# GENERAL NOTES:

- 1. ALL STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE ARCHITECTURAL. MECHANICAL, ELECTRICAL, HVAC, AND PLUMBING DRAWINGS AND SPECIFICATIONS.
- 2. THE CONTRACTOR(S) SHALL VERIFY ALL EXISTING CONDITIONS, DIMENSIONS, ELEVATIONS, ETC. IN THE FIELD AND NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES PRIOR TO THE START
- OF CONSTRUCTION OR SHOP DRAWINGS. 3. THE DRAWINGS ARE INTENDED TO REQUIRE AND TO INCLUDE ALL LABOR, MATERIAL AND EQUIPMENT PROPER FOR THE WORK.
- 4. ALL WORK SHALL COMPLY WITH ALL LOCAL, STATE AND NATIONAL CODES AND REQUIREMENTS. 5. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND SAFETY PROCEDURES. THE ARCHITECT/ENGINEER SHALL NOT BE RESPONSIBLE FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS OR THEIR
- AGENTS OR EMPLOYEES OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK. 6. OBSERVE ALL OSHA AND OTHER APPLICABLE SAFETY REQUIREMENTS INCLUDING THE USE OF SAFETY GLASSES, HARD HATS, AND PROTECTION OF AREA WHEN WORKING OVERHEAD. THE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR CONSTRUCTION SAFETY AT ALL TIMES.
- 7. COORDINATE WORK OF ALL DISCIPLINES (STRUCT., ARCH., MECH., ELECT., ETC.) WITH EXISTING CONDITIONS, SPECIAL REQUIREMENTS, CONSTRUCTION SCHEDULE AND OTHER CONTRACTORS PERFORMING WORK AT THE SITE.
- 8. ALL TEMPORARY SHORING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL DESIGN AND PROVIDE ANY TEMPORARY SHORING, BRACING, ETC., AS NEEDED FOR THE WORK SO AS NOT TO ENDANGER THE STRUCTURAL INTEGRITY OF ANY EXISTING FEATURE. 9. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR ANY DAMAGE DONE TO EXISTING FEATURES AS A RESULT OF THIS WORK. DAMAGED ITEMS SHALL BE REPLACED IN KIND AND AT NO
- ADDITIONAL COST TO THE OWNER. 10. DO NOT SCALE DRAWINGS. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND LAYOUT PRIOR TO CONSTRUCTION. ALL DIMENSIONS ON STRUCTURAL DRAWINGS SHALL BE CHECKED AGAINST ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, AND CIVIL DRAWINGS AND ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE. IMMEDIATELY. SEE THE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS NOT SHOWN ON THE STRUCTURAL DRAWINGS. REFER TO MECHANICAL, ELECTRICAL, AND ARCHITECTURAL DRAWINGS FOR OPENINGS NOT SHOWN ON STRUCTURAL DRAWINGS. CHANGES AFFECTING THE LAYOUT SHOWN MUST BE SPECIFIC AND CLEARLY CONVEYED TO THE OWNER'S REPRESENTATIVE IN WRITTEN
- FORM AS A CHANGE FOR INCLUSION INTO THESE PLANS. 11. SHOP DRAWINGS: REPRODUCTION OF DESIGN DRAWINGS SHALL NOT BE PERMITTED FOR SHOP DRAWING SUBMISSIONS. THE GENERAL CONTRACTOR/CONSTRUCTION MANAGER SHALL REVIEW AND PROVIDE REVIEW STAMP ON SHOP DRAWING SUBMISSIONS PRIOR TO SUBMITTAL TO ARCHITECT/ENGINEER INDICATING UNDERSTANDING AND ACCEPTANCE OF SUBMITTAL AND CONFIRMING CONFORMANCE TO PROJECT PLANS/SPECIFICATIONS.
- 12. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ERECTION PROCEDURE AND SEQUENCE TO INSURE THE SAFETY OF THE BUILDING AND ITS COMPONENT PARTS DURING ERECTION. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF WHATEVER TEMPORARY BRACING, GUYS OR TIE-DOWNS MAY BE NECESSARY.
- 13. EQUIPMENT FRAMING LOADS, OPENINGS AND STRUCTURE IN ANY WAY RELATED TO HVAC, PLUMBING, PROCESS OR ELECTRICAL REQUIREMENTS ARE SHOWN FOR BIDDING PURPOSES ONLY. CONTRACTOR SHALL OBTAIN APPROVAL OF THE PERTINENT TRADES BEFORE PROCEEDING WITH SUCH PORTION OF THE WORK. EXCESS COST RELATED TO VARIATION IN THESE REQUIREMENTS SHALL BE BORNE BY THE APPROPRIATE CONTRACTOR.

# **FOUNDATION NOTES**

- 1. NO GEOTECHNICAL REPORT HAS BEEN COMPLETED AT THE TIME OF DESIGN. AN ASSUMED BEARING PRESSURE OF 2,000 PSF WAS USED TO COMPLETE THE FOUNDATION DESIGN. A HIGH WATER TABLE IS KNOWN IN THE AREA AND WAS ASSUMED TO BE AT AN ELEVATION OF 2 FEET BELOW THE TOP OF SLAB ON GRADE DURING THE FOUNDATION DESIGN. A GEOTECHNICAL INVESTIGATION AND REPORT
- SHALL BE ISSUED PRIOR TO BIDDING DOCUMENTS TO CONFIRM THESE ASSUMPTIONS. 2. THE VEHICLE LIFT FOUNDATION DESIGN AND LAYOUT SHOWN IS FOR A BASIS OF DESIGN USING THE STERTIL-KONI DIAMOND LIFT WITH 17' TRAVEL DISTANCE. COORDINATE WITH THE MANUFACTURER
- AND FINAL LIFT SELECTION WILL BE REQUIRED PRIOR TO ISSUING CONSTRUCTION DOCUMENTS. 3. A GEOTECHNICAL ENGINEER SHALL OBSERVE THE OPEN EXCAVATION TO DETERMINE THAT THE SOIL TYPE AND CONDITIONS ARE CONSISTENT WITH DESIGN CRITERIA OF THE SOIL REPORT. IF THE SOIL
- PROPERTIES ARE FOUND TO BE DIFFERENT FROM THIS CRITERIA THE OWNER'S REPRESENTATIVE SHALL BE PROMPTLY NOTIFIED SO THAT THE FOUNDATION DESIGN MAY BE REVIEWED. 4. NO FOUNDATION CONCRETE SHALL BE INSTALLED UNTIL ALL FOUNDATION WORK HAS BEEN COORDINATED WITH UNDERGROUND UTILITIES. FOOTINGS SHALL BE LOWERED WHERE REQUIRED TO
- AVOID UTILITIES. WHERE FOOTINGS ARE REQUIRED TO BE LOWERED MORE THAN 1 FOOT, NOTIFY THE ENGINEER OF RECORD. 5. TO MINIMIZE WEATHERING, THE LAST 6 INCHES OF EXCAVATION FOR ALL FOOTINGS SHALL BE MADE
- IMMEDIATELY PRIOR TO PLACEMENT OF FOOTINGS. . WHERE ROCK OUTCROPPINGS ARE ENCOUNTERED IN ANY FOOTING EXCAVATION, UNDERCUT TO A DEPTH OF NOT LESS THAN 6 INCHES BELOW ELEVATION OF BOTTOM OF FOOTING AND BACKFILL WITH THOROUGHLY COMPACTED #10 FINES.
- 7. UNLESS OTHERWISE SHOWN, THE CENTERLINES OF ALL PIERS AND COLUMN FOOTINGS SHALL BE LOCATED ON COLUMN CENTERLINES.

