



KIRCHHOFF & ASSOCIATES  
ARCHITECTS

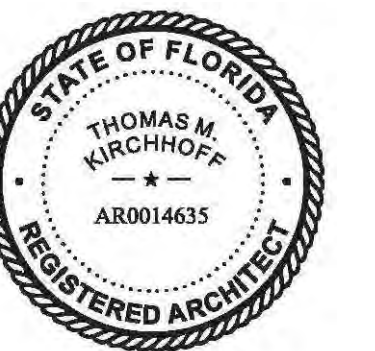
1907 COMMERCE LANE, SUITE 106  
JUPITER, FLORIDA 33458  
561.575.9994  
KIRCHHOFFARCHITECTS.COM

PERGOLA  
RENOVATION FOR:

THOMAS  
RESIDENCE

227 ANGLER AVENUE  
PALM BEACH, FLORIDA 33480

SEAL



THOMAS M. KIRCHHOFF FL REG. NO. AR0014635  
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KIRCHHOFF & ASSOCIATES ARCHITECTS

REVISIONS

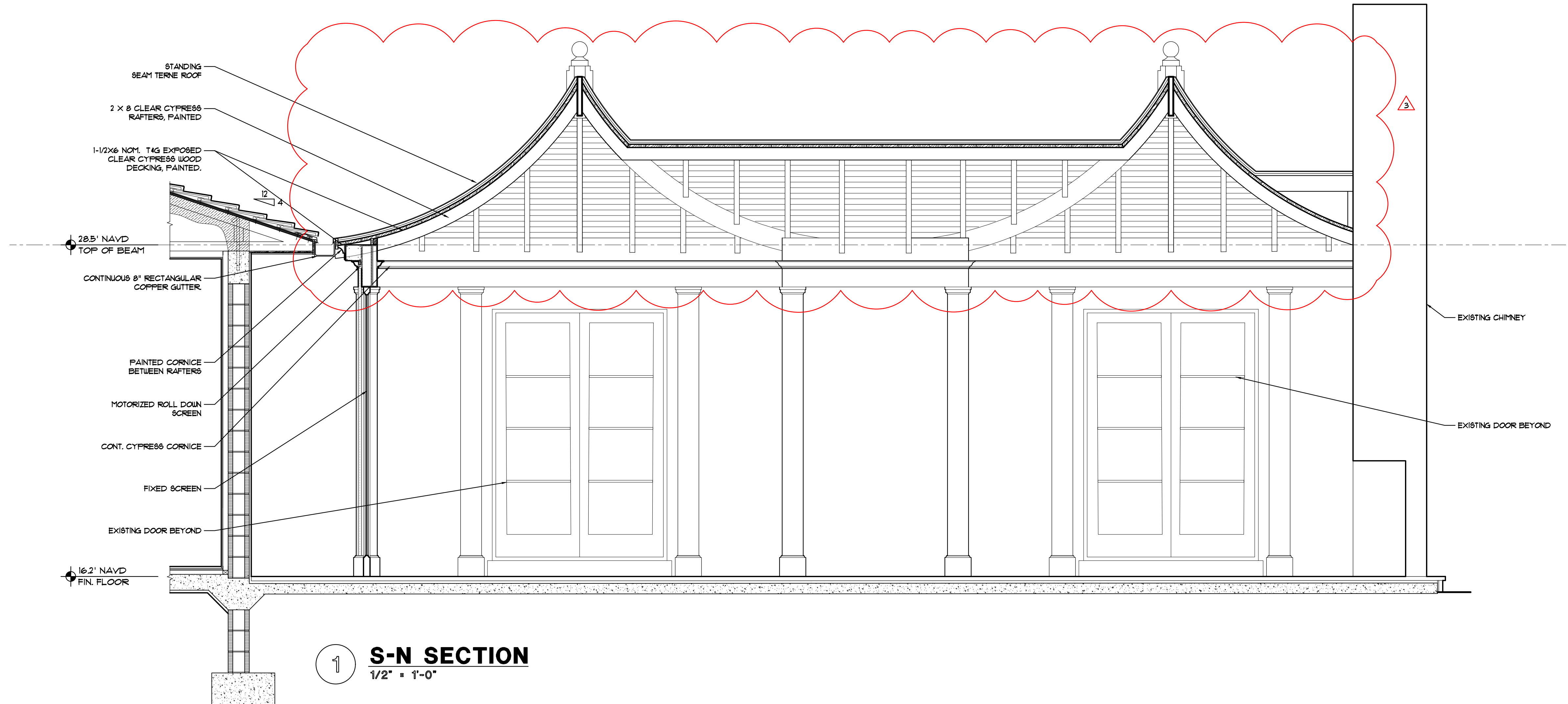
1 JANUARY 29, 2024  
3 APRIL 8, 2024

PROJECT NUMBER:  
2302  
ISSUED FOR:  
PERMITS  
DATE PREPARED:  
SEPTEMBER 2023

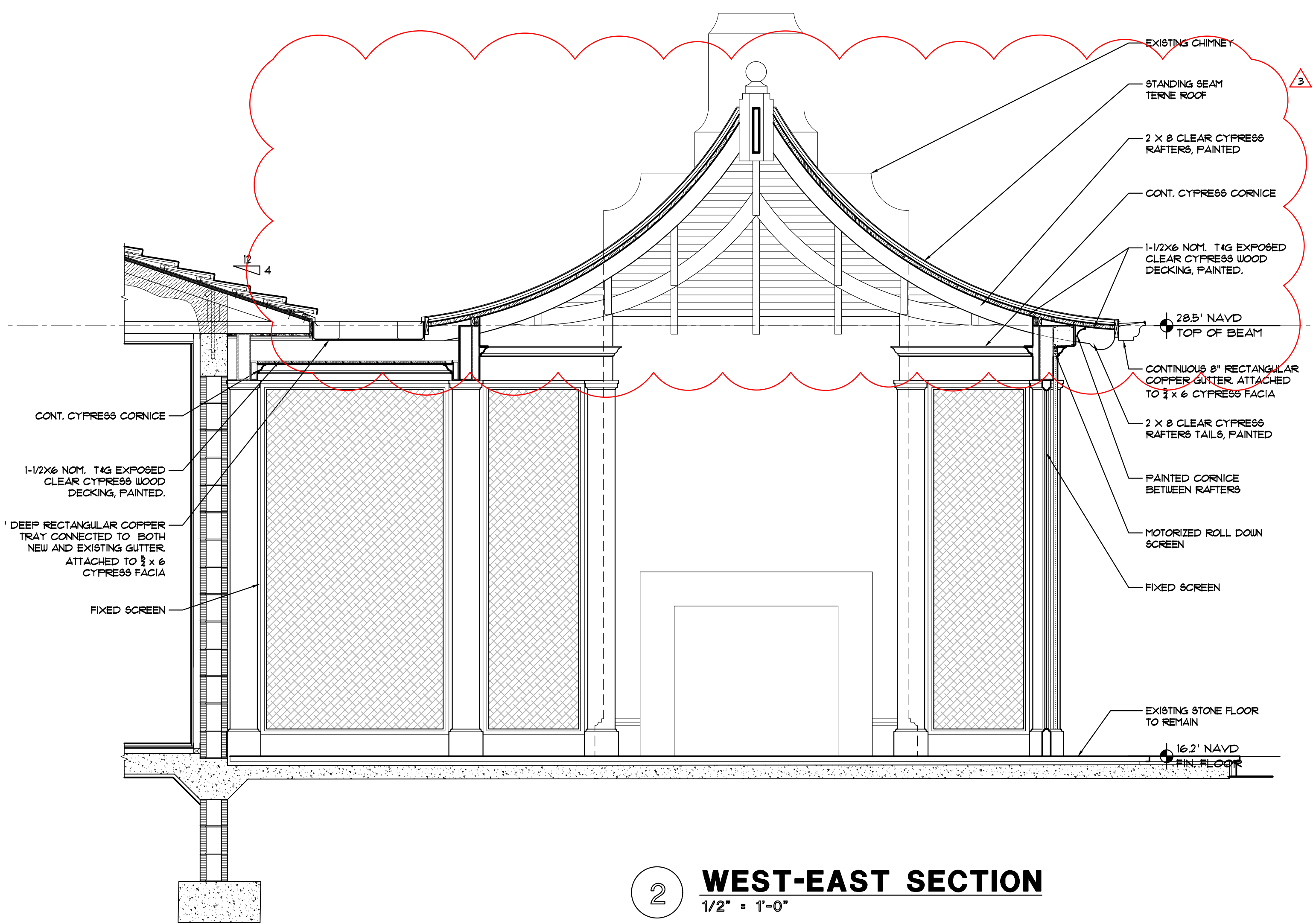
DRAWN BY:  
AA  
CHECKED BY:  
TK  
DRAWING NUMBER:

