

# PRELIMINARY SITE PLAN

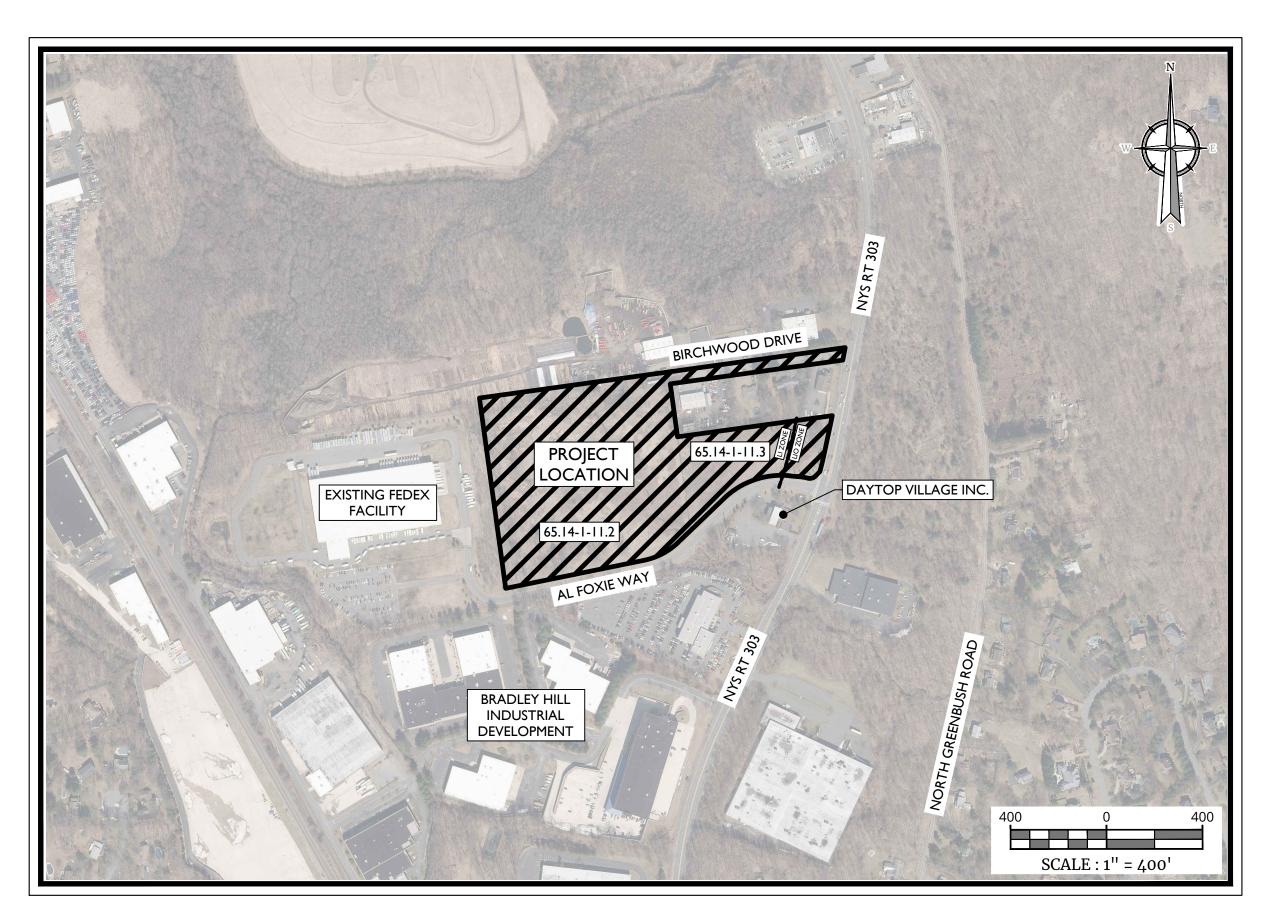
FOR

622 ROUTE 303 LLC

PROJECT AL FOXIE

SECTION 65.14, BLOCK 1, LOTS 11.2 & 11.3

TOWN OF ORANGETOWN ROCKLAND COUNTY NEW YORK STATE



PROJECT LOCATION AND AERIAL MAP

**SOURCE: NYS CLEARING HOUSE** 

### **INDEX OF SHEETS** DESCRIPTION **REVISION COVER SHEET** 9/6/2024 EXISTING CONDITIONS AND DEMOLITION PLAN 9/6/2024 OVERALL DIMENSION PLAN 9/6/2024 9/6/2024 **DIMENSION PLAN WEST DIMENSION PLAN EAST** 9/6/2024 GRADING AND DRAINAGE PLAN WEST 9/6/2024 GRADING AND DRAINAGE PLAN EAST 9/6/2024 GRADING AND DRAINAGE PLAN - STORM PIPE PROFILES **UTILITIES PLAN WEST** 9/6/2024 **UTILITIES PLAN EAST** 9/6/2024 9/6/2024 WATERMAIN PROFILE SOIL EROSION AND SEDIMENT CONTROL NOTES 9/6/2024 SOIL EROSION AND SEDIMENT CONTROL PLAN 9/6/2024 SOIL EROSION AND SEDIMENT CONTROL DETAILS 9/6/2024 LANDSCAPE PLAN WEST 9/6/2024 LANDSCAPE PLAN EAST 9/6/2024 LIGHTING PLAN WEST 9/6/2024 9/6/2024 LIGHTING PLAN EAST CONSTRUCTION DETAILS 9/6/2024 FIRE TRUCK TURN EXHIBIT 9/6/2024

### **GENERAL INFORMATION**

THE SUBJECT PROPERTY IS KNOWN AS SECTION 65.14, BLOCK I, LOTS 11.2 & 11.3, IN THE TOWN OF ORANGETOWN, ROCKLAND COUNTY, NEW YORK

THE PROPERTY IS LOCATED IN THE LI (LIGHT INDUSTRIAL) ZONING DISTRICT AND LIO (LABORATORY-OFFICE) ZONING DISTRICT, AND CONTAINS A TOTAL TRACT AREA OF 18.5 ACRES.

622 ROUTE 303 LLC 21 PHILIPS PARKWAY MAHWAH, NJ 07430

> 21 PHILIPS PARKWAY MAHWAH, NJ 07430

622 ROUTE 303 LLC

BOUNDARY AND TOPOGRAPHIC INFORMATION SHOWN HEREON IS TAKEN FROM A PLAN ENTITLED "ALTA/NSPS LAND TITLE SURVEY PREPARED FOR 622 NEW YORK 303 SECTION 65.14 BLOCK I LOTS II.2 & 11.3" PREPARED BY CLEARPOINT SURVEYING, DPC.: DATED 2/27/2021 REVISED 12/14/2023, AND "LOT CONSOLIDATION PLAN PREPARED FOR 622 NEW YORK 303 SECTION 65.14 BLOCK I LOTS II.2 & II.3" PREPARED BY CLEARPOINT SURVEYING, DPC.; DATED 1/31/2024.

UNDERGROUND WATER UTILITY WITHIN AL FOXIE WAY SHOWN FOR REFERENCE ONLY PER DESIGN

DRAWINGS BY MCLAREN ENGINEERING GROUP DATED 6/21/10 SHEETS C-301 AND C-302 (NOT REVIEWED AS-BUILT DRAWINGS). CONTRACTOR TO VERIFY LOCATION AND SIZE WITH TEST PITS PRIOR TO

BUILDING INFORMATION SHOWN HEREON REFERENCES A SET OF PRELIMINARY ARCHITECTURAL FLOOR PLANS PREPARED BY ANDERSON DESIGN GROUP DATED 06/27/2023.

THE HORIZONTAL DATUM IS RELATIVE TO NAD83. THE VERTICAL DATUM IS RELATIVE TO NAD88. BENCHMARK ELEVATION OF 90.55 REFERENCED FROM SURVEY MAP CITED IN NOTE #3 ABOVE. THE LIMITS OF FRESHWATER WETLANDS SHOWN HEREON WERE FIELD DELINEATED BY ECOLOGICAL

SOLUTIONS, LLC. ON FEBRUARY 8, 2022. NO 100 YEAR FLOOD PLAINS ARE KNOWN TO EXIST ON THE SITE PER THE FLOOD INSURANCE RATE MAPS

36087C179G DATED 3/03/2014 PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.

THIS SET OF PLANS IS NOT DEPICTING ENVIRONMENTAL CONDITIONS OR A CERTIFICATION/WARRANTY REGARDING THE PRESENCE OR ABSENCE OF ENVIRONMENTALLY IMPACTED SITE CONDITIONS. COLLIERS ENGINEERING & DESIGN HAS PERFORMED NO EXPLORATORY OR TESTING SERVICES, INTERPRETATIONS, CONCLUSIONS OR OTHER SITE ENVIRONMENTAL SERVICES RELATED TO THE DETERMINATION OF THE POTENTIAL FOR CHEMICAL, TOXIC, RADIOACTIVE OR OTHER TYPE OF CONTAMINANTS AFFECTING THE PROPERTY AND THE UNDERSIGNED PROFESSIONAL IS NOT QUALIFIED TO DETERMINE THE EXISTENCE OF SAME. SHOULD ENVIRONMENTAL CONTAMINATION OR WASTE BE DISCOVERED, THE OWNER AND CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE LAWS AND REGULATIONS.

0. THIS IS A SITE DEVELOPMENT PLAN AND UNLESS SPECIFICALLY NOTED ELSEWHERE HEREON, IS NOT A

. DO NOT SCALE DRAWINGS AS THEY PERTAIN TO ADJACENT AND SURROUNDING PHYSICAL CONDITIONS, BUILDINGS, STRUCTURES, ETC. THEY ARE SCHEMATIC ONLY, EXCEPT WHERE DIMENSIONS

THIS SET OF PLANS HAS BEEN PREPARED FOR THE PURPOSES OF MUNICIPAL AND AGENCY REVIEW AND APPROVAL. THIS SET OF PLANS SHALL NOT BE UTILIZED AS CONSTRUCTION DOCUMENTS UNTIL ALL APPROVALS REQUIRED HAVE BEEN OBTAINED, ALL CONDITIONS OF APPROVAL HAVE BEEN SATISFIED AND THE DRAWINGS HAVE BEEN STAMPED "ISSUED FOR CONSTRUCTION". THIS SHALL INCLUDE APPROVAL OF ALL CATALOG CUTS, SHOP DRAWINGS AND/OR DESIGN CALCULATIONS AS REQUIRED BY THE PROJECT OWNER AND/OR MUNICIPAL ENGINEER.

I. THE CONTRACTOR IS RESPONSIBLE FOR PROJECT SAFETY, INCLUDING PROVISION OF ALL APPROPRIATE SAFETY DEVICES AND TRAINING REQUIRED.

14. PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL CALL 811 TO REQUEST A UTILITY MARKOUT. 5. INFORMATION HEREON INCORPORATES THE CONTENT IN THE FOLLOWING DOCUMENTS:

· "STORMWATER POLLUTION PREVENTION PLAN (SWPPP)" PREPARED BY COLLIERS ENGINEERING & DESIGN LAST REVISED, MARCH 2024. GEOTECHNICAL DATA REPORT (IN-SITU INFILTRATION TESTING) PREPARED BY COLLIERS ENGINEERING & DESIGN DATED DECEMBER 21, 2022. TRAFFIC IMPACT STUDY PREPARED BY COLLIERS ENGINEERING & DESIGN LAST REVISED FEBRUARY 28, 2024. ARCHITECTURAL PLANS PREPARED BY ANDERSON DESIGN GROUP DATED AUGUST 31, 2023.

BUILDING FOOTPRINT DIMENSIONS SHOWN HEREON ARE APPROXIMATE. FINAL BUILDING FOOTPRINT DIMENSIONS FOR THE BUILDING SHALL BE FURNISHED ON THE INDIVIDUAL ARCHITECTURAL PLANS AT THE TIME OF APPLICATION FOR A BUILDING PERMIT. ALL STRUCTURES SHALL CONFORM TO THE APPROVED BULK ZONING REQUIREMENTS.

CURBS SHALL BE DEPRESSED FLUSH WITH PAVEMENT, AND HANDICAP ACCESSIBLE RAMPS INSTALLED WHERE SIDEWALKS AND CROSSWALKS INTERSECT SAME, DETECTABLE WARNINGS SHALL BE INCLUDED ON HANDICAP ACCESSIBLE RAMPS.

TRAFFIC SIGNAGE AND STRIPING SHALL CORRESPOND TO THE MANUAL ON UNIFORM TRAFFIC

I. REFUSE AND RECYCLABLES SHALL BE STORED WITHIN OUTDOOR ROLL-OFF CONTAINERS AND PICKED UP BY PRIVATE WASTE DISPOSAL HAULER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER DISPOSAL OF ALL WASTE MATERIALS IN

MATERIALS, WORKMANSHIP, AND CONSTRUCTION FOR THE SITE IMPROVEMENTS SHOWN HEREON

ACCORDANCE WITH GOVERNING REGULATIONS AND AGENCIES. THERE SHALL BE NO ON-SITE BURIAL OF CONSTRUCTION MATERIALS, TREE BRANCHES, STUMPS, OR

SHALL BE IN ACCORDANCE WITH: A. NEW YORK STATE DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS", 2018; AS

B. CURRENT PREVAILING MUNICIPAL, COUNTY, AND/OR STATE AGENCY SPECIFICATIONS, STANDARDS, CONDITIONS, BUILDING CODES AND REQUIREMENTS.

C. CURRENT PREVAILING UTILITY COMPANY/AUTHORITY SPECIFICATIONS, STANDARDS, AND D. CURRENT MANUFACTURER SPECIFICATIONS, STANDARDS, AND REQUIREMENTS.

EXISTING UTILITY INFORMATION SHOWN HEREON HAS BEEN COLLECTED FROM VARIOUS SOURCES AND IS NOT GUARANTEED AS TO ACCURACY OR COMPLETENESS. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO EXCAVATION. WHERE EXISTING UTILITIES ARE TO BE CROSSED BY PROPOSED CONSTRUCTIONS, TEST PITS SHALL BE DUG BY THE CONTRACTOR PRIOR TO CONSTRUCTION TO ASCERTAIN EXISTING INVERTS. MATERIALS. AND SIZES, TEST PIT INFORMATION SHALL BE GIVEN TO THE ENGINEER PRIOR TO CONSTRUCTION TO PERMIT ADJUSTMENTS AS REQUIRED TO AVOID CONFLICTS. THE CONTRACTOR SHALL NOTIFY THE UNDER SIGNED PROFESSIONAL IMMEDIATELY IF ANY FIELD CONDITIONS ENCOUNTERED DIFFER MATERIALLY FROM THOSE REPRESENTED HEREON, SUCH CONDITIONS COULD RENDER THE DESIGNS HEREON INAPPROPRIATE OR INEFFECTIVE.

UTILITY RELOCATIONS SHOWN HEREON, IF ANY, ARE FOR INFORMATIONAL PURPOSES ONLY AND MAY NOT REPRESENT ALL REQUIRED UTILITY RELOCATIONS. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING AND/OR COORDINATING ALL REQUIRED UTILITY RELOCATIONS IN COOPERATION WITH THE RESPECTIVE UTILITY COMPANY/AUTHORITIES.

STORM SEWERS SHALL BE CLASS III (OR HIGHER IF NOTED) REINFORCED CONCRETE PIPE (RCP) WITH "O" RING GASKETS OR INTERNALLY PRELUBRICATED GASKET (TYLOX SUPERSEAL OR EQUIVALENT, ADS N-12 HIGH DENSITY POLYETHYLENE PIPE (HDPE), AS NOTED ON THE PLAN, OR APPROVED EQUAL. PROPER PIPE COVERAGE SHALL BE MAINTAINED DURING ALL PHASES OF CONSTRUCTION. PIPE LENGTHS SHOWN HEREON ARE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.

WATER SERVICE TO BE PROVIDED FROM THE EXISTING WATER MAIN LINE WITHIN THE 20' UTILITY EASEMENT, OWNED AND OPERATED BY VEOLIA WATER. PROPOSED WATER MAIN EXTENSIONS AND FIRE HYDRANT LOCATIONS ARE SUBJECT TO MUNICIPAL REVIEW AND APPROVAL. PIPE MATERIALS SHALL BE CEMENT LINED DUCTILE IRON PIPE. CLASS 52. WITH ASPHALTIC EPOXY TYPE COATING. POTABLE WATER SERVICE PIPES TO BE TYPE K SEAMLESS COPPER. AS NOTED ON THE PLANS. WATER MAINS SHALL BE

INSTALLED TO PROVIDE A MINIMUM 4' OF COVER FROM THE TOP OF PIPE TO THE PROPOSED GRADE.

SANITARY SEWER SERVICE SHALL BE PROVIDED BY MUNICIPAL SEWER WITHIN AL FOXIE WAY. OWNED AND OPERATED BY THE TOWN OF ORANGETOWN SEWER DEPARTMENT. PROPOSED SEWER SERVICE CONNECTION IS SUBJECT TO MUNICIPAL REVIEW AND APPROVAL. PIPE MATERIALS SHALL BE PVC SDR-35, EXCEPT AS NOTED OTHERWISE ON THE PLANS. EXCEPT WHERE SHALLOWER DEPTHS ARE PERMITTED BY THE MUNICIPALITY OR UTILITY AUTHORITY, SEWER LINES, INCLUDING FORCE MAINS AND LATERALS, SHALL BE INSTALLED TO PROVIDE A MINIMUM 4 FEET OF COVER FROM THE TOP OF PIPE TO PROPOSED

ALL WATER MAINS SHOULD BE SEPARATED FROM SANITARY AND STORM SEWER AND INDUSTRIAL DISCHARGE LINES BY A MINIMUM HORIZONTAL DISTANCE OF 10 FEET. IF SUCH HORIZONTAL SEPARATION IS NOT POSSIBLE. THE WATER AND SEWER LINES SHALL BE IN SEPARATE TRENCHES WITH THE TOP OF THE SEWER LINE AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN ENCASED

GAS. ELECTRIC. LIGHTING, CABLE TELEVISION, AND ELECTRICAL SERVICE PLANS, IF REQUIRED, SHALL BE PREPARED BY THE RESPECTIVE UTILITY COMPANIES THAT SERVICE THE AREA PRIOR TO SITE CONSTRUCTION AND SHALL BE INSTALLED UNDERGROUND PER ORDINANCE OR LOCAL UTILITY COMPANIES REQUIREMENTS. CROSSINGS OF PROPOSED PAVEMENTS WILL BE INSTALLED PRIOR TO THE CONSTRUCTION OF PAVEMENT BASE COURSE.

IN CONCRETE OR WITH SUCH SEPARATION EXPRESSLY APPROVED BY THE DEPARTMENT OF HEALTH.

SOIL EROSION AND SEDIMENT CONTROL NOTES

IN AREAS WHERE SOIL DISTURBANCE ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED. THE APPLICATION OF SOIL STABILIZATION MEASURES MUST BE INITIATED BY THE END OF THE NEXT BUSINESS DAY AND COMPLETED WITHIN SEVEN (7) DAYS FROM THE DATE THE CURRENT SOIL DISTURBANCE ACTIVITY CEASED. THE SOIL STABILIZATION MEASURES SELECTED SHALL BE IN CONFORMANCE WITH THE TECHNICAL STANDARD, NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL, DATED 2016.

**Colliers** 

Engineering

& Design

www.colliersengineering.com

e copied, reused, disclosed, distributed or relied upon for any other pur

MASEL

ALL STATES REQUIRE NOTIFICATION CAVATORS, DESIGNERS, OR ANY PER PREPARING TO DISTURB THE EARTH'
SURFACE ANYWHERE IN ANY STATE FOR STATE SPECIFIC DIRECT PHONE NUMBERS

VISIT: WWW CALL811 COM



Jesse Barrett Cokeley NEW YORK LICENSED PROFESSIONAL ENGINEER LICENSE NUMBER: 090987-01 COLLIERS ENGINEERING & DESIGN CT, P.C. N.Y. C.O.A #: 0017609

PRELIMINARY SITE PLAN

622 ROUTE 303 LLC

PROJECT AL FOXIE

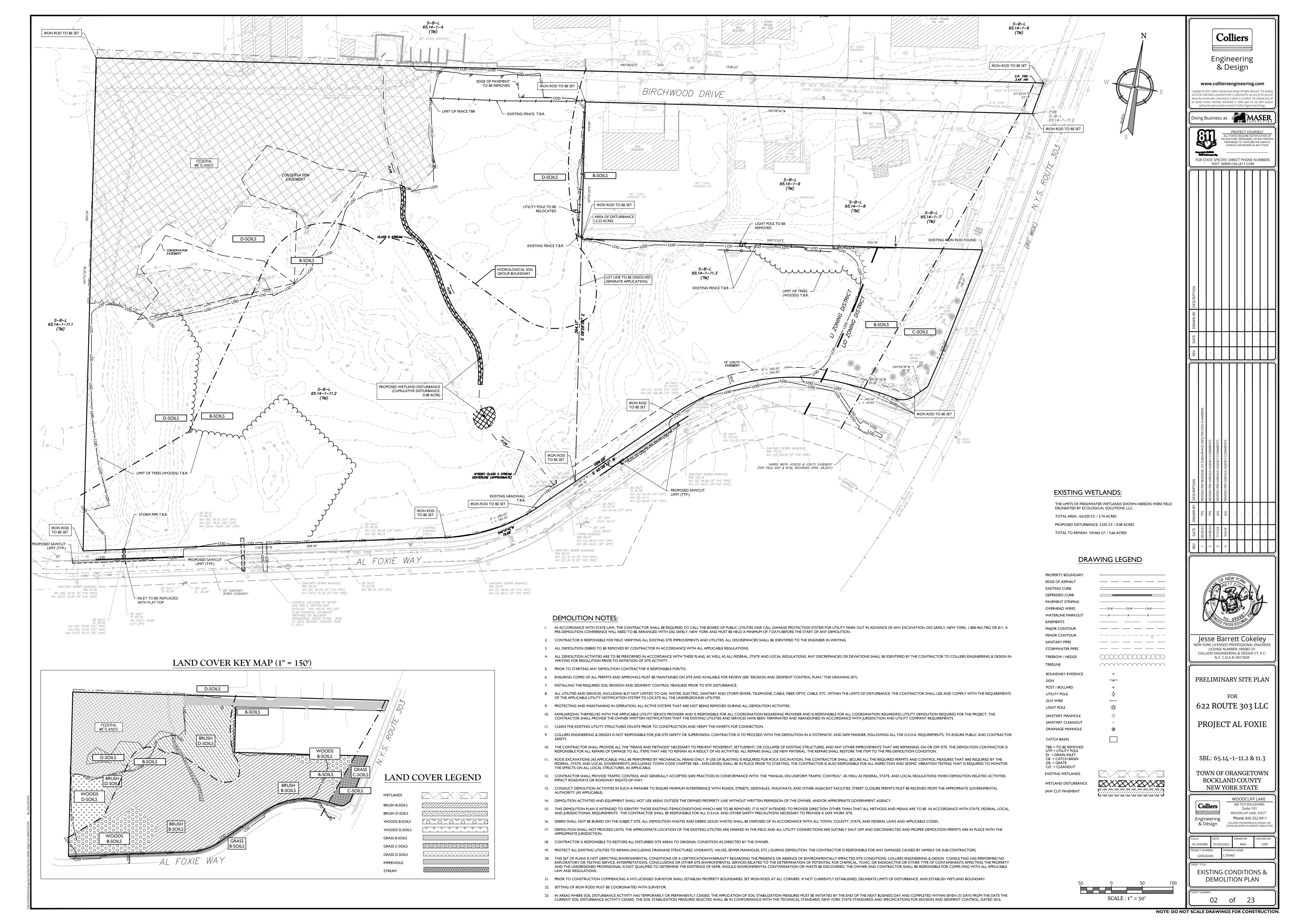
SBL: 65.14-1-11.2 & 11.3

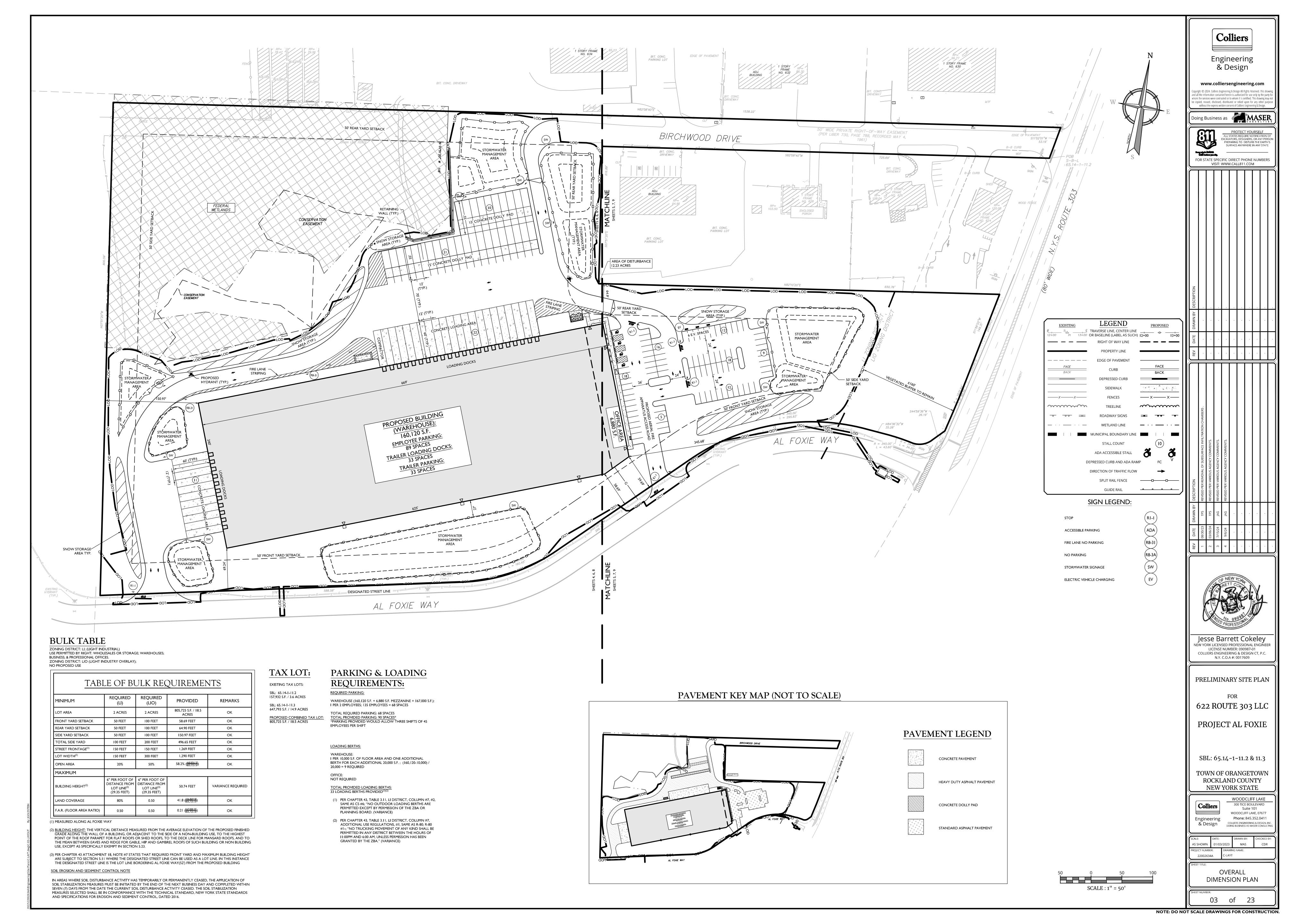
TOWN OF ORANGETOWN ROCKLAND COUNTY NEW YORK STATE

