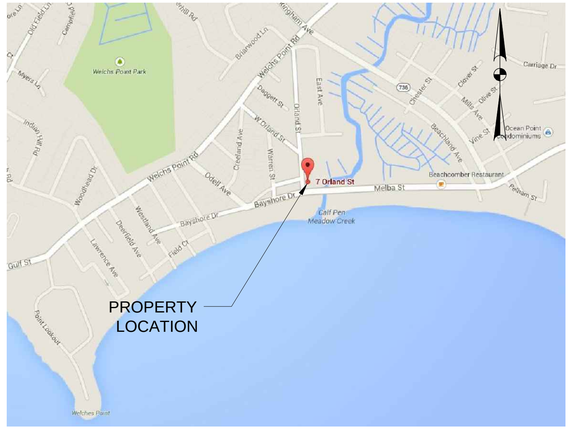
THE STATE OF CONNECTICUT

DEPARTMENT OF HOUSING (DOH)

COMMUNITY DEVELOPMENT BLOCK GRANT-DISASTER RECOVERY PROGRAM (CDBG-DR)

OWNER-OCCUPIED REHABILITATION AND REBUILDING PROGRAM (OORR)



PROJECT LOCATION MAP
NTS

STORM SANDY RELIEF

GOVERNOR DANNEL P. MALLOY

DRAWING INDEX

SHEET NO.	DRAWING TITLE
G-100	COVER SHEET
C-100	SITE PLAN
A-101	CHAIR LIFT ADDITION ARCHITECTURAL PLAN
S-100	GENERAL NOTES
S-101	CHAIR LIFT ADDITION STRUCTURAL PLAN
E-100	ELECTRICAL FOUNDATION & DECK PLANS

APPLICATION NO. 1417
7 ORLAND ST.
MILFORD, CT 06460

6/07/2017

IN THE AFTERMATH OF Superstorm Sandy

Department of Housing
CDBG-DR
Team Sandy
Rebuilding Together

QUI TRANSTULIT SUSTINET

CONNECTICUT DEPARTMENT OF HOUSING

NOTES:

REVISIONS

dtc
DIVERSIFIED TECHNOLOGY CONSULTANTS
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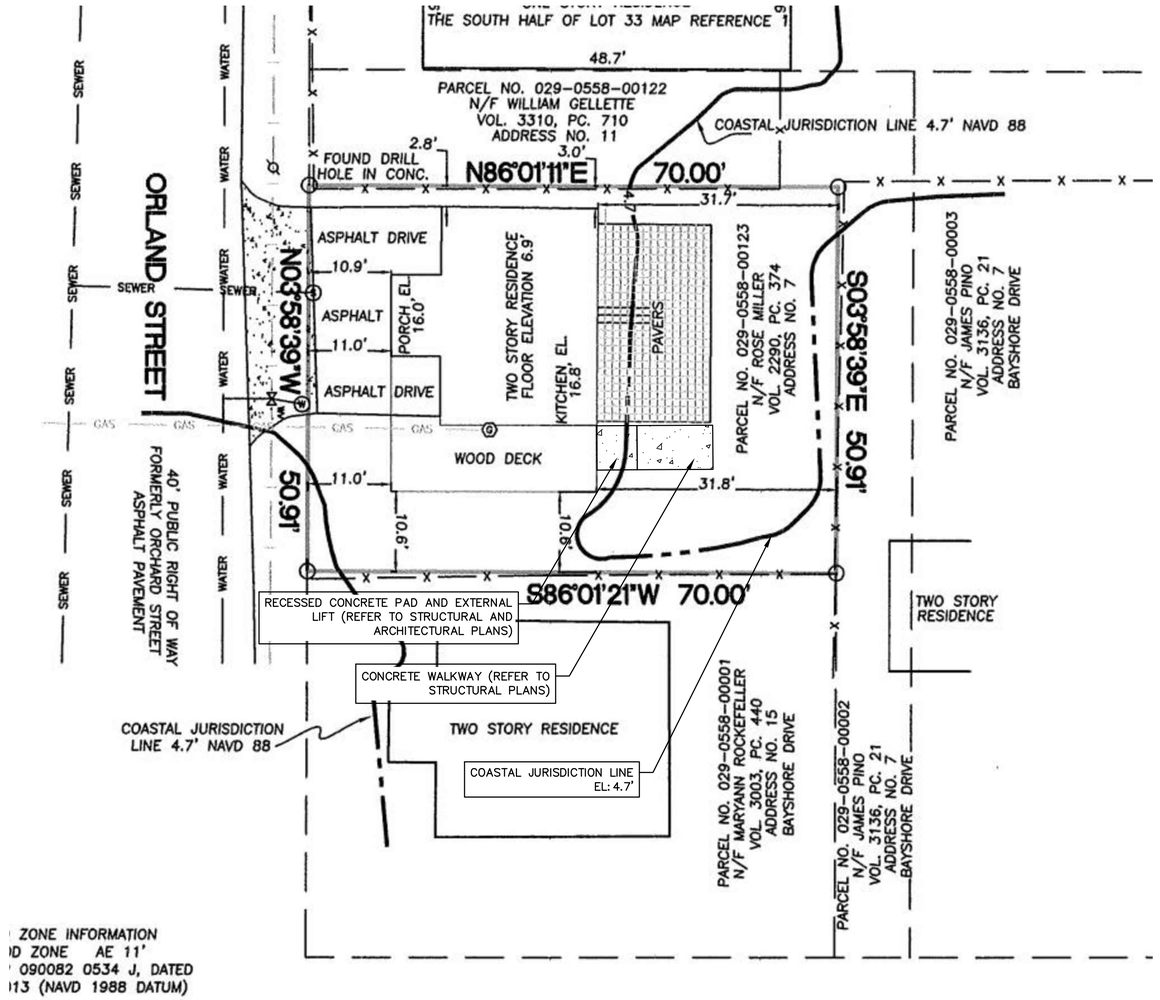
203 239 4200 203 234 7376 FAX

