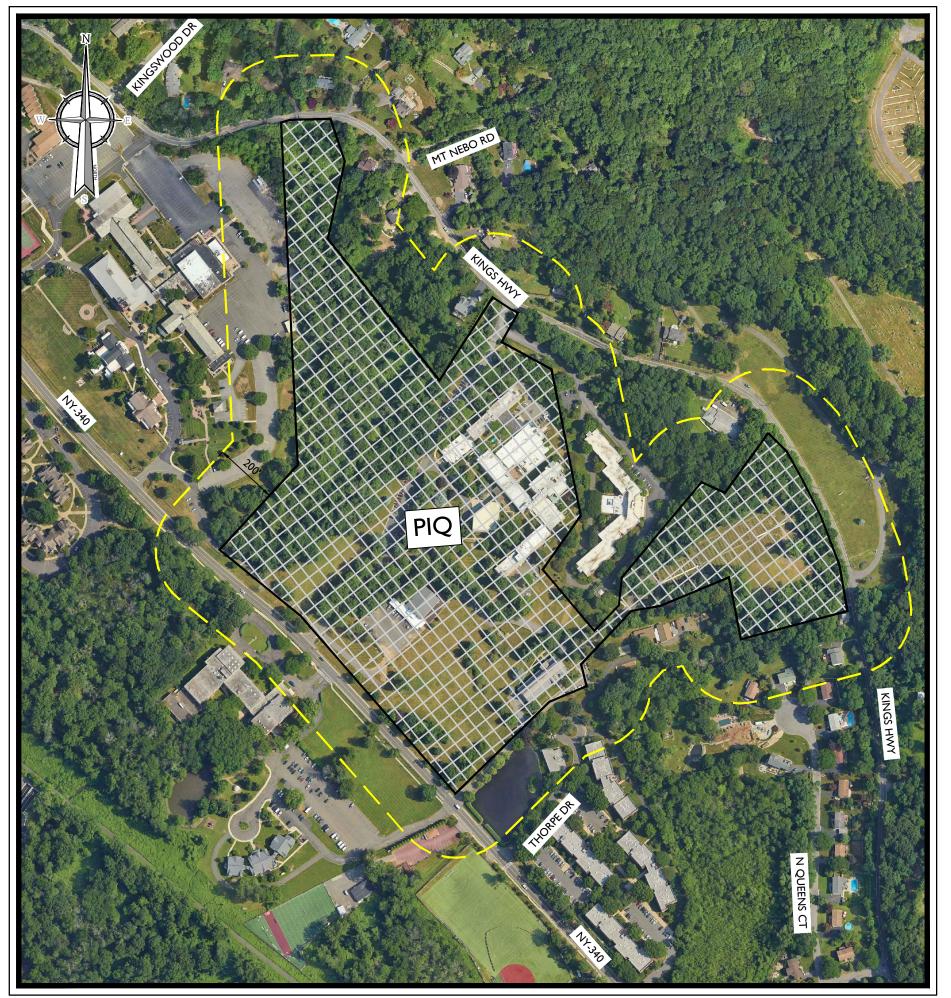
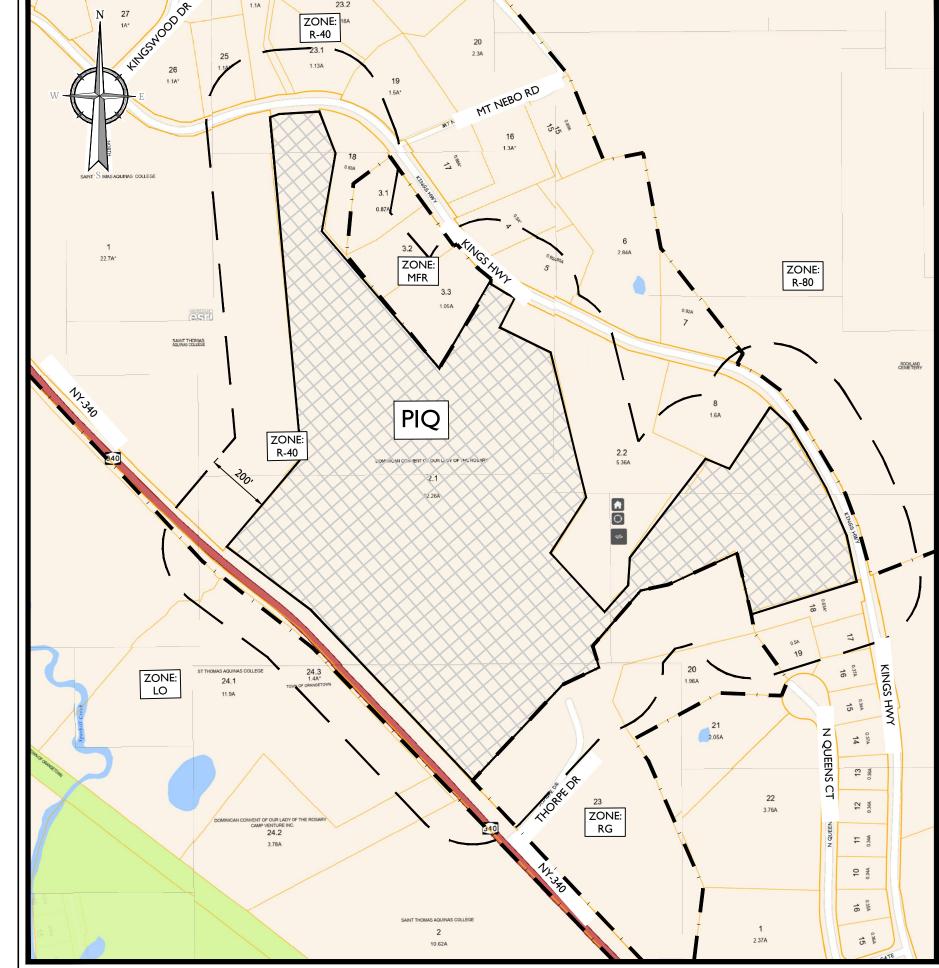
# PRELIMINARY SITE PLAN

FOR

ST. THOMAS AQUINAS COLLEGE PROPOSED TRACK & FIELD SECTION 74.16, BLOCK 1, LOT 2.1

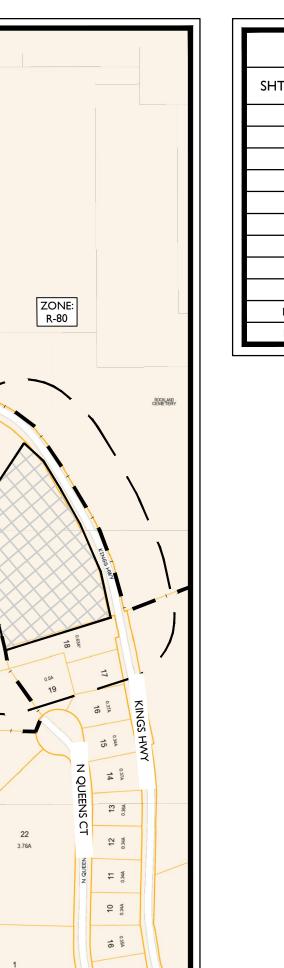
175 ROUTE 340 TOWN OF ORANGETOWN, ROCKLAND COUNTY, NEW YORK

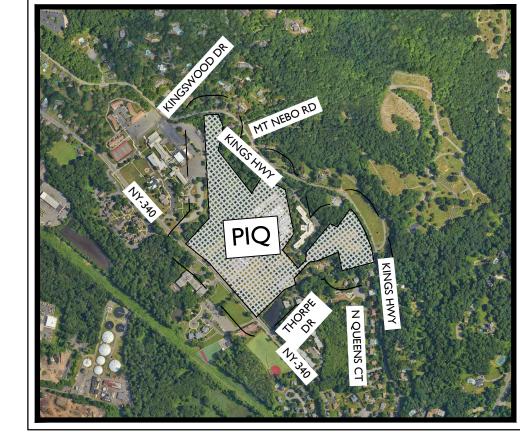




TAX & ZONING MAP

SOURCE: ROCKLAND COUNTY GIS

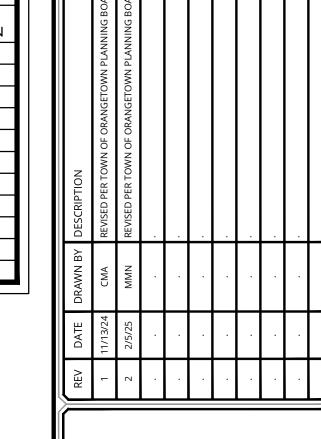




# VICINITY MAP

SOURCE: GOOGLE EARTH

	INDEX OF SHEETS	
SHT. No.	DRAWING TITLE	LATEST REVISION
I	COVER SHEET	
2	DEMOLITION PLAN	
3	OVERALL LAYOUT PLAN	
4	LAYOUT PLAN	
5	GRADING, DRAINAGE, & UTILITIES PLAN	
6	GRADING, DRAINAGE, & UTILITIES BLOW-UP PLAN	
7	LANDSCAPE PLAN	
8	SOIL EROSION & SEDIMENT CONTROL PLAN	
9	CONSTRUCTION DETAILS	
10	CONSTRUCTION DETAILS	
11	CONSTRUCTION DETAILS	



**Colliers** 

Engineering & Design

FOR STATE SPECIFIC DIRECT PHONE NUMBERS



Jesse Barrett Cokeley COLLIERS ENGINEERING & DESIGN CT, P.C.

> **PRELIMINARY** SITE PLAN

ST. THOMAS AQUINAS COLLEGE

> **SECTION 74.16** BLOCK 1 LOT 2.1 125 ROUTE 340

TOWN OF ORANGETOWN ROCKLAND COUNTY

**NEW YORK** 

WOODCLIFF LAKE Voodcliff Lake, NJ 07677 Phone: 845.352.0411 & Design

**COVER SHEET** 

**ENGINEER** 

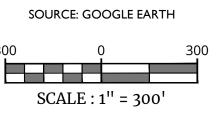
APPROVED BY THE PLANNING BOARD OF THE TOWN OF ORANGETOWN AT THE

I HEREBY CERTIFY THAT I AM THE OWNER OF RECORD OF THE SITE HEREIN

DEPICTED AND THAT I CONCUR WITH THE SUBMISSION.

REGULAR MEETING OF \_\_\_

**AERIAL MAP** 



PREPARED BY:

COLLIERS ENGINEERING & DESIGN, CT, P.C. 300 TICE BOULEVARD, SUITE 101 WOODCLIFF LAKE, NJ 07677

JNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY OR ENGINEERING MAP BEARING A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF 1 NLY MAPS WITH THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S ORIGINAL WORK AND OPINION

200' PROPERTY OWNER LIST

30 Mt Nebo Rd, Orangeburg NY 10962

157A Kings Highway, Orangeburg NY 10962

157 Kings Highway, Orangeburg NY 10962

148 Kings Highway, Orangeburg NY 10962

147 Kings Highway, Orangeburg NY 10962

141 Kings Highway, Orangeburg NY 10962

135 Kings Highway, Orangeburg NY 10962

129 Kings Highway, Orangeburg NY 10962

31 Kings Highway, Orangeburg NY 10962

17 Kings Highway, Orangeburg NY 10962

Kingswood Dr, Orangeburg NY 10962

75 Route 340, Sparkill NY 10976

Thorpe Dr, Sparkill NY 10976

165 Kings Highway, Orangeburg NY 10962

71 Kings Highway, Orangeburg NY 10962

75 Kings Highway, Orangeburg NY 10962

5 Smith St, Suite 512, Nanuet NY 10962

7 N Queens Ct, Orangeburg NY 10962

8 N Queens Ct, Orangeburg NY 10962

9 N Queens Ct, Orangeburg NY 10962

10 N Queens Ct, Orangeburg NY 10962

IN Queens Ct, Orangeburg NY 10962

2 N Queens Ct, Orangeburg NY 10962

3 N Queens Ct, Orangeburg NY 10962

O Box 254, Sparkill NY 10976

25 Route 340, Sparkill NY 10976

25 Route 340, Sparkill NY 10976

Mary Kate Dillon

5 Smith St, Suite 512, Nanuet NY 10962

150 Kings Highway, Orangeburg NY 10962

152 Kings Highway, Orangeburg NY 10962

154 Kings Highway, Orangeburg NY 10962

75 Route 340, Sparkill NY 10976

PO Box 206, Sparkill NY 10976

St. Thomas Aquinas College 125 Route 340, Sparkill NY 10976 St. Thomas Aquinas College 25 Route 340, Sparkill NY 10976

Dominican Convent

Dowling Housing Corp

Camp Venture Inc

Fauzia Abdul-Quader

Anthony Scorziello

Mary F Contreras

NY Oratory of St Philip Neri

Richard A McQuade

Susan R Ferguson

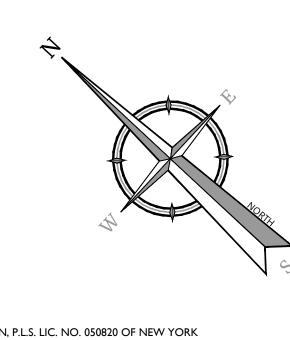
John P Bartolotta

Feliberto Germosen

**OWNER'S NAME/ADDRESS** 

PARCEL ID NO.

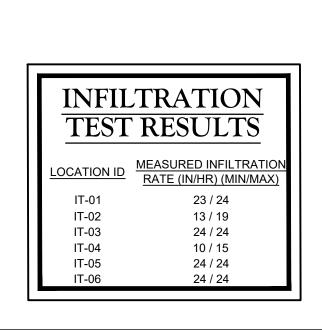
NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.



