PROJECT NOTES

- ALL CONSTRUCTION SHALL COMPLY WITH APPLICABLE CODES AND STANDARDS, INCLUDING BUT NOT LIMITED TO ALL STATE LAWS, LOCAL ORDINANCES, UTILITY COMPANY, FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION, THE OCCUPATIONAL SAFETY AND HEALTH ACT, NFPA AND THE CURRENTLY ADOPTED.
- CONTRACTOR SHALL REMOVE ALL DEBRIS FROM THE PROJECT SITE AS REQUIRED TO MAINTAIN A SAFE AND ORDERLY WORK ENVIRONMENT.
- GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS PRIOR TO AND DURING CONSTRUCTION.
- EXISTING GROUND SHALL BE PROTECTED DURING CONSTRUCTION. THE CONTRACTOR SHALL CLEAN AFTER CONSTRUCTION AND REPLACE AREAS DAMAGED AS A RESULT OF PERFORMANCE OF THE WORK.
- THE CONTRACTOR SHALL SECURE ALL OPENINGS UNDER CONSTRUCTION AT THE END OF EACH WORKING DAY.
- ITEMS OR AREAS DAMAGED BY THE CONTRACTOR OR SUBCONTRACTORS SHALL BE REPAIRED OR REPLACED AT THE CONTRACTORS EXPENSE.
- IF ANY VOIDS UNDER THE SLAB/FOUNDATION ARE DISCOVERED, CONTRACTOR WILL PUMP A SOIL/CEMENT/WATER MIXTURE INTO THE VOID SPACE BY ACCEPTABLE INDUSTRY STANDARDS AS APPROPRIATE FOR THE SPECIFIC SITE CONDITION.
- CONTRACTOR SHOULD HAVE GENERAL LIABILITY INSURANCE.
- CONDITIONS SUCH AS INSUFFICIENT STEEL IN THE SLAB AND/OR OTHER STRUCTURAL CONDITIONS AND/OR SINKHOLE ACTIVITY MAY BE DISCOVERED AFTER WORK COMMENCES THAT MAY NOT BE VISIBLE PRIOR TO COMMENCEMENT OF WORK OR EVEN DURING THE WORK. THESE CONDITIONS MAY MAKE LEVELING THE STRUCTURE IMPOSSIBLE. IF SUCH CONDITIONS ARE FOUND, CONTRACTOR WILL IMMEDIATELY HALT WORK AND INFORM THE OWNER AND THE SITE ENGINEER
- IF, DURING THE COURSE OF FOUNDATION REPAIR, EXISTING UNDERPINNINGS OR OTHER UNFORESEEN CONDITIONS ARE ENCOUNTERED THAT CREATE AN OBSTRUCTION FOR THE CONTRACTOR, THE CONTRACTOR WILL NOTIFY THE OWNER AND/OR THE SITE ENGINEER OF SUCH UNDERPINNINGS OR OTHER CONDITIONS.
- CONTRACTOR WARRANTS THAT THE WORK AND MATERIALS WILL BE FREE FROM DEFECTS NOT INHERENT IN THE NATURE OF SUCH WORK AND MATERIALS AND WILL PERFORM AS STATED HEREIN AND THAT CONTRACTOR WILL PERFORM ALL WORK EXERCISING THE STANDARD OF CARE NORMALLY EXERCISED BY OTHER CONTRACTORS IN THIS GEOGRAPHICAL AREA ENGAGED IN FOUNDATION REPAIR BY MEANS OF PILING INSTALLATION.
- THIS PROPOSED DRAWING IS IN ACCORDANCE WITH THE SEVENTH EDITION (2020) FLORIDA BUILDING CODE.
- AWARD ENGINEERING INC. SHALL NOT BE RESPONSIBLE FOR ANY DAMAGES OCCUR DURING THE REPAIR/CONSTRUCTION WORK.
- THE CONTRACTOR SHOWN IN THIS PLAN SHALL OBTAIN THE REQUIRED PERMIT BEFORE BEGINNING CONSTRUCTION ON THIS STABILIZATION PROJECT.
- LOCATE ALL UTILITIES INCLUDING WATER, SEWER, ELECTRICAL, TELEPHONE AND IRRIGATION LINES EITHER AROUND THE PERIMETER OR BENEATH THE INTERIOR SLABS OF THE BUILDING.
- CALL SUNSHINE PRIOR TO CONSTRUCTION.
- THIS FOUNDATION STABILIZATION PLAN IS NOT INTENDED TO MITIGATE ANY DEEP SOIL OR SINKHOLE CONDITIONS THAT MAY EXIST AT THE SITE, NOR IS IT INTENDED TO REPLACE A COMPACTION GROUTING PROGRAM.

