- 2. SUBMITTALS REQUIRED, STRUCTURAL
- A. THE FOLLOWING ITEMS REQUIRE SUBMITTAL OF SHOP AND ERECTION DRAWINGS, FOR REVIEW AND APPROVAL:
- a. REINFORCING STEEL FOR CAST-IN-PLACE CONCRETE
- b. CONCRETE CONSTRUCTION AND CONTRACTION JOINTS
- c. CONCRETE MASONRY CONSTRUCTION AND CONTRACTION JOINTS d. ASPHALT MIX DESIGN FROM NYSDOT APPROVED BATCH PLANT.
- B. THE FOLLOWING ITEMS REQUIRE SUBMITTAL OF SHOP AND ERECTION DRAWINGS AND STRUCTURAL CALCULATIONS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF THIS PROJECT FOR REVIEW AND APPROVAL:
- a. SHORING AND RESHORING
- b. CONCRETE AND GROUT MIX DESIGNS c. EXCAVATION SUPPORT, SHEETING, OR BENCHING WHERE SOILS
- REQUIRE SUCH BY VIRTUE OF OSHA REQUIREMENTS (ALL EXCAVATIONS GREATER THAN 5' REQUIRE SPECIFIC TRENCHING CONSIDERATIONS) OR SOIL CONDITIONS
- d. FIBER CEMENT PANEL DESIGN AND FASTENING REQUIREMENTS
- C. PILE INSTALLATION NARRATIVE, MATERIAL CUTSHEETS, SIGNED AND SEALED GROUT MIX, AND PROCEDURE TO OBTAIN GROUT CUBE SAMPLES.
- D. UPON COMPLETION OF MICROPILE INSTALLATION BUT PRIOR TO DEMOBILIZING THE DRILL RIG(S), SUBMIT AS-BUILT MICROPILE LOCATION PLAN. THE PLAN SHALL INCLUDE DEVIATION OF PILE CENTER FROM THEORETICAL PILE LOCATION, PILE PLUMBNESS, AND ACTUAL PILE CUT-OFF ELEVATION.
- E. THE CONTRACTOR SHALL ISSUE THE REQUIRED SUBMITTALS TO THE DESIGN TEAM FOR REVIEW NO LESS THAN 10 BUSINESS DAYS PRIOR TO THE DATE THAT THE SUBMITTAL MUST BE RETURNED.
- F. SUBMITTALS ISSUED TO THE DESIGN TEAM FOR REVIEW SHALL BEAR THE CONTRACTOR'S STAMP OF APPROVAL, CERTIFYING THAT ALL FIELD MEASUREMENTS, CONSTRUCTION CRITERIA, MATERIALS, ETC. HAVE BEEN VERIFIED AND EACH SHEET HAS BEEN REVIEWED FOR COMPLETENESS, COORDINATION BETWEEN TRADES, AND COMPLIANCE WITH THE CONTRACT DOCUMENTS. FURTHER, STRUCTURAL SHOP DRAWINGS WILL ONLY BE REVIEWED ONCE ANY REQUIRED CALCULATION PACKAGES FOR THAT WORK HAS BEEN ISSUED ALONG WITH A SIGNED AND SEALED LETTER BY THE CONTRACTOR'S ENGINEER CERTIFYING THAT THE SHOP DRAWINGS HAVE PROPERLY INCORPORATED THEIR DESIGN, IN ACCORDANCE WITH THE 2010 AISC CODE OF STANDARD PRACTICE-SECTION 3.1.1 (OPTION 3). OTHERWISE THE SUBMITTAL PACKAGE WILL BE REJECTED.
- 3. SPECIAL INSPECTIONS: AS PER IBC CHAPTER 17, THE FOLLOWING ITEMS ARE SUBJECT TO SPECIAL INSPECTION BY AN INDEPENDENT INSPECTION AND/OR TESTING AGENCY HIRED BY THE OWNER AND APPROVED BY THE ENGINEER AND BUILDING OFFICIAL. OWNER/SPECIAL INSPECTOR SHALL PROVIDE SPECIAL INSPECTION REPORTS WITHIN 5 DAYS OF PERFORMING THE INSPECTION AND IMMEDIATELY NOTIFY THE ENGINEER.
- A. CONCRETE CONSTRUCTION B. MASONRY CONSTRUCTION
- C. POST-INSTALLED ANCHORS D. DEEP FOUNDATION ELEMENTS
- (ACI318 17.8.2) (1705.8)
- 4. THE CONTRACTOR SHALL CHECK THE BUILDING LOCATION WITH REGARD TO PROPERTY LINE, AND VERIFY ALL EXISTING CONDITIONS BEFORE EXCAVATION AND SHOP DRAWING PREPARATION. NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
- 5. THE DESIGN AT THE EXISTING PART OF THE BUILDING WHICH WILL REMAIN IS BASED ON INCOMPLETE INFORMATION ABOUT THE EXISTING STRUCTURE AND THE SIZE AND DEPTH OF THE EXISTING FOUNDATION. AS THE WORK PROGRESSES, THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH FIELD INFORMATION ABOUT THE EXISTING FOUNDATION AND OTHER STRUCTURAL MEMBERS AND WILL FOLLOW ANY CHANGES IN DESIGN THAT WILL BE REQUIRED BY THE ENGINEER DUE TO UNANTICIPATED FIELD CONDITIONS.
- 6. IN CASE OF CONTRADICTION BETWEEN THE DRAWINGS, THE SPECIFICATIONS, AND THE CODES, OR IF ANY CHANGE IS REQUIRED, THE CONTRACTOR SHALL INFORM THE ENGINEER IMMEDIATELY. NO CHANGE SHALL BE MADE WITHOUT WRITTEN APPROVAL OF THE ENGINEER.
- 7. THE STABILITY OF THE STRUCTURE IS THE CONTRACTOR'S RESPONSIBILITY UNTIL CONSTRUCTION IS COMPLETE AND THE STRUCTURE HAS REACHED ITS FINAL CONDITION. THE CONTRACTOR IS RESPONSIBLE FOR ANY TEMPORARY BRACING, ERECTION PIECES, AND CONSTRUCTION SUPPORTS.
- 8. THE CONTRACTOR SHALL VERIFY THAT ANY CONSTRUCTION LOADS DO NOT EXCEED THE DESIGN CAPACITY OF THE STRUCTURE.

DEMOLITION NOTES

WARNING - IT IS A VIOLATION OF NEW YORK STATE EDUCATIONAL LAW, SECTION

7209.2, FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A

LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR. TO ALTER THIS OCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH

THE REQUIREMENTS OF NEW YORK EDUCATIONAL LAW, SECTION 7209.2

- DURING ALL PHASES OF DEMOLITION AND CONSTRUCTION, THE GENERAL CONTRACTOR SHALL MAINTAIN STRUCTURAL INTEGRITY OF STRUCTURES TO BE DEMOLISHED AND ADJACENT FACILITIES TO REMAIN, WITH INTERIOR OR EXTERIOR SHORING, BRACING OR SUPPORT TO PREVENT MOVEMENT, SETTLEMENT OR COLLAPSE OF STRUCTURES.
- 2. EXISTING STRUCTURES TO REMAIN SHALL BE SAFED-OFF AND PROTECTED FROM ELEMENTS AT ALL TIMES.
- 3. CONTRACTORS ARE REQUIRED TO EXAMINE THE DRAWINGS CAREFULLY, VISIT THE SITE, AND FULLY INFORM THEMSELVES AS TO ALL EXISTING CONDITIONS AND LIMITATIONS, PRIOR TO SUBMITTING THEIR PROPOSAL FAILURE TO VISIT THE SITE AND BECOME FAMILIAR WITH THE EXISTING CONDITIONS AND LIMITATIONS WILL IN NO WAY RELIEVE SUCCESSFUL BIDDER FROM FURNISHING ALL MATERIALS OR PERFORMING ANY WORK THAT MAY BE REQUIRED TO COMPLETE THE WORK, IN ACCORDANCE WITH

