

# 81 TWEED BLVD NYACK, NEW YORK 10960

## PROPERTY AND OWNER INFORMATION

OWNER: KRISHNA KUPPACHI  
SECTION: 71.17 BLOCK: 1 LOT: 27  
LOT AREA: 0.93 ACRES (GROSS)  
ZONE: R-22  
GROUP: 1 - SINGLE FAMILY DETACHED RESIDENCES  
USE: SINGLE FAMILY DETACHED RESIDENCE

## CONSTRUCTION NOTES:

- EXISTING UTILITIES AND UNDERGROUND STRUCTURES SHOWN ON THE PLAN ARE BASED UPON THE BEST AVAILABLE PUBLIC RECORDS, PRIVATE RECORDS AS SUPPLIED BY THE OWNER, OR DATA OBTAINED VERBALLY FROM OWNERS OR OFFICIALS FAMILIAR WITH THE PROJECT SITE. NEITHER THE OWNER NOR THE ENGINEER GUARANTEE ACCURACY OR COMPLETENESS OF THIS INFORMATION AND ASSUME NO RESPONSIBILITY FOR IMPROPER LOCATIONS ON THE CONSTRUCTION PLANS. OTHER UNDERGROUND FACILITIES NOT SHOWN ON THE DRAWINGS MAY BE ENCOUNTERED DURING THE COURSE OF THE WORK. ALL INVERT ELEVATIONS SHOWN ON THE DRAWINGS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
- IF CHANGED CONDITIONS ARE ENCOUNTERED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF EITHER (1) PREEXISTING SUBSURFACE CONDITIONS DIFFERING FROM THOSE INDICATED IN THE PLANS, OR (2) PREEXISTING UNKNOWN SUBSURFACE CONDITIONS OF AN UNUSUAL NATURE, DIFFERING MATERIALLY FROM THOSE ORIGINALLY ENCOUNTERED AND GENERALLY RECOGNIZED AS INHERENT IN THE CHARACTER OF THE WORK PROVIDED FOR IN THE CONTRACT. THE CONTRACTOR AND/OR OWNER SHALL MAKE NO CLAIMS TO THE ENGINEER FOR RECOMPENSATION FOR EXTRA WORK RESULTING FROM CHANGED CONDITIONS UNLESS THE ENGINEER HAS APPROVED THE WORK IN WRITING.
- CONTRACTOR SHALL PROVIDE ALL NECESSARY PERMITS AND APPROVED CITY ORDINANCES AND SHALL POST SUCH DOCUMENTS AT VISIBLE LOCATIONS AND MAINTAIN UPDATED DOCUMENTATION ACCORDINGLY.
- CONTRACTOR SHALL CALL THE UTILITIES UNDERGROUND LOCATION CENTER FOR FIELD LOCATIONS OF ALL UTILITIES AND SHALL NOT BEGIN EXCAVATION UNTIL ALL KNOWN UNDERGROUND FACILITIES IN THE VICINITY OF THE PROPOSED WORK HAVE BEEN LOCATED AND MARKED. IF THE UTILITY IS NOT A SUBSCRIBER OF THE UTILITIES UNDERGROUND LOCATION CENTER, THEN THE CONTRACTOR SHALL GIVE NOTICE TO THAT UTILITY.
- THE CONTRACTOR IS RESPONSIBLE FOR REVIEW OF ALL INFORMATION PROVIDED BY UTILITY PURVEYORS, AND CITY OR STATE RECORDS RELATED TO THE EXISTING UNDERGROUND UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR AVOIDING DAMAGE TO THESE FACILITIES AND SHALL RESTORE ALL UTILITIES AT CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL NOTIFY ALL UTILITY SERVICES FOR TEMPORARY SHUT OFF AS REQUIRED. CONTRACTOR SHALL MAINTAIN AND PROTECT SERVICES AGAINST DAMAGE DURING DEMOLITION OPERATIONS.
- NO PUBLIC WAYS OR WALKS MAY BE OBSTRUCTED WITHOUT THE WRITTEN PERMISSION OF GOVERNING AUTHORITIES AND OF THE OWNER. WHERE ROUTES ARE PERMITTED TO BE CLOSED, PROVIDE ALTERNATE ROUTES AND SIGNAGE IF REQUIRED.
- WET DEBRIS WITH WATER AS NECESSARY TO LIMIT DUST TO LOWEST PRACTICAL LEVEL. DO NOT WET TO THE EXTENT OF FLOODING, CONTAMINATED RUNOFF, OR ICING.
- ANY PORTIONS OF PAVEMENT TO BE REMOVED MUST BE SEPARATED BY MAKING A NEAT VERTICAL SAW CUT ALONG THE BOUNDARIES OF THE AREA TO BE REMOVED. MAKE CUTS AT CLOSEST PAVING JOINT.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL LABOR, EQUIPMENT, AND SERVICES TO PROPERLY EXECUTE THE DEMOLITION AND REMOVAL WORK INDICATED ON THESE CONSTRUCTION DOCUMENTS.
- ALL DEMOLITION WORK SHALL BE PERFORMED WITH MINIMUM DAMAGE TO THE EXISTING WORK TO REMAIN. IT SHALL BE RECOGNIZED THAT THE UTMOST CARE BE TAKEN WHEN PERFORMING THE DEMOLITION WORK. PROVIDE BARRICADES, BARRIERS, AND SHORING WHERE REQUIRED TO PROTECT THE PUBLIC, PERSONNEL, CONSTRUCTION, AND VEGETATION TO REMAIN. COMPLY WITH ALL STATE AND LOCAL AGENCY REQUIREMENTS.
- PROVISIONS SHALL BE MADE TO ALLEVIATE THE SPREAD OF DEBRIS, DIRT, AND DUST TO THE ADJACENT PROPERTIES. THE PROPERTY SHALL BE KEPT AS CLEAN AS POSSIBLE AT ALL TIMES. MAINTAIN HAULING ROUTES CLEAN AND FREE OF ANY DEBRIS RESULTING FROM DEMOLITION WORK ON THIS PROJECT. ANY HAZARDOUS MATERIAL REMOVAL WORK SHALL BE PERFORMED PRIOR TO ANY DEMOLITION ACTIVITY. THE HAZARDOUS MATERIAL REMOVAL SHALL BE PERFORMED BY A LICENSED ABATEMENT COMPANY.
- THE REFUSE RESULTING FROM ANY CLEARING AND GRUBBING AND ALL DEBRIS AND MATERIALS FROM THE STRUCTURE(S) TO BE DEMOLISHED SHALL BE DISPOSED OF BY THE CONTRACTOR IN A MANNER CONSISTENT WITH ALL GOVERNMENT REGULATIONS. IN NO CASE SHALL REFUSE MATERIAL BE LEFT ON THE PROJECT SITE, PUSHED ONTO ADJUTING PRIVATE PROPERTIES, OR BE BURIED IN EMBANKMENTS OR TRENCHES ON THE PROJECT SITE. DEBRIS SHALL NOT BE DEPOSITED IN ANY STREAM, LAKE, WETLAND, BODY OF WATER, OR IN ANY STREET OR ALLEY, OR UPON ANY PRIVATE PROPERTY EXCEPT BY WRITTEN CONSENT OF THE PRIVATE PROPERTY OWNER. NO RECLAIMED LUMBER OR MATERIALS SHALL BE RE-USED EXCEPT AS SPECIFICALLY APPROVED BY THE ARCHITECT OR OWNER.
- WHERE DEMOLITION AND CUTTING WORK HAS OCCURRED OR WHERE EXISTING SURFACES, MATERIALS, OR OTHER ITEMS HAVE BEEN DAMAGED OR DISTURBED AS A RESULT OF THE CONTRACTED WORK, THE SAID SURFACES AND AREAS SHALL BE CAREFULLY CLOSED UP, PATCHED, REPAIRED, FINISHED, OR RESTORED AS REQUIRED TO BE CONTIGUOUS TO EXISTING SURROUNDING SURFACES.
- ALL MECHANICAL, ELECTRICAL, AND PLUMBING DEMOLITION, INCLUDING GAS LINE REMOVAL IS TO BE PERFORMED BY A CONTRACTOR OR SUB-CONTRACTOR LICENSED IN THE PARTICULAR TRADE.

## SITE/CIVIL CONSTRUCTION SEQUENCING:

- INSTALL SILT FENCE, EROSION CONTROL, AND CONSTRUCTION FENCE
- PERFORM DEMOLITION AS PER SPECIFICATIONS
- REMOVE ALL DEBRIS AS PER SPECIFICATION
- INSTALL ALL ADDITIONAL EROSION CONTROL AND STABILIZATION OF DEMO AREAS
- REMOVE CONSTRUCTION FENCING, ENSURE PROPER MAINTENANCE OF SILT FENCING
- INSTALL SUBSURFACE UTILITIES (SEPTIC SYSTEM) & ROUGH SITEWORK (MINOR REGRADING) PROVIDE TEMP. SEEDING / SODDING & EROSION CONTROL MEASURES
- CONSTRUCTION OF SURFACE SITE STRUCTURES, MANHOLES & UTILIZATION OF TEMPORARY STAGING AREA
- REMOVE EXISTING PARKING / STAGING AREA
- INSTALL SITE WALLS & PERFORM FINISH GRADING
- REMOVE TEMP. EROSION CONTROL MEASURES, INSTALL NEW PAVEMENT & PERMANENT LANDSCAPING. SITE STABILIZATION (80% UNIFORM DENSITY OF VEGETATION) MUST BE ACHIEVED PRIOR TO REMOVING TEMPORARY EROSION CONTROL MEASURES.

## SCOPE OF WORK

THE SCOPE OF WORK IS TO CONSTRUCT A NEW SINGLE-FAMILY RESIDENTIAL DWELLING ON THE EXISTING UNDEVELOPED LOT AT THE REFERENCED ADDRESS. SANITARY SEPTIC SYSTEM, STORMWATER RETENTION & INFILTRATION MANAGEMENT SYSTEM, SEDIMENT & EROSION CONTROL, AND SITE GRADING DESIGNS HAVE BEEN PREPARED.