## **DEMOLITION NOTES:**

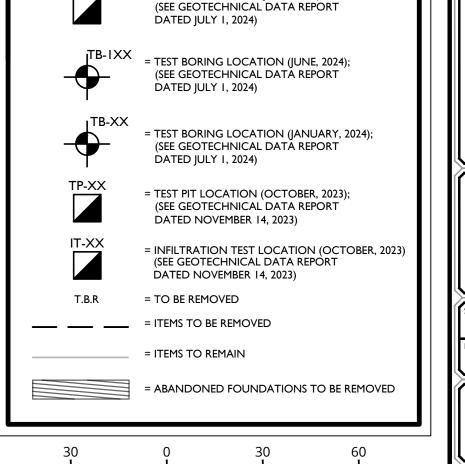
MARKOUT UTILITIES PRIOR TO CONSTRUCTION

- I. THIS PLAN REFERENCES THE FOLLOWING DOCUMENTS AND INFORMATION:
- A. "LEASE AREA EXHIBIT", SHEET I OF I, DATED FEBRUARY 8TH, 2023, PREPARED BY COLLIERS ENGINEERING & DESIGN, P.L.S. LIC. NO. 050820 OF NEW YORK
  B. GEOTECHNICAL EXPLORATION REPORT FOR ST. THOMAS AQUINAS COLLEGE TRACK AND FIELD, PREPARED BY COLLIERS ENGINEERING AND DESIGN, CT,PC, DATED 7/1/24.
- 2. CONTRACTOR SHALL PERFORM ALL WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 (29 U.S.C. 651 et seq.).
- THE DEMOLITION PLAN IS INTENDED TO PROVIDE GENERAL INFORMATION REGARDING ITEMS TO BE DEMOLISHED AND/OR REMOVED. THE CONTRACTOR SHALL ALSO REVIEW THE OTHER SITE PLAN DRAWINGS AND INCLUDE IN DEMOLITION ACTIVITIES ALL INCIDENTAL WORK NECESSARY FOR THE CONSTRUCTION OF THE NEW SITE IMPROVEMENTS.
- 4. ALL DEMOLITION ACTIVITIES ARE TO BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THESE PLANS AND SPECIFICATIONS AND ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS, ANY QUESTIONS CONCERNING THE ACCURACY OR INTENT OF THESE PLANS OR SPECIFICATIONS, CONCERNIS REGARDING THE APPLICABLE SAFETY STANDARDS OR THE SAFETY OF THE CONTRACTOR OR THIRD PARTIES IN PERFORMING THE WORK OF THIS PROJECT SHALL BE RAISED WITH ENGINEER, IN WRITING AND RESPONDED TO BY ENGINEER, IN WRITING, PRIOR TO THE INITIATION OF ANY SITE ACTIVITY.
- 5. PRIOR TO STARTING ANY DEMOLITION, CONTRACTOR IS RESPONSIBLE FOR/TO:
- A. OBTAINING ALL REQUIRED PERMITS AND MAINTAINING THE SAME ON SITE FOR REVIEW BY THE ENGINEER AND OTHER PUBLIC AGENCIES HAVING JURISDICTION.
- B. NOTIFYING, AT A MINIMUM, THE MUNICIPAL ENGINEER, DESIGN ENGINEER, AND LOCAL DEPARTMENT OF PUBLIC WORKS, 72 HOURS PRIOR TO START OF WORK.
- C. INSTALLING THE REQUIRED SOIL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO SITE DISTURBANCE.
- D. IN ACCORDANCE WITH STATE LAW, THE CONTRACTOR SHALL BE REQUIRED TO CALL THE BOARD OF PUBLIC UTILITIES ONE CALL DAMAGE PROTECTION SYSTEM FOR UTILITY MARK OUT IN ADVANCE OF ANY EXCAVATION.
- E. LOCATING AND PROTECTING ALL UTILITIES AND SERVICES, INCLUDING BUT NOT LIMITED TO GAS, WATER, ELECTRIC, SANITARY AND STORM SEWER, TELEPHONE, CABLE, FIBER OPTIC CABLE, ETC. WITHIN AND ADJACENT TO THE LIMITS OF PROJECT ACTIVITIES. THE CONTRACTOR SHALL USE AND COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY NOTIFICATION SYSTEM TO LOCATE ALL THE UNDERGROUND UTILITIES. THE CALL BEFORE YOU DIG NUMBER FOR NEW JERSEY IS 811 AND SHOULD BE NOTIFIED TO
- F. PROTECTING AND MAINTAINING IN OPERATION, ALL ACTIVE UTILITIES AND SYSTEMS THAT ARE NOT BEING REMOVED DURING ALL DEMOLITION ACTIVITIES.
- G. ARRANGING FOR AND COORDINATING WITH THE APPLICABLE UTILITY SERVICE PROVIDER(S) FOR THE TEMPORARY OR PERMANENT TERMINATION OF SERVICE REQUIRED BY THE PROJECT PLANS AND SPECIFICATIONS. THE CONTRACTOR SHALL PROVIDE THE UTILITY ENGINEER AND OWNER WRITTEN NOTIFICATION THAT THE EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED AND ABANDONED IN ACCORDANCE WITH JURISDICTIONAL AND UTILITY COMPANY REQUIREMENTS.
- H. COORDINATION WITH UTILITY COMPANIES REGARDING WORKING "OFF-PEAK" HOURS OR ON WEEKENDS AS MAY BE REQUIRED TO MINIMIZE THE IMPACT ON THE AFFECTED PARTIES. WORK REQUIRED TO BE DONE "OFF-PEAK" SHALL BE DONE AT NO ADDITIONAL COST TO THE OWNER.
- I. IN THE EVENT THE CONTRACTOR DISCOVERS ANY HAZARDOUS MATERIAL, THE REMOVAL OF WHICH IS NOT ADDRESSED IN THE PROJECT PLANS AND SPECIFICATIONS, THE CONTRACTOR SHALL IMMEDIATELY CEASE ALL WORK AND NOTIFY THE OWNER AND ENGINEER OF THE DISCOVERY OF SUCH MATERIALS.
- 6. THE FIRM OR ENGINEER OF RECORD IS NOT RESPONSIBLE FOR JOB SITE SAFETY OR SUPERVISION. CONTRACTOR IS TO PROCEED WITH THE DEMOLITION IN A SYSTEMATIC AND SAFE MANNER, FOLLOWING ALL THE OSHA REQUIREMENTS TO ENSURE PUBLIC AND CONTRACTOR SAFETY.
- 7. THE CONTRACTOR SHALL PROVIDE ALL THE "MEANS AND METHODS" NECESSARY TO PREVENT MOVEMENT, SETTLEMENT, OR COLLAPSE OF EXISTING STRUCTURES, AND ANY OTHER IMPROVEMENTS THAT ARE REMAINING ON OR OFF SITE. THE CONTRACTOR IS RESPONSIBLE FOR ALL REPAIRS OF DAMAGE TO ALL ITEMS THAT ARE TO REMAIN. ALL REPAIRS SHALL USE NEW MATERIAL. THE REPAIRS SHALL RESTORE THE ITEM TO THE PRE-DEMOLITION CONDITION. SUCH REPAIRS SHALL BE PERFORMED AT THE CONTRACTOR'S SOLE EXPENSE.
- 8. THE CONTRACTOR SHALL NOT PERFORM ANY EARTH MOVEMENT ACTIVITIES, DEMOLITION OR REMOVAL OF FOUNDATION WALLS, FOOTINGS, OR OTHER MATERIALS WITHIN THE LIMITS OF DISTURBANCE UNLESS IT IS IN STRICT ACCORDANCE WITH THE PROJECT PLANS AND SPECIFICATIONS, AND/OR UNDER THE WRITTEN DIRECTION OF THE OWNER'S STRUCTURAL OR GEOTECHNICAL ENGINEER.
- 9. CONTRACTOR SHALL BACKFILL ALL EXCAVATION RESULTING FROM, OR INCIDENTAL TO, DEMOLITION ACTIVITIES. BACKFILL SHALL BE ACCOMPLISHED WITH APPROVED BACKFILL MATERIALS, AND SHALL BE SUFFICIENTLY COMPACTED TO SUPPORT NEW IMPROVEMENTS AND IN COMPLIANCE WITH THE RECOMMENDATIONS IN THE GEOTECHNICAL REPORT. BACKFILLING SHALL OCCUR IMMEDIATELY AFTER DEMOLITION ACTIVITIES, AND SHALL BE DONE SO AS TO PREVENT WATER ENTERING THE EXCAVATION. FINISHED SURFACES SHALL BE GRADED TO PROMOTE POSITIVE DRAINAGE.
- 10. EXPLOSIVES SHALL BE PROHIBITED. THE CONTRACTOR IS ALSO RESPONSIBLE FOR ALL INSPECTION AND SEISMIC VIBRATION TESTING TO MONITOR THE EFFECTS ON ALL ADJACENT STRUCTURES.
- 11. CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL AND GENERALLY ACCEPTED SAFE PRACTICES IN CONFORMANCE WITH THE CURRENT FHWA "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), AS WELL AS FEDERAL, STATE AND LOCAL REGULATIONS WHEN DEMOLITION RELATED ACTIVITIES IMPACT ROADWAYS OR ROADWAY RIGHT-OF-WAY.
- 12. CONTRACTOR SHALL CONDUCT DEMOLITION ACTIVITIES IN SUCH A MANNER TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, SIDEWALKS, WALKWAYS, AND OTHER ADJACENT FACILITIES. STREET CLOSURE PERMITS MUST BE RECEIVED FROM THE APPROPRIATE GOVERNMENTAL AUTHORITY PRIOR TO THE COMMENCEMENT OF ANY ROAD OPENING OR DEMOLITION ACTIVITIES IN OR ADJACENT TO THE RIGHT-OF-WAY.
- 13. DEMOLITION ACTIVITIES AND EQUIPMENT SHALL NOT USE AREAS OUTSIDE THE DEFINED PROJECT LIMIT LINE, WITHOUT WRITTEN PERMISSION OF THE OWNER AND ALL GOVERNMENTAL AGENCIES HAVING JURISDICTION.
- 14. THE CONTRACTOR SHALL USE DUST CONTROL MEASURES TO LIMIT AIRBORNE DUST AND DIRT RISING AND SCATTERING IN THE AIR IN ACCORDANCE WITH FEDERAL, STATE, AND/OR LOCAL STANDARDS. AFTER THE DEMOLITION IS COMPLETE, ADJACENT STRUCTURES AND IMPROVEMENTS SHALL BE CLEANED OF ALL DUST AND DEBRIS CAUSED BY THE DEMOLITION OPERATIONS. THE CONTRACTOR IS RESPONSIBLE FOR RETURNING ALL ADJACENT AREAS TO THEIR "PRE-DEMOLITION" CONDITION.
- 15. CONTRACTOR IS RESPONSIBLE TO SAFEGUARD SITE AS NECESSARY TO PERFORM THE DEMOLITION IN SUCH A MANNER AS TO PREVENT THE ENTRY OF UNAUTHORIZED PERSONS AT
- 16. CONTRACTOR IS RESPONSIBLE FOR SITE JOB SAFETY, WHICH SHALL INCLUDE BUT NOT LIMITED TO THE INSTALLATION AND MAINTENANCE OF BARRIERS, FENCING AND OTHER APPROPRIATE SAFETY ITEMS NECESSARY TO PROTECT THE PUBLIC FROM AREAS OF CONSTRUCTION AND CONSTRUCTION ACTIVITY.
- 17. THIS DEMOLITION PLAN IS INTENDED TO IDENTIFY THOSE EXISTING ITEMS/CONDITIONS WHICH ARE TO BE REMOVED. IT IS NOT INTENDED TO PROVIDE DIRECTION AS TO THE MEANS AND METHODS TO BE USED TO ACCOMPLISH THAT WORK. ALL MEANS AND METHODS UTILIZED ARE TO BE IN STRICT ACCORDANCE WITH ALL STATE, FEDERAL, LOCAL, AND JURISDICTIONAL REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL OSHA AND OTHER SAFETY PRECAUTIONS NECESSARY TO PROVIDE A SAFE WORK SITE.
- 18. DEBRIS SHALL NOT BE BURIED ON THE SUBJECT SITE. ALL DEMOLITION WASTES AND DEBRIS (SOLID WASTE) SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL MUNICIPAL, COUNTY, STATE, AND FEDERAL LAWS AND APPLICABLE CODES. THE CONTRACTOR SHALL MAINTAIN RECORDS TO DEMONSTRATE PROPER DISPOSAL ACTIVITIES, TO BE PROVIDED TO THE OWNER UPON REQUEST.
- 19. CONTRACTOR SHALL MAINTAIN A RECORD SET OF PLANS UPON WHICH IS INDICATED THE LOCATION OF EXISTING UTILITIES THAT ARE CAPPED, ABANDONED IN PLACE, OR RELOCATED DUE TO DEMOLITION ACTIVITIES. THIS RECORD DOCUMENT SHALL BE PREPARED IN A NEAT AND WORKMAN-LIKE MANNER, AND TURNED OVER TO THE OWNER/DEVELOPER UPON COMPLETION OF THE WORK.
- 20. GC IS RESPONSIBLE FOR TAKING THE APPROPRIATE MEASURES TO ENSURE THE STRUCTURAL STABILITY OF SIDEWALKS, PAVEMENT, DRAINAGE STRUCTURES, ETC. WHICH ARE TO REMAIN. GC WILL BE RESPONSIBLE FOR REPAIRING DAMAGE DONE TO THE AFOREMENTIONED ITEMS. THE REPAIR SHALL RESTORE SUCH TO A CONDITION EQUIVALENT TO OR BETTER THAN THE EXISTING CONDITIONS AND IN ACCORDANCE WITH ALL APPLICABLE CODES.



ALL UTILITIES, INCLUDING ELECTRIC AND TELEPHONE SERVICE, SHALL BE INSTALLED JNDERGROUND.

THIS PLAN DOES NOT CONFLICT WITH THE COUNTY OFFICIAL MAP AND HAS BEEN APPROVED IN THE MANNER SPECIFIED BY SECTION 239L&M OF THE GENERAL MUNICIPAL LAW OF THE STATE OF NEW YORK.



SCALE: 1" = 30'

Linear unit of measure: US Survey Foot (1 ft = 1200/3937 m)

**LEGEND** 

= TEST PIT LOCATION (JUNE, 2024);

Colliers

Engineering & Design

www.colliersengineering.com

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now what's **below.**Call before you dig.

FOR STATE SPECIFIC DIRECT PHONE NUMBERS

VISIT: WWW.CALL811.COM

 REV
 DATE
 DRAWN BY
 DESCRIPTION

 1
 11/13/24
 CMA
 REVISED PER TOWN OF ORANGETOWN PLANNING BOARD REVIEW LETTER

 2
 2/5/25
 MMN
 REVISED PER TOWN OF ORANGETOWN PLANNING BOARD REVIEW LETTER

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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

FOR ST. THOMAS AQUINAS COLLEGE

> SECTION 74.16 BLOCK 1 LOT 2.1 125 ROUTE 340

TOWN OF ORANGETOWN ROCKLAND COUNTY NEW YORK

	WOODCLIFF LAKE
olliers	300 Tice Boulevard
omers	Suite 101
	Woodcliff Lake, NJ 076
gineering	Phone: 845.352.041
Design	COLLIERS ENGINEERING & DESIG ARCHITECTURE, LANDSCAPE ARCHITE SURVEYING CT, P.C.