UCAIIUN			HIGHLAND, NY	
DWNER	HIGHLAND CENTRAL SCHOOL DISTRICT			
ESIGN PROFESSIONAL IN CHARGE Patrick J. Williams, PE, SE				
his statement of Special Insp of the applicable building co coordinator and the identity of encompasses the following d he Building Official and the R he contractor for correction. special Inspection program c	pections is submitte ode. It includes a so of other approved disciplines: STRUCTL Registered Design If such discrepand does not relieve the	d as a condition for permit issuance chedule of Special Inspection servi agencies to be retained for condu RAL. The Special Inspection Coorce Professional in Responsible Charge cies are not corrected, the discrep- e contractor of his or her responsibi	e in accordance with the Spe ces applicable to this project ucting these inspections and t linator shall keep records of al (RDP). Discovered discrepanc ancies shall be brought to the lity for quality assurance.	cial Inspection and Structural Testing requirement as well as the name of the Special Inspection ests. This Statement of Special Inspections I inspections and shall furnish inspection reports to cies shall be brought to the immediate attention o attention of the Building Official and the RDP. The
nterim reports shall be submi	tted to the Building	9 Official and the RDP, monthly.		
A Final Report of Special Insp nspections shall be submitted	ections document d by the special In	ing completion of all required Spe spection Coordinator prior to issual	cial Inspections, testing, and c nce of a Certificate of Use and	correction of any discrepancies noted in the discrepancies noted in the
lob site safety and means an	nd methods of con	struction are solely the responsibilit	y of the contractor.	
n accordance with the appl	licable building co	de, the Observations and Inspection	ons listed in the Schedule of Sp	pecial Inspections are required.
SCHEDULE OF INSP	PECTION AN	D TESTING AGENCIES	<u>.</u>	
SPECIAL INSPECTION AC	GENCIES	FIRM	ADDRESS	TELEPHONE No.
Special Inspection Coo	rdinator	TBD	TBD	(###) ###-####
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AMERICAN WELDING SOCIETY (AWS) CERTIFICATION

INTERNATIONAL CODE COUNCIL (ICC) CERTIFICATION

NATIONAL INSTITUTE FOR CERTIFICATION IN ENGINEERING TECHNOLOGIES (NICET)

## **CONCRETE NOTES** 1. COMPLY WITH THE FOLLOWING CODES AND STANDARDS:

- A. ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS". B. ACI 305, ACI 306, ACI 318, "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE". C. ACI DETAILING MANUAL (ACI SP-66-04). D. ACI 347 "RECOMMENDED PRACTICE FOR CONCRETE FORM WORK". E. CONCRETE REINFORCING STEEL INSTITUTE (CRSI), "MANUAL OF STANDARD PRACTICE".
- CONCRETE". 2. MATERIALS: A. REINFORCING BARS - ASTM A615, GRADE 60, DEFORMED B. WELDED WIRE FABRIC (WWF) - ASTM A185, FLAT SHEETS. C. PORTLAND CEMENT-ASTM C150, TYPE II.
- D. AGGREGATES-ASTM C33. E. AIR ENTRAINING ADMIXTURE-ASTM C260, CERTIFIED BY MANUFACTURER TO BE COMPATIBLE WITH OTHER REQUIRED ADMIXTURES.
- MORE THAN 0.1% CHLORIDE IONS ARE NOT PERMITTED.
- REINFORCEMENT WILL NOT BE PERMITTED. 4. UNLESS OTHERWISE SHOWN, BARS AT WALL AND CONTINUOUS FOOTING CORNERS AND
- CORNER BARS SHALL BE 48 BAR DIAMETERS X 48 BAR DIAMETERS MINIMUM UNLESS NOTED OTHERWISE.
- 5. PROVIDE DOWELS TO MATCH REINFORCEMENT SIZE AND SPACING INDICATED FOR ALL STRUCTURAL CONCRETE PLACEMENT ("WET STICKING" REINFORCING NOT PERMITTED").
- OR RELOCATED IF PROPERLY DETAILED ON SHOP DRAWINGS AND APPROVED BY THE OWNER'S REPRESENTATIVE.
- FOR OPENINGS IN SLABS AND WALLS FOR ADDITIONAL REQUIREMENTS. SUPPORT OF REINFORCEMENT ON FORM TIES, WOOD, BRICK, BRICKBAT OR OTHER UNACCEPTABLE
- MATERIAL, WILL NOT BE PERMITTED.
- 10. IN SLABS-ON-GRADE, PROVIDE 2 #4X4' 0" DIAGONAL BARS IN THE MIDDLE OF THE SLAB AT EACH CORNER OF OPENINGS OVER 1'0" SQUARE AND AT RE-ENTRANT CORNERS.
- CONTRACTION JOINTS, CONSTRUCTION JOINTS, OR EXPANSION JOINTS.
- UNTIL FLOOR SLABS ARE IN PLACE AND HAVE ATTAINED REQUIRED STRENGTHS. 13. PROVIDE WATERSTOPS IN ALL CONSTRUCTION JOINTS AT OR BELOW GRADE. 14. PROVIDE WATERSTOPS IN EXPANSION JOINTS AND CONSTRUCTION JOINTS OF LIQUID CONTAINING
- 16. CHAMFER EDGES OF PERMANENTLY EXPOSED CONCRETE SURFACES 3/4-INCH, UNO.
- ARE STRIPPED THERE MUST BE NO EXCESSIVE DEFLECTION, DISTORTION, DISCOLORATION, AND NO EVIDENCE OF DAMAGE TO THE CONCRETE.