- THE DRAWINGS AND WITHOUT ADDITIONAL COST TO THE OWNER.
- 4. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS BY MEASUREMENTS AT THE JOB SITE AND SHALL TAKE ANY AND ALL OTHER MEASUREMENTS NECESSARY TO VERIFY THE DRAWINGS AND TO ALLOW PROPER PERFORMANCE OF HIS WORK. ANY DISCREPANCY BETWEEN THE DRAWINGS AND THE MEASURED DIMENSIONS OF THE EXISTING STRUCTURE SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER. NO WORK SHALL PROCEED UNTIL SUCH DISCREPANCY HAS BEEN RECTIFIED. SUCH DISCREPANCIES BETWEEN THE DRAWINGS AND THE MEASURED DIMENSIONS SHALL NOT BE THE REASON FOR ANY EXTRA COST OR DELAY IN THE EXECUTION OF THE WORK AND THE WORK SHALL BE PERFORMED PER INTENT OF THE CONTRACT DOCUMENTS AT NO EXTRA COST TO THE
- 5. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO WORK WITH THE STRUCTURAL DRAWINGS TO DETERMINE THE FULL EXTENT OF THE
- 6. WHERE EXISTING WORK IS TO BE CUT, UNDERPINNED AND/OR SHEETED, CONTRACTOR TO PROVIDE ALL SHEETING, SHORING, NEEDLING, BRACING, WEDGING AND DRY-PACKING AND BE RESPONSIBLE FOR THE SAFETY OF THE STRUCTURE DURING THIS OPERATIONS AT NO EXTRA COST TO THE
- 7. SHORING, UNDERPINNING AND SHEETING IS THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER WITH AT LEAST FIVE YEARS EXPERIENCE IN THE DESIGN OF THE ABOVE AND BE LICENSED IN THE STATE OF NEW YORK.
- 8. CONTRACTOR SHALL BE REQUIRED TO REPAIR AND PATCH ANY AREAS THAT ARE ALTERED OR DAMAGED DURING THE PROCESS OF THE ALTERATION AT NO EXTRA COST TO THE OWNER.
- CONTRACTOR IS CAUTIONED TO MAKE CONTINUOUS OBSERVATIONS OF EXISTING STRUCTURE DURING THE PERFORMANCE OF HIS WORK. SHOULD THE CONTRACTOR BECOME AWARE OF ANY SITUATIONS THAT REQUIRE FURTHER INVESTIGATION OR STUDY (SUCH AS CRACKS IN CONCRETE AND PARTITIONS, DETERIORATION OF EXISTING STRUCTURE TO REMAIN, EXCESSIVE DEFLECTIONS, ETC.), THEY SHALL NOTIFY THE ENGINEER IMMEDIATELY.
- 10. ALL DIMENSIONS INDICATED ON THE DRAWINGS ARE APPROXIMATE AND SHALL NOT BE USED FOR ORDERING AND/OR FABRICATING MATERIALS. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS PRIOR TO ORDERING AND/OR FABRICATING MATERIALS.
- 11. ALL CONSTRUCTION WASTE SHALL BE REMOVED AND DISPOSED LEGALLY IN ACCORDANCE WITH THE NEW YORK STATE LAW.

FOUNDATION NOTES

- 1. FOUNDATIONS HAVE BEEN DESIGNED BASED ON A GEOTECHNICAL ASSESSMENT LETTER ISSUED BY McLAREN ENGINEERING, P.C. DATED JANUARY 30, 2018.
- - A. PILES SHALL BE AS SHOWN ON DETAIL E ON DRAWING S-300. SEE S-100 FOR LOCATIONS OF PILES.
 - B. STRUCTURAL PILES SHALL BE INSTALLED IN THE PRESENCE OF A PROFESSIONAL ENGINEER, REGISTERED IN NEW YORK STATE. DEPTH OF PILE SHALL BE RECORDED AND SUBMITTED TO THE STRUCTURAL ENGINEER OF RECORD AND BY THE SUPERVISING FIELD ENGINEER.
 - C. MAXIMUM ALLOWABLE DEVIATION FOR PILES SHALL BE THREE (3) INCHES IN EACH DIRECTION. CONTRACTOR SHALL PROVIDE SURVEY OF "AS-BUILT" PILE LOCATIONS INDICATING NORTH-SOUTH AND EAST-WEST OUT OF TOLERANCE DIMENSIONS FROM THE THEORETICA PILE CENTERLINE AND RECEIVE APPROVAL FROM MCLAREN BEFORE PROCEEDING WITH SUBSEQUENT CONSTRUCTION. PILES WHICH ARE OUT OF TOLERANCE OR DO NOT ACHIEVE THE REQUIRED STRENGTH WILL BE SUBJECT TO REDESIGN. THE ENGINEERING COSTS OF THE REDESIGN, ADDITIONAL PILES AND ADDITIONAL PILE CAP COST SHALL BE BORNE BY THE CONTRACTOR.
 - D. PILE INSPECTION WILL BE PERFORMED BY A LICENSED GEOTECHNICAL ENGINEER REGISTERED IN THE STATE OF NEW YORK EMPLOYED BY AN INSPECTION AGENCY OR AGENCIES RETAINED BY THE OWNER. THE PILES WILL NOT BE LOAD TESTED, HOWEVER, VIDEO INSPECTIONS OF ROCK SOCKETS ARE REQUIRED.
 - a. ALL ROCK SOCKETS SHALL BE VIDEO INSPECTED BY A LICENSED GEOTECHNICAL ENGINEER PRIOR TO GROUTING THE PILES. NO PILE SHALL BE INSTALLED EXCEPT IN THE PRESENCE OF THE INSPECTION AGENCIES.
 - b. THE VIDEO INSPECTION SHALL VERIFY THE ROCK SURFACE DIRECTLY UNDERLYING THE AREA OF THE PILE IS FREE OF SEAMS, CRACKS. OR DISINTEGRATED MATERIALS THAT COULD SERVE AS RESERVOIRS FOR WATER AND THUS BE SUBJECT TO FREEZING.
 - c. THE CONTRACTOR SHALL PROVIDE DOWNHOLE CAMERA AND OPERATING PERSONNEL. THE OWNER'S RESPONSIBILITY IS LIMITED TO PERFORMING THE VIDEO INSPECTIONS.
 - d. THE PILES SHALL BEAR ON SOUND ROCK WITH A ROCK QUALITY DESIGNATION (RQD) OF AT LEAST 75%
 - E. MICROPILE GROUT SHALL HAVE A MINIMUM 6000 PSI CONCRETE COMPRESSIVE STRENGTH AND CURED FOR A MINIMUM OF SEVEN (7) DAYS PRIOR TO CASTING THE SLAB. MIX DESIGN BY THE CONTRACTOR IS TO BE SUBMITTED. PLATES SHALL BE ASTM A36 AND HOT DIPPED GALVANIZED. THREADED ROD NUT AND COUPLERS SHALL DEVELOP 125% OF THE TENSILE STRENGTH OF THE THREADED ROD AND SHALL BE HOT DIPPED GALVANIZED. THREADED RODS SHALL BE HOT DIPPED
 - GALVANIZED. F. MICROPILE BOND ZONE TO BE IN SOUND ROCK BASED ON SOIL PROFILE AT MICROPILE LOCATION.
 - G. MICROPILE RECOMMENDED INSTALLATION PROCEDURE a. MICROPILES SHALL BE INSTALLED BY ADVANCING SECTIONS OF
 - MICROPILE CASING TO THE APPROXIMATE PILE TIP ELEVATION. b. DRILLING WILL BE ROTARY DUPLEX WITH INTERNAL FLUSH METHODS USING AN AIR POWERED DOWN-THE-HOLE-HAMMER (DTHH) TO REMOVE DRILL CUTTING FROM THE HOLE TO THE SURFACE. USE
 - OTHER DRILLING FLUID SUCH AS DRILLING FOAM, SLURRY OR WATER WITH A BIODEGRADABLE DRILLING MUD, CAN BE USED WITH APPROVAL FROM THE ENGINEER.
 - c. AN AIR POWERED DTHH WITH AN OVERBURDEN DRILLING SYSTEM SHALL BE USED TO ADVANCE THE DRILL CASING THROUGH OBSTRUCTIONS.
 - d. UPON ACHIEVING THE DESIGN DEPTH, COMPLETELY FLUSH THE CASING WITH AIR AND/OR WATER UNTIL CLEAN RETURN IS