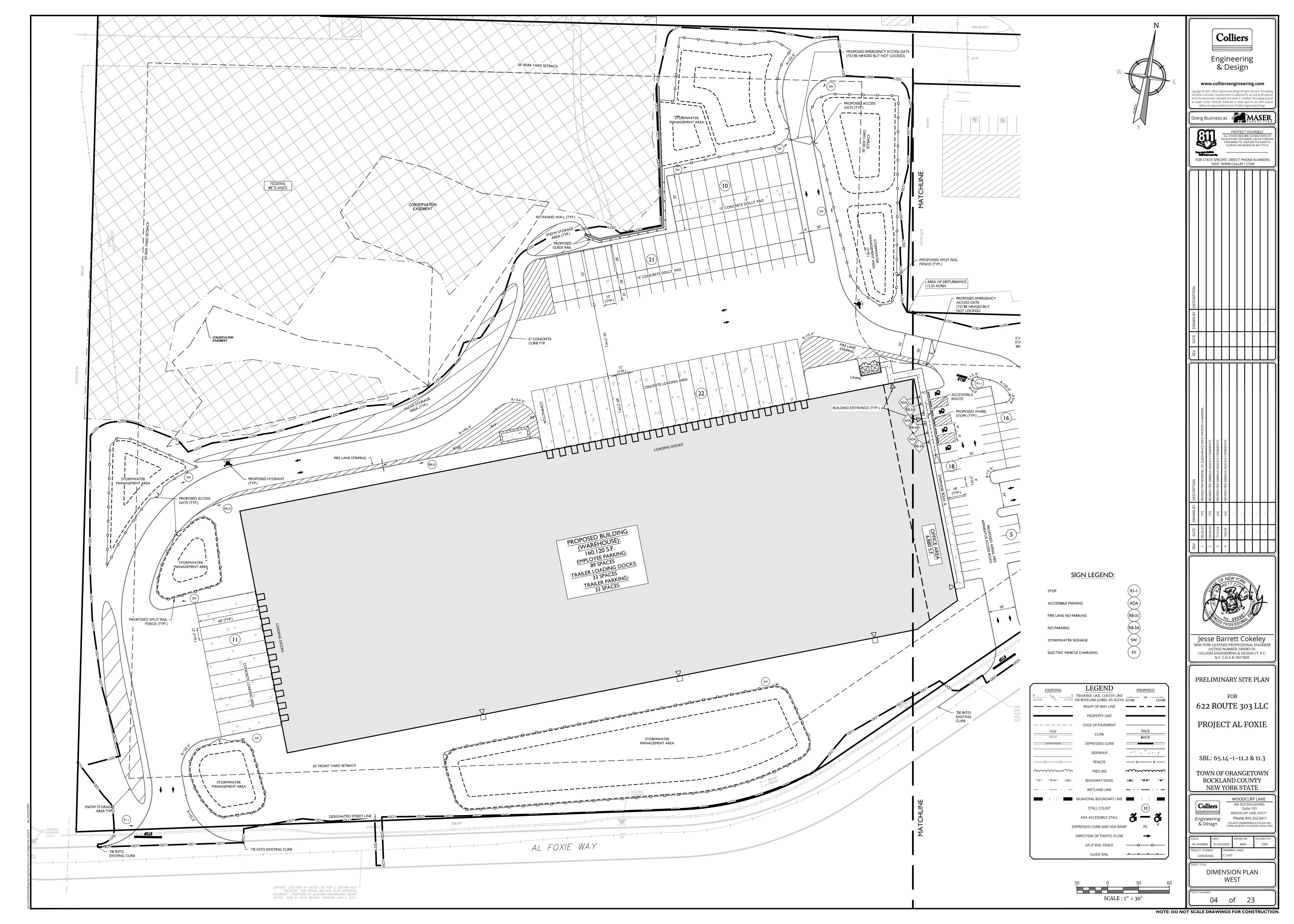
WOODCLIFF LAKE 300 TICE BOULEVARD WOODCLIFF LAKE, 07677 Phone: 845.352.0411 COLLIERS ENGINEERING & DESIGN, INC. & Design DOING BUSINESS AS MASER CONSULT

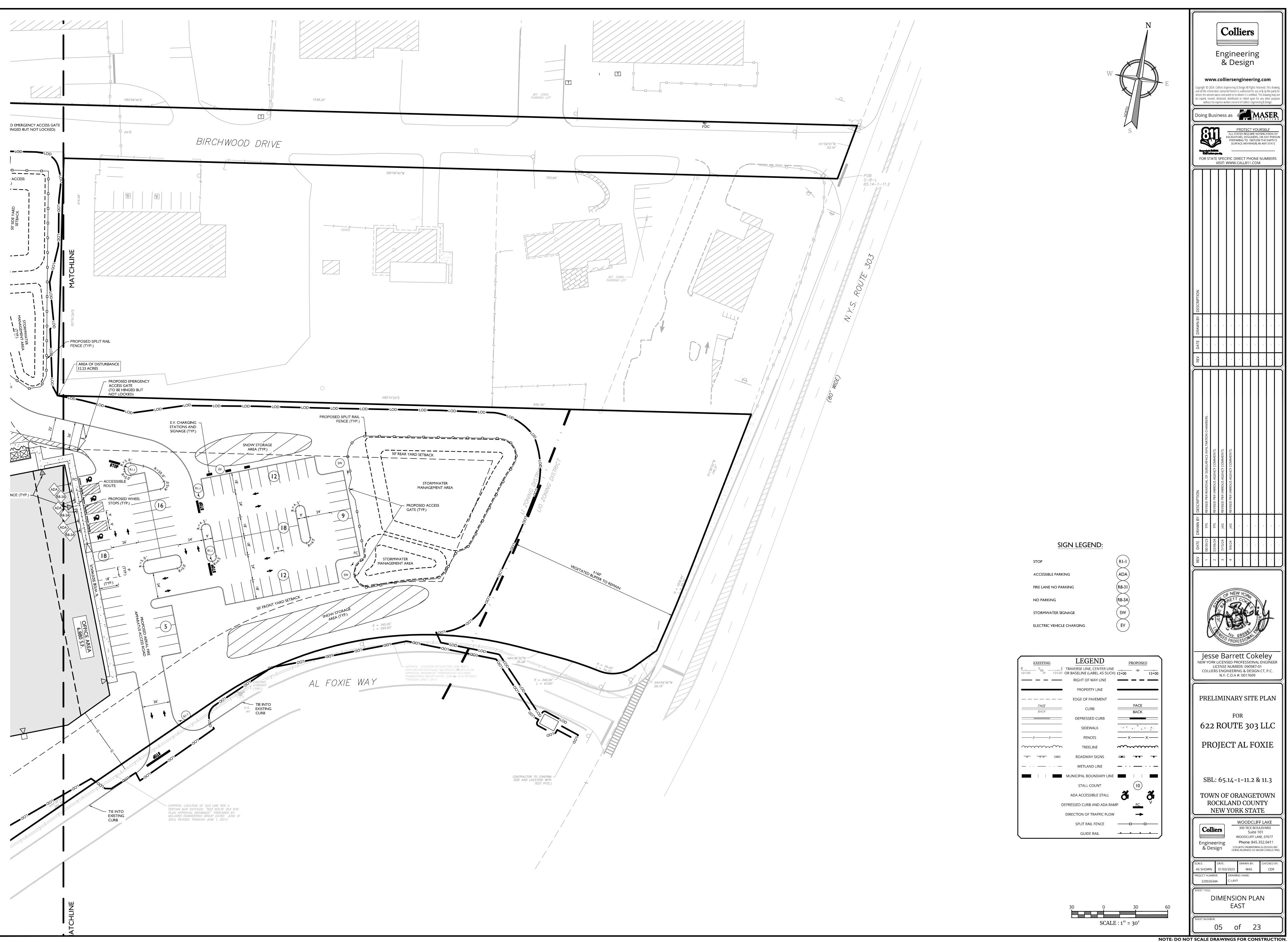
22002634A

COVER SHEET









www.colliersengineering.com

PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM



Jesse Barrett Cokeley NEW YORK LICENSED PROFESSIONAL ENGINEER LICENSE NUMBER: 090987-01 COLLIERS ENGINEERING & DESIGN CT, P.C.

PRELIMINARY SITE PLAN

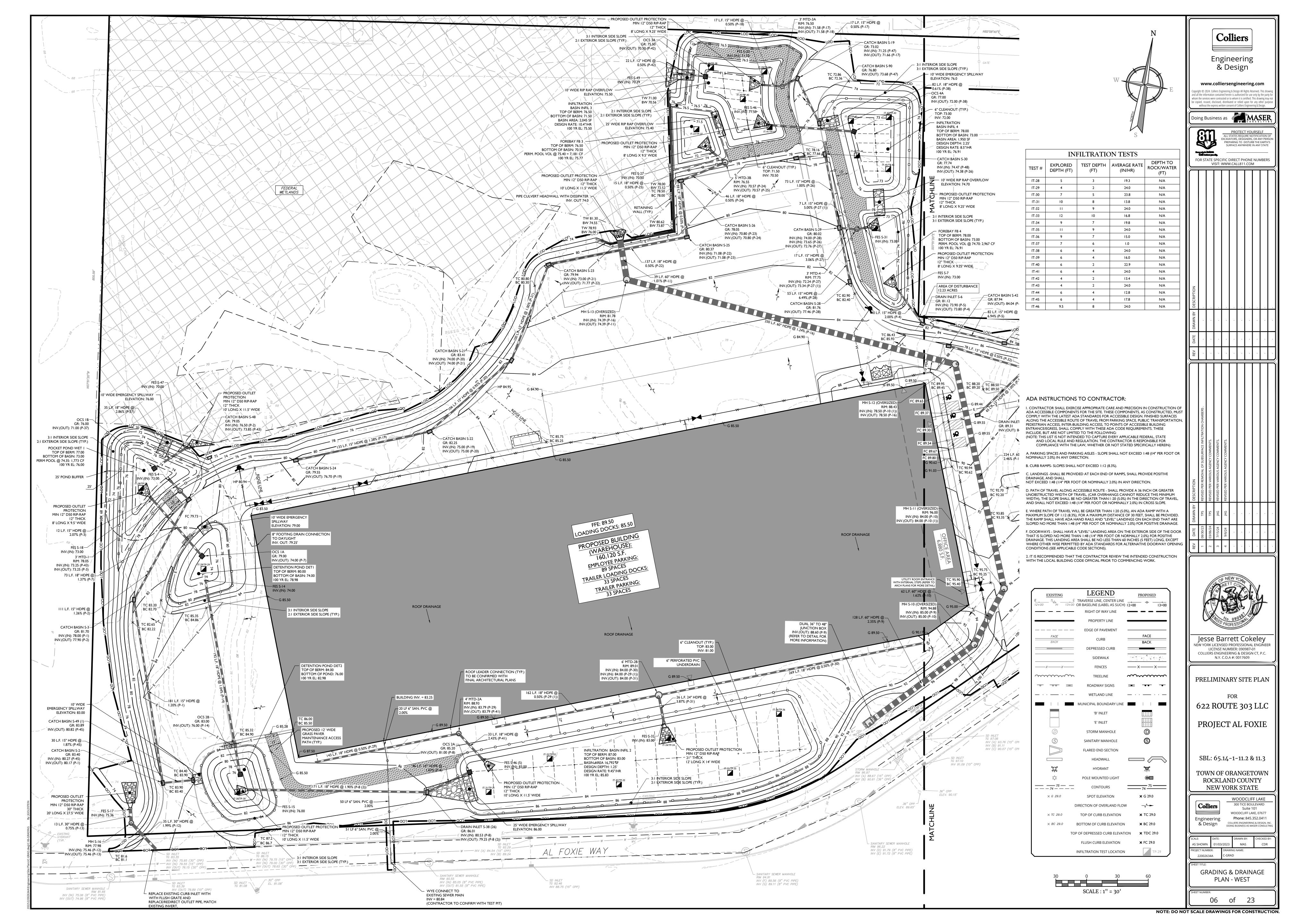
622 ROUTE 303 LLC

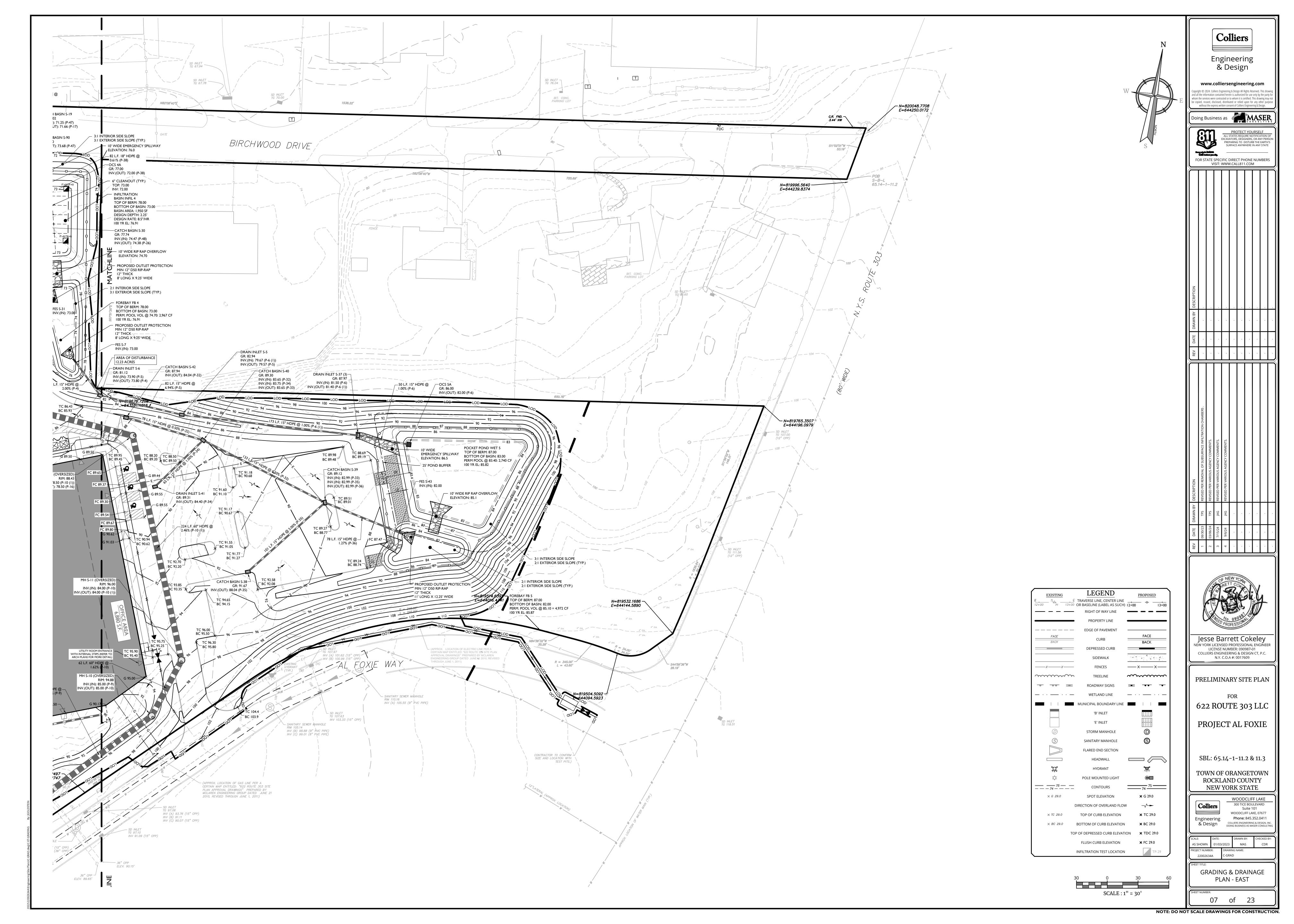
ROCKLAND COUNTY NEW YORK STATE

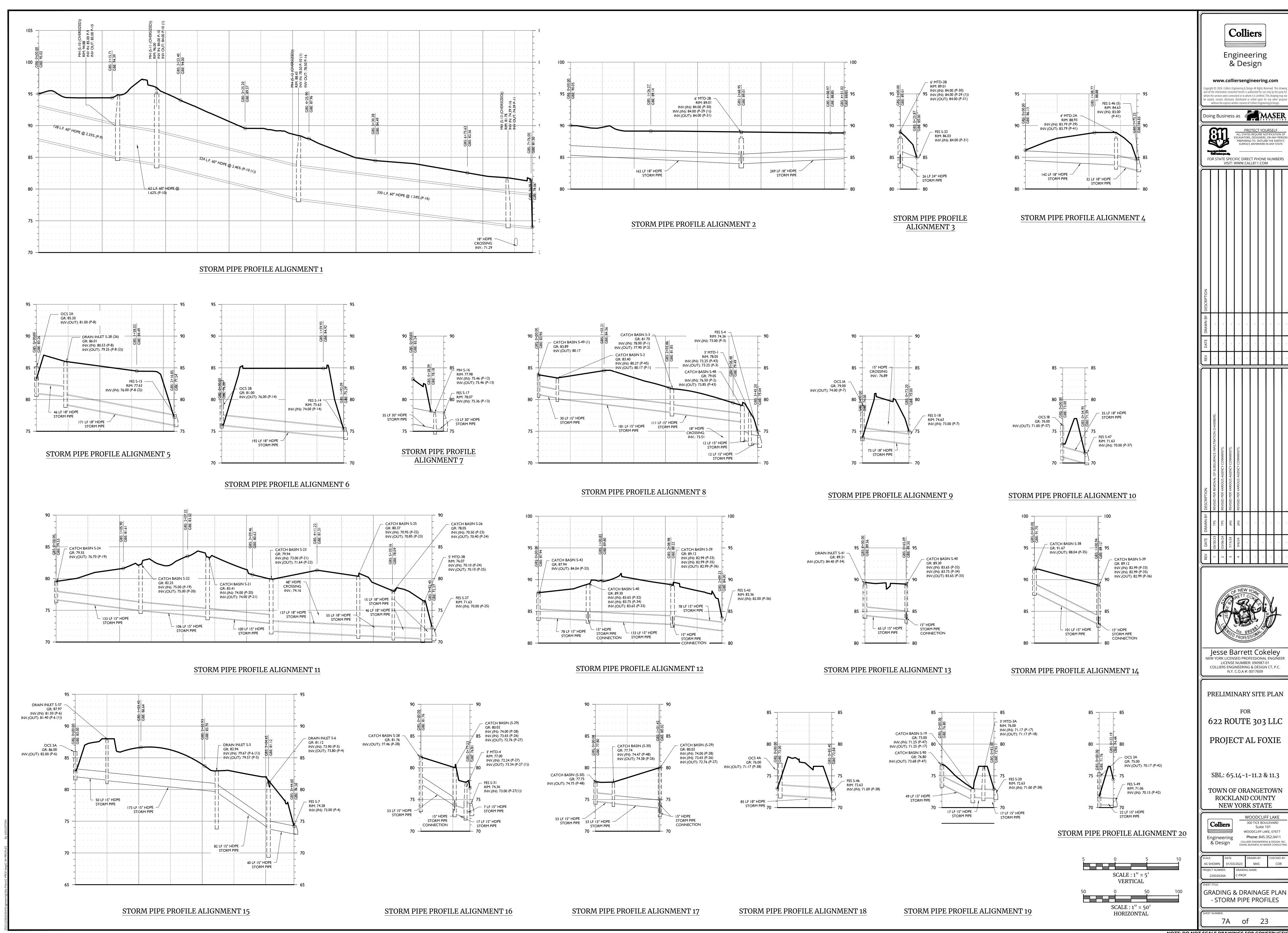
WOODCLIFF LAKE 300 TICE BOULEVARD Suite 101 WOODCLIFF LAKE, 07677 Engineering Phone: 845.352.0411 & Design COLLIERS ENGINEERING & DESIGN, INC. DOING BUSINESS AS MASER CONSULTING

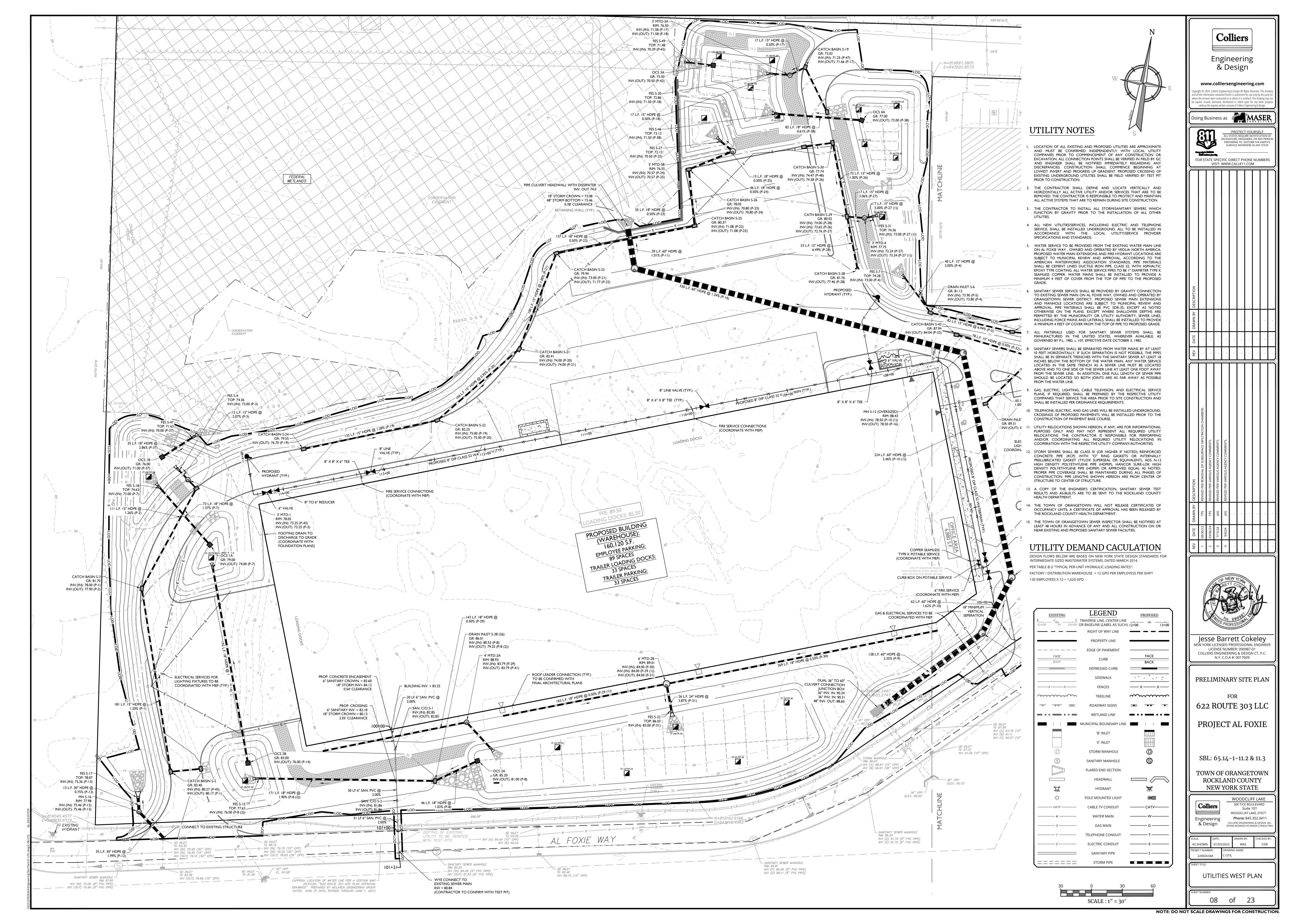
**DIMENSION PLAN** 

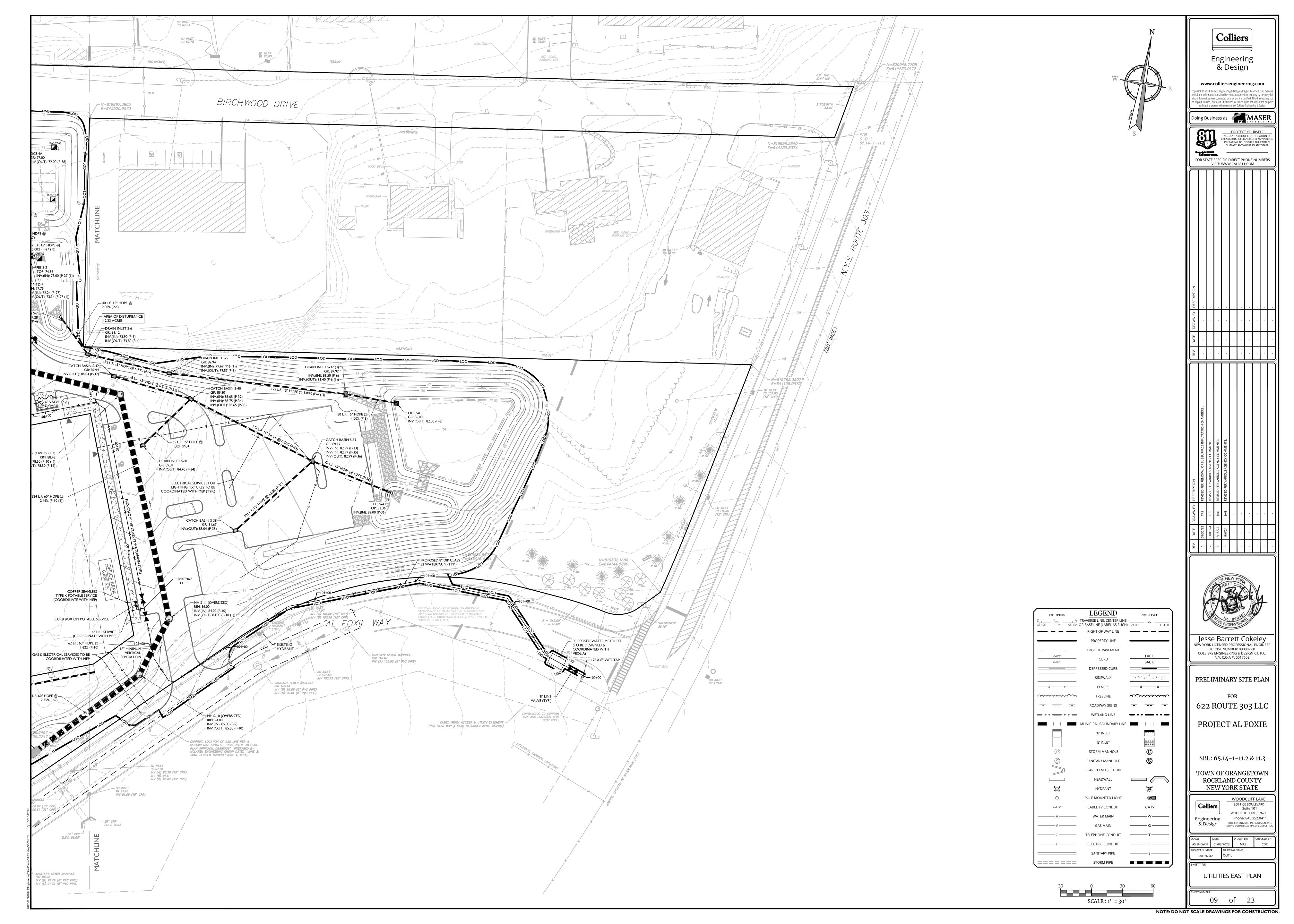
05 of 23

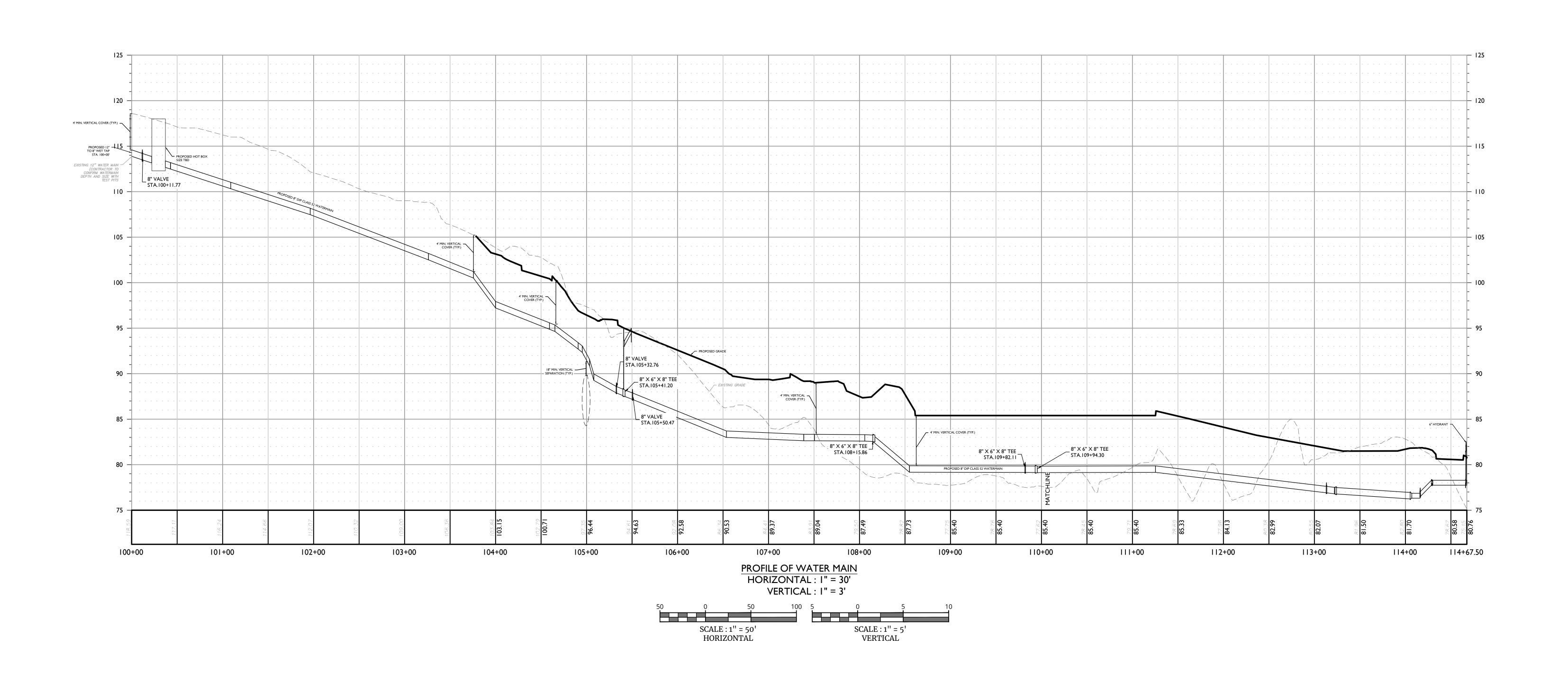












Engineering & Design

www.colliersengineering.com

Copyright © 2024. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF
EXCAVATORS, DESIGNERS, OR ANY PERSON
PREPARING TO DISTURB THE EARTH'S
SURFACE ANYWHERE IN ANY STATE

FOR STATE SPECIFIC DIRECT PHONE NUMBERS
VISIT: WWW.CALL811.COM

Jesse Barrett Cokeley
NEW YORK LICENSED PROFESSIONAL ENGINEER LICENSE NUMBER: 090987-01

COLLIERS ENGINEERING & DESIGN CT, P.C.