ACI-LTT

ACI-STT

AWS-CWI

aws/aisc-ssi

ICC-SMSI

ICC-SWSI

ICC-SFSI ICC-PCSI

ICC-RCSI

NICET-CT

NICET-ST NICET-GET Laboratory Testing Technician - Grade 1&2

Strength Testing Technician

Certified Welding Inspector

Certified Structural Steel Inspector

Structural Masonry Special Inspector

Prestressed Concrete Special Inspector

Reinforced Concrete Special Inspector

Concrete Technician - Levels I, II, III, & IV

Geotechnical Engineering Technician - Levels I, II, III & IV

Soil Technicians - Levels I, II, III & IV

Structural Steel and Welding Special Inspector

Spray-Applied Fireproofing Special Inspector

F. ACI 304 "RECOMMENDED PRACTICE FOR MEASURING, MIXING, TRANSPORTING AND PLACING

F. PROHIBITED ADMIXTURES-CALCIUM CHLORIDE THYOCYANATES OR ADMIXTURES CONTAINING 3. CONTINUOUS REINFORCING IN WALLS AND SLABS MAY BE SPLICED, AS REQUIRED, PROVIDING BARS ARE OF THE LONGEST PRACTICABLE LENGTH AND SPLICES ARE SHOWN ON REINFORCING SHOP DRAWINGS. WHEREVER POSSIBLE, SPLICES SHALL BE STAGGERED. FIELD CUTTING OF

INTERSECTIONS SHALL BE DETAILED AS SHOWN ON FIGURE 15 OF ACI SP-66-04. CORNER BARS SHALL BE DETAILED AS SHOWN FOR OUTSIDE LOADED ONLY CORNERS. INTERSECTIONS SHALL BE DETAILED WITHOUT DIAGONAL BARS. ALL END HOOKS SHALL BE STANDARD 90 DEGREE END HOOKS AND

ELEMENTS, UNLESS OTHERWISE INDICATED. DOWELS MUST BE PLACED AND SECURED PRIOR TO 6. MAJOR CONSTRUCTION JOINTS ARE SHOWN ON THE DRAWINGS. INTERMEDIATE JOINTS IN WALLS, SLABS, AND FLOOR FRAMING ARE NOT SHOWN. CONSTRUCTION JOINTS MAY BE ADDED, OMITTED

7. SEE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR LOCATIONS OF OPENINGS AND SLEEVES IN CONCRETE WALLS AND SUPPORTED FLOORS. SPREAD REINFORCEMENT AT OPENINGS AND SLEEVES UNLESS OTHERWISE SHOWN. DO NOT CUT REINFORCEMENT. SEE TYPICAL REINFORCEMENT DETAILS 8. PLACING OF REINFORCEMENT: PROVIDE CHAIRS, BOLSTERS, ADDITIONAL REINFORCEMENT, AND ACCESSORIES NECESSARY TO SUPPORT REINFORCEMENT AT POSITION SHOWN ON DRAWINGS.

9. THE CONTRACTOR SHALL REVIEW ALL DRAWINGS FOR SIZE AND LOCATION OF ALL EMBEDDED ITEMS, SLEEVES, SLAB DEPRESSIONS, OPENINGS, ETC. REQUIRED BY OTHER TRADES. RECONCILE THEIR EXACT SIZES AND LOCATIONS BEFORE PROCEEDING WITH THE WORK. ALL ITEMS SHALL BE FURNISHED AND INSTALLED PRIOR TO PLACEMENT OF CONCRETE. SECURE THE APPROVAL OF THE OWNER'S REPRESENTATIVE PRIOR TO PLACING OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS

11. PROVIDE CONTROL JOINTS IN CAST-IN-PLACE CONCRETE SLABS-ON-GRADE AT 12 FEET O.C. MAX. LOCATE CONTROL JOINTS TO FORM APPROXIMATE SQUARE PANELS WITH THE LENGTH OF ONE SIDE NOT EXCEEDING THE ADJACENT SIDE BY A FACTOR OF 1.5. CONTROL JOINTS MAY BE

12. CONCRETE WALLS SHALL BE TEMPORARILY BRACED AGAINST EARTH PRESSURE AND OTHER FORCES

STRUCTURES AND WHERE REQUIRED TO PREVENT INFILTRATION OF GROUND WATER. 15. WHERE CONSTRUCTION JOINTS ARE REQUIRED BUT ARE NOT INDICATED ON THE DRAWINGS, THEY SHALL BE LOCATED AT THE MID-SPAN OF BEAMS, SLABS AND WALLS AND SHALL BE SUBJECT TO REVIEW BY THE OWNER'S REPRESENTATIVE. UNLESS NOTED OTHERWISE OR SHOWN ON THE DRAWINGS, AT CONCRETE SLABS ON STEEL DECK, SUPPORTED BY STEEL BEAMS AND GIRDERS, CONSTRUCTION JOINTS SHALL BE PLACED AT MID-SPAN OF DECK AND MID-WAY BETWEEN GIRDERS 17. SLABS AND BEAMS OR JOISTS SHALL BE CAST MONOLITHICALLY UNLESS OTHERWISE INDICATED. 18. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING WHEN IT IS SAFE TO REMOVE FORMS AND/OR SHORING. FORMS AND SHORING MUST NOT BE REMOVED UNTIL THE CONCRETE IS STRONG ENOUGH TO CARRY ITS OWN WEIGHT AND ANY ANTICIPATED SUPERIMPOSED LOADS. WHEN FORMS