PROJECT CLASSIFICATION THIS IS AN ALTERATION LEVEL 1 PROJECT AND FALLS UNDER THE WORK AREA COMPLIANCE METHOD

ALTERATION, AS DEFINED IN CHAPTER 2 OF THE FLORIDA BUILDING CODE - EXISTING BUILDING, IS ANY CONSTRUCTION OR RENOVATION TO AN EXISTING STRUCTURE OTHER THAN A REPAIR OR ADDITION. ALTERATIONS ARE CLASSIFIED AS LEVEL 1, LEVEL 2 AND LEVEL 3.

PROJECT DESCRIPTION: THIS PROJECT CONSISTS OF INSTALLING UNDERPINS TO PROVIDE ADDITIONAL FOUNDATION SUPPORT TO THE STRUCTURE.

503.1 SCOPE.

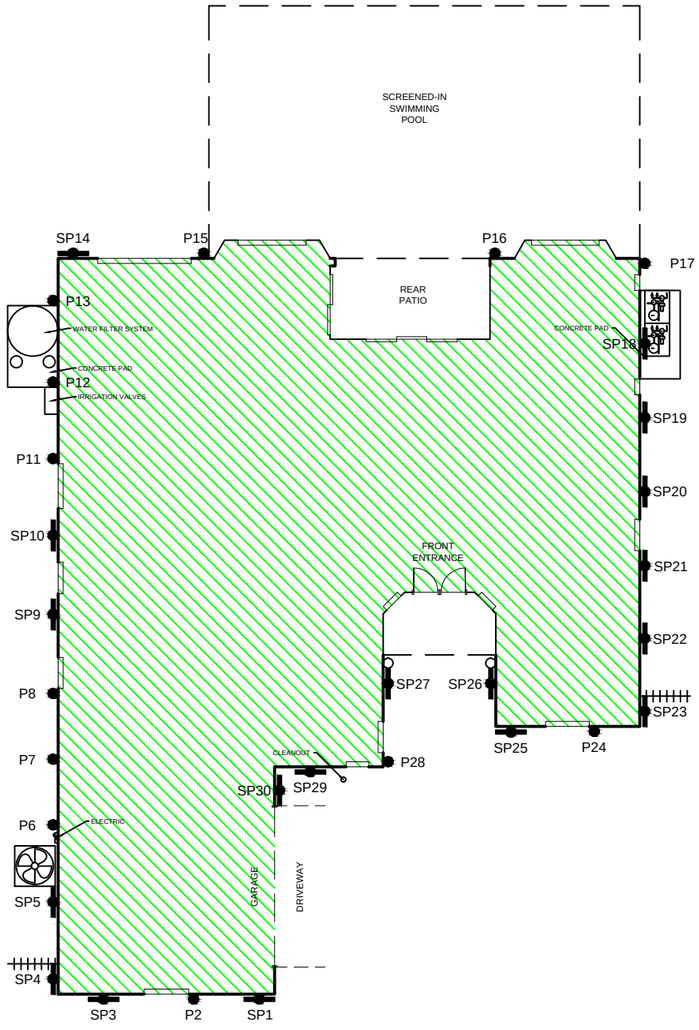
LEVEL 1 ALTERATIONS INCLUDE THE REMOVAL AND REPLACEMENT OR THE COVERING OF EXISTING MATERIALS, ELEMENTS, EQUIPMENT, OR FIXTURES USING NEW MATERIALS, ELEMENTS, EQUIPMENT, OR FIXTURES THAT SERVE THE SAME PURPOSE.

