# RIGHT 2021 IKE KLIGERMAN BARKLEY ARCHITECTS, PO PROJECT NAME: 59 TWEED BLVD

## PROJECT ADDRESS: 59 TWEED BLVD, NYACK, NY 10960 PROJECT ARCHITECT: CWB ARCHITECTS STRUCTURAL ENGINEER: DOMINICK R.PILLA ASSOCIATES PC STRUCTURAL PLANS **ISSUED: FOR BUILDING PERMIT**

DATE: 08/17/2021

INDEX OF DRAWINGS			
PAGE #	DWG #	REVISION #	DRAWING TITLE
1	S-001	00	TITLE SHEET
2	S-002	00	GENERAL NOTES
3	S-300	00	RETAINING WALL PLAN
4	S-400	00	RETAINING WALL SECTIONS
5	S-410	00	RETAINING WALL DETAILS

SYMBOL LEGEND		
SECTION #	SECTION SYMBOL	
DETAIL #	DETAIL	
SHT# SHEET #	REFERENCE SYMBOL	
ELEVATION #		
A SHT # SHEET #	ELEVATION REFERENCE SYMBOL	
TITLE FOR PLAN, SECTION OR DETAIL #		
SHT # IF SHOWN POINT TO SHEET WHERE SECTION OR DETAIL WAS TAKEN	PLAN, SECTION, OR DETAIL TITLE SYMBOL	
XXX +	ELEVATION SYMBOL	
<►	BEAM MOMENT CONNECTION	
\$\$	POST UP/POST DOWN	
LT-#	PRECAST LINTEL	
GB-#	CONCRETE GRADE BEAM	
F-#.#	FOOTING NUMBER	
MW-#	MASONRY WALL NUMBER	
CB-#	CONCRETE BEAM	
CP-#	CONCRETE PIER	
CW-#	CONCRETE WALL NUMBER	

BBREVIATION

AESS	ARCHITECTURALLY EXPOSED STRUCTURAL STEEL
В	BOTTOM REINFORCEMENT
BM	BEAM
BS	BOTH SIDES
BU	BUILT UP MEMBER
BW	BEARING WALL
С	COMPRESSION FORCE IN KIPS
CANT.	CANTILEVER
CL	CENTER LINE
CG	CENTER OF GRAVITY
COL	COLUMN
CONT	CONTINUOUS
COMP LAP	COMPRESSION REINF LAP SLICE
СР	COMPLETE PENETRATION WELD
DB	DEVELOPMENT LENGTH OF REINFORCEMENT BAR
DEL	DELTA OR CHANGE IN ELEVATION
(E)	EXISTING CONSTRUCTION
ÈF	EACH FACE
EL	ELEVATION
EW	EACH WAY
F	FINISHED SURFACE
GB	GRADE BEAM
Н	HORIZONTAL REINFORCEMENT
Н	HORIZONTAL FORCE IN KIPS
J1,J2	NEW CODE FORMED STEEL JOISTS
LAP	FULL TENSION CAPACITY LAP SPLICE
LD	TENSION DEVELOPMENT LENGTH FOR REINFORCING
LDC	COMPRESSION SPLICE LENGTH FOR REINFORCEMEN
LLBB	LONG LEGS BACK-TO-BACK
LW	LIGHTWEIGHT CONCRETE
М	BENDING MOMENT IN FOOT-KIPS
MC	MOMENT CONNECTION SHOWN ON DRAWING
MIN	MINIMUM
(N)	NEW CONSTRUCTION
Ň	BEARING BOLTS THREADS INCLUDED IN SHEAR PLA
NTS	NOT TO SCALE
OC	ON CENTER
PC	PILE CAP
PL	PLATE
PP	PARTIAL PENETRATION WELD
PL	PROPERTY LINE
SAD	SEE ARCHITECTURAL DRAWINGS/DETAILS
S1,S2	SLAB ON DECK TYPE
SC	SLIP CRITICAL BOLT
SIM	SIMILAR
SPW	SOLDIER PILE LAGGING WALL
SW	SHEAR WALL
Т	TENSION FORCE IN KIPS
Т	THICKNESS
Т	TOP REINFORCEMENT
TBC	TO BE CONFIRMED
TOC	TOP OF CONCRETE
TOF	TOP OF FOOTING
TOS	TOP OF STEEL
ТҮР	TYPICAL
UNO,UON	UNLESS OTHERWISE NOTED
М	MOMENT
V	VERTICAL BEAM END REACTION IN KIPS
VIF	VERIFY IN FIELD
WP	WORKPOINT
WWF	WELDED WIRE FABRIC

LEGEND		
	NEW CONCRETE RETAINING WALL	
	NEW FOOTING	
	PROPERTY LINE	

 $\bigcirc$ 

 $\bigcirc$ 







ANE

	SPECIAL INSPECTIONS	
	STRUCTURAL STEEL - WELDING	BC 1704.3.1
	STRUCTURAL STEEL - DETAILS	BC 1704.3.2
	STRUCTURAL STEEL - HIGH STRENGTH BOLTS	BC 1704.3.3
	STRUCTURAL COLD-FORMED STEEL	BC 1704.3.4
•	CONCRETE - CAST-IN-PLACE	BC 1704.4
	CONCRETE - PRECAST	BC 1704.4
	CONCRETE - PRESTRESSED	BC 1704.4
	MASONRY	BC 1704.5
	WOOD - INSTALLATION OF HIGH-LOAD DIAPHRAGMS	BC 1704.6.1
	WOOD-INSTALLATION OF METAL-PLATE-CONNECTED TRUSSES	BC 1704.6.2
	WOOD - INSTALLATION OF PREFABRICATED I-JOISTS	BC 1704.6.3
•	SUBGRADE INSPECTION	BC 1704.7.1
•	SUBRAGE CONDITIONS - FILL PLACEMENT & IN-PLACE DENSITY	BC 1704.7.2 BC 1704.7.3
	SUBSURFACE INVESTIGATIONS (BORINGS/TEST PITS) TR4	BC 1704.7.4
	DEEP FOUNDATION ELEMENTS TR5	BC 1704.8
	HELICAL PILES (BB# 2014-020) TR5H	BC 1704.8.5
	VERTICAL MASONRY FOUNDATION ELEMENTS	BC 1704.9
	WALL PANELS, CURTAIN WALLS, AND VENEERS	BC 1704.10
	STRUCTURAL STABILITY - EXISTING BUILDINGS	BC 1704.20.1
	EXCAVATIONS-SHEETING, SHORING, AND BRACING	BC 1704.20.2
	UNDERPINNING	BC 1704.20.3 BC1814
	RAISING AND MOVING OF A BUILDING	BC 1704.20.5
•	POST-INSTALLED ANCHORS (BB# 2014-018, 2014-019)	BC 1704.32
	SEISMIC ISOLATION SYSTEMS	BC 1707.8
	CONCRETE DESIGN MIX TR3	BC1905.3 BC 1913.5
	CONCRETE SAMPLING AND TESTING TR2	BC 1905.6 BC1913.10
	<b>PROGRESS INSPECTIONS</b>	
	FOOTING AND FOUNDATION	BC 110.3.1
	STRUCTURAL WOOD FRAME	BC 110.3.2.
	FINAL	BC 110.5

