

1. VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.
2. ALL NEW FOOTINGS SHALL BE NOTED ON PLAN.
3. LEDGER BOARD SHALL BE SAME SIZE AS JOISTS AND ATTACHED TO RM JOIST AS "P" DETAIL. IF LEDGER NOT PROPERLY ALIGNED W/ HOUSE RM JOIST LEDGER SHALL BE SECURED TO FOUNDATION WALL WITH STAGGERED THRU BOLTS OR WEDGE ANCHORS.
4. PROVIDE JOIST HANGERS AT ALL FLUSH FRAME CONDITIONS.
5. JOIST HANGERS TO BE SIMPSON LUS28Z
6. BLOCK JOISTS AT MID-SPAN FOR SPANS OF 8'-0" OR GREATER.
7. EROD PT SLOPE COLS/POSTS TREATED FOR STRUCTURAL GROUND BURIAL MCA .23
8. BEAMS/JOISTS TO BE SYP TREATED NAILED. SEE PLAN FOR SIZING AND SPACING.
9. DECKING TO BE 2x4x6 TREX
10. RAILS TO BE 2" HIGH WITH LESS THAN 4" OPENINGS PER IRC CODE
11. STAIRS TO BE BUILT 8-1/4" RISE 9-1/2" RUN PER IRC CODE
12. ALL DECK HARDWARE TO BE CORROSION RESISTANT AND INSTALLED PER MANUFACTURERS INSTRUCTIONS.



NJ LICENSE # 13VH08509200

CONSTRUCTION SPECIFICATIONS

GENERAL: ALL MATERIALS SHALL BE INSTALLED IN A WORKMANLIKE MANNER AND THE METHODS BE WITHIN THE HIGHEST STANDARDS OF THE APPLICABLE CONSTRUCTION TRADE. ALL WORK SHALL MEET OR EXCEED PROVISIONS OF ALL GOVERNING CODES AND ORDINANCES. THE DRAWINGS ARE GENERAL IN NATURE. IT IS INTENDED THAT THE CONTRACTOR ADJUST DIMENSIONS, MATERIALS AND METHODS OF CONSTRUCTION TO PROPERLY ADAPT THE WORK TO THE SITE CONDITIONS.

EXCAVATOR: EXCAVATE FOR ALL FOUNDATION WORK TO DEPTH BELOW GRADE REQUIRED BY LOCAL CODE. FOOTINGS SHALL REST ON UNDISTURBED EARTH.

CONCRETE: SOLID CONCRETE MASONRY UNITS OR 2500# STRENGTH CONCRETE OF A SIZE SUFFICIENT TO SPREAD THE IMPOSED FOUNDATION LOAD ON THE BEARING SOIL IN ACCORDANCE WITH CODE REQUIREMENTS.

CARPENTRY: ALL WOOD SHALL BE #2 OR BETTER SOUTHERN YELLOW PINE, PRESSURE-TREATED WITH NON-ARSENIC BASED PRESERVATIVE, OF NOMINAL SIZES DETAILING INDICATED ON THE DRAWINGS OR BY CODE.

METALS: ALL HARDWARE SHALL BE HOT-DIPPED GALVANIZED OR OTHER NON-CORROSIVE FINISH AND SHALL BE OF A SIZE AND SPACING SUFFICIENT TO CARRY OR TRANSMIT THE INTENDED STRUCTURAL LOAD IN ACCORDANCE WITH GOVERNING CODES AND APPLICABLE STRUCTURAL STANDARDS. FINISH HARDWARE SHALL BE NON-CORROSIVE AND SUITABLE FOR EXTERIOR APPLICATIONS.

ANALYSIS OF 2x10 CANTILEVERED DECK JOISTS

CALCULATIONS ARE BASED ON THE FOLLOWING DATA:

- 60 PSF LIVE LOAD
- 10 PSF DEAD LOAD
- #2 SYP, FB (ALLOWABLE BENDING STRESS) 800 PSI
- $E = 1.1 \times 10^6$ PSI
- CANTILEVER LENGTH 3'-4" MAX.
- BASE SPAN 16'-2" MAX.
- JOIST SPACING 12" OC
- DEFLECTION LIMITED TO $L/240$

CALCULATED BENDING STRESS = 544 PSI < 800 PSI OK
DEFLECTION = $16'-2" \times 10^3 / 240 = 0.68"$ ($162 < 240$ OK)

THE CALCULATIONS INDICATE SUCH AN APPLICATION IS ACCEPTABLE AND SATISFIES THE DESIGN SPECIFICATIONS OF THE WESTERN WOOD PRODUCTS ASSOCIATION.