503.2 APPLICATION.

LEVEL 1 ALTERATIONS SHALL COMPLY WITH THE PROVISIONS OF CHAPTER 7.

301.1.2 WORK AREA COMPLIANCE METHOD.

REPAIRS, ALTERATIONS, ADDITIONS, CHANGES IN OCCUPANCY AND RELOCATED BUILDINGS COMPLYING WITH THE APPLICABLE REQUIREMENTS OF CHAPTERS 5 THROUGH 13 OF THIS CODE SHALL BE CONSIDERED IN COMPLIANCE WITH THE PROVISIONS OF THIS CODE.



PROPOSED UNDERPINNING & CHEMICAL GROUT PLAN

LEGEND	
●	PRESSURE PIER LOCATION
⬬	SPREADER BEAM LOCATION
	UNDER SLAB CHEMICAL GROUT TREATMENT AREA
	ELECTRICAL UNIT
	A.C. UNIT
SPD	POOL PUMP
	FENCE

N

0' SCALE 1"=15' 15'

STREET LOCATION MAP

OWNER INFORMATION:

RECORDED OWNER:	TAYLIN GONZALEZ 2590 6TH AVE SE NAPLES, FL 34117-4500
STRAP:	350800 15 04D07
PHYSICAL ADDRESS:	2590 6TH AVE SE NAPLES, FL 34117-4500
LEGAL DESCRIPTION:	GOLDEN GATE EST UNIT 81 E 105FT OF TR 15
PROPERTY USE:	1 - SINGLE FAMILY RESIDENTIAL
YEAR BUILT:	2007

CONTRACTOR

JAY SILVER
HELICON FOUNDATION REPAIR SYSTEMS
11103 N 46TH ST, BLDG B
TAMPA, FL 33613
TEL: (813) 567-1065
FAX: (813) 864-4461
CBC #1255310

I HEREBY CERTIFY THAT THIS PLAN AND SPECIFICATION WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION

Hovhannes Mouradian

This item has been electronically signed and sealed by Hovhannes Mouradian, PE on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copy.

DN: c=US, st=Florida, l=Riverview, o=Hovhannes Mouradian, PE, cn=Hovhannes Mouradian, PE, email=hoviemouradian@gmail.com
Date: 2021.10.06 21:30:56 -04'00'

HOVHANNES A. MOURADIAN, P.E.
PROFESSIONAL ENGINEER # 78439
STATE OF FLORIDA

REVISIONS	BY

CLIENT:
JAY SILVER
HELICON FOUNDATION REPAIR SYSTEMS
11103 N 46TH STREET - BLDG B
TAMPA, FL 33617

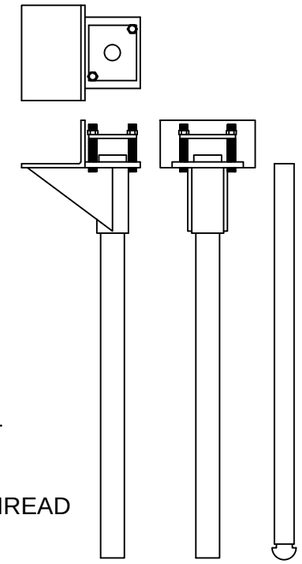
PROJECT:
PARTIAL-FOUNDATION STABILIZATION
GONZALEZ RESIDENCE
2590 6TH AVE SE
NAPLES, FL 34117