E: DATE: DRAWN BY: CHECKED BY:
SHOWN 8/21/24 JAG JF

ECT NUMBER: DRAWING NAME:
18001787B C-DEMO

DEMOLITION PLAN

T NUMBER:

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY OR ENGINEERING MAP BEARING A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. ONLY MAPS WITH THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S ORIGINAL WORK AND OPINION.

L=16.01'

S 44°27'03" E 1,208.74

PINE C

SYCAMORE

EDGE OF PAVEMENT - (\ (UNABLE TO OPEN)

J-BUSH

ASPHALT SURFACE

MASONRY

PARKING

S 43°00'52" E 3,548.40

SOLID WHITE

EDGE OF

**SURFACE** 

POINT OF BEGINNIN

NEW YORK STATE ROUTE 340

(A.K.A. ORANGEBURG ROAD)

(ASPHALT SURFACE)

(S.H. 728)

LEASE PARCEL 1

-∆=87°23'17"

CH=S 0°45'24" E

**PAVEMENT** 

G 88.27

S 44°59'51" E 1,149.81

REPUTED OWNER

DOMINICAN CONVENT, DOMINICAN SISTERS OF SPARKILL

TAX ID: 74.16-1-2.1

RIGHT-OF-WAY

EDGE OF RIGHT-OF-WAY APPROXIMATE LOCATION OF

FOUNDATIONS (TYP.)

R=100.00'

L=159.64'

T.B.R.

T.B.R. 💥

PAVEMEN7

EDGE OF

LIMIT OF DISTRUBANCE:

±85,124 SF (1.95 ACRES)

SOLID WH

SOLID WHITE

 $\Delta$ =91°28'03"

CH=S 0°44'11" W

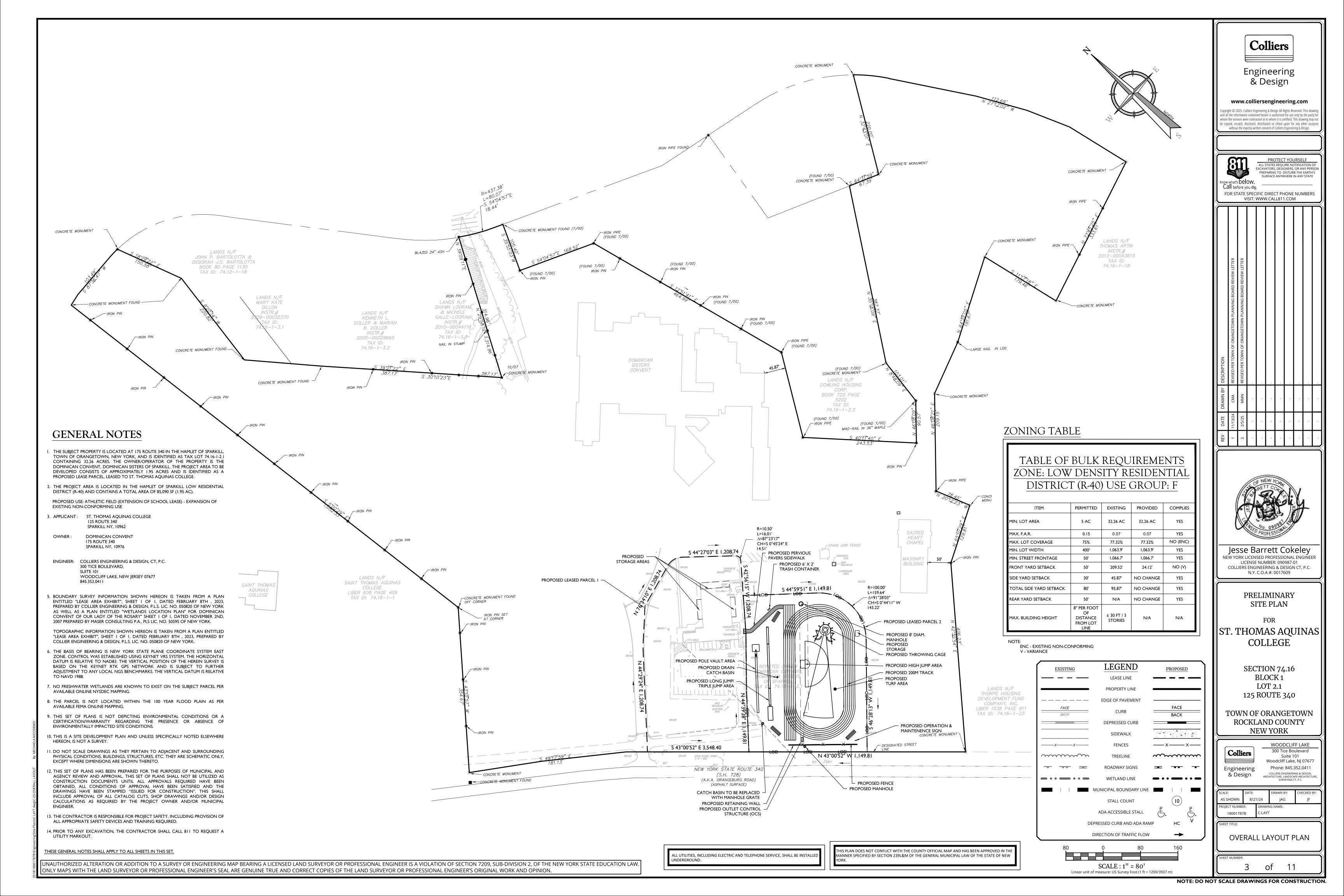
BASEMENT AREAS TO

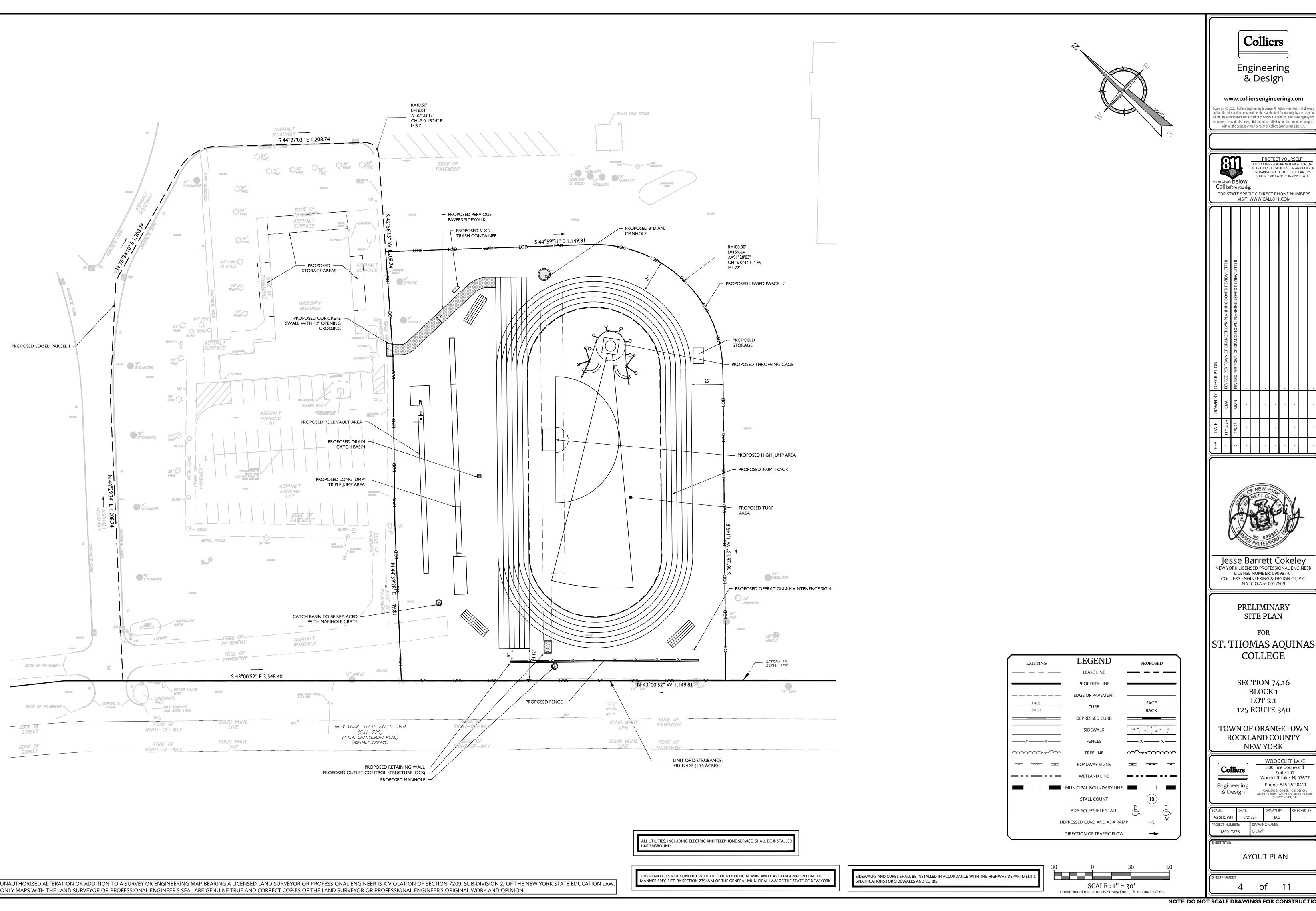
BE EXCAVATED AND

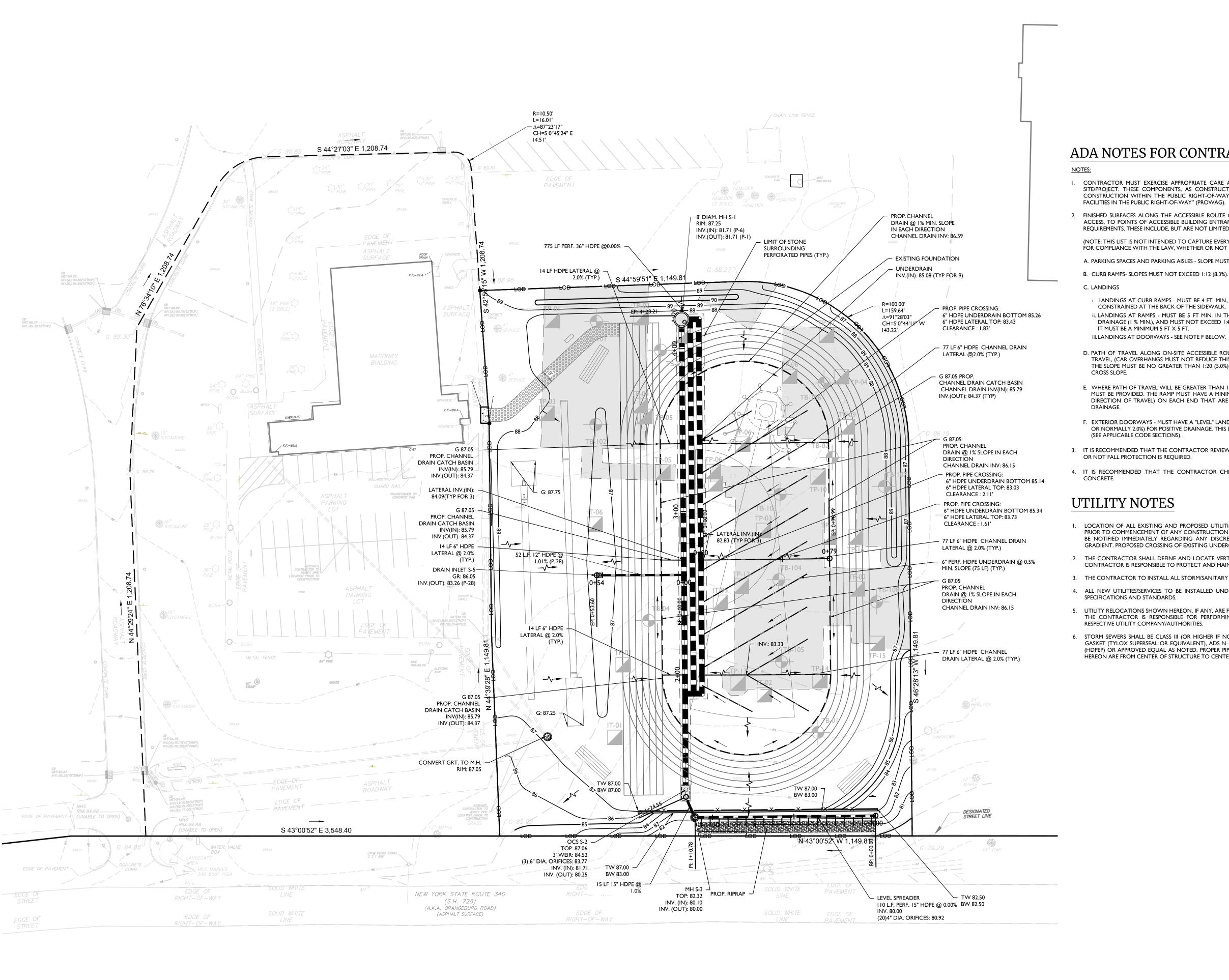
GEOTECHNICAL RECCOMMENDATIONS

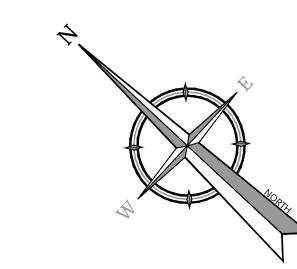
COORDINATED AS PER

LEASE PARCEL 2









### ADA NOTES FOR CONTRACTOR

- I. CONTRACTOR MUST EXERCISE APPROPRIATE CARE AND PRECISION IN CONSTRUCTION OF ADA (HANDICAPPED) ACCESSIBLE COMPONENTS FOR THE SITE/PROJECT. THESE COMPONENTS, AS CONSTRUCTED, MUST COMPLY WITH THE LATEST FEDERAL ADA STANDARDS FOR ACCESSIBLE DESIGN, AND CONSTRUCTION WITHIN THE PUBLIC RIGHT-OF-WAY MUST COMPLY WITH THE LATEST FEDERAL PROPOSED "ASSESSIBILITY GUIDELINES FOR PEDESTRIAN FACILITIES IN THE PUBLIC RIGHT-OF-WAY" (PROWAG).
- FINISHED SURFACES ALONG THE ACCESSIBLE ROUTE OF TRAVEL FROM PARKING SPACE, PUBLIC TRANSPORTATION, PEDESTRIAN ACCESS, INTER-BUILDING ACCESS, TO POINTS OF ACCESSIBLE BUILDING ENTRANCE/EGRESS, MUST COMPLY WITH THESE ADA CODE REQUIREMENTS AND ANY SUPPLEMENTAL STATE REQUIREMENTS. THESE INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:

(NOTE: THIS LIST IS NOT INTENDED TO CAPTURE EVERY APPLICABLE FEDERAL, STATE AND LOCAL RULE AND REGULATION. THE CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH THE LAW, WHETHER OR NOT STATED SPECIFICALLY HEREIN):

A. PARKING SPACES AND PARKING AISLES - SLOPE MUST NOT EXCEED 1:48 (L/4" PER FOOT OR NORMALLY 2.0%) IN ANY DIRECTION.

- i. LANDINGS AT CURB RAMPS MUST BE 4 FT. MIN., X 4 FT. MIN. AND ARE TO BE INCREASED TO 5 FEET WHERE THE LANDING SPACE (TURNING SPACE) IS CONSTRAINED AT THE BACK OF THE SIDEWALK.
- ii. LANDINGS AT RAMPS MUST BE 5 FT MIN. IN THE DIRECTION OF TRAVEL AND BE PROVIDED AT EACH END OF THE RAMP, MUST PROVIDE POSITIVE DRAINAGE (I % MIN.), AND MUST NOT EXCEED I:48 (I/4" PER FOOT OR NORMALLY 2.0%) IN ANY DIRECTION. WHEN LANDING IS ALSO A TURNING SPACE, IT MUST BE A MINIMUM 5 FT X 5 FT. iii. LANDINGS AT DOORWAYS - SEE NOTE F BELOW.
- D. PATH OF TRAVEL ALONG ON-SITE ACCESSIBLE ROUTE MUST PROVIDE A 36 INCH (EXCLUDING THE CURB) OR GREATER UNOBSTRUCTED WIDTH OF TRAVEL, (CAR OVERHANGS MUST NOT REDUCE THIS MINIMUM WIDTH). IN A PUBLIC RIGHT-OF-WAY, THE MINIMUM WIDTH EXCLUDING THE CURB IS 4 FT. THE SLOPE MUST BE NO GREATER THAN 1:20 (5.0%) IN THE DIRECTION OF TRAVEL AND MUST NOT EXCEED 1:48 (1/4" PER FOOT OR NORMALLY 2.0%) IN
- E. WHERE PATH OF TRAVEL WILL BE GREATER THAN 1:20 (5.0%), AN ADA RAMP, WITH A MAXIMUM SLOPE OF 1:12 (8.3%), FOR A MAXIMUM RISE OF 30 INCHES, MUST BE PROVIDED. THE RAMP MUST HAVE A MINIMUM. CLEAR WIDTH OF 36 INCHES, HAVE ADA HAND RAILS AND LANDINGS (MIN. 5 FT. LONG IN THE DIRECTION OF TRAVEL) ON EACH END THAT ARE SLOPED A MIN. I % AND NO MORE THAN 1:48 (L/4" PER FOOT OR NOMINALLY 2.0%) FOR POSITIVE
- F. EXTERIOR DOORWAYS MUST HAVE A "LEVEL" LANDING AREA ON THE EXTERIOR SIDE OF THE DOOR THAT IS SLOPED NO MORE THAN 1:48 (1/4" PER FOOT OR NORMALLY 2.0%) FOR POSITIVE DRAINAGE. THIS LANDING AREA IS GENERALLY 5 FT X 5 FT, EXCEPT WHERE OTHERWISE PERMITTED BY ADA STANDARDS. (SEE APPLICABLE CODE SECTIONS).
- 3. IT IS RECOMMENDED THAT THE CONTRACTOR REVIEW THE INTENDED CONSTRUCTION WITH THE LOCAL BUILDING CODE OFFICIAL, INCLUDING WHETHER OR NOT FALL PROTECTION IS REQUIRED.
- 4. IT IS RECOMMENDED THAT THE CONTRACTOR CHECK THE SLOPE OF FORMWORK FOR COMPLIANCE WITH ADA STANDARDS PRIOR TO POURING

### UTILITY NOTES

- I. LOCATION OF ALL EXISTING AND PROPOSED UTILITIES ARE APPROXIMATE AND MUST BE CONFIRMED INDEPENDENTLY WITH LOCAL UTILITY COMPANIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION OR EXCAVATION. ALL CONNECTION POINTS SHALL BE VERIFIED IN FIELD BY GC AND ENGINEER SHALL BE NOTIFIED IMMEDIATELY REGARDING ANY DISCREPANCIES. CONSTRUCTION SHALL COMMENCE BEGINNING AT LOWEST INVERT AND PROGRESS UP GRADIENT. PROPOSED CROSSING OF EXISTING UNDERGROUND UTILITIES SHALL BE FIELD VERIFIED BY TEST PIT PRIOR TO CONSTRUCTION.
- 2. THE CONTRACTOR SHALL DEFINE AND LOCATE VERTICALLY AND HORIZONTALLY ALL ACTIVE UTILITY AND/OR SERVICES THAT ARE TO BE REMOVED. THE CONTRACTOR IS RESPONSIBLE TO PROTECT AND MAINTAIN ALL ACTIVE SYSTEMS THAT ARE TO REMAIN DURING SITE CONSTRUCTION.
- 3. THE CONTRACTOR TO INSTALL ALL STORM/SANITARY SEWERS WHICH FUNCTION BY GRAVITY PRIOR TO THE INSTALLATION OF ALL OTHER UTILITIES.
- 4. ALL NEW UTILITIES/SERVICES TO BE INSTALLED UNDERGROUND. ALL TO BE INSTALLED IN ACCORDANCE WITH THE LOCAL UTILITY/SERVICE PROVIDER SPECIFICATIONS AND STANDARDS.
- 5. 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.
- 6. 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 (HDPEP), HANCOR SURE-LOK HIGH DENSITY POLYETHYLENE PIPE (HDPEP) OR APPROVED EQUAL AS NOTED. PROPER PIPE COVERAGE SHALL BE MAINTAINED DURING ALL PHASES OF CONSTRUCTION. PIPE LENGTHS SHOWN HEREON ARE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.

EXISTING	LEGEND	PROPOSED
12+00 PI 13	TRAVERSE LINE, CENTER LINE  3+00 OR BASELINE (LABEL AS SUCH)	<del></del>
	RIGHT OF WAY LINE	
	PROPERTY LINE	
	- — EDGE OF PAVEMENT	
BACK	CURB	FACE BACK
	DEPRESSED CURB	
	SIDEWALK	4 4 4
xx	FENCES	xx
······	TREELINE	······
<del></del>	ROADWAY SIGNS	<del>_</del> ~ ~
	WETLAND LINE	
	MUNICIPAL BOUNDARY LINE	
	'B' INLET	
	'E' INLET	
	STORM MANHOLE	
(\$)	SANITARY MANHOLE	S
	FLARED END SECTION	
	HEADWALL	
"	HYDRANT	<b>X</b>
$\Diamond$	POLE MOUNTED LIGHT	
75 —	CONTOURS	75
× G 29.0	SPOT ELEVATION	<b>x</b> G 29.0
	DIRECTION OF OVERLAND FLOW	<b>√</b>
× TC 29.0	TOP OF CURB ELEVATION	<b>x</b> TC 29.0
× BC 29.0	BOTTOM OF CURB ELEVATION	<b>★</b> BC 29.0
	TOP OF DEPRESSED CURB ELEVATION	ON X TDC 29.0

HIS PLAN DOES NOT CONFLICT WITH THE COUNTY OFFICIAL MAP AND HAS BEEN APPROVED IN THE 1ANNER SPECIFIED BY SECTION 239L&M OF THE GENERAL MUNICIPAL LAW OF THE STATE OF NEW ALL UTILITIES, INCLUDING ELECTRIC AND TELEPHONE SERVICE, SHALL BE INSTALLED

> OT DRAINAGE SHOWN SHALL CONSTITUTE EASEMENTS RUNNING WITH THE LAND AND ARE NOT TO BE DISTURBED.

SCALE: 1" = 30' Linear unit of measure: US Survey Foot (1 ft = 1200/3937 m)

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> **PRELIMINARY** SITE PLAN

ST. THOMAS AQUINAS COLLEGE

> SECTION 74.16 BLOCK 1 LOT 2.1 125 ROUTE 340

TOWN OF ORANGETOWN ROCKLAND COUNTY

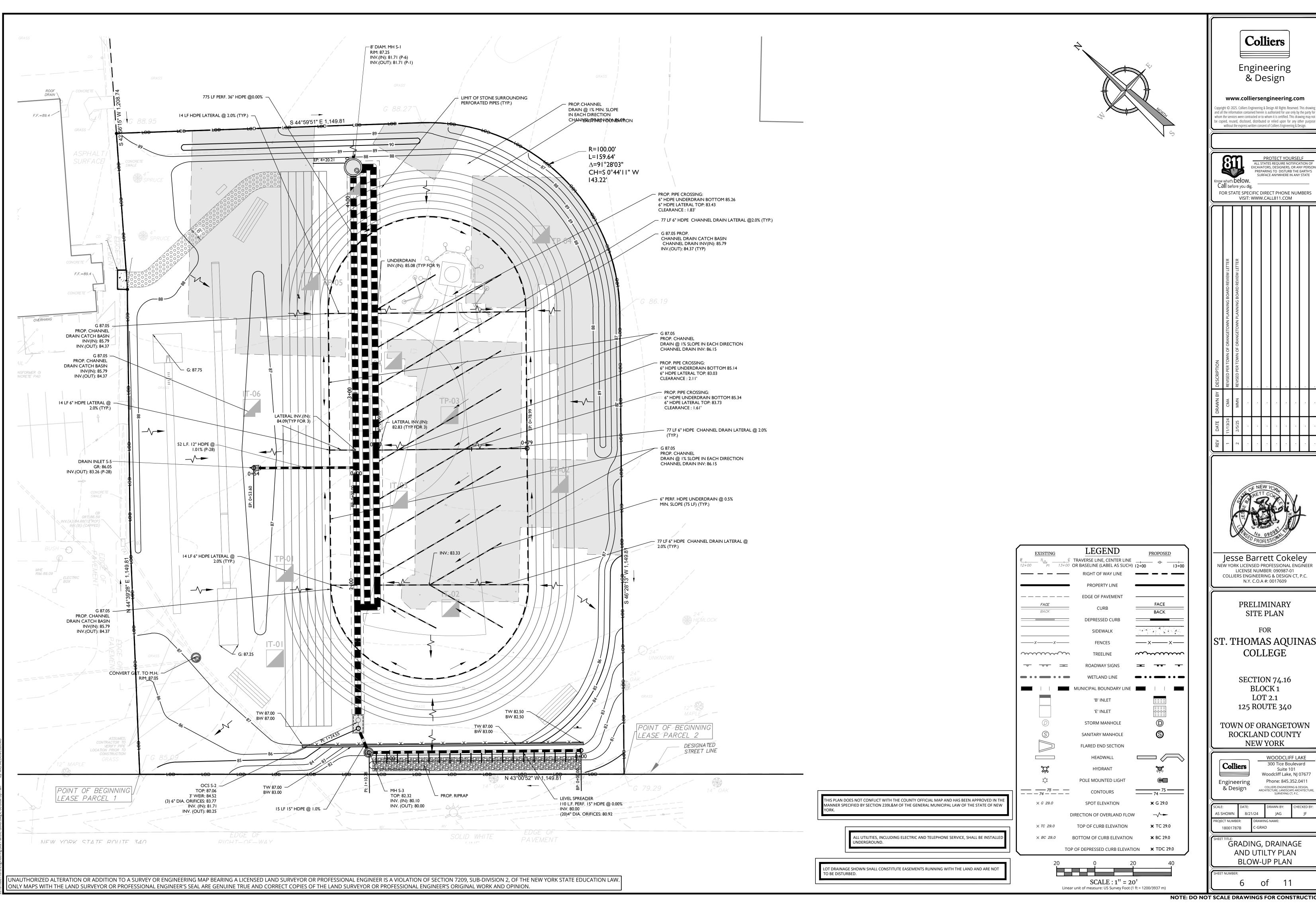
**NEW YORK** 

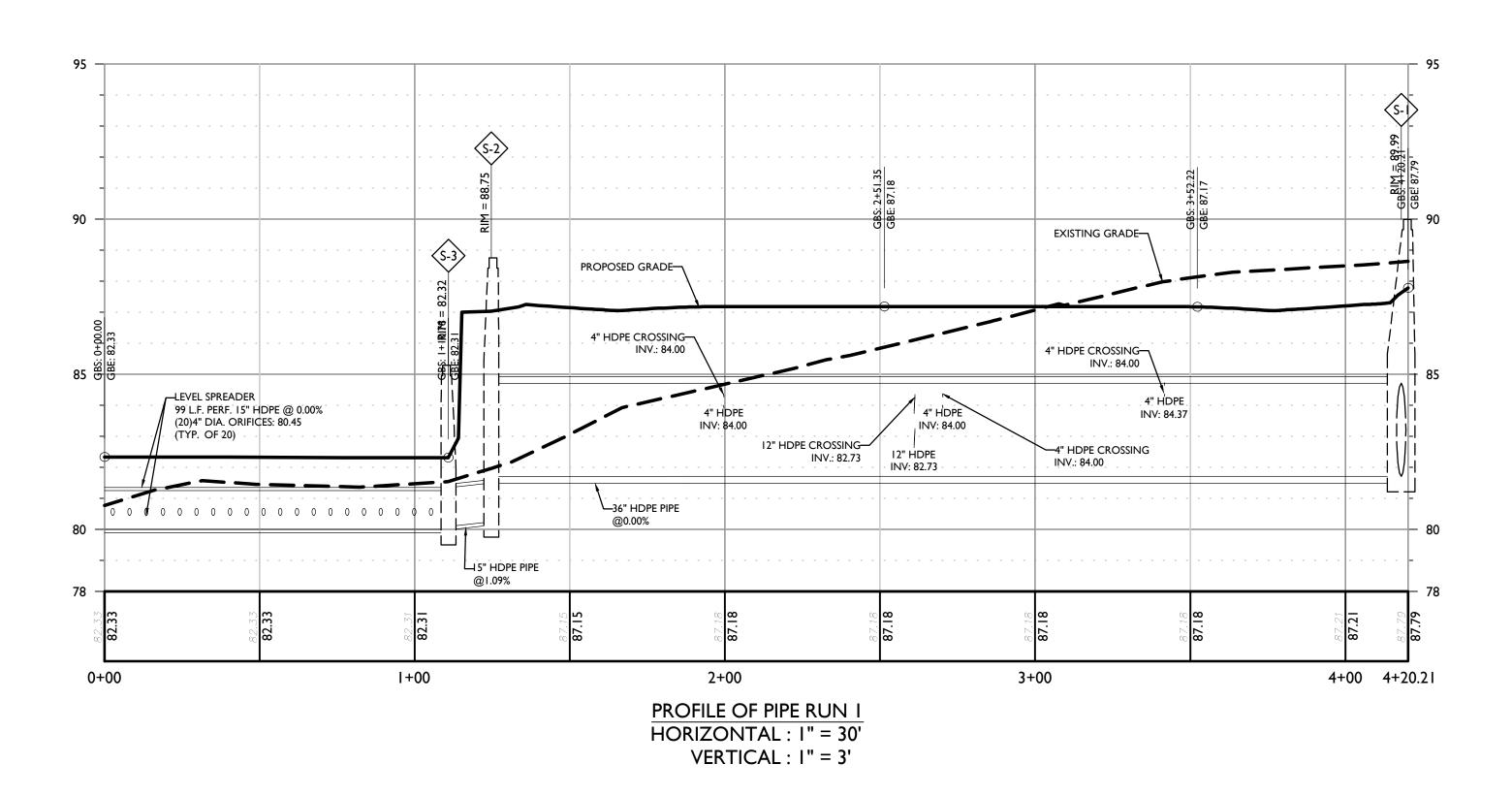
	WOODCLIFF LAKE
Colliers	300 Tice Boulevard
<b>Joiners</b>	Suite 101
	Woodcliff Lake, NJ 0767
gineering	Phone: 845.352.0411
& Design	COLLIERS ENGINEERING & DESIGN, ARCHITECTURE, LANDSCAPE ARCHITECT SURVEYING CT, P.C.

