ FT	100.00 %
TOTAL PERVIOUS AREA	3,095 SQ FT	30.19 %
TOTAL IMPERVIOUS AREA	7,155 SQ FT	69.81 %



FOLIO: 5142 16 01 1790  
OWNER: 2204 & 2214 MADISON STREET LLC

THE W. 1/2 OF LOT 22, BLOCK 2

CIVIL PLAN  
SCALE: 1:10

LEGEND	
	EXISTING GRADE
	PROPOSED ELEVATION
	PROP. 5/8" WATER METER
	PROP. 6" CLEAN-OUT
	SWALE BOTTOM
	OVERHEAD LINES
	EXIST. POWER POLE
	PROPERTY LINE
	EX. CHAINLINK FENCE

12 UNIT APARTMENTS  
2200 MADISON STREET  
HOLLYWOOD, FL

REVISIONS	DATE	DESCRIPTION

GEA PROJECT NO.: 19028  
DATE: 08-15-2019  
SCALE: AS SHOWN  
DESIGNED BY: R.B.J.  
DRAWN BY: L.B.  
CHECKED BY: R.B.J.  
APPROVED BY: R.B.J.

SHEET TITLE

CIVIL PLAN

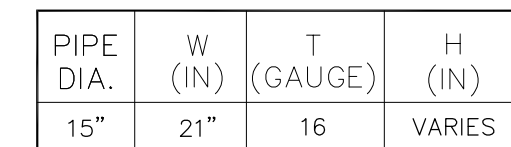
C2 OF 4

GATOR ENGINEERING  
ASSOCIATES, INC.  
11390 TEMPLE STREET  
COOPER CITY, FL 33330  
TEL: (954) 434-5905 FAX: (954) 434-5904  
CERTIFICATE OF AUTHORIZATION NUMBER 30290

SEAL

DATE: 08-15-2019  
REGINA BOBO-JACKSON, P.E.  
FL P.E. NO.: 38550





1. ALUMINUM SHEET OF SAME THICKNESS (GAUGE) AS PIPE SHALL BE WELDED TO CLOSE OPENING AT THE TOP OR BOTTOM.
2. NEOPRENE ADHESIVE BACKED GASKET, OR APPROVED EQUAL (1" x 2") SHALL BE INSTALLED ON THE SIDES AND TOP OF OF ALL BAFFLES AND BOTTOM OF ALL WEIRS.
3. POLLUTION RETARDANT BAFFLE TO BE FASTENED IN PLACE WITH 1/2" x 4" STAINLESS STEEL "RED HEAD" ANCHORS, OR APPROVED EQUAL. ALL MOUNTING HARDWARE TO BE STAINLESS STEEL.
4. FIBERGLASS BAFFLES SHALL NOT BE ALLOWED.
5. BRACKETS MAY BE ADDED TO FLAT BARS TO EASE INSTALLATION IN ROUND STRUCTURES. SPACING TO MATCH HOLES IN FLAT BARS.
6. PIPE CORRUGATION SHALL BE ANNULAR.

POLLUTION RETARDANT BAFFLE DETAILS



- 1- MATERIAL: ASTM-A48  
CLASS 30B GRAY IRON  
2- FRAME WT: 335 LBS. APP.  
3- GRATE WT: 265 LBS. APP.



INLET FRAME AND GRATE  
NOT TO SCALE



1. FILTER FABRIC PER F.D.O.T. STD. INDEX #199 SHALL BE USED AT EACH SIDE AND ON TOP, AND AT EACH END OF FRENCH DRAIN TRENCH.
2. THE DEPTH OF THE EXFILTRATION TRENCH SHALL BE 4.80 FEET.
3. AFTER THE BALLAST ROCK HAS BEEN PLACED TO THE PROPER ELEVATION IT SHALL BE CAREFULLY VIBRATED OR COMPACTED IN ORDER TO ALLOW FOR INITIAL SETTLEMENT THAT MAY OCCUR. IF IT DOES TAKE PLACE, ADDITIONAL BALLAST ROCK WILL BE ADDED TO RESTORE THE BALLAST ROCK TO THE PROPER ELEVATION SO THAT THE EXFILTRATION TRENCH CAN BE COMPLETED IN ACCORDANCE WITH THE DETAIL.



DATE: \_\_\_\_\_  
REGINA BOBO-JACKSON, P.E.  
FL P.E. NO.: 38550

12 UNIT APARTMENTS  
2200 MADISON STREET  
HOLLYWOOD, FL

[illegible]

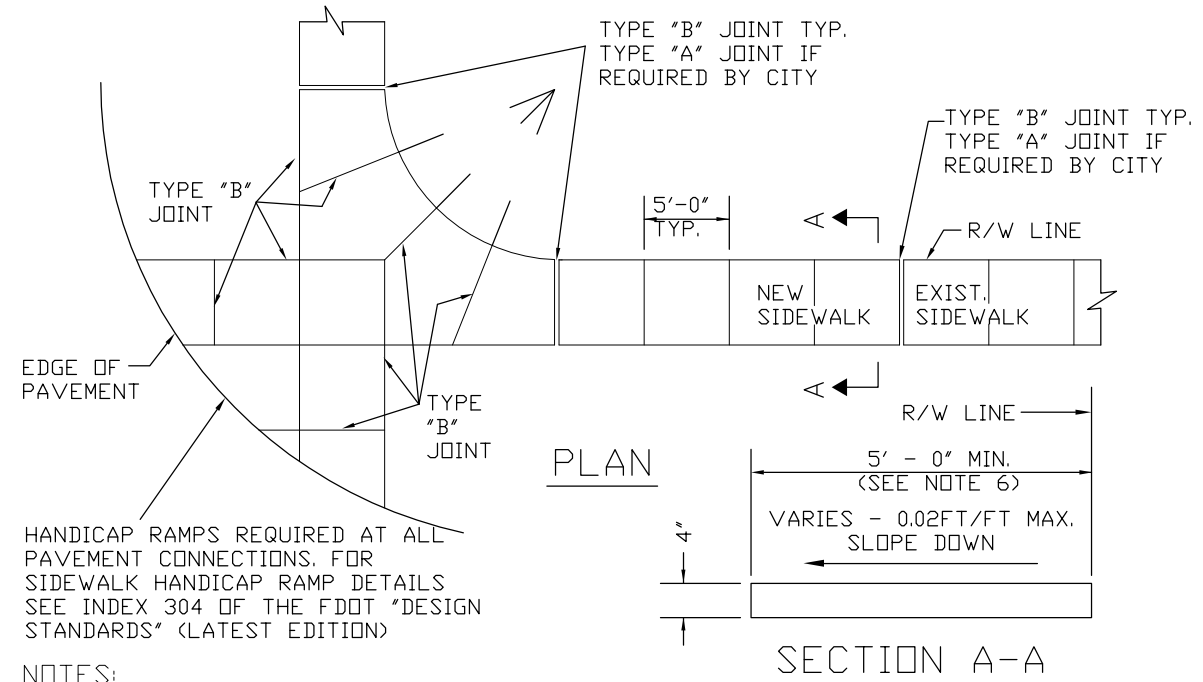
EA PROJECT NO.: 19028  
DATE: 08-15-2019  
SCALE: AS SHOWN  
DESIGNED BY: R.B.J.  
DRAWN BY: L.B.  
CHECKED BY: R.B.J.  
APPROVED BY: R.B.J.