A5.1

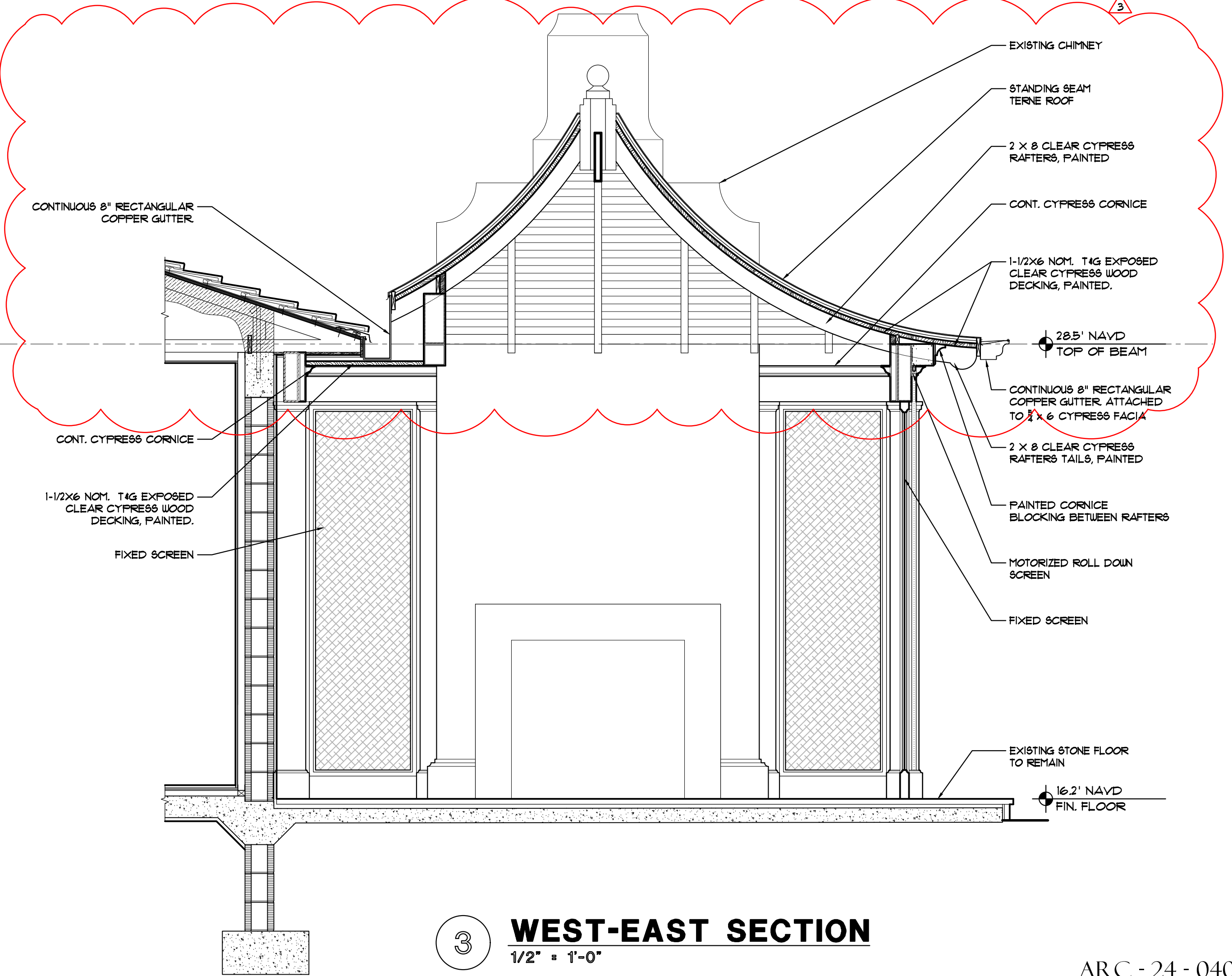
SCALE:  
AS NOTED



1 S-N SECTION  
1/2" = 1'-0"



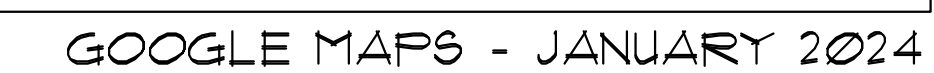
2 WEST-EAST SECTION  
1/2" = 1'-0"



3 WEST-EAST SECTION  
1/2" = 1'-0"

ARC - 24 - 040  
ZON - 24 - 046





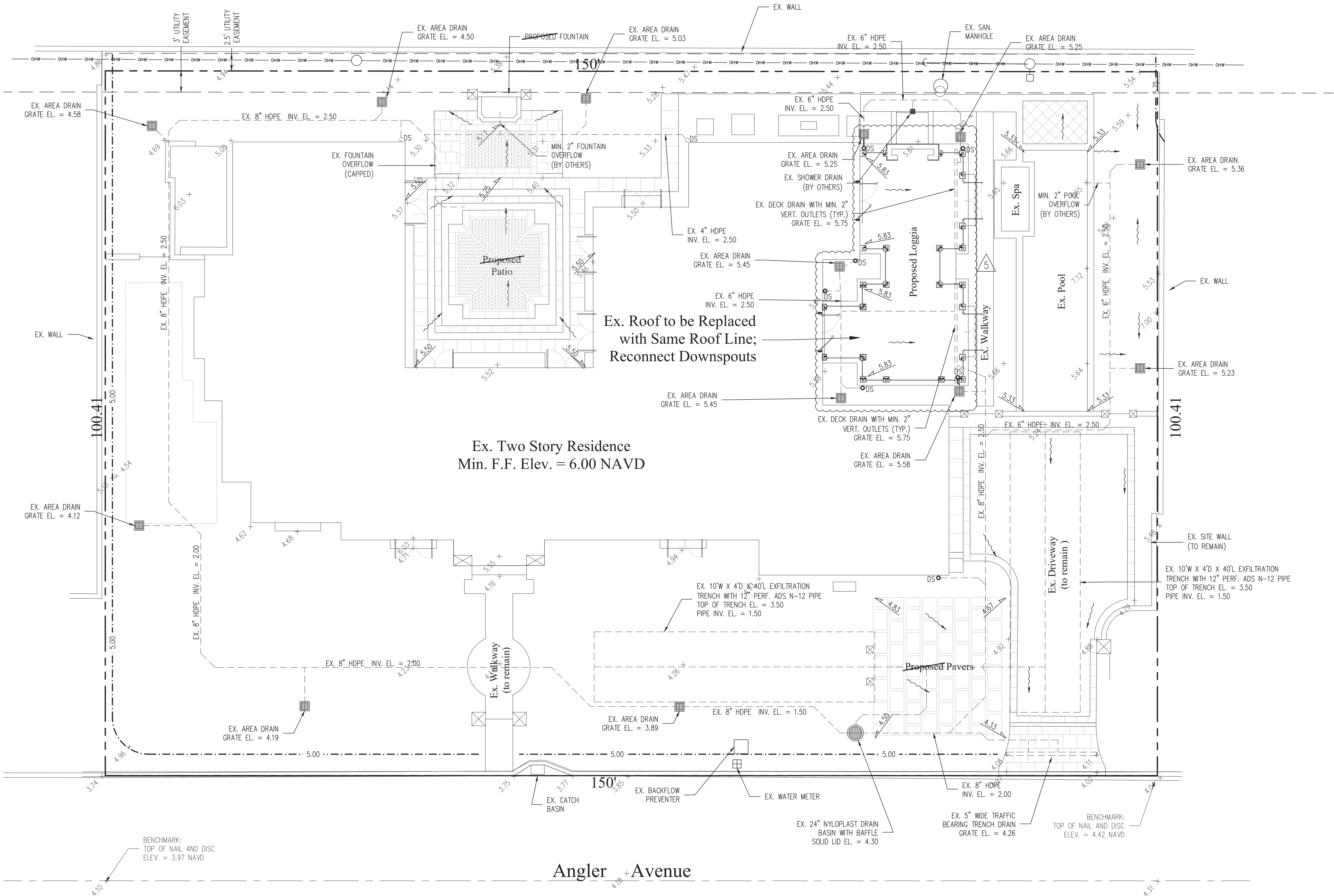
1

1. THE BEST ROUTE IS INDICATED VIA THE FLAGLER MEMORIAL BRIDGE.
2. TRUCK DRIVERS WILL BE COGNIZANT OF SEASONS WHEN USE OF THE RIGHT-OF-WAY IS LIMITED/ RESTRICTED.
3. 10 TRUCK DELIVERIES WILL ACCESS THE PROPERTY OVER 3 MONTHS.



20





STORMWATER RETENTION CALCULATIONS

A. SITE INFORMATION

Total Property Area = 15,069 sq.ft.

Drainage Area Impervious Surface  
(existing residence, driveway, walkways, proposed walkways, pool, concrete) = 8,720 sq.ft.

Drainage Area Pervious Surface = 6,349 sq.ft.

B. ESTIMATED STORMWATER RETENTION VOLUME

The retention volume is estimated using the Rational Method ( $Q=CiA$ )  
where:

$C = 1.0$  (impervious surface)

$C = 0.2$  (pervious surface)

$i = 2$  in/hr

Impervious Surface Runoff Volume:  
 $1.0 \times 2 \text{ in/hr} \times 8,720 \text{ sq.ft.} \times 1 \text{ ft./12 in.} = 1,453 \text{ cu.ft.}$

Pervious Surface Runoff Volume:  
 $0.2 \times 2 \text{ in/hr} \times 6,349 \text{ sq.ft.} \times 1 \text{ ft./12 in.} = 212 \text{ cu.ft.}$

Total Volume to be Retained = 1,665 cu.ft.