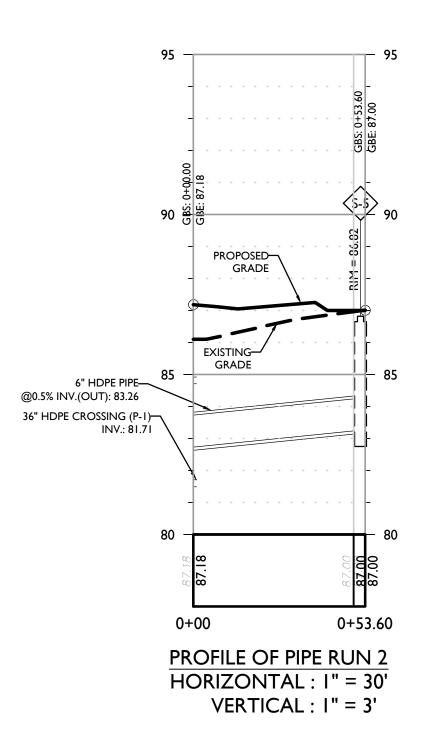
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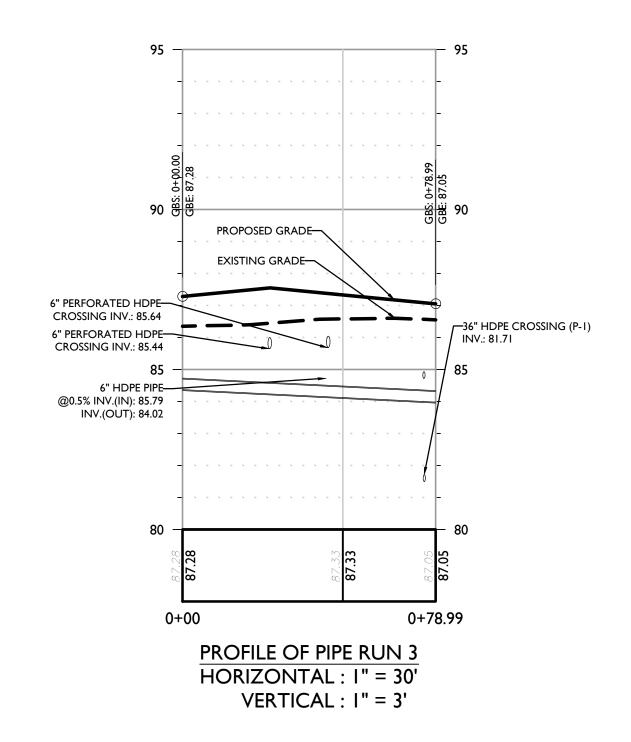
GRADING, DRAINAGE AND UTILTY PLAN

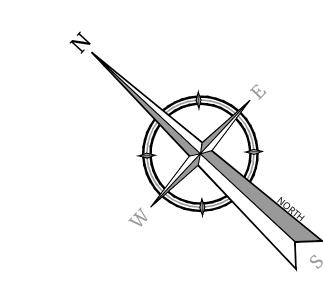
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LEGEND

TRAVERSE LINE, CENTER LINE TAVERSE LINE, CENTER LINE

13+00 OR BASELINE (LABEL AS SUCH) 12+00

13+00

**EDGE OF PAVEMENT** 

DEPRESSED CURB

SIDEWALK

FENCES

TREELINE

WETLAND LINE

'B' INLET

STORM MANHOLE

SANITARY MANHOLE

FLARED END SECTION

HEADWALL

HYDRANT

POLE MOUNTED LIGHT

CONTOURS

SPOT ELEVATION

DIRECTION OF OVERLAND FLOW

TOP OF CURB ELEVATION

BOTTOM OF CURB ELEVATION

TOP OF DEPRESSED CURB ELEVATION X TDC 29.0

4 4 4

\_\_\_x\_\_\_x\_\_

 $\sim$ 

75 \_\_\_\_\_

**X** G 29.0

BACK

\_\_\_\_x\_\_\_\_x\_\_\_

 $\sim$ 

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> **PRELIMINARY** SITE PLAN

ST. THOMAS AQUINAS COLLEGE

> SECTION 74.16 BLOCK 1 LOT 2.1 125 ROUTE 340

TOWN OF ORANGETOWN ROCKLAND COUNTY **NEW YORK** 

WOODCLIFF LAKE 300 Tice Boulevard Colliers & Design

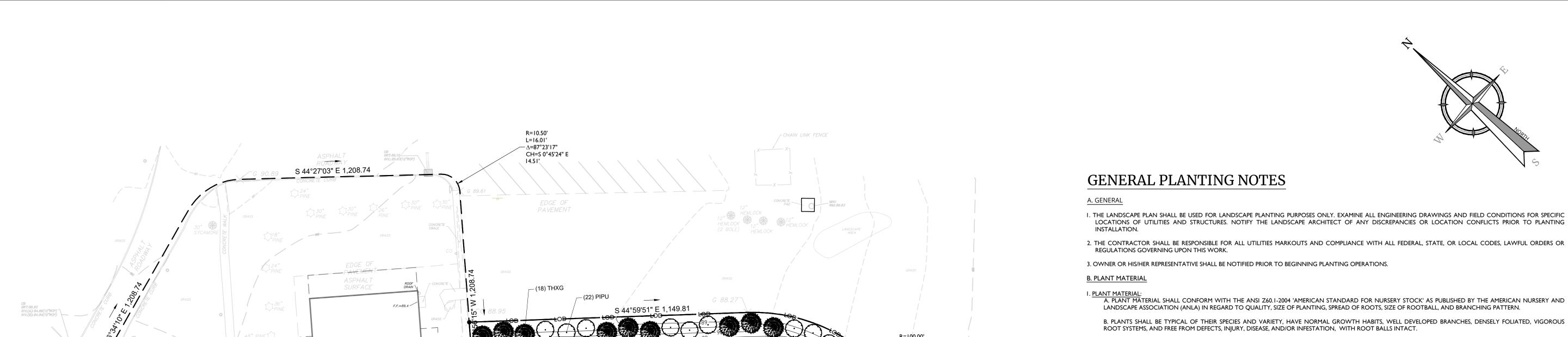
Woodcliff Lake, NJ 07677 Phone: 845.352.0411

18001787B

PROFILE PLAN

of

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY OR ENGINEERING MAP BEARING A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. ONLY MAPS WITH THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S ORIGINAL WORK AND OPINION.



THIS PLAN DOES NOT CONFLICT WITH THE COUNTY OFFICIAL MAP AND HAS BEEN APPROVED IN THI

WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, SOIL

SHALL NOT BE EXPOSED MORE THAN SEVEN (7) DAYS. CONTRACTOR SHALL INITIATE

STABILIZATION MEASURES IN ACCORDANCE WITH THE SOIL EROSION & SEDIMENT

CONTROL PLAN.

MANNER SPECIFIED BY SECTION 239L&M OF THE GENERAL MUNICIPAL LAW OF THE STATE OF NEW

LIMIT OF DISTRUBANCE: ±85,124 SF SF (1.95 ACRES)

L=159.64' ∆=91°28'03" CH=S 0°44'11" W I. THE LANDSCAPE PLAN SHALL BE USED FOR LANDSCAPE PLANTING PURPOSES ONLY. EXAMINE ALL ENGINEERING DRAWINGS AND FIELD CONDITIONS FOR SPECIFIC LOCATIONS OF UTILITIES AND STRUCTURES. NOTIFY THE LANDSCAPE ARCHITECT OF ANY DISCREPANCIES OR LOCATION CONFLICTS PRIOR TO PLANTING

- B. PLANTS SHALL BE TYPICAL OF THEIR SPECIES AND VARIETY, HAVE NORMAL GROWTH HABITS, WELL DEVELOPED BRANCHES, DENSELY FOLIATED, VIGOROUS
- C. ALL PLANT MATERIAL SHALL BEAR THE SAME RELATION TO FINISHED GRADE AT THE NURSERY. THE PLANT MATERIAL SHALL BE PLANTED AT THE SAME LEVEL
- D. PLANT MATERIAL SHALL BE PLANTED ON THE DAY OF DELIVERY TO THE SITE. IN THE EVENT THIS IS NOT POSSIBLE, THE CONTRACTOR SHALL TAKE APPROPRIATE STEPS TO PROTECT THE PLANT MATERIAL FROM DAMAGE PRIOR TO INSTALLATION.
- E. THE LANDSCAPE ARCHITECT OR OWNER SHALL HAVE THE RIGHT, AT ANY STAGE OF THE OPERATION, TO REJECT ANY AND ALL PLANT MATERIAL WHICH IN THEIR OPINION DOES NOT MEET THE REQUIREMENTS OF THESE PLANS.
- 2. PLANT QUANTITIES: THE LANDSCAPE PLAN SHOULD TAKE PRECEDENCE OVER THE PLANT SCHEDULE IF ANY PLANT DISCREPANCIES OCCUR.
- 3. PLANT SIZE: THE CONTRACTOR SHALL FURNISH PLANT MATERIAL IN THE CALIPER, HEIGHT, SIZE OR SPREAD INDICATED IN THE PLANT SCHEDULE.
- 4. SUBSTITUTIONS: NO PLANT SUBSTITUTIONS SHALL BE PERMITTED WITH REGARD TO SIZE, SPECIES, OR VARIETY WITHOUT WRITTEN PERMISSIONS OF THE MUNICIPALITY, LANDSCAPE ARCHITECT, OR OWNER. WRITTEN PROOF OF THE PLANT MATERIAL UNAVAILABILITY MUST BY DOCUMENTED BY THE CONTRACTOR.
- 5. GUARANTEE: PLANT MATERIAL SHALL BE GUARANTEED FOR TWO (2) YEARS FROM THE DATE OF FINAL ACCEPTANCE. ANY PLANT MATERIAL THAT IS WITHIN THAT TIME PERIOD SHALL BE REMOVED, INCLUDING STUMP, AND REPLACED WITH A SIMILAR SIZE AND SPECIES AT THE EXPENSE OF THE CONTRACTOR WITHIN ONE YEAR OF ONE GROWING SEASON. TREE STAKES, WRAPPING, AND PLASTIC CHAINS SHALL BE REMOVED AT THE END OF THE GUARANTEE PERIOD.

### C. PLANTING PROCEDURES

- A. PROVIDE PLANTING PITS AS INDICATED ON PLANTING DETAILS. BACKFILL PLANTING PITS WITH WELL DRAINING AND FERTILE SOILS. SOILS SHALL BE SANDY LOAM, FREE FROM DEBRIS, ROCKS, ETC. SOIL TO BE ONE PART EACH OF TOPSOIL, MOISTENED PEAT MOSS, AND PARENT MATERIAL.
- B. PLANTING BEDS SHALL RECEIVE THREE (3) INCHES OF DOUBLE SHREDDED HARDWOOD MULCH AND TREATED WITH A PRE-EMERGENT HERBICIDE. NO MULCH SHALL COME IN DIRECT CONTACT WITH ROOT FLARE/COLLAR; UNDER NO CIRCUMSTANCES SHALL THE ROOT CROWN BE BURIED.
- C. SHRUB MASSES SHALL BE PLANTED IN CONTINUOUS MULCHED BEDS.
- 2. PLANT LOCATIONS: THE LOCATION OF ALL PLANT MATERIAL INDICATED ON THE LANDSCAPE PLANS ARE APPROXIMATE. THE FINAL LOCATION OF ALL PLANT MATERIAL AND PLANTING BEDLINES SHALL BE DETERMINED IN THE FIELD AT THE TIME OF INSTALLATION FOLLOWING THE BASIC INTENT OF THE APPROVED PLANS, UNLESS THERE IS A SPECIFIC DIMENSION OR LOCATION SHOWN.
- B. <u>Planting dates:</u> Planting Operations shall be performed during periods within the Planting Season when weather and soil conditions are SUITABLE AND IN ACCORDANCE WITH ACCEPTED LOCAL PRACTICES. PLANTING SEASONS ARE DEFINED AS MARCH 15 THROUGH MAY 15 AND SEPT 15 THROUGH NOV 15. PLANTING IS ACCEPTABLE DURING THE WINTER MONTHS IF WEATHER PERMITS AND THE GROUND IS NOT FROZEN, AND IN THE SUMMER IF SUPPLEMENTAL WATERING IS PROVIDED. SOIL MUST BE FROST FREE, FRIABLE, AND NOT MUDDY AT TIME OF PLANTING.