UPLIFT AND UPLIFT RESISTANCE

FOR THESE CALCULATIONS THE "WORST CASE" COLUMN (LONGEST SPAN AND LARGEST CONTRIBUTING AREA) WAS USED. THE DECK WAS CONSIDERED A FLAT ROOF. TABLE 1609.4.3 OF THE IBC IS FOR A ROOF WITH MEAN HEIGHT OF 30 FEET LOCATED IN EXPOSURE B. TABLE R301.2(3) OF THE IRC LISTS THE LOWEST MEAN ROOF HEIGHT AT 15' WITH AN ADJUSTMENT COEFFICIENT OF 1.00. THIS DECK IS AVERAGE +/- 1' ABOVE GRADE. DESIGN WIND SPEED = 115 MPH.

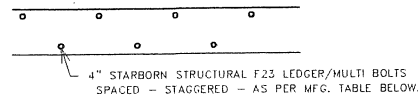
UPLIFT
DECK CONTRIBUTING AREA = 21.47' x 10' = 214.7 SF

UPLIFT WAS INTERPOLATED FROM TABLE 1609.6.2.1(1), VERTICAL LOAD, INTERIOR ZONE, WINDWARD ROOF, LOAD DIRECTION - LONGITUDINAL.
110MPH = -16.0 120MPH = -19.1 115MPH = -17.55
 $21.47 \times 17.55 \text{ PSF} = 376.7$ UPLIFT

RESISTANCE TO UPLIFT

THE GOLIATH METAL POST HAS AN ALLOWABLE WORKING LOAD FOR UPLIFT RESISTANCE OF +/- 4800#.

DEAD LOAD $10' \times 10\#/\text{SF} = 100\#$
GOLIATH TECH METAL POST 4800
HEADLOK 640
DEAD LOAD 1000 TOTAL 5800 OK



LEDGER BOLT PATTERN DETAIL NTS

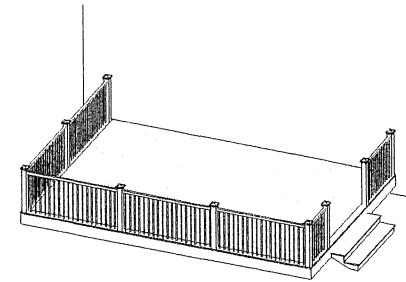
BASED ON 60#LL, S. PINE LEDGER AND 2x LUMBER HOUSE RIM JOIST

JOIST LENGTH (SPAN FROM LEDGER)	ON CENTER SPACING
6'-0" OR LESS	12"
+6'-0" TO 8'-0"	13"
+8'-0" TO 10'-0"	10"
+10'-0" TO 12'-0"	8"
+12'-0" TO 14'-0"	7"
+14'-0" TO 16'-0"	6"



THE GOLIATH TECH METAL POST INSTALLER WILL PROVIDE A FIELD REPORT DETAILING AND ATTESTING TO THE LOCATION OF EACH HELICAL PILE, IT'S DEPTH, THE ACHIEVED TORQUE AND THE BEARING CAPACITY IN RELATION TO THE TORQUE

A COPY OF THIS REPORT WILL BE PROVIDED TO THE CONSTRUCTION OFFICIAL.



GENERAL INFORMATION

USE GROUP R-5
CONSTRUCTION TYPE 5B

DESIGN LOADS

LIVE LOAD	50# / sf
DEAD LOAD	10# / sf
TOTAL LOAD	60# / sf

DESIGN WIND SPEED = 115 MPH.

EXISTING DECK AREA = 168 SF

NEW DECK AREA = 123 SF

TOTAL DECK AREA = 291 SF

BUILDING CODES
N.J.A.C. 5:23-6
2021 INTERNATIONAL RESIDENTIAL CODE NJ ED.

ALTERNATE CONCRETE FOOTING SIZES

LOAD IN LBS	DIAM
0-2137#	14"
2138-2799#	16"
2800-3533#	18"
3534-4362#	20"
4363-4809#	21"
4810-5279#	22"
5280-5770#	23"
5771-6283#	24"
6284-6817#	25"
6818-7374#	26"

NOTE:
1. VARIOUS UNMOVABLE OBSTACLES SUCH AS SEPTIC LINES, LARGE ROCKS, ETC., MAY PRECLUDE A HELICAL PIER. A CONCRETE FOOTING MAY BE SUBSTITUTED FOLLOWING THE TABLE ABOVE.
2. FOOTINGS ARE 8" DEEP AT MIN. 3'-0" BELOW GRADE.
CONTRACTOR SHALL HAVE OPTION TO USE ALTERNATE CONCRETE FOOTINGS OVER HELICAL PILES