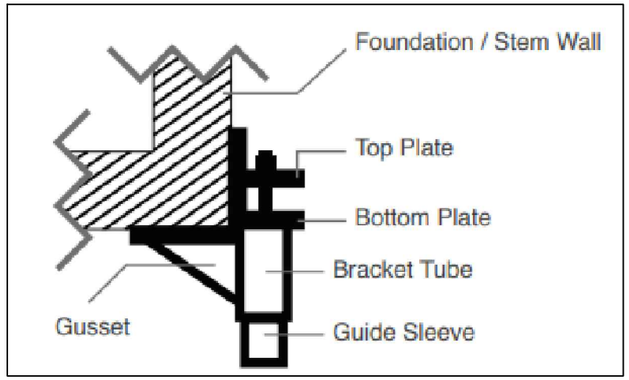
AWARD ENGINEERING, INC.
7804 N FLORIDA AVE
TAMPA, FL 33604
TEL: (813) 238-4393
FAX: (813) 237-3909

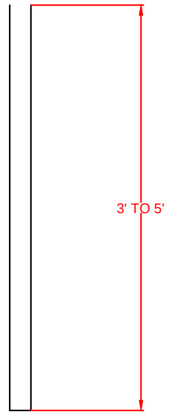
DRAWN BY: H.M.
CHECKED BY: H.M.
DATE: 10/06/2021
SCALE AS SHOWN
PROJ. NO. 21-8700B
SHEET 1
OF TWO SHEETS

ASSEMBLY INCLUDES

SEAT-6"X8"X1/2X12"L ANGLE IRON
TOP PLATE-6"X3/4X7"L
SP-PLANE NO HOLE
PP-BORE+THREADED FOR GROUT
BRACKET PLATE 7"X3/4X9"L
BRACKET TUBE 4"SCH 120 SRL BPE CUT TO 9"L
GUSSET-8"X1/2"X10 3/4"L
CUT DIAGONALLY FOR 2 GUSSETS
GUIDE SLEEVE 3"SCH 40BPE CUT TO 50"L
WELD ON RETAINING RING 3 1/2 SCH 40BPE 5/6"L
STARTER- 2 1/2" SCH 40 BPE CUT TO48"
WELD ON SOIL PLUG
ALL THREAD AND NUTS =(2PCS)1"X8"X6"L-ALL THREAD
GRADE 5







PUSH PIPE

- PUSH PIPE TO BE 2.875" O.D. SCHEDULE 40 STEEL PIPE

UNDERPINNING PIER INSTALLATION INSTRUCTIONS

THE INTENT OF THE UNDERPINNING IS TO RE-SUPPORT THE FOUNDATION SLAB BY PILES BEARING ONTO THE COMPETENT MATERIAL AT DEPTH. THE INSTALLATION OF THE UNDERPINNING PILES WILL LIFT AND/OR SUPPORT THE STRUCTURE. THE TYPICAL SPACING BETWEEN UNDERPINS IS 6' TO 8' ON CENTER AND SHOULD NOT BE LOCATED UNDER ANY WINDOW OR OPENING UNLESS APPROVED BY THE OVERSEEING ENGINEER. ADDITIONALLY, SOME OF THE PINS' DISTANCES ARE LESS AT CORNERS, AND MORE AT GARAGES, WINDOWS, AND SLIDING DOORS. THE LOCATIONS OF THE UNDERPINS MAY REQUIRE ADJUSTMENT BY THE CONTRACTOR BASED ON SITE CONDITIONS, BUT THE OVERSEEING PROFESSIONAL ENGINEER MUST APPROVE ANY ADJUSTMENTS.