# **RENOVATION AND EXISTING STRUCTURE NOTES:**

1. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, ETC., NECESSARY FOR THE PROPER CONSTRUCTION AND ALIGNMENT OF THE NEW PORTIONS OF THE STRUCTURE TO THE EXISTING STRUCTURE. THE CONTRACTOR SHALL VERIFY ALL MEASUREMENTS NECESSARY FOR PROPER FABRICATION AND ERECTION OF ALL STRUCTURAL MEMBERS. THE CONTRACTOR SHALL SUPPORT, BRACE AND SECURE EXISTING STRUCTURES AS REQUIRED. THE CONTRACTOR IS SOLELY RESPONSIBLE

- FOR THE SAFETY OF EXISTING STRUCTURES DURING CONSTRUCTION. 2. BEFORE PROCEEDING WITH ANY WORK WITHIN OR ADJACENT TO THE EXISTING STRUCTURE, THE CONTRACTOR SHALL BECOME FAMILIAR WITH EXISTING CONDITIONS. DURING THE PROCESS OF CONSTRUCTION, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE INTEGRITY OF THE EXISTING STRUCTURE WHERE THE EXISTING STRUCTURE IS MODIFIED TO ACCOMMODATE NEW CONSTRUCTION AND TO PROTECT FROM DAMAGE THOSE PORTIONS OF THE EXISTING STRUCTURE, WHICH ARE TO REMAIN.
- 3. ALL EXISTING STRUCTURAL ELEMENTS (SLABS, BEAMS, WALLS, COLUMNS, FOUNDATIONS...) SHALL REMAIN INTACT UNLESS SPECIFICALLY NOTED TO BE REMOVED BY THE DEMOLITION DOCUMENTS OR OTHERWISE NOTED ON THE STRUCTURAL DRAWINGS. 4. INFORMATION PROVIDED ON THESE DRAWINGS RELATED TO EXISTING CONDITIONS IS BASED ON
- AVAILABLE DESIGN DOCUMENTS. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY AND AWAIT DIRECTION FROM THE OWNER'S REPRESENTATIVE IF ANY DISCREPANCY BETWEEN THE CONTRACT DOCUMENTS AND THE EXISTING CONDITIONS IS DISCOVERED.
- 5. CORE DRILLS REQUIRED BY MECHANICAL OR ELECTRICAL TRADES BUT NOT SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE DOCUMENTED SHOWING EXACT DIMENSIONS AND LOCATIONS. THE DRAWING SHALL BE SUBMITTED TO THE OWNER'S REPRESENTATIVE FOR APPROVAL PRIOR TO PROCEEDING WITH THE DRILLING OPERATION. 6. EXISTING CONCRETE SURFACE PREPARATION: INTENTIONALLY ROUGHEN EXISTING CONCRETE
- SURFACES TO AN AMPLITUDE OF 3/4" WHERE NEW CONCRETE IS BEING PLACED AGAINST THE EXISTING CONCRETE AND CONNECTED BY DRILLING AND EPOXY GROUTING.

# SPECIAL INSPECTION NOTES:

- 1. SPECIAL INSPECTIONS WILL BE PERFORMED IN ACCORDANCE WITH THE STATEMENT OF SPECIAL INSPECTIONS. 2. OWNER, OR ARCHITECT/STRUCTURAL ENGINEER OF RECORD ACTING AS THE OWNER'S AGENT, SHALL
- DIRECTLY EMPLOY AND PAY FOR SERVICES OF THE SPECIAL INSPECTORS TO PERFORM REQUIRED SPECIAL INSPECTIONS.

**DESIGN CRITERIA** 

- 11

2,000 PSF

# STRUCTURAL DESIGN CRITERIA

BUILDING DATA: LOCATION HIGHLAND, NY 12528 BUILDING OCCUPANCY RISK CATEGORY APPLICABLE BUILDING CODE 2020 BUILDING CODE OF NEW YORK STATE (IBC 2018)

## GEOTECHNICAL INFORMATION: ASSUMED ALLOWABLE BEARING PRESSURE

FLOOR LIVE LOADING:

100 PSF

# GARAGE LL1

# SLAB-ON-GRADE SCHEDULE

MARK	TYPE	THICKNESS	slab Reinforcing	REMARKS
SOG1	GARAGE SLAB	8"	#4 BARS @ 12" OC, EW, T&B	ADDITIONAL REINF REQ'D IN SLAB, SEE PLAN AND TYP DETAILS

THE AC FOI TES	FOLLOWING TABLES COMPRISES THE STRUCTURAL SPECIAL INSP CORDANCE WITH CHAPTER 17 OF THE 2018 INTERNATIONAL BUIL R REQUIRED QUALIFICATIONS OF ALL PERSONNEL PERFORMING TING INFORMATION.	ECTION REQUIREME DING CODE. REFER	ENTS FOR THIS PROJECT R TO THE PROJECT SPI N ACTIVITIES AND AD	ct in Ecifications Iditional
	EARTHWORK - REQUIREMENTS FOR SPECIAL	. INSPECTION & TEST	ING	
	AREAS OF INSPECTION & TESTING	FREQUENCY OF INSPECTION OR TESTING	REFERENCE STANDARD	IBC REFERENCE
1.	VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	PERIODIC	-	1705.6
2.	VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	PERIODIC		
3.	PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS	PERIODIC		
4.	VERIFY USE OF PROPER MATERIALS, DENSITIES, AND LIFT THICKNESS DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	CONTINUOUS		
5.	PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	PERIODIC		
	CAST-IN-PLACE CONCRETE - REQUIREMENTS	FOR SPECIAL INSPEC	CTION & TESTING	
	AREAS OF INSPECTION & TESTING	FREQUENCY OF INSPECTION OR TESTING	REFERENCE STANDARD	IBC REFERENCE
1.	INSPECT REINFORCEMENT, INCLUDING PRESTRESSING TENDONS, AND VERIFY PLACEMENT.	PERIODIC	ACI 318 CH. 20, 25.2, 25.3, 26.6.1 - 26.6.3	1908.4
2.	REINFORCING BAR WELDING: A. VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A706; B. INSPECT SINGLE-PASS FILLET WELDS, MAXIMUM 5/16"; AND C. INSPECT ALL OTHER WELDS.	PERIODIC PERIODIC CONTINUOUS	AWS D1.4 ACI 318: 26.6.4	-
3.	INSPECT ANCHORS CAST IN CONCRETE	PERIODIC	ACI 318:17.8.2	-
4.	INSPECT ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS. A. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS. B. MECHANICAL ANCHORS AND ADHESIVE ANCHORS.	CONTINUOUS	ACI 318: 17.8.2.4	-
5.	VERIFY USE OF REQUIRED DESIGN MIX.	PERIODIC	ACI 318: CH. 19, 26.4.3, 26.4.4	1904.1, 1904.2, 1908.2, 1908.3
6.	PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	CONTINUOUS	ASTM C172 ASTM C31 ACI 318: 26.4, 26.12	1908.10
7.	INSPECT CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	CONTINUOUS	ACI 318: 26.5	1908.6, 1908.7, 1908.8
8.	VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	PERIODIC	ACI 318: 26.5.3 - 26.5.5	1908.9
9.	INSPECT PRESTRESSED CONCRETE FOR: A. APPLICATION OF PRESTRESSING FORCES; AND B. GROUTING OF BONDED PRESTRESSING TENDONS.	CONTINUOUS CONTINUOUS	ACI 318: 26.10	-
10.	INSPECT ERECTION OF PRECAST CONCRETE MEMBERS.	PERIODIC	ACI 318: CH. 26.8	-
11.	VERIFY IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST-TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS.	PERIODIC	ACI 318: 26.11.2	-
12.	INSPECT FORMWORK FOR SHAPE, LOCATION AND	PERIODIC	ACI 318: 26.11.2 (b)	-