SHEET TITLE

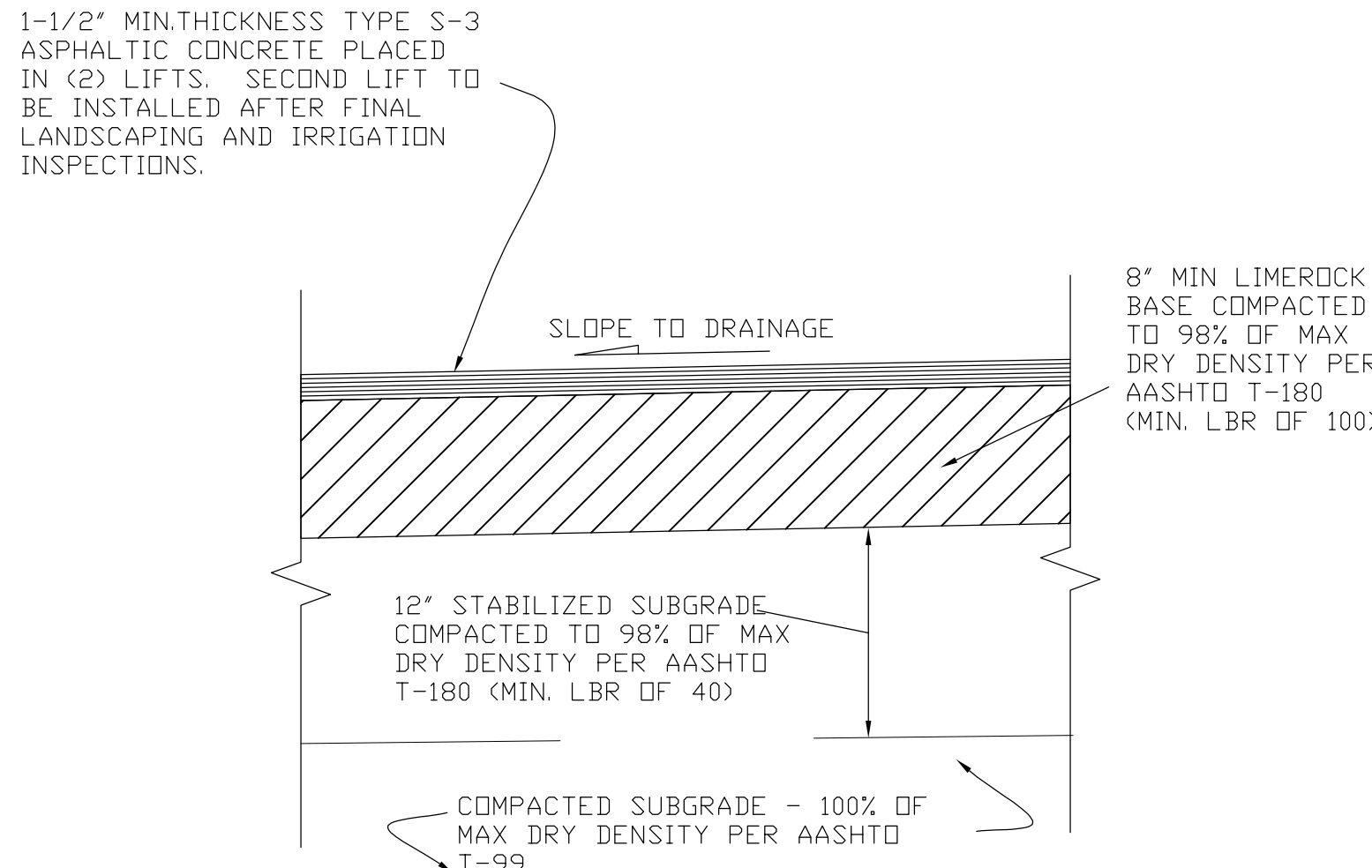
## SECTIONS & DETAILS

C3 OF 4

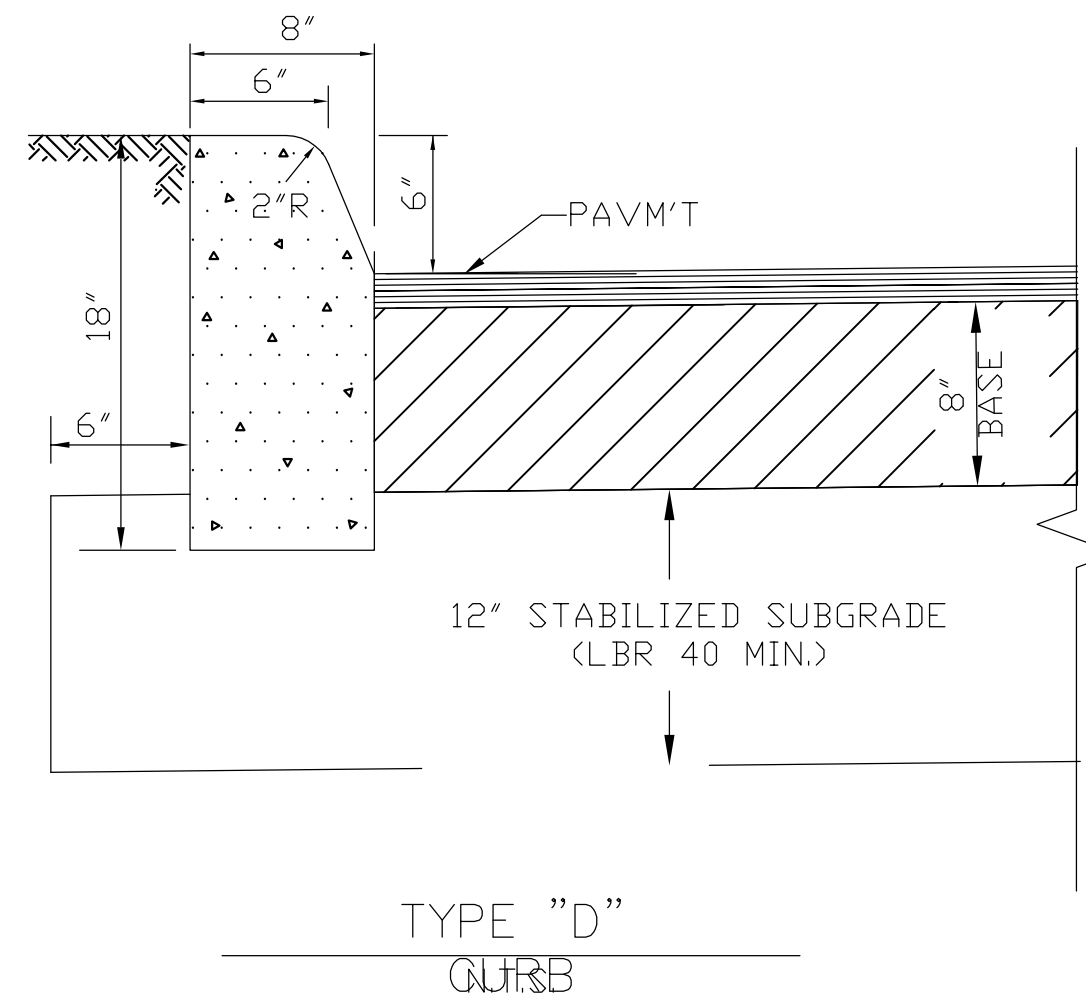




SIDEWALK CONSTRUCTION DETAIL  
N.T.S.



ASPHALTIC CONCRETE PAVEMENT DETAIL  
N.T.S.



CURB NOTES:

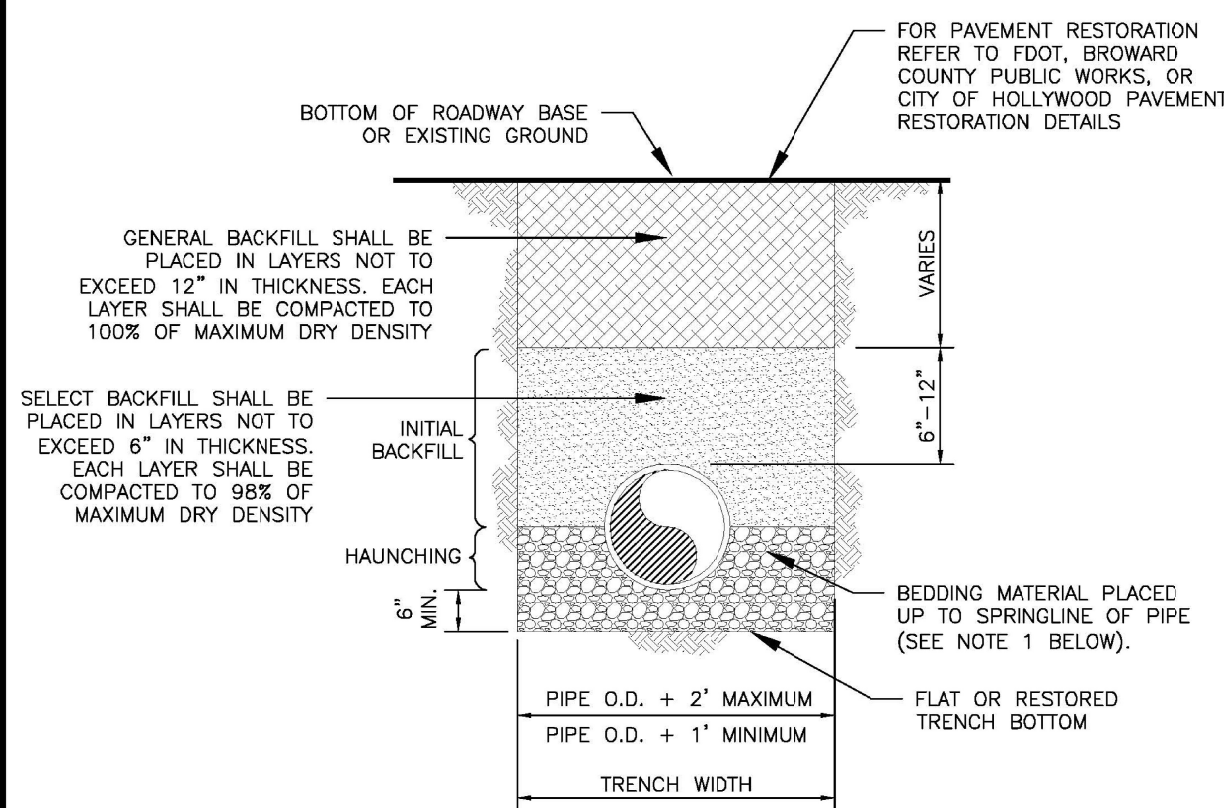
- PROVIDE 1/4" WIDE CONTRACTION JOINT A MINIMUM OF 1-1/2" DEEP AND AT 10' SPACING MAXIMUM FOR ALL CURBS.
- CONCRETE SHALL BE 3000 P.S.I. MIN. @ 28 DAYS.
- TYPE "D" CURB FOR PARKING LOTS MAY BE INSTALLED AS "TRENCHED" D CURB WITH EXTRUDED TOP AT THE CONTRACTOR'S OPTION. TRENCHED CURB REQUIRES CITY TRENCH INSPECTION AND APPROVAL. EXTRUDED CURB MUST BE PLACED WITHIN 15 MINUTES OF PLACEMENT OF TRENCH CONCRETE. EXTRUDED CURB AND TRENCH CONCRETE SHALL BE MONOLITHIC.

