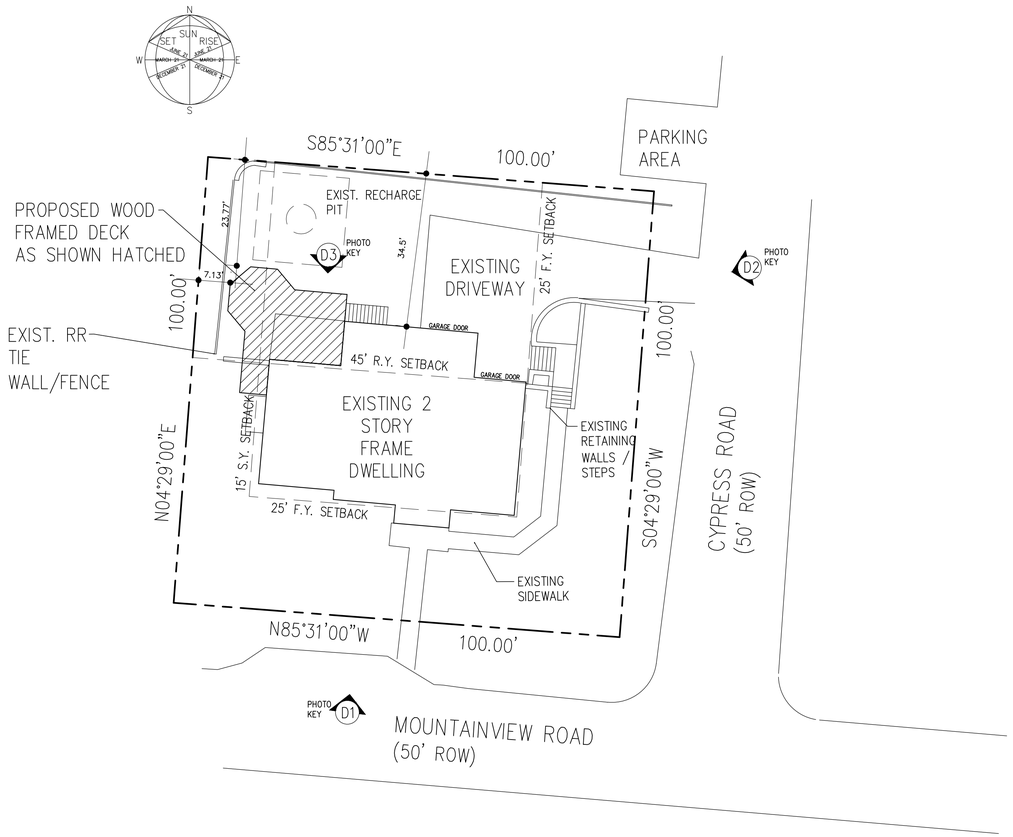


C1 SITE PLAN
SCALE: 1" = 20'-0"

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

B1 TAX / LOCATION MAP
NOT TO SCALE

SITE PLAN OF ZONE R-4
LOTS 1.03 BLOCK 51
APPLICANT JANICE SMITH
ADDRESS 28 MOUNTAINVIEW ROAD, CHATHAM TOWNSHIP, NEW JERSEY 07928

1. THE SUBJECT PROPERTY CONTAINS .229 ACRES AND IS LOCATED IN THE R-4 ZONE.

THIS SURVEY IS REFERENCED FROM A PLAN ENTITLED : "AS-BUILT PLAN FOR IVAN LEVYTSKYY BLOCK 51, LOT 1.03 CHATHAM TOWNSHIP, MORRIS COUNTY, NEW JERSEY, PREPARED BY RBZ ENTERPRISES, INC. DATED 6-7-16. SIGNED BY NICHOLAS LEBO PROFESSIONAL LAND SURVEYOR.