- OBSERVED. AFTER THE PILE IS FLUSHED CLEAN, REMOVE THE INNER DRILL RODS.
- e. THE CENTRALIZED THREADBAR MAY BE INSTALLED IN SECTIONS USING COUPLERS AS REQUIRED.
- f. INSERT CENTRALIZED THREADBAR AND PVC OR HDPE TREMIE TUBE INTO THE CASING. THREADBAR AND TREMIE TUBE SHALL EXTEND TO PILE DESIGN TIP ELEVATION. INSERT CENTRALIZED REINFORCING BAR INTO CASING EITHER BEFORE OR AFTER TREMIE GROUTING BUT PRIOR TO CASING WITHDRAWAL.
- g. TREMIE FILL THE CASING WITH NEAT CEMENT GROUT UNTIL CLEAN RICH UNDILUTED GROUT IS OBSERVED EXITING THE TOP OF THE
- h. GROUTING OF A PILE SHALL BE DONE IN A CONTINUOUS OPERATION.
- i. REMOVE THE TREMIE TUBE FROM MICROPILE OR ENSURE THE TREMIE TUBE IS COMPLETELY GROUT FILLED AND REMOVE THE GROUT HOSE CONNECTION.
- . TOP OFF CASING AS REQUIRED WITH GROUT TO MAINTAIN POSITIVE
- k. IF COMMUNICATION BETWEEN ADJACENT DRILL HOLES OF RECENTLY GROUTED MICROPILES IS DETECTED DURING DRILLING, IMMEDIATELY DISCONTINUE DRILLING OPERATIONS AND MOVE TO ANOTHER DRILL HOLE LOCATION A SUFFICIENT DISTANCE FROM PREVIOUSLY INSTALLED MICROPILE AS TO PREVENT FURTHER COMMUNICATION UNTIL MICROPILE GROUT HAS SUFFICIENTLY SET.
- I. DEPENDING ON AMOUNT OF COMMUNICATION NOTED AND DISPLACEMENT OF FLUID GROUT WHICH OCCURRED IT MAY BE NECESSARY TO IMMEDIATELY INSTALL TREMIE TUBE IN AFFECTED MICROPILE TO THE DEPTH AT WHICH COMMUNICATION OCCURRED AND PUMP FRESH GROUT TO DISPLACE THE GROUT CONTAMINATED BY THE COMMUNICATION.

STRUCTURAL NOTES

- CAST-IN-PLACE CONCRETE
- A. ALL CONCRETE WORK SHALL CONFORM TO REQUIREMENTS OF THE ACI BUILDING CODE REQUIREMENT FOR STRUCTURAL CONCRETE (318-14 ULTIMATE STRENGTH DESIGN)
- B. 28 DAY MINIMUM COMPRESSIVE STRENGTH AND RELATED PROPERTIES FOR CONCRETE SHALL BE AS FOLLOWS:

F'c MAX W/C RATIO MAX DENSITY SLAB ON GRADE 5000PSI 0.40 N.W. (145 PCF)

C. CONCRETE COVERING OF REINFORCING STEEL (INCLUDING TIES AND STIRRUPS) SHALL CONFORM TO THE FOLLOWING MINIMUM **REQUIREMENTS:**

SLABS AND WALLS FOR #5 OR SMALLER, 2" OTHERWISE (U.O.N.) CONCRETE CAST AGAINST EARTH

- D. ALL CONCRETE SHALL BE AIR ENTRAINED, 6%±1.5% BY VOLUME FOR 3/4" COARSE AGGREGATE. AIR ENTRAINING ADMIXTURE TO COMPLY WITH ASTM C260.
- E. ALL PORTLAND CEMENT SHALL CONFORM TO ASTM C150, TYPE II OR
- F. ALL NORMAL WEIGHT AND LIGHT WEIGHT CONCRETE AGGREGATE SHALL
- CONFORM TO ASTM C33 AND ASTM C330 RESPECTIVELY. G. MAXIMUM CONCRETE SLUMP SHALL BE 4" FOR CONCRETE NOT RECEIVING HIGH-RANGE WATER REDUCING ADMIXTURES.
- H. WELDING OF REINFORCEMENT IS PROHIBITED I. ALL REINFORCING BARS SHALL BE OF NEW BILLET STEEL CONFORMING TO ASTM A615. WITH THE FOLLOWING GRADE.
- #3 THROUGH #10 GRADE 60 (F'y = 60,000 PSI) J. ALL HORIZONTAL JOINTS IN CONCRETE POURS (WHERE SHOWN ON STRUCTURAL DRAWINGS OR EXPLICITLY APPROVED BY THE ENGINEER IN WRITING) SHALL BE RAKED TO 1/4" AMPLITUDE WHILE CONCRETE IS
- K. ALL CONCRETE SHALL BE MIXED, TRANSPORTED AND PLACED IN ACCORDANCE WITH ACI STANDARDS 318 AND 304.
- L. ALL REINFORCING STEEL SHALL BE DETAILED IN ACCORDANCE TO ACI
- M. TEST CYLINDERS SHALL BE TAKEN FROM THE MIXER IN ACCORDANCE WITH ASTM C172 AND THE PROJECT SPECIFICATIONS.
- N. STONE AGGREGATE USED IN CONCRETE MIX SHALL BE FREE OF MATERIALS WITH HARMFUL REACTIVITY TO ALKALI IN CEMENT.
- O. THE MAXIMUM WATER SOLUBLE CHLORIDE ION (CL-) CONTENT IN CONCRETE FROM ALL INGREDIENTS SHALL BE LESS THAN 0.06% OF WEIGHT OF CEMENT, PER ASTM C1218.
- P. THE CONCRETE SLABS SHALL HAVE THE FOLLOWING FINISHES: a. INTERIOR SLAB - HARD STEEL-TROWELED OR FLOAT FINISH b. EXTERIOR DRIVEWAY/SIDEWALK - BROOM FINISH
- Q. THE INTERIOR SLAB SHALL BE COATED WITH SIKAGARD-616 TO ACT AS A PRIMER AND SIKAGARD-664 AS A SMOOTH FINISH COATING. THE CONTRACTOR MAY SUBMIT AN EQUIVALENT COATING SYSTEM FOR ENGINEER APPROVAL.
- a. ALLOW THE CONCRETE TO CURE PER MANUFACTURER RECOMMENDATIONS.
- b. SHOTBLAST AND REMOVE DEBRIS PRIOR TO INSTALLATION PER MANUFACTURER RECOMMENDATIONS. c. TEST SUBSTRATE MOISTURE CONTENT AND SUBMIT TO McLAREN
- PRIOR TO APPLICATION. R. A 6-MIL (0.006 INCH; 0.15 MM) POLYETHYLENE VAPOR RETARDER WITH JOINTS LAPPED NOT LESS THAN 6 INCHES (152 MM) SHALL BE PLACED BETWEEN THE BASE COURSE OR SUBGRADE AND THE CONCRETE FLOOR SLAB, OR OTHER APPROVED EQUIVALENT METHODS OR MATERIALS SHALL BE USED TO RETARD VAPOR TRANSMISSION THROUGH THE FLOOR SLAB.
- 2. POST-INSTALLED ANCHORAGES
- A. POST-INSTALLED ANCHORS SHALL BE INSTALLED INTO SOUND CONCRETE AND MASONRY AND INSPECTED IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS, THE BUILDING CODE, AND ACI 318,
- SECTION 17.8. B. POST-INSTALLED ANCHORS SHALL BE INSTALLED BY AN ACI/CRSI CERTIFIED INSTALLER (OR APPROVED EQUAL CERTIFICATION). THE EOR MUST RECEIVE DOCUMENTED CONFIRMATION THAT ALL OF THE CONTRACTOR'S PERSONNEL WHO INSTALL ANCHORS ARE TRAINED PRIOR TO THE COMMENCEMENT OF INSTALLING ANCHORS.
- C. POST-INSTALLED ANCHORS SHALL MEET THE TESTING REQUIREMENTS OF ACI 355.2 FOR MECHANICAL ANCHORS AND 355.4 FOR ADHESIVE ANCHORS AND SHALL BE ICC CERTIFIED.
- D. ALL ADHESIVE ANCHOR INSTALLATIONS SHALL USE A PISTON PLUG TO

ENSURE COMPLETE FILLING OF DRILL HOLE.