C. EXISTING EXFILTRATION TRENCH SIZING

L	=	Total Length of Trench Provided	=	80	ft
W	=	Trench Width	=	10	ft
K	=	Hydraulic Conductivity	=	0.000613	cfs/sq.ft./ft. of head
H2	=	Depth to Water Table	=	2.76	ft
DU	=	Un-Saturated Trench Depth	=	2.00	ft
DS	=	Saturated Trench Depth	=	2.00	ft
V	=	Volume Treated	=	8,939	cu.ft.

Notes:

- Exfiltration trenches and storm piping to be protected from roots with a root barrier.
- Roof drain downspouts are to be connected to the proposed drainage system. Contractor to provide engineer with downspout locations prior to installation of drainage system.
- Contractor shall mill and overlay all roadway cuts a minimum of 50 ft. on either side of the excavation the entire width of each affected lane.
- Contractor is responsible for installing and maintaining erosion control measures during construction.
- Video inspection of storm drainage system required prior to installation of sod.
- Existing drainage system shown per site grading/drainage plan by Doug Winter Companies, Inc. dated 5/24/05
- Existing site drainage to be cleaned, video inspected and re-certified prior to completion of project.

48 HOURS BEFORE DIGGING  
CALL  
1-800-432-4770  
SUNSHINE STATE ONE CALL  
OF FLORIDA, INC.  
Contractor is responsible for obtaining  
location of existing utilities prior to  
commencement of construction activities.



Gruber Consulting  
Engineers, Inc.  
5754 MERCER AVE., SUITE 305  
WEST PALM BEACH, FL 33401  
PHONE: 86.112.2841  
office@gruberengineers.com

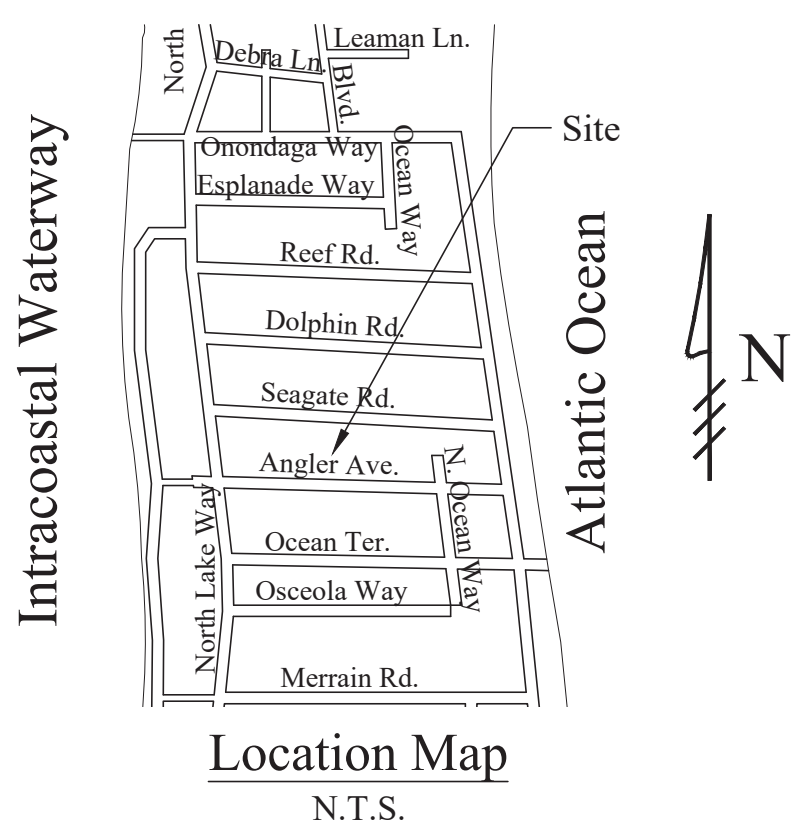
Project Information				
Project No.	2024-0068	Issue Date	07/31/2020	Scale
Issue Date	07/31/2020	Scale	1/8" = 1'-0"	Drawn By
Scale	1/8" = 1'-0"	Drawn By	KM	Checked By
Drawn By	KM	Checked By	CG	

Site Grading & Drainage Plan For:  
**Proposed Renovation**  
227 Angler Avenue  
Palm Beach, Florida

Revisions	
1	09/02/2020
2	04/26/2021
3	12/14/2021
4	01/12/2024
5	02/08/2024
6	
7	
8	
9	
10	

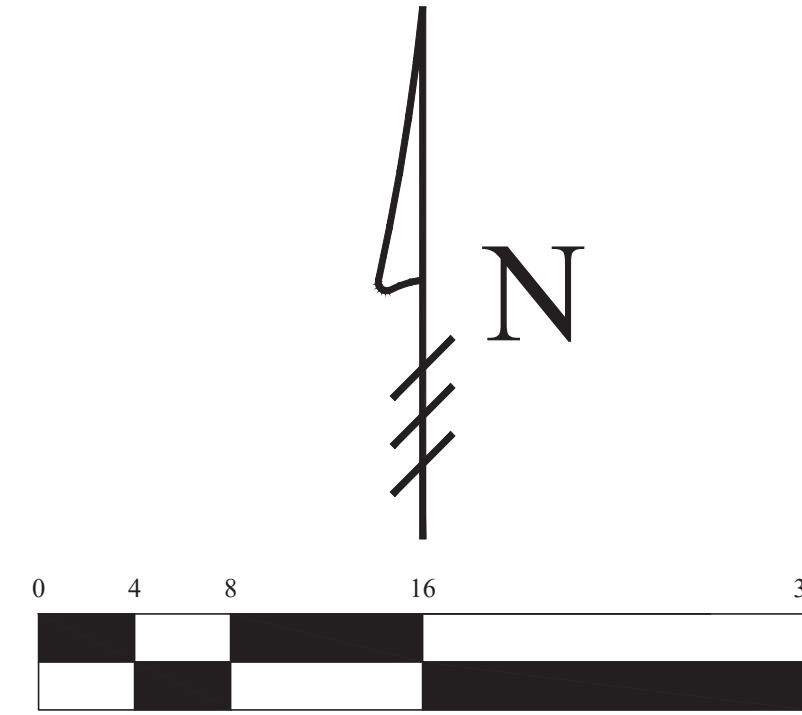
Chad M. Gruber  
FL P.E. No. 57466

Sheet No.  
**C-1**



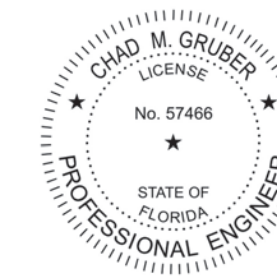
Legend

- EXISTING ELEVATION PER WALLACE SURVEYING CORP. (NAVD-88)
- PROPOSED ELEVATION (NAVD-88)
- PROPOSED ELEVATION CONTOUR (NAVD-88)
- FLOW DIRECTION
- EXFILTRATION TRENCH
- AREA DRAIN
- 24" NYLOPLAST DRAIN BASIN WITH BAFFLE



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

- |   |          |  |
|---|----------|--|
| 1 | 09/02/20 | REVISE PLAN PER TOWN OF PALM BEACH COMMENTS            |
| 2 | 04/26/21 | REVISE DECK DRAINAGE ON EAST SIDE OF RESIDENCE         |
| 3 | 12/14/21 | UPDATE PLAN WITH AS-BUILT DRAINAGE CONFIGURATION       |
| 4 | 01/12/24 | UPDATE PLAN FOR COVERED PATIO ROOF REPLACEMENT PROJECT |
| 5 | 02/08/24 | UPDATE PLAN BACKGROUND; ADJUST STORM DRAINAGE          |