N.Y. C.O.A #: 0017609

PRELIMINARY SITE PLAN

622 ROUTE 303 LLC

PROJECT AL FOXIE

SBL: 65.14-1-11.2 & 11.3

TOWN OF ORANGETOWN ROCKLAND COUNTY NEW YORK STATE

Colliers 300 TICE BOULEVARD
Suite 101 Suite 101 WOODCLIFF LAKE, 07677 Engineering Phone: 845.352.0411 & Design COLLIERS ENGINEERING & DESIGN, INC.
DOING BUSINESS AS MASER CONSULTING

WOODCLIFF LAKE

22002634A

WATER MAIN PROFILE

10 of 23

# GENERAL SEQUENCE OF CONSTRUCTION FOR **EROSION CONTROL NOTES**

GENERAL SEQUENCE NOTES THAT APPLY TO ALL PHASES:

- I. THE ENGINEERING INSPECTOR SHALL BE NOTIFIED IN WRITING AT LEAST 48 HOURS PRIOR TO THE START OF ANY WORK.
- 2. PRIOR TO THE COMMENCEMENT OF ANY SITE WORK BUT IN NO CASE NO MORE THAN 2 DAYS OR LESS IF RAIN IS PREDICTED AFTER CONSTRUCTION ACTIVITY THE APPLICANT SHALL INSTALL THE SOIL EROSION AND SEDIMENT CONTROLS AS PER THE APPROVED PLANS, WHICH INCLUDES THE SILT FENCES, AND INLET FILTERS AND SLOPE PROTECTING MEASURES. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL CONFORM TO THE LATEST VERSION OF THE NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL.
- 3. STABILIZATION THE OPERATOR SHALL INITIATE STABILIZATION MEASURES AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. BUT IN NO CASE MORE THAN 7 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. STABILIZATION MEANS COVERING OR MAINTAINING AN EXISTING COVER OVER SOIL. COVER CAN BE VEGETATIVE (E.G. GRASS, TREES, SEED AND MULCH, SHRUBS, OR TURF) OR NON-VEGETATIVE (E.G. GEOTEXTILES, RIP RAP, GABIONS AND/OR CAT TRACKING).
- 4. MAINTENANCE SEDIMENT SHALL BE REMOVED FROM SEDIMENT TRAPS WHENEVER THEIR CAPACITY HAS BEEN REDUCED BY TWENTY-FIVE (25) PERCENT FROM THE DESIGN CAPACITY. A FIXED VERTICAL SEDIMENT DEPTH MARKER SHOULD BE INSTALLED TO
- 5. ADDITIONAL EROSION CONTROL MEASURES SHALL BE INSTALLED, AS MAY BE REQUIRED AND REQUESTED BY AUTHORITIES, TO PREVENT THE INCIDENTAL DISCHARGE OF SILT LADEN RUNOFF FROM ENTERING A WATER COURSE OR A DRAINAGE SYSTEM.
- 6. THE GENERAL PERMIT FOR STORM WATER DISCHARGES FROM CONSTRUCTION ACTIVITIES STATES THAT IT IS UNLAWFUL FOR ANY
- PERSON TO CAUSE OR CONTRIBUTE TO A VIOLATION OF WATER QUALITY STANDARDS. 7. EXISTING ON-SITE UTILITIES TO BE MARKED OUT PRIOR TO CONSTRUCTION. EXTREME CARE AND CAUTION SHALL BE USED WHEN

# SEOUENCE OF CONSTRUCTION FOR EROSION CONTROL (PHASE 1)

PHASE I: SITE ACCESS, PREPARATION FOR CONSTRUCTION VEHICLES, AND PASSENGER PARKING CONSTRUCTION TOTAL LIMIT OF DISTURBANCE: 2.89 ACRES

- STAKE OUT OR DELINEATE THE LIMITS OF WETLANDS AND CONSERVATION AREAS AS APPLICABLE AS WELL AS THE LIMITS OF PHASE I BY GPS OR OTHER SURVEY METHODS. THE CONTRACTOR MUST PROTECT THE WETLANDS AND CONSERVATION AREAS
- 2. INSTALL PERIMETER SILT FENCE AND SILT SOCK MEASURES AS SHOWN ON THE PROJECT PLANS.
- 4. CLEAR STUMPS AND ANY REMAINING VEGETATION WITHIN THE LIMITS OF PHASE I. ANY DEBRIS OR WASTE IDENTIFIED SHOULD BE DISPOSED OF IN ACCORDANCE WITH APPROPRIATE REGULATIONS DEPENDING ON THE NATURE OF IT.

3. INSTALL CONSTRUCTION ENTRANCES AND TRUCK WASHOUTS IN LOCATIONS INDICATED ON THIS PLAN FOR PHASE I.

5. ESTABLISH AREAS FOR CONSTRUCTION STAGING AND MATERIALS STORAGE.

PERFORMING ANY WORK NEAR EXISTING UTILITY LINES.

- 6. INSTALL TEMPORARY DIVERSION SWALES TO ENSURE THAT STORMWATER RUNOFF IS CONVEYED TO THE TEMPORARY SEDIMENT
- 7. EXCAVATE FOR TEMPORARY STONE OUTLET SEDIMENT TRAPS A AND B WITHIN THE LIMITS OF PHASE I.
- 8. EXCAVATE SUBSURFACE CLAY, RELOCATE CUT SOIL IN AREAS OF FILL AS INDICATED ON THE GRADING PLAN, UNSUITABLE SOIL THAT WILL NOT BE USED AS FILL SHOULD BE BROUGHT OFF THE SITE.
- 9. PLACE ANY EXCESS EXCAVATED MATERIAL IN POTENTIAL SOIL STOCKPILE LOCATIONS AS SPECIFIED ON THE PROJECT PLANS FOR
- 10. EXCAVATE FOR UTILITY TRENCHING, AND STORMWATER TRENCHING WITH THE LIMITS OF PHASE I. REPEAT PREVIOUS STEP. 11. INSTALL UTILITY AND STORMWATER PIPES/STRUCTURES LOCATED WITHIN PHASE I (INCLUDING THE LIMITS OF THE STREAM
- DIVERSION PIPES AND STRUCTURES ) AS INDICATED ON THE GRADING AND UTILITY PLANS. 12. INSTALL INLET PROTECTION PER PLAN AND ADDITIONAL SOIL EROSION MEASURES AS DICTATED BY CONSTRUCTION
- CONDITIONS.
- 13. ROUGH GRADE THE LIMITS WITHIN PHASE I. STABILIZE ROADS WITH GRAVEL
- 14. PREPARE PAVEMENT SUB-GRADE AND INSTALL SUB-BASE MATERIAL.

WHICH MAY HAVE ACCUMULATED.

- 15. INSTALL PROPOSED CURBING AND PAVE (BASE AND BINDER COURSE) PROPOSED DRIVE AISLES BASED ON THE LAYOUT AND
- 16. FINISH GRADING AND STABILIZE ALL DISTURBED AREA. ALL CATCH BASINS, DRAINAGE MANHOLES, AND DRAINAGE LINES SHALL BE CLEANED OF ANY ACCUMULATED SILT AND SEDIMENT.
- 17. REMOVE ALL ACCUMULATED SEDIMENT WITHIN THE TEMPORARY SEDIMENT AREAS WITH VACUUM EXCAVATION TRUCKS FOR
- 18. FINISH FINAL GRADING FOR POCKET POND 5 (AREA PREVIOUSLY USED FOR SEDIMENT TRAP A) AND FOREBAY 4 (AREA PREVIOUSLY USED FOR SEDIMENT TRAP B).
- 19. REPAIR SOIL EROSION AND SEDIMENT CONTROL MEASURES AS NEEDED FROM CONSTRUCTION ACTIVITIES, ONCE THE SITE IS CLEAR OF DEBRIS AND THE SURROUNDING AREA IS STABILIZED CLEAR DRAINAGE PIPES AND STRUCTURES OF ANY SEDIMENT
- 20. PHASE 2 MAY BEGIN. THIS IS TO ENSURE THAT NO MORE THAN 5 ACRES OF LAND IS DISTURBED AT ANY ONE TIME.

# SEQUENCE OF CONSTRUCTION FOR EROSION CONTROL (PHASE 2)

PHASE 2: STREAM DIVERSION INSTALLATION, NORTHERN LOADING DOCKS AND PARTIAL BUILDING FOUNDATION CONSTRUCTION TOTAL LIMIT OF DISTURBANCE: 4.97 ACRES

- STAKE OUT OR DELINEATE THE LIMITS OF PHASE 2 BY GPS OR OTHER SURVEY METHODS. THE CONTRACTOR MUST FIRST DELINEATE AND PROTECT THE WETLANDS AND CONSERVATION AREAS AS APPLICABLE.
- 2. INSTALL PERIMETER SILT FENCE AND SILT SOCK MEASURES AS SHOWN ON THE PROJECT PLANS.
- 3. INSTALL TRUCK WASHOUTS IN LOCATIONS INDICATED ON THIS PLAN FOR PHASE 2. 4. CLEAR STUMPS AND ANY REMAINING VEGETATION WITHIN THE LIMITS OF PHASE 2. ANY DEBRIS OR WASTE IDENTIFIED SHOULD
- BE DISPOSED OF IN ACCORDANCE WITH APPROPRIATE REGULATIONS DEPENDING ON THE NATURE OF IT. 5. ESTABLISH AREAS FOR CONSTRUCTION STAGING AND MATERIALS STORAGE.
- INSTALL TEMPORARY DIVERSION SWALES TO ENSURE THAT STORMWATER RUNOFF IS CONVEYED TO THE TEMPORARY SEDIMENT
- 7. EXCAVATE FOR TEMPORARY STONE OUTLET SEDIMENT TRAPS C, D AND E WITHIN THE LIMITS OF PHASE 2. CONTRACTOR TO
- ENSURE ALL UPSTREAM DISTURBED AREAS HAVE BEEN ACHIEVED 100% FINAL STABILIZATION PRIOR TO EXCAVATION. IF FINAL STABILIZATION CANNOT BE ACHEIVED ALL FLOW TO THE TEMPORARY SEDIMENTATION TRAPS MUST BE DIVERTED TO AN ALTERNATE STORMWATER QUALITY/QUANTITY FEATURE
- 8. EXCAVATE FOR REMAINING STREAM DIVERSION PIPES AND STRUCTURES WITHIN THE LIMITS OF PHASE 2 WHILE PROTECTING THE 9. PLACE ANY EXCESS EXCAVATED MATERIAL IN POTENTIAL SOIL STOCKPILE LOCATIONS AS SPECIFIED ON THE PROJECT PLANS FOR
- 12. INSTALL REMAINING STREAM DIVERSION PIPES/STRUCTURES LOCATED WITHIN PHASE 2 AS INDICATED ON THE GRADING AND
- 11. EXCAVATE SUBSURFACE CLAY, RELOCATE CUT SOIL IN AREAS OF FILL AS INDICATED ON THE GRADING PLAN, UNSUITABLE SOIL
- THAT WILL NOT BE USED AS FILL SHOULD BE BROUGHT OFF THE SITE.
- 12. PLACE ANY EXCESS EXCAVATED MATERIAL IN POTENTIAL SOIL STOCKPILE LOCATIONS AS SPECIFIED ON THE PROJECT PLANS FOR
- 13. EXCAVATE FOR REMAINING UTILITY, AND STORMWATER TRENCHING WITHIN THE LIMITS OF PHASE 2 REPEAT PREVIOUS STEP. 14. INSTALL REMAINING UTILITY AND STORMWATER PIPES/STRUCTURES LOCATED WITHIN PHASE 2 AS INDICATED ON THE GRADING
- 15. INSTALL INLET PROTECTION PER PLAN AND ADDITIONAL SOIL EROSION MEASURES AS DICTATED BY CONSTRUCTION
- 16. ROUGH GRADE THE LIMITS WITHIN PHASE 2. STABILIZE ROADS WITH GRAVEL.
- 14. CONSTRUCT BUILDING FOUNDATION WITHIN THE LIMITS OF PHASE 2.
- 15. PREPARE PAVEMENT SUB-GRADE AND INSTALL SUB-BASE MATERIAL.
- 16. INSTALL PROPOSED CURBING AND PAVE (BASE AND BINDER COURSE) PROPOSED LOADING DOCKS AND DRIVE AISLES BASED ON THE LAYOUT AND GRADING PLANS.
- 17. FINISH GRADING AND STABILIZE ALL DISTURBED AREA. ALL CATCH BASINS, DRAINAGE MANHOLES, AND DRAINAGE LINES SHALL BE CLEANED OF ANY ACCUMULATED SILT AND SEDIMENT.
- 18 REMOVE ALL ACCUMULATED SEDIMENT WITHIN THE TEMPORARY SEDIMENT AREAS WITH VACUUM EXCAVATION TRUCKS AND/OR USING LIGHT UNPACKING EQUIPMENT ( TO AVOID COMPACTION OF THE BASIN FLOOR) FOR BEST RESULTS.
- 19. NEXT, THE BASINS SHALL BE EXCAVATED TO THE FINAL DESIGN ELEVATION FOR INFILTRATION BASIN 2 (AREA PREVIOUSLY USED FOR SEDIMENT TRAP C), INFILTRATION BASIN AND FOREBAY 3 (AREA PREVIOUSLY USED FOR SEDIMENT TRAP E) AND INFILTRATION BASIN 4 (AREA PREVIOUSLY USED FOR SEDIMENT TRAP E) AND DESIGN GROUND COVER INSTALLED. ONCE THE INFILTRATION BASIN, BASIN BOTTOM, BASIN SLOPES, ETC. HAVE ACHIEVED I 00% STABILIZATION, STORMWATER FLOW CAN BE REDIRECTED TO THE INFILTRATION BASINS AND ALL TEMPORARY STORMWATER QUALITY/ QUANTITY FEATURES BE REMOVED.
- 20. REPAIR SOIL EROSION AND SEDIMENT CONTROL MEASURES AS NEEDED FROM CONSTRUCTION ACTIVITIES. ONCE THE SITE IS CLEAR OF DEBRIS AND THE SURROUNDING AREA IS STABILIZED CLEAR DRAINAGE PIPES AND STRUCTURES OF ANY SEDIMENT WHICH MAY HAVE ACCUMULATED.
- 21. PHASE 3 MAY BEGIN. THIS IS TO ENSURE THAT NO MORE THAN 5 ACRES OF LAND IS DISTURBED AT ANY ONE TIME.

# SEQUENCE OF CONSTRUCTION FOR EROSION CONTROL (PHASE 3)

PHASE 3: WESTERN LOADING DOCKS AND REMAINING BUILDING FOUNDATION CONSTRUCTION TOTAL LIMIT OF DISTURBANCE: 4.37 ACRES

- STAKE OUT OR DELINEATE THE LIMITS OF PHASE 3 BY GPS OR OTHER SURVEY METHODS. THE CONTRACTOR MUST FIRST DELINEATE AND PROTECT THE WETLANDS AND CONSERVATION AREAS AS APPLICABLE.
- 2. INSTALL PERIMETER SILT FENCE AND SILT SOCK MEASURES AS SHOWN ON THE PROJECT PLANS.
- 3. INSTALL TRUCK WASHOUTS IN LOCATIONS INDICATED ON THIS PLAN FOR PHASE 3.
- 4. CLEAR STUMPS AND ANY REMAINING VEGETATION WITHIN THE LIMITS OF PHASE 3, ANY DEBRIS OR WASTE IDENTIFIED SHOULD BE DISPOSED OF IN ACCORDANCE WITH APPROPRIATE REGULATIONS DEPENDING ON THE NATURE OF IT.
- 5. ESTABLISH AREAS FOR CONSTRUCTION STAGING AND MATERIALS STORAGE.
- 7. EXCAVATE FOR TEMPORARY STONE OUTLET SEDIMENT TRAPS F, G AND H WITHIN THE LIMITS OF PHASE 3.

6. INSTALL TEMPORARY DIVERSION SWALES TO ENSURE THAT STORMWATER RUNOFF IS CONVEYED TO THE TEMPORARY SEDIMENT

- 8. EXCAVATE SUBSURFACE CLAY, RELOCATE CUT SOIL IN AREAS OF FILL AS INDICATED ON THE GRADING PLAN, UNSUITABLE SOIL THAT WILL NOT BE USED AS FILL SHOULD BE BROUGHT OFF THE SITE.
- 9. PLACE ANY EXCESS EXCAVATED MATERIAL IN POTENTIAL SOIL STOCKPILE LOCATIONS AS SPECIFIED ON THE PROJECT PLANS FOR
- 10. EXCAVATE FOR REMAINING UTILITY, AND STORMWATER TRENCHING WITHIN THE LIMITS OF PHASE 3. REPEAT PREVIOUS STEP.
- II. INSTALL REMAINING UTILITY AND STORMWATER PIPES/STRUCTURES LOCATED WITHIN PHASE 3 AS INDICATED ON THE GRADING AND UTILITY PLANS.

12. INSTALL INLET PROTECTION PER PLAN AND ADDITIONAL SOIL EROSION MEASURES AS DICTATED BY CONSTRUCTION

- 13. ROUGH GRADE THE LIMITS WITHIN PHASE 23 STABILIZE ROADS WITH GRAVEL. 14. CONSTRUCT BUILDING FOUNDATION WITHIN THE LIMITS OF PHASE 3.
- 15. PREPARE PAVEMENT SUB-GRADE AND INSTALL SUB-BASE MATERIAL.
- 16. INSTALL PROPOSED CURBING AND PAVE (BASE AND BINDER COURSE) PROPOSED LOADING DOCKS AND DRIVE AISLES BASED ON
- 17. FINISH GRADING AND STABILIZE ALL DISTURBED AREA. ALL CATCH BASINS, DRAINAGE MANHOLES, AND DRAINAGE LINES SHALL BE CLEANED OF ANY ACCUMULATED SILT AND SEDIMENT
- 18. REMOVE ALL ACCUMULATED SEDIMENT WITHIN THE TEMPORARY SEDIMENT AREAS WITH VACUUM EXCAVATION TRUCKS FOR
- 19. FINISH FINAL GRADING FOR WET POND 1, DETENTION BASIN 1 AND DETENTION BASIN 2.
- 20. ONCE CONSTRUCTION OF THE PROPOSED BUILDING FOUNDATION AND TRUCK LOADING AREA FOR PHASE 3 AS WELL AS THE ABOVE REFERENCES BASINS ARE COMPLETED THE PROPOSED BUILDING MAY BE CONSTRUCTED.
- 21. REPAIR SOIL EROSION AND SEDIMENT CONTROL MEASURES AS NEEDED FROM CONSTRUCTION ACTIVITIES. ONCE THE SITE IS CLEAR OF DEBRIS AND THE SURROUNDING AREA IS STABILIZED CLEAR DRAINAGE PIPES AND STRUCTURES OF ANY SEDIMENT
- 22. AFTER COMPLETION OF CONSTRUCTION, APPLY SEED OR SOD ON ALL LAWN AREAS. AFTER STABILIZATION HAS BEEN ESTABLISHED CLEAR DRAINAGE PIPES AND STRUCTURES OF ANY SEDIMENT WHICH MAY HAVE ACCUMULATED. REMOVE ALL EROSION CONTROL DEVICES. MAINTAIN ALL LAWN AND LANDSCAPED AREAS TO ENSURE A VIABLE STABILIZED VEGETATIVE

# GENERAL SOIL EROSION AND SEDIMENT CONTROL NOTES

- I. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES ARE TO BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCE, OR IN THEIR PROPER SEQUENCE, AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
- 2. ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED MORE THAN FOURTEEN (14) DAYS FOR DISTURBANCES LESS THAN FIVE (5) ACRES AND SEVEN (7) DAYS FOR DISTURBANCES GREATER THAN FIVE (5) ACRES. AND NOT SUBJECT TO CONSTRUCTION TRAFFIC. WILL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. IF THE SEASON PREVENTS THE ESTABLISHMENT OF TEMPORARY COVER, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW, OR EQUIVALENT MATERIAL, AT A RATE OF TWO (2) TONS PER ACRE, ACCORDING TO STATE STANDARDS.
- 3. PERMANENT VEGETATION TO BE SEEDED OR SODDED ON ALL EXPOSED AREAS WITHIN FIVE (5) DAYS AFTER FINAL GRADING. MULCHING IS REQUIRED ON ALL SEEDING. WHEN HYDROSEEDING, MULCH SHALL NOT BE INCLUDED IN THE
- 4. ALL WORK TO BE DONE IN ACCORDANCE WITH THE 2016 NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL OR AS AMENDED.
- 5. A SUBBASE COURSE WILL BE APPLIED IMMEDIATELY FOLLOWING ROUGH GRADING AND INSTALLATION OF IMPROVEMENTS TO STABILIZE STREETS, ROADS, DRIVEWAYS, AND PARKING AREAS. IN AREAS WHERE NO UTILITIES ARE PRESENT, THE SUBBASE SHALL BE INSTALLED WITHIN FIVE (5) DAYS OF THE PRELIMINARY GRADING.
- IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING, ALL CRITICAL AREAS SUBJECT TO EROSION (I.E. STEEP SLOPES 3:1 OR GREATER AND ROADWAY EMBANKMENTS) WILL RECEIVE A TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR A SUITABLE EQUIVALENT, AT A RATE OF TWO (2) TONS PER ACRE, ACCORDING TO STATE
- 7. ANY STEEP SLOPES RECEIVING PIPELINE INSTALLATION WILL BE BACKFILLED AND STABILIZED DAILY, AS THE INSTALLATION CONTINUES (I.E. SLOPES GREATER THAN 3:1).
- 8. THE STANDARD FOR STABILIZED CONSTRUCTION ACCESS REQUIRES THE INSTALLATION OF A STONE PAD, AT ALL CONSTRUCTION DRIVEWAYS, IMMEDIATELY AFTER INITIAL SITE DISTURBANCE.
- 9. IN ACCORDANCE WITH THE STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS, ANY SOIL HAVING A PH OF 4 OR LESS OR CONTAINING IRON SULFIDES SHALL BE COVERED WITH A MINIMUM OF TWELVE (12) INCHES OF SOIL HAVING A PH OF 5 OR MORE PRIOR TO SEEDBED PREPARATION. AREAS WHERE TREES OR SHRUBS ARE TO BE PLANTED SHALL BE COVERED WITH A MINIMUM OF TWENTY-FOUR (24) INCHES OF SOIL HAVING A PH OF 5 OR MORE.
- 10. AT THE TIME THE SITE PREPARATION FOR PERMANENT VEGETATIVE STABILIZATION IS GOING TO BE ACCOMPLISHED, ANY SOIL THAT WILL NOT PROVIDE A SUITABLE ENVIRONMENT TO SUPPORT ADEQUATE VEGETATIVE GROUND COVER, SHALL BE REMOVED OR TREATED IN SUCH A WAY THAT IT WILL PERMANENTLY ADJUST THE SOIL CONDITIONS AND RENDER IT SUITABLE FOR VEGETATIVE GROUND COVER. IF THE REMOVAL OR TREATMENT OF THE SOIL WILL NOT PROVIDE SUITABLE CONDITIONS, NON-VEGETATIVE MEANS OF PERMANENT GROUND STABILIZATION WILL HAVE TO BE
- II. CONDUIT OUTLET PROTECTION MUST BE REVIEWED & SUPPLEMENTED AT ALL OUTFALLS PRIOR TO THE DRAINAGE
- 12. UNFILTERED DEWATERING IS NOT PERMITTED. TAKE ALL NECESSARY PRECAUTIONS DURING ALL DEWATERING OPERATIONS TO MINIMIZE SEDIMENT TRANSFER. ANY DEWATERING METHODS USED MUST BE IN ACCORDANCE WITH
- 13. SHOULD THE CONTROL OF DUST AT THE SITE BE NECESSARY, THE SITE WILL BE SPRINKLED UNTIL THE SURFACE IS WET, TEMPORARY VEGETATIVE COVER SHALL BE ESTABLISHED OR MULCH SHALL BE APPLIED IN ACCORDANCE WITH STATE STANDARDS FOR EROSION CONTROL.
- 14. ALL SOIL WASHED, DROPPED, SPILLED, OR TRACKED OUTSIDE THE LIMIT OF DISTURBANCE OR ONTO PUBLIC RIGHT-OF-WAY WILL BE REMOVED IMMEDIATELY.
- 15. THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR ANY EROSION AND SEDIMENTATION THAT MAY OCCUR BELOW STORMWATER OUTFALLS OR OFFSITE AS A RESULT OF CONSTRUCTION OF THE PROJECT.
- 16. STOCKPILE AND STAGING LOCATIONS DETERMINED IN THE FIELD, SHALL BE PLACED WITHIN THE LIMITS OF DISTURBANCE ACCORDING TO THE CERTIFIED PLAN.
- 17. CONCRETE WASHOUT, DUMPSTER, & STAGING AREA LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR AND APPROVED AT THE PRE-CONSTRUCTION MEETING. THEY SHALL BE PLACED IN THE PROXIMITY OF THE CONSTRUCTION ENTRANCE AND STAGING AREAS AND SHALL BE USED PRIOR TO EXITING THE PROJECT SITE. THE LOCATION SHALL BE IN A PRACTICAL, CLEARLY DELINEATED, AREA AND BE MAINTAINED THROUGHOUT CONSTRUCTION.
- 18. ALL SOIL STOCKPILES ARE TO BE TEMPORARILY STABILIZED IN ACCORDANCE WITH THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
- 19. ALL PERMANENT SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED BY THE PROPERTY OWNER, AND SHALL BECOME THEIR RESPONSIBILITY.