OORR
APPLICATION NO. 1417
MILLER RESIDENCE
7 ORLAND ST.
MILFORD, CT

COVER SHEET

DTC PROJECT NUMBER: 13-449-010
DTC DRAWING FILE:
SCALE: NA
DRAWN BY:
DATE: 06/07/2017
CHECKED BY:
SHEET:

G-100



A2 EXISTING CONDITION SURVEY

GRAPHIC SCALE

10 0 5 10 20

(IN FEET)

NOTES:

REVISIONS

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SITE PLAN

DTC PROJECT NUMBER: 13-449-010

DTC DRAWING FILE:

SCALE: AS NOTED

DRAWN BY: EPZ

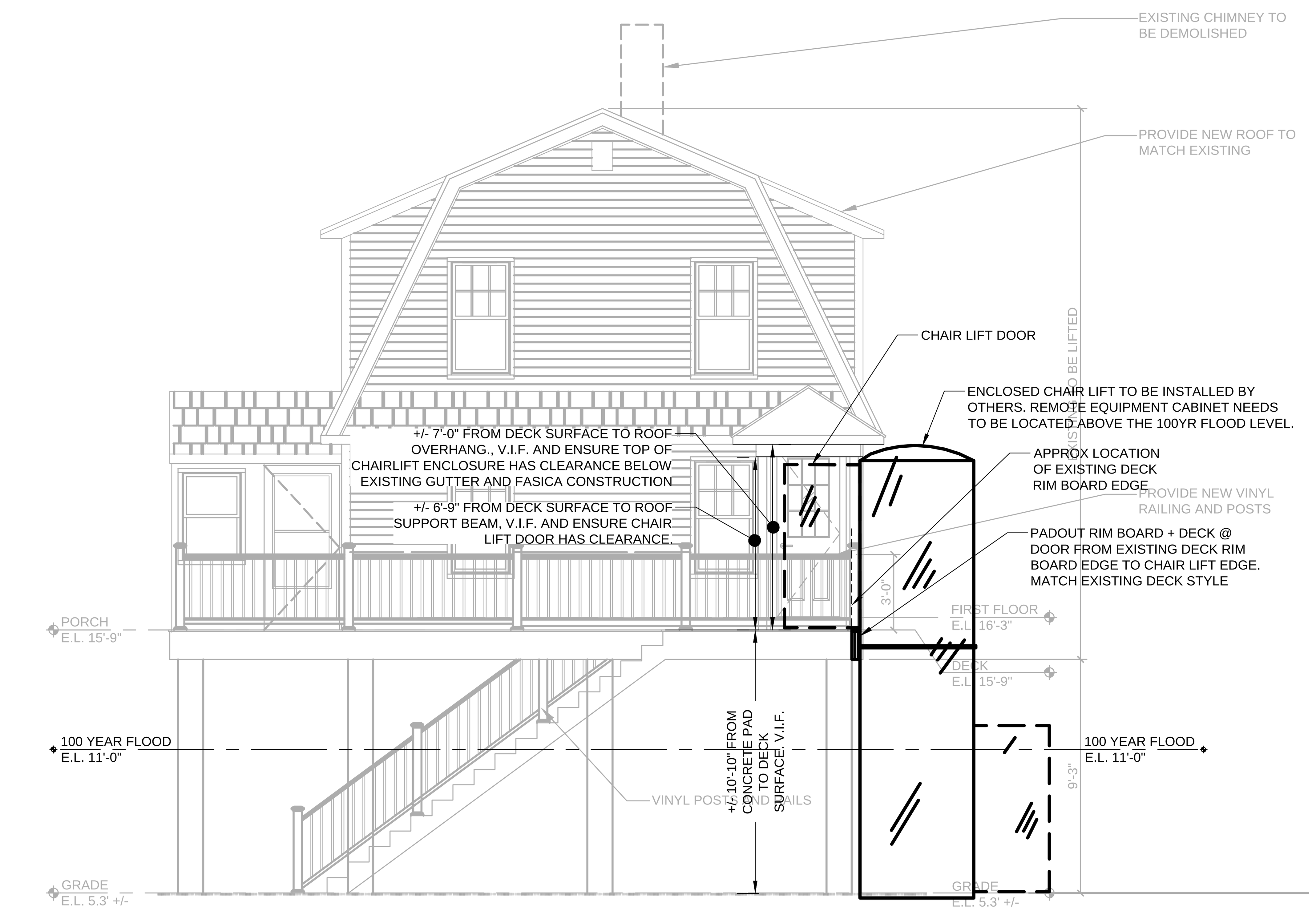
DATE: 06/07/2017

CHECKED BY: JAB

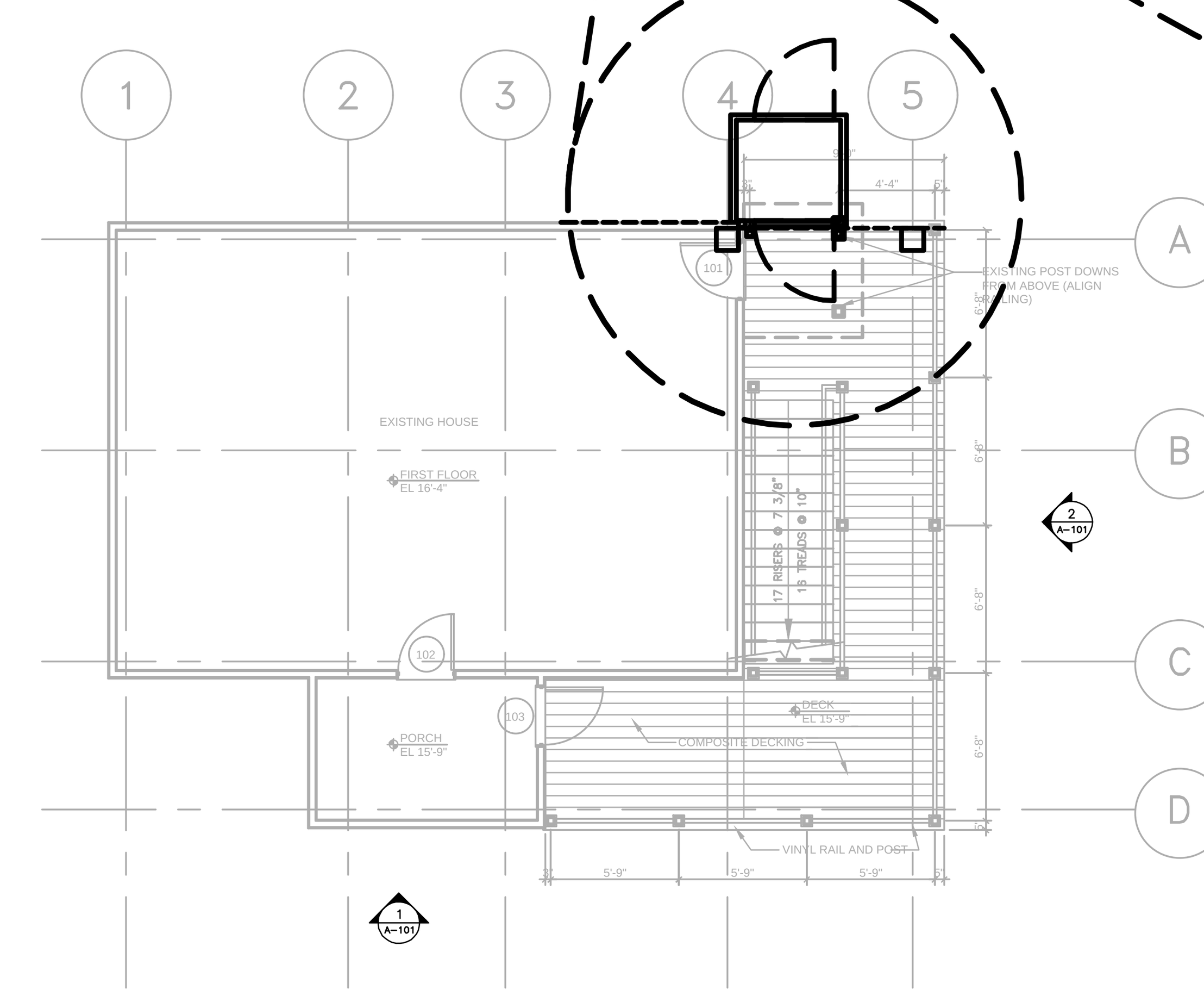
SHEET:

C-100

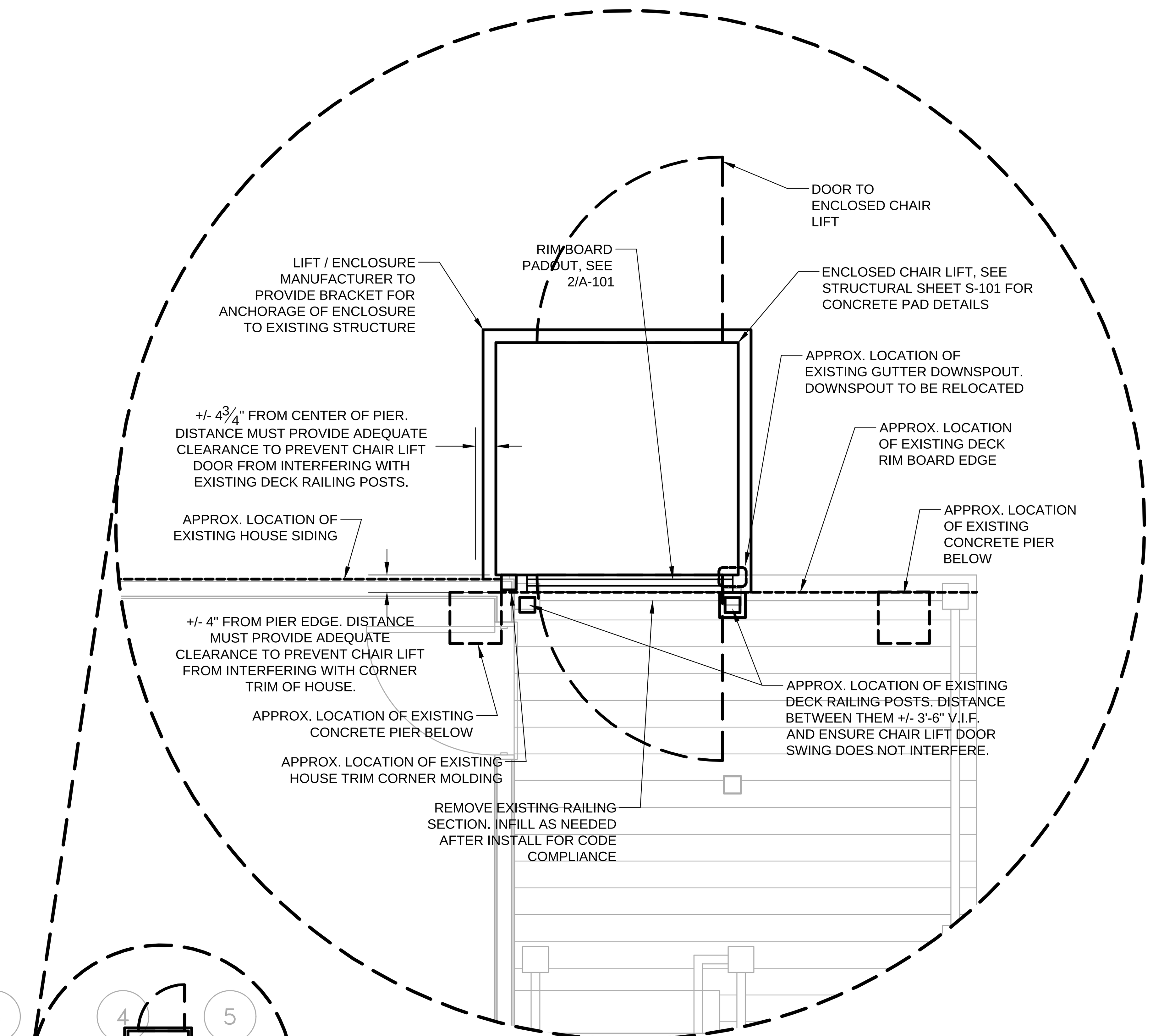
1 EAST ELEVATION
1/4" = 1'-0"