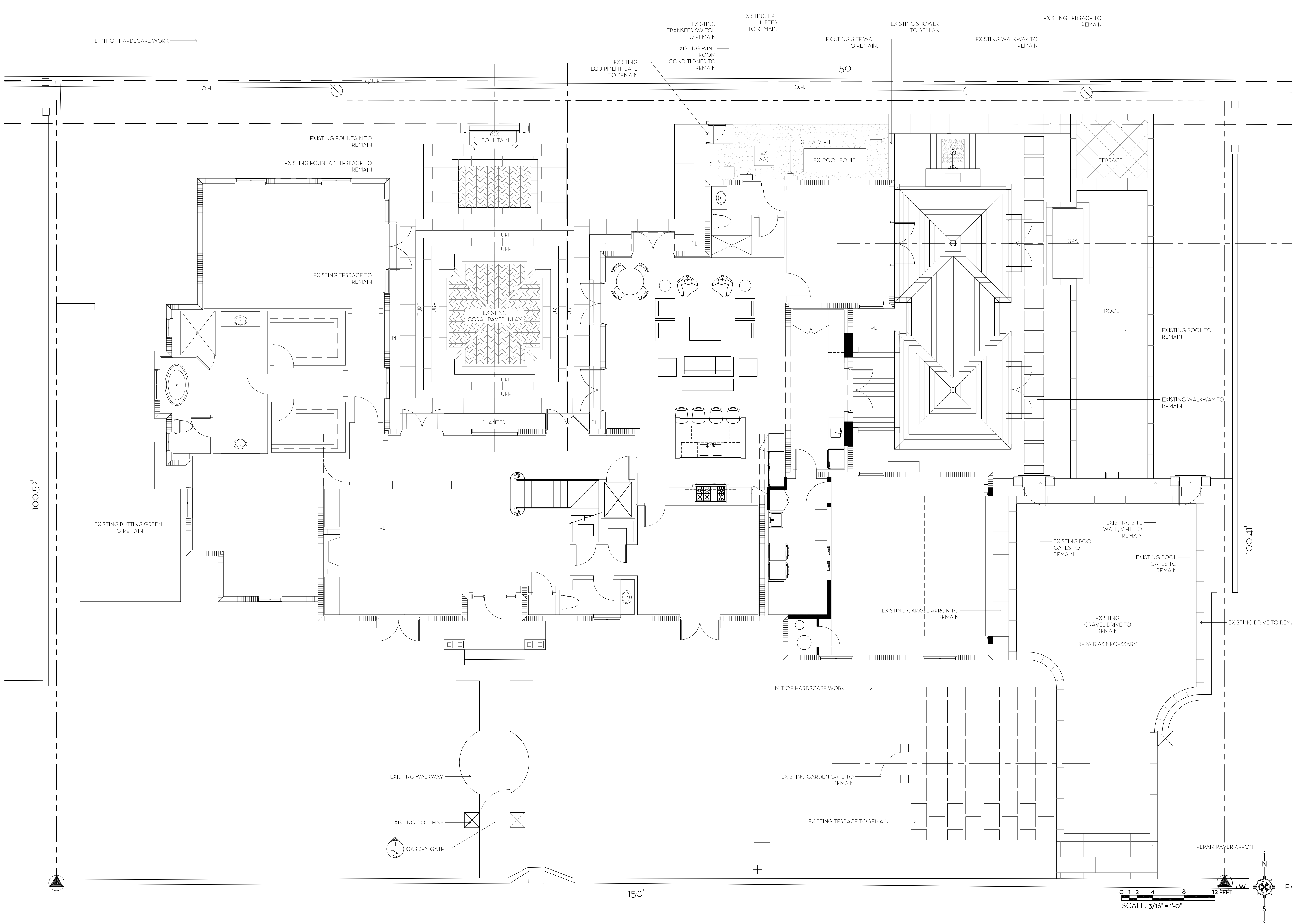
Digitally signed  
by Chad M Gruber  
Date: 2024.02.08  
16:07:50 -05'00'

This item has been electronically signed and sealed by Chad M. Gruber on the date adjacent to the seal using a SHA authentication code. Printed copies of this document are not considered signed and sealed and the SHA authentication code must be verified on any electronic copies.

Plan Background from Site Plan by  
Kirchhoff & Associates Architects  
Received 2/6/24

ARC-24-040  
ZON-24-046

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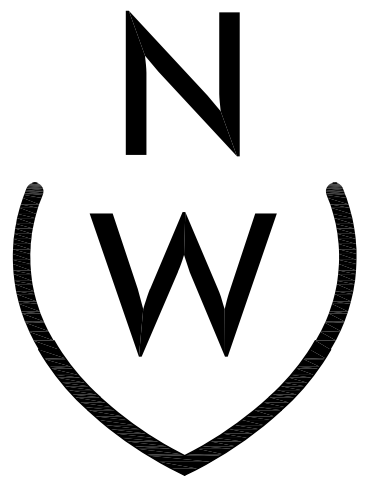


MARIO F. NIEVERA  
State of Florida  
Landscape Architect  
Registration No.  
6666856

HARDSCAPE PLAN  
**227 ANGLER AVENUE**  
PALM BEACH, FLORIDA

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

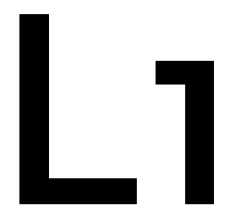
11 JANUARY 2024



NIEVERA WILLIAMS  
DESIGN

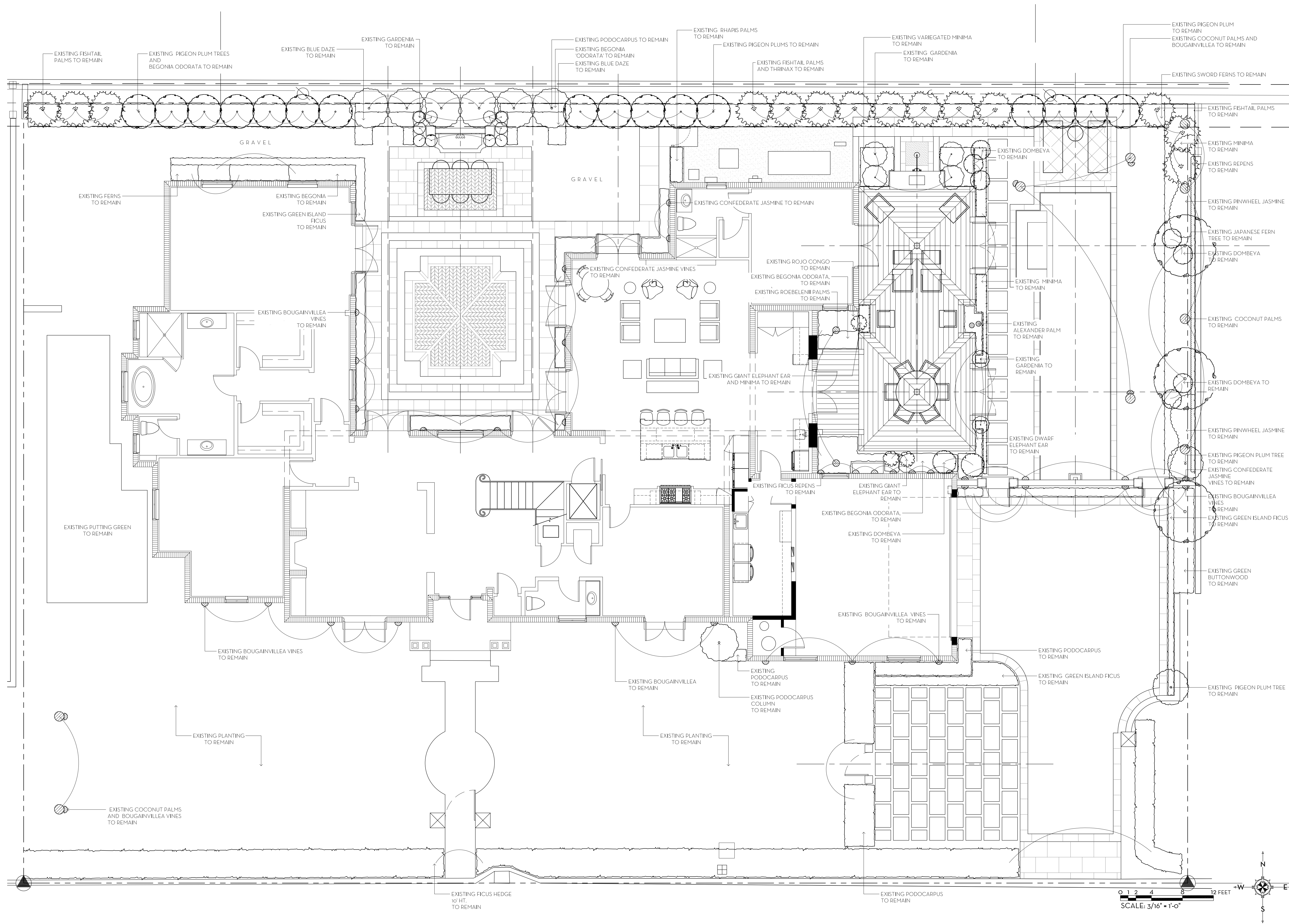
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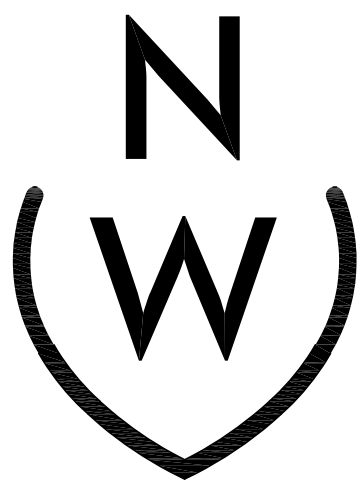
MARIO F. NIEVERA