- 3. CONCRETE MASONRY UNITS (CMU)
- A. ALL MASONRY WORK SHALL CONFORM TO THE REQUIREMENTS OF TMS 602-13 SPECIFICATION FOR MASONRY STRUCTURES.
- UNITS CONFORMING TO ASTM C90, GRADE N-TYPE I WITH MINIMUM COMPRESSIVE STRENGTH OF UNITS = 1900 PSI ON NET AREA, WITH ASSUMED DESIGN COMPRESSIVE STRENGTH, F'M=1500 PSI. UNITS TO BE FABRICATED WITH NORMAL WEIGHT AGGREGATE (C33).
- C. ALL UNITS SHALL BE PLACED IN RUNNING BOND.
- E. GROUT SHALL COMPLY WITH ASTM C476. SLUMP SHALL BE 8 TO 11 INCHES, STRENGTH SHALL BE EQUAL TO 3000 PSI.
- F. STORE ALL UNITS OFF GROUND TO PREVENT CONTAMINATION. COVER MATERIALS TO PROTECT FROM THE ELEMENTS.
- G. NO AIR-ENTRAINING ADMIXTURES OR ANTIFREEZE COMPOUNDS, SUCH AS CALCIUM CHLORIDE SHALL BE ADDED TO MORTAR.
- H. DO NOT BACKFILL AGAINST WALL UNTIL MORTAR HAS ATTAINED
- I. VERTICAL CONTROL JOINTS SHALL BE PLACED SUCH THAT THE RATIO OF JOINT SPACING (S) DIVIDED BY WALL HEIGHT (H) DOES NOT EXCEED 1.5. IN NO CASE SHALL SPACING EXCEED 25 FT. CONTROL JOINTS SHALL BE CONSTRUCTED USING SASH BLOCKS AND
- d. AT ABUTMENT OF WALL AND COLUMNS.
- REINFORCING ASTM A82 WIRE, HOT DIPPED GALVANIZED, AT 16" ON
- K. ALL MASONRY WALLS SHALL BE ADEQUATELY BRACED DURING CONSTRUCTION TO RESIST WIND LOADS OF 25 PSF. MASONRY WALLS SHALL NOT BE BUILT HIGHER THAN 10 TIMES THEIR THICKNESS
- L. ALL CMU CORES WITH VERTICAL REINFORCEMENT MUST BE FULLY GROUTED.

- A. ALL AGGREGATE USED IN DESIGN MIXES SHALL BE AS SPECIFIED IN DOT SPECIFICATION SECTION 401-2.02 B.; COARSE AGGREGATE TYPE F2 CONDITIONS.
- DOT'S APPROVED LIST FOR FINE AND COARSE AGGREGATES AND PERFORMANCE GRADED (PG) BINDERS FOR WARM MIX ASPHALT (WMA) TECHNOLOGY FOR PAVING RESPECTIVELY. USE OF MINERAL FILLER OR ANY OTHER MATERIALS FOR THE PRODUCTION OF ASPHALT WILL BE
- AND MIXTURE VERIFICATION PROCEDURES. EACH MIXTURE MUST BE THE FOLLOWING NYS DOT ITEMS ONLY SHALL BE UTILIZED FOR THIS
- c. 25.0 BINDER COURSE ASPHALT. d. 37.5 BASE COURSE ASPHALT.
- OF NYS DOT MM 5.16 SUPERPAVE HOT MIX ASPHALT MIXTURE DESIGN AND MIXTURE VERIFICATION PROCEDURES.

TEMPORARY CHAIN LINK FENCE NOTES

1. ALL CHAIN LINK FENCING AND GATES TO CONFORM TO THE SPECIFICATIONS OF THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION SECTION 607 ISSUED JANUARY

PRECAST PANEL NOTES

THE PRECAST PANELS SHALL BE REPLACED WITH ARCHITECTURAL CLADDING AS MANUFACTURED BY HIGH CONCRETE GROUP OR AN APPROVED EQUAL.

MISCELLANEOUS NOTES

1. THIS PROJECT DOES NOT HAVE ANY BUY AMERICA(N) REQUIREMENTS.

BID NOTES

- a. PLANS AND ELEVATIONS ON THE DRAWINGS ARE DRAWN PROPORTIONALLY BASED ON DATA AVAILABLE AND ARE NOT TO BE USED TO CALCULATE AREAS FOR THE PURPOSES OF VALUATION. DO NOT SCALE THESE DRAWINGS. RELATIVE DRAFTING SCALE IS INDICATED FOR THE SOLE PURPOSE OF MAINTAINING PRINTING
- c. FOR THE INSTALLATION OF THE MICROPILES, THE ESTIMATE SHALL BE BASED ON THE LINEAR FOOT LENGTH THAT THE PILES MUST BE DRILLED INTO SOIL AND ROCK. THE ENGINEER PROVIDED AN APPROXIMATE TOTAL LENGTH VALUE IN DETAIL E/S-300, AND THE CONTRACTOR SHALL BID ON THE PROJECT USING THIS VALUE. HOWEVER, THE TRUE DEPTH THAT THE PILES NEED TO BE DRILLED WILL BE DETERMINED DURING CONSTRUCTION, AND MAY BE MORE OR LESS THAN THE ENGINEER'S APPROXIMATION. ANY DIFFERENCES IN THE LENGTH WILL ALTER THE BID AMOUNT PER THE UNIT PRICE
- DRIVEWAY APRON IS REQUIRED.

- B. ALL CONCRETE MASONRY UNITS SHALL BE HOLLOW LOAD BEARING

- MAXIMUM STRENGTH.
- DUR-O-WAL PREFORMED REGULAR RAPID CONTROL JOINT (OR EQUAL OF EXTRUDED RUBBER.) VERTICAL JOINTS SHALL BE LOCATED AS FOLLOWS:
- c. AT CHASES AND RECESSES FOR PIPING, COLUMNS, FIXTURES, ETC.
- e. WITHIN S/2 IF CORNERS OF WALLS OR INTERSECTIONS.
- J. CMU WALLS SHALL BE REINFORCED WITH $\frac{3}{6}$ ° DIA. TRUSS TYPE LADDER CENTER (VERTICALLY), AND AT THE FIRST AND SECOND BED JOINTS
- WITHOUT BRACING.

4. ASPHALT PAVING

- b. 12.5 TOP COURSE ASPHALT (LARGE PARKING LOTS & ACCESS
- ASPHALT MIXTURES, TYPE 5 (SHIM). D. RECLAIMED ASPHALT PAVEMENT (RAP) SHALL MEET THE REQUIREMENTS

- CONSISTENCY BETWEEN DRAWINGS.

- d. THE CONTRACTOR'S BID SHALL ASSUME A GPR SURVEY OF THE
 - ORIGINAL SHEET SIZE = 22"x34"

- D. MORTAR SHALL BE TYPE M OR S. MORTAR SHALL MEET ASTM C270.

- a. CHANGES IN WALL HEIGHT OR THICKNESS.
- b. AT CONSTRUCTION JOINTS IN FOUNDATION, IN ROOF, AND IN
- f. NO CLOSÉR THAN 2'-0" TO EDGE OF ANY OPENING IN WALL.
- ABOVE AND BELOW WALL OPENINGS.