AREA OF DISTURBANCE: ± 26,000 SF

## SURVEY INFORMATION

TOPOGRAPHICAL SURVEY PROVIDED BY ROBERT SORACE, PLS.  
P.O. BOX 605 NEW CITY, NY 10956  
954-638-10956  
RO 9624  
SECTION 71.17 BLOCK 1 LOT 27  
DISTRICTS  
SCHOOL: SOUTH ORANGETOWN SCHOOL DISTRICT  
FIRE: NYACK JOINT FIRE DISTRICT  
LIGHTING: TOWN OF ORANGETOWN

## DRAWING ISSUANCE LIST

PAGE	SHEET	ISSUED TO:	PB	HEALTH DEPT	ZBA
1	C001	TITLE PAGE AND NOTES	•	•	
2	C100	SITE PLAN	•	•	
3	L01	TREES, LANDSCAPE, LIGHTING	•	•	
4	C120	SOIL EROSION & SEDIMENT CTRL	•	•	
5	C130	SEPTIC AREA & PART PLAN	•	•	
6	C200	PROFILES & SIGHT DISTANCE	•	•	
7	C300	SEPTIC DETAILS	•	•	
8	C310	CIVIL DETAILS & SECTIONS	•	•	
9	C400	EROSION CONTROL DETAILS	•	•	
1	S100	RETAINING WALL STRUCTURAL NOTES	•	•	
2	S200	RETAINING WALL STRUCTURAL PLAN	•	•	
3	S400	RETAINING WALL DETAILS	•	•	
	A02	BASEMENT FLOOR PLAN	•	•	
	A03	GROUND FLOOR PLAN	•	•	
	A04	SECOND FLOOR PLAN	•	•	
	A05	ARCH ELEVATIONS	•	•	

## TOWN OF ORANGETOWN PLANNING BOARD NOTES

THE APPLICANT IS REMINDED THAT NO WORK CAN BEGIN AND NO PERMIT WILL BE ISSUED UNTIL ALL THE VOMMENYS ARE MET FROM THE VARIOUS AGENCIES, ALL APPROVALS OBTAINED, THE FINAL SITE PLAN IS STAMPED AND THE CONSTRUCTION PLANS ARE VIEWED AND APPROVED BY THE BUILDING DEPARTMENT.  
AT LEAST ONE WEEK PRIOR TO THE COMMENCEMENT OF ANY WORK, INCLUDING THE INSTALLATION OF EROSION CONTROL DEVICES OR REMOVAL OF TREES AND VEGETATION, A PRE-CONSTRUCTION MEETING MUST BE HELD WITH THE TOEN OF ORANGETOWN DEPARTMENT OF ENVIRONMENTAL MANAGEMENT AND ENGINEERING, SUPERINTENDENT OF HIGHWAYS AND THE OFFICE OF BUILDING, ZONING AND PLANNING ADMINISTRATION AND ENFORCEMENT. IT IS THE RESPONSIBILITY AND OBLIGATION OF THE PROPERTY OWNER TO ARRANGE SUCH A MEETING.

## COUNTY OF ROCKLAND HEALTH DEPARTMENT REQUIREMENTS

- INSPECTION FEE TO BE MADE OUT TO THE ROCKLAND COUNTY COMMISSIONER OF FINANCE.
- THIS DEPARTMENT MUST BE CONTACTED TO INSPECT THE EXCAVATION PRIOR TO THE INSTALLATION OF THE SELECT FILL.
- COPIES OF THE MATERIAL DELIVERY TICKETS FOR THE SELECT FILL ARE TO BE SUBMITTED, SHOWING THE MIX, QUANTITY AND WITH THE CORRECT PROPERTY ADDRESS.
- THIS DEPARTMENT MUST BE CONTACTED TO INSPECT THE INSTALLATION PRIOR TO WHEN THE SYSTEM ELEMENTS ARE COVERED OVER, INCLUDING THE PIPING AND ALL JOINTS.
- THE DEPARTMENT MUST WITNESS THE TESTING OF THE PUMP SYSTEM, INCLUDING AN ALARM TEST AND DOSING OF THE BED.
- AS-BUILT REVIEW: THE APPLICANT'S CONTRACTOR MUST SUBMIT A LINE DRAWING, TRIANGULATING THE LOCATION OF THE SYSTEM ELEMENTS TO THE MAIN HOUSE AND OTHER PERMANENT STRUCTURES.
- A SERVICE CONTRACT FOR THE ETU WILL BE REQUIRED FOR THE LIFE OF THE SYSTEM.
- A SERVICE CONTRACT FOR NOT LESS THAN THREE YEARS SHALL BE SIGNED BY THE OWNER AND SERVICE PROVIDER PRIOR TO THE ISSUANCE OF A CERTIFICATE OF COMPLIANCE.

## STORM WATER SYSTEM CLEANING AND MAINTENANCE:

STORM WATER SYSTEM SHOULD BE CLEANED OF LEAVES, SAND, DIRT, SEDIMENT, TRASH AND OTHER DEBRIS BY HAND OR BY VACTOR TRUCK. THE SYSTEM IS TO BE EVALUATED, CLEANED AND MAINTAINED AT LEAST TWO TIMES PER YEAR. SURFACE GRATES AND INTERIOR HUMPS SHOULD BE MAINTAINED TO FUNCTION AS ORIGINALLY DESIGNED. SEE MAINTENANCE PLAN ON FILE WITH BOTH THE PROPERTY OWNER AND THE LOCAL BUILDING DEPARTMENT FOR MORE DETAILS.

## MUNICIPAL NOTES

- AT LEAST ONE WEEK PRIOR TO THE COMMENCEMENT OF ANY WORK, INCLUDING THE INSTALLATION OF EROSION CONTROL DEVICES OR THE REMOVAL OF TREES AND VEGETATION, A PRE-CONSTRUCTION MEETING MUST BE HELD WITH THE TOWN OF ORANGETOWN DEPARTMENT OF ENVIRONMENTAL MANAGEMENT AND ENGINEERING, SUPERINTENDENT OF HIGHWAYS AND THE OFFICE OF BUILDING, ZONING AND PLANNING ADMINISTRATION AND ENFORCEMENT. IT IS THE RESPONSIBILITY AND OBLIGATION OF THE PROPERTY OWNER TO ARRANGE SUCH A MEETING.
- STORMWATER MANAGEMENT PHASE II REGULATIONS: ADDITIONAL CERTIFICATION, BY AN APPROPRIATE LICENSED OR CERTIFIED DESIGN PROFESSIONAL SHALL BE REQUIRED FOR ALL MATTERS BEFORE THE PLANNING BOARD INDICATING THAT THE DRAWINGS AND PROJECT ARE IN COMPLIANCE WITH THE STORMWATER MANAGEMENT PHASE II REGULATIONS.
- ALL OUTDOOR CONSTRUCTION ACTIVITIES, INCLUDING SITE CLEARING OPERATIONS IF APPLICABLE, SHALL TAKE PLACE BETWEEN THE HOURS OF 7:00 AM AND 7:00 PM, MONDAY THROUGH SATURDAY. NO SUCH ACTIVITIES SHALL TAKE PLACE ON SUNDAY OR A LEGAL HOLIDAY. THE SAME CRITERIA SHALL APPLY TO INDOOR CONSTRUCTION ACTIVITIES, EXCEPT THAT SUCH ACTIVITIES MAY TAKE PLACE BETWEEN THE HOURS OF 7:00 AM AND 10:00 PM.
- LOT DRAINAGE SHOWN SHALL CONSTITUTE EASEMENTS RUNNING WITH THE LAND AND ARE NOT TO BE DISTURBED.
- ALL UTILITIES, INCLUDING ELECTRIC AND TELEPHONE SERVICE, SHALL BE INSTALLED UNDERGROUND.
- THE TOWN OF ORANGETOWN SEWER INSPECTOR SHALL BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE OF ANY AND ALL CONSTRUCTION ON OR NEAR EXISTING AN PROPOSED SANITARY SEWER FACILITIES.
- AL OF THE CONDITIONS OF THIS DECISION SHALL BE BINDING UPON THE OWNER OF THE SUBJECT PROPERTY, ITS SUCCESSORS AND/OR ASSIGNEES, INCLUDING THE REQUIREMENT TO MAINTAIN THE PROPERTY IN ACCORDANCE WITH THE CONDITIONS OF THE RELEVANT PLANNING BOARD DECISIONS.
- THIS PLAN DOES NOT CONFLICT WITH THE COUNTY OFFICIAL MAP AND HAS BEEN APPROVED IN THE MANNER SPECIFIED BY SECTION 239.16M OF THE GENERAL MUNICIPAL LAW OF THE STATE OF NEW YORK.
- AN AUTOMATIC SPRINKLER SYSTEM SHALL BE PLACED THROUGHOUT THE BUILDING, PER 2020IRC R313.2

## ARCHITECTURAL AND COMMUNITY APPEARANCE BOARD OF REVIEW

### THE ABOVE APPLICATION APPROVED TENTATIVE DATE, WITH CONDITIONS:

- RETAINING WALLS AND DECORATIVE STONE ON THE HOUSE TO BE CONSISTENT (TENTATIVE)
- LIGHTING AT ROOF PLACED ON BULKHEAD APPROXIMATELY WAIST HIGH(TENTATIVE)

## UTILITY NOTE

- CONTRACT TO CONTACT ORANGE AND ROCKLAND NEW BUSINESS DEPARTMENT FOR SERVICE TERMINATIONS AND RELOCATIONS PRIOR TO WORK. ALL CODE 753 RULES MUST BE FOLLOWED