UNDERPINNING BRACKETS WILL BE INSTALLED UNDER THE EXISTING SLAB AS SHOWN IN THE ABOVE DETAIL AT THE LOCATIONS SHOWN ON THE PLAN. THE PILES WILL BE DRIVEN, HYDRAULICALLY ADVANCED, JETTED, OR DRILLED TO REACH THE RECOMMENDED DEPTH AND/OR PRESSURE. THE INTENT IN THE FIELD WILL BE TO INTERCEPT THE LIMESTONE/SOIL INTERFACE. THE CONTRACTOR WILL INSTALL THE PIERS TO AT A MINIMUM TO THE ANTICIPATED DEPTH OF BEDROCK OR TO A DEPTH CONSIDERED SUFFICIENT TO DETERMINE THAT COMPETENT SOIL OR ROCK HAS BEEN REACHED. INDICATORS THAT SUFFICIENT DEPTH HAS BEEN REACHED INCLUDE STRUCTURAL LIFT AND/OR PIPE ADVANCEMENT REFUSAL. MINIMUM REQUIRED PIER TERMINATION DEPTH IS 9 FEET. THE DEPTHS OF UNDERPINNING ARE LIKELY TO VARY. TYPICAL CUTOFF PRESSURE RANGES BETWEEN 2000 AND 4000 PSI, BUT MAYBE CONSIDERABLY LESS IN LIGHT LOAD AREAS, WOOD FRAME, OR COLUMNS. UPON COMPLETION OF PIER ADVANCEMENT, THE STRUCTURE LOADS WILL BE LOCKED IN BY A TOP PLATE FASTENED TO THE BRACKET BY TWO THREADED BOLTS AND HEX NUTS. THIS METHOD OF ATTACHMENT WILL PRESSURE HOLD THE PIER BRACKETS IN PLACE.

IT IS IMPORTANT TO NOTE THAT THE OPTIMUM LEVEL TO WHICH THE STRUCTURE CAN BE LIFTED, IF RECOMMENDED, AS A RESULT OF THE UNDERPINNING PROCESS IS A FUNCTION OF THE STRUCTURAL CONFIGURATION AS WELL AS THE AMOUNT OF LONG-TERM AND IRREVERSIBLE STRESSES THAT HAVE ACCUMULATED. IT MAY NOT BE PRACTICAL TO ATTEMPT TO COMPLETELY RE-LEVEL THE STRUCTURE, AS EXCESSIVE COLLATERAL DAMAGE MAY RESULT. THE STRUCTURE IS TO BE CAREFULLY MONITORED DURING ANY LIFTING PROCESS. THERE IS NO RECOMMENDATION FOR LIFTING FOR THIS STRUCTURE .

CHEMICAL GROUTING

- THE MATERIAL USED FOR SOIL DENSIFICATION UNDER THESE CONCRETE SHALL BE A CLOSED CELL, HYDRO-INSENSITIVE, HIGH-DENSITY POLYURETHANE SYSTEM
- HAND CONE PENETROMETER TESTING SHOULD BE CONDUCTED TO CONFIRM THE EXISTING BASE SOIL CONDITIONS AT LOCATION WITHIN THE TREATMENT AREA. COPPER TUBING SHALL BE USED FOR INJECTION OF THE POLYURETHANE MATERIAL INTO THE SOIL.
- CONTRACTOR SHALL INSTALL INJECTION POINTS THROUGH A SERIES OF 5/8" - 3/4" HOLES (AS REQUIRED FOR TUBE PLACEMENT) DRILLED AT APPROXIMATELY 4-6 FOOT SPACED INTERVALS THROUGH THE CONCRETE ABOVE THE AREA REQUIRED FOR SOIL REMEDIATION. DRILL THE EXTERIOR INJECTION HOLES WITH ANGLE (15-30 DEGREE) AT APPROXIMATE DISTANCE OF 2.0 FEET FROM THE STRUCTURE
- AVOID ANY GROUND HEAVE OR STRUCTURAL MOVEMENT DETRIMENTAL TO THE RESIDENCE.
- PROVIDE SUFFICIENT VENTILATION TO MAINTAIN VAPOR CONCENTRATIONS BELOW RECOMMENDED EXPOSURE LIMITS SET BY THE CHEMICAL GROUTING MANUFACTURER.
- AVOID CONTACT WITH SKIN, EYES, AND CLOTHING. WEAR PROTECTIVE RUBBER GLOVES AND SAFETY GOGGLES WHEN HANDLING OR DISPENSING MATERIALS. WASH CONTAMINATED CLOTHING BEFORE REUSE.

I HEREBY CERTIFY THAT THIS PLAN AND SPECIFICATION WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION

HOVHANNES A. MOURADIAN, P.E.
PROFESSIONAL ENGINEER # 78439
STATE OF FLORIDA

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SHEET	2
OF TWO SHEETS	