- B. USE AGGREGATE AND PG BINDER FROM SUPPLIERS LISTED IN THE NYS
- ACCEPTED IN ACCORDANCE WITH THE STATE'S WRITTEN INSTRUCTIONS. C. SUPPLY APPROVED ASPHALT MIXTURES THAT MEET THE REQUIREMENTS OF NYS DOT MM 5.16 SUPERPAVE HOT MIX ASPHALT MIXTURE DESIGN OBTAINED FROM A SINGLE PLANT FOR THE DURATION OF THE PROJECT.
- a. 6.3 TOP COURSE ASPHALT (DRIVEWAYS, GUTTERS).
- e. TRUEING & LEVELING COURSE: DOT TABLE 401-1 COMPOSITION OF

- GENERAL BID:
- b. ALL DIMENSIONS AND WORK QUANTITIES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR. ANY PERCEIVED DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE EOR. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE ACCURACY OF ALL DIMENSIONS.
- THAT THE CONTRACTOR PROVIDES.

 ISSUED - NEW SHEET → ISSUED - REVISION MADE O ISSUED - NO REVISION MADE ⊗ SHEET REMOVED STRUCTURAL DWG. NO. DRAWING TITLE **→** | ○ | ○ | **●** | S-001 **GENERAL NOTES** ● | ○ | ● | S-100 GROUND FLOOR PLAN SOUTH EAST ELEVATION ● | ○ | ● | ● | S-200 **⊕** | **○** | **⊕** | **S**-201 NORTH EAST ELEVATION - EXTERIOR ● | ○ | ● | ● | S-202 NORTH EAST ELEVATION - INTERIOR

DRAWING LIST

MCLAREN MEASURED APPROXIMATELY 13'-0" HEAD ROOM FROM THE TOP OF EXISTING SLAB TO BOTTOM OF CEILING. CONTRACTOR TO NOTE THE FOLLOWING: THERE IS OVERHEAD DOOR WHICH WHEN RETRACTED

STRUCTURAL DETAILS

STRUCTURAL DETAILS CONT.

- ALLOWS APPROXIMATELY 12'-3" HEAD ROOM FROM EXISTING SLAB TO RETRACTED GARAGE DOOR. THERE ARE A NUMBER OF OTHER OBSTRUCTIONS THAT MAY NEED TO BE TEMPORARILY REMOVED AND
- THE PROPOSED SLAB IS 1'-6" THICK WITH A SUBBASE BELOW. MCLAREN FINDS THAT THERE WILL BE APPROXIMATELY 13'-6" HEADROOM TO INSTALL THE PILES.

CONTRACTOR TO VERIFY MEANS AND METHODS AND TRUE HEAD

REPLACED (E.G. EXHAUST PIPE FOR THE FIRE TRUCKS).

FOR THE DRILLING OF THE PILES AND EQUIPMENT, INCLUDE REMOVAL AND REPLACEMENT OF THE EXISTING GARAGE DOORS AND OVERHEAD PIPING FOR THE PURPOSES OF CLEARANCE. THE CONTRACTOR SHALL PROTECT THE INTERIOR OF THE STRUCTURE

ROOM PRIOR TO CONSTRUCTION.

ABBREVIATIONS

DIM.

EXP. JT.

0.C.

SIM.

U.O.N.

AS NECESSARY.

○ | **○** | **○** | **●** | S-300

S-301

- **ADDITIONAL ALTERNATE** ARCH. **ARCHITECTURAL** ASD ALLOWABLE STRESS DESIGN (SERVICE LEVEL LOADS) BOTTOM OF SLAB CMU CONCRETE MASONRY UNIT CONC. CONCRETE CONT. CONTINUOUS DIA OR Ø DIAMETER
- -do-DITTO DWG. DRAWING EACH EL. OR ELEV. **ELEVATION EQUIVALENT** EXISTING EX.

DIMENSION

EXPANSION JOINT

- FLR. FLOOR FT. OR FEET OR FOOT YIELD STRESS GAUGE GALV. GALVANIZED
- GRADE HOT DIPPED GALVANIZED HIGH POINT INCHES
- MAX. MAXIMUM MIN. MINIMUM MECHANICAL, ELECTRICAL, & PLUMBING **MISCELLANEOUS** N.T.S. NOT TO SCALE
- O.D. OUTSIDE DIAMETER POUNDS PER SQUARE INCH REINF. REINFORCING REQ'D REQUIRED

ON CENTER

SIMILAR

- S.O.G. SLAB ON GRADE STD. STANDARD T&B TOP & BOTTOM THK. OR THKNS. THICK OR THICKNESS TYP.
- V.I.F. VERIFY IN FIELD WITH

UNLESS OTHERWISE NOTED

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RAWING NO.

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160616.04 AS NOTED 11/17/2023