## ENGINEERED FILL

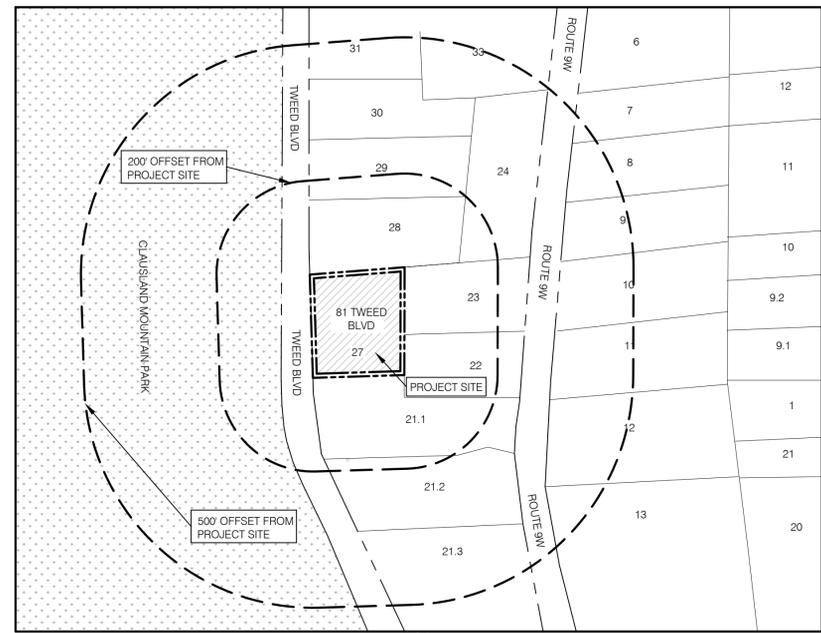
BANKRUN SAND & GRAVEL SHALL BE OBTAINED FROM AN APPROVED COMMERCIAL MANUFACTURER AND SHALL HAVE A PERCOLATION RATE OF LESS THAN 5 MIN / INCH & GREATER THAN 1 MIN / INCH. THE SUPPLIER SHALL PROVIDE A WRITTEN ANALYSIS AND CERTIFY TO THE ROCKLAND COUNTY HEALTH DEPARTMENT AND TO THE DESIGN ENGINEER THAT THE MATERIAL DELIVERED TO THIS SITE HAS BEEN MANUFACTURED BY THEM AND MEETS THE DESIGN ENGINEERS SPECIFICATION FOR BANKRUN SAND & GRAVEL. THE CONTRACTOR SHALL EXCAVATE THE ABSORPTION BED AREA TO DESIGN DEPTH AND HAVE THE EXCAVATION INSPECTED AND APPROVED BY THE ROCKLAND COUNTY HEALTH DEPARTMENT PRIOR TO PLACEMENT OF THE BANKRUN SAND & GRAVEL.

## SEPTIC CONSTRUCTION NOTES

- HEAVY CONSTRUCTION EQUIPMENT SHALL BE KEPT OUTSIDE THE PROPOSED BOTTOM AREA OF THE BED
- THE REQUIRED BED BOTTOM AREA IS EXCAVATED AS LEVEL AS PRACTICAL. THE BOTTOM AND SIDES OF THE EXCAVATION ARE HAND RAKED TO REDUCE SOIL SMEARING
- AFTER EXCAVATIONS A SIX-INCH LAYER OF AGGREGATE BELOW PIPE AND COVERED WITH AGGREGATE TO A LEVEL TWO INCHES ABOVE THE TOP OF THE PIPE
- THE ENTIRE AREA IS TO BE COVERED WITH A PERMEABLE GEOTEXTILE

## SANITARY SEWER LINE REQUIREMENTS

- CLEANOUTS SHALL BE PROVIDED ON SEWER LINES WHEREVER A GRADE CHANGE OR ALIGNMENT CHANGE IS MADE. (SEE CLEANOUT DETAIL FOR MORE INFO)
- SEWER LINES SHALL BE SEPARATED FROM POTABLE WATER LINES BY A MINIMUM OF 10' HORIZONTAL
- SEWER LINES CROSSING POTABLE WATER LINES MUST BE LAID A MINIMUM OF 18" BELOW WATER LINES. WATER LINE JOINTS MUST BE MINIMUM 10' FROM POINT OF CROSSING. SEWER LINES ARE TO BE CONSTRUCTED TO STANDARDS EQUIVALENT TO WATER MAIN SPECIFICATIONS AND SHALL BE PRESSURE TESTED PRIOR TO BACKFILL.
- GRAVITY LINES SHALL BE A MINIMUM OF 4' Ø.
- LINES MUST BE OF CAST-IRON PIPE FOR A MIN. DISTANCE OF 2' BEYOND FOUNDATION WALL
- GRAVITY LINES TO BE PITCHED MINIMUM 1/4" VERTICAL PER 1' HORIZONTAL
- TRENCHES ARE TO BE FIRMLY TAMPED BY HAND ABOUT THE PIPE.



## A VICINITY MAP

SCALE: 1" = 200'-0"



## LEGEND:

	PROPOSED SEPTIC COMPONENT
	PROPOSED BED SYSTEM
	IMPERVIOUS ROOF
	BUILDING FOOTPRINT
	GRASS YARD
	EXISTING SITE STRUCTURE
	STORM CATCH BASIN
	ADJACENT BUILDING
	AREA DRAIN
	SEWER CLEANOUT
	PROPERTY LINE
	STORM LINE
	MAJOR TOPO CONTOUR
	MINOR TOPO CONTOUR
	PROPOSED TOPO CONTOUR
	10' OFFSET FROM COMPONENT
	SILT FENCE
	EXISTING TREE TO REMAIN
	EXISTING TREE TO BE REMOVED
	12" Maple
	STRAW BALES
	SILT FENCE
	STOCKPILED SOIL
	GRAVEL APRON FOR STABILIZED CONSTRUCTION ENTRANCE
	DRIVEWAY STATION

## ABBREVIATIONS

BC	BOTTOM OF CURB
BL	BLOCK
BLDG	BUILDING
BOT	BOTTOM
CF	CUBIC FOOT
CL	CENTERLINE
CLF	CHAIN LINK FENCE
COMB	COMBINED
CONC	CONCRETE
DIA / Ø	DIAMETER
EL	ELEVATION
ELEC.	ELECTRIC
ELEV. / EL	ELEVATION
EXG.	EXISTING
FND	FOUNDATION
FT	FEET
HDPE	HIGH-DENSITY POLYETHYLENE
HYD	HYDRANT
INV	INVERT
LG	LEGAL GRADE
MAX	MAXIMUM
MIN	MINIMUM
NTS	NOT TO SCALE
PL	PROPERTY LINE
P / PROP	PROPOSED
PVMT	PAVEMENT
RD	ROOF DRAIN
RMN	REMAIN
SF	SQUARE FEET
SQ	SQUARE
ST	STREET
SW	SIDEWALK
TBR	TO BE REMOVED
TC	TOP OF CURB
TOD	TOP OF DRAIN ELEVATION
TYP	TYPICAL
UT	UTILITY POLE
W	WITH

ANALYSIS FOR NET AREA  
\*REFERENCE: T.O. ORANGETOWN NOTE TO USE & BULK TABLES - 16

GROSS LOT AREA	COVER TYPE	AREA	40.492 SF	DEDUCTION
> 40% SLOPE	(50% DEDUCTION)	2,008 SF	1,004 SF	
26%-40% SLOPE	(50% DEDUCTION)	24,963 SF	12,482 SF	
15%-25% SLOPE	(0% DEDUCTION)	7,937 SF	0 SF	
<b>TOTAL DEDUCTION</b>		<b>26,971 SF</b>	<b>13,486 SF</b>	
<b>NET LOT AREA TOTAL</b>		<b>13,521 SF</b>	<b>27,007 SF</b>	

81 Tweed Blvd. Tax Lot: Section 71.17, Block 1, Lot 27				
Zone	R22			
Group	I			
Use	Single Family Detached Residence			
Bulk regulation	Required	Existing	Proposed	Variance Required
Floor Area Ratio	0.20	0.00	0.13	
Lot Area (SF)	22500	40,492	40,492	
Counted Lot Area (under 25%)		27,007	27,007	
Floor Area (as per note 16)	5401.3	0	3626	
Floor Area Ratio calculation	3626 / 27,007 = 13.43%			
Lot Width (FT)	125	210	210	
Street Frontage (FT)	75	210	210	
Front yard setback (town)	40' from PL	na	25'-7"	yes
Side yard setback (FT)	25	na	50	
Total side yard setback (FT)	60	na	115'-0"	
Rear yard setback (FT)	45	na	94'-7"	
Maximum building height (FT) 9 IN/FT	19	na	28.67'	yes
Parking	2 spaces	0	2	



## REVISIONS:

1	10/20/2025	FOR CONSULTANT REVIEW
2	11/20/2025	PB RESUBMIT

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## PROJECT:

81 TWEED BLVD.  
NYACK, NY  
71.17-1-27

## NOTES & SLOPE ANALYSIS

## SEAL & SIGNATURE:



JOREL J. VACCARO  
NY PE 093362

DATE: 09/30/2025

PROJECT #: 25011

DRAWN/CHECKED: PJM/JJV

SCALE: NOTED

PAGE: 01 OF 09

C-001.00

## RECORD OWNER:

ADDRESS:

SIGNATURE

DATE

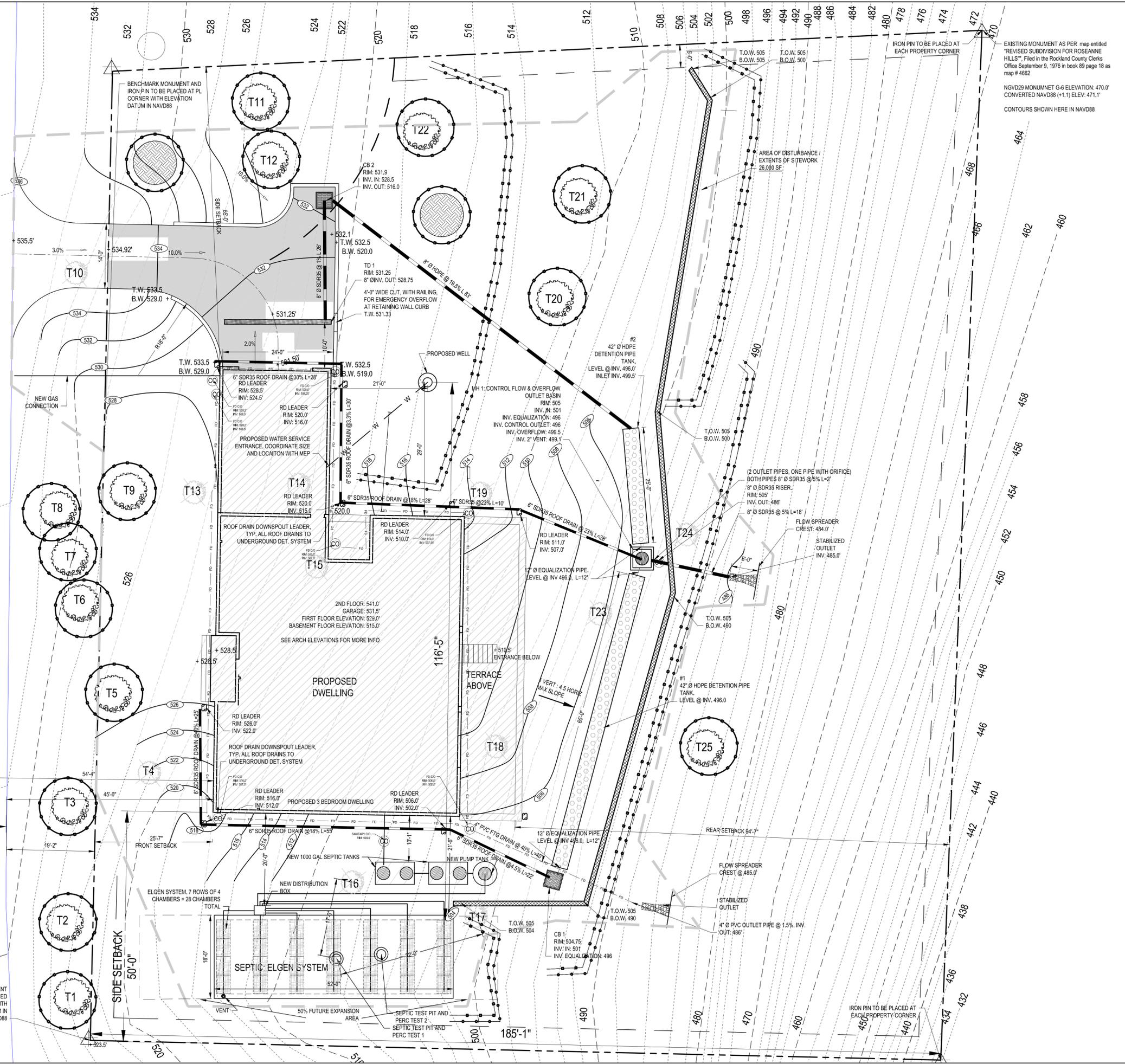
## B STEEP SLOPES PLAN

SCALE: 1" = 20'-0"



ABBREVIATIONS	
BL	BOTTOM OF CURB
BLDG	BLOCK
BTM	BOTTOM
CF	CUBIC FOOT
CLF	CENTRALINE
CLF	CHAIN LINK FENCE
COMB	COMBINED
CONC	CONCRETE
DIA/Ø	DIAMETER
EL	ELEVATION
ELEC	ELECTRIC
ENG. FND	EXISTING FOUNDATION
FT	FEET
HDPE	HIGH-DENSITY POLYETHYLENE
HYD	HYDRANT
INV	INVERT
LG	LEGAL GRADE
MAX	MAXIMUM
MIN	MINIMUM
NOT TO SCALE	NOT TO SCALE
NTS	NOT TO SCALE
P/PROP	PROPOSED
PAVT	PAVEMENT
RD	ROOF DRAIN
RIM	REMAIN SQUARE FEET
SF	SQUARE FEET
SG	SQUARE
ST	STREET
SIV	SIDEWALK
TBR	TO BE REMOVED
TOP OF CURB	TOP OF CURB
TOD	TOP OF DRAIN ELEVATION
TYP	TYPICAL
UT	UTILITY POLE
W	WITH

LEGEND	
[Symbol]	PROPOSED SEPTIC COMPONENT
[Symbol]	PROPOSED STORM SYSTEM
[Symbol]	IMPERVIOUS PAVEMENT
[Symbol]	BUILDING FOOTPRINT
[Symbol]	GRASS YARD
[Symbol]	STORM CATCH BASIN
[Symbol]	ADJACENT BUILDING
[Symbol]	AREA DRAIN, SEE DET. C-10
[Symbol]	SEWER CLEANOUT
[Symbol]	PROPOSED TOPO CONTOUR
[Symbol]	MINOR TOPO CONTOUR
[Symbol]	10' OFFSET FROM COMPONENT
[Symbol]	AREA OF WORK (26,000 SF)
[Symbol]	EXISTING TREE TO REMAIN
[Symbol]	EXISTING TREE TO BE REMOVED
[Symbol]	12" MADE
[Symbol]	STRAW BALES
[Symbol]	SILT FENCE
[Symbol]	STOCKPILED SOIL
[Symbol]	GRAVEL APRON FOR STABILIZED CONSTRUCTION ENTRANCE
[Symbol]	DRIVEWAY STATION
[Symbol]	BORING LOCATION
[Symbol]	BENCHMARK
[Symbol]	ROOF LEADER OUTLET



**KRYPTON ENGINEERING**  
 307 MCLEAN AVENUE  
 YONKERS, NY 10705  
 (917) 475-6138  
 KRYPTON-ENG.COM

EXISTING MONUMENT AS PER map entitled "REVISED SUBDIVISION FOR ROSEANNE HILLS", Filed in the Rockland County Clerks Office September 9, 1976 in book 89 page 18 as map # 4862

NGVD29 MONUMENT G-6 ELEVATION: 470.0' CONVERTED NAVD83 (+1.1) ELEV: 471.1'

CONTOURS SHOWN HERE IN NAVD83

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REVISIONS:

1	10/20/2025	FOR CONSULTANT REVIEW
2	11/20/2025	PB RESUBMIT

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PROJECT: 81 TWEED BLVD. NYACK, NY 17.17-1-27

**SITE PLAN**

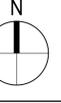
SEAL & SIGNATURE:

JOREL J. VACCARO, PE  
 NY PE 093362

DATE: 09/30/2025  
 PROJECT #: 25011  
 DRAWN/CHECKED: P.J.M./J.V.  
 SCALE: NOTED  
 PAGE: 02 OF 09

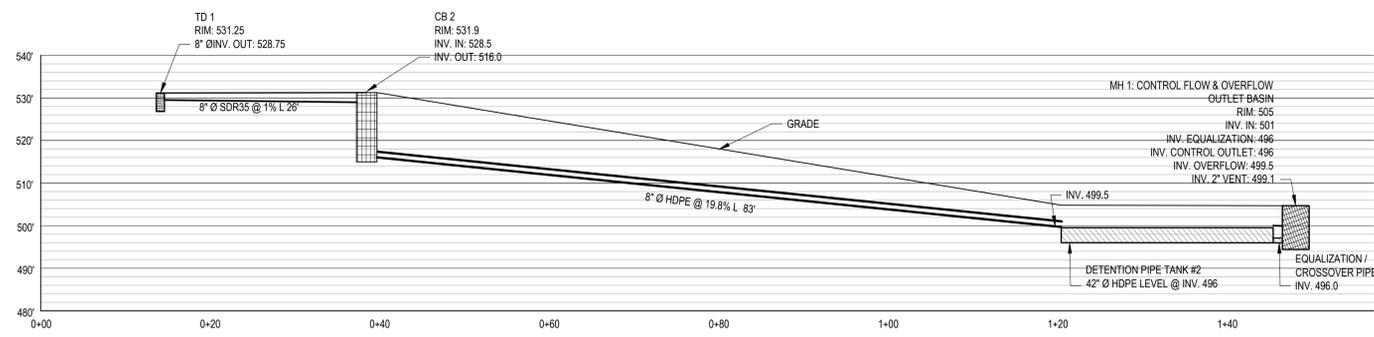
**C-100.00**

**A PROPOSED SITE PLAN**  
 SCALE: 1" = 10'-0"

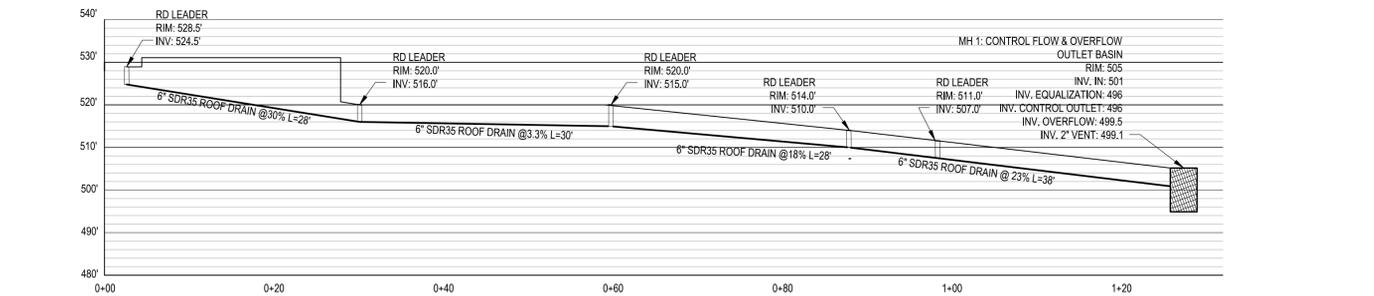




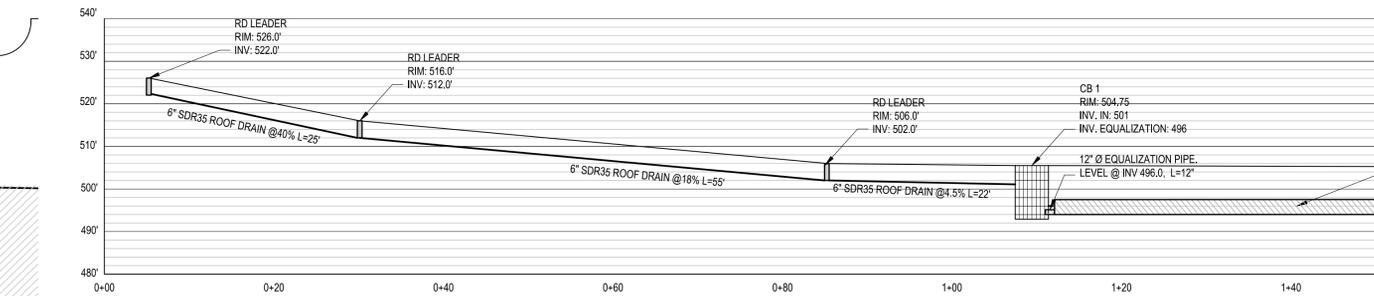




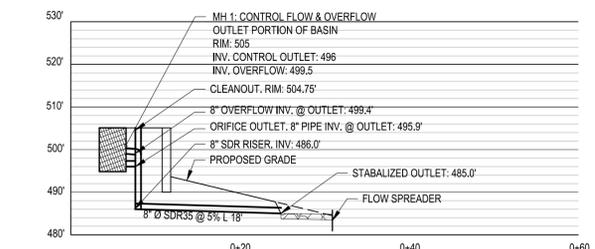
**A TD1 TO DET. PIPE 2 PROFILE**  
 SCALE: 1" = 10'-0"