#### 4. PLANTING METHODS: A. TREES SHALL BE SUPPORTED IMMEDIATELY AFTER PLANTING. PLANT MATERIAL SHALL BE PROPERLY GUYED, STAKED, AND PLANTED IN CONFORMANCE WITH

- THE TYPICAL PLANTING DETAILS. (I) STAKES SHALL BE EIGHT TO TEN FEET LONG, OF SOUND, DURABLE UNFINISHED LUMBER CAPABLE OF WITHSTANDING ABOVEGROUND AND UNDERGROUND CONDITIONS DURING THE PERIOD OF GUARANTEE WITH TOP AND BOTTOM DIMENSIONS OF TWO INCHES BY TWO INCHES IN DIAMETER (2) THREE STAKES SHALL BE EQUALLY SPACED ABOUT THE TREE IN A TRIANGULAR FASHION AND SHALL BE DRIVEN VERTICALLY INTO THE GROUND  $2\frac{1}{2}$  TO 3 FEET IN A MANNER THAT DOES NOT INJURE THE ROOT BALL.
- (3) TREES SHALL BE FASTENED TO EACH STAKE AT A HEIGHT OF FIVE FEET BY MEANS OF PLASTIC CHAIN LINK TREE TIE  $\binom{7}{16}$  WIDE RECOMMENDED FOR TREES UP TO  $2\frac{1}{2}$  INCHES IN CALIPER).
- B. SET PLANTS PLUMB AND STRAIGHT. SET AT SUCH LEVEL THAT AFTER SETTLEMENT A NORMAL OR NATURAL RELATIONSHIP TO THE CROWN OF THE PLANT WITH THE GROUND SURFACE WILL BE ESTABLISHED. LOCATE PLANTS IN CENTER OF PIT.
- C. AT TIME OF INSTALLATION, THE CONTRACTOR SHALL WATER NEWLY INSTALLED PLANT MATERIAL. THE CONTRACTOR SHALL PROVIDE REGULAR WATERING TO ENSURE THE ESTABLISHMENT, GROWTH, AND SURVIVAL OF ALL PLANTS.
- D. B&B PLANTS SHALL BE HANDLED FROM THE BOTTOM OF THE ROOTBALL ONLY. PLANTS WITH BROKEN, SPLIT, OR DAMAGED ROOTBALLS SHALL BE REJECTED.
- E. CORD BINDING OF ALL B&B PLANTS SHALL BE CUT AND REMOVED, ALONG WITH THE BURLAP OF THE UPPER 🖁 OF THE ROOT BALL. ALL WIRE BASKETS ARE TO BE REMOVED PRIOR TO BACKFILLING PLANTING PIT.

### D. MAINTENANCE

- A. EACH TREE AND SHRUB SHALL BE PRUNED IN ACCORDANCE WITH THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION TO PRESERVE THE NATURAL CHARACTER OF THE PLANT. ALL DEAD WOOD OR SUCKERS AND ALL BROKEN OR BADLY BRUISED BRANCHES SHALL BE REMOVED. PRUNING SHALL BE DONE WITH CLEAN, SHARP TOOLS.
- B. SHADE TREES PLANTED NEAR PEDESTRIAN OR VEHICULAR ACCESS SHOULD NOT BE BRANCHED LOWER THAN 7'-0" ABOVE GRADE, PLANT MATERIAL LOCATED WITHIN SIGHT TRIANGLE EASEMENTS SHALL NOT EXCEED A MATURE HEIGHT OF 30" ABOVE THE ELEVATION OF THE ADJACENT CURB. STREET TREES PLANTED IN SIGHT TRIANGLE EASEMENTS SHALL BE PRUNED TO NOT TO HAVE BRANCHES BELOW 7'-0".
- C. THE CENTRAL LEADER SHALL NOT BE CUT OR DAMAGED.

## A. THE LANDSCAPE CONTRACTOR SHALL TEST THE SOIL TO CONFIRM SUITABILITY FOR THE PROPOSED SEED MIX AND SUPPLEMENT AS REQUIRED TO MEET THE

REQUIRED PH & NUTRIENT LEVELS.

B. ALL DISTURBED AREAS SHALL BE STABILIZED WITH SEED UNLESS OTHERWISE INDICATED ON THE LANDSCAPE PLANS. SEED SHALL BE IN ACCORDANCE WITH THE

- C. SOD, IF SPECIFIED, SHALL CONSIST OF A NEW YORK CERTIFIED MIXTURE. ALL DISTURBED AREAS INDICATED AS LAWN OR SOD SHALL BE TOPSOILED, LIMED, AND FERTILIZED & FINE GRADED PRIOR TO LAWN INSTALLATION.
- . EXISTING VEGETATION: EXISTING TREES AND SHRUBS TO BE PRESERVED ON SITE SHALL BE PROTECTED AGAINST CONSTRUCTION DAMAGE BY SNOW FENCING. FENCING SHALL BE PLACED OUTSIDE THE INDIVIDUAL TREE CANOPY. TREES TO REMAIN SHALL BE IDENTIFIED IN THE FIELD PRIOR TO COMMENCEMENT OF CONSTRUCTION. TREE PROTECTION FENCING SHALL BE INSTALLED PRIOR TO COMMENCEMENT OF CONSTRUCTION, GRADING, OR CLEARING. EXISTING VEGETATION BEING PRESERVED AND LOCATED AT THE EDGE OF THE NEW TREELINE SHALL BE PRUNED AND TRIMMED TO REMOVE ALL DEAD, DAMAGED, OR
- 4. SITE CLEANUP: PLANTING DEBRIS (WIRE, TWINE, RUBBERHOSE, BACKFILL, ETC.) SHALL BE REMOVED FROM THE SITE AFTER PLANTING IS COMPLETE. THE PROPERTY IS TO BE LEFT IN A NEAT, ORDERLY CONDITION IN ACCORDANCE WITH ACCEPTED PLANTING PRACTICES.
- 5. VEGETATION THAT DIES DURING ANY SEASON SHALL BE REPLACED AT THE START OF THE NEXT GROWING SEASON.

SEED SPECIFICATIONS AS NOTED ON THE PHASE II SOIL EROSION AND SEDIMENT CONTROL SHEET.

ALL UTILITIES, INCLUD UNDERGROUND	ING ELECTRIC AND TELEPHONE SERV	ICE, SHALL BE INSTALLED	)	CODE
				EVER
TREES TO BE DI ANITER	) IN ACCORDANCE WITH THE TOW	/N CODE REGULATION (	21-25	PIPU

PLANTING SCHEDULE						
CODE	BOTANICAL NAME	COMMON NAME	COND.	NOTES	<u>QTY</u>	
EVERGREEN TREES	PICEA PUNGENS GLAUCA	COLARADO BLUE SPRUCE	6`	B & B	22	
THXG	THUJA X 'GREEN GIANT'	GREEN GIANT ARBORVITAE	6`	B & B	18	

SCALE: 1" = 30' Linear unit of measure: US Survey Foot (1 ft = 1200/3937 m) Engineering & Design

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> **PRELIMINARY** SITE PLAN

ST. THOMAS AQUINAS COLLEGE

> SECTION 74.16 BLOCK 1 LOT 2.1 125 ROUTE 340

TOWN OF ORANGETOWN ROCKLAND COUNTY **NEW YORK** 

	WOODCLIFF LA
Colliers	300 Tice Bouleva Suite 101
ngineering	Woodcliff Lake, NJ ( Phone: 845.352.0
& Design	COLLIERS ENGINEERING & D ARCHITECTURE, LANDSCAPE ARC SURVEYING CT, P.C.

18001787B

LANDSCAPE PLAN

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POINT OF BEGINNIN

NEW YORK STATE ROUTE 340

(S.H. 728)

(A.K.A. ORANGEBURG ROAD)

(ASPHALT SURFACE)

SEE CONSTRUCTION DETAILS FOR LANDSCAPE DETAILS

HIS PLAN TO BE UTILIZED FOR LANDSCAPE PURPOSES ONL'

LEASE PARCEL 1

S 43°00'52" E 3,548.40

PLANT DETAIL NOTES

PROPER DRAINAGE BEFORE PLANTING.

CONTRACTOR SHALL REMOVE WRAPPING AT THE END OF GUARANTEE PERIOD.

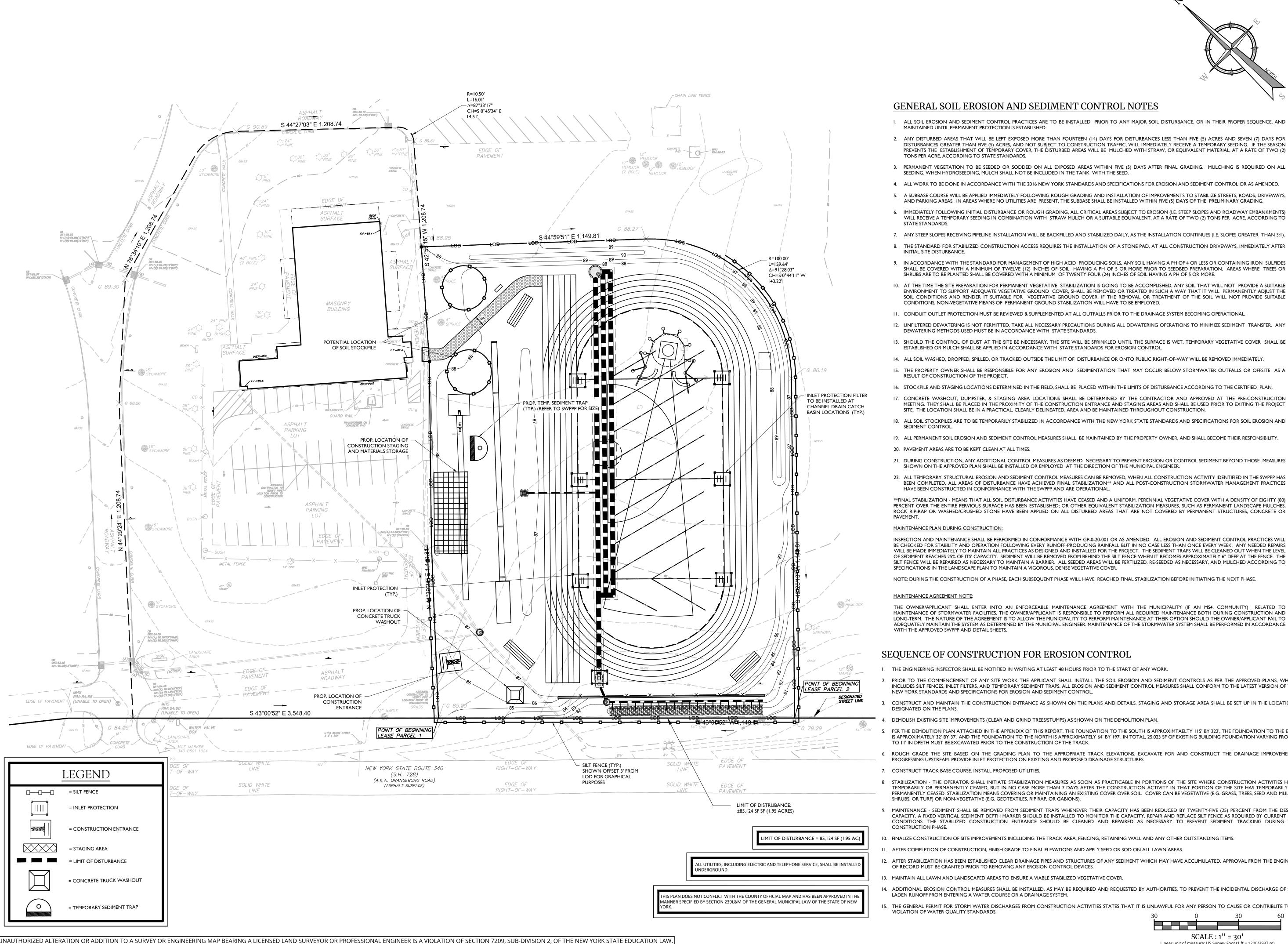
3. BACKFILL MIXTURE TO BE SPECIFIED BASED UPON SOIL TEST AND CULTURAL REQUIREMENTS OF PLANT.

I. CONTRACTOR SHALL PARTIALLY FILL WITH WATER A REPRESENTATIVE NUMBER OF PITS IN EACH AREA OF THE PROJECT PRIOR TO

2. PLANTING MUST BE GUARANTEED FOR TWO (2) FULL YEARS FROM THE TIME OF FINAL ACCEPTANCE BY THE TOWN OF ORANGETOWN.

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

PLANTING TO DETERMINE IF THERE IS ADEQUATE PERCOLATION. IF PIT DOESN'T PERCOLATE, MEASURES MUST BE TAKEN TO ASSURE





- 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.
- 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)
- 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 TANK WITH THE SEED.
- 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.
- 6. IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING, ALL CRITICAL AREAS SUBJECT TO EROSION (I.E. STEEP SLOPES 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
- 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 EMPLOYED.
- II. CONDUIT OUTLET PROTECTION MUST BE REVIEWED & SUPPLEMENTED AT ALL OUTFALLS PRIOR TO THE DRAINAGE SYSTEM BECOMING OPERATIONAL.
- 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 STATE STANDARDS.
- 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-CONSTRUCITON
- 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.
- 19. ALL PERMANENT SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED BY THE PROPERTY OWNER, AND SHALL BECOME THEIR RESPONSIBILITY. 20. PAVEMENT AREAS ARE TO BE KEPT CLEAN AT ALL TIMES.
- 21. DURING CONSTRUCTION, ANY ADDITIONAL CONTROL MEASURES AS DEEMED NECESSARY TO PREVENT EROSION OR 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.

\*\*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

### MAINTENANCE PLAN DURING CONSTRUCTION:

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.

NOTE: DURING THE CONSTRUCTION OF A PHASE, EACH SUBSEQUENT PHASE WILL HAVE REACHED FINAL STABILIZATION BEFORE INITIATING THE NEXT PHASE.