TYPE "D" CURB DETAIL  
N.T.S.

#### WATER METER SERVICE NOTES:

- SUCCESSIVE TAPS INTO THE WATER MAIN SHALL BE SPACED NOT LESS THAN 18" ON CENTER.
- P.E. TUBING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF AWWA STANDARD C301, "POLYETHYLENE (PE) PRESSURE PIPE AND TUBING, 1/2 IN. (13mm) THROUGH 3 IN. (76 mm), FOR WATER SERVICE".
- MINIMUM SERVICE PIPE DIAMETER SHALL BE 1" FOR SINGLE OR DUAL 3/4" OR SINGLE 1" DIAMETER METERS.
- MINIMUM SERVICE PIPE DIAMETER SHALL BE 2" FOR SINGLE OR DUAL 1-1/2" OR SINGLE 2" DIAMETER METERS.
- FOR METER DIAMETERS LARGER THAN 2", THE MINIMUM SERVICE PIPE DIAMETER SHALL BE THE SAME AS THE METER DIAMETER.
- APPROVED COPPER TUBING MAY BE USED AT THE CITY'S DISCRETION.
- FOR NEW METER INSTALLATIONS, ALL SADDLES, VALVES, PIPING, FITTINGS, CURB STOPS, METER VALVES, METER COUPLINGS, METER VAULTS AND COVERS SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR. THE WATER METERS WILL BE PROVIDED AND INSTALLED BY THE CITY OF HOLLYWOOD (NEW ACCOUNTS).
- FOR METER RELOCATIONS, ALL SADDLES, VALVES, PIPING, FITTINGS, CURB STOPS, METER VALVES, METER COUPLINGS, METER VAULTS AND COVERS SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR. THE EXISTING WATER METER TO BE RELOCATED AND INSTALLED BY CONTRACTOR.
- FOR EXISTING METERS ABUTTING THE RIGHT-OF-WAY THAT ARE BEING DISCONNECTED FROM EXISTING MAINS AND RECONNECTED TO NEW MAINS, THE CONTRACTOR SHALL:
  - CUT AND PLUG THE EXISTING SERVICE LINE AT THE MAIN AND AT THE METER, AND REMOVE THE EXISTING BALL VALVE CURB STOP.
  - FURNISH AND INSTALL SERVICE SADDLE, CORPORATION STOP OR SERVICE VALVE AND VALVE BOX, PIPING AND FITTINGS UP TO AND INCLUDING THE BALL VALVE CURB STOP.
- THE ELEVATION AT THE TOP OF THE METER BOX SHALL MATCH THE ELEVATION OF THE BACK OF SIDEWALK, WHENEVER PRACTICAL.
- AS PART OF THE SERVICE INSTALLATION, THE CONTRACTOR SHALL RESTORE THE RIGHT-OF-WAY TO MATCH EXISTING CONDITIONS, INCLUDING ROADWAY PAVEMENT, PAVEMENT MARKINGS AND RPMs, CONCRETE CURBS, SIDEWALKS, RAMPS (INCLUDING DETECTABLE WARNING SURFACE), SODDING, AND ALL OTHER IMPROVEMENTS REMOVED OR DAMAGED DURING THE SERVICE INSTALLATION.
- FOR UNPAVED AREAS, THE MINIMUM GROUND COVER ACCEPTED BY THE CITY IS SODDING.

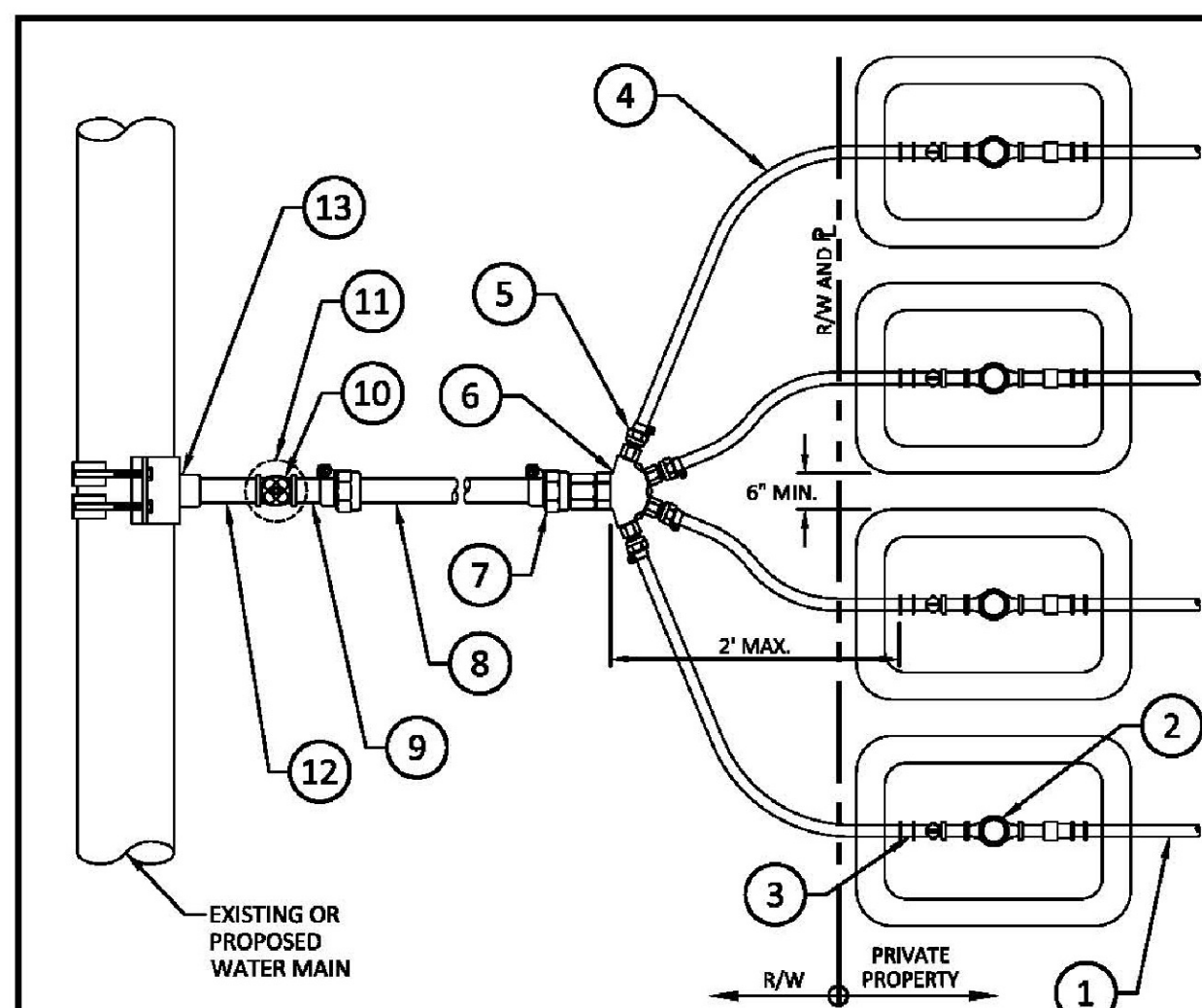
ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 11/06/2017
DRAWN: EAM	WATER METER SERVICE NOTES FOR 5/8" THROUGH 2" METERS	DRAWING NO. W-07
APPROVED: XXX		