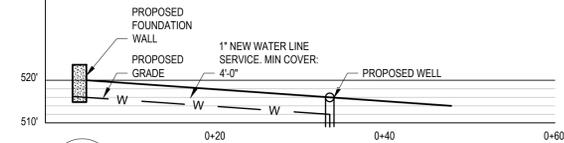
**C ROOF DRAINS ALONG GARAGE TO MH1**  
 SCALE: 1" = 10'-0"



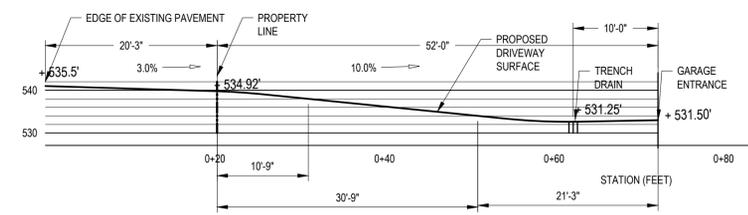
**F CLEANOUT TO MANHOLE 1**  
 SCALE: 1" = 10'-0"



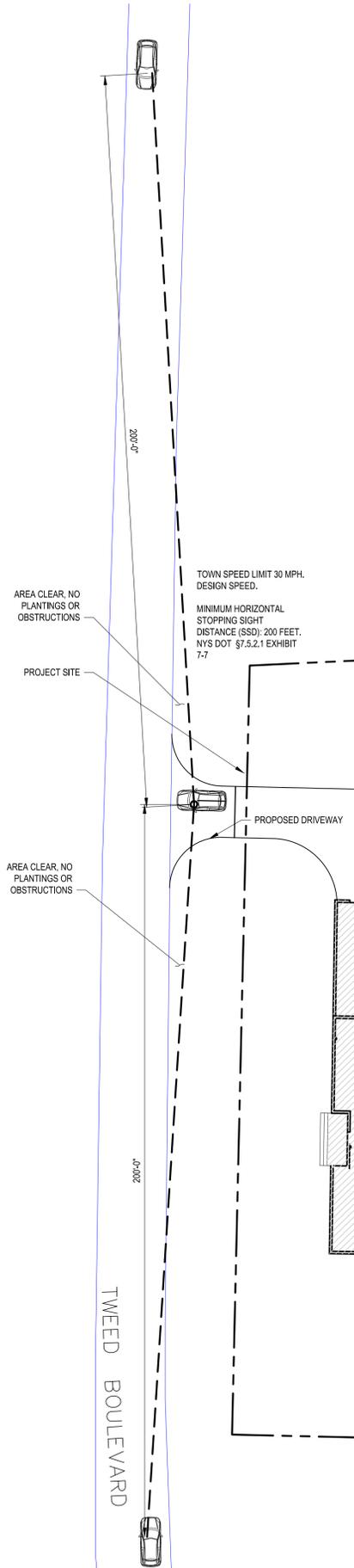
**B MANHOLE 1 TO STABILIZED FLOW OUTLET**  
 SCALE: 1" = 10'-0"



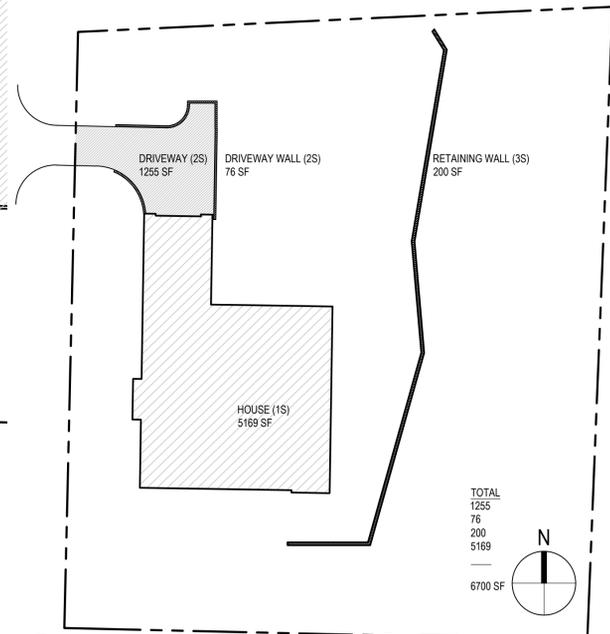
**D WATER SERVICE**  
 SCALE: 1" = 10'-0" VERT.



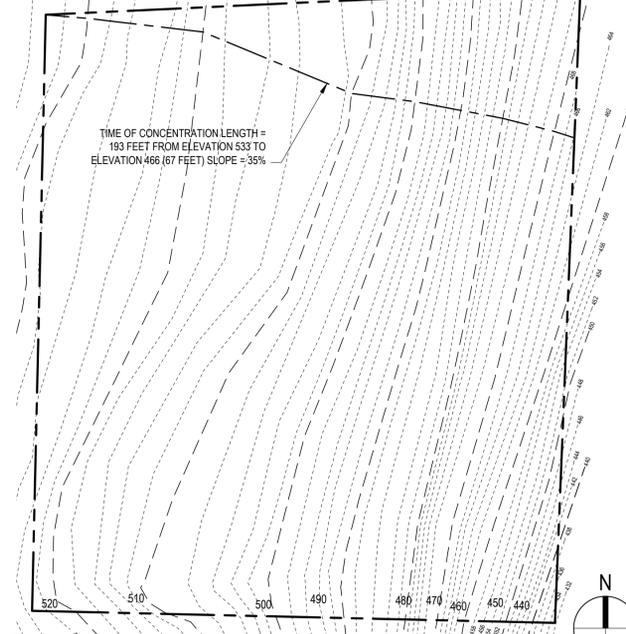
**E DRIVEWAY PROFILE**  
 SCALE: 1" = 10'-0"



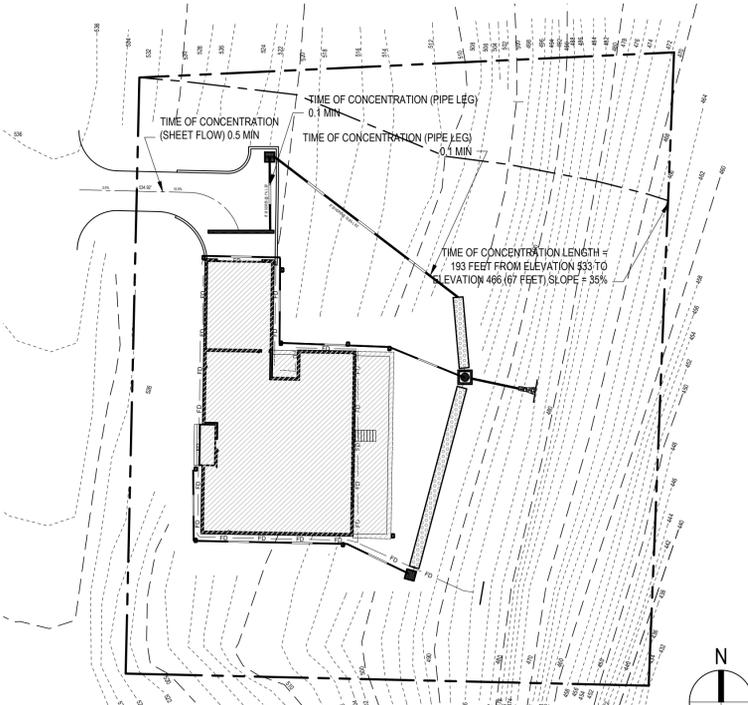
**1 SIGHT DISTANCE ANALYSIS**  
 SCALE: 1" = 20'-0"



**2 PROPOSED AREA TAKEOFF ANALYSIS**  
 SCALE: 1" = 30'-0"



**3 TIME OF CONCENTRATION EXISTING CONDITIONS**  
 SCALE: 1" = 30'-0"



**4 TIME OF CONCENTRATION PROPOSED CONDITIONS**  
 SCALE: 1" = 30'-0"

REVISIONS:

1	10/20/2025	FOR CONSULTANT REVIEW
2	11/20/2025	PB RESUBMIT

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PROJECT: 81 TWEED BLVD. NYACK, NY 11717-127

**PROFILES**

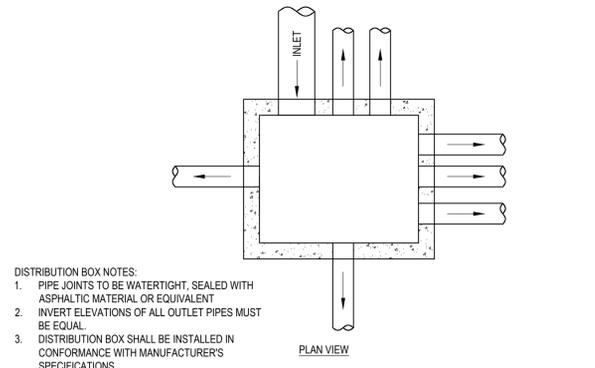
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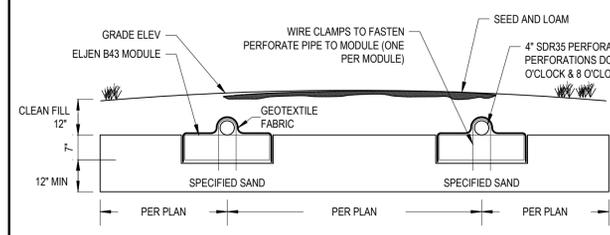
DATE: 09/30/2025  
 PROJECT #: 25011  
 DRAWN/CHECKED: P.J.M./J.V.  
 SCALE: NOTED  
 PAGE: 06 OF 09