SHEET 1 - NOTES & SPECS

WILLIAM WEEKS

310 WOODMERE AVE

NEPTUNE, NJ 07753

4/25/2023

SEAL

JONATHAN C. WALLACE

AIA, M. Arch, LEED AP BD+C

NJ LICENSE # 21A0202500

AVLY DEVELOPMENT LLC

1500 CHESTNUT ST. SUITE 2 #1933

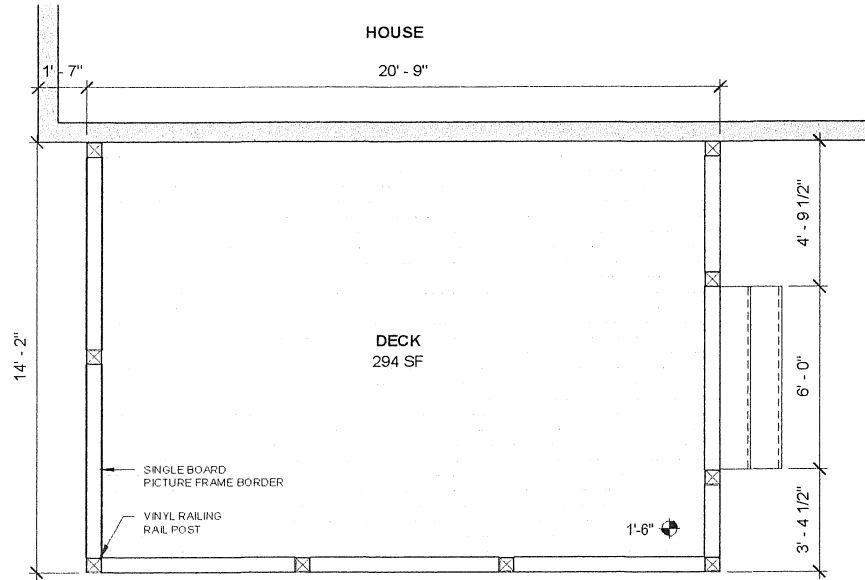
PHILADELPHIA, PA 19102

AVLY
ARCHITECTURE DEVELOPMENT

NJ LICENSE # 13VH0809200



FASTEN 5/4x6 TREX DECKING W/HIDDEN FASTENERS



DECK ELEVATION FROM GRADE

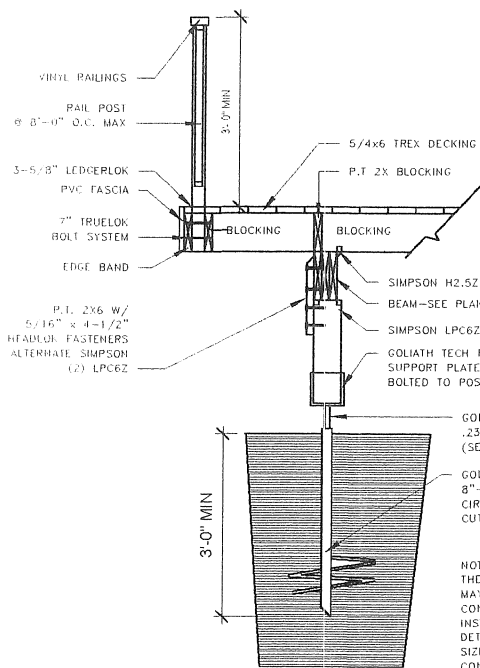
1 DECK PLAN

1/4" = 1'-0"

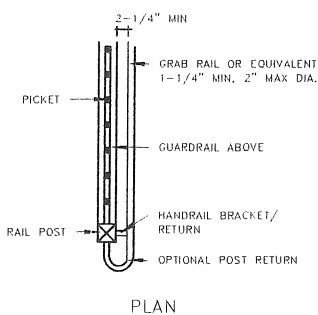
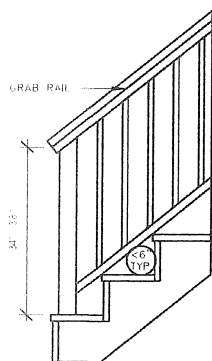
SHEET 3 - DECK PLAN
WILLIAM WEEKS
310 WOODMERE AVE
NEPTUNE, NJ 07753
4/25/2023

JONATHAN C. WALLACE
AIA, LEED AP BD+C
NJ LICENSE # 21A02202500
AVLV DEVELOPMENT LLC
1500 CHESTNUT ST SUITE 2 #1833
PHILADELPHIA PA 19102
267 499 0275 ARCHITECTURE@AVLV.COM
AVLV
ARCHITECTURE DEVELOPMENT