21. DURING CONSTRUCTION, ANY ADDITIONAL CONTROL MEASURES AS DEEMED NECESSARY TO PREVENT EROSION OR

- 20. PAVEMENT AREAS ARE TO BE KEPT CLEAN AT ALL TIMES.
- CONTROL SEDIMENT BEYOND THOSE MEASURES SHOWN ON THE APPROVED PLAN SHALL BE INSTALLED OR EMPLOYED AT THE DIRECTION OF THE MUNICIPAL ENGINEER. 22. ALL TEMPORARY, STRUCTURAL EROSION AND SEDIMENT CONTROL MEASURES CAN BE REMOVED, WHEN ALL CONSTRUCTION ACTIVITY IDENTIFIED IN THE SWPPP HAS BEEN COMPLETED, ALL AREAS OF DISTURBANCE HAVE ACHIEVED FINAL STABILIZATION\*\* AND ALL POST-CONSTRUCTION STORMWATER MANAGEMENT PRACTICES HAVE BEEN
- CONSTRUCTED IN CONFORMANCE WITH THE SWPPP AND ARE OPERATIONAL. 23. BOTTOM AND BERM ELEVATIONS OF TEMPORARY SEDIMENT TRAPS TO BE REVIEWED WITH THE CONTRACTOR BASED ON
- THEIR PROPOSED CONSTRUCTION SEQUENCE FOR THE PROJECT. 24. WASHOUTS, STOCKPILES, AND STAGING AREAS SHOWN FOR SCHEMATIC REFERENCE ONLY. CONTRACTOR TO LOCATE

\*\*FINAL STABILIZATION - MEANS THAT ALL SOIL DISTURBANCE ACTIVITIES HAVE CEASED AND A UNIFORM, PERENNIAL VEGETATIVE COVER WITH A DENSITY OF EIGHTY (80) PERCENT OVER THE ENTIRE PERVIOUS SURFACE HAS BEEN ESTABLISHED; OR OTHER EQUIVALENT STABILIZATION MEASURES. SUCH AS PERMANENT LANDSCAPE MULCHES. ROCK RIP-RAP OR WASHED/CRUSHED STONE HAVE BEEN APPLIED ON ALL DISTURBED AREAS THAT ARE NOT COVERED BY PERMANENT STRUCTURES, CONCRETE OR PAVEMENT.

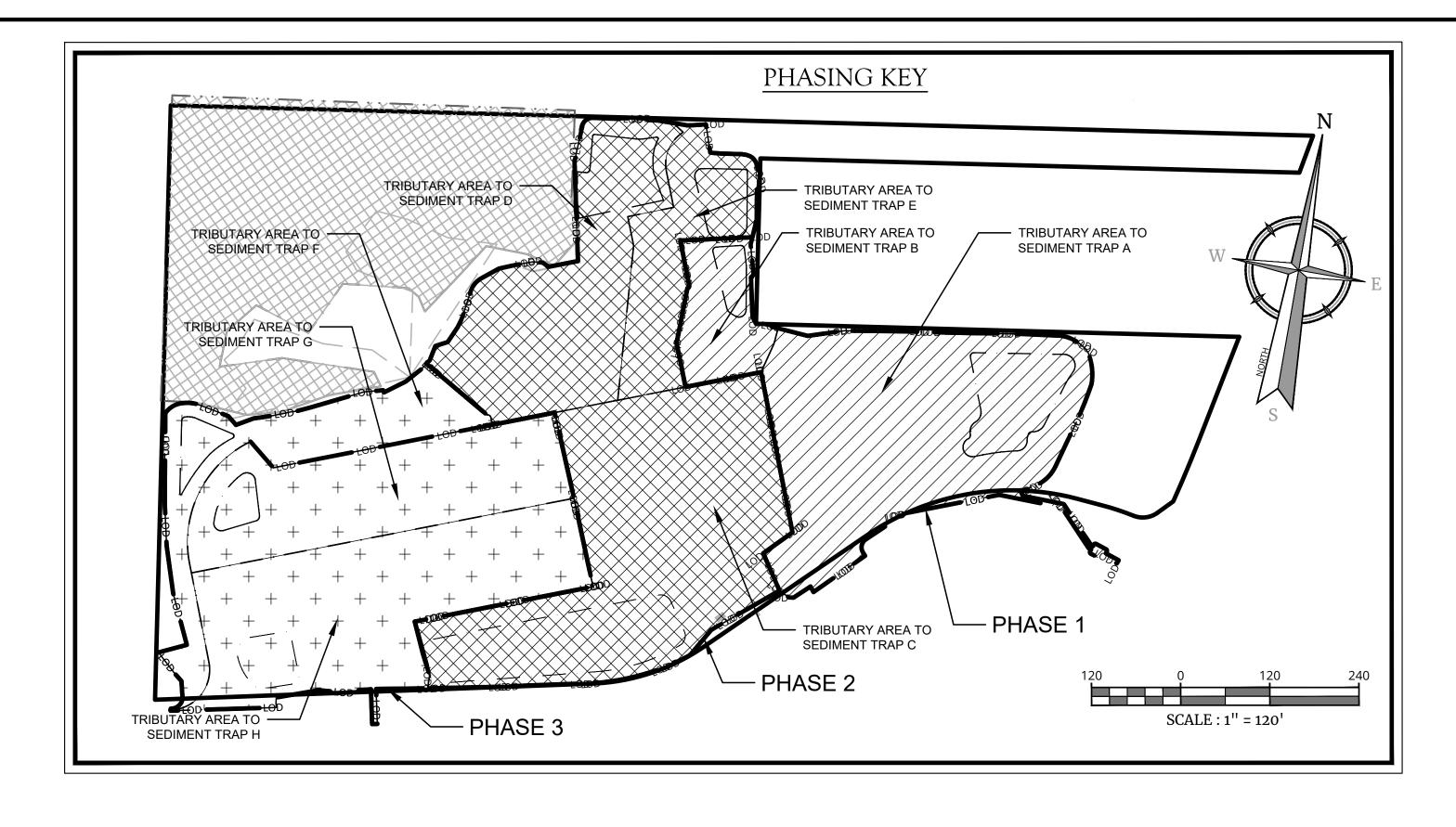
# MAINTENANCE PLAN DURING CONSTRUCTION:

AS NECESSARY TO FACILITATE WORK.

INSPECTION AND MAINTENANCE SHALL BE PERFORMED IN CONFORMANCE WITH GP-0-20-001 OR AS AMENDED. ALL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CHECKED FOR STABILITY AND OPERATION FOLLOWING EVERY RUNOFF-PRODUCING RAINFALL BUT IN NO CASE LESS THAN ONCE EVERY WEEK. ANY NEEDED REPAIRS WILL BE MADE IMMEDIATELY TO MAINTAIN ALL PRACTICES AS DESIGNED AND INSTALLED FOR THE PROJECT. THE SEDIMENT TRAPS WILL BE CLEANED OUT WHEN THE LEVEL OF SEDIMENT REACHES 25% OF ITS' CAPACITY. SEDIMENT WILL BE REMOVED FROM BEHIND THE SILT FENCE WHEN IT BECOMES APPROXIMATELY 6" DEEP AT THE FENCE. THE SILT FENCE WILL BE REPAIRED AS NECESSARY TO MAINTAIN A BARRIER. ALL SEEDED AREAS WILL BE FERTILIZED, RE-SEEDED AS NECESSARY, AND MULCHED ACCORDING TO SPECIFICATIONS IN THE LANDSCAPE PLAN TO MAINTAIN A VIGOROUS, DENSE VEGETATIVE COVER.

# MAINTENANCE AGREEMENT NOTE:

THE OWNER/APPLICANT SHALL ENTER INTO AN ENFORCEABLE MAINTENANCE AGREEMENT WITH THE MUNICIPALITY (IF AN MS4. COMMUNITY) RELATED TO MAINTENANCE OF STORMWATER FACILITIES. THE OWNER/APPLICANT IS RESPONSIBLE TO PERFORM ALL REQUIRED MAINTENANCE BOTH DURING CONSTRUCTION AND LONG-TERM. THE NATURE OF THE AGREEMENT IS TO ALLOW THE MUNICIPALITY TO PERFORM MAINTENANCE AT THEIR OPTION SHOULD THE OWNER/APPLICANT FAIL TO ADEQUATELY MAINTAIN THE SYSTEM AS DETERMINED BY THE MUNICIPAL ENGINEER. MAINTENANCE OF THE STORMWATER SYSTEM SHALL BE PERFORMED IN ACCORDANCE WITH THE APPROVED SWPPP AND DETAIL SHEETS.



# Colliers

Engineering

& Design

www.colliersengineering.com

hom the services were contracted or to whom it is certified. This drawing m e copied, reused, disclosed, distributed or relied upon for any other pur without the express written consent of Colliers Engineering & Design

LL STATES REQUIRE NOTIFICATION ( AVATORS, DESIGNERS, OR ANY PER

PREPARING TO DISTURB THE EARTH'
SURFACE ANYWHERE IN ANY STATE FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW CALL811 COM



Jesse Barrett Cokeley NEW YORK LICENSED PROFESSIONAL ENGINEER LICENSE NUMBER: 090987-01 COLLIERS ENGINEERING & DESIGN CT, P.C. N.Y. C.O.A #: 0017609

PRELIMINARY SITE PLAN

622 ROUTE 303 LLC

PROJECT AL FOXIE

SBL: 65.14-1-11.2 & 11.3

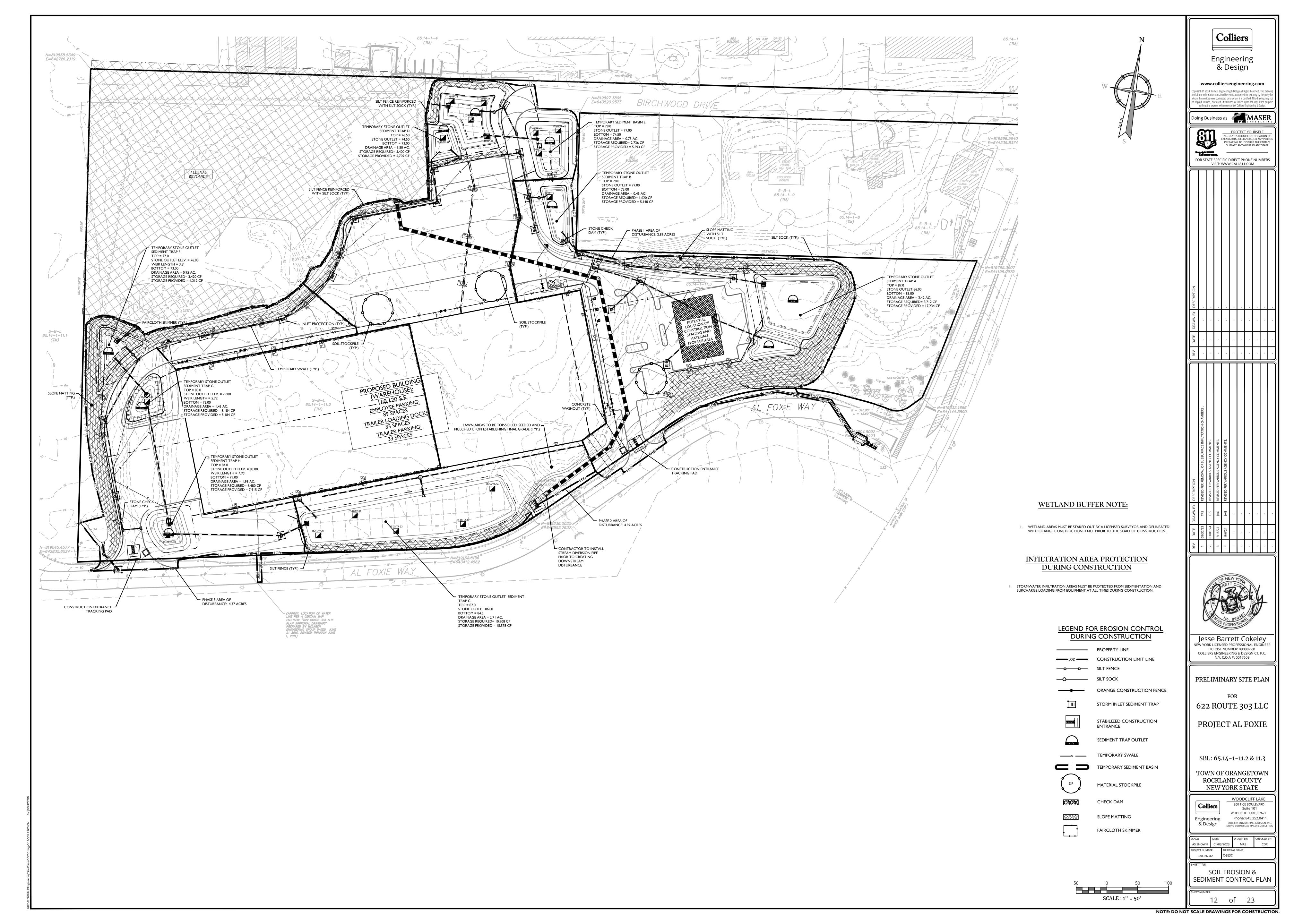
NEW YORK STATE

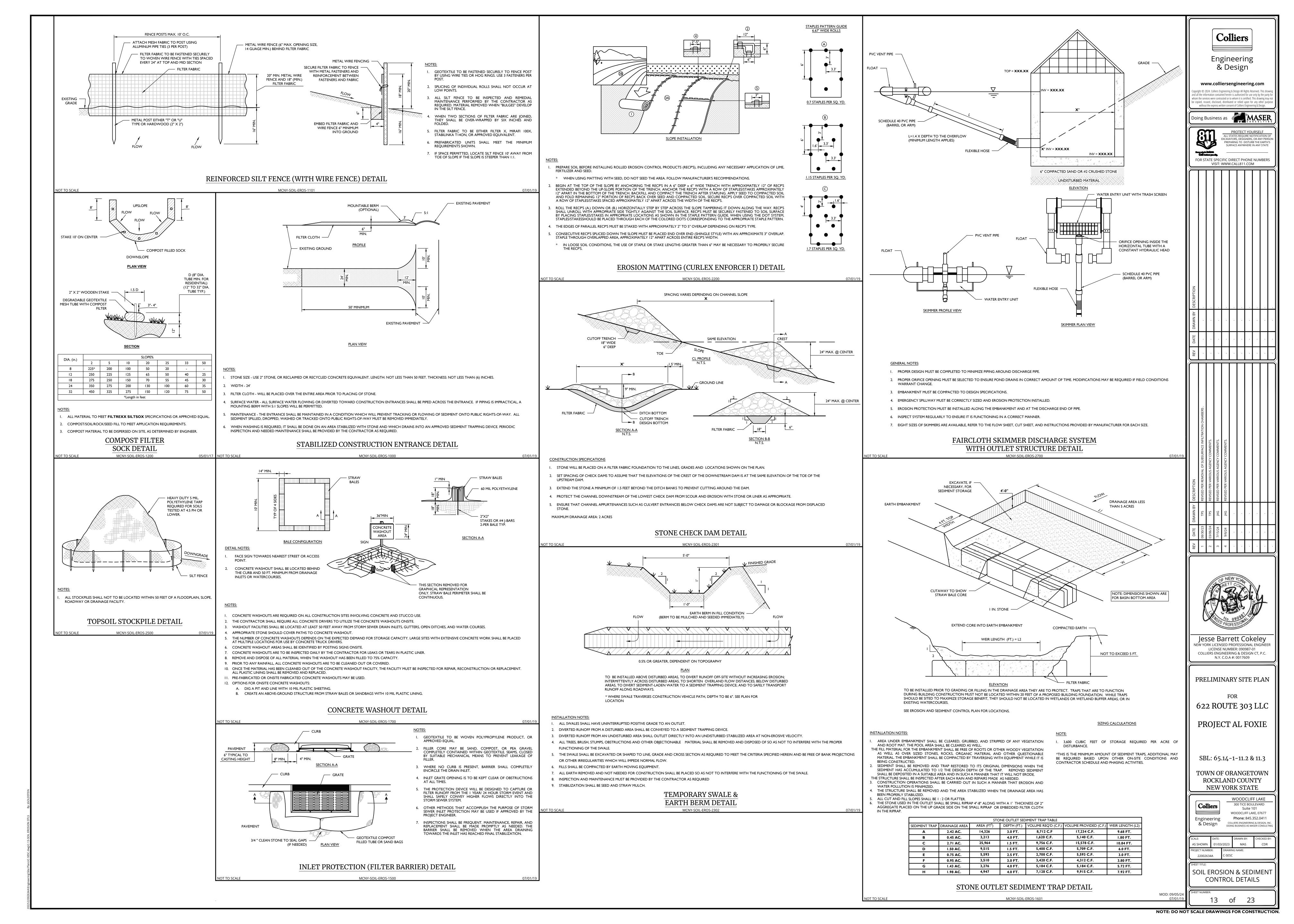
TOWN OF ORANGETOWN ROCKLAND COUNTY

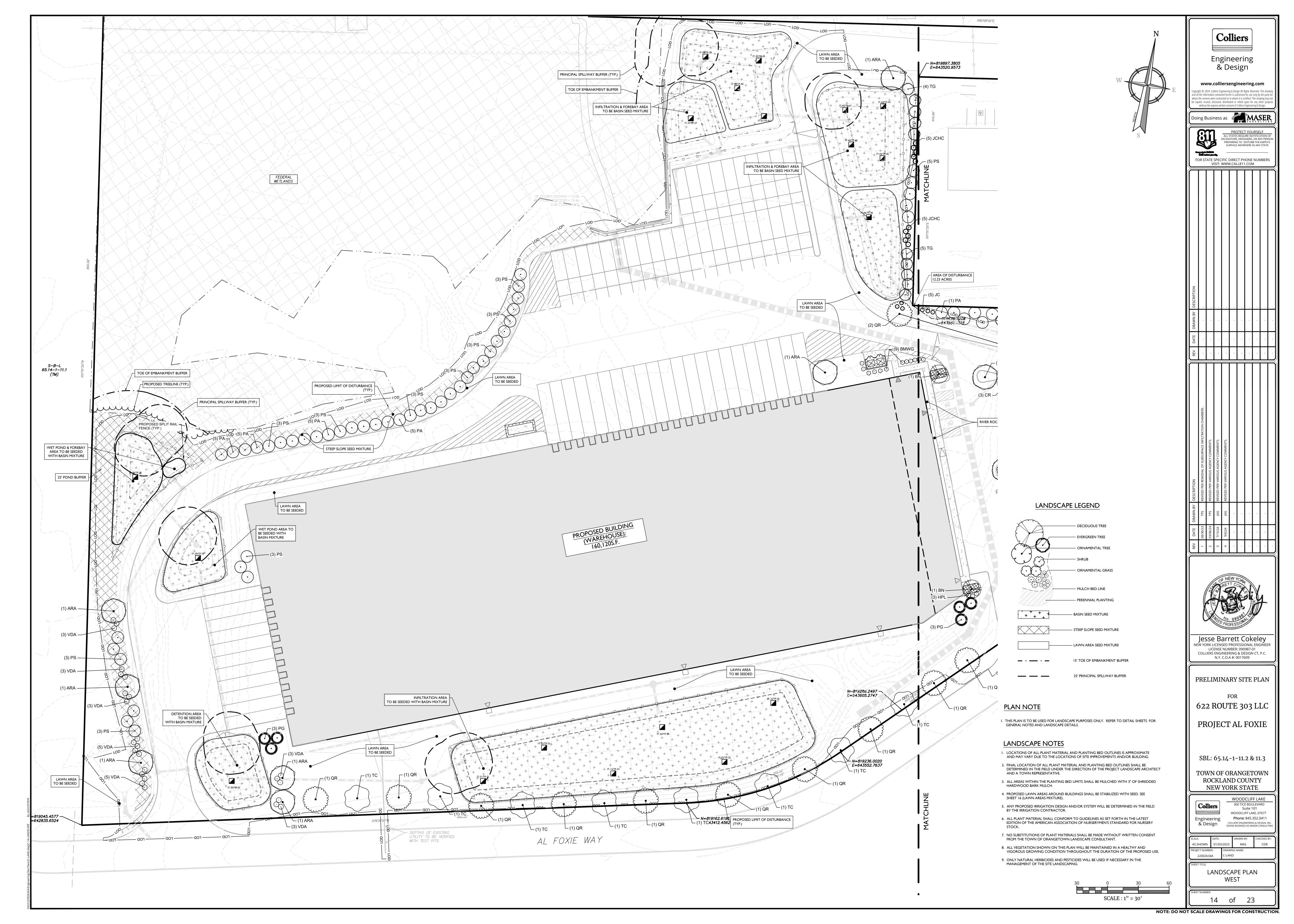
WOODCLIFF LAKE 300 TICE BOULEVARD Colliers Suite 101 WOODCLIFF LAKE, 07677 Phone: 845.352.0411 Engineering COLLIERS ENGINEERING & DESIGN, INC. & Design DOING BUSINESS AS MASER CONSULT

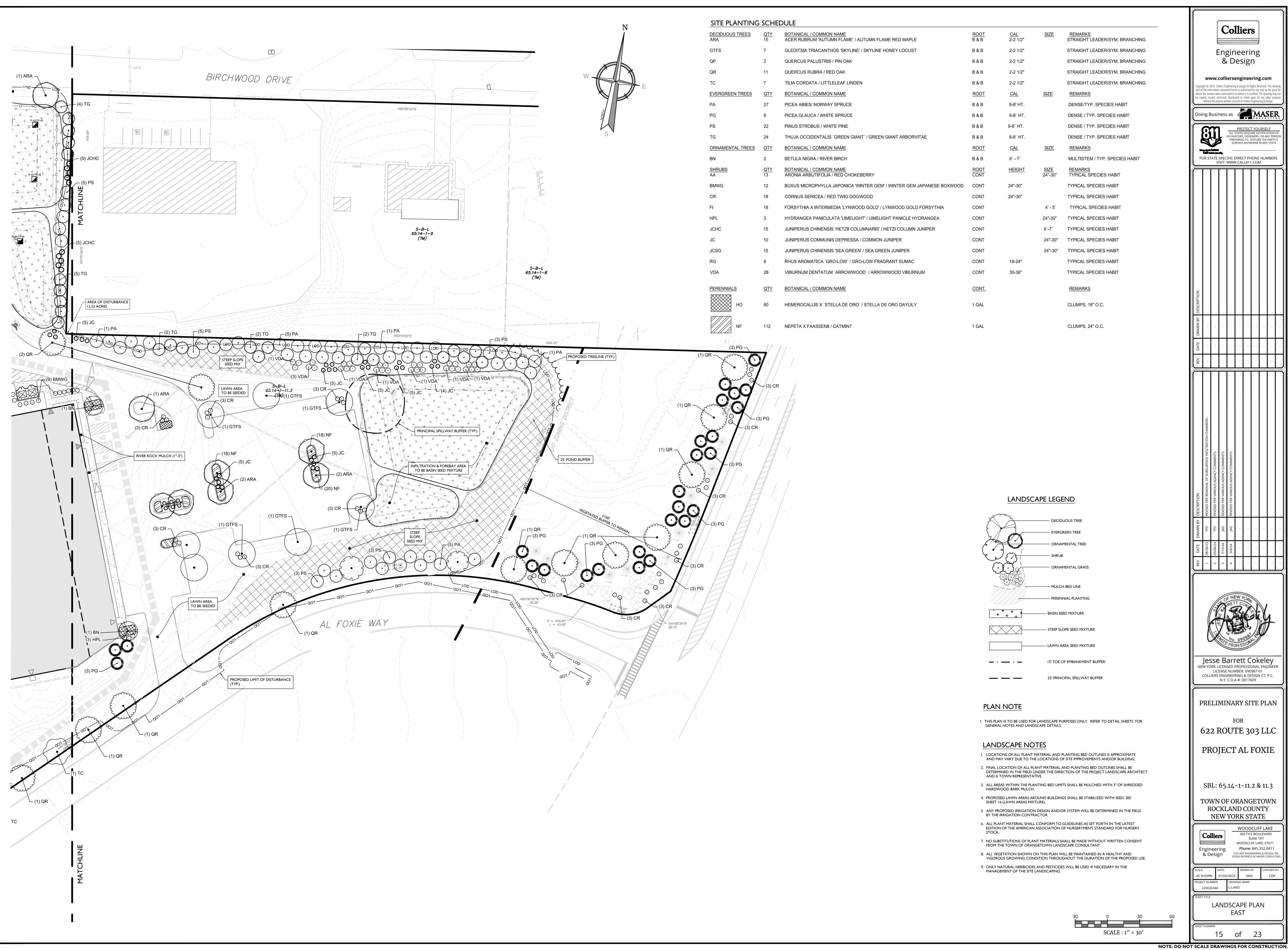
22002634A

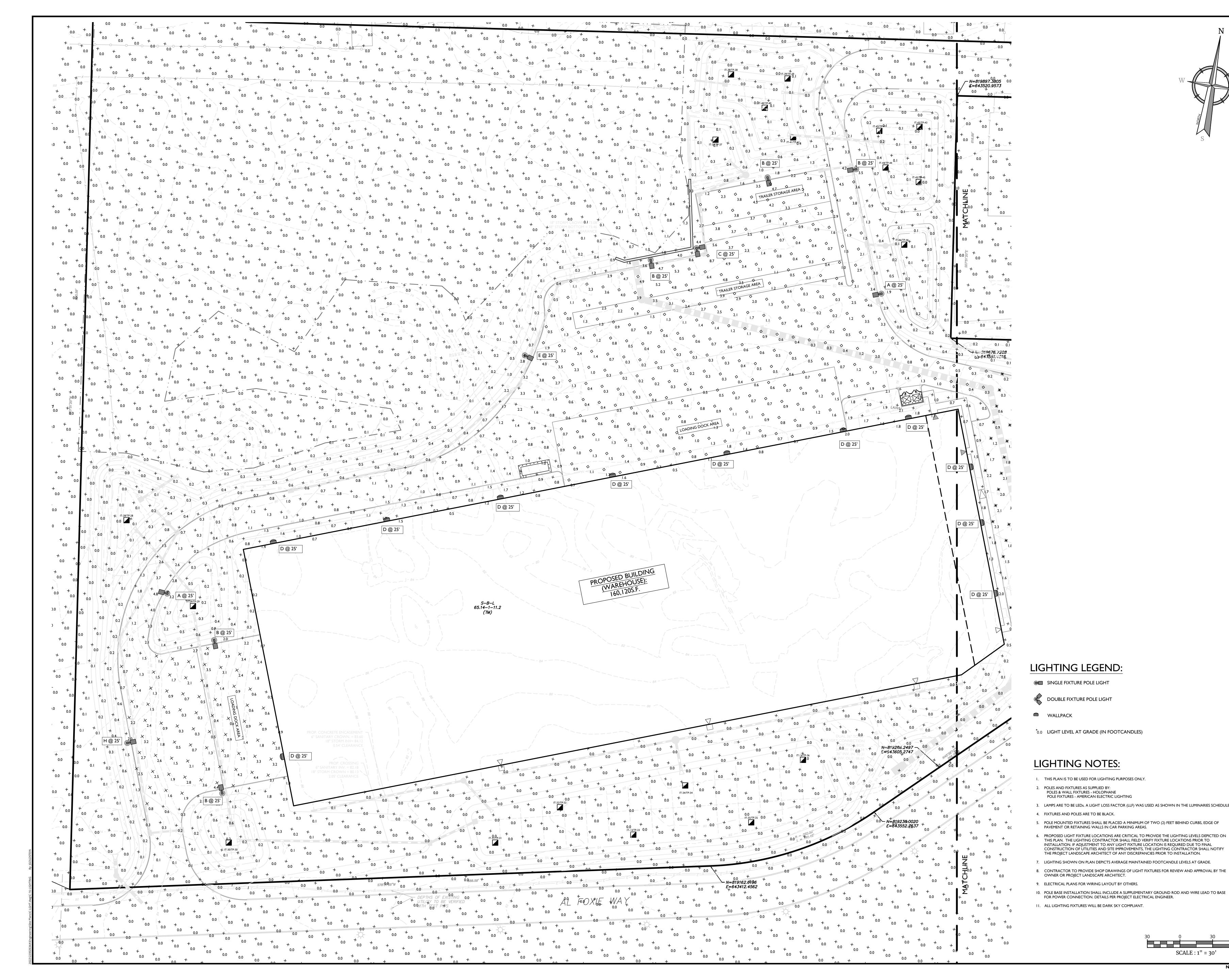
**SOIL EROSION & SEDIMENT** CONTROL NOTES