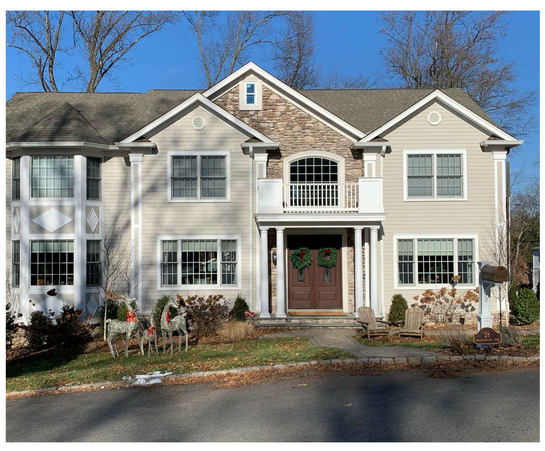
ARCHITECT ADDED PROPOSED NEW DECK STRUCTURE.

ZONING SCHEDULE

Zone: R-4 Type: Additions Lot: 1.03 Block: 51

Item Regulated	Required	Existing	Proposed	Exist. Non-Conforming	Variance Required	Note
Min. Lot Area:	10,000sf.	NA	N/A	N/A	N/A	
Total Lot Area:	NA	10,000sf	N/A	N/A	N/A	note 1
Front Yard:	25'	27.91'	N/A	N/A	N/A	
Rear Yard:	45'	34.5'	23.77'	Yes (see site plan)	Yes (see site plan)	
Side Yard:	15'	16.87'	7.13'	N/A	Yes (see site plan)	
Combined SideYards (1) %:	NA	NA	N/A	N/A	N/A	
Combined SideYards (2) SF:	NA	NA	N/A	N/A	N/A	
Lot Width at Street Line:	75'	100'	N/A	N/A	N/A	
Lot Width at Setback line:	75'	100'	N/A	N/A	N/A	
Lot Depth:	100'	100'	N/A	N/A	N/A	
Number of Stories:	2.5	2	N/A	N/A	N/A	
Building Height:	35'	30'	N/A	N/A	N/A	
Principal Building Coverage:	2,000sf.	1,950sf.	N/A	N/A	N/A	note 2
Total Impervious Coverage:	4,000sf.	3,812sf.	N/A	N/A	N/A	

NOTE 1: .229 acres
NOTE 2: PROPOSED NEW 477.8 SF DECK DOES NOT CONTRIBUTE TO EXISTING LOT COVERAGE



D1 VIEW OF SUBJECT PROPERTY FROM MOUNTAINVIEW ROAD (FRONT)
NOT TO SCALE

D2 VIEW OF SUBJECT PROPERTY FROM CYPRESS ROAD (SIDE)
NOT TO SCALE

D3 INTERIOR VIEW OF PROPERTY @ PROPOSED DECK LOCATION
NOT TO SCALE

BUILDING DATA

BUILDING CODES

N.J.A.C. 5:23-6 Rehabilitation Subcode N.J.A.C. 5:23-6
2015 International Building Code w/amendments N.J.A.C. 5:23-3.14
2015 National Standard Plumbing Code w/amendments N.J.A.C. 5.23-3.15
2014 National Electric Code w/amendments N.J.A.C. 5:23-3.16
2015 International Mechanical Code w/amendments N.J.A.C. 5:23-3.20
2015 International Fuel Gas Code w/amendments N.J.A.C. 5:23-3.27
Barrier Free Subcode and ICC/ANSI A117.1-2003
w/amendments N.J.A.C. 5:23-7

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Rev. No.: Date: NJ License # AI 13424