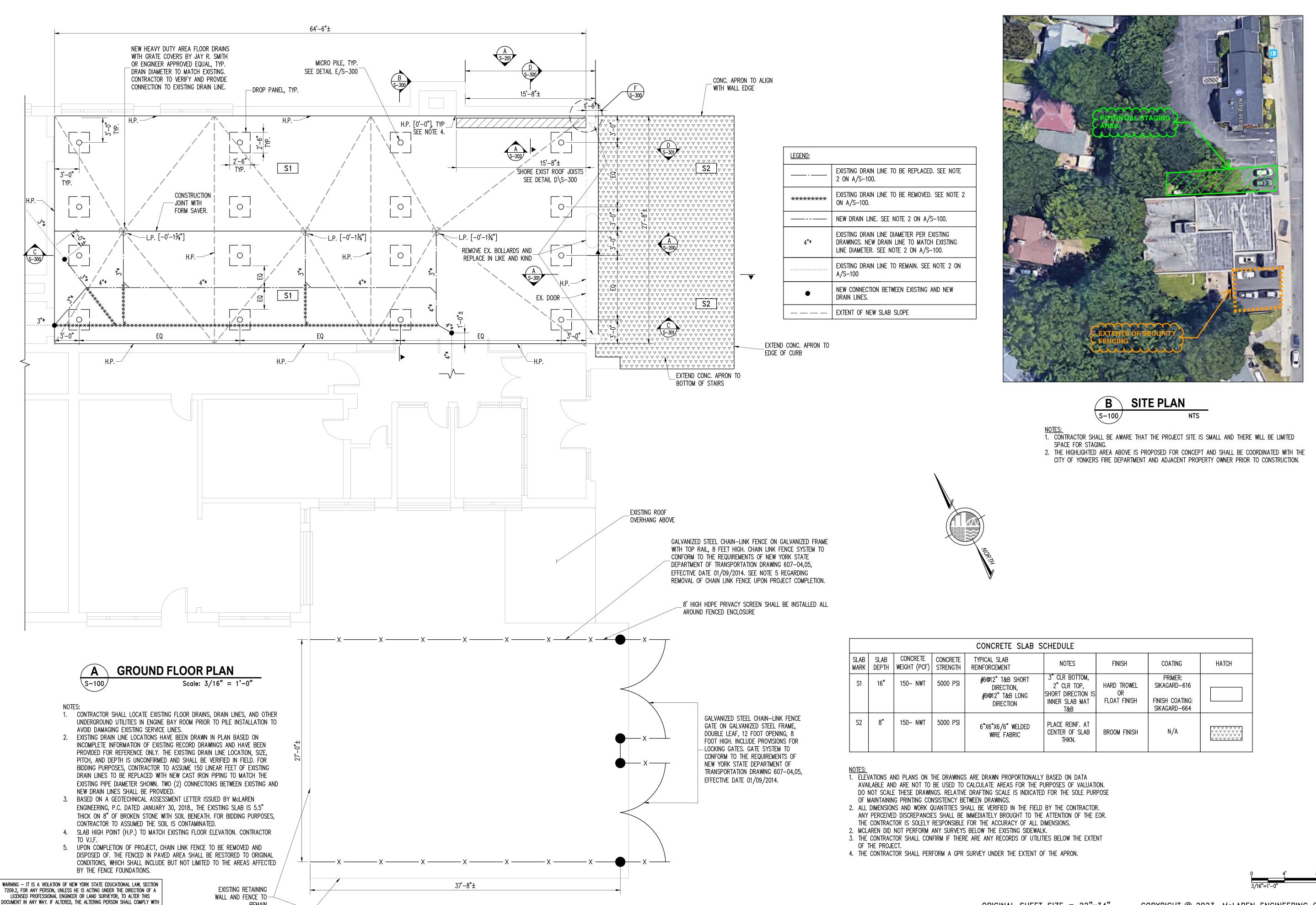
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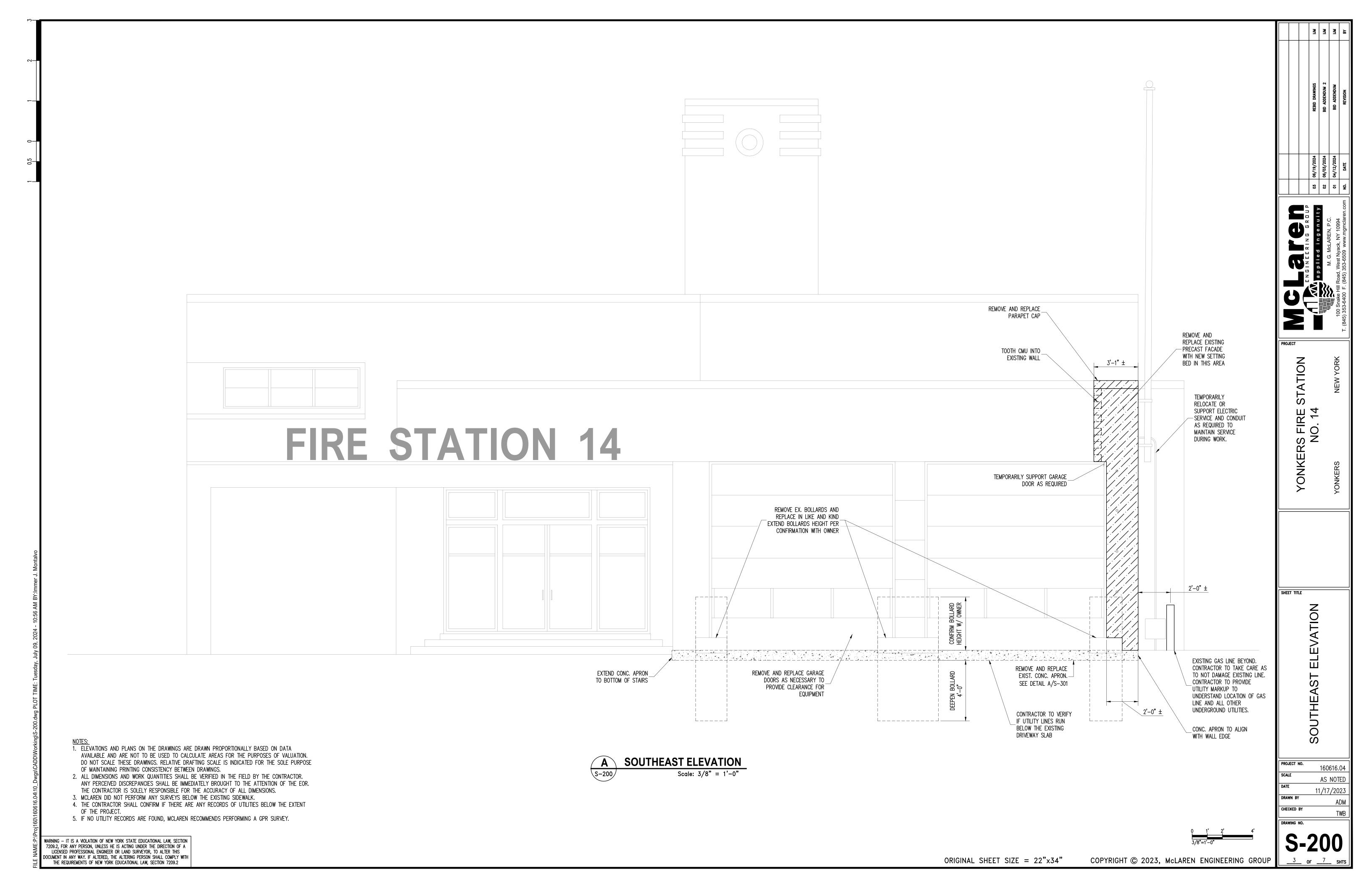
THE REQUIREMENTS OF NEW YORK EDUCATIONAL LAW, SECTION 7209.2