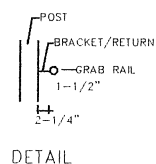
Deck GUARDIAN
NJ LICENSE # 13VH08509200



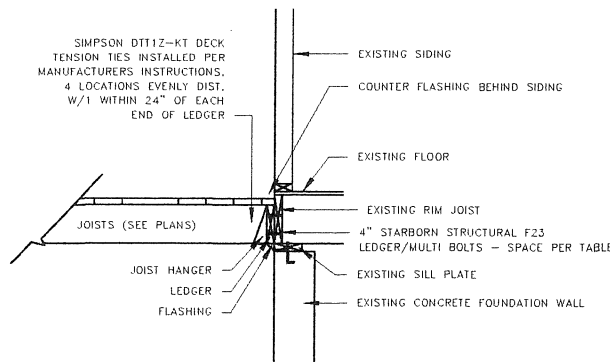
SECTION @ CANTILEVER DECK W/ VINYL RAIL NTS



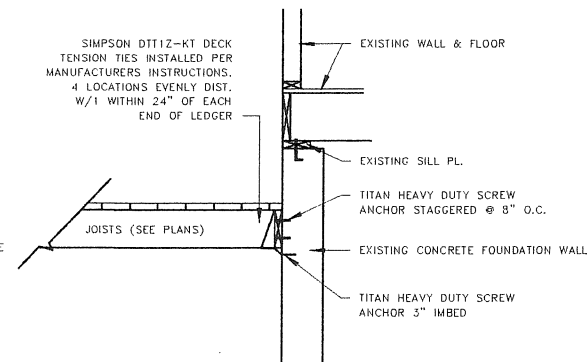
GRASPABLE HANDRAIL NTS



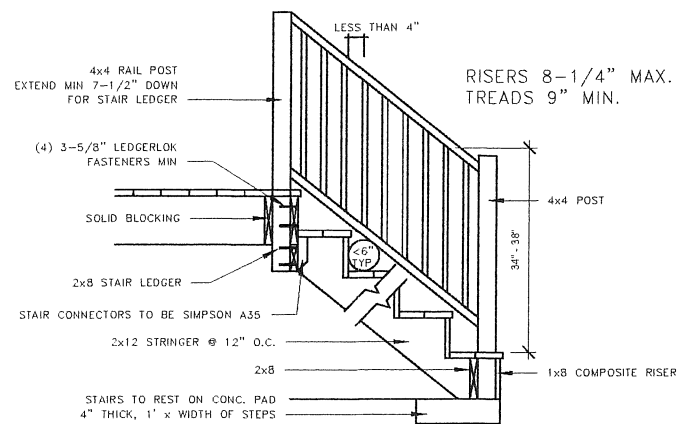
DETAIL



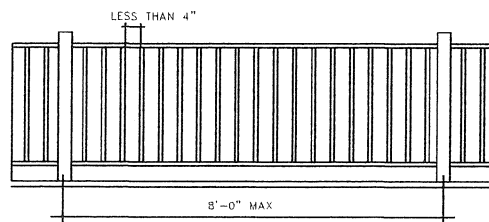
ATTACHMENT DETAIL @ HOUSE RIM BOARD NTS



ATTACHMENT DETAIL @ HOUSE CONC. WALL NTS



STAIR DETAIL NTS



RAILING ELEVATION NTS

SHEET 4 - DETAILS

WILLIAM WEEKS

310 WOODMERE AVE

NEPTUNE, NJ 07753

4/25/2023

JONATHAN C. WALLACE

AIA, N.A.A.S.P., LEED AP BD+C

ALL LICENSE # 21400207500

AVLY DEVELOPMENT, LLC

1500 CHESTNUT ST SUITE 2 #1833

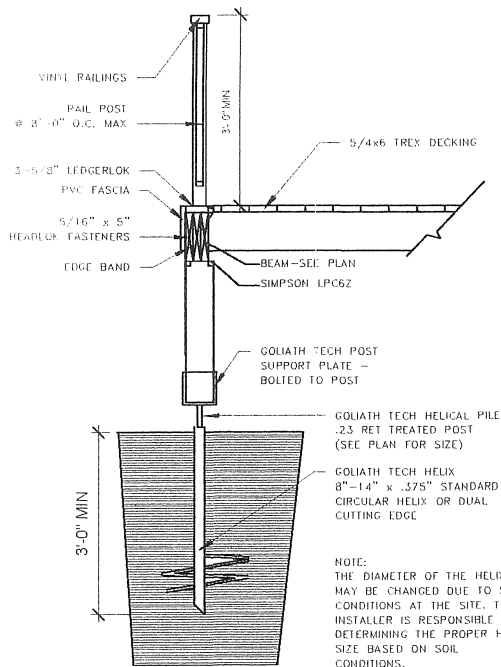