<b>REQUIRED SHOP DRAWING SUBMITTALS</b>		
•	REINFORCING STEEL	
	STEEL DECKING AND STUD LAYOUT	
	STRUCTURAL STEEL	
	STEEL STAIRS	
	CONCRETE STAIRS	
	STRUCTURAL COLD FORM STEEL	
	PRECAST CONCRETE	
•	CONCRETE DESIGN MIX	
	ANCHOR ROD LAYOUT	
	COMPOSITE DRAWINGS OF ALL SLAB PENETRATIONS	
	CONCRETE MASONRY	
	CURTAIN WALLS	

# Ike Kligerman Barkley

330 West Forty-Second Stre New York, NY 10036 212 268 0128

	59 TWEED BLVD.	
No. 1	REMARKS	DATE
2		
PROJECT: RESIDENCE 59 TWEED BOULEVARD ORANGEBURG, NY 10960		
SEAL	& SIGNATURE:	A O PAK AR AND
	TITLE SHEE	ΞT
DAT	E:0	8/ <u>17/</u> 2021
PRO DRA	JECT No. : WING BY :	21-077 AM/JB
CHK DWC	BY : 5 No. :	GF
	S-001.	00

#### **GENERAL NOTES**

YRIGHT 2021 IKE KLIGERMAN BARKLEY ARCHITECTS, PC

UNLESS OTHERWISE NOTED OR SHOWN ON THE STRUCTURAL DRAWINGS, THE FOLLOWING REOUIREMENTS, TOGETHER WITH THE PROJECT PLANS, SPECIFICATIONS AND GEOTECHNICAL REPORT APPLY TO THE STRUCTURES IN THIS CONTRACT.

- 1. CONSTRUCTION IS TO COMPLY WITH THE REQUIREMENTS OF THE GOVERNING BUILDING CODE AND ALL OTHER APPLICABLE FEDERAL, STATE, AND LOCAL CODES, STANDARDS, REGULATIONS AND LAWS.
- 2. THE STRUCTURAL DOCUMENTS SHALL BE USED IN CONJUNCTION WITH AND COORDINATED WITH THE ARCHITECTURAL, CIVIL AND MEP CONTRACT DOCUMENTS AS WELL AS ANY OTHER TRADES. IF A CONFLICT EXISTS, CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER AND OBTAIN CLARIFICATION PRIOR TO BIDDING AND PROCEEDING WITH WORK
- 3. THE GENERAL CONTRACTOR SHALL COORDINATE ALL CONTRACT DOCUMENTS WITH FIELD CONDITIONS, DIMENSIONS, ELEVATIONS AND PROJECT SHOP DRAWINGS PRIOR TO CONSTRUCTION. DO NOT SCALE DRAWINGS; USE ONLY PRINTED DIMENSIONS. REPORT ANY DISCREPANCIES IN WRITING TO THE ARCHITECT/ENGINEER PRIOR TO PROCEEDING WITH WORK. DO NOT CHANGE SIZE OR LOCATION OF STRUCTURAL MEMBERS WITHOUT WRITTEN INSTRUCTIONS FROM THE STRUCTURAL ENGINEER OF RECORD.
- 4. THE DESIGN AT THE EXISTING PART OF THE BUILDING, WHICH WILL REMAIN, IS BASED ON INCOMPLETE INFORMATION ABOUT THE EXISTING STRUCTURE, THE SIZE AND DEPTH OF EXISTING FOUNDATION. AS THE WORK PROGRESS, THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH FIELD INFORMATION ABOUT THE EXISTING FOUNDATION AND OTHER STRUCTURAL MEMBERS AND FOLLOW ANY CHANGES IN DESIGN THAT WILL BE REQUIRED BY THE ENGINEER DUE TO UNANTICIPATED FIELD CONDITIONS.
- 5. OPENINGS SHOWN ON STRUCTURAL DRAWINGS ARE ONLY PICTORIAL. SEE THE ARCHITECTURAL AND M.E.P. DRAWINGS FOR THE SIZE AND LOCATION OF OPENINGS IN THE STRUCTURE.
- 6. CONTRACTORS WHO DISCOVER DISCREPANCIES, OMISSIONS OR VARIATIONS IN THE CONTRACT DOCUMENTS DURING BIDDING SHALL IMMEDIATELY NOTIFY THE ARCHITECT. THE ARCHITECT WILL RESOLVE THE CONDITION AND ISSUE A WRITTEN CLARIFICATION.
- 7. THE CONTRACTOR SHALL PROTECT ADJACENT PROPERTY, HIS OWN WORK AND THE PUBLIC FROM HARM. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS AND METHODS, AND JOBSITE SAFETY INCLUDING ALL OSHA REQUIREMENTS.
- 8. SEE PROJECT SPECIFICATIONS FOR TESTING. SEE THE STRUCTURAL SPECIAL INSPECTION NOTES FOR INSPECTION REQUIREMENTS.
- 9. DETAILS LABELED "TYPICAL" APPLY TO ALL SITUATIONS THAT ARE THE SAME OR SIMILAR TO THOSE SPECIFICALLY REFERENCED, WHETHER OR NOT THEY ARE KEYED IN AT EACH LOCATION. QUESTIONS REGARDING THE APPLICABILITY OF TYPICAL DETAILS SHALL BE RESOLVED BY THE ARCHITECT.
- 10. THE STRUCTURE IS DESIGNED TO BE STRUCTURALLY SOUND WHEN COMPLETED. PRIOR TO COMPLETION, THE CONTRACTOR IS RESPONSIBLE FOR STABILITY AND TEMPORARY BRACING, INCLUDING, BUT NOT LIMITED TO, MASONRY WALLS. THE CONTRACTOR SHALL VERIFY THAT CONSTRUCTION LOADS DO NOT EXCEED THE CAPACITY OF THE STRUCTURE AT THE TIME THE LOAD IS APPLIED. WHENEVER THE CONTRACTOR IS UNSURE OF THESE REQUIREMENTS, THE CONTRACTOR SHALL RETAIN A NEW YORK STATE LICENSED ENGINEER TO DESIGN AND INSPECT THE TEMPORARY BRACING AND STABILITY OF THE STRUCTURE.