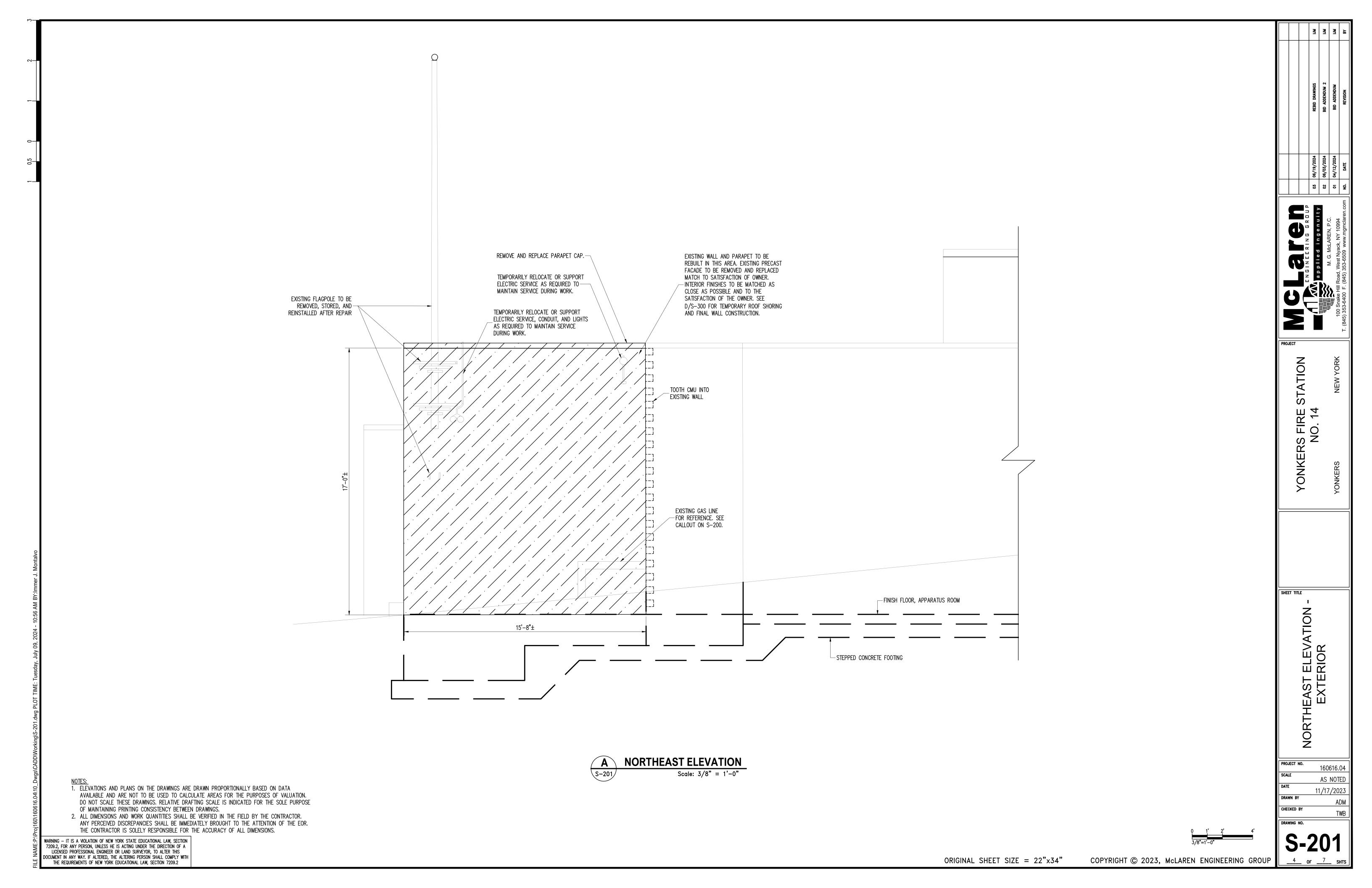
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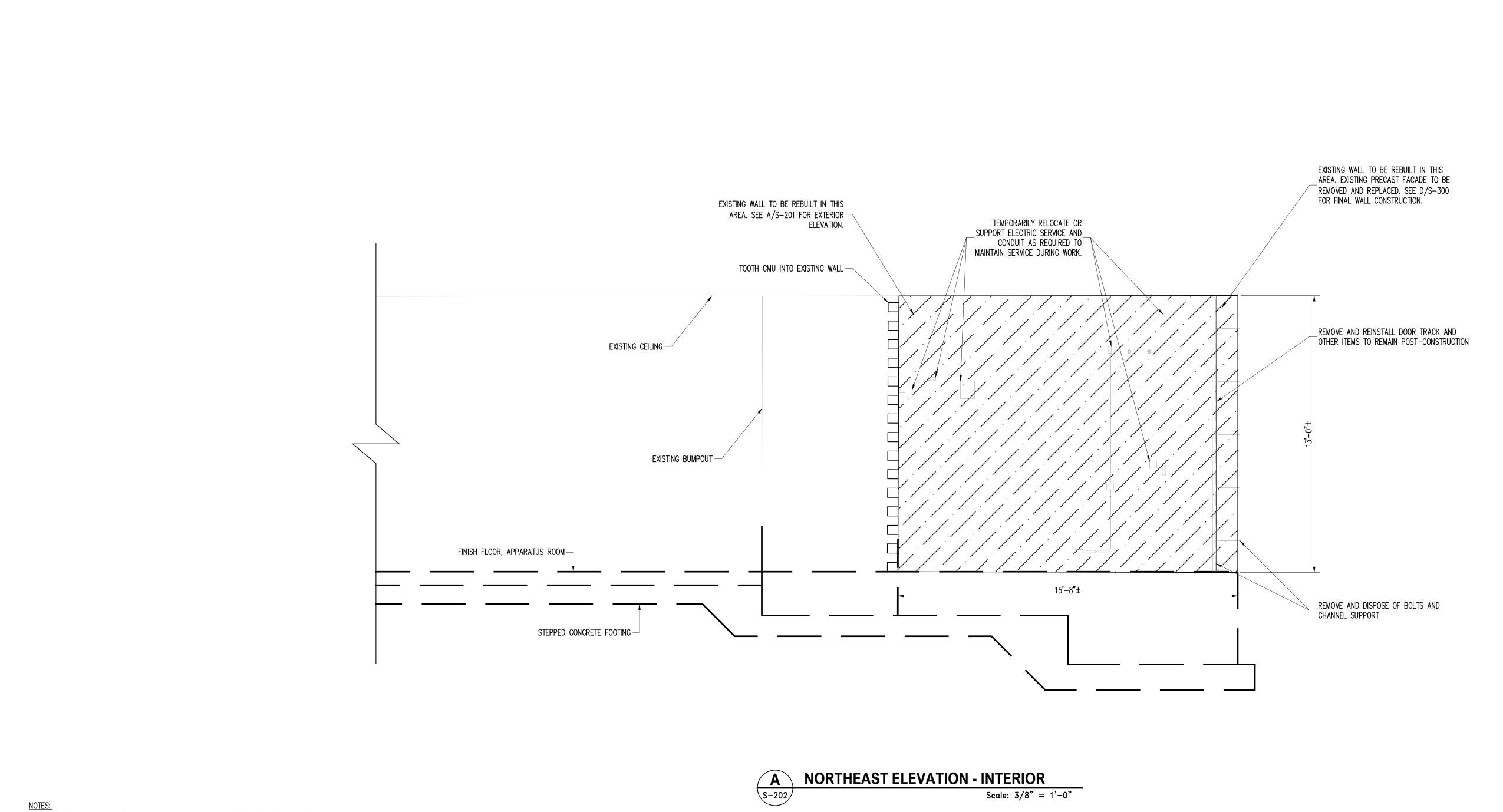
160616.04 AS NOTED 11/17/2023

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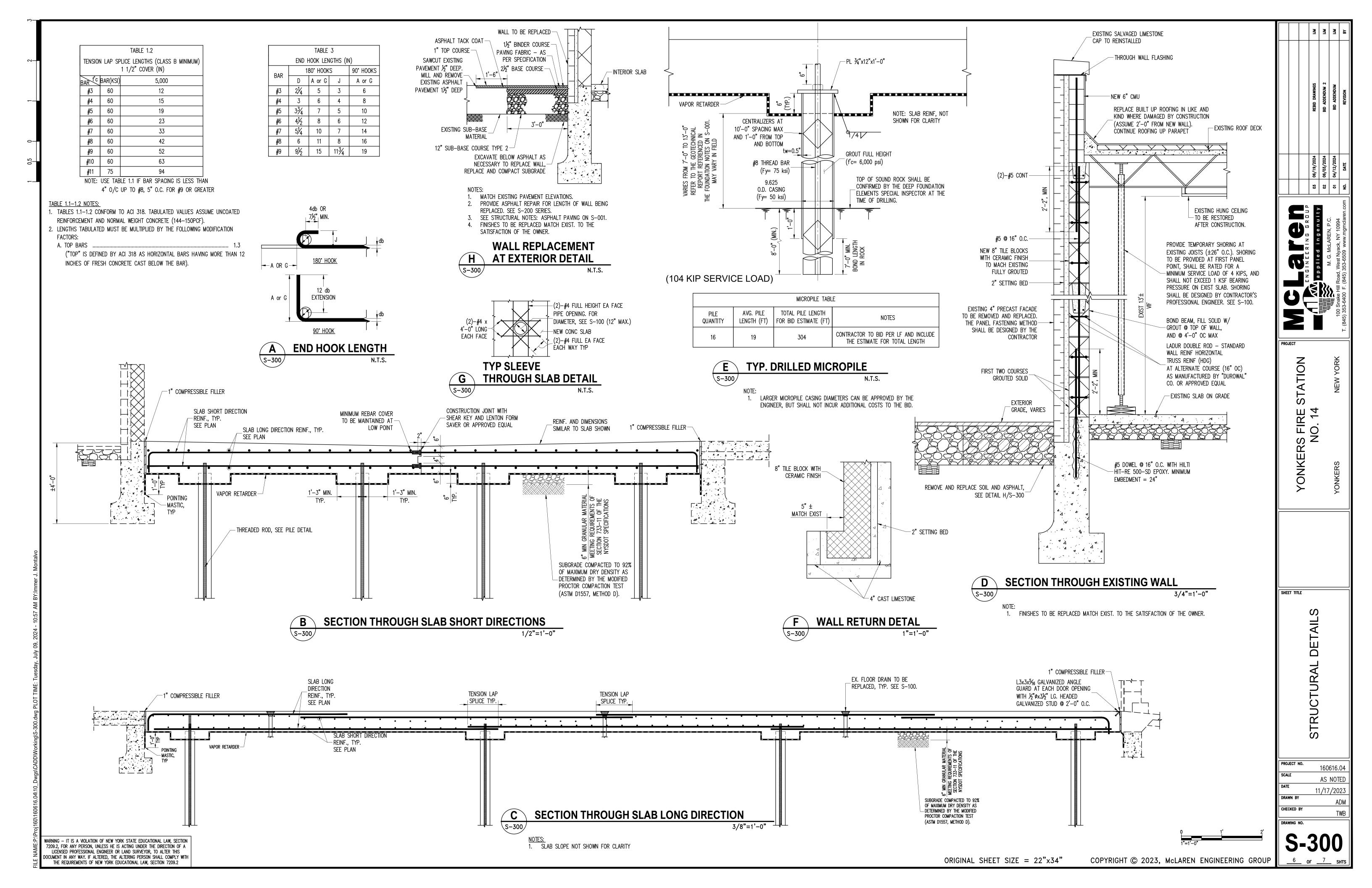
1. ELEVATIONS AND PLANS ON THE DRAWINGS ARE DRAWN PROPORTIONALLY BASED ON DATA AVAILABLE AND ARE NOT TO BE USED TO CALCULATE AREAS FOR THE PURPOSES OF VALUATION. DO NOT SCALE THESE DRAWINGS. RELATIVE DRAFTING SCALE IS INDICATED FOR THE SOLE PURPOSE OF MAINTAINING PRINTING CONSISTENCY BETWEEN DRAWINGS.