# BAR CL/ # # # # #7 | # BARS

# **REINFORCED CONCRETE COVER SCHEDULE**

	MIN COVER (IN)		
CAST AGAINST E	3"		
	OSED TO #5 BARS AND SMALLER, WWF		
WEATHER	#6 BAI	rs and larger	2"
	SLABS & WALLS	#11 BARS AND SMALLER, WWF	3/4"
TO EARTH OR		#14 BARS AND LARGER	1-1/2"
WLAINLK	BEAMS	S AND COLUMNS	1-1/2"

## **CONCRETE REINF SPLICE & DEVELOPMENT LENGTHS SCHEDULE** LAP SPLICE LENGTHS (IN ) DEVELOPMENT LENGTHS (IN )

SIZE	TEN	<b>ISION L</b>	AP LENGTH					
	TOP I	BARS	OTH	HER	COMP.	COMP. TENSION		HOOKED
ASS	А	В	А	В				
3	18	23	14	18	12		8	7
4	24	31	18	24	15		9	9
5	30	38	23	30	19	S A LICE	12	12
6	35	46	27	35	23	P SP	14	14
7	51	67	40	51	27	as c I la	16	16
8	59	76	45	59	30	ME /	18	18
9	66	86	51	66	34	SAI	21	21
10	74	96	57	74	39		23	23
11	82	107	64	82	43		26	26

1. TOP BARS ARE HORIZONTAL BARS, PLACED SO THAT MORE THAN 12 INCHES OF FRESH CONCRETE IS PLACED BELOW THE BAR. 2. ALL LAP SPLICES SHALL BE CLASS "B" UNLESS OTHERWISE NOTED.

3. LENGTHS IN THE TABLE ARE FOR UNCOATED OR ZINC-COATED (GALVANIZED) 4. CLEAR SPACING OF BARS BEING DEVELOPED OR SPLICED NOT LESS THAN 2Db AND CLEAR COVER NOT LESS THAN Db. 5. VALUES IN TABLE ARE FOR NORMAL WEIGHT CONCRETE.

6. SPACING REQUIREMENTS AND END ANCHORAGE SHALL BE SPACED PER THE REQUIREMENTS OF ACI-318.

# **CONCRETE STRENGTH AND MATERIAL SCHEDULE**

STRUCTURAL ELEMENT	MIN COMPRESSIVE STRENGTH AT 28 DAYS (PSI)	MAX WATER/CEMENT RATIO	AIR CONTI (%)
LIFT FOUNDATIONS, SLAB-ON-GRADE	4,500	0.45	6 +/- 1.5

- PREPARE DESIGN MIXES FOR EACH TYPE, AND STRENGTH OF CONCRETE BY EITHER LABORATORY TRIAL BATCH OR FIELD EXPERIENCE METHODS AS SPECIFIED IN ACI 318.
- 2. CONCRETE SHALL BE READY MIXED PER ASTM C94. JOBSITE MIXING SHALL NOT BE PERMITTED. 3. MAXIMUM NOMINAL AGGREGATE SIZE IS 3/4".
- 4. SEE REINFORCED CONCRETE NOTES ON S-001 FOR ADDTIONAL REQUIREMENTS. 5. ENSURE ENTRAPPED AIR IN SLAB CONCRETE TO BE TROWEL FINISHED DOES NOT EXCEED 3%.
- 5. DO NOT HARD-TROWEL SLABS THAT ARE TO BE AIR-ENTRAINED. COORDINATE SLAB FINISH WITH ARCHITECTURAL AND/OR OWNER REQUIREMENTS. CARE SHALL BE TAKEN FOR FINISHING SLABS
- WITH AIR-ENTRAINMENT. CONCRETE PIT WALLS AND MAT FOUNDATION SHALL UTILIZE A CRYSTALLINE WATERPROOFING
- ADDITIVE (XYPEX, OR EQUAL).