#### CODES AND SPECIFICATIONS

THE DESIGN SHOWN ON THESE DRAWINGS IS BASED ON THE FOLLOWING CODES, SPECIFICATIONS AND STANDARDS:

- 1. "NEW YORK CITY BUILDING CODE," 2014 EDITION.
- ASCE 7-16: "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES." AWS D1.1: "STRUCTURAL WELDING CODE," 2014. "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE," ACI 318-2014.
- "SPECIFICATIONS FOR STRUCTURAL CONCRETE," ACI 301-1999. "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES," ACI 530-2013. "SPECIFICATIONS FOR STRUCTURAL STEEL BUILDINGS," AISC 360-16, "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES," AISC 303-16.
- "SEISMIC PROVISIONS FOR STRUCTURAL STEEL BUILDINGS," AISC-341-16, "STANDARD FOR COMPOSITE STEEL FLOOR DECK-SLAB," SDI, 2011. "STANDARD FOR STEEL ROOF DECK," SDI 2010.
- 2. "NATIONAL DESIGN SPECIFICATION (NDS) FOR WOOD CONSTRUCTION," AWC NDS 2018. ASCE 37-14: "DESIGN LOADS ON STRUCTURES DURING CONSTRUCTION."
- 3. "BUILDING CODE OF NEW YORK STATE," 2020.

#### SHOP DRAWINGS AND OTHER SUBMITTALS

- 1. SEE TITLE SHEET FOR REQUIRED SUBMITTALS.
- 2. INCOMPLETE SUBMITTALS WILL BE RETURNED WITHOUT REVIEW.
- 3. SUBMIT SPECIFIC COMPONENTS, SUCH AS COLUMNS, FOOTINGS, ETC., IN A SINGLE PACKAGE. SUBMIT SIMILAR FLOORS TOGETHER.
- 4. ON FIRST SUBMITTAL, CLEARLY FLAG AND CLOUD ALL DIFFERENCES FROM THE CONTRACT DOCUMENTS. ON RE-SUBMITTALS, FLAG AND CLOUD ALL CHANGES AND ADDITIONS TO PREVIOUS SUBMITTAL. ONLY CLOUDED ITEMS WILL BE REVIEWED.
- 5. SUBMITTALS FOR SPECIAL STRUCTURAL, LOAD-CARRYING ITEMS THAT ARE REQUIRED BY CODES OR STANDARDS TO RESIST FORCES MUST BE PREPARED BY, OR UNDER THE DIRECT SUPERVISION OF, A DELEGATED ENGINEER. EXAMPLES INCLUDE STRUCTURAL STEEL CONNECTIONS, STRUCTURAL LIGHT GAGE STEEL FRAMING, AND EXTERIOR ENCLOSURE SYSTEMS.
- 6. A DELEGATED ENGINEER IS DEFINED AS A NEW YORK STATE LICENSED ENGINEER WHO SPECIALIZES IN AND UNDERTAKES THE DESIGN OF STRUCTURAL COMPONENTS OR STRUCTURAL SYSTEMS INCLUDED IN A SPECIFIC SUBMITTAL PREPARED FOR THIS PROJECT AND IS AN EMPLOYEE OR OFFICER OF, OR CONSULTANT TO, THE CONTRACTOR OR FABRICATOR RESPONSIBLE FOR THE SUBMITTAL. THE DELEGATED ENGINEER SHALL SIGN, SEAL AND DATE THE SUBMITTAL, INCLUDING CALCULATIONS AND DRAWINGS. SEE SPECIFICATIONS FOR MORE SPECIFIC CRITERIA.
- 7. THE TRADE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING AND CORRELATING DIMENSIONS AT THE JOB SITES, FOR TOLERANCES, CLEARANCES, QUANTITIES, FABRICATION PROCESSES AND TECHNIOUES OF CONSTRUCTION, COORDINATION OF THE WORK WITH OTHER TRADES AND FULL COMPLIANCE WITH THE CONTRACT DOCUMENTS.
- 8. THE GENERAL CONTRACTOR/CONSTRUCTION MANAGER SHALL REVIEW AND APPROVE SUBMITTALS AND SHALL SIGN AND DATE EACH DRAWING PRIOR TO SUBMITTING TO THE ARCHITECT. THIS APPROVAL IS TO CONFIRM THAT THE SUBMITTAL IS COMPLETE, COMPLIES WITH THE SUBMITTAL REQUIREMENTS AND IS COORDINATED WITH FIELD DIMENSIONS, OTHER TRADES, ERECTION SEQUENCING AND CONSTRUCTABILITY.