State of Florida  
Landscape Architect  
Registration No.  
6666856

LANDSCAPE PLAN  
**227 ANGLER AVENUE**

PALM BEACH, FLORIDA

11 JANUARY 2024



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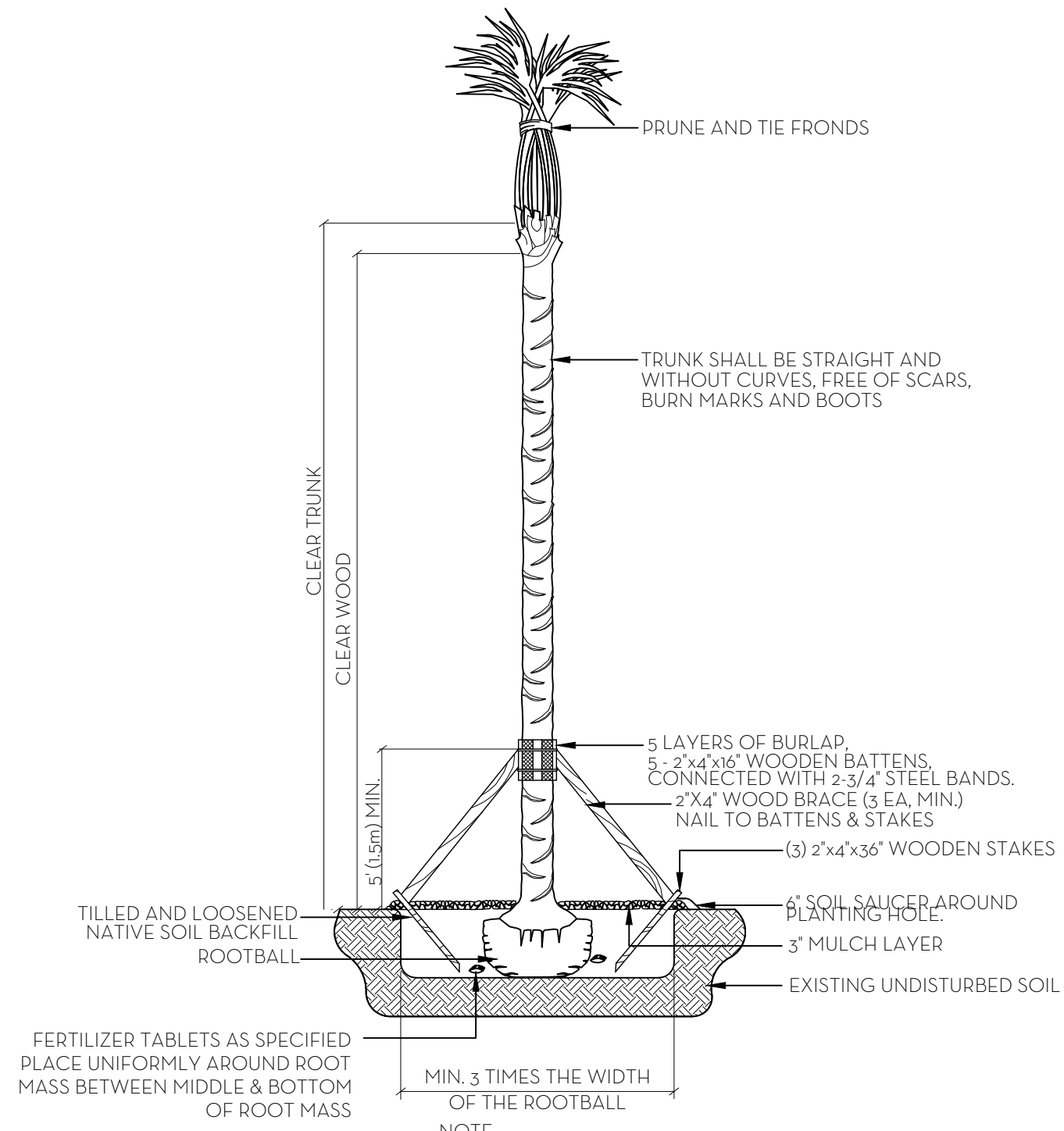
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ZON-24-046

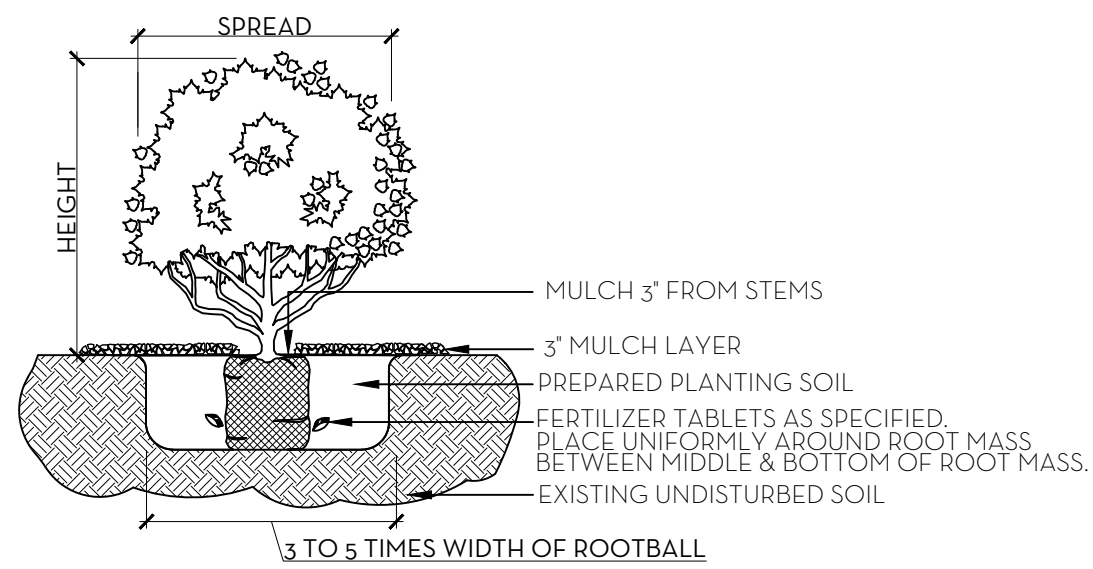
SCALE: 3/16" = 1'-0"







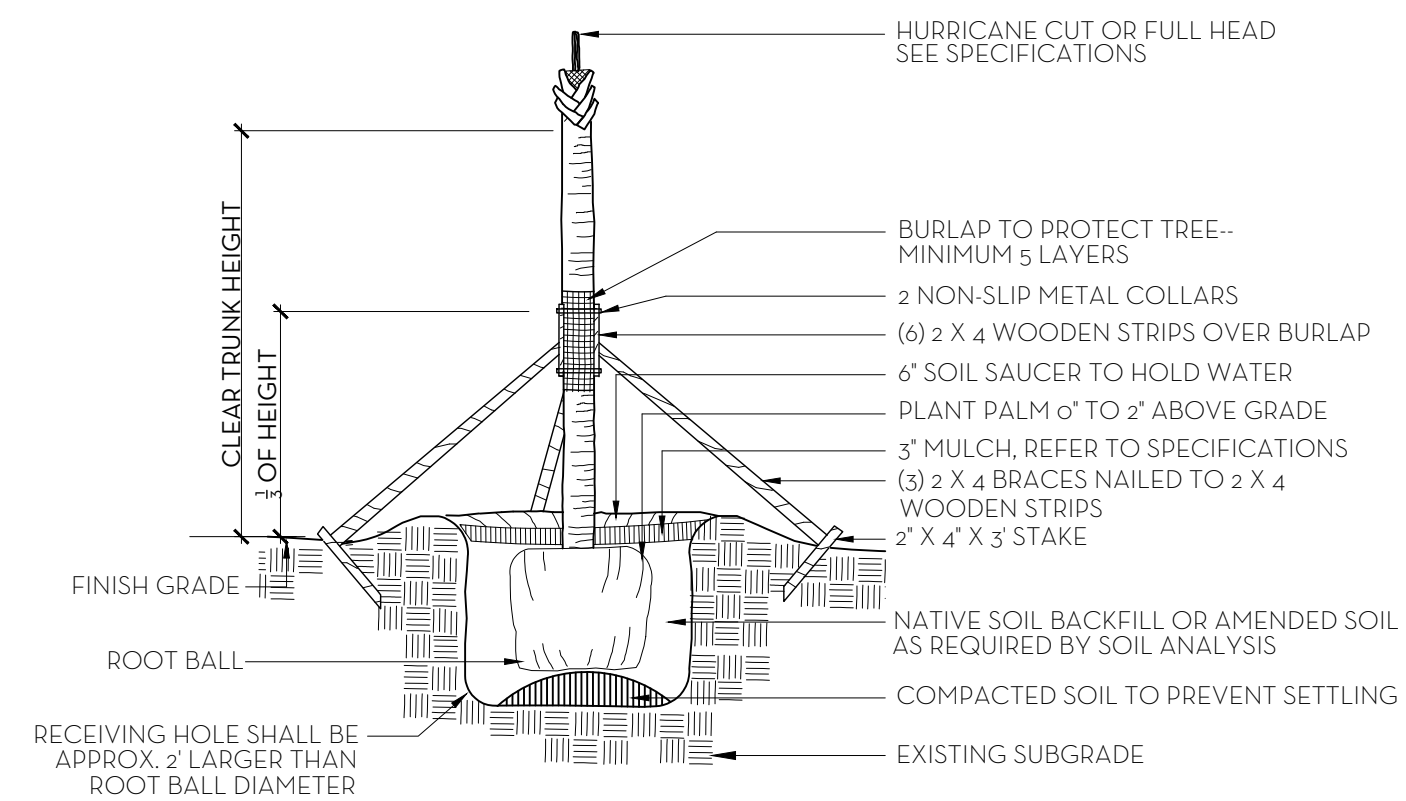
PALM PLANTING DETAIL  
N.T.S.



NOTE:  
ALL MATERIAL TO BE FLORIDA #1 OR BETTER

SHRUB & GROUNDCOVER PLANTING DETAIL  
N.T.S.