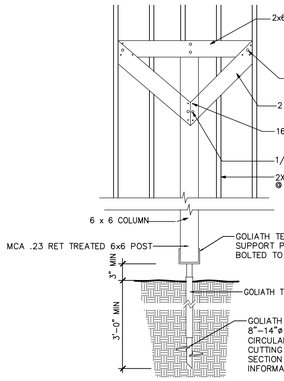
PROJECT TITLE

NEW DECK FOR
JANICE SMITH
BLOCK 51 LOT 1.03 ZONE R-4
28 MOUNTAINVIEW ROAD
CHATHAM TWP., NEW JERSEY

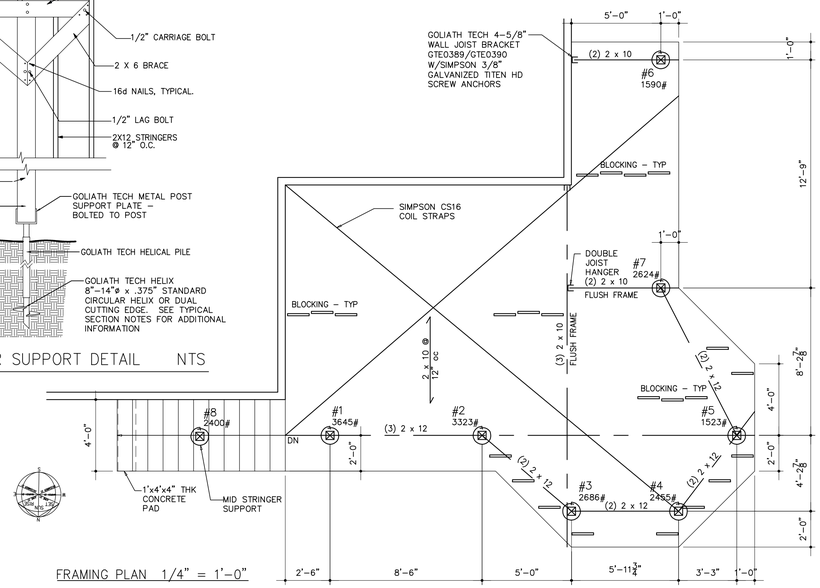
DRAWING TITLE
SITE PLAN, ZONING,
LOCATION MAP,
PHOTOGRAPHS

Project No.	1901-63
Drawn By:	MG
Checked By:	J.A.F.
Date:	12-12-19

A-1
Sheet No.



MID-STRINGER SUPPORT DETAIL NTS



FOOTING LEGEND

(8) POSTS – P2
(8) SUPPORT PLATE – MHC1161-3B POST CAP HELIX SIZE – 10"
#1 FOOTING NUMBER
500# REQUIRED LOAD IN POUNDS
⊗ 6x6 POST

FRAMING PLAN 1/4" = 1'-0"

1. VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.
2. ALL NEW FOOTINGS SHALL BE AS NOTED ON PLAN.
3. PROVIDE JOIST HANGERS AT ALL FLUSH FRAME CONDITIONS.
4. 2x10 LEDGER ATTACHED TO FOUNDATION WALL
4. BLOCK JOISTS AT MID-SPAN FOR SPANS OF 8'-0" OR GREATER.
5. 2X10 PT JOISTS @ 12" O.C.
6. PT COLS TREATED FOR STRUCTURAL GROUND BURIAL MCA .23.

CONSTRUCTION SPECIFICATIONS

GENERAL: ALL MATERIALS SHALL BE INSTALLED IN A WORKMANLIKE MANNER AND THE METHOD 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.

FLASHING: FLASHING SHALL BE NON-ALUMINUM AND APPROPRIATE TO THE TYPE OF PRESSURE TREATED WOOD USED. ADHESIVE BACKED FLASHING SHALL MEET AAMA711.

ANALYSIS OF 2 X 10 CANTILEVERED DECK JOISTS

CALCULATIONS ARE BASED ON THE FOLLOWING DATA:
- 50 PSF LIVE LOAD
- 10 PSF DEAD LOAD
- #2 SYP, FB (ALLOWABLE BENDING STRESS) 907 PSI
- E = 1.1 E6 PSI
- CANTILEVER LENGTH 5'-0" MAX.
- BASE SPAN 8'-0" TO 11'-0"
- JOIST SPACING 16" OC
- DEFLECTION LIMITED TO L/240