- 9. THE STRUCTURAL ENGINEER REVIEWS SUBMITTALS TO CONFIRM THAT THE SUBMITTAL IS IN GENERAL CONFORMANCE WITH THE DESIGN CONCEPT PRESENTED IN THE CONTRACT DOCUMENTS. OUANTITIES AND DIMENSIONS ARE NOT CHECKED. NOTATIONS ON SUBMITTALS DO NOT AUTHORIZE CHANGES TO THE CONTRACT SUM. CHECKING OF THE SUBMITTAL BY THE STRUCTURAL ENGINEER SHALL NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR DEVIATIONS FROM THE CONTRACT DOCUMENTS AND FROM ERRORS OR OMISSIONS IN THE SUBMITTAL.
- 10. IN ADDITION TO THE ABOVE, THE STRUCTURAL ENGINEER'S REVIEW OF DELEGATED ENGINEER SUBMITTALS IS LIMITED TO VERIFYING THAT THE SPECIFIED STRUCTURAL SUBMITTAL HAS BEEN FURNISHED, SIGNED AND SEALED BY THE DELEGATED ENGINEER AND THAT THE DELEGATED ENGINEER HAS UNDERSTOOD THE DESIGN INTENT AND USED THE SPECIFIED STRUCTURAL CRITERIA. NO DETAILED CHECK OF CALCULATIONS WILL BE MADE. THE DELEGATED ENGINEER IS SOLELY RESPONSIBLE FOR HIS/HER DESIGN, INCLUDING BUT NOT LIMITED TO THE ACCURACY OF HIS/HER CALCULATIONS AND COMPLIANCE WITH THE APPLICABLE CODES AND STANDARDS.
- 11. CAD FILES OF STRUCTURAL DRAWINGS MAY BE USED AS AN AID IN PREPARING SHOP DRAWINGS ONLY UPON THE CONTRACTOR SIGNING AN AGREEMENT. WHEN CAD FILES OR COPIES OF THE STRUCTURAL DRAWINGS ARE MADE AVAILABLE, IT IS UNDER THE FOLLOWING CONDITIONS:
- a. ALL INFORMATION CONTAINED IN THE CAD FILES OR COPIES OF THE STRUCTURAL DRAWINGS ARE INSTRUMENTS OF SERVICE OF THE ARCHITECT/ENGINEER AND SHALL NOT BE USED FOR OTHER PROJECTS, ADDITIONS TO THE PROJECT OR THE COMPLETION OF THE PROJECT BY OTHERS. CAD FILES AND COPIES OF THE STRUCTURAL DRAWINGS REMAIN THE PROPERTY OF DOMINICK R. PILLA ASSOCIATES AND IN NO CASE SHALL THEIR TRANSFER BE CONSIDERED A SALE.
- b. CAD FILES OR COPIES OF THE STRUCTURAL DRAWINGS ARE NOT CONTRACT DOCUMENTS. IN THE EVENT OF A CONFLICT, THE STRUCTURAL DRAWINGS SHALL GOVERN
- c. THE USE OF CAD FILES OR COPIES OF THE STRUCTURAL DRAWINGS SHALL NOT IN ANY WAY RELIEVE THE CONTRACTOR'S RESPONSIBILITY FOR PROPER CHECKING AND COORDINATION OF DIMENSIONS, DETAILS, SIZES AND QUANTITIES OF MATERIALS AS REQUIRED FOR THE PREPARATION OF COMPLETE AND ACCURATE SHOP DRAWINGS.
- d. THE CONTRACTOR SHALL REVISE ALL REFERENCES TO CONTRACT DOCUMENT SHEET NUMBERS AND SECTION MARKS AND SHALL REMOVE INFORMATION THAT IS NOT REQUIRED FOR THEIR WORK FROM THE CAD FILES OR COPIES OF THE STRUCTURAL DRAWINGS, INCLUDING THE TITLE BLOCK; AND
- e. DIMENSIONS IN THE CAD FILES MAY NOT BE PRECISE AND, IN SOME CASES, HAVE BEEN INTENTIONALLY ALTERED FOR PRESENTATION PURPOSES. DO NOT SCALE DIMENSIONS ELECTRONICALLY OR OTHERWISE.

#### SHALLOW FOUNDATIONS

- 1. FOUNDATION DESIGN IS BASED ON THE "GEOTECHNICAL ENGINEERING REPORT," PREPARED BY ROBERT DYKSTRA OF GTA ENGINEERING SERVICES OF NEW YORK, P.C. AND DATED 7/16/2021 SEE THAT REPORT FOR ADDITIONAL REQUIREMENTS.
- 2. FOUNDATIONS PLACED ON UNDISTURBED SOIL AT ELEVATIONS INDICATED ARE DESIGNED FOR AN ALLOWABLE NET SOIL BEARING PRESSURE OF 2,000 PSF.