2 NORTH ELEVATION
1/4" = 1'-0"



3 OVERALL PLAN
1/8" = 1'-0"



4 ENLARGED PLAN VIEW
1/2" = 1'-0"

NOTES:

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CHAIR LIFT ADDITION
ARCHITECTURAL
PLAN

DTC PROJECT NUMBER:	13-449-010		
DTC DRAWING FILE:			
SCALE:	VARIES	DRAWN BY:	CH
DATE:	06/07/2017	CHECKED BY:	RO

SHEET:
A-101

GENERAL NOTES

GENERAL

SCOPE: CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIAL, INSTALLATION, EQUIPMENT AND ACCESSORIES REQUIRED TO PROVIDE COMPLETE AND FUNCTIONABLE LIFT AND ENCLOSURE

GOVERNING CODE: 2009 INTERNATIONAL RESIDENTIAL CODE OF THE INTERNATIONAL CODE COUNCIL.INC. WITH THE 2013 AMENDMENTS TO THE STATE CODE.

DESIGN LOADS:

NEW FLOOR AREAS:

FIRST FLOOR: DEAD LOAD 15 PSF
LIVE LOAD 40 PSF

DECKS: DEAD LOAD 15 PSF
LIVE LOAD 40 PSF

ROOF DEAD LOAD = 15 PSF

WIND LOAD CRITERIA FOR NEW, ALTERED, OR REPAIRED ELEMENTS:

BASIC WIND SPEED = 100 MPH, EXPOSURE CLASSIFICATION "D".

SEISMIC LOAD CRITERIA FOR NEW, ALTERED OR REPAIRED ELEMENTS.

SEISMIC DESIGN CATEGORY "B"

1. SHOULD ANY OF THE DETAILED INSTRUCTIONS SHOWN ON THE PLANS CONFLICT WITH THE GENERAL STRUCTURAL NOTES, THE SPECIFICATIONS, OR WITH EACH OTHER, THE STRICTEST PROVISION SHALL GOVERN.
2. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURE AND SEQUENCE AND TO INSURE THE SAFETY OF THE BUILDING AND ITS COMPONENT PARTS DURING ERECTION. THIS INCLUDES THE ADDITION OF WHATEVER SHORING, SHEETING, TEMPORARY BRACING, GUYS OR TIEDOWNS WHICH MIGHT BE NECESSARY. SUCH MATERIAL SHALL REMAIN THE CONTRACTOR'S PROPERTY AFTER COMPLETION OF THE PROJECT.
3. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO FOLLOW ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION.
4. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, ANGLES AND EXISTING CONDITIONS BEFORE PROCEEDING WITH ANY WORK.
5. ALL SECTIONS AND DETAILS SHALL BE CONSIDERED TYPICAL AND APPLY FOR THE SAME AND SIMILAR SITUATIONS THROUGHOUT THE BUILDING, UNLESS OTHERWISE SPECIFICALLY NOTED.
6. NEW, ALTERED, OR REPAIRED ELEMENTS COMFORM TO THE 2009 INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS INCLUDING THE CONNECTICUT 2013 AMMENDMENT TO THE STATE BUILDING CODE.
7. ELEVATION OF THE BOTTOM OF THE LOWEST HOROZONTAL STRUCTURAL MEMBER SHALL BE ELEVATION 16.0.

FOUNDATIONS

1. BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BE AT LEAST 3'-6" BELOW FINISHED GRADE.
2. PLACEMENT OF ALL COMPACTED FILL MUST BE UNDER SUPERVISION OF AN APPROVED TESTING LABORATORY (SEE SPECIFICATIONS). CONCRETE FOUNDATIONS SHALL NOT BE PLACED UNTIL SUBBASE HAS BEEN CHECKED IN PLACE AND APPROVED BY TESTING LABORATORY.