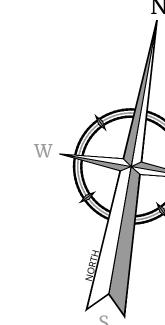






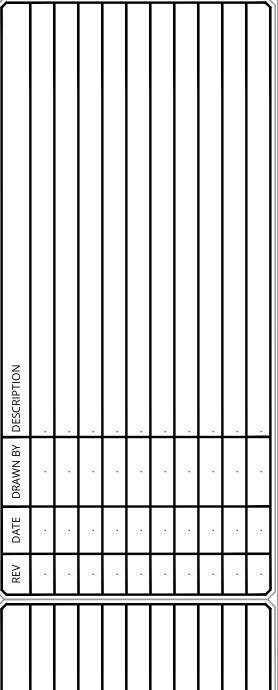






Engineering

& Design





Jesse Barrett Cokeley LICENSE NUMBER: 090987-01 COLLIERS ENGINEERING & DESIGN CT, P.C. N.Y. C.O.A #: 0017609

PRELIMINARY SITE PLAN

622 ROUTE 303 LLC

PROJECT AL FOXIE

SBL: 65.14-1-11.2 & 11.3

TOWN OF ORANGETOWN ROCKLAND COUNTY NEW YORK STATE

WOODCLIFF LAKE 300 TICE BOULEVARD Suite 101 WOODCLIFF LAKE, 07677

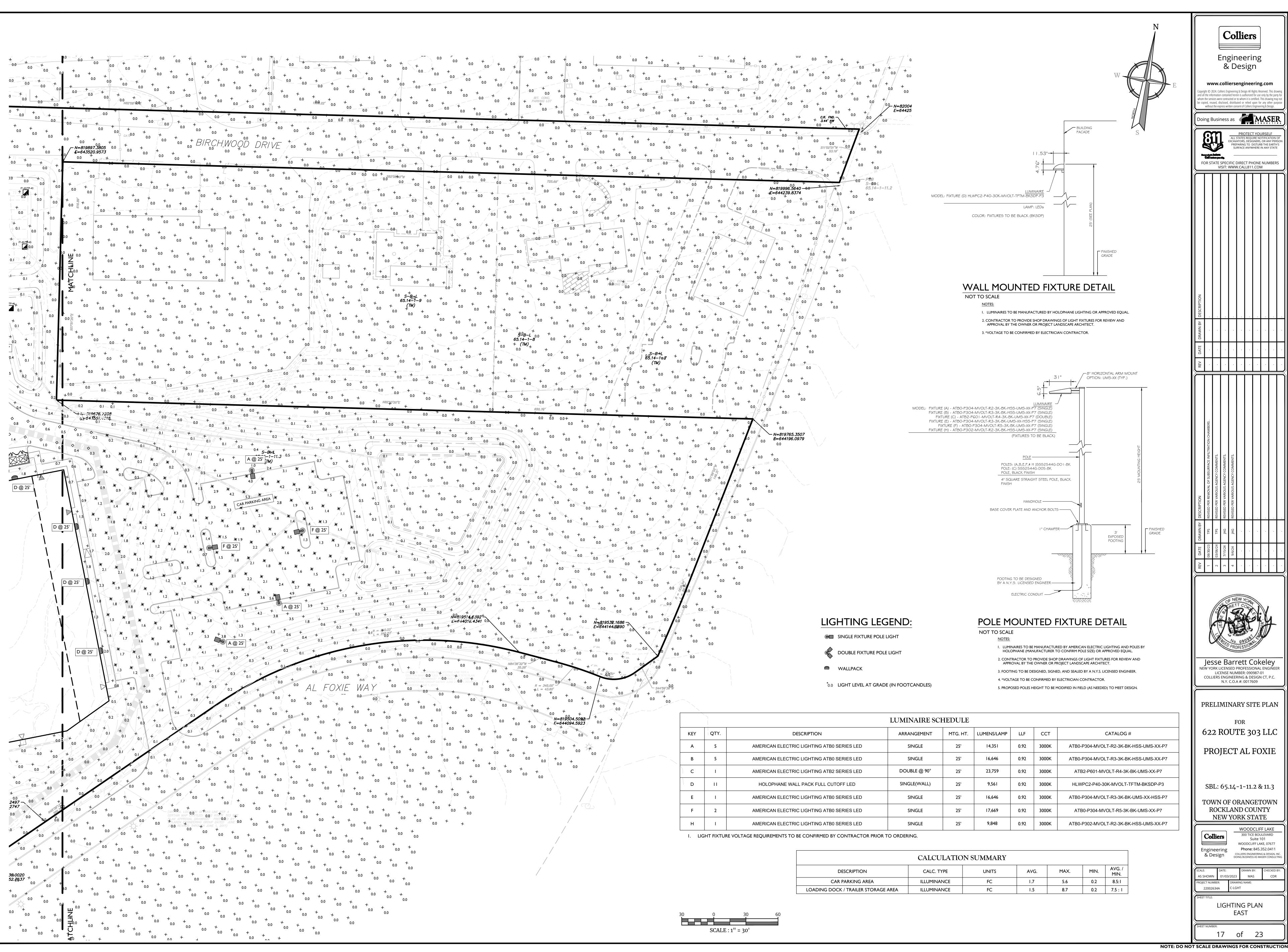
Phone: 845.352.0411 COLLIERS ENGINEERING & DESIGN, INC. DOING BUSINESS AS MASER CONSULT

22002634A

LIGHTING PLAN WEST

16 of 23

SCALE: 1" = 30'



& Design

e copied, reused, disclosed, distributed or relied upon for any other p MASER

PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION (
CAVATORS, DESIGNERS, OR ANY PER PREPARING TO DISTURB THE EARTH'
SURFACE ANYWHERE IN ANY STATE

FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM



Jesse Barrett Cokeley LICENSE NUMBER: 090987-01 COLLIERS ENGINEERING & DESIGN CT, P.C.

PRELIMINARY SITE PLAN

622 ROUTE 303 LLC

PROJECT AL FOXIE

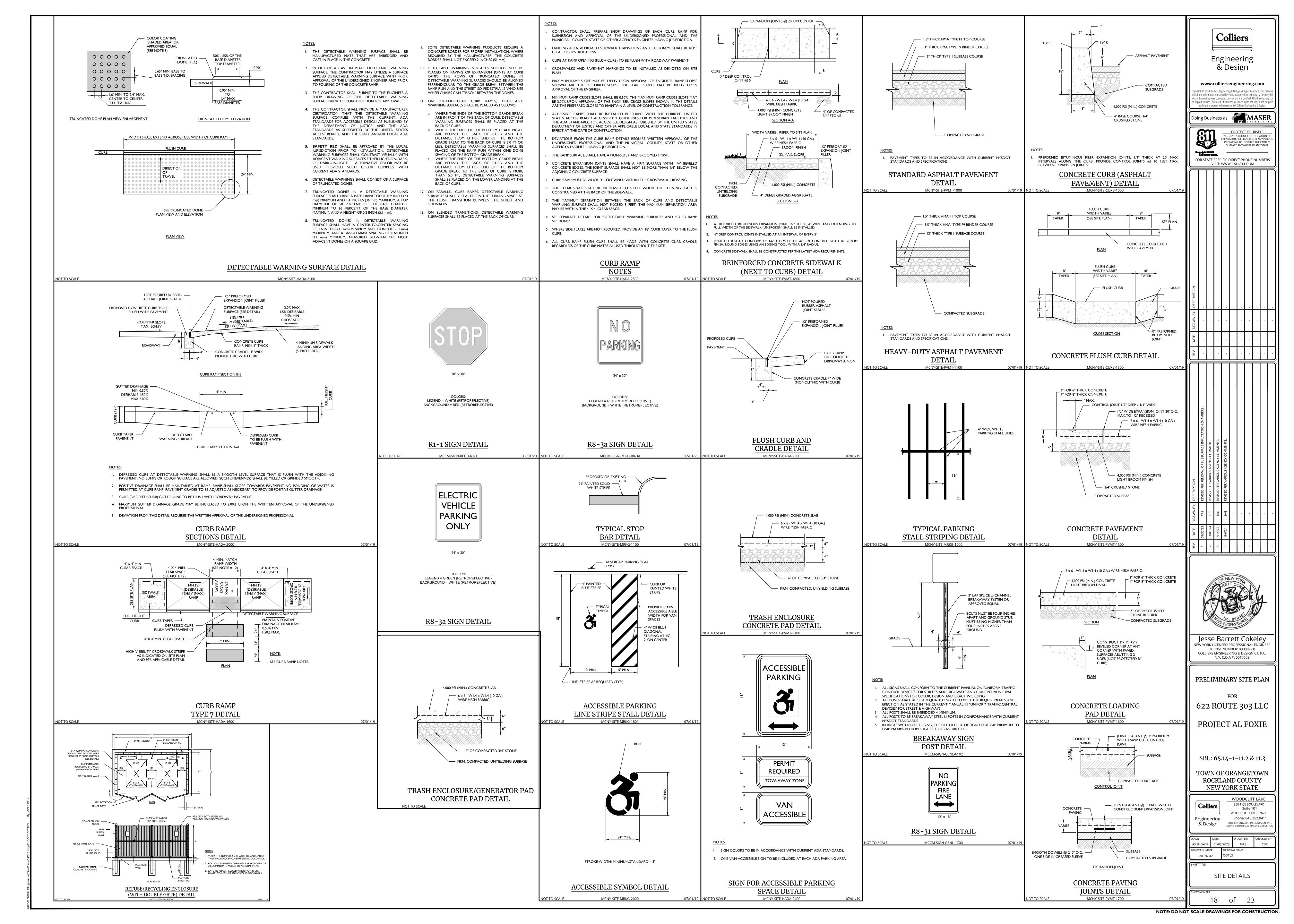
SBL: 65.14-1-11.2 & 11.3

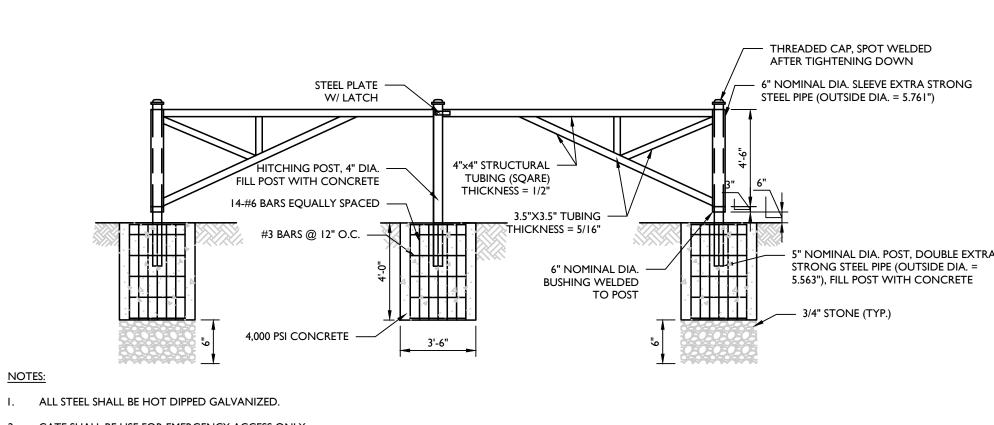
TOWN OF ORANGETOWN ROCKLAND COUNTY NEW YORK STATE

WOODCLIFF LAKE 300 TICE BOULEVARD Suite 101 WOODCLIFF LAKE, 07677 Phone: 845.352.0411 COLLIERS ENGINEERING & DESIGN, INC.

LIGHTING PLAN

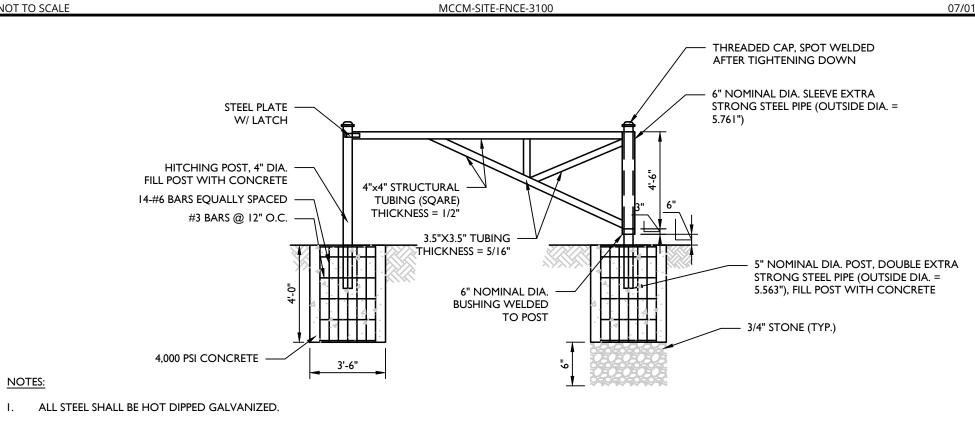
17 of 23





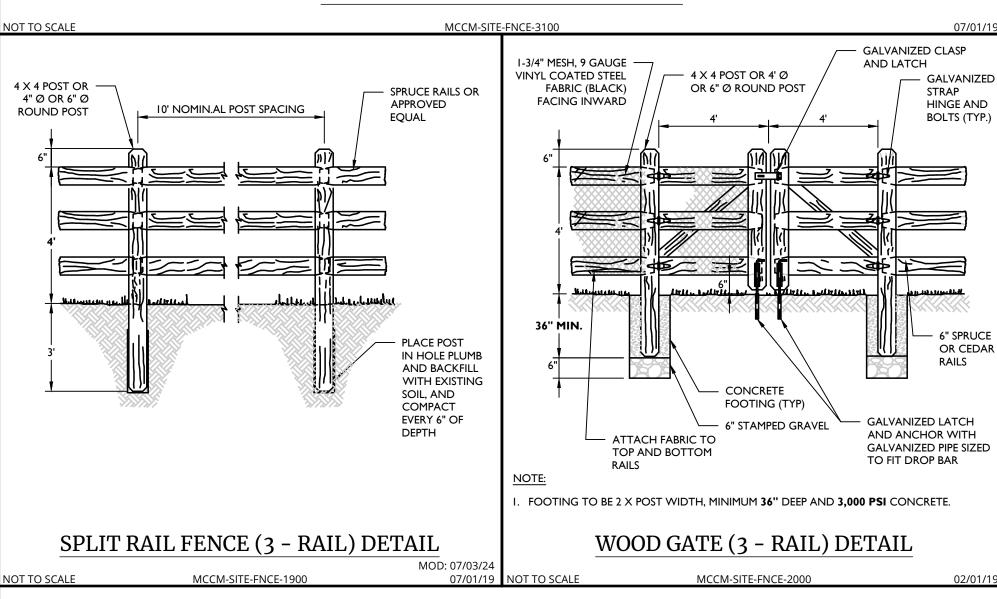
- GATE SHALL BE USE FOR EMERGENCY ACCESS ONLY
- GATE TO BE HINGED ONLY. NO LOCKS ARE TO BE USED AT ANYTIME

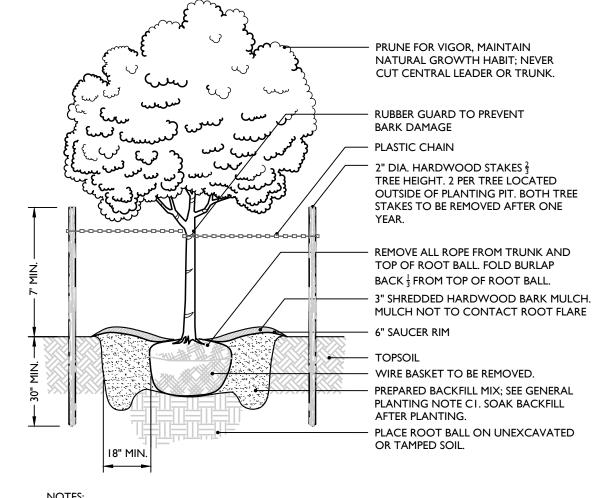
### EMERGENCY ACCESS DOUBLE GATE DETAIL



- GATE SHALL BE USE FOR EMERGENCY ACCESS ONLY
- GATE TO BE HINGED. NO LOCKS ARE TO BE USED AT ANYTIME.

### EMERGENCY ACCESS GATE DETAIL



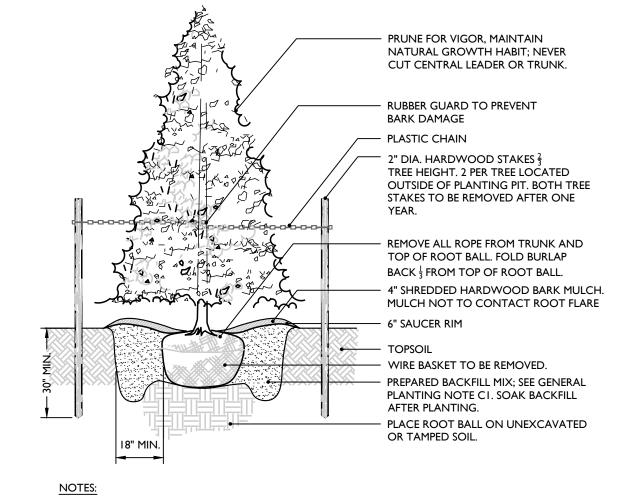


NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT. 2. PLANTING DEPTH SHALL BE THE SAME OR HIGHER AS GROWN IN NURSERY.

### TREE PLANTING DETAIL

MOD: 01/19/24

IOT TO SCALE

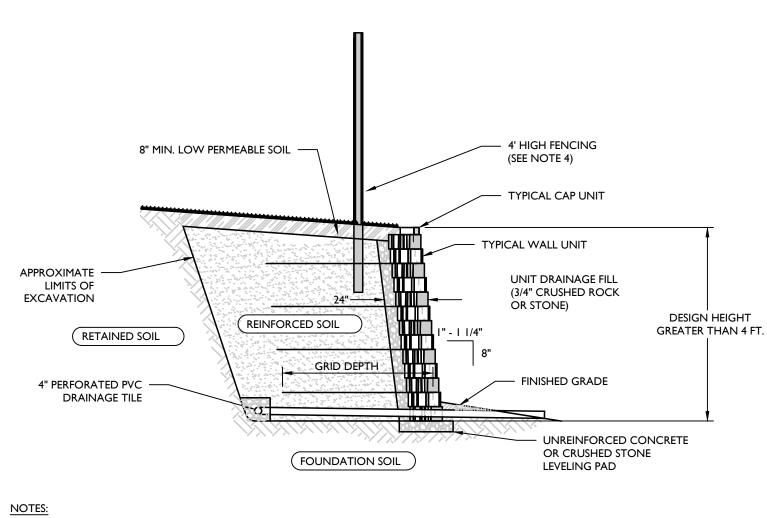


NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT. PLANTING DEPTH SHALL BE THE SAME OR HIGHER AS GROWN IN NURSERY.

# EVERGREEN TREE PLANTING DETAIL

## GENERAL PLANTING NOTES

- I. THIS PLAN SHALL BE USED FOR LANDSCAPE PLANTING PURPOSES ONLY. EXAMINE ALL ENGINEERING DRAWINGS AND FIELD CONDITIONS FOR SPECIFIC LOCATIONS OF UTILITIES AND STRUCTURES AND NOTIFY THE LANDSCAPE ARCHITECT OF ANY DISCREPANCIES OR LOCATION CONFLICTS PRIOR TO PLANTING INSTALLATION.
- 2. THE CONTRACTOR IS RESPONSIBLE TO LOCATE AND VERIFY LOCATION OF ALL UTILITIES ON SITE PRIOR TO CONSTRUCTION. 3. ALL PLANT MATERIAL SHALL CONFORM TO GUIDELINES AS SET FORTH IN THE LATEST EDITION OF THE AMERICAN ASSOCIATION OF NURSERYMEN'S STANDARD FOR NURSERY STOCK OR THE PLANT MATERIAL WILL BE UNACCEPTABLE. ALL PLANT MATERIAL SHALL BE TRUE TO SPECIES, VARIETY, SIZE AND BE CERTIFIED DISEASE AND INSECT FREE. THE OWNER AND/OR THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO APPROVE ALL PLANT MATERIAL ON SITE PRIOR TO
- 4. NO PLANT SUBSTITUTIONS SHALL BE PERMITTED WITH REGARD TO SIZE, SPECIES, OR VARIETY WITHOUT WRITTEN PERMISSION OF THE LANDSCAPE CONSULTANT. WRITTEN PROOF OF PLANT MATERIAL UNAVAILABILITY MUST BE DOCUMENTED. 5. THE LOCATION OF ALL PLANT MATERIAL INDICATED ON THE LANDSCAPE PLANS ARE APPROXIMATE. THE FINAL LOCATION OF ALL PLANT MATERIAL AND PLANTING BED LINES SHALL BE DETERMINED IN THE FIELD UNDER THE DIRECTION OF THE LANDSCAPE ARCHITECT.
- 6. ALL STREET TREES AND SHADE TREES PLANTED NEAR PEDESTRIAN OR VEHICULAR ACCESS SHOULD NOT BE BRANCHED LOWER THAN 7'-0" ABOVE GRADE. ALL PLANT MATERIAL LOCATED WITHIN SIGHT TRIANGLE EASEMENTS SHALL NOT EXCEED A MATURE HEIGHT OF 30" ABOVE THE ELEVATION OF THE ADJACENT CURB. ALL STREET TREES PLANTED IN SIGHT TRIANGLE EASEMENTS SHALL BE PRUNED TO NOT HAVE BRANCHES BELOW 10'-0".
- 7. THE PLANTING PLAN SHALL TAKE PRECEDENCE OVER THE PLANT SCHEDULE SHOULD ANY PLANT QUANTITY DISCREPANCIES OCCUR. 8. ALL PLANT MATERIAL SHALL BE PROPERLY INSTALLED IN CONFORMANCE WITH
- THE TYPICAL PLANTING DETAILS. INSTALL ALL PLANT MATERIAL ON UNDISTURBED GRADE. CUT AND REMOVE JUTE BURLAP FROM TOP ONE-THIRD OF THE ROOT BALL. WIRE BASKETS AND NOT JUTE BURLAP SHALL BE COMPLETELY REMOVED PRIOR TO BACKFILLING THE PLANT PIT. 9. BRANCHES OF DECIDUOUS TREES SHALL BE PRUNED BACK BY NO MORE THAN ONE QUARTER (1/4) TO BALANCE THE TOP GROWTH WITH ROOTS AND TO PRESERVE
- THEIR CHARACTER AND SHAPE. THE CENTRAL LEADER OF TREE SHALL NOT BE PRUNED. 10. PROVIDE PLANTING PITS AS INDICATED ON PLANTING DETAILS. BACKFILL PLANTING PITS WITH ONE PART EACH OF TOPSOIL, PEAT MOSS AND PARENT MATERIAL. IF WET SOIL CONDITIONS EXIST THEN PLANTING PITS SHALL BE EXCAVATED AN ADDITIONAL 12" AND FILLED WITH CRUSHED STONE OR UNTIL FREE DRAINING.
- II. ALL PLANT MATERIAL SHALL BEAR THE SAME RELATION TO FINISHED GRADE AS IT BORE TO EXISTING GRADE AT NURSERY.
- 12. OPTIMUM PLANTING TIME: DECIDUOUS - APRIL I TO JUNE I & OCTOBER 15 TO NOVEMBER 30. CONIFEROUS - APRIL I TO JUNE I & SEPTEMBER I TO NOVEMBER I. PLANTING OUTSIDE OF THE OPTIMUM DATES SHALL NOT BE CONDUCTED WITH OUT PRIOR APPROVAL FROM THE LANDSCAPE
- 13. NEWLY INSTALLED PLANT MATERIAL SHALL BE WATERED AT THE TIME OF INSTALLATION. REGULAR WATERING SHALL BE PROVIDED TO ENSURE THE ESTABLISHMENT. GROWTH AND SURVIVAL OF ALL PLANTS. WATERING AMOUNTS SHOULD BE ADJUSTED AS RAIN EVENTS OCCUR. WATERING AFTER THE INITIAL 4 WEEKS SHALL BE ADJUSTED BASED ON SEASONAL CONDITIONS. WATERING SHALL NOT TAKE PLACE DURING THE HOTTEST POINT OF THE DAY.
- 14. ALL PLANT MATERIAL SHALL BE GUARANTEED FOR TWO YEARS AFTER THE DATE OF FINAL ACCEPTANCE. ANY PLANT MATERIAL THAT DIES WITHIN THAT TIME PERIOD SHALL BE REMOVED, INCLUDING THE STUMP, AND REPLACED BY A TREE OF SIMILAR SIZE AND SPECIES AT NO EXPENSE TO THE OWNER.
- 15. THE LANDSCAPE CONTRACTOR SHALL PROVIDE A MINIMUM 4" LAYER OF TOPSOIL IN ALL LAWN AREAS AND A MINIMUM OF 12" OF TOPSOIL IN ALL PLANTING AREAS. A FULL SOIL ANALYSIS SHALL BE CONDUCTED AFTER CONSTRUCTION AND PRIOR TO PLANTING TO DETERMINE THE EXTENT OF SOIL AMENDMENT REQUIRED. SOIL PH SHOULD BE 5.5-6.5. 16. ALL DISTURBED LAWN AREAS SHALL BE STABILIZED WITH SEED AS INDICATED
- ON THE LANDSCAPE PLANS. TEMPORARY SEEDING SHALL BE IN ACCORDANCE WITH THE GENERAL SEEDING NOTES ON THIS SHEET. ALL DISTURBED LAWN AREAS SHALL BE TOPSOILED, LIMED, FERTILIZED AND FINE GRADED PRIOR TO LAWN INSTALLATION.
- 17. ALL PLANTING BEDS SHALL RECEIVE 3" OF SHREDDED HARDWOOD BARK MULCH.
- 18. ALL SHRUB MASSES SHALL BE PLANTED IN CONTINUOUS MULCHED BEDS.
- 19. ALL PLANTING DEBRIS (WIRE, TWINE, RUBBER HOSE, BACKFILL ETC.) SHALL BE REMOVED FROM THE SITE AFTER PLANTING IS COMPLETE. PROPERTY IS TO BE LEFT IN A NEAT ORDERLY CONDITION IN ACCORDANCE WITH ACCEPTED PLANTING



- I. THIS DETAIL IS A SCHEMATIC REPRESENTATION FOR MUNICIPAL AND/OR AGENCY APPROVALS AND IS NOT INTENDED TO BE USED FOR CONSTRUCTION.
- 3. MODULAR CONCRETE BLOCK WALL TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- 4. A SAFETY BARRIER (FENCING) IS REQUIRED ON ALL WALLS WHERE THE WALL HEIGHT EXCEEDS 30". PLACEMENT AND INSTALLATION METHOD OF THE PROPOSED FENCING TO BE IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

# (1" TO 1-1/4" SETBACK) DETAIL

TO FIRST BRANCH.

- 6" SAUCER RIM

FINISHED GRADE

TOP OF ROOT BALL.

NOTE No. 10

TAMPED SOIL

120 LBS/ACRE

30 LBS/ACRE

MULTI-STEM TREE PLANTING DETAIL

**GENERAL SEEDING NOTES** 

I. TEMPORARY SEEDING SHALL CONSIST OF PERENNIAL RYEGRASS IN LAWN AREAS AND

2. PERMANENT SEEDING SHALL CONSIST OF THE FOLLOWING MIXTURE OR APPROVED

ANNUAL RYEGRASS IN AREAS TO BE SEEDED WITH A MEADOW MIX APPLIED AT A

RATE OF 1.0 LBS. PER 1000 SF OR SPRING OATS APPLIED AT A RATE OF 2.0 LBS. PER

DISTURBED AREAS ARE PERMANENTLY STABILIZED WITH PERMANENT SEEDING.

EQUAL - OPTIMUM SEEDING DATES ARE BETWEEN APRIL I AND MAY 31: AND

KENTUCKY BLUE GRASS (BLEND) 40 LBS/ACRE

1000 SF. TEMPORARY SEEDING SHALL BE MULCHED AND MAINTAINED UNTIL

VARIES

AUGUST 16 AND OCTOBER 15.