#### NOTES:

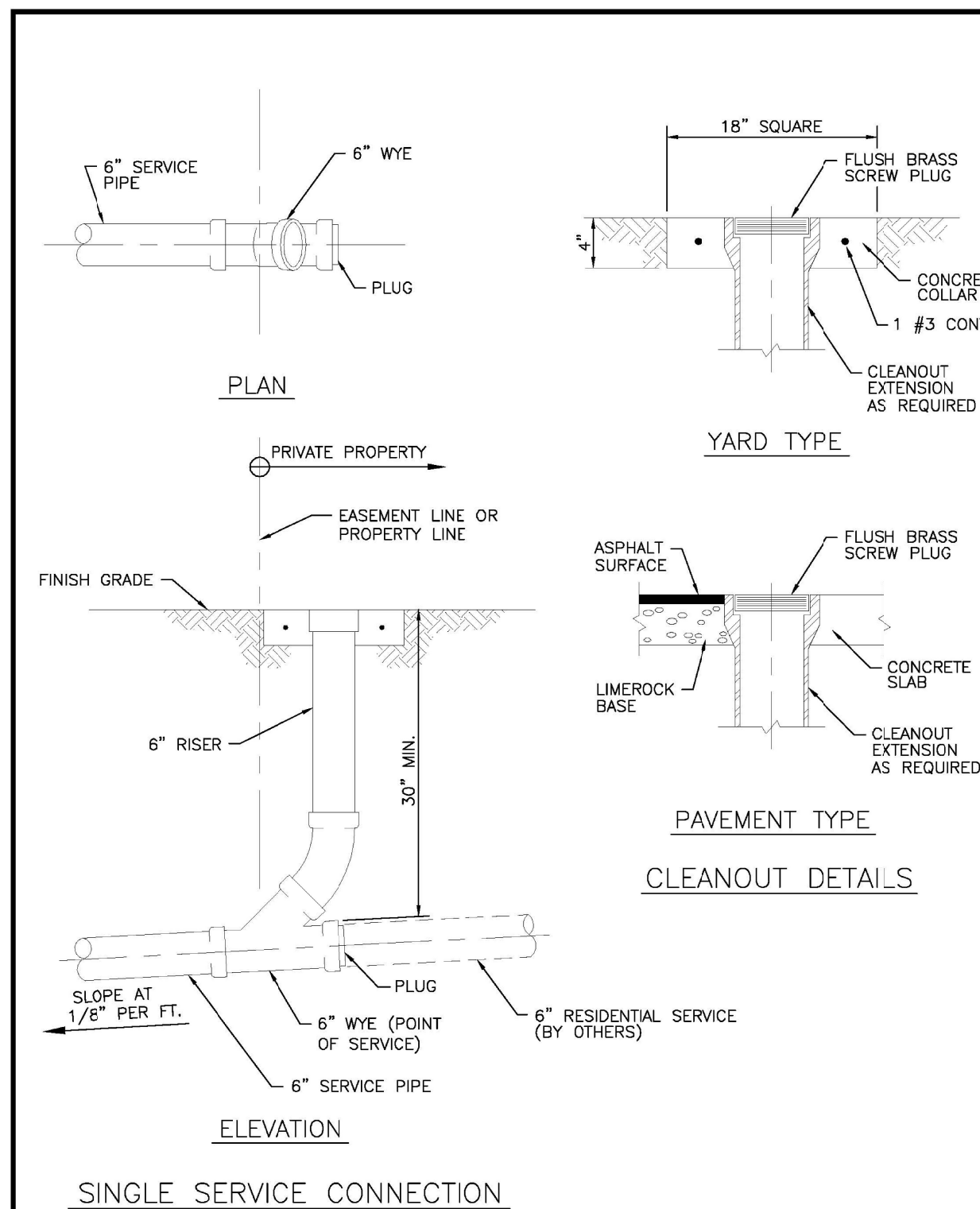
- WHEN PIPE INSTALLATION IS ABOVE THE GROUND WATER TABLE ELEVATION, OR WHENEVER BEDDING COPPER PIPE UNDER ANY CONDITION, BEDDING MATERIAL SHALL BE CLEAN SANDY SOIL IF AVAILABLE WITHIN THE LIMITS OF CONSTRUCTION. IMPORTED BEDDING SHALL BE WELL GRADED, WASHED CRUSHED STONE (OR DRAINFIELD LIMEROCK). CRUSHED STONE SHALL CONSIST OF HARD, DURABLE, SUB-ANGULAR PARTICLES OF PROPER SIZE AND GRADATION, AND SHALL BE FREE FROM ORGANIC MATERIAL, WOOD, TRASH, SAND, LOAM, CLAY, EXCESS FINES, AND OTHER DELETERIOUS MATERIALS.
- ALL BEDDING MATERIAL SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY BEFORE ANY PIPE IS LAID. FOR ADDITIONAL MATERIAL SPECIFICATIONS REFER TO SPECIFICATION SECTION 02222, "EXCAVATION AND BACKFILL FOR UTILITIES".
- DENSITY TESTING SHALL BE IN ACCORDANCE WITH AASHTO T-180 AND ASTM D-3017.
- BACKFILL TO COMPLY WITH FDOT DESIGN STANDARD 125-8.

ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 06/08/2014
DRAWN: EAM	PIPE LAYING CONDITION TYPICAL SECTION (P.V.C.)	DRAWING NO. G-03
APPROVED: XXX		

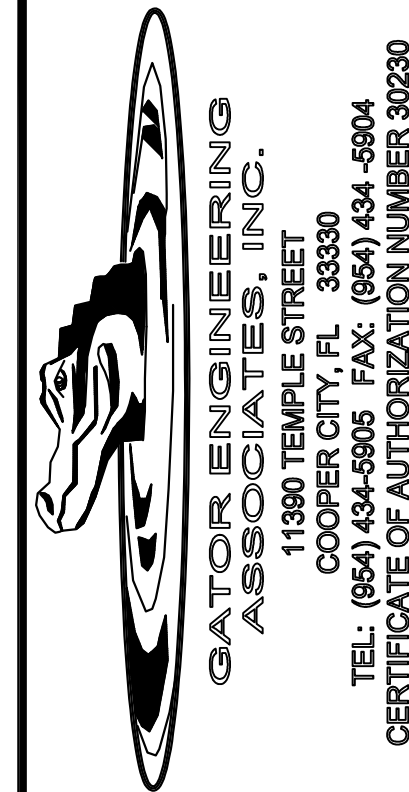


- PROPERTY OWNER'S SERVICE PIPE
- 3/4", 3/8" OR 1" METER INSTALLATION (REFER TO "SINGLE SERVICE PLAN" ON STANDARD DETAIL W-06) (TYP. FOR 4)
- COUPLING W/1" COMPRESSION FOR HDPE X 3/4" MIP
- 1" HDPE SERVICE PIPE TO METER (TYP. FOR 4)
- COUPLING W/1" MIP X 1" COMPRESSION FOR HDPE (TYP. FOR 4)
- MULTI-SERVICE "Y" W/SINGLE 2" FIP INLET AND (4)-1" FIP OUTLETS (MULTI SERVICE BRASS Y)
- COUPLING WITH 2" COMPRESSION FOR HDPE X 2" MIP
- 2" HDPE WATER SERVICE PIPE
- COUPLING W/2" BRASS THREAD X 2" COMPRESSION FOR HDPE
- PROP. 2" GATE VALVE W/2" OPERATING WHEEL
- PROP. VALVE BOX W/LID AND RISER. FOR UNPAVED AREAS, INSTALL 24"x24"x8" THICK CONC. COLLAR
- PROPOSED 2" BRASS NIPPLE
- PROP. DOUBLE STRAP SERVICE SADDLE FOR D.I.P. OR BAND SADDLE FOR PVC
- ALL FITTINGS TO BE BRASS.

ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 11/06/2017
DRAWN: EAM	METER BANK INSTALLATION FOR FOUR 3/8", 3/4" AND/OR 1" METERS	DRAWING NO. W-06.1
APPROVED: XXX		



ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 06/08/2014
DRAWN: EAM	SEWER SERVICE CONNECTION AND CLEANOUT AT PROPERTY LINE	DRAWING NO. S-12
APPROVED: XXX		



SEAL

DATE: 08/15/2019  
DRAWN: R.B.J.  
CHECKED: R.B.J.  
P.E. NO.: 38550

12 UNIT APARTMENTS  
2200 MADISON STREET  
HOLLYWOOD, FL

REVISIONS	DATE	DESCRIPTION

GEA PROJECT NO.: 19028  
DATE: 08-15-2019  
SCALE: AS SHOWN  
DESIGNED BY: R.B.J.  
DRAWN BY: L.B.  
CHECKED BY: R.B.J.  
APPROVED BY: R.B.J.

SHEET TITLE

DETAILS

C4 OF 4



**DRAINAGE CALCULATION**

**FOR**

**12 UNIT APARTMENTS  
2200 MADISON STREET  
HOLLYWOOD, FLORIDA  
AUGUST, 2019**

**Prepared By:**

**Gator Engineering Associates, Inc.  
11390 Temple Street  
Cooper City, Florida 33330**

**GEC Project No. 19028**

Signed: \_\_\_\_\_  
Regina Bobo-Jackson, P.E.

P.E. No. 0038550

Dated: \_\_\_\_\_  
Pages 1-23



## I. INTRODUCTION

The project, New Triplex, is proposed on a 10,2509 square feet (0.235 Ac) site located at within the City of Hollywood, Broward County, Florida. The project proposes the development of a three story building containing twelve (12) rental apartments. restaurant.

The site drainage is design to satisfy the Broward County Surface Water Management Division and SFWMD drainage criteria and regulations.

## II. GIVEN PARAMETERS

- The average wet season water table is 1.5' NAVD per the FCAWSG map.
- Flood Zone: "AH"  
Map No.: 125113 0569H  
Base Flood Elevation: 9
- The average existing site grade is 8.04' NAVD
- Site elevations

Road Crown (Madison Street)  
Proposed Finish Floor (Lobby)

Highest Elevation = 8.31' NAVD  
Elevation = 9.00' NAVD

## III. SITE BREAKDOWN

	EXISTING	PROPOSED
• Total	(0.235 Ac)	(0.235 Ac)
• Impervious		
Buildings	(0.000 Ac)	(0.009 Ac)
Pavement	(0.000 Ac)	(0.142 Ac)
Walkways	(0.000 Ac)	(0.013 Ac)
• Pervious	(0.235 Ac)	(0.071 Ac)

# STORM WATER MANAGEMENT AND FLOOD ROUTING CALCULATIONS

Project Name: 2200 Madison Street - Pre- Development Condition  
Project Number: 19028

Designed: LK  
Checked: RBJ

## I. Site Data

### A. Acreage

Total 0.235 ac

#### 1. Impervious

a. Pavement 0.000 ac  
b. Sidewalk 0.000 ac  
c. Building 0.000 ac

Total Impervious 0.000 ac

#### 2. Water Management

a. Lake 0.000 ac  
b. Dry Retention 0.000 ac  
c. Swale 0.000 ac

Total Water Management 0.000 ac

#### 3. Pervious

a. Grass area 0.235 ac  
b. Green area Perimeter 0.000 ac  
c. Green area near LME 0.000 ac  
d. Lake Bank 0.000 ac  
e. L.M.E. 0.000 ac  
f. N/A 0.000 ac  
g. N/A 0.000 ac