CALCULATED BENDING STRESS = 654 PSI < 907 PSI OK
DEFLECTION = 0.07" = L/1402 FOR 8'-0" BASE SPAN
DEFLECTION = 0.26" = L/503 FOR 11'-0" BASE SPAN

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

UPLIFT AND UPLIFT RESISTANCE CALCULATIONS

FOR THESE CALCULATIONS, THE "WORST CASE" COLUMN (LONGEST SPAN AND LARGEST CONTRIBUTING AREA) WAS USED.THE DECK WAS CONSIDERED A FLAT ROOF. TABLE 1609.6.2.1(1) 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 ±8'-0" ABOVE GRADE. DESIGN WIND SPEED = 115 MPH.

UPLIFT
DECK CONTRIBUTING AREA= 9'-0" X 8'-6" = 76.5SF

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
76.5SF X 17.55PSF = 1342.57# UPLIFT

RESISTANCE TO UPLIFT

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

DEAD LOAD 76.5SF X 10#/SF = 765#

GOLIATH TECH METAL POST 4800
DEAD LOAD 765 TOTAL = 5565 OK

LATERAL LOAD AND LATERAL LOAD RESISTANCE

FOR THESE CALCULATIONS, THE "WORST CASE" COLUMN (LONGEST SPAN PARALLEL TO THE BEAM) WAS USED. THE DECK WAS CONSIDERED A FLAT ROOF. TABLE 1609.6.2.1(1) 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 8'-0"ABOVE GRADE. DESIGN WIND SPEED = 115 MPH.

LATERAL WIND LOADING
BEAM 8'-6" X 9.25" = 6.54SF
EDGE BAND 8'-6" X 9.25" = 6.54SF TOTAL = 13.08 SF

LATERAL LOADING WAS INTERPOLATED FROM TABLE 1609.6.2.1(1) HORIZONTAL LOAD, END ZONE, LOAD DIRECTION – LONGITUDINAL
110MPH = -10.0 120MPH = -11.9 115MPH = -10.95

13.08SF X 10.95 = 143.22

LATERAL LOAD RESISTANCE

THE GOLIATH TECH METAL POST HAS AN ALLOWABLE WORKING LOAD FOR LATERAL FORCES OF 450# AVERAGE.
THIS VALUE MAY VARY DEPENDING ON SOIL CONDITIONS.

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 = 115mph

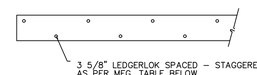
AREA= 477.8sf

BUILDING CODES
N.J.A.C. 5:23-6
2015 International Residential Code NJ Ed.

ALTERNATE CONCRETE FOOTING SIZES (SEE NOTES BELOW)

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

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 @ MIN. 3'-0" BELOW GRADE. CONTRACTOR SHALL HAVE OPTION TO USE ALTERNATE CONCRETE FOOTINGS OVER HELICAL PILES