I) LAWN AREAS MIXTURE

HARD FESCUE

PERENNIAL RYE GRASS

CREEPING RED FESCUE (30%)

8.0% CANADA WILDRYE (ELYMUS CANADENSIS)

3.1% SWITCHGRASS (PANICÙM VIRGATUM)

0.8% LANCELEAF COREOPSIS (COREOPSIS)

0.8% BLACKEYED SUSAN (RUDBECKIA HIRTA)

0.3% WILD BERGAMOT (MONARDA FISTULOSA)

0.1% CALICA ASTER (ASTER LATERIFLORUS)

0.1% HEATH ASTER (ASTER PILLOSUS)

0.2% COMMON MILKWEED (ASCLEPIAS SYRIACA)

3.2% AUTUMN BENTGRASS (AGROSTIS PERENNANS)

2.4% DEERTONGUE (OANICUM CLANDESTINUM)

1.2% PURPLE CONEFLOWER (ECHINACEA PURPUREA)

I.1% PARTRIDGE PEA (CHAMAECRISTA FASCICULATA)

0.9% OXEYE SUNFLOWER (HELIOPSIS HELIANTHOIDES)

0.2% WRINKLELEAF GOLDENROD (SOLIDAGO RUGOSA)

3. PERMANENT SEEDING TO BE APPLIED BY RAKING OR DRILLING INTO THE SOILS AT A RATE OF 150# PER ACRE, SLOPED AREA TO BE COVERED WITH MULCH AS

4. FERTILIZER FOR THE ESTABLISHMENT OF TEMPORARY AND PERMANENT VEGETATIVE

5. IF SEASON PREVENTS THE ESTABLISHMENT OF TEMPORARY OR PERMANENT SEEDING, EXPOSED AREA TO BE STABILIZED WITH MULCH AS INDICATED IN NOTE 6.

7. WORK LIME AND FERTILIZER INTO SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4

BE ROLLED TO FIRM THE SEEDBED WHEREVER FEASIBLE.

THE AREA MUST BE RETILLED AND FIRMED AS ABOVE.

WOOD AND FIBER MULCH BINDER OR AN APPROVED EQUAL. MULCH WILL BE

SPREAD AT RATES OF 90 TO 115 LBS. PER 1000 SF AND ANCHORED WITH A MULCH ANCHORING TOOL OR LIQUID MULCH BINDER, AND SHALL BE PROVIDED ON ALL

EEDINGS. HYDROMULCH SHALL ONLY BE USED DURING OPTIMUM GROWING

INCHES WITH A DISC, SPRINGTOOTH HARROW, OR OTHER SUITABLE EQUIPMENT.

GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM, FINE

SEEDBED IS PREPARED. ALL BUT CLAY OR SILTY SOILS AND COARSE SANDS SHOULD

THE FINAL HARROWING OR DISCING OPERATION SHOULD BE ON ON THE

8. REMOVE FROM THE SURFACE ALL STONES TWO INCHES OR LARGER IN ANY DIMENSION.

REMOVE ALL OTHER DEBRIS, SUCH AS WIRE, CABLE, TREE ROOTS, PIECES OF

9. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED,

CONCRETE, CLODS, LUMPS, OR OTHER UNSUITABLE MATERIAL.

6. MULCH TO CONSIST OF SMALL GRAIN STRAW OR SALT HAY ANCHORED WITH A

TEST PRIOR TO FERTILIZER APPLICATION IS RECOMMENDED.

COVER SHALL BE IN COMPLIANCE WITH THE LATEST NYSDEC REGULATIONS. A SOIL

(ERNMX# ERNMX-181-1 BY ERNST SEEDS OR APPROVED EQUAL)

20.8% INDIANGRASS, PA ECOTYPE (SORGHASTRUM NUTANS, PA ECOTYPE)

11.2% BIG BLUESTEM, 'NIAGARA' (ANDROPOGON GERARDII, 'NIAGRA)

5.6% VIRGINIA WILDRYE, MADISON-NY ECOTYPE (ELYMUS VIRGINICUS )

PERENNIAL RYE GRASS (10%) BIRDSFOOT TREFOIL (30%)

3) NATIVE STEEP SLOPE MIX WITH GRAIN OATS

SEEDING RATE: 75 LBS PER ACRE.

40.0% OATS, (AVENA SATIVA)

SPECIES LIST:

INDICATED IN NOTE 5.

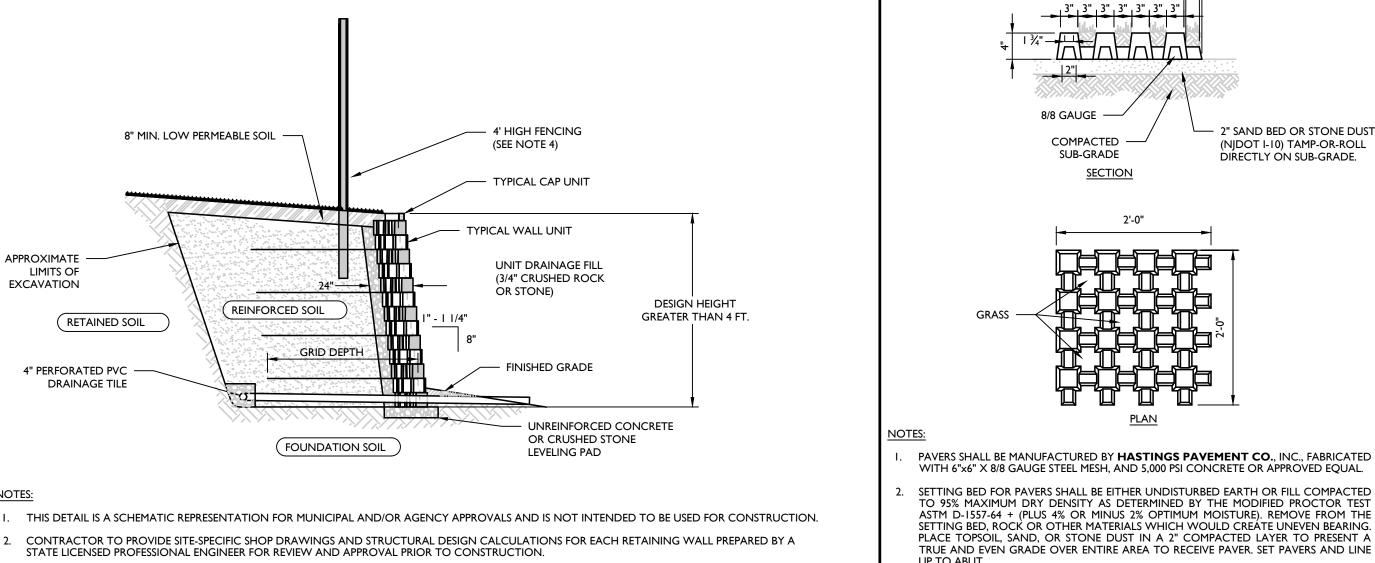
2) BASIN MIX - (2-3 LBS./1,000 S.F. MINIMUM)

TALL FESCUE (30%)

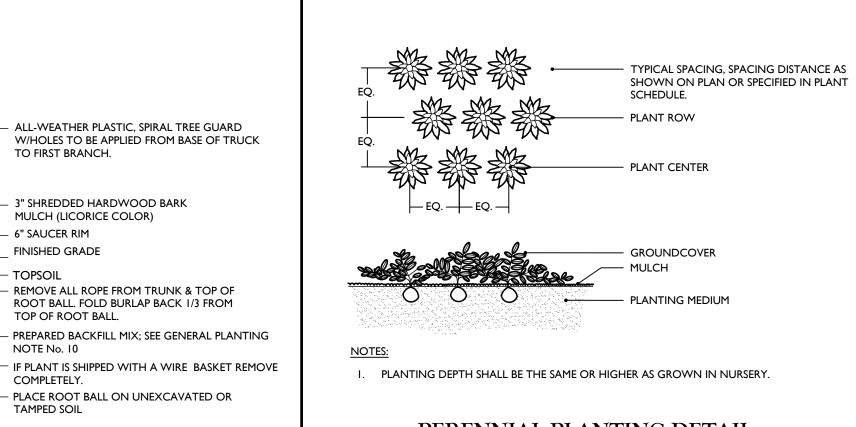
18"MIN.——

3" SHREDDED HARDWOOD BARK

MULCH (LICORICE COLOR)



TYPICAL REINFORCED WALL SECTION



OT TO SCALE

NOTES:

## PERENNIAL PLANTING DETAIL

THOROUGHLY MIX LIME, FERTILIZER AND OTHER ADDITIVES PER LOCAL SOIL

CONSERVATION REQUIREMENTS WITH THE TOPSOIL AND SPREAD LOOSELY TO FILE

VOIDS IN PAVERS, WATER WITH A MIST SPRAY TO SETTLE, ADD ADDITIONAL TOPSOIL

ADD SEED MIX AS PER LOCAL SOIL CONSERVATION DISTRICT AND PROJECT

LANDSCAPING REQUIREMENTS AND APPLY SEED AT SLIGHTLY LESS THAN NORMAL

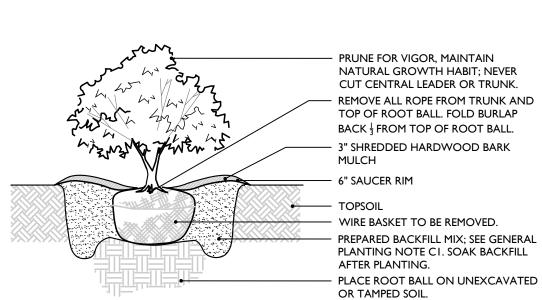
MIX TO BRING THE TOPSOIL FLUSH WITH TOP OF THE PAVER.

RATE, AND MULCH. WHEN GRASS IS 2 1/2" HIGH, CUT TO 1 3/4".

GRASS PAVERS (FOR

**EMERGENCY/MAINTENANCE** 

ACCESS DRIVE) DETAIL



. NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT. PLANTING DEPTH SHALL BE THE SAME OR HIGHER AS GROWN IN NURSERY.

# SHRUB PLANTING DETAIL

NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT. MULCH SHALL

- . PLANTING DEPTH SHALL BE THE SAME OR HIGHER AS GROWN IN NURSERY.
- . WIRE BASKETS AND NON-JUTE BURLAP MUST BE ENTIRELY REMOVED FROM THE ROOT BALL. JUTE BURLAP MUST BE REMOVED FROM THE TOP 1/3 OF THE ROOT BALL.
- . DEPTH OF PLANT PIT SHALL BE INCREASED BY I 2" WHEREVER POOR SOIL CONDITIONS OCCUR, WITH THE ADDITION OF LOOSE AGGREGATE.
- . CONTRACTOR SHALL PARTIALLY FILL WITH WATER A REPRESENTATIVE NUMBER OF PITS IN EACH AREA OF THE PROJECT PRIOR TO PLANTING TO DETERMINE IF THERE IS ADEQUATE PERCOLATION. IF PIT DOESN'T PERCOLATE, MEASURES MUST BE TAKEN TO ASSURE
- . PLANTING MUST BE GUARANTEED FOR TWO FULL GROWING SEASONS FROM THE TIME OF FINAL ACCEPTANCE BY THE LANDSCAPE CONSULTANT. CONTRACTOR SHALL REMOVE ALL WRAPPING AT THE END OF GUARANTEE PERIOD OR SOONER PER PROJECT LANDSCAPE
- BACKFILL MIXTURE TO BE SPECIFIED BASED UPON SOIL TEST AND CULTURAL

PROPER DRAINAGE BEFORE PLANTING.

PRUNE DAMAGED AND CONFLICTING BRANCHES MAINTAINING NORMAL TREE SHAPE, NEVER CUT CENTRAL TRUNK OR LEADER.

PLANT DETAIL NOTES





Engineering

& Design

www.colliersengineering.com

copied reused disclosed distributed or relied upon for any other pur

FOR STATE SPECIFIC DIRECT PHONE NUMBERS

VISIT: WWW CALL811 COM

AVATORS, DESIGNERS, OR ANY PEF

PREPARING TO DISTURB THE EARTH SURFACE ANYWHERE IN ANY STATE

Jesse Barrett Cokeley NEW YORK LICENSED PROFESSIONAL ENGINEER LICENSE NUMBER: 090987-01 COLLIERS ENGINEERING & DESIGN CT, P.C.

N.Y. C.O.A #: 0017609

PRELIMINARY SITE PLAN

PROJECT AL FOXIE

622 ROUTE 303 LLC

SBL: 65.14-1-11.2 & 11.3

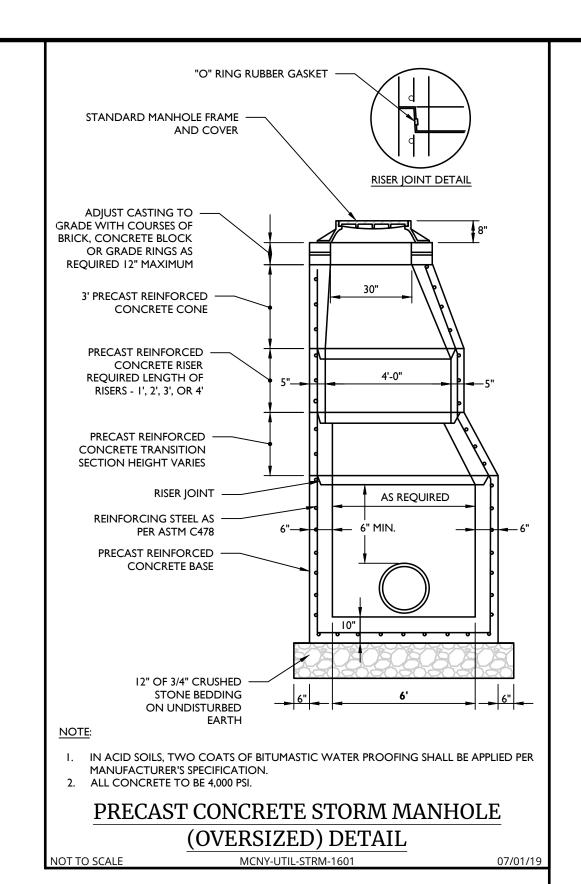
TOWN OF ORANGETOWN ROCKLAND COUNTY NEW YORK STATE

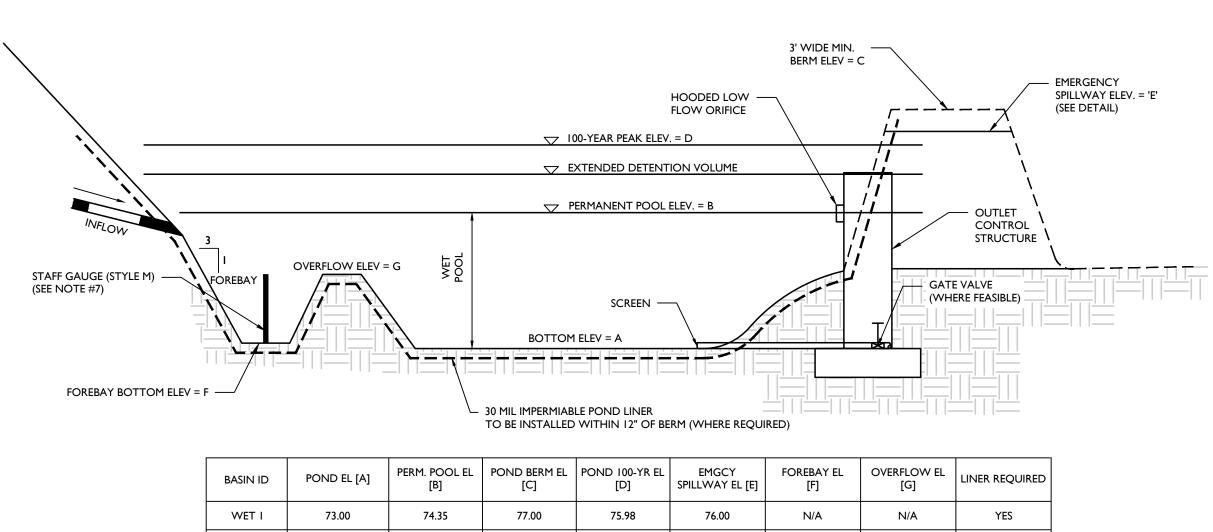
300 TICE BOULEVARD **Colliers** Suite 101 WOODCLIFF LAKE, 07677 Phone: 845.352.0411 Engineering COLLIERS ENGINEERING & DESIGN, INC. & Design DOING BUSINESS AS MASER CONSULTIN

22002634A

WOODCLIFF LAKE

SITE DETAILS





BASIN ID	POND EL [A]	PERM. POOL EL [B]	POND BERM EL [C]	POND 100-YR EL [D]	EMGCY SPILLWAY EL [E]	FOREBAY EL [F]	OVERFLOW EL [G]	LINER REQUIRED
WET I	73.00	74.35	77.00	75.98	76.00	N/A	N/A	YES
WET 5	83.00	83.40	87.00	85.94	86.50	82.00	85.10	NO
DET I	74.00	N/A	80.00	78.98	79.00	N/A	N/A	NO
DET 2	76.00	N/A	82.00	82.98	83.00	N/A	N/A	NO

- HDPE PIPE

3/4" CRUSHED

SPRINGLINE

CRUSHED STONE.

STONE COMPACTED IN MAX. 9" LIFTS.

OF AT LEAST 4" BELOW THE PIPE.

MINIMUM TRENCH WIDTH PER MANUFACTURER'S RECOMMENDATIONS.

PAVEMENT DETAIL SHALL BE IN ACCORDANCE WITH THIS DETAIL.

FOR INSTALLATION IN PAVEMENT, REFER TO THE APPLICABLE PAVEMENT DETAIL TO

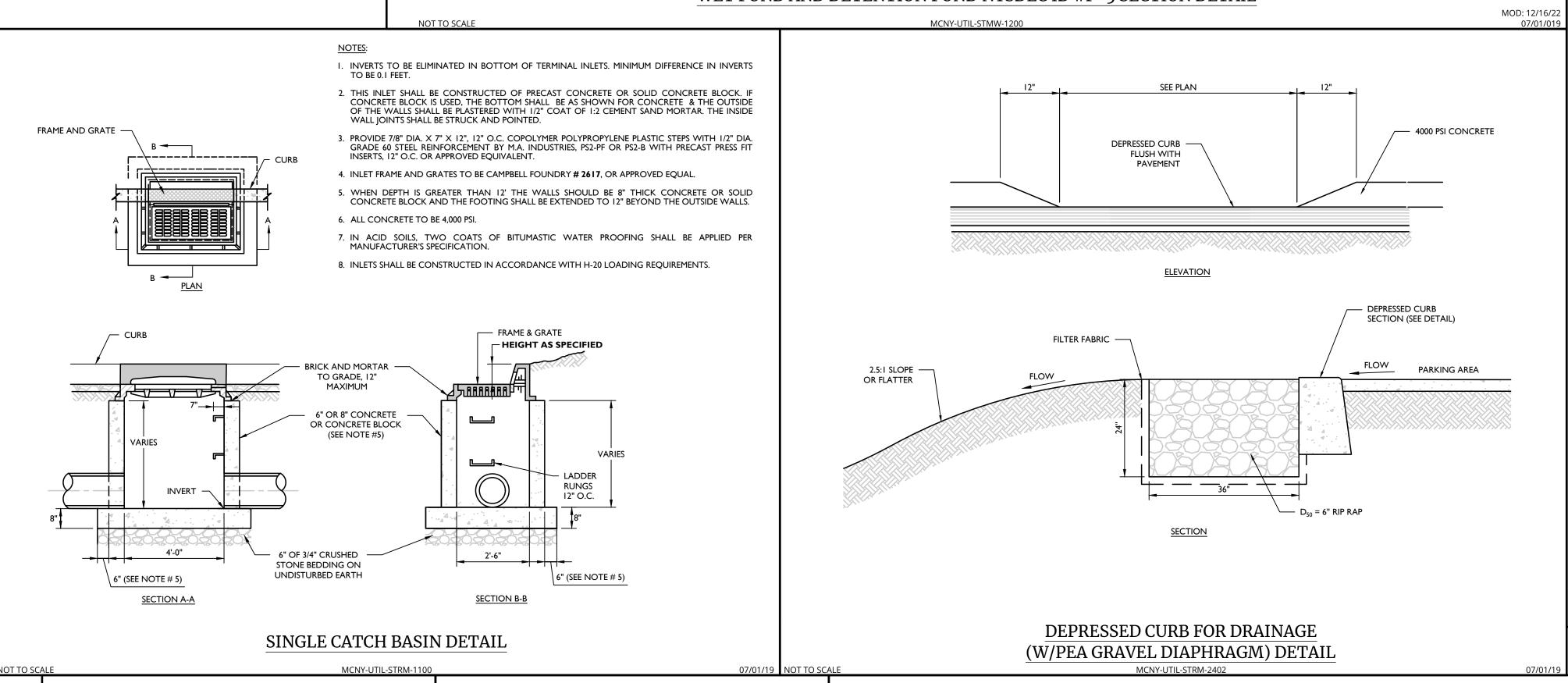
HDPE STORM PIPE

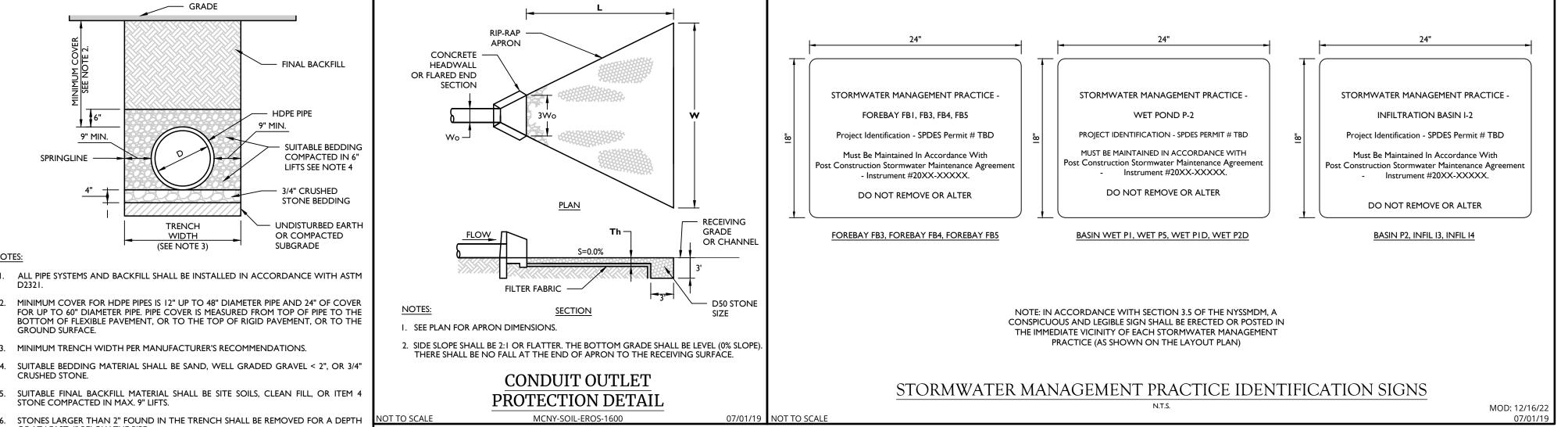
**BEDDING DETAIL** 

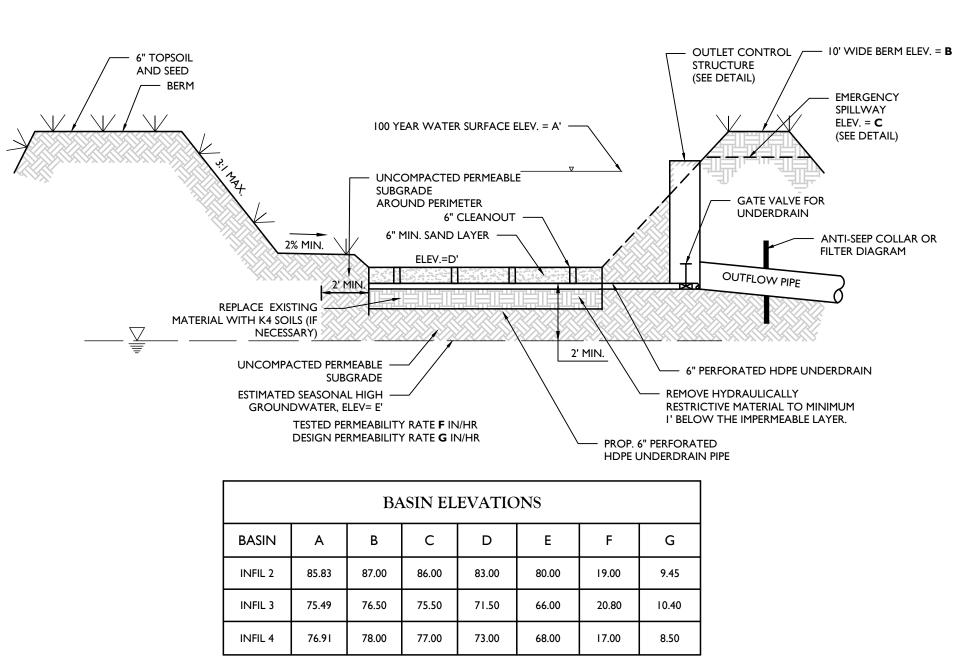
ESTABLISH FINAL GRADE. BACKFILL REQUIREMENTS BEYOND THE DEPTH OF THE

- I. ALL EARTHWORK OPERATIONS, INCLUDING EXCAVATION, PROOFROLLING, GRADING AND BACKFILL OPERATIONS SHALL BE CONDUCTED UNDER THE SUPERVISION OF A NEW YORK LICENSED PROFESSIONAL ENGINEER.
- 2. FILL MATERIAL AND LINER INSTALLATION SHALL BE INSPECTED, APPROVED BY, AND INSTALLED UNDER THE SUPERVISION OF A NEW YORK LICENSED PROFESSIONAL ENGINEER.
- 3. THE FILL MATERIAL TO BE UTILIZED FOR THE BERM/EMBANKMENT AT THE WET POND SHALL BE AS FOLLOWS: THE BERMS SHALL BE CONSTRUCTED WITH SOIL FILL THAT HAS AN IN-SITU PERMEABILITY NO GREATER THAN 0.4 IN/HR. THE BERM/EMBANKMENT FILL SHALL BE PLACED IN 12 INCH LAYERS AND COMPACTED TO 95% MAXIMUM MODIFIED PROCTOR DENSITY (ASTM D-1557). EACH LIFT SHALL BE INSPECTED, TESTED, AND APPROVED BY A NEW YORK LICENSED PROFESSIONAL ENGINEER PRIOR TO THE PLACEMENT OF SUBSEQUENT LIFTS.
- 4. THE CONTRACTOR SHALL NOTIFY THE UNDERSIGNED PROFESSIONAL IMMEDIATELY IF SOIL CONDITIONS ENCOUNTERED IN THE FIELD DIFFER FROM WHAT IS SHOWN HEREON. SUCH
- CONDITIONS COULD RENDER THE DESIGN HEREON INAPPROPRIATE OR INEFFECTIVE. 5. ALL SUBMERGED PIPES INTO OR OUT OF A WET POND SHALL BE CONSTRUCTED USING WATERTIGHT JOINTS. REINFORCED CONCRETE PIPE JOINTS SHALL MEET ASTM C361 OR C443, PLASTIC PIPE JOINTS SHALL MEET ASTM D3212 AND DUCTILE IRON PIPE JOINTS SHALL CONFORM TO ANSI/AWWA C111/A21.11, ALL LATEST EDITIONS. HDPE PIPE SHALL NOT BE UTILIZED IN SUBMERGED
- 6. GROUNDWATER SHALL BE CONTROLLED BY THE CONTRACTOR AT ALL TIMES.
- 7. STAFF GAUGE SHALL BE 2.5" WIDE, DIVIDED INTO INCHES WITH EACH FOOT NUMBERED. GAUGES FOR ANY ELEVATION MAY BE ASSEMBLED BY USING SEPARATE FIGURE PLATES.