Total Pervious 0.235 ac

### B. Minimum elevations

1. Roads and Parking 8.31 ft-NAVD  
2. Finished Floor 9.00 ft-NAVD  
3. FEMA Flood Elevation 9.00 ft-NAVD

### C. Allowable discharge

1. For the C-18 Canal (No Connection) 0.00 CSM  
2. Allowable discharge for this project 0.0000 CFS

### D. Water level elevation

1. Wet season water table 1.50 ft-NAVD  
2. Control elevation 1.50 ft-NAVD  
3. Receiving body water level N/A ft-NAVD

### E. Rainfall amounts

1. Design Storm (10-year 1 day) 9.00 inches  
2. Design Storm (25-year 3 day) 15.00 inches  
3. Finish Floor (100-year 3 day) 18.00 inches



# **STORM WATER MANAGEMENT AND FLOOD ROUTING CALCULATIONS**

Project Name: 2200 Madison Street - Pre- Development Condition  
Project Number: 19028

Designed:	LK
Checked:	RBJ

## **II. Water Quality Computations**

1. Compute the first inch of runoff from the developed project
  - = 1 in X total area X (1ft/12in)
  - = 0.020 ac-ft for the first inch of runoff
  
2. Compute 2.5 inches times the percentage of imperviousness
  - a. Site area for water quality pervious/impervious calculations only:
    - = Total project - (water surface + roof)
    - = 0.235 ac of site area for water quality pervious/impervious
  - b. Impervious area for water quality pervious/impervious calculation only:
    - = (site area for water quality pervious/impervious) - pervious
    - = 0.000 ac if impervious area for water quality pervious/impervious
  - c. Percentage of imperviousness for water quality:
    - = (Impervious area for water quality/site area for water quality) 100%
    - = 0.00 % impervious
  - d. For 2.5 inches times the percentage impervious:
    - = 2.5 X percent impervious
    - = 0.00 inches to be treated
  - e. Compute volume required for water quality detention:
    - = Inches to be treated X (total site - Lake)
    - = 0.000 ac-ft for the 2.5 inches times the percentage imperviousness
  
3. Since the
  - 0.020 ac-ft for the first inch of runoff is greater than
  - 0.000 ac-ft for the 2.5 inches times the percentage imperviousness
  - 0.020 ac-ft controls**

Storage (ac-ft)	Stage (ft)
0.00	7.50
0.02	7.68
0.05	8.00

# **STORMWATER MANAGEMENT AND FLOOD ROUTING CALCULATIONS**

Project Name:  
Project Number:

2200 Madison Street - Pre- Development Condition  
19028

Designed:  
Checked:

LK
RBJ

## **III. SCS Curve Number**

### 1. Average site finished grade

Land use	Area-A (ac)	Grade-G (ft)	A X G
Pavement	0.0000	6.00	0.00
Sidewalk	0.0000	0.00	0.00
Building	0.0000	7.37	0.00
Lake	0.0000	0.00	0.00
Green area near LME	0.0000	0.00	0.00
Green area Perimeter	0.0000	0.00	0.00
Grass area	0.2350	7.90	1.86
N/A	0.0000	0.00	0.00
N/A	0.0000	0.00	0.00
Lake Bank	0.0000	0.00	0.00
L.M.E.	0.0000	0.00	0.00
Total	0.2350		1.86
Weighted Site Grade			7.90 ft-NGVD

### 2. Average depth to water table will be

= Average site grade - average water table/control elevation  
= 6.40 ft

### 3. Soil type Flatwoods

### 4. From the soil storage calculation sheet, inches of moisture stored under the pervious areas for this type of soil is:

6.75 inches

### 5. Compute available soil storage

= Storage available X pervious area  
= 0.13 ac-ft available soil storage onsite

### 6. Convert available soil storage to site-wide moisture storage, S

= Available soil storage onsite/site area  
= 6.75 inches of site-wide storage, S

### 7. SCS Curve Number, CN

=  $1000/(S+10)$   
= 60 SCS Curve Number



# Gator Engineering Associates, Inc.

11390 Temple Street, Cooper City, FL-33330

Tel 954.434.5905 - Fax 954.434.5904

## STORM WATER MANAGEMENT AND SOIL STORAGE CALCULATION

Project Name: 2200 Madison Street - Pre- Development Condition  
Project Number: 19028

Designed: LK  
Checked: RBJ

Depth to Water Table (feet)	Coastal (1)		Flatwoods (2)		Depressional (3)	
	Cumulative Water Storage (inches)	Compacted Water Storage (inches)	Cumulative Water Storage (inches)	Compacted Water Storage (inches)	Cumulative Water Storage (inches)	Compacted Water Storage (inches)
1	0.60	0.45	0.60	0.45	0.60	0.45
2	2.50	1.88	2.50	1.88	2.10	1.58
3	6.60	4.95	5.40	4.05	4.40	3.30
4	10.90	8.18	9.00	6.75	6.80	5.10

- (1) Sandy Soil 0-40" thick with water tables dropping below 40" - St. Lucie series is representative.  
(2) Water tables 15"-40" - Immokalee series is representative  
(3) Water tables above ground - 15" - Riviera and Pompano series are representative

\* 4 feet is the maximum depth of percolation assumed possible in three days for any soil.

- A. From the calculation the average depth to the water table is  
B. The Soil Type is  
C. Assuming 25% compaction  
D. Inches of moisture stored under pervious area

6.40 ft  
Flatwoods

Depth to Water Table (feet)	Compacted Water Storage (inches)
3.00	4.05
6.40	6.75
4.00	6.75

# SOUTH FLORIDA WATER MANAGEMENT DISTRICT FLOOD ROUTING CALCULATIONS

Project Name: 2200 Madison Street - Pre- Development Condition  
Project Number: 19028

Designed:  
Checked:

LK
RBJ

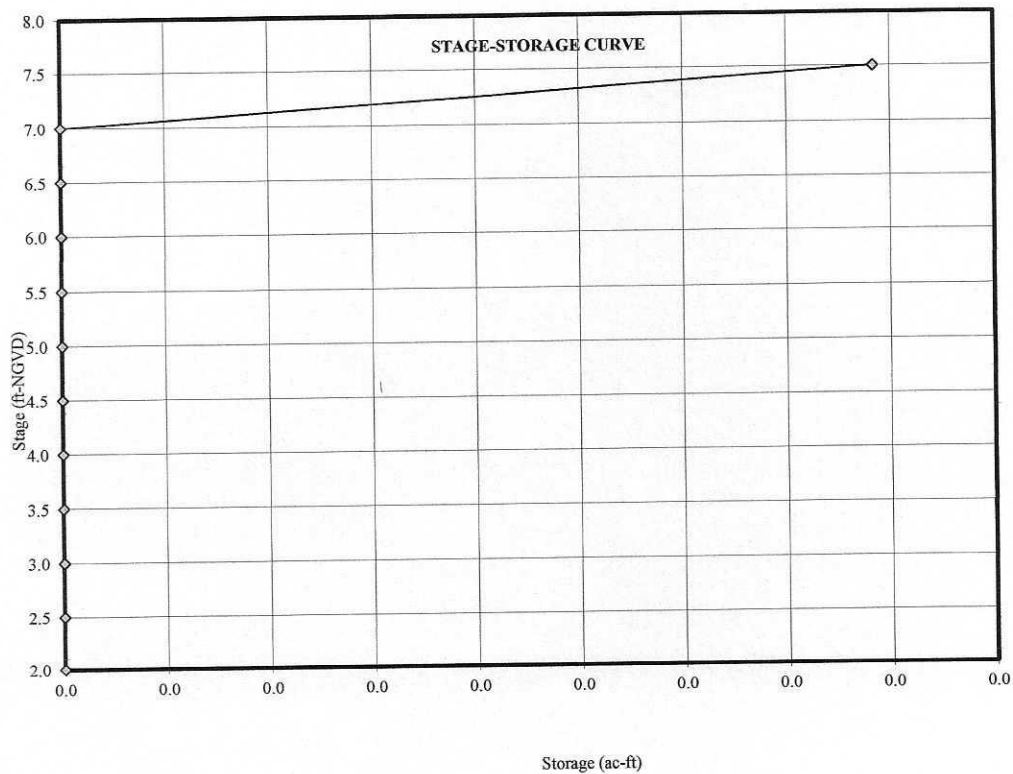
## III. Computations

### C. Project surface storage

Land use	Start ft	End ft	Area Acres
Pavement	0.00	0.00	0.0000
Sidewalk	0.00	0.00	0.0000
Building	0.00	0.00	0.0000
Green area Perimeter	0.00	0.00	0.0000
Grass area	7.30	8.50	0.2350
Green area near LME	0.00	0.00	0.0000
Berm	0.00	0.00	0.0000
N/A	0.00	0.00	0.0000
Lake	0.00	0.00	0.0000
Lake Bank	0.00	0.00	0.0000
L.M.E.	0.00	0.00	0.0000

2. For Stage-Storage curve data, please refer to table attached.

3. Stage-Storage curve.





# **STORM WATER MANAGEMENT AND FLOOD ROUTING CALCULATIONS** **STAGE - STORAGE CALCULATION**

Project Name: 2200 Madison Street - Pre- Development Condition  
 Project Number: 19028