NOTE: BUD SHALL BE PERPENDICULAR TO GROUND PLANE. TRUNK SHALL BE STRAIGHT AND WITHOUT CURVES. NO SCARRED OR BLACKENED TRUNKS.

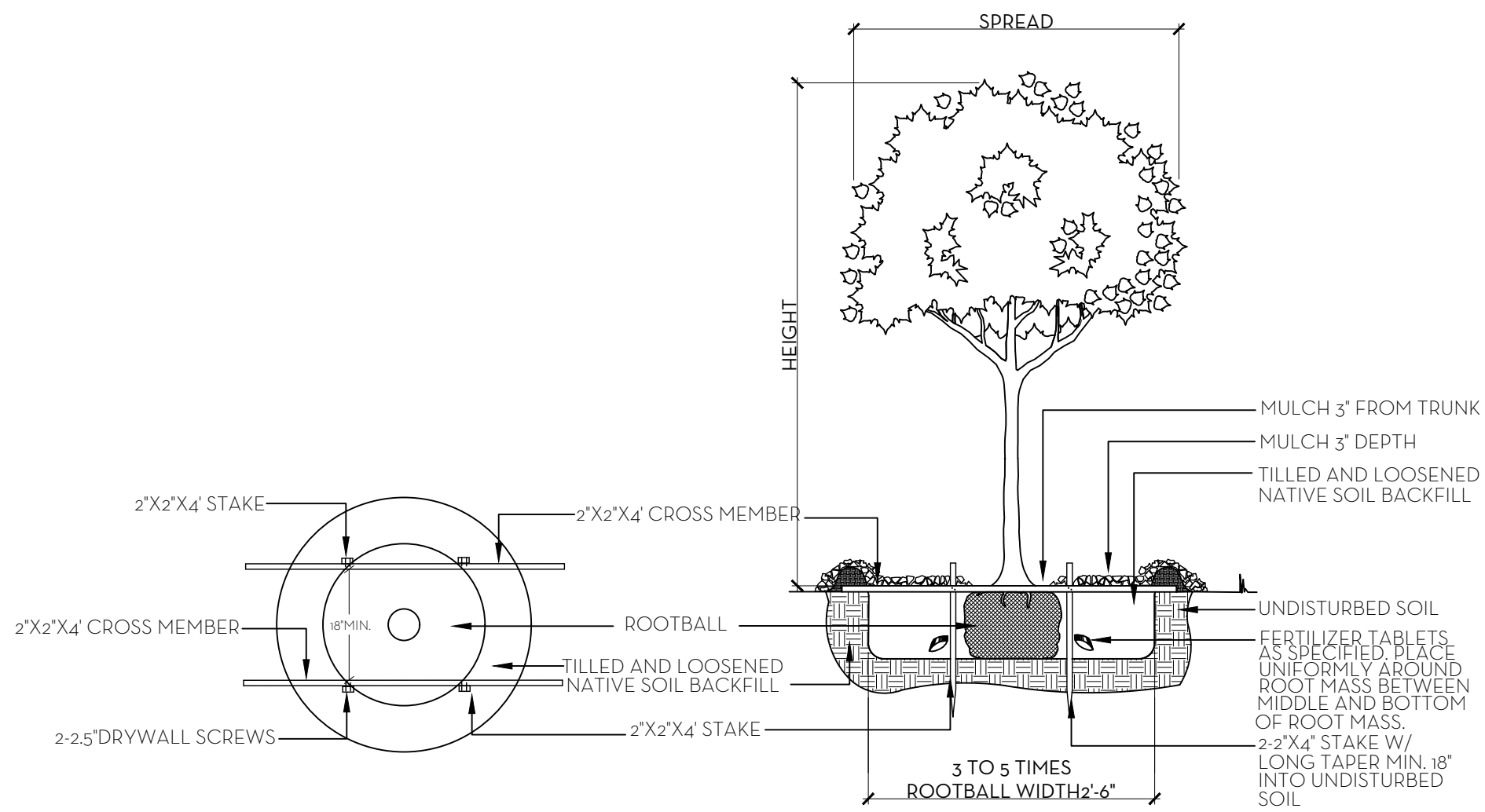


NOTES: STAKING & GUYING REQUIRED FOR PALMS, IF NECESSARY, OR AS DIRECTED BY THE LANDSCAPE ARCHITECT.  
ALL PLANT TO BE FLORIDA #1 OR BETTER

PALM TREE PLANTING AND STAKING DETAIL  
N.T.S.

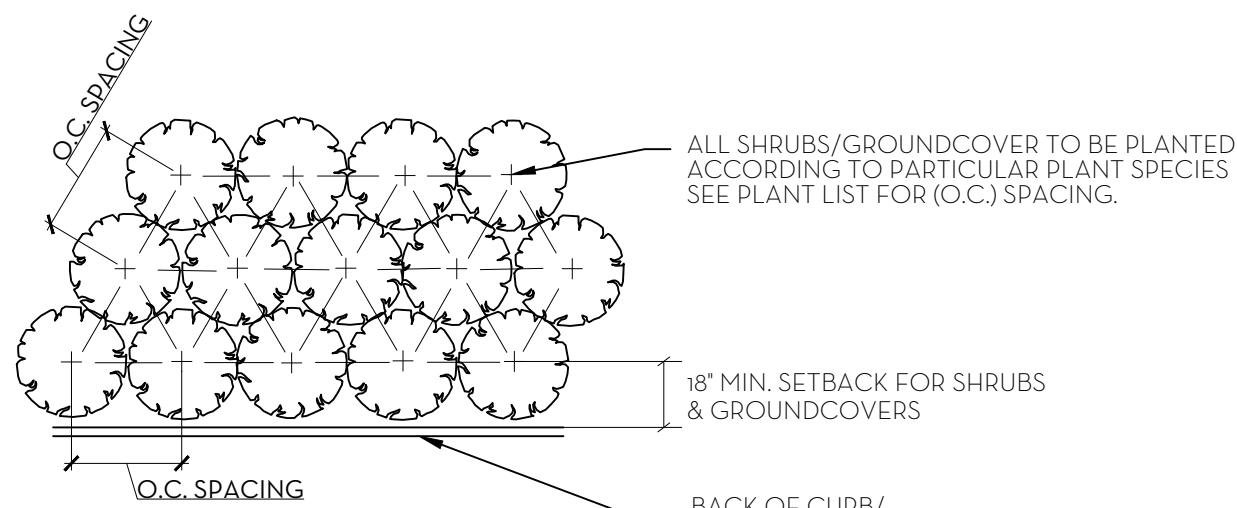
**FERTILIZATION**  
SHRUBS AND TREES  
ALL TREES AND SHRUBS SHALL BE FERTILIZED WITH "AGRIFORM" 20-15-5 PLANTING TABLETS AT TIME OF INSTALLATION AND PRIOR TO COMPLETION OF PIT BACKFILLING. TABLETS SHALL BE PLACED UNIFOMLY AROUND THE ROOT MASS OF A DEPTH THAT IS BETWEEN THE MIDDLE AND BOTTOM OF THE ROOT MASS.  
APPLICATION RATE:  
1 GALLON CAN: 1 - 21 GRAM TABLET  
3 GALLON CAN: 2 - 21 GRAM TABLETS  
5 GALLON CAN: 3 - 21 GRAM TABLETS  
7 GALLON CAN: 4 - 21 GRAM TABLETS  
TREES: 3 - 21 GRAM TABLETS EACH 1/2" OF CALIPER  
PALMS: 7 - 21 GRAM TABLETS  
GROUND COVER AREAS  
ALL GROUND COVER AREAS SHALL RECEIVE FERTILIZATION WITH "OZMOCOTE" TIME RELEASE FERTILIZER AS PER MANUFACTURER'S SPECIFICATIONS.

**NOTES:**  
1. ALL WOOD SHALL BE SPRUCE OR PINE-NOT PRESSURE TREATED.  
2. CROSS TIES SHALL NOT CROSS OVER WOODY ROOTS.  
3. REMOVE ALL STRING &/OR WIRE WRAPPED AROUND TRUNK.  
4. REMOVE ALL STRAPS, ROPES, WIRE, &/OR STRINGS USED TO LIFT THE ROOTBALL.  
5. REMOVE ALL BURLAP &/OR WIRE FROM THE TOP OF THE ROOT BALL.  
6. TOP OF ROOTBALL TO BE SET 2" BELOW FINISH SURROUNDING FINISH GRADE.



NOTE:  
ALL PLANT TO BE FLORIDA #1 GRADE OR BETTER

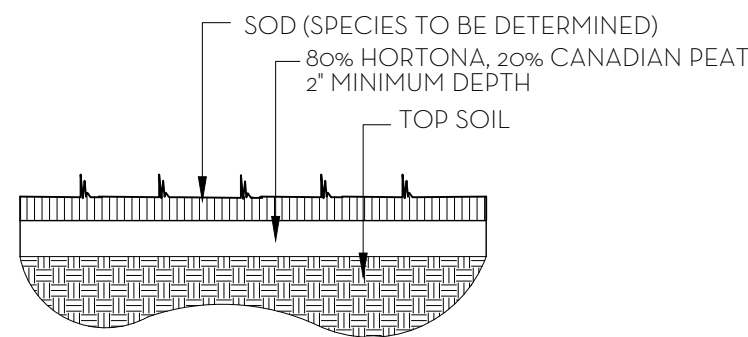
TREE PLANTING DETAIL  
N.T.S.