PHILADELPHIA PA 19102

267 486 0375 ARCHITECTURE@AVLY.COM

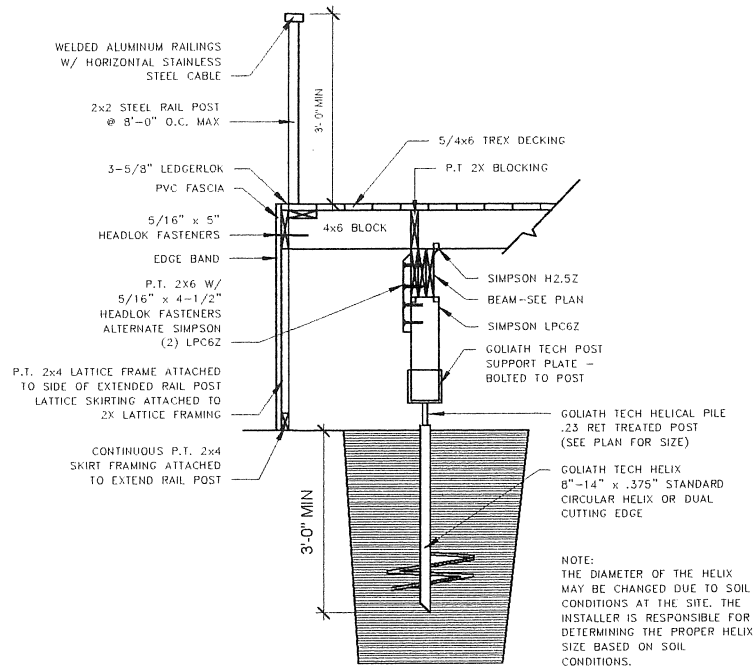
AVLY LLC
ARCHITECTURAL DEVELOPMENT

Deck Guardian

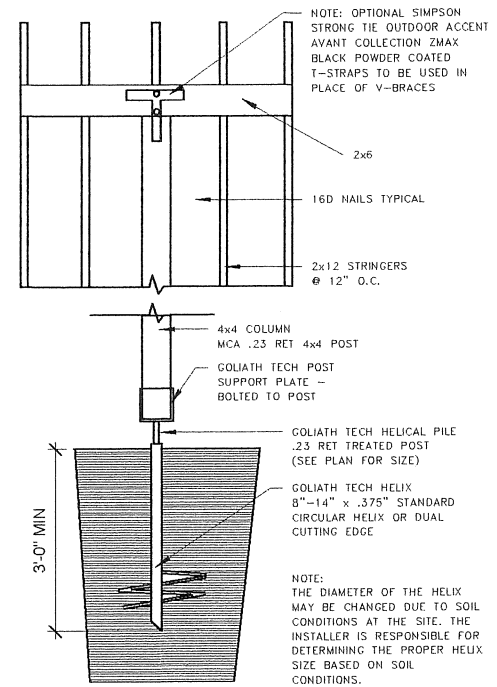
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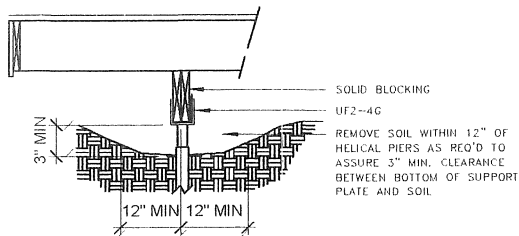
SECTION @ FLUSH DECK NTS



SECTION @ CANTILEVER DECK W/ ALUM. RAIL NTS



MID-STRINGER SUPPORT DETAIL NTS



DETAIL @ LOW DECK NTS

SHEET 5 - DETAILS

WILLIAM WEEKS

310 WOODMERE AVE

NEPTUNE, NJ 07753

4/25/2023

SEAL

JONATHAN C. WALLACE

AIA, M. ARCH. LEED AP BD+C

NJ LICENSE # 21A0202500

AVLY DEVELOPMENT LLC

1500 PHILADELPHIA PIKE, SUITE 100
NEPTUNE, NJ 07753
201.469.0275 ARCHITECTURE@AVLY.COM

Deck Guardian

NJ LICENSE # 13VH08509200