# WET POND AND DETENTION POND NYSDEC ID #P-5 SECTION DETAIL







### ABOVE GROUND INFILTRATION BASIN CONSTRUCTION NOTES:

- I. CONTRACTOR SHALL PROCURE THE SERVICES OF A NEW YORK LICENSED PROFESSIONAL ENGINEER TO PERFORM REGULAR OVERSIGHT OF THE CONSTRUCTION OF THE INFILTRATION BASIN TO ENSURE ITS EFFECTIVENESS. THE FOLLOWING REQUIRED OVERSIGHT ACTIVITIES INCLUDING, BUT NOT LIMITED TO: a. PARTICIPATION BY THE ENGINEER AND CONTRACTOR AT A PRE-CONSTRUCTION MEETING TO REVIEW THE CONTRACTOR'S FAMILIARITY WITH CONSTRUCTION OF THE BASIN. b. THE CONTRACTOR SHALL IDENTIFY THE CONSTRUCTION EQUIPMENT TO BE USED FOR THE BASIN CONSTRUCTION AND THE CONSTRUCTION TECHNIQUES THAT WILL BE USED
- TO MINIMIZE COMPACTION OF THE INFILTRATION AREA. c. ENSURING THAT EARTHWORK DOES NOT OCCUR WITHIN THE LIMITS OF THE BASIN WHEN THE SOIL MOISTURE CONTENT IS ABOVE THE LOWER PLASTIC LIMIT AND THAT THE SPECIFICATIONS OF THE REPLACEMENT SOIL ARE MET.
- d. TEST EACH SOIL LAYER WHERE THE PERMEABILITY RATE IS CRITICAL PRIOR TO THE PLACEMENT OF A NEW LAYER TO ENSURE THAT THE PERMEABILITY RATE HAS BEEN RETAINED. e. THE CONTRACTOR SHALL ENSURE THAT PROPER PRECAUTIONS ARE TAKEN TO PREVENT SEDIMENT FROM ENTERING THE INFILTRATION AREA DURING CONSTRUCTION.
- 2. THE CONTRACTOR SHALL NOTIFY THE UNDERSIGNED PROFESSIONAL IMMEDIATELY IF SOIL CONDITIONS ENCOUNTERED IN THE FIELD DIFFER FROM WHAT IS SHOWN HEREON. SUCH CONDITIONS COULD RENDER THE DESIGN HEREON INAPPROPRIATE OR INEFFECTIVE.

COMPLETELY STABILIZED

A. PRE-CONSTRUCTION:

- I. DURING CLEARING AND GRADING OF THE SITE, MEASURES MUST BE TAKEN TO ELIMINATE SOIL COMPACTION AT THE LOCATION OF THE PROPOSED INFILTRATION BASIN. 2. THE LOCATION OF THE PROPOSED INFILTRATION BASIN MUST BE CORDONED OFF DURING CONSTRUCTION TO PREVENT COMPACTION OF THE SUBSOIL BY CONSTRUCTION EQUIPMENT OR STOCKPILES. EXCAVATION AND CONSTRUCTION OF THE INFILTRATION BASIN MUST BE PERFORMED USING EQUIPMENT PLACED OUTSIDE THE LIMITS OF THE BASIN. IF THE SIZE THE BASIN PRECLUDES THIS APPROACH, EXCAVATION SHALL BE PERFORMED FROM THE INSIDE OUT SUCH THAT ALL EQUIPMENT UTILIZED WITHIN THE BASIN IS AT LEAST 2 FEET ABOVE THE FINAL EXCAVATION DEPTH.
- 3. EXCAVATION FOR THE INFILTRATION BASIN MUST BE AT LEAST 6 INCHES ABOVE THE FINAL EXCAVATION DEPTH IF IMPORTED SAND IS TO BE UTILIZED FOR THE ENGINEERED SAND LAYER, EXCAVATION MAY BE TO THE DESIGN ELEVATION OF THE INFILTRATION BASIN BOTTOM IF IN-SITU SAND MEETS THE SPECIFICATIONS AND IS TO BE UTILIZED FOR THE ENGINEERED SAND LAYER. THE USE OF THE LOCATION PROPOSED FOR AN INFILTRATION BASIN AS A SEDIMENT BASIN DURING CONSTRUCTION IS PROHIBITED
- 4. THE BASIN BOTTOM SHALL BE CLEARED OF SEDIMENT AND UNSUITABLE MATERIALS SHALL BE REMOVED PERIODICALLY AS NECESSARY AND PRIOR TO FINAL EXCAVATION. THE EXCAVATION TO FINAL SUBSOIL DEPTH AND INSTALLATION OF THE ENGINEERED SAND LAYER OR IF APPLICABLE TO THE FINAL DESIGN ELEVATION OF THE INFILTRATION BASIN BOTTOM MAY ONLY OCCUR AFTER ALL SITE CONSTRUCTION WITHIN ITS DRAINAGE AREA IS COMPLETED AND THE DRAINAGE AREA, INCLUDING THE BASIN SIDE SLOPES, IS
- 5. JE CONSTRUCTION OF THE INFILTRATION BASIN CANNOT BE DELAYED BY INSTALLING TEMPORARY STORMWATER MANAGEMENT MEASURES. SEDIMENT BARRIERS. MUST BE PLACED AROUND THE ENTIRE PERIMETER OF THE BASIN BOTTOM DURING ALL PHASES OF CONSTRUCTION TO DIVERT ALL FLOWS AWAY FROM THE BASIN. INLET FOREBAYS (CONSTRUCTED USING SEDIMENT BARRIERS) MUST BE PLACED AROUND ALL BASIN INLET PIPES CONDUIT OUTLET PROTECTION. THE SEDIMENT BARRIERS REQUIRED HEREIN MAY NOT BE REMOVED UNTIL ALL SITE CONSTRUCTION WITHIN THE BASIN DRAINAGE AREA IS COMPLETED, AND THE DRAINAGE AREA, INCLUDING THE BASIN SIDE SLOPES, IS COMPLETELY STABILIZED. ALL EARTHWORK OPERATIONS. INCLUDING EXCAVATION. GRADING AND BACKFILL OPERATIONS SHALL BE CONDUCTED UNDER THE SUPERVISION OF A NEW YORK LICENSEI PROFESSIONAL ENGINEER AND CERTIFIED TO INSTALLATION OF SUCH PROVIDED. IF APPLICABLE, EXCAVATIONS TO REMOVE HYDRAULICALLY RESTRICTIVE MATERIAL SHALL EXTEND
- A MINIMUM OF I' BELOW THE IMPERMEABLE LAYER AND REMOVAL OF THE MATERIAL SHALL BE WITNESSED AND CERTIFIED BY A PROFESSIONAL ENGINEER. 7. THE REPLACEMENT MATERIAL MUST MEET ALL SPECIFICATIONS FOR CLEAN, COARSE SAND IN ACCORDANCE WITH AASHTO M-6 OR ASTM C-33 MEETING AGGREGRATE SIZE GRADATION SIZE NO. 10 (AASHTO M-43), AND THE MINIMUM TESTED PERMEABILITY RATE IS 8 INCHES PER HOUR, AS CERTIFIED BY A NY LICENSED PROFESSIONAL ENGINEER. CONTRACTOR SHALL PROVIDE THE DESIGN ENGINEER WITH A SUBMITTAL CONFIRMING THE REQUIREMENTS ARE MET.
- 8. PRIOR TO INSTALLATION OF THE ENGINEERED SAND LAYER THE PERMEABILITY RATE OF THE IN-SITU UNDERLYING OR REPLACEMENT SOILS SHALL BE CONFIRMED BY A NEW YORK LICENSED PROFESSIONAL ENGINEER TO MEET THE MINIMUM DESIGN PERMEABILITY RATE. THE BASIN INFILTRATION RATE SHALL BE CERTIFIED BY A NEW YORK LICENSED PROFESSIONAL ENGINEER, THAT IT MEETS THE MINIMUM DESIGN PERMEABILITY RATE. RESULTS OF THE PERMEABILITY TESTS SHALL BE PROVIDED TO THE DESIGN ENGINEER IN WRITING PRIOR TO THE PLACEMENT OF THE SAND LAYER. SEE PERMEABILITY TESTING REQUIREMENTS BELOW.
- 9. ONCE THE FINAL GRADING PHASE OF A SURFACE INFILTRATION BASIN IS REACHED, THE BOTTOM OF THE BASIN SHALL BE DEEPLY TILLED WITH A ROTARY TILLER OR DISC HARROW AND THEN SMOOTHED OUT WITH A LEVELING DRAG OR EQUIVALENT GRADING EQUIPMENT. THESE PROCEDURES SHOULD PREFERABLY BE PERFORMED WITH EQUIPMENT LOCATED OUTSIDE THE BASIN BOTTOM. IF THIS IS NOT POSSIBLE, IT SHOULD BE PERFORMED WITH LIGHT-WEIGHT, RUBBER-TIRED EQUIPMENT. TILLING OPERATIONS SHALL BE WITNESSED AND
- 10. THE BOTTOM ENGINEERED SAND LAYER MUST MEET ALL SPECIFICATIONS FOR CLEAN, COARSE SAND IN ACCORDANCE WITH AASHTO M-6 OR ASTM C-33 MEETING AGGREGRATE SIZE GRADATION SIZE NO. 9 (AASHTO M-43), THE MAXIMUM PERCENTAGE OF FINES IS 15% FINES AND THE MINIMUM TESTED PERMEABILITY RATE IS 20 INCHES PER HOUR. THE ABOVE MATERIAL MUST BE CERTIFIED BY A NJ LICENSED PROFESSIONAL ENGINEER. CONTRACTOR SHALL PROVIDE THE DESIGN ENGINEER WITH A SUBMITTAL CONFIRMING THE
- REQUIREMENTS ARE MET II. INCORPORATE MULCH INTO INFILTRATION BASIN SOIL TO MITIGATE PROBLEMS WITH SOIL FERTILITY AS A COLD CLIMATE DESIGN CONSIDERATION

### 12. THE GATE VALVE WITHIN THE OUTLET STRUCTURE SHALL REMAIN CLOSED AT ALL TIMES, EXCEPT FOR PERIODS OF MAINTENANCE. C. PERMEABILITY TESTING REQUIREMENTS:

- I. PERMEABILITY TESTING MUST BE PERFORMED ON THE AS-BUILT INFILTRATION BASIN IN ACCORDANCE WITH THE CONSTRUCTION AND POST-CONSTRUCTION OVERSIGHT AND SOIL PERMEABILITY TESTING SECTION IN THE "NEW YORK STATE STORMWATER MANAGEMENT DESIGN MANUAL APPENDIX D: INFILTRATION TESTING REQUIREMENTS".
- 2. AS REQUIRED BY "NEW YORK STATE STORMWATER MANAGEMENT DESIGN MANUAL APPENDIX D: INFILTRATION TESTING REQUIREMENTS", A MINIMUM OF XX PERMEABILITY TESTS
- SHALL BE PERFORMED WITHIN THE BASIN BOTTOM. THE MINIMUM PERMEABILITY RATE OF EACH TEST PIT SHALL BE 20 INCHES PER HOUR. 3. IF THE FIELD-TESTED PERMEABILITY RATES CONFIRM THE BASIN'S ABILITY TO TOTALLY DRAIN WITHIN 72 HOURS AFTER THE CESSATION OF THE DESIGN STORM, THE DESIGN ENGINEER, IN CONSULTATION WITH THE OWNER AND ANY AGENCY HAVING JURISDICTION, MAY ACCEPT THE BASIN DESIGN. THE CONTRACTOR HAS THE OPTION TO DEMONSTRATE THAT THE INFILTRATION BMP, WHEN FLOODED WITH WATER, EITHER ARTIFICIALLY OR NATURALLY BY RAIN EVENT, PERFORMS AS DESIGNED FOR INFILTRATION.
- 4. IF NEITHER THE TESTING NOR FLOODING OF THE BASIN WORKS, WHERE THE PERMEABILITY RATES DO NOT MEET THE REQUIRED DESIGN RATE NOTED ABOVE BY SHOWING A LONGER DRAIN TIME THAN DESIGNED, REMEDIAL/CORRECTIVE ACTION MUST BE TAKEN BY THE CONTRACTOR. THE SOILS BELOW THE INFILTRATION BMP MUST BE REMEIDATED OR REPLACED AND THEN RE-TESTED UNTIL THE REQUIRED DRAIN TIME IS ACHIEVED. ALL POST-CONSTRUCTION SOIL PERMEABILITY TEST RESULTS SHALL BE CERTIFIED BY A LICENSED PROFESSIONAL ENGINEER.

# D. POST-CONSTRUCTION:

NOT TO SCALE

- I. UPON COMPLETION OF THE BASIN, THE CONTRACTOR SHALL PROVIDE THE DESIGN ENGINEER WITH A TOPOGRAPHIC SURVEY OF THE BASIN PREPARED BY A NEW YORK LICENSED PROFESSIONAL SURVEYOR. THE SURVEY SHALL INCLUDE I FOOT CONTOURS OF THE ENTIRE BASIN, TOP OF BERM ELEVATIONS, BOTTOM OF BASIN ELEVATIONS AND ALL INFORMATION PERTAINING TO THE OUTLET CONTROL STRUCTURE INCLUDING ORIFICE AND WEIR SIZES AND ELEVATIONS. THE OUTLET PIPE AND NEXT DOWN-STREAM DRAINAGE STRUCTURE SHALL BE SURVEYED.
- 2. THE PROFESSIONAL ENGINEER THAT WITNESSES THE BASIN CONSTRUCTION AND PERFORMED THE SOIL PERMEABILITY TESTS SHALL PROVIDE A SIGNED AND SEALED LETTER TO THE DESIGN ENGINEER WITH THE RESULTS OF THE PERMEABILITY TESTS AND CONSTRUCTION CONFORMANCE WITH THE APPROVED SWPPP AND THIS DETAIL.

INFILTRATION NYSDEC ID #I-2 CROSS-SECTION DETAIL

A\$C6ED61543

MOD: 07/15

Colliers

Engineering

& Design

www.colliersengineering.com

e copied, reused, disclosed, distributed or relied upon for any other pur without the express written consent of Colliers Engineering & Design

FOR STATE SPECIFIC DIRECT PHONE NUMBERS

VISIT: WWW CALL811 COM

CAVATORS, DESIGNERS, OR ANY PER PREPARING TO DISTURB THE EARTH'
SURFACE ANYWHERE IN ANY STATE

Jesse Barrett Cokeley NEW YORK LICENSED PROFESSIONAL ENGINEER LICENSE NUMBER: 090987-01 COLLIERS ENGINEERING & DESIGN CT, P.C.

PRELIMINARY SITE PLAN

N.Y. C.O.A #: 0017609

622 ROUTE 303 LLC

PROJECT AL FOXIE

SBL: 65.14-1-11.2 & 11.3

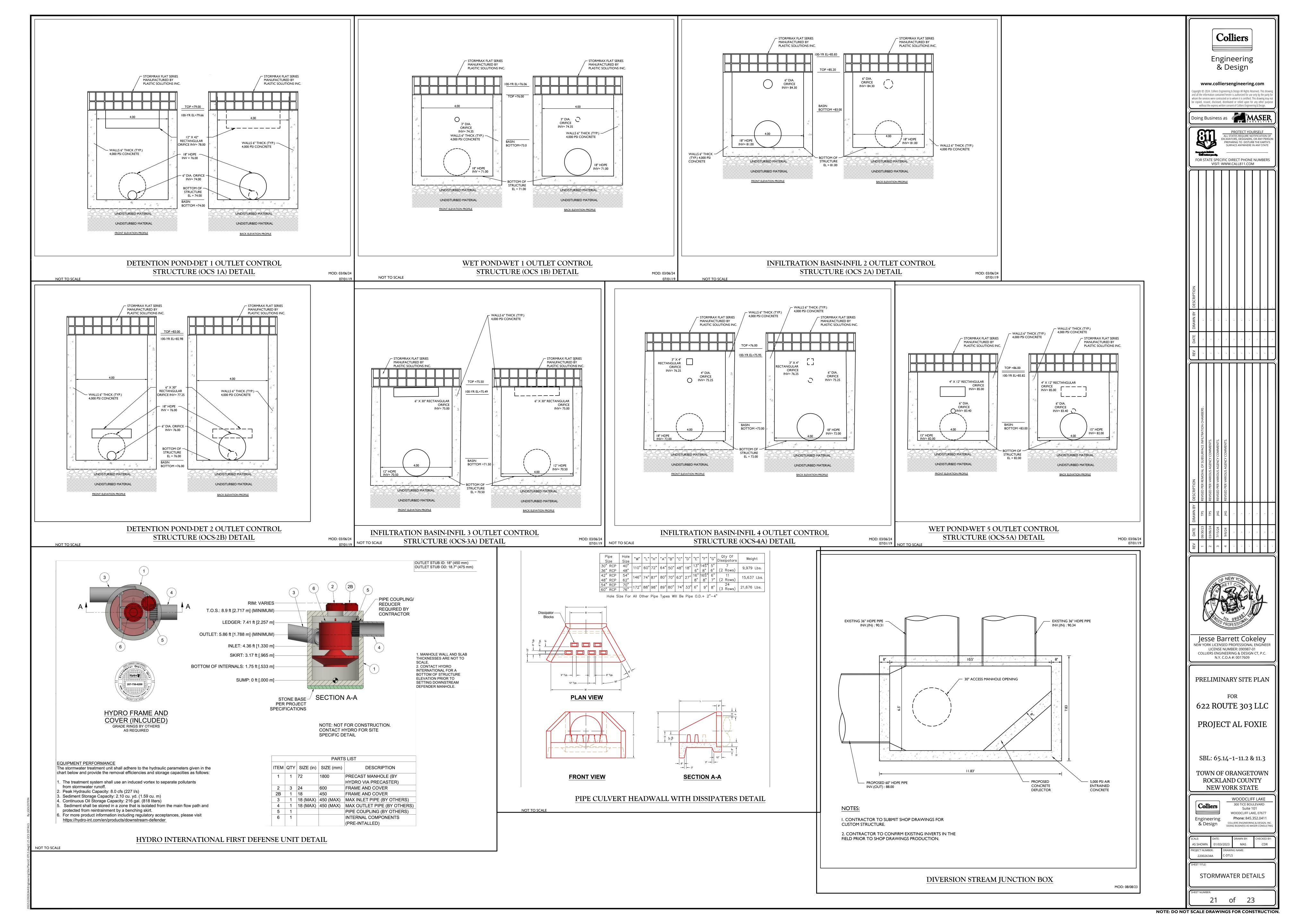
TOWN OF ORANGETOWN ROCKLAND COUNTY NEW YORK STATE

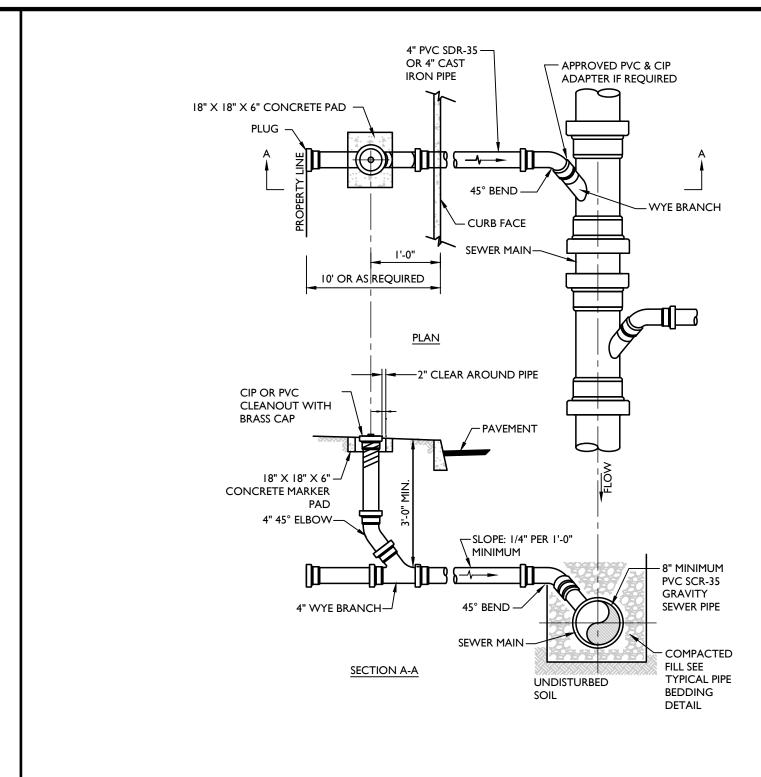
WOODCLIFF LAKE

300 TICE BOULEVARD **Colliers** Suite 101 WOODCLIFF LAKE, 07677 Phone: 845.352.0411 Engineering COLLIERS ENGINEERING & DESIGN, INC. & Design DOING BUSINESS AS MASER CONSULT

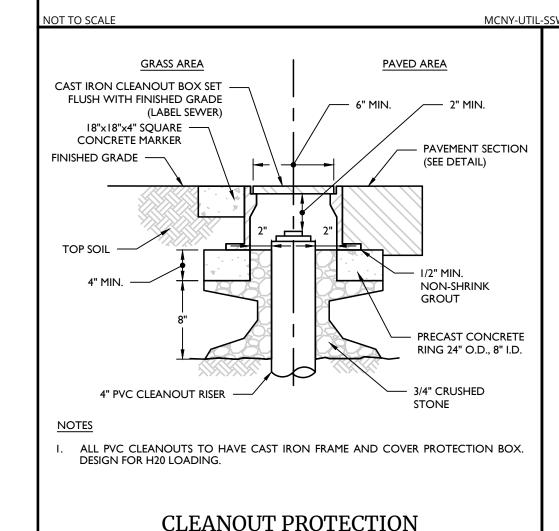
22002634A

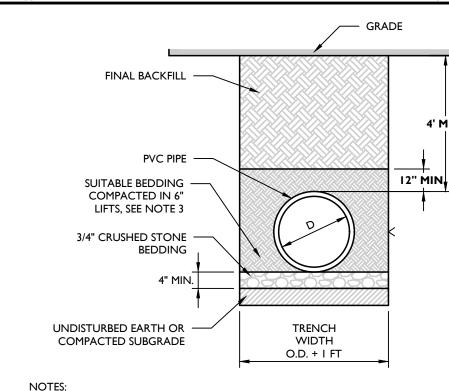
STORMWATER DETAILS





## SANITARY SEWER LATERAL & CLEANOUT DETAIL





# ALL PVC GRAVITY PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH

- . GRAVITY SANITARY PIPE SHALL BE PVC SDR 35 PER ASTM D3034 OR AS
- REQUIRED BY THE GOVERNING AUTHORITY. SUITABLE BEDDING MATERIAL SHALL BE COARSE SAND OR  $\frac{3}{4}$ " CRUSHED STONE.
- 4. SUITABLE FINAL BACKFILL MATERIAL SHALL BE SITE SOILS. CLEAN FILL. OR ITEM 4 STONE COMPACTED IN MAX. 9" LIFTS. BACKFILL MATERIAL WITHIN 2' OF THE PIPE MUST BE FREE AND CLEAR OF DEBRIS, FROZEN MATERIAL, LARGE CLODS

OR STONES, ORGANIC MATTER, OR OTHER UNSUITABLE MATERIALS.

- STONES LARGER THAN 2" FOUND IN THE TRENCH SHALL BE REMOVED FOR A DEPTH OF AT LEAST 4" BELOW THE PIPE.
- 5. FOR INSTALLATION IN PAVEMENT, REFER TO THE APPLICABLE PAVEMENT DETAIL TO ESTABLISH FINAL GRADE, BACKFILL REQUIREMENTS BEYOND THE DEPTH OF THE PAVEMENT DETAIL SHALL BE IN ACCORDANCE WITH THIS

PVC SANITARY PIPE BEDDING (GRAVITY) DETAIL

--- GRADE MECHANICAL JOINT AND 45 DEGREE BEND WITH RETAINER GLAND MECHANICAL JOINTS ANGLE | D = | R = | L = 45° | T x 1.414 | T x 1.000 | D-2A 22.5° | T x 2.613 | T x 2.414 | D-2A 

WATER MAIN MAY CROSS ABOVE OBSTRUCTION IF 4' MINIMUM COVER IS MAINTAINED ABOVE THE WATER MAIN AND FINISH GRADE.

- 2. MINIMUM VERTICAL SEPARATION BETWEEN SANITARY OR STORM SEWER TO WATER MAIN SHALL BE 18" IF THE HORIZONTAL SEPARATION IS LESS THAN 10'. BETWEEN WATER MAIN AND OTHER UTILITIES, THE MINIMUM VERTICAL SEPARATION SHALL BE 12".
- 3. WATER MAIN SHALL BE SIZE AND MATERIAL SPECIFIED ON THE PLAN, WITH MECHANICAL JOINT OR PUSH-ON AND ALL FITTINGS BE CAST IRON MECHANICALLY JOINT. 4. OFFSETS MAY BE SUBSTITUTED FOR A "T" OF UP TO 24" IF APPROVED BY THE ENGINEER.
- 5. CONCRETE THRUST BLOCKS SHALL BE PROVIDED AT ALL BENDS OR OTHER POINTS OF PIPE DIRECTION CHANGE.
- 6. TIE RODS SHALL BE UTILIZED TO RESTRAIN PIPE JOINTS IF THRUST BLOCK IS NOT USED. DETAILS OF THE TIE ROD ASSEMBLY SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL. TIE RODS SHALL BE SUFFICIENT TO RÉSTRAIN THE THRUST DEVELOPED AT 100 PSI WORKING PRESSURE. MEGALUG RESTRAINT ALSO ACCEPTABLE IN PLACE OF TIE