2. ALL DIMENSIONS AND WORK QUANTITIES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR. ANY PERCEIVED DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE EOR. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE ACCURACY OF ALL DIMENSIONS.

WARNING — IT IS A WOLATION OF NEW YORK STATE EDUCATIONAL LAW, SECTION 7209.2, FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATIONAL LAW, SECTION 7209.2

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1 OF 1 SCALE: NOT TO SCALE DRAWN BY: JM CHECKED BY: JR

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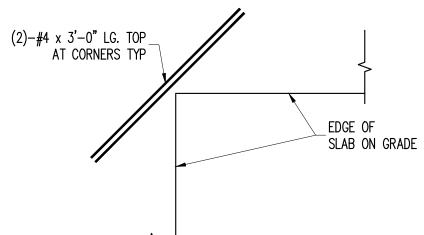
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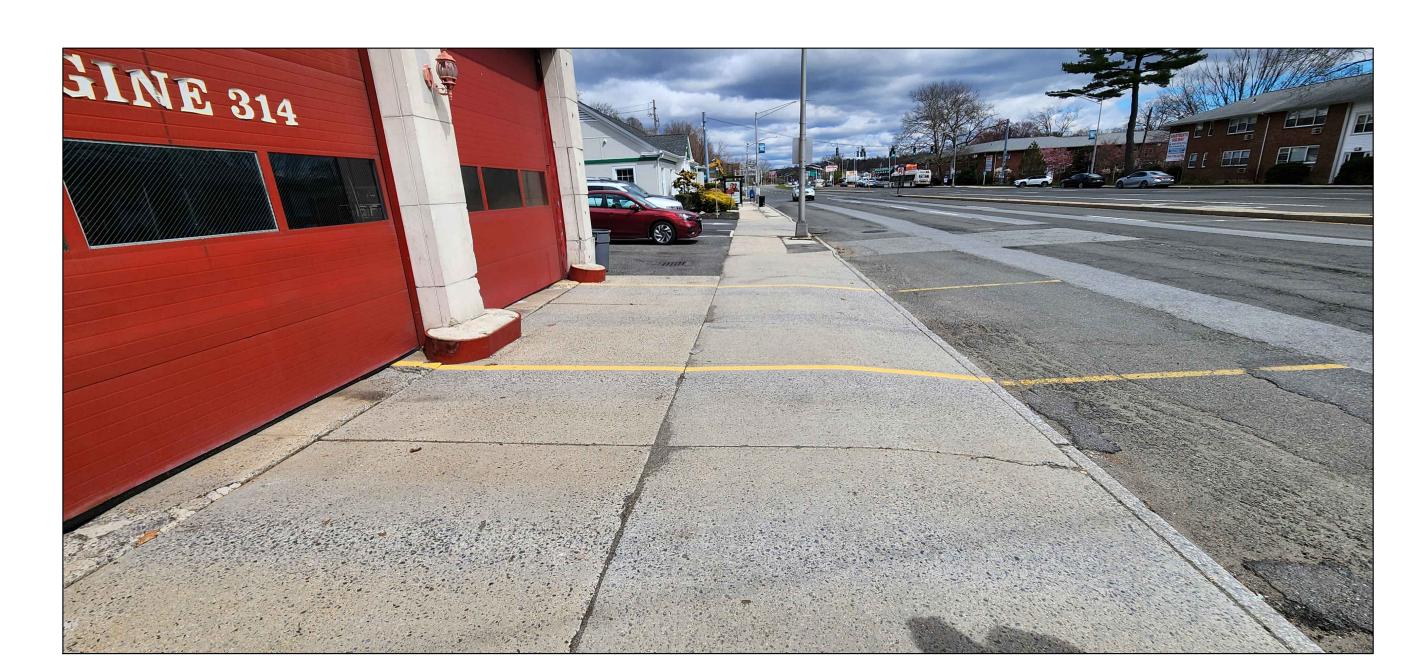
CONCRETE DRIVEWAY AND DROP CURB DETAIL

NOTES:

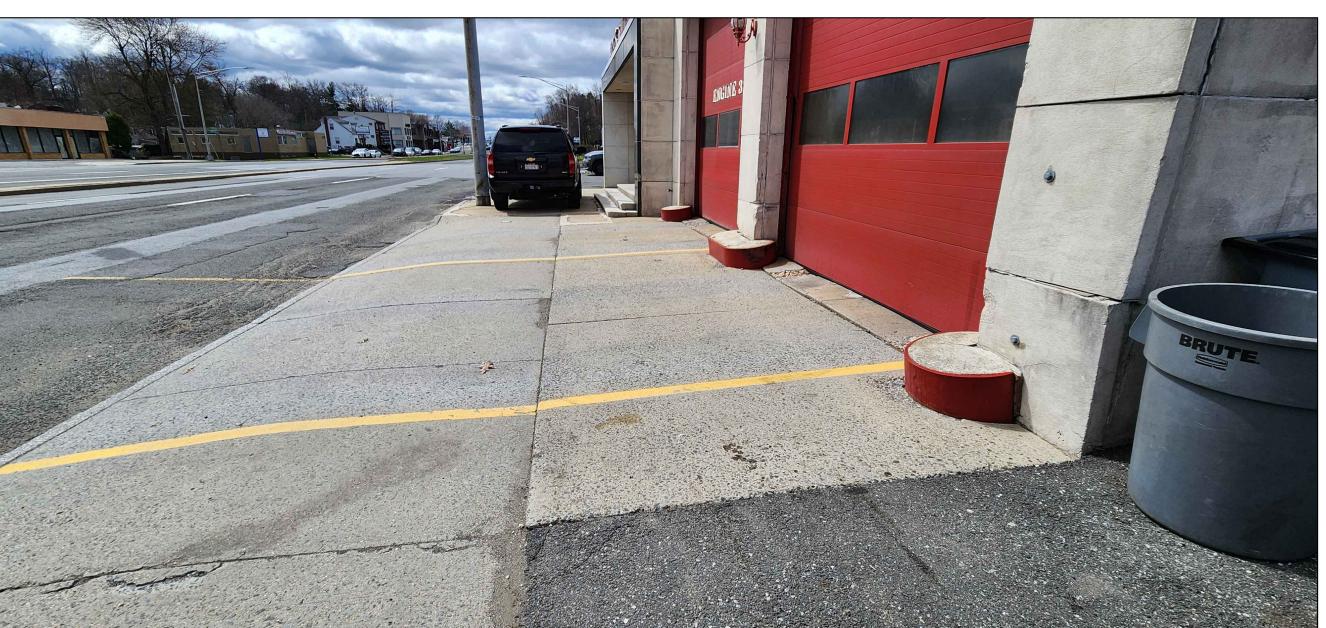
1. MCLAREN DID NOT PERFORM ANY SURVEYS BELOW THE EXISTING SIDEWALK.

- 2. THE CONTRACTOR SHALL PERFORM A GPR SURVEY UNDER THE EXTENT OF THE APRON.
- 3. THIS DETAIL IS AN EDITED VERSION OF THE TYPICAL DETAIL PROVIDED BY THE YONKERS ENGINEERING DEPARTMENT.
- 4. DEMOLISH EXISTING CONCRETE APRON TO MINIMUM DEPTH REQUIRED BY DETAIL.





EXISTING CONDITIONS PHOTO - CONCRETE DRIVEWAY (1) Scale: NTS



EXISTING CONDITIONS PHOTO - CONCRETE DRIVEWAY (2)

ORIGINAL SHEET SIZE = 22"x34"

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TYP S.O.G. REINFORCING AT **RE-ENTRANT CORNERS DETAIL**

160616.04

11/17/2023