AND

- FOUNDATIONS PLACED ON COMPACTED STRUCTURAL FILL HAVE BEEN DESIGNED FOR AN ALLOWABLE NET SOIL BEARING PRESSURE OF 2,000 PSF.
- 3. THE CONTRACTOR SHALL NOTIFY THE ENGINEER WHERE BOTTOM OF FOOTING ELEVATION IS CHANGED AND OBTAIN REVISED DESIGN OF THE FOUNDATION AND RETAINING WALLS AS REQUIRED.
- 4. ALL FILL REQUIRED BELOW ANY PORTION OF THE STRUCTURE SHALL BE COMPACTED IN 9" LIFTS TO AT LEAST 98% OF THE MAXIMUM DRY DENSITY PER ASTM D-1557. REMOVE UNSUITABLE FILL AND REPLACE WITH CONTROLLED FILL AS REQUIRED FOR SOUND PLACEMENT OF FOUNDATIONS.
- 5. SOIL SUPPORTED FOOTING SHALL BE FOUNDED UPON UNDISTURBED NATURAL SUBGRADE (OR CONTROLLED COMPACTED FILL) WITH A MINIMUM BEARING CAPACITY AS NOTED AND AS FIELD VERIFIED AND APPROVED BY A REGISTERED SOIL ENGINEER. THE BOTTOM OF THE FOOTING ELEVATIONS AND BEARING CAPACITIES AS SHOWN ON THE DRAWINGS ARE ESTIMATED AND WILL REQUIRE VERIFICATION. FINAL, EXACT ELEVATIONS AND BEARING CAPACITIES SHALL BE FIELD DETERMINED.
- 6. WHEN NECESSARY, FOOTINGS STEPS SHALL BE CONSTRUCTED AT MAXIMUM SLOPE OF ONE VERTICAL TO TWO HORIZONTALS.
- 7. CENTER ALL FOOTINGS UNDER THEIR RESPECTIVE COLUMNS OR WALLS, U.O.N.
- **EXCAVATION, BACKFILL AND DEWATERING**
- 1. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL EXCAVATION PROCEDURES INCLUDING LAGGING, SHORING, AND PROTECTION OF ADJACENT PROPERTY, STRUCTURES, STREETS AND UTILITIES IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL BUILDING DEPARTMENT AND OSHA REGULATIONS. DO NOT EXCAVATE WITHIN ONE FOOT OF THE ANGLE OF REPOSE OF ANY SOIL BEARING FOUNDATION UNLESS THE FOUNDATION IS PROPERLY PROTECTED AGAINST SETTLEMENT.
- 2. DO NOT BACKFILL AGAINST WALLS UNTIL 7 DAYS AFTER THE WALLS ARE BRACED BY THE STRUCTURE OR ARE TEMPORARILY BRACED. DO NOT BACKFILL CANTILEVERED RETAINING WALLS UNTIL CONCRETE IS 7 DAYS OLD. DO NOT BACKFILL UNTIL AFTER COMPLETION AND INSPECTION OF ANY WATERPROOFING.
- 3. THE CONTRACTOR IS RESPONSIBLE FOR THE DISPOSAL OF ALL ACCUMULATED WATER IN A MANNER THAT DOES NOT INCONVENIENCE OR DAMAGE THE WORK.

#### SLABS ON GRADE

- 1. SLABS-ON-GRADE SHALL BE 5" THICK FIBER REINFORCED CONCRETE SLAB. (PROVIDE 3 LBS PER CU. FT. OF MACRO SYNTHETIC FIBER.) SHALL BE FINISHED IN ACCORDANCE WITH ACI STANDARD 302.1R FOR CLASS 2 FLOORS. TYPE II OR I/II CEMENT AND 3/4" COARSE AGGREGATE (SIZE NO. 57) SHALL BE USED.
- 2 SUBGRADE SOILS BELOW SLAB SHALL BE PROOF ROLLED AND CERTIFIED BY A SOILS ENGINEER AS ACCEPTABLE BEFORE PLACEMENT OF GRAVEL OR CONCRETE.
- 3. PROVIDE CONTROL JOINTS SPACING OF 36 TIMES THE SLAB THICKNESS MAXIMUM.
- 4. FOLLOW RECOMMENDATIONS OF ACI 302.1R.
- 5. SIDEWALKS AND WALKWAYS, LOCATE ISOLATION JOINTS AT 20 FT. O.C. MAXIMUM SCORE AND TOOL BETWEEN ISOLATION JOINTS IN EQUAL BAYS OF 5 FT. OR LESS.
- 6. SEE THE ARCHITECTURAL DRAWINGS FOR SLAB ON GRADE DEPRESSIONS AND OTHER REQUIREMENTS.

### **REINFORCED CONCRETE**

1. COMPLY WITH ACI 301 AND 318.

2. ALL CAST-IN-PLACE CONCRETE SHALL BE CONTROLLED CONCRETE AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH (Fc) AT 28 DAYS AS FOLLOWS:

FOOTINGS 4,000 PSI POURED WALLS 4,000 PSI SLABS-ON-GRADE 4,000 PSI SLAB ON METAL DECK 4,000 PSI (LT. WT. CONC.)

- 3. USE NORMAL WEIGHT CONCRETE FOR ALL STRUCTURAL MEMBERS. U.O.N.
- 4. CONCRETE REINFORCEMENT SHALL BE ASTM A615, GRADE 60 DEFORMED REINFORCING STEEL. LAP BOTTOM STEEL OVER SUPPORTS AND TOP STEEL AT MIDSPAN (U.O.N.). HOOK DISCONTINUOUS ENDS OF ALL TOP BARS AND ALL BARS IN WALLS, U.O.N.
- 5. USE EPOXY COATED REINFORCEMENT CONFORMING TO ASTM A775 FOR CONCRETE SUBJECT TO WATER AND CHLORITE PENETRATION.
- A.LOADING DOCK SLABS AND WALLS.
- 6. WHERE SPECIFIED, PROVIDE PLAIN, COLD-DRAWN ELECTRONICALLY WELDED WIRE REINFORCEMENT (WWF) CONFORMING TO ASTM A185. SUPPLY IN FLAT SHEETS ONLY. LAP SPLICE SHALL BE ONE CROSS WIRE SPACING PLUS TWO INCHES.
- 7. FOLLOW ACI 117-10 "SPECIFICATION FOR TOLERANCES OF CONCRETE CONSTRUCTION AND MATERIALS" FOR REQUIRED TOLERANCES.
- 8. UTILITIES SHALL NOT PENETRATE BEAMS OR COLUMNS BUT MAY PASS THROUGH SLABS AND WALLS INDIVIDUALLY, UON. SEE TYPICAL DETAILS.
- 9. PROVIDE CONSTRUCTION JOINTS IN ACCORDANCE WITH ACI 318, SECTION 6.4. PROVIDE KEYWAYS AND ADEQUATE DOWELS. SUBMIT DRAWINGS SHOWING LOCATION OF CONSTRUCTION JOINTS AND DIRECTION OF POUR FOR REVIEW.
- 10. PROVIDE 3/4" CHAMFER FOR ALL EXPOSED CORNERS. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL CONCRETE FINISH REQUIREMENTS.