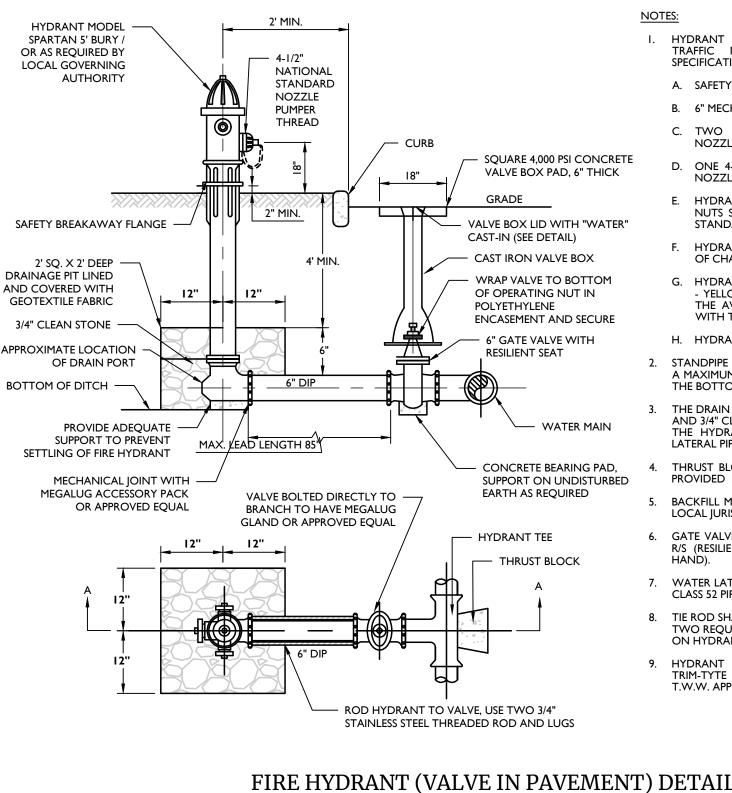
## WATER CROSSING UNDER UTILITY DETAIL

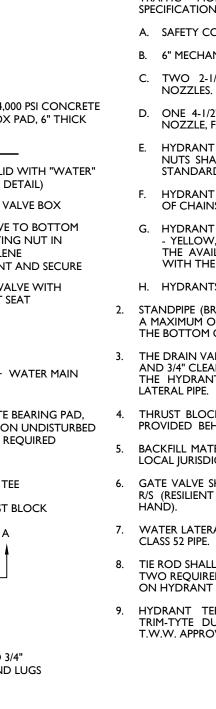
## **WATER NOTES:**

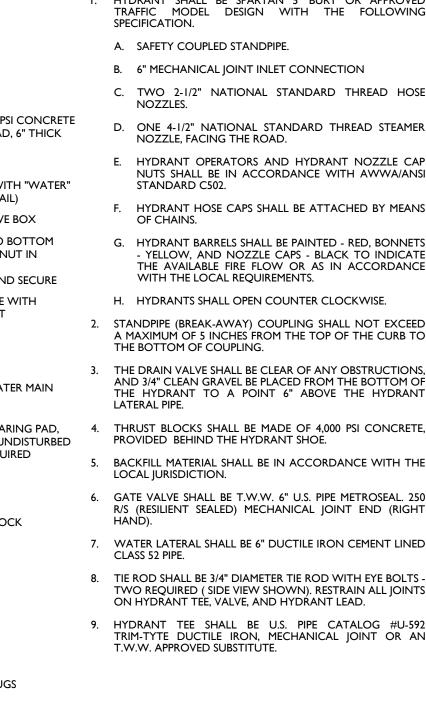
- ALL METHODS, MATERIALS, FITTINGS, DEVICES, DIMENSIONAL REQUIREMENTS AND PROCEDURES NECESSARY TO COMPLETE THE WORK SHOWN HEREON SHALL MEET THE APPROPRIATE CURRENT AWWA SPECIFICATIONS IN EFFECT AS WELL AS ALL REQUIREMENTS DEEMED APPLICABLE BY THE MUNICIPALITY OR ANY OTHER GOVERNMENTAL BODY HAVING JURISDICTION OVER SAID WORK.
- ALL WATER MAIN PIPE SHALL BE AWWA C151/A21.51-02 THICKNESS CLASS FIFTY-TWO (52) CEMENT LINED DUCTILE IRON PUSH-ON (RUBBER GASKET) TYPE; AND INSTALLED WITH THREE (3) BRONZE WEDGES PER JOINT. JOINT INSTALLATION SHALL BE "TYPE 2" AS PRESCRIBED IN THE LATEST REVISION OF AWWA C600. MECHANICAL
- ALL PIPE FITTINGS SHALL BE IN ACCORDANCE WITH THE LATEST REVISION OF THE AWWA SPECIFICATION C153/A21.53-00.
- ALL GATE VALVES SHALL BE "MUELLER" OR APPROVED EQUAL, RESILIANT-SEATED GATE VALVES WITH MECHANICAL JOINT CONNECTIONS. OPENING SHALL BE LEFT (CCW) AND OPERATION SHALL BE BY 2" SQUARE WRENCH NUT. MINIMUM WORKING PRESSURE SHALL BE 250 PSI. GATE VALVES ARE TO BE IN ACCORDANCE WITH LATEST REVISION OF AWWA SPECIFICATION C509.
- ALL VALVE BOXES SHALL BE EXTENSION TYPE BY MUELLER SET ON BRICKS AND POSITIONED PERPENDICULAR TO THE PIPE AND ON COMPACTED BACKFILL. ALL CHANGES IN PIPE LINE DIRECTION, BOTH HORIZONTAL AND VERTICAL SHALL BE TIE-RODDED AND MECHANICALLY RESTRAINED AS DIRECTED BY THE ENGINEER.
- FLUSH OUT ALL WATER MAINS AND APPURTENANCES AS DIRECTED BY THE MUNICIPALITY UNTIL THE WATER RUNS CLEAN AND FREE OF RUST AND DIRT. PRESSURIZE ALL LINES AND APPURTENANCES FOR FORTY-EIGHT (48) HOURS, OR AS DIRECTED BY THE MUNICIPALITY, TO REVEAL ANY LEAKS OR BROKEN PIPE. THIS SHALL ALL BE DONE EITHER AS A TOTAL PROJECT OR BETWEEN VALVED SECTIONS AS DIRECTED BY THE TOWN. IF PRESSURE TESTING REVEALS ANY LEAKS OR DIFFICULTIES THE CONTRACTOR SHALL PROMPTLY UNCOVER THE LEAK OR BROKEN PIPE AND IMMEDIATELY REPAIR AND RETEST SAME. THIS SHALL BE REPEATED AS MANY TIMES AS MAY BE REQUIRED TO DEMONSTRATE A TIGHT LINE TO THE SATISFACTION OF THE TOWN & PROJECT ENGINEER. THE NEW WATER MAIN AND APPURTENANCES SHALL BE PRESSURE TESTED IN ACCORDANCE WITH THE LATEST REVISION OF AWWA C-600. RESULTS OF TESTS ARE TO BE SUBMITTED AND ACCEPTED BY THE MUNICIPALITY &
- THE MUNICIPAL ENGINEER MUST BE NOTIFIED FORTY-EIGHT (48) HOURS PRIOR TO PRESSURE TESTING.
- ALL WATER LINES AND APPURTENANCES SHALL BE DISINFECTED TO THE SATISFACTION OF THE MUNICIPALITY, PROJECT ENGINEER, AND IN ACCORDANCE WITH THE STANDARDS OF THE DEPT. OF HEALTH. THIS SHALL ALSO BE DONE IN ACCORDANCE WITH THE LATEST REVISION OF AWWA C651. A MINIMUM OF TWO (2) BACTERIAL TESTS TAKEN TWENTY-FOUR (24) HOURS APART ARE REQUIRED. RESULTS OF TESTS ARE TO BE SUBMITTED AND ACCEPTED BY THE MUNICIPALITY & PROJECT ENGINEER. DISINFECTION PROCEDURE, FEED LOCATIONS, AND SAMPLE LOCATIONS MUST BE REVIEWED AND APPROVED BY THE MUNICIPALITY & PROJECT ENGINEER PRIOR TO
- AS PER AWWA C651, LATEST REVISION, WATER MAIN DISINFECTION PROCEDURE SHALL, GENERALLY, BE AS FOLLOWS: INSPECTING MATERIALS TO BE USED TO ENSURE THEIR INTEGRITY.
- PREVENTING CONTAMINATING MATERIALS FROM ENTERING THE WATER MAIN DURING STORAGE. CONSTRUCTION, OR REPAIR AND NOTING POTENTIAL CONTAMINATION AT THE CONSTRUCTION SITE. REMOVING, BY FLUSHING OR OTHER MEANS, THOSE MATERIALS THAT MAY HAVE ENTERED THE WATER MAIN.
- CHLORINATING ANY RESIDUAL CONTAMINATION THAT MAY REMAIN, AND FLUSHING THE CHLORINATED WATER FROM THE MAIN. PROTECTING THE EXISTING DISTRIBUTION SYSTEM FROM BACKFLOW CAUSED BY HYDROSTATIC PRESSURE TEST AND DISINFECTION PROCEDURES.
- DOCUMENTING THAT AN ADEQUATE LEVEL OF CHLORINE CONTACTED EACH PIPE TO PROVIDE DISINFECTION. DETERMINING THE BACTERIOLOGICAL QUALITY BY LABORATORY TEST AFTER DISINFECTION.
- FINAL CONNECTION OF THE APPROVED NEW WATER SERVICE TO THE ACTIVE DISTRIBUTION SYSTEM.
- THE CONTINUOUS-FEED METHOD SHALL BE IMPLEMENTED FOR CHLORINATION, AS DESCRIBED IN AWWA C651, LATEST REVISION. AFTER CHLORINATION, THE CONTRACTOR SHALL FLUSH THE MAINS AS PER FINAL FLUSHING REQUIREMENTS OF AWWA C651, LATEST REVISION. WHEN CUTTING INTO OR REPAIRING AN EXISTING MAIN, DISINFECTION
- PROCEDURES SHALL BE OBSERVED AS DETAILED IN DISINFECTION PROCEDURES WHEN CUTTING INTO OR REPAIRING EXISTING MAINS OF AWWA C651, LATEST REVISION. THE TABLET METHOD FOR INTRODUCING CHLORINE TO THE SYSTEM SHALL NOT BE PERMITTED.

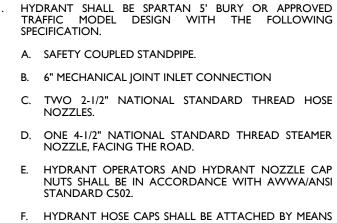
VERIFICATION SHALL BE ACCOMPLISHED VIA BACTERIOLOGICAL TESTS. AFTER FINAL FLUSHING AND BEFORE THE NEW WATER MAIN IS CONNECTED TO THE DISTRIBUTION

- SYSTEM, TWO CONSECUTIVE SETS OF ACCEPTABLE SAMPLES, TAKEN AT LEAST 24 HR APART, SHALL BE COLLECTED FROM THE NEW MAIN. AT LEAST ONE SET OF SAMPLES SHALL BE COLLECTED FROM EVERY 1,200 FT OF THE NEW WATER MAIN, PLUS ONE SET FROM THE END OF THE LINE AND AT LEAST ONE SET FROM EACH BRANCH. SAMPLES SHALL BE TESTED FOR BACTERIOLOGICAL (CHEMICAL AND PHYSICAL) QUALITY IN ACCORDANCE WITH STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, AND SHALL SHOW THE ABSENCE OF COLIFORM ORGANISMS AND THE PRESENCE OF A CHLORINE RESIDUAL. SAMPLES FOR BACTERIOLOGICAL ANALYSIS SHALL BE COLLECTED IN STERILE BOTTLES TREATED WITH SODIUM THIOSULFATE, AS REQUIRED BY STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER. NO HOSE OR FIRE HYDRANT SHALL BE USED IN THE COLLECTION OF SAMPLES. THERE SHOULD BE NO WATER IN THE TRENCH UP TO THE CONNECTION FOR SAMPLING. THE SAMPLING PIPE MUST BE DEDICATED AND CLEAN AND DISINFECTED AND FLUSHED PRIOR TO SAMPLING. A CORPORATION COCK MAY BE INSTALLED IN THE MAIN WITH A COPPER-TUBE GOOSENECK ASSEMBLY. AFTER SAMPLES HAVE BEEN COLLECTED, THE GOOSENECK ASSEMBLY MAY BE REMOVED AND RETAINED FOR FUTURE USE. IF SAMPLES RESULTS FROM THE LAB INDICATE
- A MEASURED HPC GREATER THAN 500 COLONY-FORMING UNITS (CFU) PER ML, FLUSHING SHOULD BE RESUMED AND ANOTHER COLIFORM AND HPC SET OF SAMPLES SHOULD BE TAKEN UNTIL NO COLIFORMS ARE PRESENT AND THE HPC IS LESS THAN 500 CFU/ML. THE RECORD OF COMPLIANCE SHALL BE THE BACTERIOLOGICAL TEST RESULTS CERTIFYING THAT THE WATER SAMPLED FROM THE NEW WATER MAIN IS FREE OF COLIFORM BACTERIA CONTAMINATION AND IS EQUAL TO OR BETTER THAN THE BACTERIOLOGIC WATER
- ALL OTHER REQUIREMENTS OF AWWA C651, LATEST REVISION, SHALL BE OBSERVED.
- WATER SERVICE CROSSING SEWER OR STORM SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18" BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF THE SEWER OR STORM. THIS SHALL BE THE CASE WHERE THE WATER MAIN IS EITHER ABOVE OR BELOW THE SEWER. AT CROSSINGS, ONE FULL LENGTH OF WATER PIPE SHALL BE LOCATED SO BOTH JOINTS WILL BE AS FAR FROM THE SEWER OR STORM AS POSSIBLE. SPECIAL STRUCTURAL SUPPORT FOR THE WATER AND
- . WATER SERVICE SHALL BE LAID AT LEAST 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED SEWER MAIN OR SERVICE.
- 12. WATER TIGHT PLUGS ARE TO BE INSTALLED IN THE ENDS OF PIPES WHEN WORK IS NOT IN PROGRESS.
- 13. LEAKAGE AND HYDROSTATIC PRESSURE TESTING SHALL BE PERFORMED AT 1.5 TIMES THE WORKING PRESSURE OR 150 PSI, WHICHEVER IS GREATER. 14. THE MAXIMUM DEFLECTION ALLOWED ALLOWED AT PIPE JOINTS SHALL BE LIMITED TO 80% OF THAT ALLOWED BY AWWA OR IN ACCORDANCE WITH THE
- MUNICIPALITY. FOR AWWA ALLOWABLE JOINT DEFLECTIONS SEE LATEST REVISION OF AWWA SPECIFICATION C600. 15. CONSTRUCTION MUST CONFORM TO ALL ORDINANCES.
- 16. CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF EXISTING WATER AND OTHER UTILITIES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
- 17. CONTRACTOR TO CALL UNDERGROUND MARK-OUT PRIOR TO COMMENCEMENT OF CONSTRUCTION AT 1-800-962-7962 FOR COMPLETE UTILITIES MARK-OUT.
- 18. CONTRACTOR TO CONTACT WATER DEPARTMENT AT LEAST 2 DAYS PRIOR TO CONSTRUCTION.
- 19. ALL IMPROVEMENTS SHALL BE INSPECTED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW YORK AND CERTIFICATION SHALL BE PROVIDED TO THE MUNICIPALITY THAT THE SUBJECT IMPROVEMENTS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PLANS.
- 20. CONTRACTOR TO NOTIFY ENGINEER OF ANY DEVIATION FROM THE HORIZONTAL OR VERTICAL ALIGNMENTS WITH REGARDS TO EXISTING UTILITIES.
- 21. A CERTIFIED AS BUILT MAP OF THE WATER SYSTEM IMPROVEMENTS SHALL BE PROVIDED TO THE MUNICIPALITY'S WATER DEPARTMENT BY A LICENSED DESIGN PROFESSIONAL.









Engineering & Design

www.colliersengineering.com

Colliers

copied reused disclosed distributed or relied upon for any other pur

CAVATORS, DESIGNERS, OR ANY PERS PREPARING TO DISTURB THE EARTH SURFACE ANYWHERE IN ANY STATE FOR STATE SPECIFIC DIRECT PHONE NUMBERS

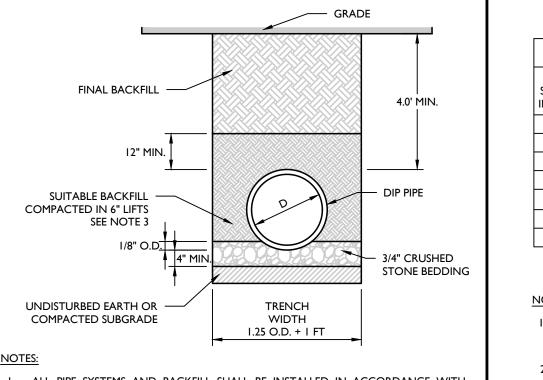
VISIT: WWW CALL811 COM

PROVIDED BEHIND THE HYDRANT SHOE. 5. BACKFILL MATERIAL SHALL BE IN ACCORDANCE WITH THE

7. WATER LATERAL SHALL BE 6" DUCTILE IRON CEMENT LINED

ON HYDRANT TEE, VALVE, AND HYDRANT LEAD.

9. HYDRANT TEE SHALL BE U.S. PIPE CATALOG #U-592 TRIM-TYTE DUCTILE IRON, MECHANICAL JOINT OR AN



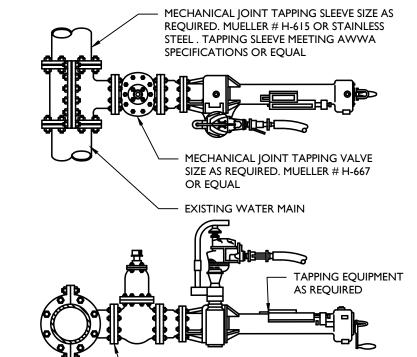
ALL PIPE SYSTEMS AND BACKFILL SHALL BE INSTALLED IN ACCORDANCE WITH

- WATER MAIN PIPE SHALL BE CEMENT LINED DUCTILE IRON PIPE (DIP) PRESSURE CLASS 150, THICKNESS CLASS 52 WITH ASPHALTIC EPOXY TYPE COATING, INSTALLED W/ THREE (3) BRONZE WEDGES PER JOINT FOR CONDUCTIVITY. SUITABLE BACKFILL MATERIAL SHALL BE SAND, WELL GRADED GRAVEL < 2", OR 3/4"
- SUITABLE FINAL BACKFILL MATERIAL SHALL BE SITE SOILS, CLEAN FILL, 3/4" CRUSHED STONES LARGER THAN 2" FOUND IN THE TRENCH SHALL BE REMOVED FOR A

DEPTH OF AT LEAST 4" BELOW THE PIPE.

- FOR INSTALLATION IN PAVEMENT, REFER TO THE APPLICABLE PAVEMENT DETAIL TO ESTABLISH FINAL GRADE. BACKFILL REQUIREMENTS BEYOND THE DEPTH OF THE PAVEMENT DETAIL SHALL BE IN ACCORDANCE WITH THIS DETAIL.
- MAXIMUM ALLOWABLE DEFLECTION AT PIPE JOINTS SHALL BE LIMITED TO 80% OF THE VALUES PUBLISHED IN AWWA C600, LATEST REVISION.

DIP WATER PIPE BEDDING **DETAIL** 



WET TAP VALVE CAN BE INSTALLED IN EITHER VERTICAL OR HORIZONTAL CONTRACTOR SHALL VERIFY DEPTH OF BURY, MATERIAL, DIAMETER (O.D.) AND OPERATING PRESSURE OF EXISTING WATER MAIN PRIOR TO ORDERING OF WET

WET TAP DETAIL

LIST OF STANDARD WATER SUPPLY MATERIALS

EXCEPTIONS TO THE MAT SESIGN ENGINEER.	FERIALS LISTED BELOW SHALL BE APPROVED IN WRITING BY
HYDRANTS	VWNY DIVISION: SIGELOCK SYSTEMS, LLC. SPARTAN 5' BUF OR APPROVED DEPTH BY VWNY
VALVES	MUELLER TYPE T-2361 RWGV MJXFL OR EQUAL
CURB STOPS	MUELLER CO. MODEL H-1502-2 FOR $\frac{3}{4}$ ND 1 INCH SIZES MUELLER CO. MODEL B-25204 FOR 1.5 AND 2 INCH SIZES
CORPORATION STOPS	MUELLER CO. MODEL H-15020 FOR $\frac{3}{4}$ AND 1 INCH SIZES MUELLER CO. MODEL H-10310 FOR 1.5 AND 2 INCH SIZES
PIPE	DUCTILE IRON PIPE SHALL BE CLASS 52 WITH MECHANICAL-JOINT OR PUSH-ON JOINT CONNECTIONS
TAPPING SLEEVES	MUELLER #H-615, #H-616 OR EQUAL
VALVE BOXES	STAINLESS STEEL, TELESCOPING AND AT LEAST 5 1/4 " IN DIAMETER
CURB BOXES	BINGHAM & TAYLOR, 2-1/2" N.S. CURB SERVICE BOXES (GENUINE BUFFALO STYLE CAST IRON) FIG. NO. 4901 SIZE NO. 93-D, EXTENSION RANGE 33"-48". CONSISTING OF TOP SECTION & COVER MARKED WATER, BOTTOM SECTION A ROD, RING AND PIN.

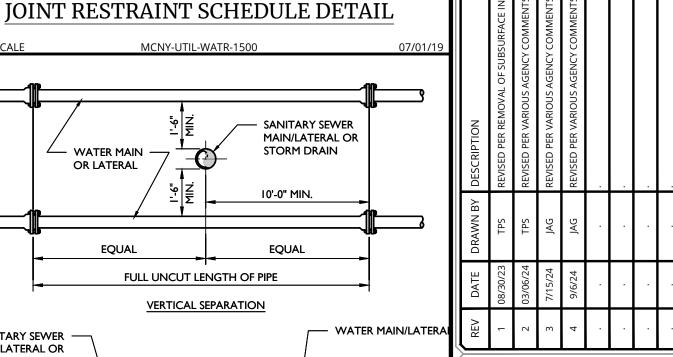
ALL UTILITY WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT STANDARDS AND DETAILS OF THE MUNICIPALITY.

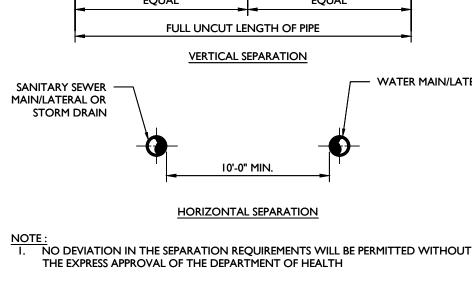
NUMBER AND SIZE OF RODS REQUIRED AND PIPE LENGTH IN FEET TO BE RESTRAINED 22½° BEND SIZE IN | INCHES | No. | SIZE | L\* | No. | SIZE | L\* | No. | SIZE | L\* 4 | 2 | ¾" | 30' | 2 | ¾" | 10' | 2 | ¾" | ! 6 2 34" 40' 2 34" 10' 2 34" 5' 8 | 4 or 2 | 3/4" or 7/8" | 50' | 2 | 3/4" | 15' | 2 | 3/4" | 5' 10 | 4 or 2 | 3/4" or 1" | 60' | 2 | 3/4" | 20' | 2 | 3/4" | 5' 12 | 4 | %" | 70' | 2 | ¾" | 20' | 2 | ¾" | 5' 14 | 4 | 1" | 80' | 2 | 3/4" | 25' | 2 | 3/4" | 5' 16 | 4 | 1" | 80' | 2 | 3/4" | 25' | 2 | 3/4" | 5' L\* = LENGTH OF PIPE TO BE RESTRAINED IS FOR EACH SIDE OF BEND

USE OF MECHANICAL JOINT RETAINER GLANDS SHALL PROVIDE A THRUST RESTRAINT SYSTEM EQUIVALENT TO THAT LISTED IN THE TABLE FOR CLAMPS AND RODS. LENGTHS ARE BASED ON THE FOLLOWING CRITERIA: 150 PSI MAXIMUM PRESSURE AND 3'-6" OF COVER. TABLE IS FOR USE WITH CAST IRON PIPE OR DUCTILE IRON PIPE ONLY. IF TEST CONDITIONS ARE MORE SEVER

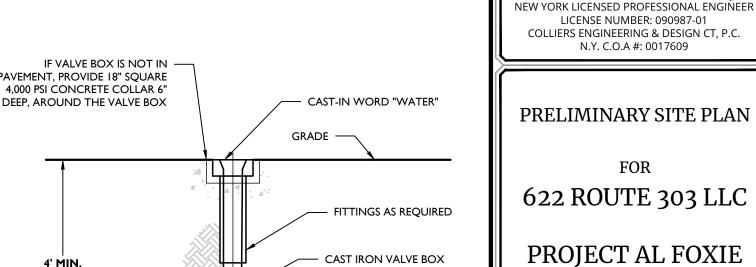
BE PROVIDED BY LICENSED PROFESSIONAL ENGINEER.

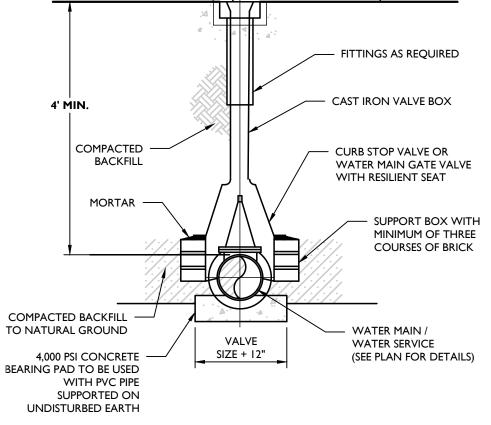
OR LARGER PIPES ARE PROPOSED, THEN SPECIAL COMPUTATIONS MUST





SANITARY/STORM SEWER-WATER MAIN SEPARATION DETAIL





VALVE BOX SHOULD HAVE EXTENSION IF WATER MAIN OR SERVICE IS PLACED CURB STOP VALVE BOX SHALL BE MUELLER EXTENSION TYPE WITH ARCH PATTERN

BASE, OR APPROVED EQUAL. WATER MAIN VALVE BOX SHALL BE SCREW TYPE ADJUSTABLE MODE. FIGURE # 4905-22 AS MANUFACTURED BY BINGHAM & TAYLOR OR APPROVED

WATER VALVE BOX DETAIL

WATER & SEWER DETAILS

Jesse Barrett Cokeley

SBL: 65.14-1-11.2 & 11.3

TOWN OF ORANGETOWN **ROCKLAND COUNTY** NEW YORK STATE

WOODCLIFF LAKE

300 TICE BOULEVARD

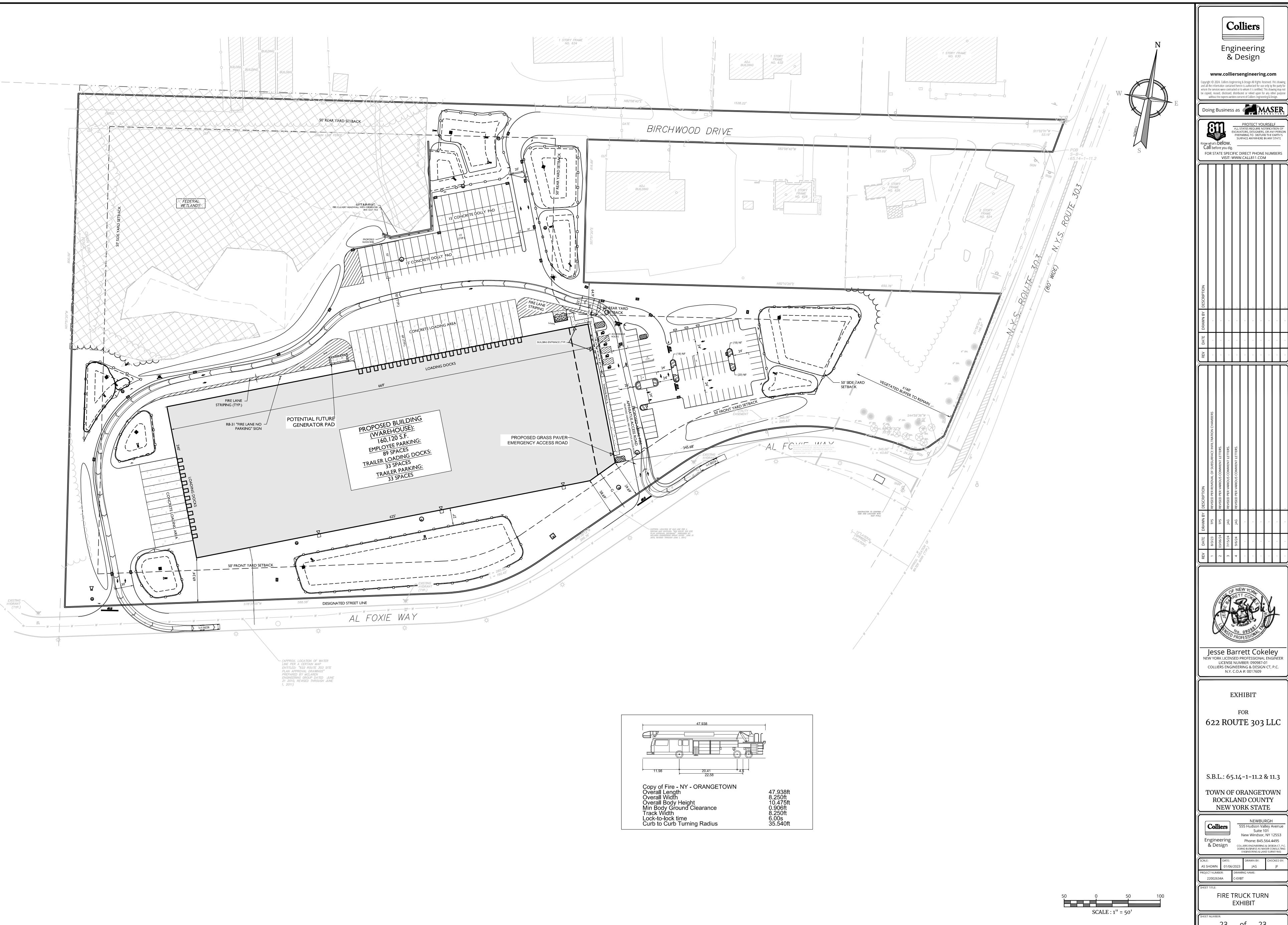
WOODCLIFF LAKE, 07677

Suite 101

Phone: 845.352.0411

COLLIERS ENGINEERING & DESIGN, INC

DOING BUSINESS AS MASER CONSULT



www.colliersengineering.com

whom the services were contracted or to whom it is certified. This drawing may to copied, reused, disclosed, distributed or relied upon for any other purpowithout the express written consent of Colliers Engineering & Design.

FOR STATE SPECIFIC DIRECT PHONE NUMBERS
VISIT: WWW.CALL811.COM

Jesse Barrett Cokeley
NEW YORK LICENSED PROFESSIONAL ENGINEER LICENSE NUMBER: 090987-01
COLLIERS ENGINEERING & DESIGN CT, P.C.

622 ROUTE 303 LLC

TOWN OF ORANGETOWN ROCKLAND COUNTY

NEW YORK STATE

Suite 101 New Windsor, NY 12553 Phone: 845.564.4495 COLLIERS ENGINEERING & DESIGN CT, P.C. DOING BUSINESS AS MASER CONSULTING ENGINEERING & LAND SURVEYING

FIRE TRUCK TURN

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

23 of 23