**C-200.00**

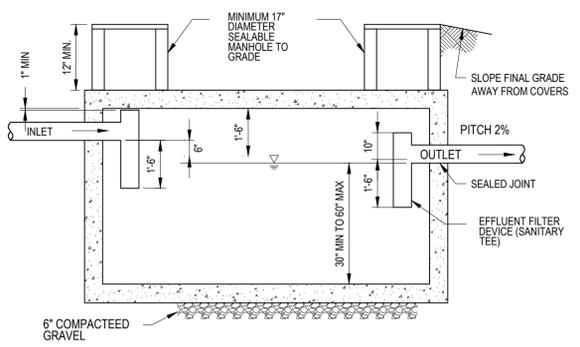
- ELIEN DESIGN & INSTALLATION NOTES:**
- THIS DESIGN AND CONSTRUCTION REQUIREMENT COMPLIES WITH APPENDIX 75-A AND LOCAL HEALTH DEPARTMENT REGULATIONS.
  - THIS DESIGN COMPLIES WITH AND MUST BE INSTALLED IN ACCORDANCE WITH THE MOST CURRENT ELIEN NEW YORK DESIGN AND INSTALLATION MANUAL.
  - THIS SYSTEM IS NOT DESIGNED FOR USE WITH A GARBAGE DISPOSAL.
  - THIS SYSTEM IS NOT DESIGNED FOR BACKWASH FROM A WATER SOFTENER.
  - ORGANIC MATERIAL THAT CAN RESTRICT FLOW MUST BE REMOVED FOR RAISED BEDS. THE SOIL MUST BE SCARIFIED TO PROVIDE DEEP CHANNELS FOR THE SAND. A PLOWED INTERFACE ON CONTOUR IS RECOMMENDED TO PREPARE THE SOIL FOR FILL PLACEMENT.
  - SCARIFY ANY SMEARED SUBSOIL PRIOR TO FILL PLACEMENT.
  - FILL MATERIAL SHALL MEET OR EXCEED STATE OF NEW YORK CODE REQUIREMENTS. ALL FILL MATERIAL SHALL BE CLEAN BANK RUN SAND, FREE OF TOPSOIL, HUMUS, AND "DREDGING" DIRECTLY BENEATH THE GSF SYSTEM.
  - ASTM C33 SPECIFIED SAND WITH LESS THAN 10% PASSING A #100 SIEVE AND LESS THAN 5% PASSING A #200 SIEVE SHALL BE PLACED BELOW AND AROUND THE GSF MODULES. WITH 6 INCHES MINIMUM UNDERNEATH AND 6 INCHES MINIMUM SURROUNDING THE GSF MODULES IN TRENCH CONFIGURATIONS. IN BED SYSTEMS, USE 6 INCHES MINIMUM UNDERNEATH THE MODULES WITH 12 INCHES MINIMUM BETWEEN MODULE ROWS AND 12 INCHES MINIMUM AROUND THE PERIMETER OF THE MODULES.
  - ELIEN PROVIDED GEOTEXTILE COVER FABRIC SHALL PROVIDE PROPER TENSION AND ORIENTATION OF THE FABRIC AROUND THE SIDES OF THE PERFORATED PIPE ON TOP OF THE GSF MODULES. FABRIC SHOULD BE NEITHER TOO LOOSE, NOR TOO TIGHT. THE CORRECT TENSION OF THE COVER FABRIC IS SET BY:
    - SPREADING THE COVER FABRIC OVER THE TOP OF THE MODULE AND DOWN BOTH SIDES OF THE MODULE WITH THE COVER FABRIC DIRECTLY OVER THE TOP OF THE PERFORATED DISTRIBUTION PIPE.
    - PLACE SHOVEL FULLS OF SPECIFIED SAND DIRECTLY OVER THE PIPE AREA ALLOWING THE COVER FABRIC TO FORM A MOSTLY VERTICAL ORIENTATION ALONG THE SIDES OF THE PIPE. REPEAT THIS STEP MOVING DOWN THE PIPE.
  - BACKFILL MATERIAL SHALL BE CLEAN WITH NO ROOTS OR STONES LARGER THAN 2 INCHES IN ANY DIMENSION TO A MINIMUM DEPTH OF 8 INCHES OVER THE GSF MODULES AND FINAL COVER FOR VEGETATION OF 4 INCHES TO 6 INCHES OF CLEAN LOAM.
  - ANY SYSTEM WHICH IS MORE THAN 18 INCHES BELOW FINISH GRADE AS MEASURED FROM THE TOP OF THE MODULE SHALL BE VENTED.



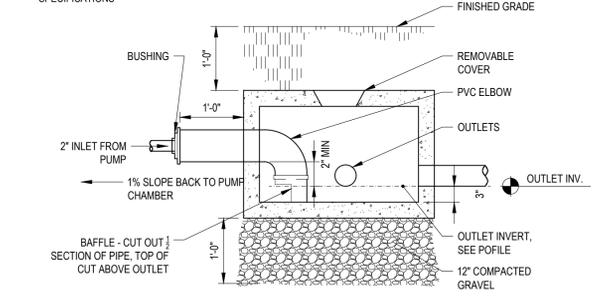
**1 SYSTEM PROFILE**  
SCALE: NTS



**3 TYP. GSF BED CROSS SECTION**  
SCALE: NTS



**4 TYPICAL SEPTIC TANK SECTION**  
SCALE: 3/8" = 1'-0"



**2 DISTRIBUTION BOX**  
SCALE: NTS

**ELIEN SEPTIC SYSTEM DESIGN & TANK SIZING:**

UNIT DESIGN FLOW	110 GPD/BEDROOM
# OF BEDROOMS	3
DESIGN FLOW	330 GPD
SEPTIC TANK CAPACITY	1000 GAL + ADDL 1000 GAL TANK
MEASURED PERCOLATION RATE	37MIN/IN (30 - 45 MIN / IN)

→ USE ELIEN SYSTEM B43 WITH TRENCH CONFIGURATION

**Septic system design flow and tank sizing**

Unit design flow: **110** gpd/bdrm

# of bedrooms: **3**

Design Flow: **330** gpd

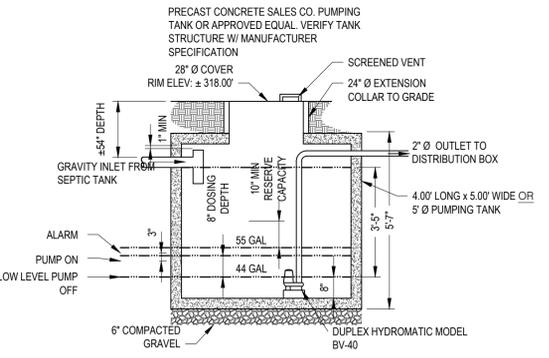
Septic tank capacity: **1000** + addl 1000 gal tank

Percolation rate: **20** min/in

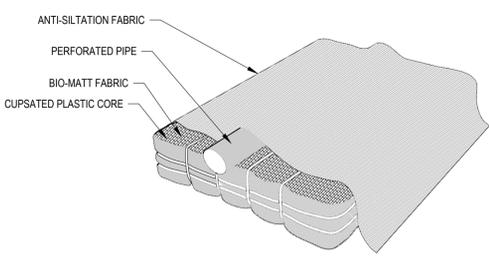
Use Elgen system B43 with trench configuration  
 Table 2: B43 GSF TRENCH Sizing Table (31 TO 45 MIN / IN):  
 Trench length required: **112 FT**

Modules per system required (Tbl 2): **28 B43 modules**  
 Use **7 ROWS OF 4**  
 check total trench length: **28 \* 4 ft = 112 ft**  
 check number of modules: **7 \* 4 = 28 modules**

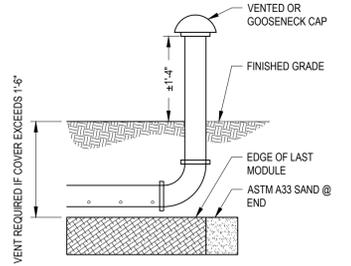
\*NOTE DESIGN INFIL. RATE FOR 81 TWEED: 37 MIN/INCH  
 \* NOTE, 8' SPACING ROW TO ROW



**5 PUMP TANK SECTION**  
SCALE: 3/8" = 1'-0"



**6 TYPICAL GSF TEXTILE MODULE**  
SCALE: 3/8" = 1'-0"



**7 VENT DETAIL**  
SCALE: NTS

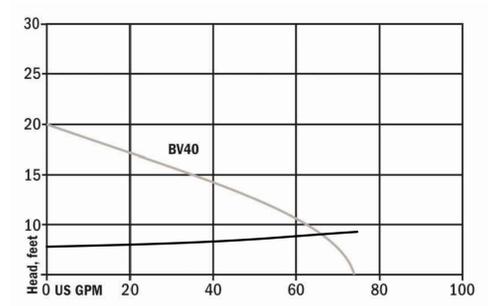
DEVELOPMENT SITE: 81 TWEED BLVD COUNTY: ROCKLAND DATE: 7/1/2025  
 TEST CONDUCTED BY: JJV WEATHER CONDITION: OVERCAST 80 DEGREES PRESOAK DATE & TIME: 6/30 11AM

TEST HOLE ONE	TEST #1	TEST #2	TEST #3	TEST #4	MAX
BEGIN	9:17 AM - 11"	9:40 AM - 12"	10:10 AM - 9.5"	10:46 AM - 9.25"	
END	9:40 AM - 12"	10:09 - 10.25"	10:45 AM - 10.5"	11:22 AM - 10.25"	
RESULTS	23 MIN	29 MIN	35 MIN	36 MIN	36 MIN
Test hole depth: 17"					