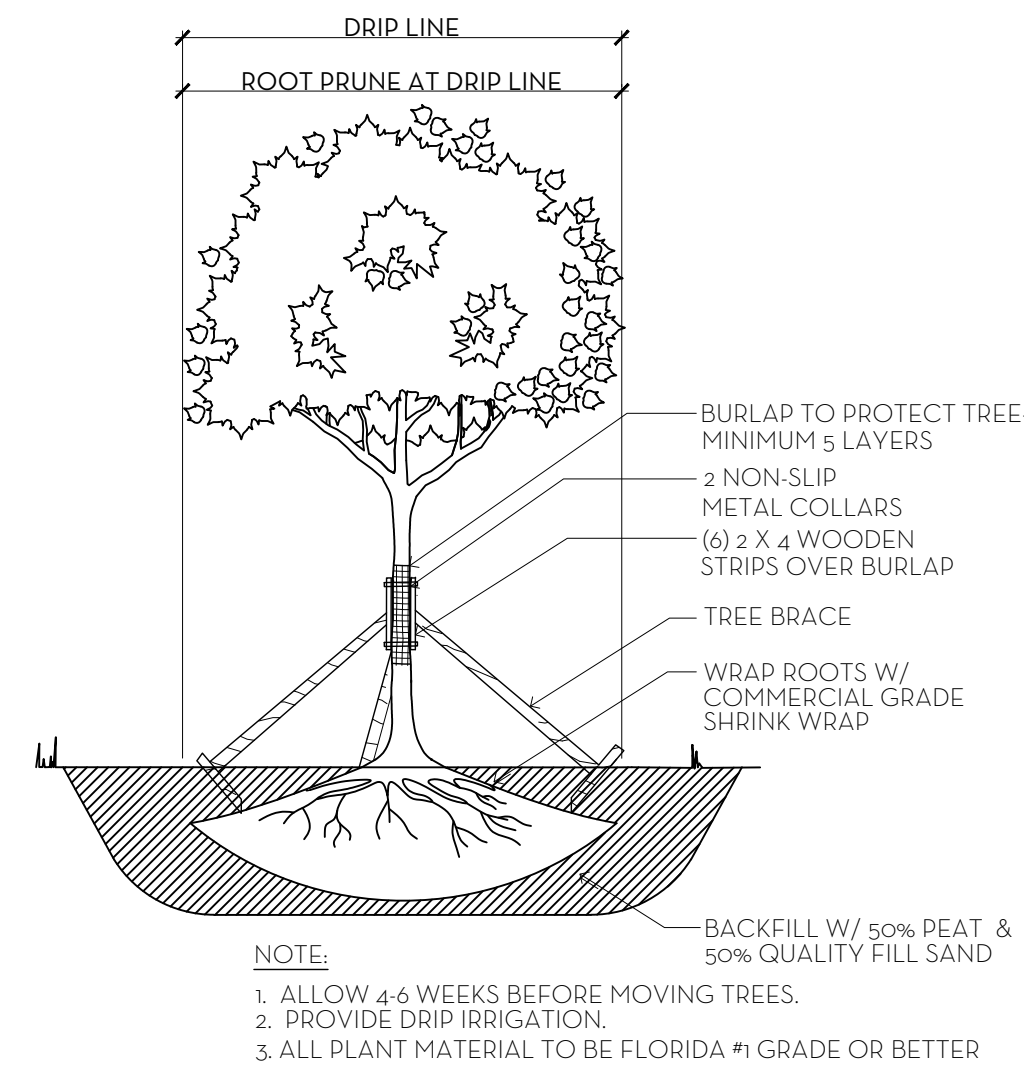
NOTE:  
ALL PLANT TO BE FLORIDA #1 OR BETTER

PLANT SPACING DETAIL  
N.T.S.

**SOD NOTES:**  
1. ROUGH GRADE PROVIDED BY CONTRACTOR 4'-5" BELOW GRADE  
2. RAKE AND REMOVE ALL CONSTRUCTION DEBRIS  
3. PRIOR TO LAYING SOD ADD 80% HORTANA AND 20% CANADIAN PEAT, 2" MIN.  
4. AFTER LAYING SOD APPLY NECESSARY PESTICIDES AND FUNGICIDES.  
5. IRRIGATE REGULARLY, REFER TO IRRIGATION DRAWINGS

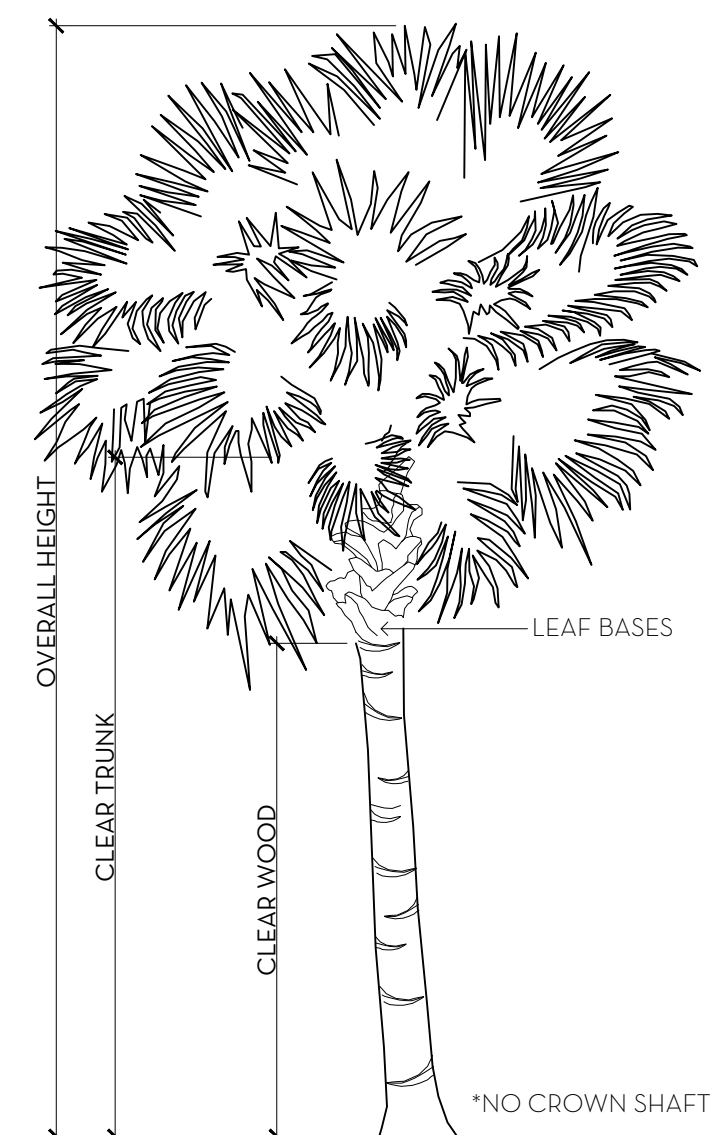


SOD PLANTING DETAIL  
N.T.S.



NOTE:  
1. ALLOW 4-6 WEEKS BEFORE MOVING TREES.  
2. PROVIDE DRIPLINE IRRIGATION.  
3. ALL PLANT MATERIAL TO BE FLORIDA #1 GRADE OR BETTER

TREE ROOT PRUNING DETAIL  
N.T.S.



PALM SPECIFICATION DETAIL  
N.T.S.

NO PLANTING CHANGES ARE PROPOSED AS PART OF THIS APPLICATION. ANY DISTURBED OR DAMAGED PLANTING SMALL BE REPLACED IN KIND



## Town of Palm Beach

Planning Zoning and Building  
360 S County Rd  
Palm Beach, FL 33480  
www.townofpalmbeach.com

Line #	Landscape Legend	
1	Property Address:	227 Angler
2	Lot Area (sq. ft.):	15,070
3		REQUIRED PROPOSED
4	Landscape Open Space (LOS) (Sq Ft and %)	6,781.5 sf (45%) 6,781.5 sf (45%)
5	LOS to be altered (Sq Ft and %)	N/A 0%
6	Perimeter LOS (Sq Ft and %)	3,390.8 sf (50%) 3,549 (76.77%)
7	Front Yard LOS (Sq Ft and %)	1,500 sf (40%) 2,879 sf (52.34%)
8	Native Trees %	30% (number of trees) N/C
9	Native Shrubs & Vines %	30% (number of shrubs & vines) N/C
10	Native Groundcover %	30% (groundcover area) N/C

To determine qualifying native vegetation use either:

[the Institute for Regional Conservation Natives for Your Neighborhood FL Statewide Plant List](#)

OR

[the Florida Native Plant Society Native Plants for Your Area List](#)

Note: Modification of >50% of existing landscape/greenscape are subject to minimum native plant requirements and must submit a landscape and irrigation plan for review.

This table shall be included on the landscape species index sheet as prepared by a licensed landscape architect and landscape openspace data shall be incorporated on to corresponding zoning legend.