### 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.

### SEQUENCE OF CONSTRUCTION FOR EROSION CONTROL

- I. THE ENGINEERING INSPECTOR SHALL BE NOTIFIED IN WRITING AT LEAST 48 HOURS PRIOR TO THE START OF ANY WORK
- PRIOR TO THE COMMENCEMENT OF ANY SITE WORK THE APPLICANT SHALL INSTALL THE SOIL EROSION AND SEDIMENT CONTROLS AS PER THE APPROVED PLANS, WHICH INCLUDES SILT FENCES, INLET FILTERS, AND TEMPORARY SEDIMENT TRAPS. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL CONFORM TO THE LATEST VERSION OF THE NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL.
- CONSTRUCT AND MAINTAIN THE CONSTRUCTION ENTRANCE AS SHOWN ON THE PLANS AND DETAILS. STAGING AND STORAGE AREA SHALL BE SET UP IN THE LOCATIONS DESIGNATED ON THE PLANS.
- DEMOLISH EXISTING SITE IMPROVEMENTS (CLEAR AND GRIND TREES/STUMPS) AS SHOWN ON THE DEMOLITION PLAN.
- PER THE DEMOLITION PLAN ATTACHED IN THE APPENDIX OF THIS REPORT, THE FOUNDATION TO THE SOUTH IS APPROXIMTAELTY 115' BY 222', THE FOUNDATION TO THE EAST IS APPROXIMATELY 32' BY 37', AND THE FOUNDATION TO THE NORTH IS APPROXIMATELY 64' BY 197'. IN TOTAL, 25,023 SF OF EXISTING BUILDING FOUNDATION VARYING FROM 2' TO II' IN DPETH MUST BE EXCAVATED PRIOR TO THE CONSTRUCTION OF THE TRACK.
- 6. ROUGH GRADE THE SITE BASED ON THE GRADING PLAN TO THE APPROPRIATE TRACK ELEVATIONS. EXCAVATE FOR AND CONSTRUCT THE DRAINAGE IMPROVEMENTS PROGRESSING UPSTREAM. PROVIDE INLET PROTECTION ON EXISTING AND PROPOSED DRAINAGE STRUCTURES.
- 7. CONSTRUCT TRACK BASE COURSE. INSTALL PROPOSED UTILITIES.
- 8. 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, OR GABIONS).
- 9. 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 MONITOR THE CAPACITY. REPAIR AND REPLACE SILT FENCE AS REQUIRED BY CURRENT SITE CONDITIONS. THE STABILIZED CONSTRUCTION ENTRANCE SHOULD BE CLEANED AND REPAIRED AS NECESSARY TO PREVENT SEDIMENT TRACKING DURING THE CONSTRUCTION PHASE.
- 10. FINALIZE CONSTRUCTION OF SITE IMPROVEMENTS INCLUDING THE TRACK AREA, FENCING, RETAINING WALL AND ANY OTHER OUTSTANDING ITEMS.
- II. AFTER COMPLETION OF CONSTRUCTION, FINISH GRADE TO FINAL ELEVATIONS AND 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. APPROVAL FROM THE ENGINEER OF RECORD MUST BE GRANTED PRIOR TO REMOVING ANY EROSION CONTROL DEVICES.
- 13. MAINTAIN ALL LAWN AND LANDSCAPED AREAS TO ENSURE A VIABLE STABILIZED VEGETATIVE COVER.
- 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.
- 15. 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.





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

SITE PLAN

**PRELIMINARY** 

ST. THOMAS AQUINAS COLLEGE

> **SECTION 74.16** BLOCK 1 LOT 2.1 125 ROUTE 340

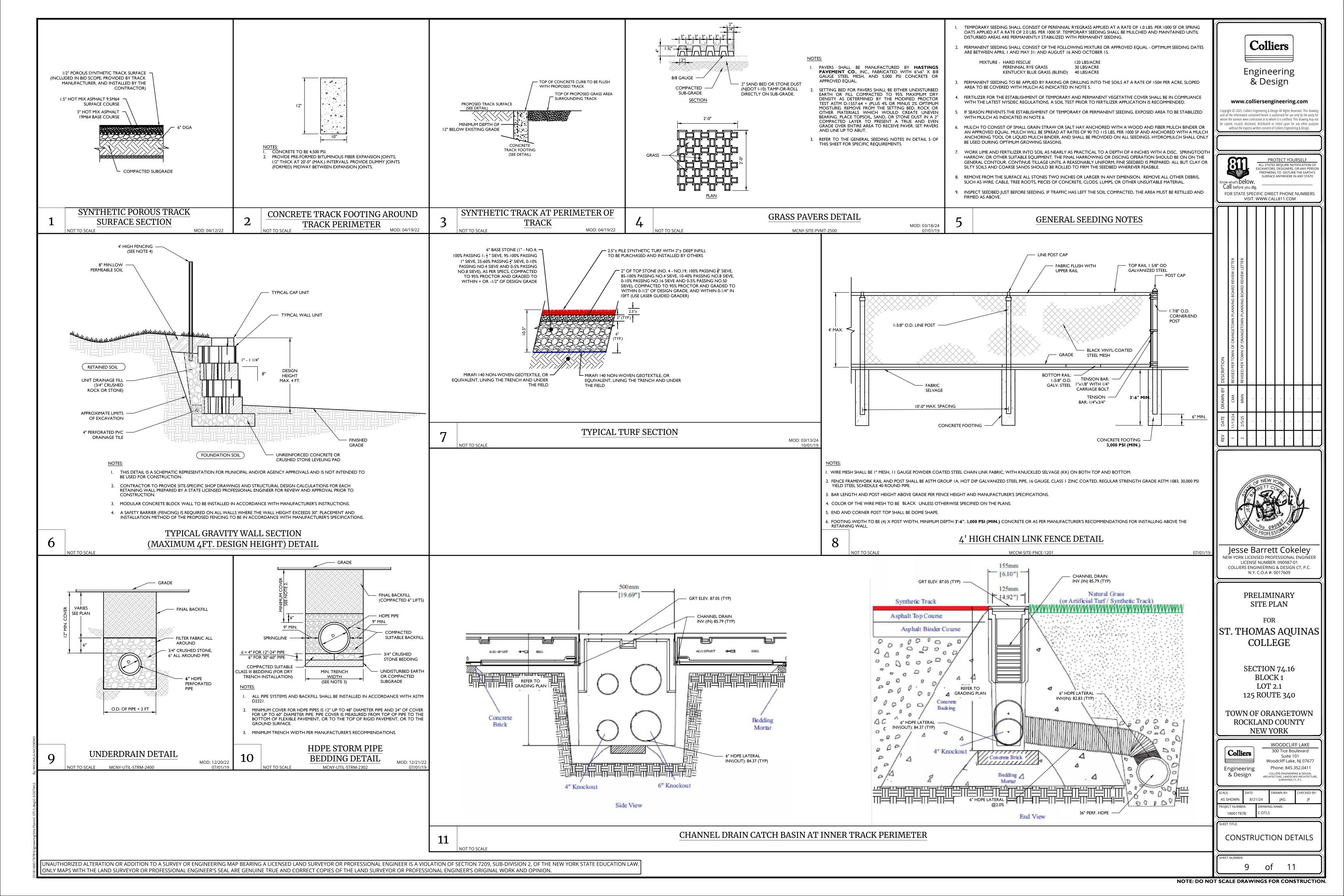
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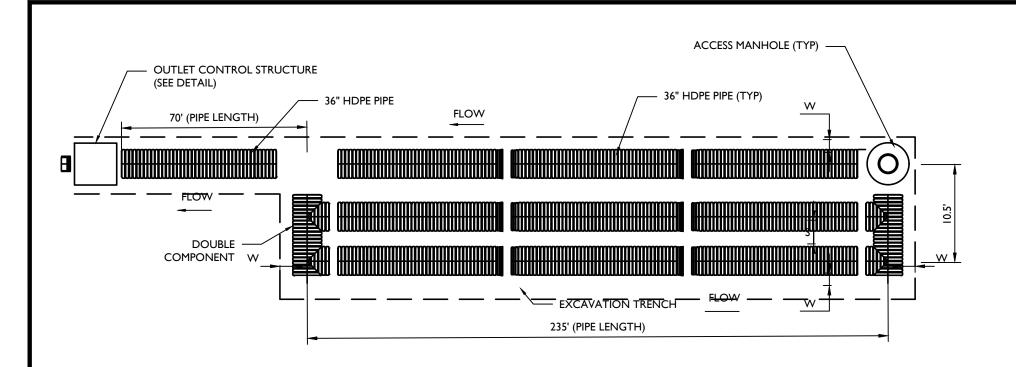
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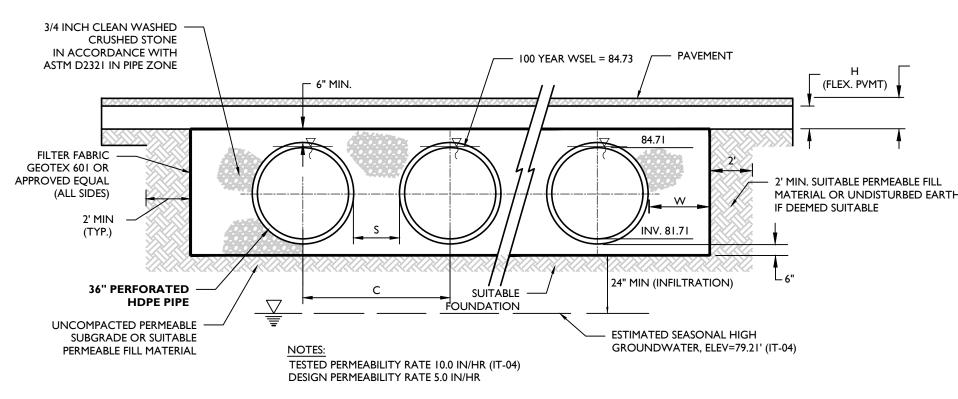
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SOIL EROSION & SEDIMENT CONTROL PLAN

ONLY MAPS WITH THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S ORIGINAL WORK AND OPINION







NOMINAL	NOMINAL	TYPICAL	TYPICAL	TYPICAL SIDE	H (MIN. PIPE COVER)
DIAMETER	O.D.	SPACING "S"	SPACING "C"	WALL "W'	(TRAFFIC)
24"	28"	13"	40.7"	10"	12"
(600 MM)	(711 MM)	(330 MM)	(1034 MM)	(254 MM)	(292 MM)
30"	36"	18"	53.1"	18"	12"
(750 MM)	(914 MM)	(457 MM)	(1347 MM)	(457 MM)	(292 MM)
36"	42"	21"	63"	18"	12"
(900 MM)	(1067 MM)	(559 MM)	(1600 MM)	(457 MM)	(292 MM)
42"	48"	24"	71.9"	18"	24"
(1050 MM)	(1219 MM)	(610 MM)	(1826 MM)	(457 MM)	(610 MM)
48"	54"	25"	78.5"	18"	24"
(1200 MM)	(1372 MM)	(635 MM)	(1994 MM)	(457 MM)	(610 MM)
60"	67"	24"	90"	18"	24"
(1500 MM)	(1702 MM)	(610 MM)	(2286 MM)	(457 MM)	(610 MM)

- I. SEE ABOVE CHART SPECIFIC TO MATERIAL/PIPE SIZES PER MANUFACTURER'S SPECIFICATIONS.
- 2. (H) FOR FLEXIBLE PAVEMENT MAY INCLUDE THE PAVEMENT SUBBASE THICKNESS AS MINIMUM COVER. 3. CLASS I A BACKFILL MATERIAL PER ASTM 2321 REQUIRED FOR PIPES 60" DIAMETER OR LARGER.

#### UNDERGROUND INFILTRATION BASIN CONSTRUCTION NOTES

### PRE-CONSTRUCTION:

- CONTRACTOR SHALL PROCURE THE SERVICES OF A NEW YORK LICENSED PROFESSIONAL ENGINEER TO PERFORM REGULAR OVERSIGHT OF THE CONSTRUCTION OF THE UNDERGROUND 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 UNDERGOUND INFILTRATION BASIN/BMP.
- FOR THE BASIN/BMP 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/BMP WHEN THE SOIL MOISTURE CONTENT IS ABOVE THE LOWER PLASTIC

b. THE CONTRACTOR SHALL IDENTIFY THE CONSTRUCTION EQUIPMENT TO BE USED

- LIMIT AND THAT THE SPECIFICATIONS OF THE REPLACEMENT SOIL ARE MET. d. Testing each soil layer within the infiltration area where the PERMEABILITY RATE IS CRITICAL PRIOR TO THE PLACEMENT OF THE HDPE PIPES TO ENSURE THAT THE PERMEABILITY RATE OF THE SUBSOIL HAS BEEN RETAINED. e. THE CONTRACTOR SHALL ENSURE THAT PROPER PRECAUTIONS SUCH AS THE USE
- 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
- 3. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR REVIEW AND APPROVAL BY THE ENGINEER PRIOR TO ORDERING MATERIALS.

OF SILT FENCING ARE TAKEN TO PREVENT SEDIMENT FROM ENTERING THE

### **DURING CONSTRUCTION**

- I. ALL EARTHWORK OPERATIONS, INCLUDING EXCAVATION, GRADING AND BACKFILL OPERATIONS SHALL BE CONDUCTED UNDER THE SUPERVISION OF A NEW YORK LICENSED PROFESSIONAL ENGINEER.
- 2. DURING CLEARING AND GRADING OF THE SITE, MEASURES SUCH AS THE USE OF APPROPRIATE CONSTRUCTION EQUIPMENT MUST BE TAKEN TO ELIMINATE SOIL COMPACTION AT THE LOCATION OF THE PROPOSED INFILTRATION BASIN/BMP.
- 3. THE LOCATION OF THE PROPOSED INFILTRATION BASIN/BMP 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.
- 4. PRIOR TO INSTALLATION OF STONE BEDDING, THE PERMEABILITY RATE OF THE UNDERLYING OR REPLACEMENT SOILS SHALL BE CONFIRMED AND 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 STONE BEDDING AND HDPE PIPES
- . UNSUITABLE MATERIALS INCLUDING HYDRAULICALLY RESTRICTIVE MATERIAL SHALL BE REMOVED. EXCAVATIONS TO REMOVE HYDRAULICALLY RESTRICTIVE MATERIAL SHALL EXTEND A MINIMUM OF I' BELOW THE IMPERMEABLE LAYER AND REMOVAL OF THE MATERIAL SHALL BE WITNESS AND CERTIFIED BY A PROFESSIONAL ENGINEER. MATERIAL OR UNDISTURBED EARTH 6. THE REPLACEMENT MATERIAL MUST MEET ALL SPECIFICATIONS FOR CLEAN COARSE SAND IN ACCORDANCE WITH AASHTO M-6 OR ASTM C-33, MEETING AGGREGATE 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. 7. THE CONTRIBUTING DRAINAGE AREA MUST BE COMPLETELY STABILIZED PRIOR TO INFILTRATION BASIN/BMP PUT INTO OPERATION.