## STRUCTURAL ABBREVIATION LEGEND

	ANCHOR BOLT
ABV	ABOVE
ACI	AMERICAN CONCRETE INSTITUTE
	ADDITIONAL
ABC	CONSTRUCTION
ALT	ALTERNATE
APPROX	APPROXIMATELY
ARCH	ARCHITECT/ARCHITECTURAL
ASTM	AMERICAN SOCIETY FOR TESTING
	AND MATERIALS
AWS	AMERICAN WELDING SOCIETY
B/	BOTTOM OF
BD	BOARD
BFE	BASE FLOOD ELEVATION
BLKG	BLOCKING
BM	
	BOTTOM OF
BOT	BOTTOM
BRG	BEARING
BTWN	BETWEEN
C/C	CENTER TO CENTER
CFMF	COLD FORMED METAL FRAMING
CIP	CAST-IN-PLACE
CJ	CONTROL JOINT
CJP	COMPLETE JOINT PENETRATION
CL	CENTER LINE
CLR	CLEAR(ANCE)
CMU	CONCRETE MASONRY UNIT
CNJ	CONSTRUCTION JOINT
COL	COLUMN
CONC	CONCRETE
CONN	CONNECT(ED)(ION)
CONST	CONSTRUCTION
CONT	CONTINUOUS
COORD	
CTR	CENT(ER) (ERED) (TRAL)
DEG	
DIM	DIMENSION
DIV	
DL	DEAD LOAD
DN	DOWN
DTL	DETAIL
DWG(S)	DRAWING(S)
DWL	
(5)	DOWEL(REBAR)
(E)	DOWEL(REBAR) EXISTNG
(E) EA	DOWEL(REBAR) EXISTNG EACH
(E) EA EF	DOWEL(REBAR) EXISTNG EACH EACH FACE
(E) EA EF EJ	DOWEL(REBAR) EXISTNG EACH EACH FACE EXPANSION JOINT
(E) EA EF EJ ELEV	DOWEL(REBAR) EXISTNG EACH EACH FACE EXPANSION JOINT ELEVATION
(E) EA EF EJ ELEV EMBED	DOWEL(REBAR) EXISTNG EACH EACH FACE EXPANSION JOINT ELEVATION EMBEDMENT
(E) EA EF EJ ELEV EMBED EOD	DOWEL(REBAR) EXISTNG EACH EACH FACE EXPANSION JOINT ELEVATION EMBEDMENT EDGE OF DECK
(E) EA EF EJ ELEV EMBED EOD EOS	DOWEL(REBAR) EXISTNG EACH EACH FACE EXPANSION JOINT ELEVATION EMBEDMENT EDGE OF DECK EDGE OF SLAB
(E) EA EF EJ ELEV EMBED EOD EOS EQ	DOWEL(REBAR) EXISTNG EACH EACH FACE EXPANSION JOINT ELEVATION EMBEDMENT EDGE OF DECK EDGE OF SLAB EQUAL
(E) EA EF EJ ELEV EMBED EOD EOS EQ EW	DOWEL(REBAR) EXISTNG EACH EACH FACE EXPANSION JOINT ELEVATION EMBEDMENT EDGE OF DECK EDGE OF SLAB EQUAL EACH WAY
(E) EA EF EJ ELEV EMBED EOD EOS EQ EW EXIST EYP	DOWEL(REBAR) EXISTNG EACH EACH FACE EXPANSION JOINT ELEVATION EMBEDMENT EDGE OF DECK EDGE OF SLAB EQUAL EACH WAY EXISTING
(E) EA EF EJ ELEV EMBED EOD EOS EQ EW EXIST EXP EXT	DOWEL(REBAR) EXISTNG EACH EACH FACE EXPANSION JOINT ELEVATION EMBEDMENT EDGE OF DECK EDGE OF SLAB EQUAL EACH WAY EXISTING EXPAN(D)(SION) EXTERIOR
(E) EA EF EJ ELEV EMBED EOD EOS EQ EW EXIST EXP EXT ED	DOWEL(REBAR) EXISTNG EACH EACH FACE EXPANSION JOINT ELEVATION EMBEDMENT EDGE OF DECK EDGE OF SLAB EQUAL EACH WAY EXISTING EXPAN(D)(SION) EXTERIOR ELOOR DRAIN
(E) EA EF EJ ELEV EMBED EOD EOS EQ EW EXIST EXP EXT FD EFF	DOWEL(REBAR) EXISTNG EACH EACH EACH FACE EXPANSION JOINT ELEVATION EMBEDMENT EDGE OF DECK EDGE OF SLAB EQUAL EACH WAY EXISTING EXPAN(D)(SION) EXTERIOR FLOOR DRAIN EINISHED FLOOR FLEVATION
(E) EA EF EJ ELEV EMBED EOD EOS EQ EW EXIST EXP EXT FD FFE FIN	DOWEL(REBAR) EXISTNG EACH EACH EACH FACE EXPANSION JOINT ELEVATION EMBEDMENT EDGE OF DECK EDGE OF SLAB EQUAL EACH WAY EXISTING EXPAN(D)(SION) EXTERIOR FLOOR DRAIN FINISHED FLOOR ELEVATION EINISHED
(E) EA EF EJ ELEV EMBED EOD EOS EQ EW EXIST EXP EXT FD FFE FIN FNDN	DOWEL(REBAR) EXISTNG EACH EACH EACH FACE EXPANSION JOINT ELEVATION EMBEDMENT EDGE OF DECK EDGE OF SLAB EQUAL EACH WAY EXISTING EXPAN(D)(SION) EXTERIOR FLOOR DRAIN FINISHED FLOOR ELEVATION FINISHED FOUNDATION
(E) EA EF EJ ELEV EMBED EOD EOS EQ EW EXIST EXP EXT FD FFE FIN FNDN FP	DOWEL(REBAR) EXISTNG EACH EACH FACE EXPANSION JOINT ELEVATION EMBEDMENT EDGE OF DECK EDGE OF SLAB EQUAL EACH WAY EXISTING EXPAN(D)(SION) EXTERIOR FLOOR DRAIN FINISHED FLOOR ELEVATION FINISHED FOUNDATION FIREPROOF(ING)
(E)           EA           EF           EJ           ELEV           EMBED           EOD           EOS           EQ           EW           EXIST           EXP           FD           FFE           FIN           FNDN           FP           FRMG	DOWEL(REBAR) EXISTNG EACH EACH FACE EXPANSION JOINT ELEVATION EMBEDMENT EDGE OF DECK EDGE OF SLAB EQUAL EACH WAY EXISTING EXPAN(D)(SION) EXTERIOR FLOOR DRAIN FINISHED FLOOR ELEVATION FINISHED FOUNDATION FIREPROOF(ING) FRAMING
(E)           EA           EF           EJ           ELEV           EMBED           EOD           EOS           EQ           EXIST           EXT           FD           FFE           FIN           FNDN           FP           FRMG           FS	DOWEL(REBAR) EXISTNG EACH EACH FACE EXPANSION JOINT ELEVATION EMBEDMENT EDGE OF DECK EDGE OF SLAB EQUAL EACH WAY EXISTING EXPAN(D)(SION) EXTERIOR FLOOR DRAIN FINISHED FLOOR ELEVATION FINISHED FOUNDATION FIREPROOF(ING) FRAMING FAR SIDE
(E)           EA           EF           EJ           ELEV           EMBED           EOD           EOS           EQ           EW           EXIST           EXP           EXT           FD           FFE           FIN           FNDN           FP           FRMG           FS	DOWEL(REBAR) EXISTNG EACH EACH EACH FACE EXPANSION JOINT ELEVATION EMBEDMENT EDGE OF DECK EDGE OF SLAB EQUAL EACH WAY EXISTING EXPAN(D)(SION) EXTERIOR FLOOR DRAIN FINISHED FLOOR ELEVATION FINISHED FOUNDATION FIREPROOF(ING) FRAMING FAR SIDE FOOTING STEP
(E)         EA         EF         EJ         ELEV         EMBED         EOD         EQ         EW         EXIST         EXP         FD         FFE         FIN         FNDN         FP         FRMG         FS         FTG	DOWEL(REBAR) EXISTNG EACH EACH FACE EXPANSION JOINT ELEVATION EMBEDMENT EDGE OF DECK EDGE OF SLAB EQUAL EACH WAY EXISTING EXPAN(D)(SION) EXTERIOR FLOOR DRAIN FINISHED FLOOR ELEVATION FINISHED FOUNDATION FIREPROOF(ING) FRAMING FAR SIDE FOOTING STEP FOOTING
(E)           EA           EF           EJ           ELEV           EMBED           EOD           EQ           EW           EXIST           EXP           EXT           FD           FFE           FIN           FNDN           FP           FRMG           FS           FTG           GA	DOWEL(REBAR) EXISTNG EACH EACH FACE EXPANSION JOINT ELEVATION EMBEDMENT EDGE OF DECK EDGE OF SLAB EQUAL EACH WAY EXISTING EXPAN(D)(SION) EXTERIOR FLOOR DRAIN FINISHED FLOOR ELEVATION FINISHED FOUNDATION FIREPROOF(ING) FRAMING FAR SIDE FOOTING STEP FOOTING GAUGE
(E)         EA         EF         EJ         ELEV         EMBED         EOD         EOS         EQ         EW         EXIST         EXP         EXT         FD         FFE         FIN         FNDN         FP         FRMG         FS         FIG         GA         GALV	DOWEL(REBAR) EXISTNG EACH EACH EACH FACE EXPANSION JOINT ELEVATION EMBEDMENT EDGE OF DECK EDGE OF SLAB EQUAL EACH WAY EXISTING EXPAN(D)(SION) EXTERIOR FLOOR DRAIN FINISHED FLOOR ELEVATION FINISHED FOUNDATION FIREPROOF(ING) FRAMING FAR SIDE FOOTING STEP FOOTING GAUGE GALVANIZED