### **CONCRETE FIELD TESTING:**

- 1. TESTING: OWNER WILL ENGAGE A QUALIFIED TESTING AGENCY TO PERFORM FIELD TESTS AND PREPARE TEST REPORTS.
- 2. CONCRETE TESTS: TESTING OF COMPOSITE SAMPLES OF FRESH CONCRETE OBTAINED ACCORDING TO ASTM C172 AND SECTION BC 1905.6.5 OF NYC BUILDING CODE SHALL BE PERFORMED ACCORDING TO THE FOLLOWING REQUIREMENTS:
- a. TESTING FREQUENCY: OBTAIN ONE COMPOSITE SAMPLE FOR EACH DAY'S POUR OF EACH CONCRETE MIXTURE LESS THAN 25 CU. YD., PLUS ONE SET FOR EACH ADDITIONAL 50 CU. YD. OR FRACTION THEREOF.
- b. WHEN FREQUENCY OF TESTING WILL PROVIDE FEWER THAN FIVE COMPRESSIVE STRENGTH TESTS OF EACH CONCRETE MIXTURE, TESTING SHALL BE CONDUCTED FROM AT LEAST FIVE RANDOMLY SELECTED BATCHES OR FROM EACH BATCH IF FEWER THAN FIVE ARE USED.
- C. WATER CONTENT AND SLUMP: VERIFY WATER CONTENT IN ACCORDANCE WITH AASHTO t-318 "STANDARD METHOD OF TESTS FOR WATER CONTENT USING MICROWAVE OVEN DRYING." TEST SLUMP IN ACCORDANCE WITH ASTM C143; ONE TEST AT POINT OF PLACEMENT FOR EACH COMPOSITE SAMPLE, BUT NOT LESS THAN ONE TEST FOR EACH DAY'S POUR OF EACH CONCRETE MIXTURE. PERFORM ADDITIONAL TESTS WHEN CONCRETE CONSISTENCY APPEARS TO CHANGE.
- d. AIR CONTENT: ASTM C231, PRESSURE METHOD, FOR NORMAL-WEIGHT CONCRETE; ASTM C173, VOLUMETRIC METHOD, FOR LIGHTWEIGHT CONCRETE; ONE TEST FOR EACH COMPOSITE SAMPLE, BUT NOT LESS THAN ONE TEST FOR EACH DAY'S POUR OF EACH CONCRETE MIXTURE.
- e. CONCRETE TEMPERATURE: ASTM C1064; ONE TEST HOURLY WHEN AIR TEMPERATURE IS 40 DEG F AND BELOW AND WHEN 80 DEG F AND ABOVE, AND ONE TEST FOR EACH COMPOSITE SAMPLE.
- f. COMPRESSION TEST SPECIMENS: ASTM C31.
- i. CAST AND LABORATORY CURE ALL TEST CYLINDER SPECIMENS. ii. WHEN REQUIRED, CAST AND FIELD CURE TWO SETS OF TWO STANDARD CYLINDER SPECIMENS FOR EACH COMPOSITE SAMPLE.
- g. COMPRESSIVE-STRENGTH TESTS: ASTM C39 AND SECTION BC 1905.6.2 OF THE NYC BUILDING CODE; TEST FIRST SET OF TWO LABORATORY-CURED SPECIMENS AT 7 DAYS FOR INFORMATION, SECOND SET OF TWO
- LABORATORY-CURED SPECIMENS AT 28 DAYS FOR ACCEPTANCE AND THIRD SET OF TWO SPECIMENS AT 56 DAYS IF NECESSARY. i. TEST ONE SET OF FIELD-CURED SPECIMENS AT 7 DAYS AND ONE SET OF TWO
- SPECIMENS AT 28 DAYS. ii. A COMPRESSIVE-STRENGTH TEST SHALL BE THE AVERAGE COMPRESSIVE STRENGTH FROM A SET OF TWO SPECIMENS OBTAINED FROM SAME COMPOSITE SAMPLE AND TESTED AT AGE INDICATED.

### STRUCTURAL STEEL

- 1. FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO AISC "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS", WITH COMMENTARY, AND ALL OSHA REQUIREMENTS.
- 2. STRUCTURAL STEEL MATERIALS SHALL CONFORM TO THE FOLLOWING MINIMUM REQUIREMENTS, UNLESS OTHERWISE NOTED ON THE CONTRACT DOCUMENTS:
- ROLLED W SHAPES: ASTM A992, GRADE 50. ROLLED M, S, C, MC, AND L SHAPES: ASTM A36, FY=36 KSI. PLATES AND BARS: ASTM A36, FY=36 KSI, UON. PLATES FOR MOMENT CONNECTIONS: ASTM A572, GR. 50. STEEL PIPE: ASTM A53, TYPE E OR S, GRADE B, FY=35 KSI. HOLLOW STRUCTURAL SECTIONS: ROUND SECTIONS: ASTM A500, GRADE C, FY=46 KSI SQUARE AND RECTANGULAR SECTIONS: ASTM A500, GRADE C, FY=50 KSI.
- 3. ALL STRUCTURAL STEEL CONNECTIONS BOLTS SHALL BE ASTM A325 OR ASTM A490, TYPE 1, UNLESS OTHERWISE NOTED, AND SHALL COMPLY WITH "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS," INCLUDING COMMENTARY. ALL JOINT TYPE SHALL BE 'PT' (PRETENSIONED).
- 4. BOLT SIZE SHALL BE 3/4" DIAMETER MINIMUM, UNLESS OTHERWISE NOTED.
- 5. A MINIMUM OF TWO (2) 3/4" DIAMETER A325 BOLTS SHALL BE PROVIDED AT EACH CONNECTIONS.