### PERMEABILITY TESTING REQUIREMENTS

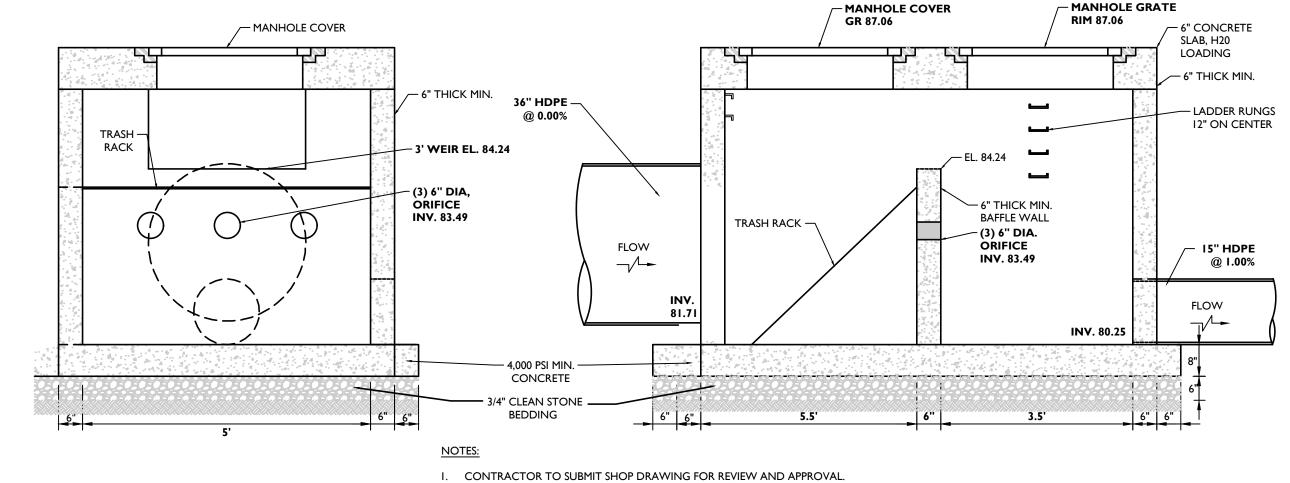
- PERMEABILITY TESTING MUST BE PERFORMED ON THE UNDERLYING SOIL BEFORE STONE BEDDING AND HDPE PIPE INSTALLATION IN ACCORDANCE WITH THE CONSTRUCTION AND POST-CONSTRUCTION OVERSIGHT AND SOIL PERMEABILITY TESTING SECTION IN THE "NEW YORK STATE STORMWATER MANAGEMENT DESIGN MANUAL APPENDIX D: INFILTRATION TESTING REQUIREMENTS".
- 2. AS REQUIRED BY THE "NEW YORK STATE STORMWATER MANAGEMENT DESIGN MANUAL APPENDIX D: INFILTRATION TESTING REQUIREMENTS", MINIMUM OF I PERMEABILITY TEST AND I TEST PIT PER 200 SF SHALL BE PERFORMED WITHIN THE BASIN BOTTOM. THE MINIMUM PERMEABILITY RATE OF EACH TEST PIT SHALL BE 0.5 INCHES PER
- 3. IF THE PERMEABILITY RATES DO NOT MEET THE REQUIRED DESIGN RATE NOTED ABOVE, REMEDIAL ACTION MAY BE REQUIRED BY THE CONTRACTOR. THE SOILS BELOW THE INFILTRATION BMP MUST BE EXCAVATED AND 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.

### POST-CONSTRUCTION:

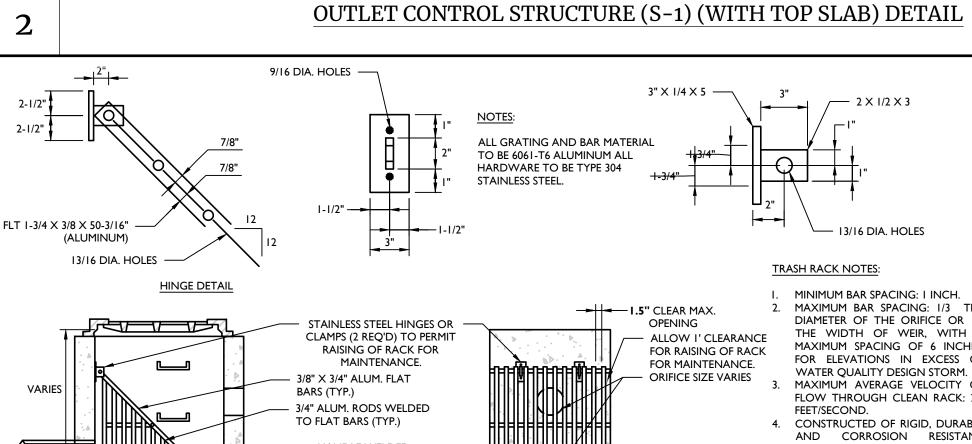
. UPON COMPLETION OF THE BASIN/BMP, THE CONTRACTOR SHALL PROVIDE THE DESIGN ENGINEER WITH A PHOTO DOCUMENTATION OF THE UNDERGROUND SYSTEM BEFORE BACKFILL, AND AN AS-BUILT SURVEY AFTER THE COMPLETION OF THE UNDERGROUND BASIN/BMP, PREPARED BY A NEW YORK LICENSED PROFESSIONAL SURVEYOR. THE SURVEY SHALL BOTTOM OF BASIN/BMP 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.

NOT TO SCALE

2. THE PROFESSIONAL ENGINEER THAT WITNESSES THE BASIN/BMP 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.



2. ALL CONCRETE TO BE 4,000 PSI (MIN.)



- HANDLE WELDED -MATERIAL. TO BARS 300 LBS./SF. DRAWINGS. VARIES SLANTED TRASH RACK DETAIL

MAXIMUM BAR SPACING: 1/3 THI DIAMETER OF THE ORIFICE OR 1/3 THE WIDTH OF WEIR, WITH A MAXIMUM SPACING OF 6 INCHES, FOR ELEVATIONS IN EXCESS OF WATER QUALITY DESIGN STORM. MAXIMUM AVERAGE VELOCITY OF FLOW THROUGH CLEAN RACK: 2.5 4. CONSTRUCTED OF RIGID, DURABLE AND CORROSION RESISTANT 5. DESIGNED TO WITHSTAND PERPENDICULAR LIVE LOADING OF 6. CONTRACTOR TO SUBMIT SHOP

PRECAST REINFORCED -CONCRETE RISER 4'-0" REQUIRED LENGTH OF RISERS - 1', 2', 3', OR 4' LADDER PRECAST REINFORCED -RUNG **CONCRETE TRANSITION SECTION HEIGHT VARIES** RISER JOINT AS REQUIRED **REINFORCING STEEL AS** PER ASTM C478 PRECAST REINFORCED CONCRETE BASE MODIFIED

12" OF 3/4" CRUSHED

STANDARD MANHOLE FRAME —

ADIUST CASTING TO —

3' PRECAST REINFORCED -

CONCRETE CONE

GRADE WITH COURSES OF

BRICK, CONCRETE BLOCK

OR GRADE RINGS AS

REQUIRED 12" MAXIMUM

AND COVER CAMPBELL

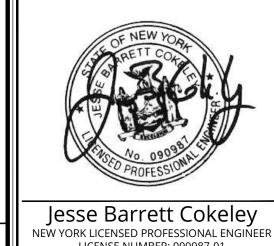
FOUNDRY # 1012B OR

APPROVED EQUAL

STONE BEDDING ON UNDISTURBED SUBJECT SITE CONTAINS IN ACID SOILS, THEREFORE, TWO COATS OF BITUMASTIC WATER PROOFING SHALL BE APPLIED PER MANUFACTURER'S SPECIFICATION.

"O" RING RUBBER GASKET -

2. ALL CONCRETE TO BE 4,000 PSI. PRECAST CONCRETE STORM MANHOLE 5' DIA. DETAIL



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> **PRELIMINARY** SITE PLAN

ST. THOMAS AQUINAS COLLEGE

> SECTION 74.16 BLOCK 1 LOT 2.1 125 ROUTE 340

TOWN OF ORANGETOWN ROCKLAND COUNTY NEW YORK

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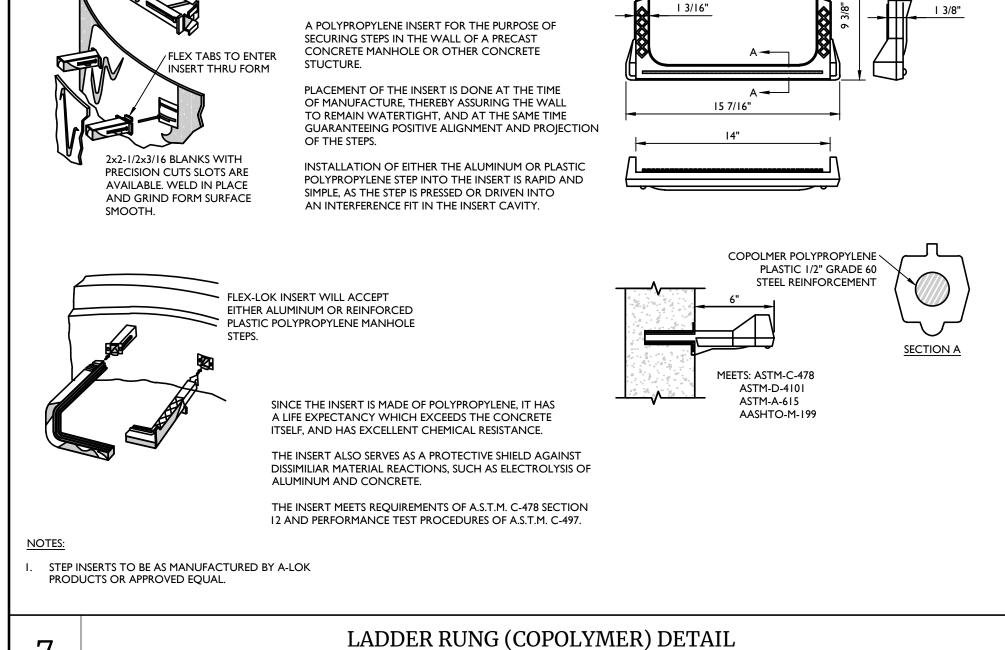
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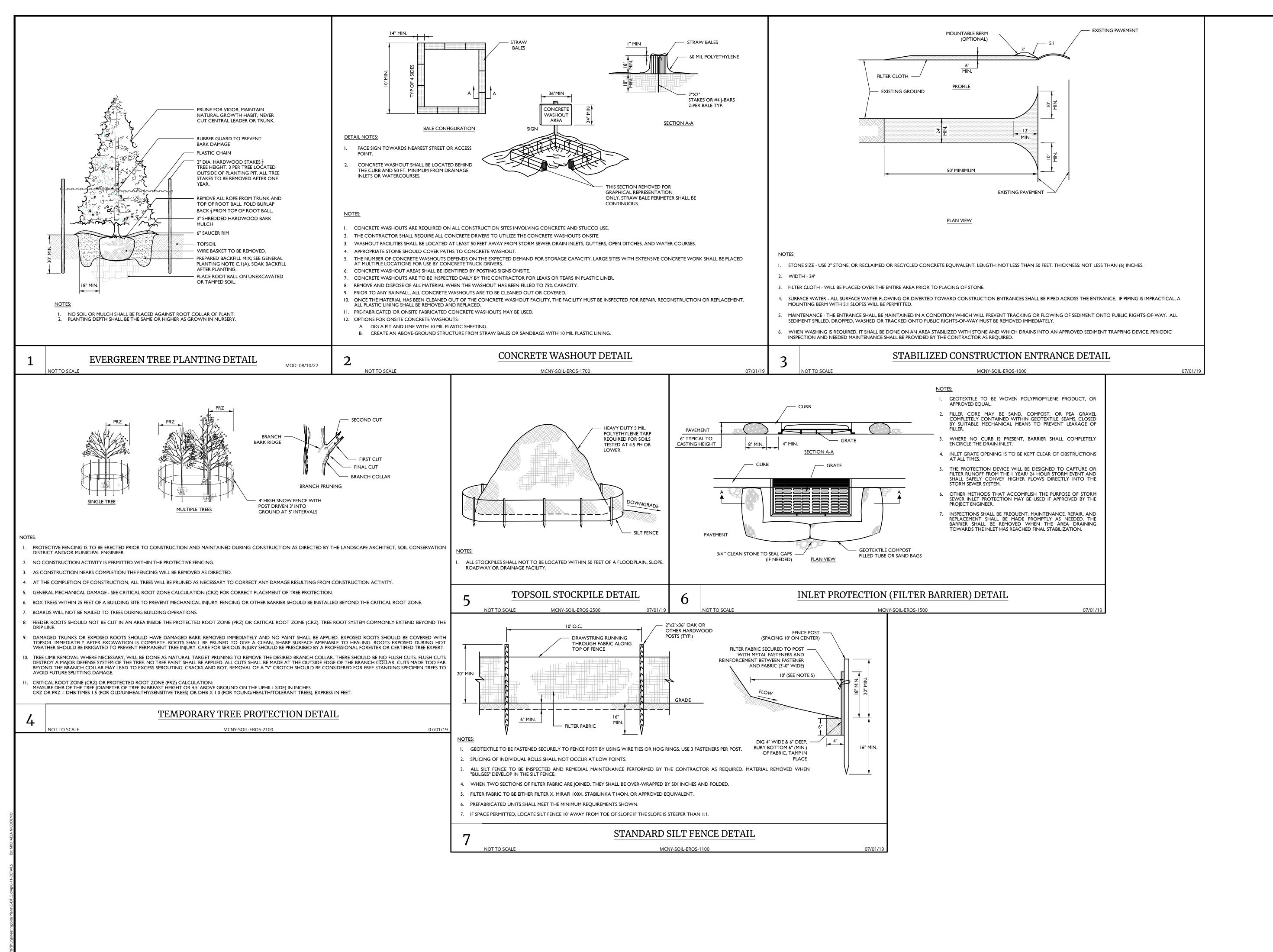
CONSTRUCTION DETAILS

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.





UNDERGROUND INFILTRATION BASIN (OPEN SYSTEM) DETAIL



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

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

PRELIMINARY SITE PLAN

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> SECTION 74.16 BLOCK 1 LOT 2.1 125 ROUTE 340

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11 of 11