See Ord. 003-2023

REV BF 20230727

MARIO F. NIEVERA

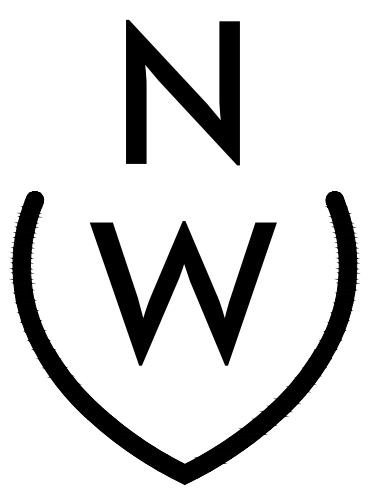
State of Florida  
Landscape Architect  
Registration No.  
6666856

PLANT LIST AND DETAILS

227 ANGLER AVENUE

PALM BEACH, FLORIDA

11 JANUARY 2024



NIEVERA WILLIAMS  
DESIGN

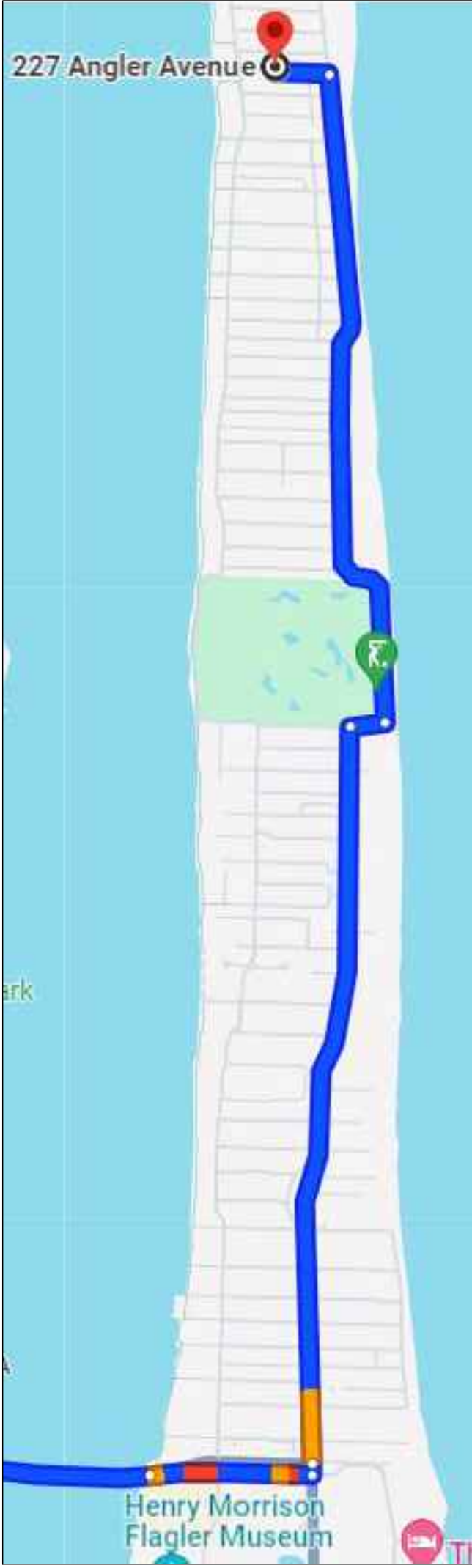
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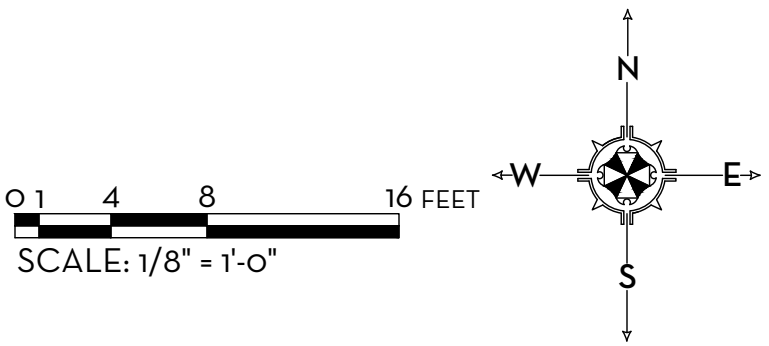
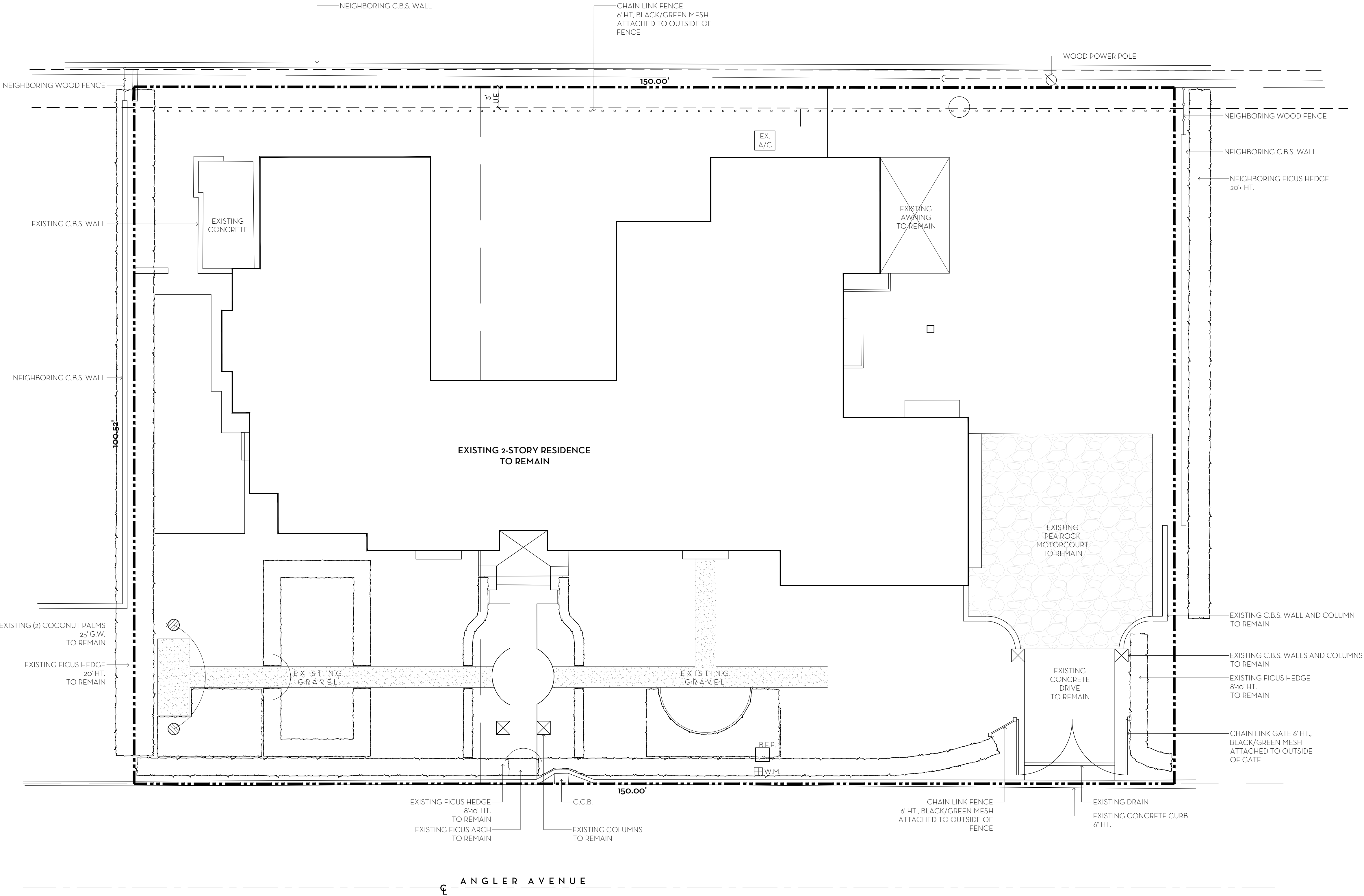
LP2

ARC-24-040  
ZON-24-046





TRUCK LOGISTICS:  
MAX. TRUCK LENGTH = 30 FEET  
ENTER VIA THE NORTH BRIDGE TO COUNTY ROAD. NORTH ON COUNTY/OCEAN BLVD TO ANGLER AVE.  
ESTIMATED NUMBER OF TRIPS FOR LARGE TRUCKS: 25



MARIO F. NIEVERA

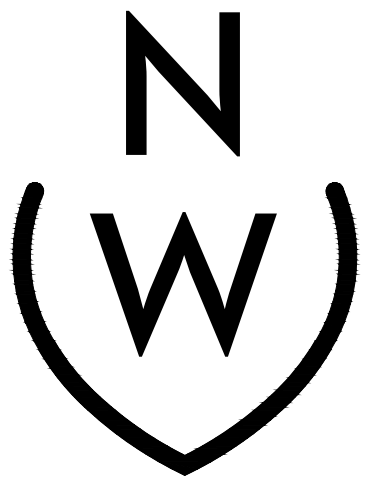
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Landscape Architect  
Registration No.  
6666856

CONSTRUCTION SCREENING PLAN  
**227 ANGLER AVENUE**

PALM BEACH, FLORIDA

11 JANUARY 2024

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



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**CSP**

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