(E)         EA         EF         EJ         ELEV         EMBED         EOD         EOS         EQ         EW         EXIST         EXP         FD         FFE         FIN         FNDN         FP         FRMG         FS         FTG         GA         GALV         GC	DOWEL(REBAR) EXISTNG EACH EACH FACE EXPANSION JOINT ELEVATION EMBEDMENT EDGE OF DECK EDGE OF SLAB EQUAL EACH WAY EXISTING EXPAN(D)(SION) EXTERIOR FLOOR DRAIN FINISHED FLOOR ELEVATION FINISHED FOUNDATION FIREPROOF(ING) FRAMING FAR SIDE FOOTING STEP FOOTING GAUGE GALVANIZED GENERAL
(E)         EA         EF         EJ         ELEV         EMBED         EOD         EQ         EW         EXIST         EXP         EXT         FD         FFE         FIN         FNDN         FP         FRMG         FS         FIG         GA         GALV         GC	DOWEL(REBAR) EXISTNG EACH EACH FACE EXPANSION JOINT ELEVATION EMBEDMENT EDGE OF DECK EDGE OF SLAB EQUAL EACH WAY EXISTING EXPAN(D)(SION) EXTERIOR FLOOR DRAIN FINISHED FLOOR ELEVATION FINISHED FOUNDATION FIREPROOF(ING) FRAMING FAR SIDE FOOTING STEP FOOTING GAUGE GALVANIZED GENERAL CONTRACTOR/CONSRTUCTION
(E)         EA         EF         EJ         ELEV         EMBED         EOD         EOS         EQ         EW         EXIST         EXP         EXT         FD         FFE         FIN         FNDN         FP         FRMG         FS         FS         FIG         GA         GALV         GC	DOWEL(REBAR) EXISTNG EACH EACH FACE EXPANSION JOINT ELEVATION EMBEDMENT EDGE OF DECK EDGE OF SLAB EQUAL EACH WAY EXISTING EXPAN(D)(SION) EXTERIOR FLOOR DRAIN FINISHED FLOOR ELEVATION FINISHED FOUNDATION FIREPROOF(ING) FRAMING FAR SIDE FOOTING STEP FOOTING STEP FOOTING GAUGE GALVANIZED GENERAL CONTRACTOR/CONSRTUCTION MANAGER
(E)         EA         EF         EJ         ELEV         EMBED         EOD         EOS         EQ         EW         EXIST         EXP         EXT         FD         FFE         FIN         FNDN         FP         FRMG         FS         FIG         GA         GALV         GC         HD	DOWEL(REBAR) EXISTNG EACH EACH EACH FACE EXPANSION JOINT ELEVATION EMBEDMENT EDGE OF DECK EDGE OF SLAB EQUAL EACH WAY EXISTING EXPAN(D)(SION) EXTERIOR FLOOR DRAIN FINISHED FLOOR ELEVATION FINISHED FOUNDATION FIREPROOF(ING) FRAMING FAR SIDE FOOTING STEP FOOTING GAUGE GALVANIZED GENERAL CONTRACTOR/CONSRTUCTION MANAGER HEAVY DUTY
(E)         EA         EF         EJ         ELEV         EMBED         EOD         EOS         EQ         EW         EXIST         EXP         EXT         FD         FFE         FIN         FNDN         FP         FRMG         FS         FIG         GA         GALV         GC         HD         HK	DOWEL(REBAR) EXISTNG EACH EACH FACE EXPANSION JOINT ELEVATION EMBEDMENT EDGE OF DECK EDGE OF SLAB EQUAL EACH WAY EXISTING EXPAN(D)(SION) EXTERIOR FLOOR DRAIN FINISHED FLOOR ELEVATION FINISHED FOUNDATION FIREPROOF(ING) FRAMING FAR SIDE FOOTING STEP FOOTING GAUGE GALVANIZED GENERAL CONTRACTOR/CONSRTUCTION MANAGER HEAVY DUTY HOOK
(E)         EA         EF         EJ         ELEV         EMBED         EOD         EOS         EQ         EW         EXIST         EXP         EXT         FD         FFE         FIN         FNDN         FP         FRMG         FS         FIG         GA         GALV         GC         HD         HK         HORIZ	DOWEL(REBAR) EXISTNG EACH EACH FACE EXPANSION JOINT ELEVATION EMBEDMENT EDGE OF DECK EDGE OF SLAB EQUAL EACH WAY EXISTING EXPAN(D)(SION) EXTERIOR FLOOR DRAIN FINISHED FLOOR ELEVATION FINISHED FLOOR ELEVATION FINISHED FOUNDATION FIREPROOF(ING) FRAMING FAR SIDE FOOTING STEP FOOTING STEP FOOTING STEP FOOTING GAUGE GALVANIZED GENERAL CONTRACTOR/CONSRTUCTION MANAGER HEAVY DUTY HOOK HORIZONTAL
(E)         EA         EF         EJ         ELEV         EMBED         EOD         EOS         EQ         EW         EXIST         EXP         FD         FFE         FIN         FNDN         FP         FRMG         FS         FIG         GA         GALV         GC         HD         HK         HORIZ         HP	DOWEL(REBAR) EXISTNG EACH EACH FACE EXPANSION JOINT ELEVATION EMBEDMENT EDGE OF DECK EDGE OF SLAB EQUAL EACH WAY EXISTING EXPAN(D)(SION) EXTERIOR FLOOR DRAIN FINISHED FLOOR ELEVATION FINISHED FLOOR ELEVATION FINISHED FOUNDATION FIREPROOF(ING) FRAMING FAR SIDE FOOTING STEP FOOTING STEP FOOTING GAUGE GALVANIZED GENERAL CONTRACTOR/CONSRTUCTION MANAGER HEAVY DUTY HOOK HORIZONTAL HIGH POINT
(E)         EA         EF         EJ         ELEV         EMBED         EOD         EOS         EQ         EW         EXIST         EXP         EXT         FD         FRE         FIN         FRMG         FS         FG         GA         GALV         GC         HD         HK         HORIZ         HS	DOWEL(REBAR) EXISTNG EACH EACH FACE EXPANSION JOINT ELEVATION EMBEDMENT EDGE OF DECK EDGE OF SLAB EQUAL EACH WAY EXISTING EXPAN(D) (SION) EXTERIOR FLOOR DRAIN FINISHED FLOOR ELEVATION FINISHED FLOOR ELEVATION FINISHED FOUNDATION FIREPROOF(ING) FRAMING FAR SIDE FOOTING STEP FOOTING GAUGE GALVANIZED GENERAL CONTRACTOR/CONSRTUCTION MANAGER HEAVY DUTY HOOK HORIZONTAL HIGH POINT HIGH STRENGTH HOLLOW STRUCTURAL SECTION/STRUC
(E)         EA         EF         EJ         ELEV         EMBED         EOD         EQ         EW         EXIST         EXP         EXT         FD         FFE         FIN         FNDN         FP         FRMG         FS         FIG         GA         GALV         GC         HD         HK         HORIZ         HP         HSS	DOWEL(REBAR) EXISTNG EACH EACH FACE EXPANSION JOINT ELEVATION EMBEDMENT EDGE OF DECK EDGE OF SLAB EQUAL EACH WAY EXISTING EXPAN(D)(SION) EXTERIOR FLOOR DRAIN FINISHED FLOOR ELEVATION FINISHED FLOOR ELEVATION FINISHED FOUNDATION FIREPROOF(ING) FRAMING FAR SIDE FOOTING STEP FOOTING GAUGE GALVANIZED GENERAL CONTRACTOR/CONSRTUCTION MANAGER HEAVY DUTY HOOK HORIZONTAL HIGH POINT HIGH STRENGTH HOLLOW STRUCTURAL SECTION(STRUC SHAPE)