- 6. SHOP DRAWINGS SHALL BE COORDINATED WITH STAIR DETAILS. ARE USED, PROVIDE STIFFENER PLATE, 3/8" THICK MINIMUM, ALO LOCATION.
- 7. SHEAR AND BRACING CONNECTIONS SHALL BE DESIGNED AND DE FABRICATOR IN ACCORDANCE WITH AISC FOR THE FORCES AND/C SHOWN, THE FABRICATOR SHALL SUBMIT CALCULATIONS DEMON THAT THE SELECTED SHEAR AND BRACING CONNECTIONS WILL A FORCES AND/OR REACTIONS INDICATED, OR AS REQUIRED BY THE
- 8. WHERE DETAILS ARE NOT GIVEN, CONNECTIONS FOR BEAMS AND TO BE DESIGNED FOR THE GIVEN FORCES AND REACTIONS.
- 9. ANCHOR RODS SHALL BE ASTM F1554 GRADE 55 WITH WELDABILI' SUPPLEMENTARY REQUIREMENT S1, HOOKED OR ANCHOR RODS S TYPE 1, THREADED WITH NUTS AND WASHERS EACH END.
- 10. WHERE CAMBER IS INDICATED, FABRICATE BEAMS SO THAT ANY CAMBER IS UPWARD AFTER ERECTION.
- 11. PROVIDE HOLES IN ALL STEEL TO PREVENT ANY ACCUMULATION HOLES SHALL NOT EXCEED 1" DIAMETER.
- 12. CUT, DRILL, OR PUNCH HOLES PERPENDICULAR TO METAL SURFACE HOLES THAT MUST BE ENLARGED TO ADMIT BOLTS AS PERMITTE ARCHITECT. DO NOT ENLARGE UNFAIR HOLES BY BURNING OR US
- 13. DO NOT SPLICE STRUCTURAL STEEL MEMBERS EXCEPT WHERE IN THE DRAWINGS.
- 14. UNLESS NOTED OTHERWISE, PROVIDE A 1/4" CAP PLATE CONTINUO AT THE ENDS OF EXTERIOR EXPOSED HOLLOW STRUCTURAL SHAF
- 15. SEE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR MISCELL NOT SHOWN ON THE STRUCTURAL DRAWINGS.
- 16. ALL STEEL MEMBERS SHALL BE SHOP PAINTED TNEMEC 10-99 PRIM APPROVED EQUAL 2.0 MILS IN THICKNESS. ALL WELDS AND BARE RECEIVE TOUCH-UP PAINT. ALL STEEL WITH EXTERIOR EXPOSURE A SHOP PAINTED TNEMEC 66 OR 161 PRIMER AND A FIELD APPLIED AFTER PRIMER TOUCH-UP. FINISH COAT SHALL BE EPOXY BASED OF 2.0 MILS.
- 17. REFER TO ARCHITECTURAL DRAWINGS AND PROJECT SPECIFICAT PAINTING AND FIREPROOFING OF STRUCTURAL STEEL. DO NOT PA SURFACES IN CONTACT WITH CONCRETE OR FIREPROOFING.
- 18. STEEL USING COMPLETE JOINT PENETRATION GROOVE WELDS TH THROUGH THE THICKNESS OF THE FLANGE OR WEB SHALL HAVE CHARPY V-NOTCH IMPACT TESTING VALUE AS FOLLOWS:
- a. ASTM A6, HOT-ROLLED SHAPES WITH A FLANGE THICKNESS EX( INCHES AND BUILT-UP HEAVY SHAPES WITH PLATES EXCEEDIN THICKNESS: 20 FT-LB @ 70 DEG. F.
- b. REGARDLESS OF THICKNESS, ALL TRUSSES, LATERAL SYSTEM M (INCLUDING COLUMNS, WIND GIRDERS, BRACES, ETC.): 20 FT-LB
- c. STEEL EXPOSED TO TEMPERATURES IN SERVICE BELOW 50 DEG. (LAST + 70 DEG. F, 40 DEG. F MAX)
- d. REGARDLESS OF THICKNESS, ALL TRUSSES, LATERAL SYSTEM (INCLUDING COLUMNS, WIND GIRDERS, BRACES, ETC) EXPOSED TEMPERATURES IN SERVICE BELOW 50 DEG. F: 30 FT-LB @ (LOW ANTICIPATED SERVICE TEMPERATURE + 70 DEG. F, 40 DEG. F MA
- e. WELD METAL: 20 FT-LB @ MINUS 20 DEG. F AND 40 FT-LB @ 70 DI
- f. WELD METAL EXPOSED TO TEMPERATURES IN SERVICE BELOW FT-LB @ MINUS 20 DEG. F AND 40 FT-LB @ (LAST + 20 DEG. F, 40 I
- g. TESTING IS TO BE IN ACCORDANCE WITH ASTM A6, SUPPLEMENT **REQUIREMENT S30, CHARPY V-NOTCH IMPACT TEST FOR STRUC** ALTERNATE CORE LOCATION, AT ROLLED SHAPES AND ASTM A AT ANY PERMITTED LOCATIONS.

### WELDING

- 1. ALL SHOP AND FIELD WELDING SHALL CONFORM TO THE AWS D1. WELDING CODE.
- 2. WELDING ELECTRODES SHALL CONFORM TO E70XX.
- 3. WHERE NECESSARY, REMOVE GALVANIZING OR PRIMER PRIOR TO
- 4. ALL WELDERS SHALL BE LICENSED AND CERTIFIED TO AWS STAND THOSE REQUIRED BY APPLICABLE BUILDING CODES.
- 5. ALL WELDS SHALL BE VISUALLY INSPECTED. ALL GROOVE WELDS RECEIVE RADIOGRAPHIC OR ULTRASONIC TESTING. MAGNETIC PA PERCENT OF ALL FILLET WELDS.
- 6. WELDING SHALL PROGRESS IN A MANNER THAT BALANCES THE S MEMBER, IN ACCORDANCE WITH AWS.
- 7. FOLLOW PREHEAT REQUIREMENTS FOR BASE METAL PER AWS GU

### METAL DECK AND SHEAR STUDS

- 1. DECK UNITS SHALL BE MANUFACTURED AND INSTALLED IN ACCO CURRENT "STANDARDS FOR COMPOSITE STEEL FLOOR DECKS -SLA "STANDARDS FOR STEEL ROOF DECKS" PUBLISHED BY THE STEEL INSTITUTE.
- 2. ALL FLOOR DECK SECTIONS SHALL BE 3" DEEP, 18 GAGE MINIMUM COMPOSITE METAL DECK WITH A MINIMUM I = 0.993 IN4/FT, UNLES NOTED.
- 3. ALL ROOF DECK SHALL BE 1 1/2" TYPE 'B' WIDE RIB ROOF DECK, 20 MINIMUM, GALVANIZED DECK WITH MINIMUM I = 0.22 IN4/FT, UNL NOTED.
- 4. ALL DECKS SHALL BE CONTINUOUS OVER A MINIMUM OF TWO SP.