## **Stage-Storage Curve Data**

Stage Storage Curve Data											
Sub area	Grass area		Lake		Sidewalk		Pavement		L.M.E.		Total Storage ac-ft
Low El.	7.30		0.00		0.00		0.00		0.00		
High El.	8.50		0.00		0.00		0.00		0.00		
Area (ft^2)	10236.60		0.00		0.00		0.00		0.00		
Area (acres)	0.235		0.000		0.000		0.000		0.000		
Stage (NAVD)	Linear Stor.	Vert. Stor.	Linear Stor.	Vert. Stor.	Linear Stor.	Vert. Stor.	Linear Stor.	Vert. Stor.	Linear Stor.	Vert. Stor.	
1.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05
8.50	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14

Project Name: 2200 Madison Street

Reviewer: RBJ

Project Number: 19028

Period Begin: Jan 01, 2000;0000 hr End: Jan 16, 2000;0000 hr Duration: 360 hr

Time Step: 0.2 hr, Iterations: 10

## Basin 1: Project Site

Method: Santa Barbara Unit Hydrograph

Rainfall Distribution: SFWMD - 3day

Design Frequency: 25 year

3 Day Rainfall: 15 inches

Area: 0.235 acres

Ground Storage: 6.75 inches

Time of Concentration: 0.1 hours

Initial Stage: 7.3 ft NGVD

Stage (ft NGVD)	Storage (acre-ft)
7.50	0.00
8.00	0.05
8.50	0.14

## User Specified Rainfall Distribution: User1

Time (hr)	Rainfall (percent)
0.00	0.00

## STRUCTURE MAXIMUM AND MINIMUM DISCHARGES

Struc	Max (cfs)	Time (hr)	Min (cfs)	Time (hr)
-------	-----------	-----------	-----------	-----------

## BASIN MAXIMUM AND MINIMUM STAGES

Basin	Max (ft)	Time (hr)	Min (ft)	Time (hr)
Project Site	8.72	73.00	7.30	0.00

## BASIN WATER BUDGETS (all units in acre-ft)

Basin	Total Runoff	Structure Inflow	Structure Outflow	Initial Storage	Final Storage	Residual
Project Site	0.18	0.00	0.00	0.00	0.18	0.00



Project Name: 2200 Madison Street

Reviewer: RBJ

Project Number: 19028

Period Begin: Jan 01, 2000;0000 hr End: Jan 16, 2000;0000 hr Duration: 360 hr

Time Step: 0.2 hr, Iterations: 10

## Basin 1: Project Site

Method: Santa Barbara Unit Hydrograph

Rainfall Distribution: SEWMD - 3day

Design Frequency: 100 year

3 Day Rainfall: 18 inches

Area: 0.235 acres

Ground Storage: 6.75 inches

Time of Concentration: 0.1 hours

Initial Stage: 7.3 ft NGVD

Stage (ft NGVD)	Storage (acre-ft)
7.50	0.00
8.00	0.05
8.50	0.14

User Specified Rainfall Distribution: User1

Time (hr)	Rainfall (percent)
0.00	0.00

## STRUCTURE MAXIMUM AND MINIMUM DISCHARGES

Struc	Max (cfs)	Time (hr)	Min (cfs)	Time (hr)

## BASIN MAXIMUM AND MINIMUM STAGES

Basin	Max (ft)	Time (hr)	Min (ft)	Time (hr)
Project Site	9.01	73.00	7.30	0.00

## BASIN WATER BUDGETS (all units in acre-ft)

Basin	Total Runoff	Structure Inflow	Structure Outflow	Initial Storage	Final Storage	Residual
Project Site	0.23	0.00	0.00	0.00	0.23	0.00

## **POST DEVELOPMENT STAGE STORAGE CALCULATIONS**



**STORM WATER MANAGEMENT AND  
FLOOD ROUTING CALCULATIONS**

Project Name: 2200 Madison Street - Post Development Condition  
Project Number: 19028

Designed:	LK
Checked:	RBJ

**I. Site Data**

**A. Acreage**

**Total** 0.235 ac

**1. Impervious**

a. Pavement	0.142 ac
b. Sidewalk	0.013 ac
c. Building	0.009 ac

**Total Impervious** 0.164 ac

**2. Water Management**

a. Lake	0.000 ac
b. Dry Retention	0.000 ac
c. Swale	0.000 ac

**Total Water Management** 0.000 ac

**3. Pervious**

a. Swale Area	0.071 ac
b. Green Area	0.000 ac
c. Swale Area	0.000 ac
d. Green Area	0.000 ac
e. Swale Area	0.000 ac
f. Other Green Areas	0.000 ac
g. NA	0.000 ac

**Total Pervious** 0.071 ac

**B. Minimum elevations**

1. Driveway and Parking	8.31 ft-NAVD
2. Finished Floor	9 ft-NAVD
3. FEMA Flood Elevation	9.00 ft-NAVD

**C. Allowable discharge**

1. No Waterbody Connection	0.00 CSM
2. Allowable discharge for this project	0.0000 CFS

**D. Water level Elevation**

1. Wet season water table	1.50 ft-NAVD
2. Control elevation	1.50 ft-NAVD
3. Receiving body water level	NA ft-NAVD

**E. Rainfall amounts**

1. Design Storm (10-year 1 day)	9.20 inches
2. Design Storm (25-year 3 day)	14.00 inches
3. Finish Floor (100-year 3 day)	18.00 inches

## STORM WATER MANAGEMENT AND FLOOD ROUTING CALCULATIONS

Project Name: 2200 Madison Street - Post Development Condition  
Project Number: 19028

Designed  
Checked:

### III. Computations

1. Compute the first inch of runoff from the developed project
  - = 1 in X total area X (1ft/12in)
  - = 0.020 ac-ft for the first inch of runoff
2. Compute 2.5 inches times the percentage of imperviousness
  - a. Site area for water quality pervious/impervious calculations only:
    - = Total project - (water surface + roof)
    - = 0.226 ac of site area for water quality pervious/impervious
  - b. Impervious area for water quality pervious/impervious calculation only:
    - = (site area for water quality pervious/impervious) - pervious
    - = 0.155 ac if impervious area for water quality pervious/impervious
  - c. Percentage of imperviousness for water quality:
    - = (Impervious area for water quality/site area for water quality) 100%
    - = 68.58 % impervious
  - d. For 2.5 inches times the percentage impervious:
    - = 2.5 X percent impervious
    - = 1.71 inches to be treated
  - e. Compute volume required for water quality detention:
    - = Inches to be treated X (total site - Lake)
    - = 0.034 ac-ft for the 2.5 inches times the percentage imperviousness
3. Since the
  - 0.034 ac-ft for the 2.5 inches times the percentage imperviousn is greater than the
  - 0.020 ac-ft for the first inch of runoff
  - 0.034 ac-ft controls**

Storage (ac-ft)	Stage (ft)
0.049	7.50
0.034	7.23
0.076	8.00

Water quality for the site is provided by the proposed exfiltration trench.



## STORM WATER MANAGEMENT AND SOIL STORAGE CALCULATION

Project Name: 2200 Madison Street - Post Development Condition  
Project Number: 19028

Designed: LK  
Checked: RBJ

Depth to Water Table (feet)	Coastal (1)		Flatwoods (2)		Depressional (3)	
	Cumulative Water Storage (inches)	Compacted Water Storage (inches)	Cumulative Water Storage (inches)	Compacted Water Storage (inches)	Cumulative Water Storage (inches)	Compacted Water Storage (inches)
1	0.60	0.45	0.60	0.45	0.60	0.45
2	2.50	1.88	2.50	1.88	2.10	1.58
3	6.60	4.95	5.40	4.05	4.40	3.30
4	10.90	8.18	9.00	6.75	6.80	5.10

- (1) Sandy Soil 0-40" thick with water tables dropping below 40" - St. Lucie series is representative.  
 (2) Water tables 15"-40" - Immokalee series is representative  
 (3) Water tables above ground - 15" - Riviera and Pompano series are representative

\* 4 feet is the maximum depth of percolation assumed possible in three days for any soil.