IF	
INSUL	INSULATION
INTMD	INTERMEDIATE
JT	JOINT
К	KIP (1000 POUNDS)
KIF	
K3I	
LB/LBS	POUNDS
LF	LINEAR FOOT,FEET
LL	LIVE LOAD
LLH	LONG LEG HORIZONTAL
LP	LOW POINT
LVL	LEVEL
LW	LIGHTWEIGHT
MANUF	MANUFACTURER
ΜΑΤΙ	MATERIAL
ΜΔΧ	ΝΑΧΙΝΑΙΙΝΑ
MECH	
MEZZ	MEZZANINE
MIN	MINIMUM
MISC	MISCELLANEOUS
MTI	METAI
(NI)	NEW
NS	NEAR SIDE
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER/DIMENSION
OF	
OPNG	OPENING(S)
OPP	OPPOSITE
P	PIER (SEE SCHEDULE)
PCC	PRECAST CONCRETE
PCF	POUNDS PER CUBIC FOOT
PERF	PERFORATE(D)
PERIM	PERIMETER
PL	PLATE
PLF	POUNDS PER LINEAR FOOT
PREEAB	
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	POST TENSION (FD) (ING)
QTY	QUANTITY
R	RADIUS RADII
RC	
RD	
REINF	REINFORCING, REINFORCEMENT
REQ('D)	REQUIRE(D)
REV	REVIS(E)(ED)(ION)
RTU	ROOF TOP UNITS
SCHED	SCHEDULE
301	
SHIG	SHEATHING
SIM	SIMILAR
SL	snow load
SOG	SLAB ON GRADE
SPA	
50 77	
SQ(FI)	SQUARE FOOT/FEET
STD	STANDARD
STIFF	STIFFENER
STL	STEEL
STRUCT	
TRR	
T(L)	
1/	
IRF	TOP OF BEAM ELEVATION
TDE	TOP OF DECK ELEVATION
TEMP	TEMPORARY
TFE	TOP OF FOOTING ELEVATION
IME	TOP OF MASONRY ELEVATION
TO	TOP OF
TOS	TOP OF STEEL
TPG	TOPPING
	TREATED
ISE	IOP OF SLAB ELEVATION
TWE	TOP OF WALL ELEVATION
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
VEPT	VERTICAL
W/	WIIH
W/O	WITHOUT
WF	WIDE FLANGE
WGHT	WEIGHT
WP	WORK POINT
WP WT	
WP WT	