		T1
IF HANGER RODS NGSIDE HANGER	5. SHEAR CONNECTORS SHALL BE HEADED STUDS CONFORMING TO AWS D1.1 CHAPTER 7 (SECTION 7.2.6 AND TABLE 7.1) TYPE B, ASTM A108, Fu = 65 KSI, SIZE AND SPACING AS SPECIFIED ON THE DRAWINGS.	Ike Kligerman
ETAILED BY THE DR REACTIONS ISTRATING ICHIEVE THE	6. NO ELECTRICAL OR ANY OTHER ACCESS HOLES SHALL BE ALLOWED IN THE FLOOR SLAB.	Barkley 330 West Forty-Second Street
E CODES. GIRDERS ARE	7. PROVIDE CELLULAR, FLUTED AND FORM UNITS, OPENINGS, SLEEVES, ETC. AS INDICATED ON THE STRUCTURAL, ARCHITECTURAL AND MECHANICAL DRAWINGS AND SPECIFICATIONS.	New York, NY 10036 212 268 0128
TY HALL BE A449.	8. PROVIDE METAL DECK REINFORCEMENT AT ALL UNFRAMED OPENINGS, SLEEVES AND COLUMN CUTOUTS AS SHOWN ON PLANS OR AS INDICATED IN THE SPECIFICATIONS.	
NATURAL	9. ALL METAL DECK UNITS SHALL BE FASTENED TO THE STEEL FRAME BY 5/8" DIAMETER PUDDLE WELD WITH AN AVERAGE WELD SPACING OF AT LEAST 12" ON CENTER, SIDE LAPS ARE TO BE WELDED AT A MAXIMUM SPACING OF 36" ON	
OF WATER.	<ul> <li>10. FURNISH, INSTALL AND WELD IN POSITION, CLOSURES AND OTHER MISCELLANEOUS ITEMS AS REQUIRED TO CLOSE OPENINGS BETWEEN FLOOR</li> </ul>	
CES. REAM D BY SING DRIFT PINS	UNITS AND COLUMNS, BEAMS AND GIRDERS AND AREAS WHERE DECK CHANGES SPAN DIRECTION. CLOSURE SHALL NOT BE LESS THAN 16 GAGE SHEET METAL.	
DICATED ON	11. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS SHOWING LAYOUT OF DECK PANELS INCLUDING DETAILS OF SPECIAL CONDITIONS.	
DICATED ON	SPECIAL STRUCTURAL INSPECTIONS	
OUSLY WELDED PES.	1. ALL WORKS SHALL BE SUBJECT TO SPECIAL INSPECTIONS IN ACCORDANCE WITH CHAPTER 17 OF NEW YORK STATE BUILDING CODE. SPECIAL INSPECTORS SHALL MEET THE QUALIFICATIONS OUTLINED IN THE RULES OF THE STATE OF NEW YORK SECTION 105.3.	
LANEOUS STEEL	2. SEE COVER SHEET FOR REQUIRED SPECIAL INSPECTIONS.	
MER OR E SPOTS SHALL E SHALL RECEIVE D FINISH COAT WITH THICKNESS		
IONS FOR AINT STEEL		
AT FUSE A MINIMUM		
CEEDING (2) IG (2) INCHES IN		
MEMBERS 3 @ 70 DEG. F		
.F: 20 FT-LB @		
MEMBERS D TO VEST		
AX)		No. REMARKS DATE
EG. F 50 DEG. F: 20		2 3
DEG. F MAX)		
CTURAL SHAPES - A673 FOR PLATES		
.1. STRUCTURAL		PROJECT: <b>RESIDENCE</b> 59 TWEED BOULEVARD ORANGEBURG, NY 10960
) WELDING.		SFAL & SIGNATURE
DARDS OR		DENE COF NEW JO
S SHALL ARTICLE TEST 20		Contraction of the second seco
TRESSES IN THE		POFESSIONAL
UDELINES.		
DRDANCE WITH ABS," AND DECK		GENERAL NOTES
1, GALVANIZED SS OTHERWISE		
GAGE ESS OTHERWISE		DATE:         08/17/2021           PROJECT No. :         21-077           DRAWING BY :         AM/JB
ANS.		CHK BY : GF DWG No. :



 $\bigcirc$ 

 $\bigcirc$ 





WALL 1 564.0 562.0 560.5 558.0 558.0 **ELEVATION (FT** B.O.F. 562.0 560.0 558.5 556.0 556.0 **ELEVATION (FT** T.O.W. 571.0 570.0 568.0 568.0 568.0 ELEVATION (FT) B.O.W. 564.5 WALL 2 564.5 565.5 565.5 561.0 ELEVATION (FT B.O.F. 563.0 563.0 559.5 564.0 564.0 ELEVATION (FT T.O.W. 571.0 570.0 570.0 570.0 571.0 ELEVATION (FT) B.O.W. WALL 3 570.5 570.5 567.5 567.5 567.5 **ELEVATION (FT** B.O.F. 569.0 569.0 566.0 566.0 566.0 ELEVATION (FT)

 $\bigcirc$ 

ROM STA 1+00.00 TO STA 1+25.00	FROM STA 1+25.00 TO STA 1+50.00	FROM STA 1+50.00 TO STA 1+75.00	FROM STA 1+75.00 TO STA 2+00.00
565.5	565.5	565.5	565.5
558.0	558.0	561.0	561.0
556.0	556.0	559.0	559.0
568.0	NO WALL	568.5	568.5
565.5	NO WALL	656.5	656.5
564.0	NO WALL	655.0	655.0
570.0	NO WALL	571.0	571.0
567.5	NO WALL	568.5	568.5
566.0	NO WALL	567.0	567





 $\bigcirc$ 

PYRIGHT 2021 IKE KLIGERMAN BARKLEY ARCHITECTS, PC



 $\bigcirc$ 

 $\bigcirc$ 

	ISOLATION
<u> </u>	JOINT (IJ)

SAW-CUT

## JOINT (SC)

CONSTRUCTION JOINT (CJ)