- A. From the calculation the average depth to the water table is  
 B. The Soil Type is  
 C. Assuming 25% compaction  
 D. Inches of moisture stored under pervious area

6.66 ft  
Flatwoods

Depth to Water Table (feet)	Compacted Water Storage (inches)
3.00	4.05
6.66	6.75
4.00	6.75

# **STORMWATER MANAGEMENT AND FLOOD ROUTING CALCULATIONS**

Project Name: 2200 Madison Street - Post Development Condition  
Project Number: 19028

Designed:  
Checked:

LK
RBJ

## **III. Computations**

### **B. SCS Curve Number**

#### 2. Average site finished grade

Land use	Area-A (ac)	Grade-G (ft)	A X G
Pavement	0.1420	8.15	1.16
Sidewalk	0.0130	8.65	0.11
Building	0.0090	9.00	0.08
Lake	0.0000	0.00	0.00
Swale Area	0.0000	0.00	0.00
Green Area	0.0000	0.00	0.00
Swale Area	0.0710	8.00	0.57
Other Green Areas	0.0000	0.00	0.00
NA	0.0000	0.00	0.00
Green Area	0.0000	0.00	0.00
Swale Area	0.0000	0.00	0.00
Total	0.2350		1.92
Weighted Site Grade			8.16 ft-NGVD

#### 3. Average depth to water table will be

= Average site grade - average water table/control elevation  
= 6.66 ft

#### 4. Soil type Flatwoods

#### 5. From the soil storage calculation sheet, inches of moisture stored under the pervious areas for this type of soil is:

6.75 inches

#### 6. Compute available soil storage

= Storage available X pervious area  
= 0.04 ac-ft available soil storage onsite

#### 7. Convert available soil storage to site-wide moisture storage, S

= Available soil storage onsite/site area  
= 2.04 inches of site-wide storage, S

#### 6. SCS Curve Number, CN

=  $1000/(S+10)$   
= 83 SCS Curve Number



# SOUTH FLORIDA WATER MANAGEMENT DISTRICT FLOOD ROUTING CALCULATIONS

Project Name: 2200 Madison Street - Post Development Condition  
Project Number: 19028

Designed:  
Checked:

LK
RBJ

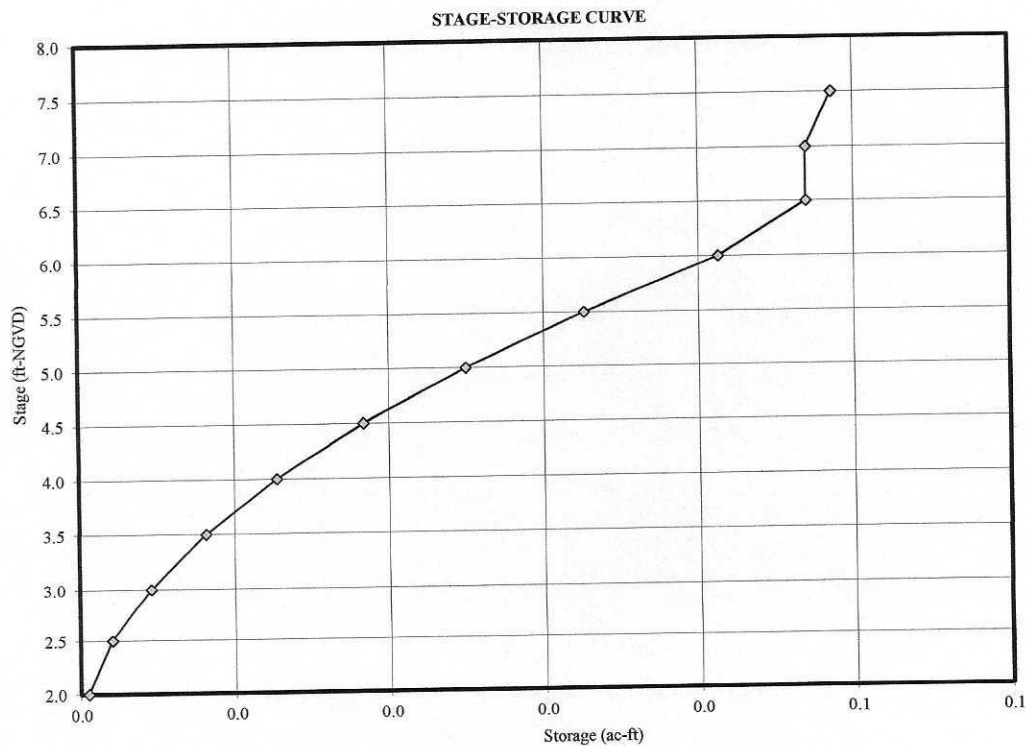
## III. Computations

### C. Project surface storage

Land use	Start	End	Area
Pavement	7.30	9.00	0.1420
Sidewalk	8.30	9.00	0.0130
Building	9.00	9.00	0.0090
Green Area	0.00	0.00	0.0000
Swale Area	7.50	8.50	0.0710
Swale Area	0.00	0.00	0.0000
Other Green Areas	0.00	0.00	0.0000
NA	0.00	0.00	0.0000
Lake	0.00	0.00	0.0000
Green Area	0.00	0.00	0.0000
Swale Area	0.00	0.00	0.0000

2. For Stage-Storage curve data, please refer to table attached.

3. Stage-Storage curve.



2200 Madison Street - Post Development Condition  
19028

Designed:	LK
Checked:	RBJ

Vwq =	0.034	Required pre-treatment Volume in ac-ft
GW =	1.50	(October Average Groundwater Level, ft., NAVD)
WIDTH =	6.50	(Exfiltration Trench Width, ft.)
H =	4.80	
TOP EL.	6.30	(Exfiltration Trench Top Elev., ft., NAVD)
BOT. EL.	1.50	(Exfiltration Trench Bottom Elev., ft., NAVD)
d =	1.25	(Exfiltration Trench Diameter, ft.)
INV. EL.	4.55	(Exfiltration Trench Pipe Invert Elev., ft., NAVD)
Du =	4.80	(Volume of runoff that can be stored)
Ds =	0.00	(Depth of Trench below the Water table)
H2 =	5.80	Height of ground surface above the design water table)



$K_{AVG}$	2.56E-04
-----------	----------

K = 0.000256 Hydraulic Conductivity, cfs/cu. Ft. head

FS =	2				
%WQ =	0.5				
Vwq =	0.034	ac-ft	=	0.41	ac-in
Vadd =	0.000	ac-ft	=	0.000	ac-in

Exfiltration Trench Length formula, L =

$$\frac{FS((\%WQ)(V_{wq})+V_{add})}{K(H_2W + 2H_2D_U - D_U^2 + 2H_2D_S) + (1.39 \times 10^{-4})WD_U}$$

Required Exfiltration length L = 18.26 LF

**Provided Exfiltration length L = 142.00 ft**



**STORM WATER MANAGEMENT AND FLOOD ROUTING CALCULATIONS**  
**STAGE - STORAGE CALCULATION**

Project Name: 2200 Madison Street - Post Development Condition  
 Project Number: 19028

Designed: [LK  
 Checked: [RBJ

**Stage-Storage Curve Data**

Sub Area	Swale Area		Sidewalk		Pavement		Swale Area		Green Area		Exfiltration Trench		Total Storage ac-ft
Low El.	7.50		8.30		7.30		0.00		0.00		1.50		
2*	8.50		9.00		9.00		0.00		0.00		6.30		
Area (ft^2)	3092.76		566.28		6185.52		0.00		0.00		852.00		
Area (acres)	0.071		0.013		0.142		0.000		0.000		0.020		
Stage (NAVD)	Linear Stor.	Vert. Stor.	Linear Stor.	Vert. Stor.	Linear Stor.	Vert. Stor.	Linear Stor.	Vert. Stor.	Linear Stor.	Vert. Stor.	Linear Stor.	Vert. Stor.	
1.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01
4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01
4.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.02
5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.02
5.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.03
6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.04
6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.05
7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.05
7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.05
8.00	0.01	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.08
8.50	0.04	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.14
9.00	0.04	0.04	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.24

Project Name: 2200 Madison Street

Reviewer: RBJ

Project Number: 19028

Period Begin: Jan 01, 2000;0000 hr End: Jan 16, 2000;0000 hr Duration: 360 hr

Time Step: 0.2 hr, Iterations: 10

## Basin 1: Project Site

Method: Santa Barbara Unit Hydrograph

Rainfall Distribution: SFWMD - 3day

Design Frequency: 25 year

3 Day Rainfall: 15 inches

Area: 0.235 acres

Ground Storage: 2.04 inches

Time of Concentration: 0.1 hours

Initial Stage: 1.5 ft NGVD

Stage (ft NGVD)	Storage (acre-ft)
3.00	0.00
3.50	0.01
4.00	0.01
4.50	0.02
5.00	0.03
5.50	0.03
6.00	0.03
6.50	0.05
7.00	0.05
7.50	0.08
8.00	0.14
8.50	0.24

User Specified Rainfall Distribution: User1

Time (hr)	Rainfall (percent)
0.00	0.00

## STRUCTURE MAXIMUM AND MINIMUM DISCHARGES

Struc	Max (cfs)	Time (hr)	Min (cfs)	Time (hr)

## BASIN MAXIMUM AND MINIMUM STAGES

Basin	Max (ft)	Time (hr)	Min (ft)	Time (hr)
Project Site	8.55	73.00	1.50	0.00

## BASIN WATER BUDGETS (all units in acre-ft)

Basin	Total Runoff	Structure Inflow	Structure Outflow	Initial Storage	Final Storage	Residual
Project Site	0.25	0.00	0.00	0.00	0.25	0.00



Project Name: 2200 Madison Street

Reviewer: RBJ

Project Number: 19028

Period Begin: Jan 01, 2000;0000 hr End: Jan 16, 2000;0000 hr Duration: 360 hr

Time Step: 0.2 hr, Iterations: 10

## Basin 1: Project Site

Method: Santa Barbara Unit Hydrograph

Rainfall Distribution: SFWMD - 3day

Design Frequency: 100 year

3 Day Rainfall: 18 inches

Area: 0.235 acres

Ground Storage: 2.04 inches

Time of Concentration: 0.1 hours

Initial Stage: 1.5 ft NGVD

Stage (ft NGVD)	Storage (acre-ft)
3.00	0.00
3.50	0.01
4.00	0.01
4.50	0.02
5.00	0.03
5.50	0.03
6.00	0.03
6.50	0.05
7.00	0.05
7.50	0.08
8.00	0.14
8.50	0.24

User Specified Rainfall Distribution: User1

Time (hr)	Rainfall (percent)
0.00	0.00

## STRUCTURE MAXIMUM AND MINIMUM DISCHARGES

Struc	Max (cfs)	Time (hr)	Min (cfs)	Time (hr)

## BASIN MAXIMUM AND MINIMUM STAGES

Basin	Max (ft)	Time (hr)	Min (ft)	Time (hr)
Project Site	8.84	73.00	1.50	0.00

## BASIN WATER BUDGETS (all units in acre-ft)

Basin	Total Runoff	Structure Inflow	Structure Outflow	Initial Storage	Final Storage	Residual
Project Site	0.31	0.00	0.00	0.00	0.31	0.00

## SUMMARY

### a. Stage-Storage Computations

Stage storage was calculated for the pre-design and post-design (no discharge). The 25 year, 3 day – No discharge and the 100 year, and the 3 day – No discharge flood routing was calculated for both the pre and post-design. The results are listed below.