HELICAL MICROPILES

1. GENERAL NOTES ARE MEANT TO COMPLIMENT THE HELICAL PILE SPECIFICATIONS AND SHOULD BE CONFORMED TO DURING DESIGN AND INSTALLATION.
2. THE HELICAL PILE CONTRACTOR SHALL HAVE MINIMUM 5 YEARS EXPERIENCE IN PERFORMING DESIGN AND CONSTRUCTION OF HELICAL MICROPILES. THE CONTRACTOR SHALL PROVIDE A DESIGN OF THE HELICAL PILE TO MEET THE BELOW STANDARDS SIGNED AND SEALED BY A REGISTERED PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF CONNECTICUT.
3. THE HELICAL PILE CONTRACTOR IS RESPONSIBLE FOR SELECTION OF CONSTRUCTION MEANS, METHODS, SEQUENCING AND VERIFYING ALL DIMENSIONS PRIOR TO CONSTRUCTION.
4. HELICAL MICROPILES SHALL BE DESIGNED FOR THE FOLLOWING ALLOWABLE LOADS:
   a. DESIGN/ALLOWABLE COMPRESSION LOAD PER PILE = 24 KIPS
   b. DESIGN/ALLOWABLE TENSION LOAD PER PILE = 6 KIPS
   c. DESIGN/ALLOWABLE LATERAL LOAD PER PILE = 2 KIPS
5. A FACTOR OF SAFETY OF 2.0 SHALL BE APPLIED TO THE ALLOWABLE LOADS TO DETERMINE THE ULTIMATE CAPACITY PER HELICAL MICROPILE.
6. SEE DETAIL 3/S-101 FOR PILE TYPE LIMITS BELOW AND ABOVE GRADE.
7. CENTRAL SHAFT PILE TYPE: 1 ½" SOLID SHAFT OR AS REQUIRED.
   a. THE CENTRAL SHAFT SHALL EXTEND FROM THE LEAD SECTION TO THE UNDERSIDE OF THE FOOTING.
8. LEAD SECTION HELIX PLATES: 8-10-12.
9. TERMINATION: CONSTRUCTION CAP FOR COMPRESSION.
10. REQUIRED FIELD INSTALLATION TORQUE = 7000 FT-LBS
11. GROUT SHALL BE PORTLAND CEMENT CONFORMING TO ASTM C150 TYPE I OR TYPE II.
    a. ADMIXTURES MAYBE REQUIRED AND SHOULD BE DISCUSSED WITH THE ENGINEER.
    b. THE WATER - CEMENT RATIO FOR CEMENT GROUTS IS TYPICALLY 0.45.
12. ALL HELICAL PILE MATERIAL SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153/A123.
13. ABOVE AND BELOW GRADE STEEL PIPE MATERIAL SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153/A123.
14. A TORQUE INDICATOR SHALL BE USED DURING HELICAL MICROPILE INSTALLATION AND SHALL BE CAPABLE OF PROVIDING CONTINUOUS MEASUREMENT OF APPLIED TORQUE THROUGHOUT THE INSTALLATION.
    a. TORQUE INDICATORS SHALL BE CALIBRATED EITHER ON-SITE OR AT AN APPROPRIATELY EQUIPPED TEST FACILITY AND RE-CALIBRATED, IF IN THE OPINION OF THE OWNER AND/OR CONTRACTOR REASONABLE DOUBT EXISTS AS TO THE ACCURACY OF THE TORQUE MEASUREMENTS.

SLAB ON GRADE

1. CONTROL JOINTS ARE TO BE CREATED IN SLABS ON GRADE. JOINTS SHALL BE SAW CUT 1/8" WIDE AND TO A DEPTH EQUAL TO 1/4 OF THE SLAB THICKNESS. LOCATE JOINTS 15'_0" ON CENTER (PLUS OR MINUS 5'_0") IN EACH DIRECTION, UNLESS OTHERWISE SHOWN ON DRAWINGS. CONSTRUCTION JOINTS AS REQUIRED SHALL BE KEYED AND LOCATED AT CONTROL JOINT INTERVALS.

CONCRETE

MATERIALS:

CONCRETE SHALL DEVELOP STRENGTH IN 28 DAYS AS FOLLOWS:

LOCATION	STRENGTH (PSI)
FOUNDATIONS	4000
SLABS ON GRADE	4000

1. ALL DETAILING, FABRICATION AND ERECTION OF REINFORCING BARS MUST FOLLOW THE LATEST ACI CODE AND THE LATEST ACI "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES".
2. REINFORCING STEEL SHALL BE 60,000 PSI YIELD.
3. NO TACK WELDING OF REINFORCING WILL BE PERMITTED.
4. UNLESS NOTED OTHERWISE, ALL LAP SPLICES SHALL BE CLASS B, IN ACCORDANCE WITH ACI 318-02.
5. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A_185.
6. WIRE MESH REINFORCEMENT MUST LAP ONE MESH SIZE AT SIDES AND ENDS AND BE WIRED TOGETHER.
7. WELDED WIRE FABRIC SIDE LAPS SHALL BE STAGGERED TO AVOID FOUR MESH THICKNESS AT COINCIDING END LAP AND SIDE LAP LOCATION.
8. NO CALCIUM CHLORIDE OR ADMIXTURES CONTAINING MORE THAN 0.1% CHLORIDE BY WEIGHT OF ADMIXTURE SHALL BE USED IN THE CONCRETE.
9. AT INTERSECTIONS OF REINFORCED CONCRETE WALLS, PROVIDE CORNER DOWELS OF SAME SIZE AND AT THE SAME SPACING AS THE SMALLER HORIZONTAL REINFORCING. DOWELS SHALL HAVE A CLASS B LAP WITH HORIZONTAL REINFORCING IN EACH DIRECTION.
10. PROVIDE CORROSION RESISTANT ACCESSORIES IN ALL EXPOSED CONSTRUCTION.
11. ALL KEYS IN CONCRETE WALLS SHALL BE 2 X 4 UNLESS NOTED OTHERWISE.
12. CONCRETE PIERS: PLACE CONCRETE PIERS AND WALLS TOGETHER. SET PIER REINFORCING AND SET WALL REINFORCING THROUGH PIER VERTICAL BARS. PROVIDE DOWELS WITH STANDARD HOOK FROM FOOTING AT ALL PIERS. SIZE AND QUANTITY OF DOWELS TO MATCH VERTICAL PIER REINFORCING (CLASS "B" SPLICE).
13. ALL CONCRETE TO REMAIN EXPOSED TO VIEW SHALL RECEIVE A SMOOTH RUBBED FINISH (SEE SPECIFICATIONS).
14. ALL CONCRETE CORNERS WITH BOTH SIDES EXPOSED TO VIEW SHALL BE SQUARE UNLESS OTHERWISE SHOWN OR NOTED. THE EDGE SHALL BE RUBBED, PRODUCING A SMOOTH, DENSE SURFACE WITHOUT PITS OR IRREGULARITIES.
15. PROVIDE CLEARANCE FROM EDGE OF REINFORCING TO EDGE OF CONCRETE AS FOLLOWS:

FOOTINGS (AGAINST EARTH)	3"
GRADE BEAMS (BOTTOM REINFORCING)	3"
COLUMNS AND PIERS (VERTICAL REINFORCING)	2"
SLABS ON GRADE (W.W.F.)	1/3 X THK. FROM TOP SURFACE