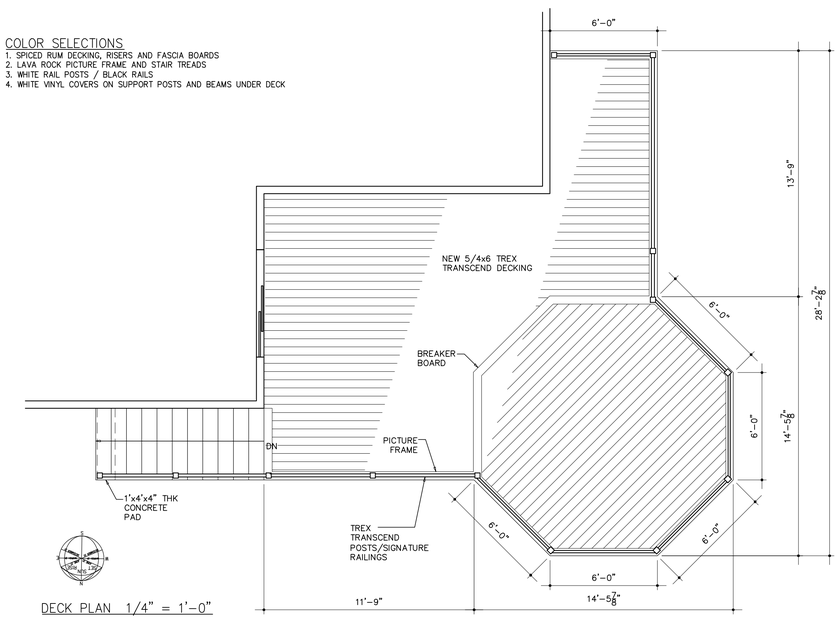
LEDGER BOLT PATTERN DETAIL NTS

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

SPAN FROM LEDGER TO JOIST	ON CENTER SPACING
6'-0" OR LESS	17
+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

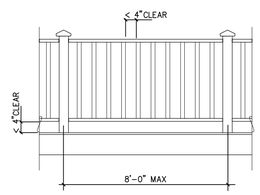
COLOR SELECTIONS

1. SPICED RUM DECKING, RISERS AND FASCIA BOARDS
2. LAVA ROCK PICTURE FRAME AND STAIR TREADS
3. WHITE RAIL POSTS / BLACK RAILS
4. WHITE VINYL COVERS ON SUPPORT POSTS AND BEAMS UNDER DECK

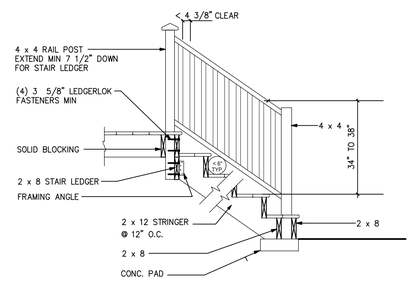


DECK PLAN 1/4" = 1'-0"

1. FASTEN 5/4 X 6 TREX TRANSCEND DECKING W/ HIDDEN FASTENERS.
2. TREX TRANSCEND/SIGNATURE RAILING SYSTEM
3. PROVIDE 5/4 X 6 STAIR TREADS
4. VINYL COVERS ON SUPPORT POSTS AND BEAMS UNDER DECK

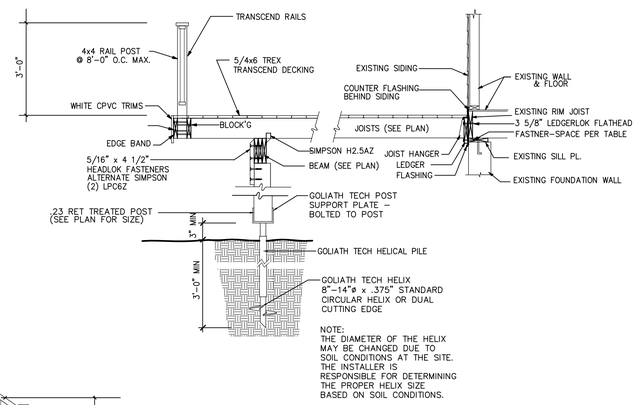


RAILING ELEVATION

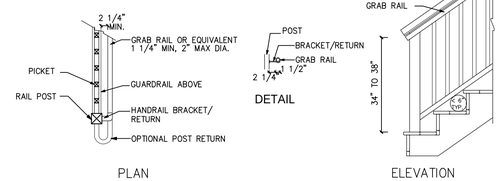


RISERS 8 1/4" MAX.
TREADS 9" MIN.

STAIR DETAIL NTS



TYPICAL SECTION NTS



PLAN ELEVATION

GRASPABLE HANDRAIL NTS

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PROJECT TITLE

NEW DECK FOR
JANICE SMITH
BLOCK 51 LOT 1.03 ZONE R-4
28 MOUNTAINVIEW ROAD
CHATHAM TWP., NEW JERSEY

DRAWING TITLE

PLANS, NOTES, DETAILS

Project No.	1901-63
Drawn By:	MG
Checked By:	J.A.F.
Date:	12-12-19

A-2
Sheet No.