Design Storm	Pre Development	Post Development
	Stage (ft) (NAVD)	Stage (ft) (NAVD)
5-Year 3-day storm	8.72'	8.55'
100-Year 3-day storm	9.01'	8.84'

Based on the Cascade model for the Post design storm events, it is clear the storm management system will be sufficient to handle runoff from the 25 year 3 day storm and 100 year 3 day events.

The Finish Floor elevation of the proposed building lobby is at 9.00 NAVD which is higher than the 100 year 3day stage elevation of 8.84' NAVD and slightly lower than the 100 year 3 day pre development condition.

There is no discharge from the proposed site and all runoff will be maintained on site.



---

# GATOR ENGINEERING ASSOCIATES, INC.

---


## INVOICE

**Project Name:** 12 Unit Apartments -  
2200 Madison Street

**Invoice #:** 19028-1

**Invoice Date:** 08/20/19

**Bill To:** PABLO FERNÁNDEZ  
**WILFERZ COMPANY**  
2239 JACKSON ST  
HOLLYWOOD, FL 33020

Description	Amount
Drainage Plan Preparation - Lump Sum	\$ 2,400.00
	Total
	\$ 0.00
	Reimbursable Expenses (+15%)
	\$ 0.00
	(-) Retainer
	\$ 1,200.00
	<b>Amount Due</b>
	<b>\$ 1,200.00</b>

FOR OFFICE USE ONLY

REMITTANCE

Date:

Amount Due:

Amount Paid:

11390 TEMPLE STREET - COOPER CITY, FLORIDA 33330  
TEL: (954) 434-5905 - FAX: (954) 434-5904  
[www.gatorengineering.com](http://www.gatorengineering.com)



**Environmental Protection and Growth Management Department**  
**Environmental Engineering and Permitting Division**  
**Surface Water Management Program**  
1 North University Drive, Mailbox 201 • Plantation, Florida 33324  
**954-519-1483 • FAX 954-519-1495 • [broward.org/environment](http://broward.org/environment)**

## Surface Water Management License Application

Please consult Chapter 27, Broward County Code of Ordinances [Section 27-199 (c) (2)] for specific requirements needed to provide a complete application. Copies of these regulations are available upon request. Many projects also require approval by other State, Federal, and Local agencies.

### Type of License (check all that apply)

- ☐ General    ☐ Conceptual    ☐ Conceptual Concurrent with DRI  
☐ SWM    ☐ SWM Modification to Permit No.

### Project Information

Project Title: \_\_\_\_\_  
Project Address: \_\_\_\_\_  
Land use type (residential, commercial, etc.): \_\_\_\_\_  
Location: Section(s): \_\_\_\_\_ Township: \_\_\_\_\_ Range: \_\_\_\_\_  
BCPA Folio Number(s): \_\_\_\_\_  
Project Acres: \_\_\_\_\_ Acres of Impervious: \_\_\_\_\_ Total Acres, per Survey: \_\_\_\_\_  
Project Description (in general terms): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

### Property Owner Information

Name: \_\_\_\_\_ Phone: \_\_\_\_\_  
Address: \_\_\_\_\_  
\_\_\_\_\_  
Email: \_\_\_\_\_  
Contact Name (if different from Owner): \_\_\_\_\_ Phone: \_\_\_\_\_  
Email: \_\_\_\_\_

### System Designer

Firm Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
Engineer of Record: \_\_\_\_\_ Phone: \_\_\_\_\_  
Email: \_\_\_\_\_

Who will be responsible for the Surface Water Management system after construction?

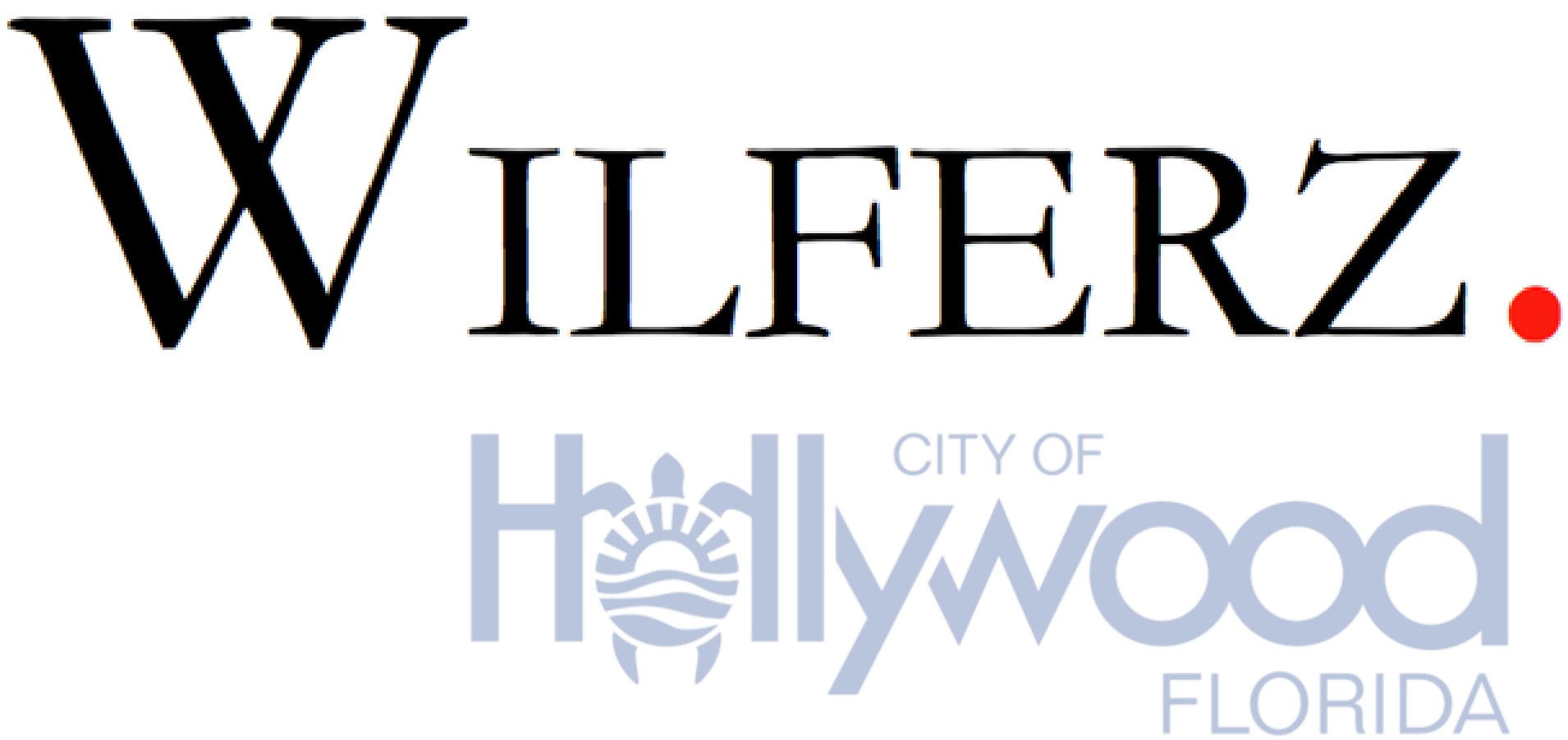
\_\_\_\_\_  
(Name of Person, Entity, or Association)

Owner/Agent Name (print): \_\_\_\_\_  
Owner/Agent Signature: \_\_\_\_\_

(If Agent - written authorization must be provided)



# STREET PROFILE

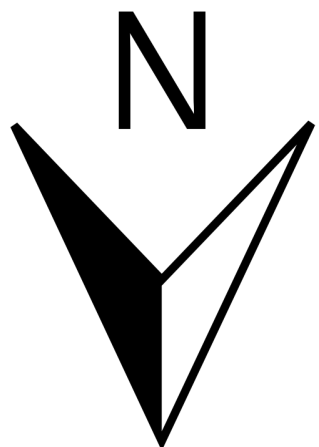


## STREET PROFILE 2200 MADISON STREET



2200 MADISON STREET

M A D I S O N   S T R E E T



WILFERZ COMPANY, LLC – WILFERZ LEASING, LLC  
WILFERZ BUILDERS, LLC  
2239 JACKSON ST HOLLYWOOD FL 33020  
786-838-7310 / 786-838-8159  
[WILFERZCO@GMAIL.COM](mailto:WILFERZCO@GMAIL.COM)  
[WWW.WILFERZ.COM](http://WWW.WILFERZ.COM)