16. PROVIDE NO OPENINGS IN CONCRETE BEAMS UNLESS DETAILED ON THE STRUCTURAL DRAWINGS.
17. JOINTS NOT INDICATED ON THE DRAWINGS SHALL BE MADE SO AS TO LEAST IMPAIR THE STRENGTH OF THE STRUCTURE. THERE SHALL BE NO HORIZONTAL JOINTS IN BEAMS OR SUSPENDED SLABS.
18. PROVIDE THE FOLLOWING AT OPENINGS IN ALL CONCRETE WALLS AND FRAMED SLABS, UNLESS OTHERWISE INDICATED:
    1-#5 AT EACH FACE ON EACH SIDE OF OPENING, EXTENDING 2'-0" BEYOND OPENING.
    1-#5 X 4'-0" LONG AT EACH FACE DIAGONALLY AT EACH CORNER.
19. REINFORCING STEEL SHOP DRAWINGS SHALL INDICATE THE SEQUENCE IN WHICH LAYERS OF CROSSING REINFORCING SHOULD BE PLACED, IN ORDER TO PRODUCE THE CORRECT OUTERMOST LAYER AS INDICATED ON THE DRAWINGS.

WOOD FRAMING

1. LUMBER FOR WOOD JOISTS, RAFTERS AND BEAMS SHALL BE DOUGLAS FIR, LARCH NUMBER 2 GRADE, WITH 19% MAXIMUM MOISTURE CONTENT AND MINIMUM SAFE STRENGTH CAPACITY OF:
   Fb = 900 PSI FOR BENDING
   Fc (perp.) = 625 PSI FOR COMPRESSION PERP. TO GRAIN
   Fc (par.) = 1350 PSI FOR COMPRESSION PARALLEL TO GRAIN
   Fv = 125 PSI FOR HORIZONTAL SHEAR
   E = 1,600,000 PSI MODULUS OF ELASTICITY
2. CUTTING AND NOTCHING: IN BEAMS, JOISTS AND RAFTERS, CUTS SHALL NOT BE DEEPER THAN SHOWN ON DRAWINGS, AND IN NO CASE DEEPER THAN 1/5 THE DEPTH OF THE BEAM, JOIST OR RAFTER.
3. CONNECTIONS AND FASTENINGS: ALL MEMBERS SHALL BE FASTENED AT THEIR JUNCTIONS WITH APPROVED CONNECTORS, SPIKES, NAILS, STRAPS, OR OTHER DEVICES.
4. ALL EXTERIOR WOOD SHALL BE PREASURE TREATED.

NOTES:

REVISIONS

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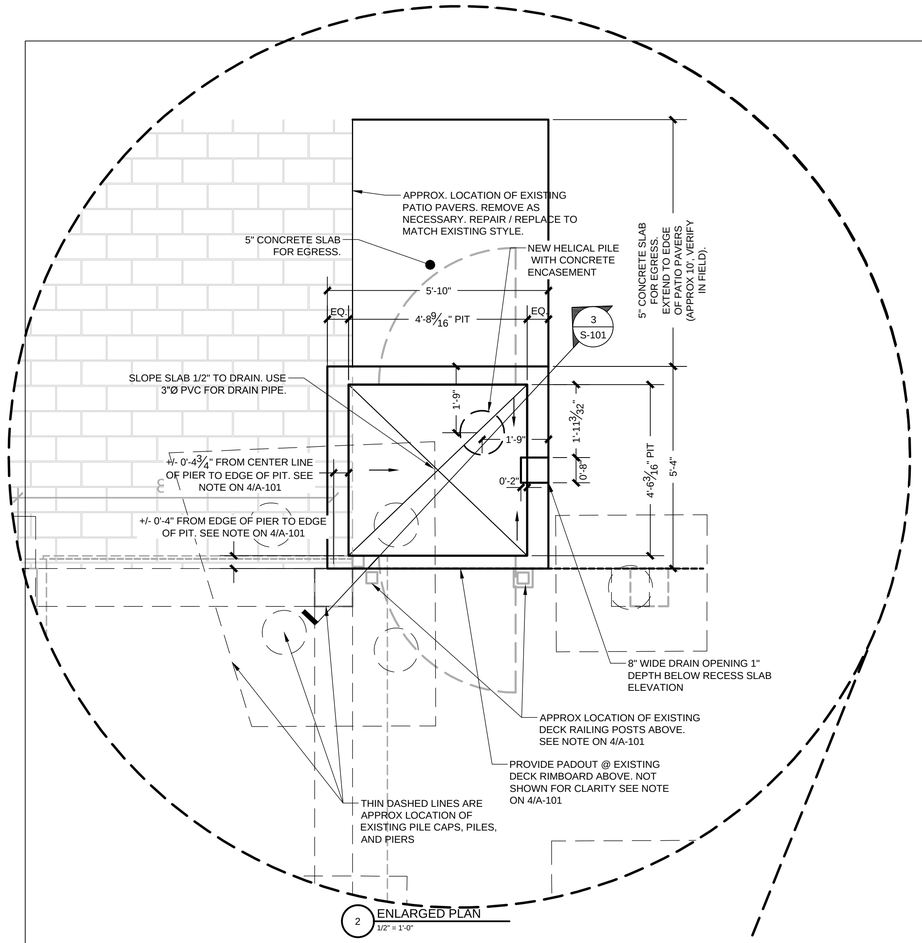
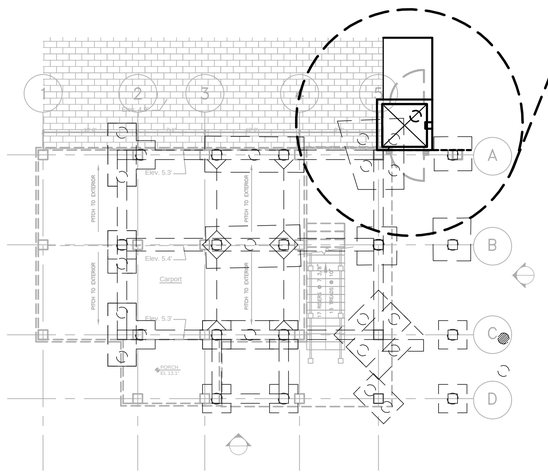
GENERAL NOTES