TEST HOLE TWO	TEST #1	TEST #2	TEST #3	MAX
BEGIN	9:19 AM - 7"	9:55 AM - 6.5"	10:25 AM - 6"	
END	9:53 AM - 8"	10:23 AM - 7.5"	11:02 - 7"	
RESULTS	34 MIN	28 MIN	37 MIN	37 MIN
Test hole depth: 13"				

**DESIGN INFILTRATION RATE: 37 MIN/IN -**



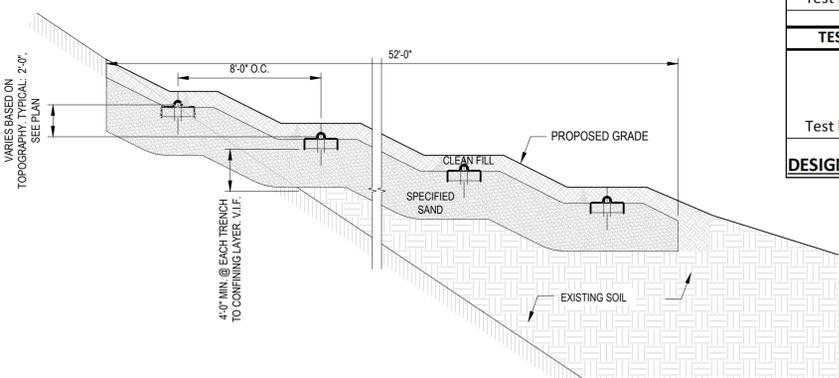
**9 PUMP CURVE**  
SCALE: NTS

**HEAD LOSS & PUMP DESIGN**  
 FLOW 2" Ø DELIVERY PIPE = 67 GPM  
 TOTAL OPERATING HEAD  $H_t = H_p + H_e + H_f$   
 $H_p$  = PRESSURE OF LATERAL = 2.5 FT  
 $H_e$  = ELEVATION HEAD  
 LATERAL INVERT ELEVATION - DOSING TANK LOWER LEVEL = 4.66 FT  
 $H_f$  = FRICTION HEAD THRU DELIVERY PIPE  $L=15'$  @ 2" Ø & 67 GPM  
 $= 15 \text{ LF} \cdot (7.68' \text{ HEAD LOSS} / 100\text{FT}) = 1.15 \text{ FT}$  (USING HAZEN-WILLIAMS)  
 $H_t = 2.5 + 4.66 + 1.15 = 8.3 \text{ FT HEAD LOSS AT 67 GPM}$

USE PENTAIR HYDRAMATIC MODEL BV-40 SUBMERSIBLE SEWAGE EJECTOR PUMP 2" NPT DISCHARGE  
 1/2 HP 110 VOLTS, 1 PHASE, 12.6 FULL LOAD AMPS

PIPE VOLUME	7.24 CF
VOL. IN PIPES & RESERVE VOL	55.0 GAL
DOSE VOLUME (80% OF PIPE)	44 GAL
PRESSURE DIST. PIPE DIAM.	1.5 TO 3"
PUMP CHAMBER SIZE (LxW)	3 FT x 3 FT
DEPTH	8 INCHES
RESERVE DEPTH	10 INCHES

1 DAY'S DESIGN FLOW ABOVE ALARM LEVEL OR DUPLEXED PUMPS



**10 GSF BED CROSS SECTION**  
SCALE: NTS

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PROJECT: 81 TWEED BLVD.  
 NYACK, NY  
 71.17-127

**SEPTIC DETAILS**

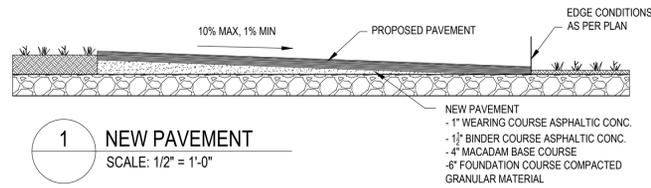
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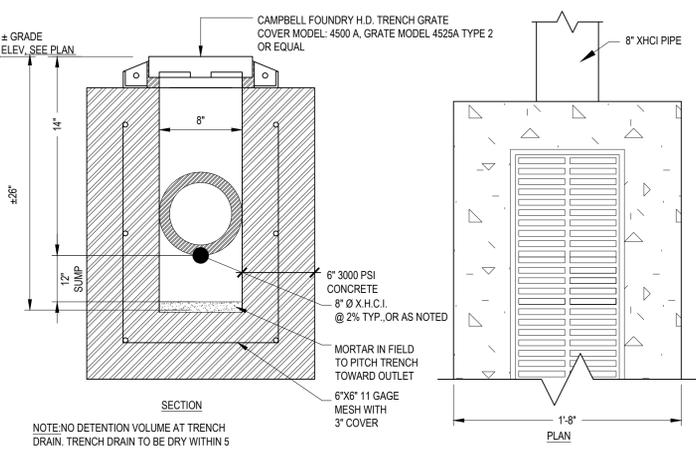
JOREL J. VACCARO  
 NY PE 093362

DATE: 09/30/2025  
 PROJECT #: 25011  
 DRAWN/CHECKED: P.JM/JJV  
 SCALE: NOTED  
 PAGE: 07 OF 09

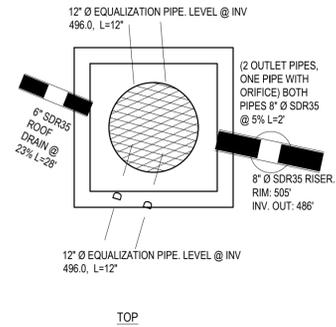
**C-300.00**



**1 NEW PAVEMENT**  
 SCALE: 1/2" = 1'-0"



**2 MH 1 CONTROL BASIN**  
 SCALE: 3/8" = 1'-0"



**3 FLOW SPREADER**  
 SCALE: 1/2" = 1'-0"

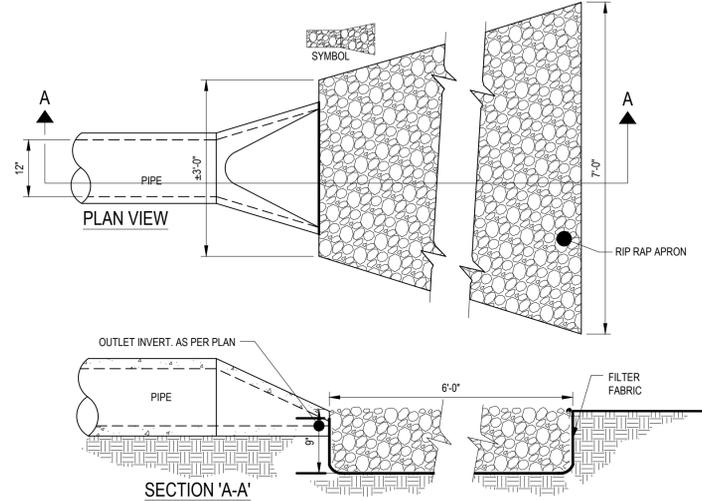
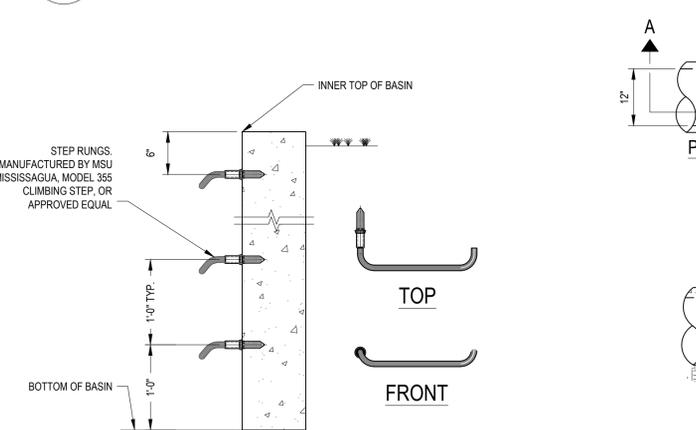
**CONSTRUCTION SPECIFICATIONS**

1. THE MATTING SHOULD BE A MINIMUM OF 4 FT. WIDE EXTENDING 6 INCHES OVER THE WEIR AND BURIED 6\"/>

Q (CFS)	E.W (FT)	D (FT)	LENGTH (FT)
0-5	10	0.5	10
5-10	16	0.6	20
10-15.24	0.7	30	

E.W. ENTRANCE WIDTH  
 D. DEPTH

**4 TRENCH DRAIN**  
 SCALE: NTS



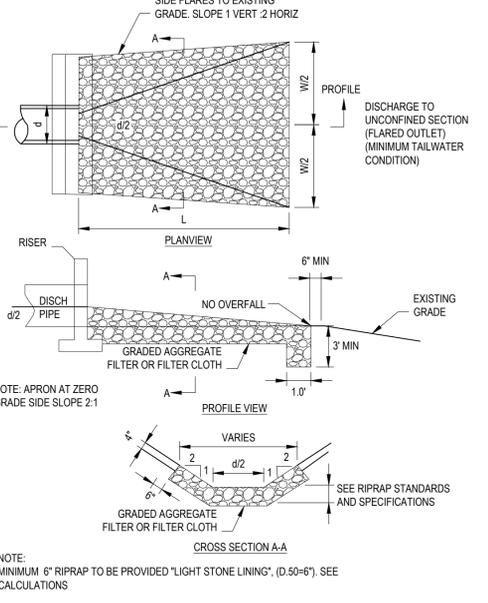
**5 CLIMBING STEP RUNGS**  
 AT DETENTION BASIN WALL  
 SCALE: NTS