DTC PROJECT NUMBER: 13-449-010
DTC DRAWING FILE:
SCALE: VARIES | DRAWN BY: CH
DATE: 06/07/2017 | CHECKED BY: RO
SHEET:

S-100



2 ENLARGED PLAN
1/2" = 1'-0"

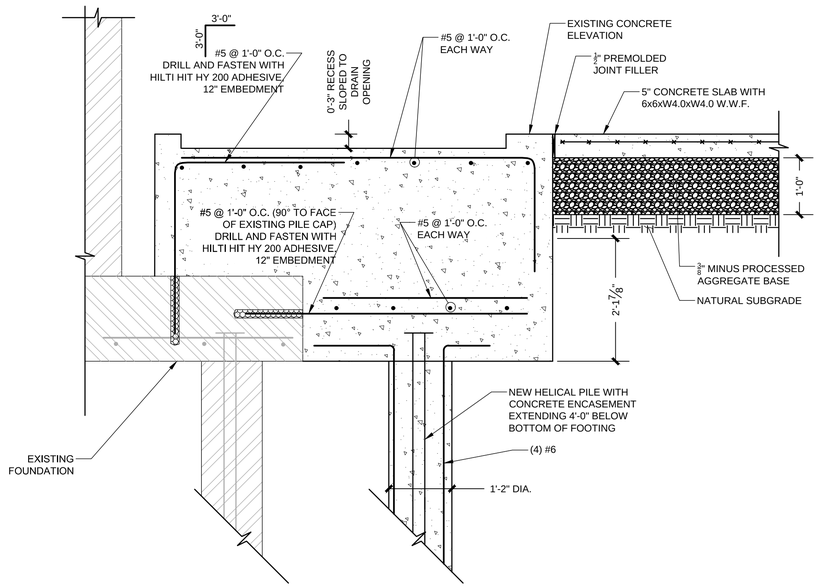


1 OVERALL PLAN
1/8" = 1'-0"

GENERAL NOTES:

1) CONTRACTOR TO COORDINATE ALL DIMENSIONS WITH FABRICATION DRAWINGS PROVIDED BY LIFT MANUFACTURER.

2) NEW HELICAL PILE BY CHANCE. 8"-10"-12" HELIX, MIN. TORQUE 7,000 FT-LB (TYP)



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

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CHAIR LIFT ADDITION
STRUCTURAL
PLAN

DTC PROJECT NUMBER: 13-449-010	
DTC DRAWING FILE:	
SCALE: VARIES	DRAWN BY: CH
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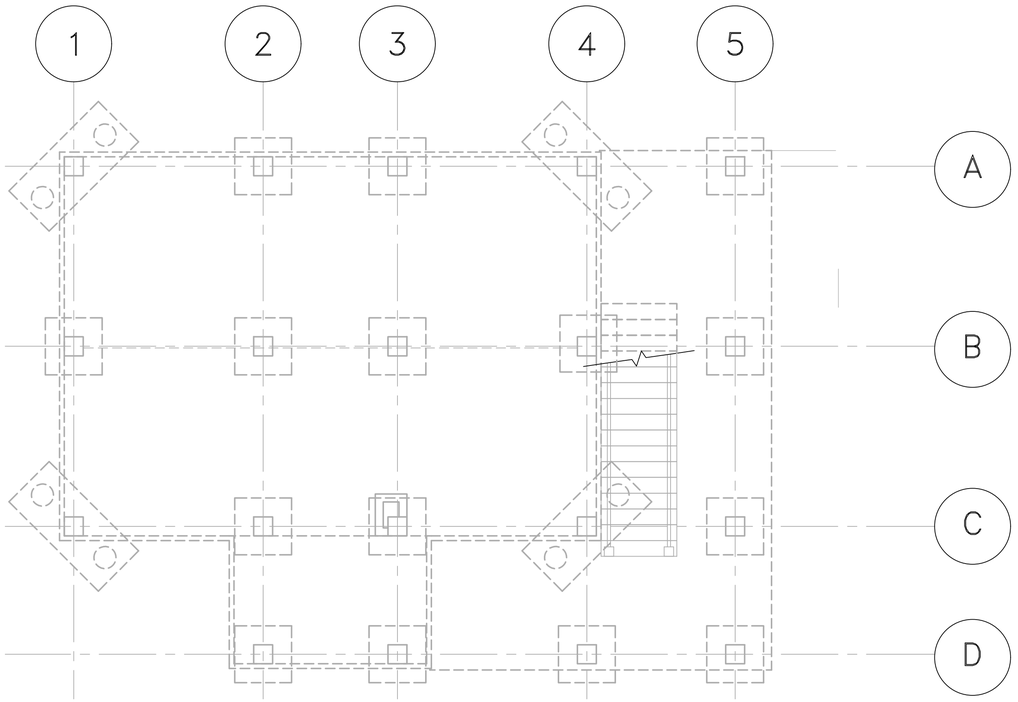
SHEET:

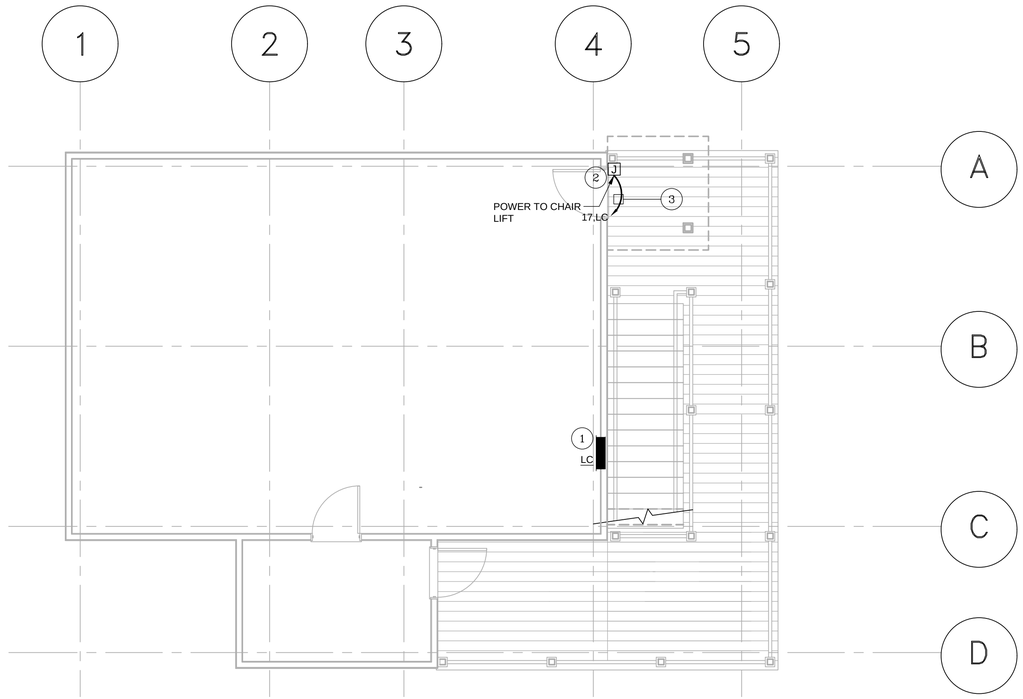
S-101



1 FOUNDATION PLAN

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

0 4' 8' 16'



2 DECK PLAN

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

0 4' 8' 16'

GENERAL NOTES

1. ALL CIRCUITS ON THIS DRAWING SHALL BE SIZED 2#12 , #12G AND SHALL BE CONNECTED TO NEW 20A-1P CIRCUIT BREAKER IN SOURCE PANEL, U.O.N.
2. ALL 120VAC BRANCH CIRCUITS EXCEEDING 100' IN LENGTH SHALL BE INCREASED TO 2#10, #10G UNLESS OTHERWISE NOTED.
3. REFER TO DWG E-001 FOR SYMBOL LEGEND, ABBREVIATIONS, AND LIGHTING FIXTURE SCHEDULE.
4. IF 2011 NEC REQUIRED GROUNDING IS NOT PRESENT ON EXISTING OUTLETS TO BE REPLACED, THE REPLACEMENT OUTLETS SHALL BE GFI TYPE, OR PROPER GROUNDING SHALL BE PROVIDED VIA ANOTHER METHOD ACCEPTABLE TO AHJ.
5. ALL BRANCH CIRCUIT USED INDOORS SHALL BE WIRED WITH NM CABLE U.O.N. REFER TO FEEDER SCHEDULE ON DRAWING E-001 FOR SIZING.
6. ALL EQUIPMENT AND DEVICES LOCATED OUTDOORS SHALL BE CIRCUITED WITH CONDUIT AND WIRING. REFER TO FEEDER SCHEDULE ON DWG E-001 FOR SIZING.
7. CONTRACTOR SHALL CUT, PATCH AND PAINT ALL EXISTING AREAS THAT ARE AFFECTED BY NEW CONSTRUCTION.
8. ALL 125 -VOLT 15 AND 20 AMP RECEPTACLES LOCATED AT 5 1/2 ' AFF OR BELOW SHALL BE TAMPER RESISTANT.

ELECTRICAL KEYNOTES (#)

1. REPLACE EXISTING LOAD CENTER WITH NEW IN EXACT LOCATION. PROVIDE NEW CIRCUIT BREAKERS TO MATCH EXISTING.
2. PROVIDE POWER AND PUSH BUTTON DISCONNECT SWITCH FOR CHAIRLIFT. REMOTE EQUIPMENT BOX TO BE COORDINATED AND VERIFIED IN FIELD WITH INSTALLER. INSTALL REMOTE EQUIPMENT BOX ABOVE THE 100 YEAR FLOOD ELEVATION.
3. PVC CONDUIT SHALL BE USED FOR ALL DEVICES IN THE BASEMENT.

LOADCENTER LC

CLASS: (●) Lighting ( ) Distribution
BUS SIZE 100A
VOLTAGE CLASS: 240/120V, 1 Ø ,3W
SCR (FULLY RATED) 22 KAIC
S/E RATING NO
MOUNTING RECESSED
CB TYPE 100A
FEEDER ENTRANCE TOP
LOCATION KITCHEN

BREAKER			PHASE LOAD - KVA				BREAKER			
#	A	P	DESCRIPTION	LOAD	A	B	LOAD	DESCRIPTION	A	P	#
1	20	1	SPARE	-	-		-	EXIST. FURNACE	15	1	2
3	20	1	SPARE	-		-	-	EXIST. DINNING ROOM	20	1	4
5	20	1	EXIST. KITCHEN RECPT	-	-		-	EXIST. LIGHTING	15	1	6
7	20	1	EXIST. DISHWASHER	-		-	-	EXIST. WATER HEATER	30	2	8
9	15	1	EXIST. KITCHNEN LTG	-	-		-	-	-	-	10
11	20	1	EXIST. KITCHEN RECPT	-		-	-	EXIST. RANGE	50	2	12
13	15	1	EXIST. LIVINGROOM RECPT	-	-		-	-	-	-	14
15	15	1	EXIST. 2ND FLOOR	-		-	-	EXIST. LOAD	20	1	16
17	20	1	CHAIR LIFT (1)	-	-			SPARE	20	1	18
19	20	1	SPARE			-	-	SPARE	20	1	20
21			SPACE	-	-		-	SPACE			22
23			SPACE	-		-	-	SPACE			24
TOTAL LOAD PER PHASE:					0.0	0.0					
TOTAL LOAD ON PANEL:					0.00	KVA					

NOTES:
1. PROVIDE GFCI CIRCUIT BREAKER.

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ELECTRICAL
FOUNDATION & DECK
PLANS

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