**NOTES:**

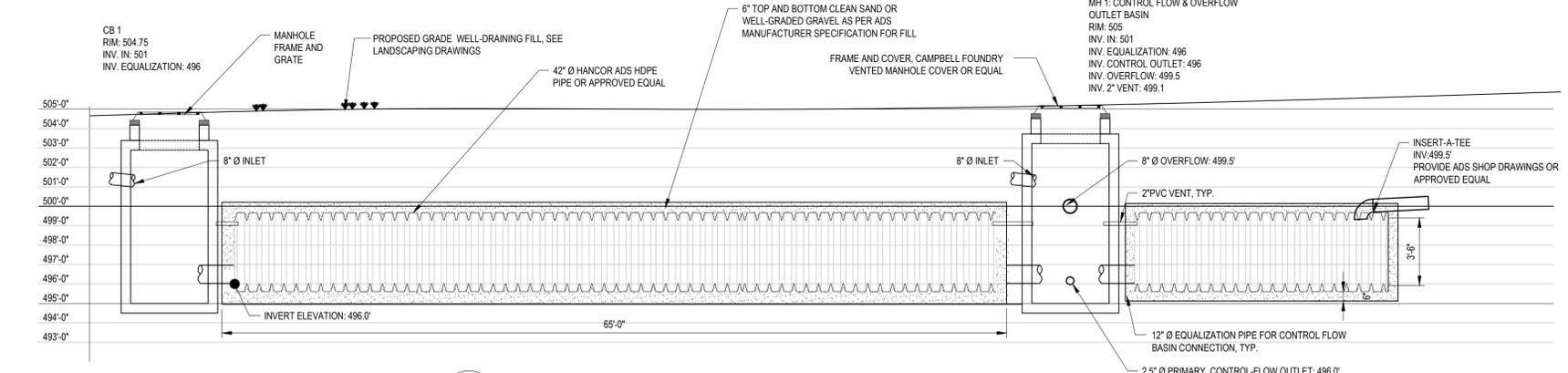
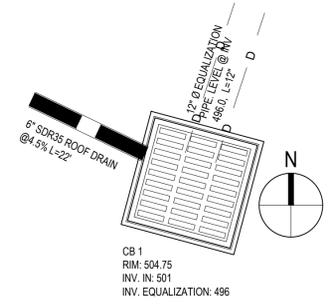
- 1) L = THE LENGTH OF THE RIPRAP APRON.
- 2) d = 1.5 TIMES THE MAXIMUM STONE DIAMETER BUT NOT LESS THAN 6\"/>

W = L + INNER DIAMETER OF PIPE

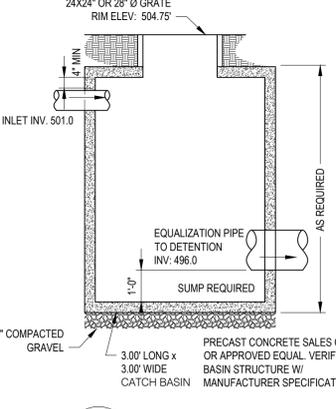
**6 STABILIZED OUTLET DIMENSIONS**  
 AT OVERFLOW AND FOOTING DRAIN OUTLETS  
 SCALE: NTS



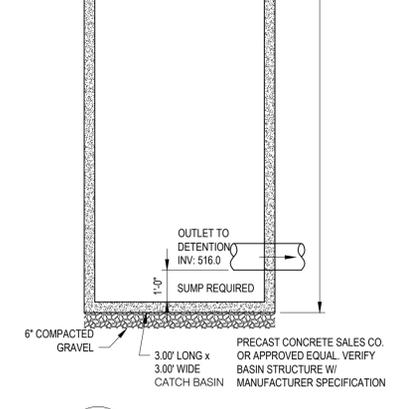
**7 TYPICAL OUTLET PROTECTION**  
 SCALE: NTS



**8 STORMWATER DETENTION SYSTEM CROSS-SECTION**  
 SCALE: 1/4" = 1'-0"



**9 CATCH BASIN 1**  
 SCALE: 3/8" = 1'-0"



**10 CATCH BASIN 2**  
 SCALE: 3/8" = 1'-0"

**REVISIONS:**

NO.	DATE	DESCRIPTION
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2	11/20/2025	PB RESUBMIT

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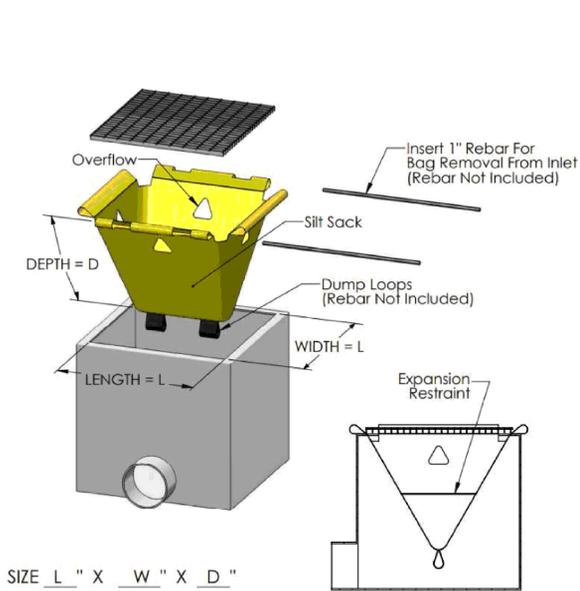
PROJECT:  
 81 TWEED BLVD.  
 NYACK, NY  
 71.17-1-27

**STORMWATER DETAILS**

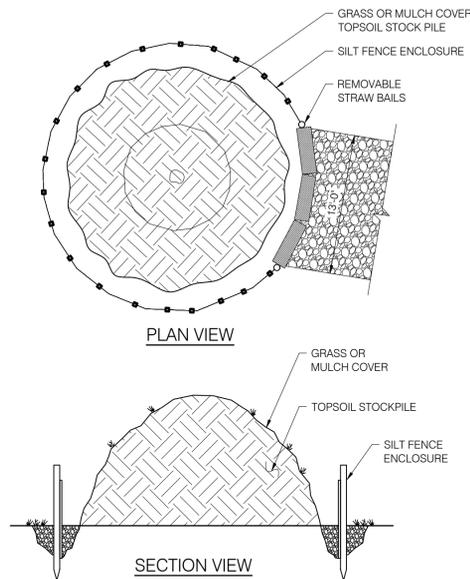
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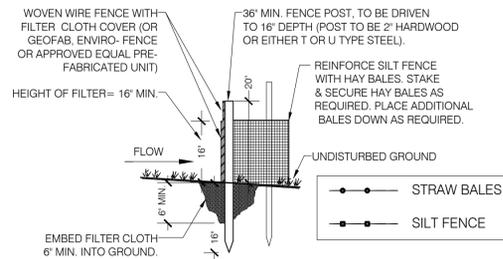


**INLET PROTECTION DETAIL**



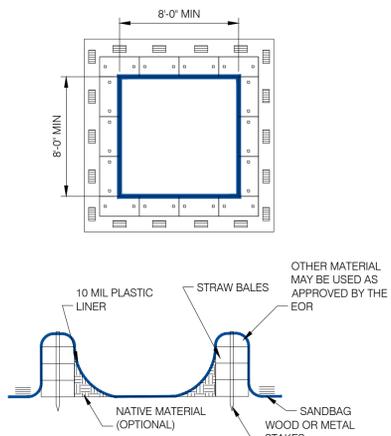
- NOTES:**
- 1- TOPSOIL REMOVED DURING SITE PREPARATION SHALL BE STOCKPILED ON-SITE FOR FUTURE USE IN SITE RECLAMATION AND REVEGETATION.
  - 2- SOIL STOCKPILE SHALL BE ENCLOSED WITH SILT FENCING WITH PASSAGEWAY PROVIDED FOR EQUIPMENT ACCESS.
  - 3- PROVIDE TEMPORARY GRASS OR MULCH COVER IF STOCKPILE IS TO REMAIN UNDISTURBED FOR THIRTY DAYS OR MORE. TEMPORARY COVER SHALL CONSIST OF ONE OF THE FOLLOWING MEASURES:
    - GRASS SEED: 1/2 LB. RYE GRASS /1000S.F
    - MULCH: 100LBS OF STRAW OR HAY/1000S.F

**DETAIL - SOIL STOCKPILE**  
NOT TO SCALE



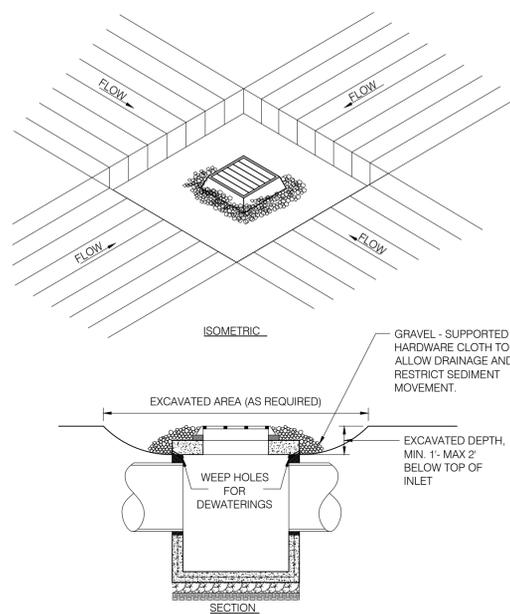
- NOTES:**
- 1- POST SPACING TO BE 10' MAX. O.C.
  - 2- WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
  - 3- WOVEN WIRE FENCE TO BE 14 GA. MIN., 6' MAX. SPACING.
  - 4- FILTER CLOTH TO BE FILTER X, MIRAFI 100X OR APPROVED EQUAL.
  - 5- FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE, WITH WIRE TIES SPACED EVERY 24" AT TOP AND MID SECTION.
  - 6- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY SIX INCHES, FOLDED AND STAPLED OR TIED TO A POST (PROVIDE POST AT SPLICE).
  - 7- MAINTENANCE SHALL BE PERFORMED AS NEEDED, AND MATERIAL REMOVED WHEN BULGES DEVELOP IN THE SILT FENCE.
  - 8- BALES SHALL BE PLACED AT THE TOE OF SLOPE OR ON THE CONTOUR AND IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
  - 9- EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF (4) INCHES, AND PLACED SO THE BINDINGS ARE HORIZONTAL.
  - 10- BALES SHALL BE SECURELY ANCHORED IN PLACE BY EITHER TWO STAKES OR REBARS DRIVEN THROUGH THE BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE AT AN ANGLE TO FORCE THE BALES TOGETHER. STAKES SHALL BE DRIVEN 1 1/2' TO 2' INTO THE GROUND AND FLUSH WITH THE BALE.
  - 11- INSPECTION SHALL BE FREQUENT AND REPAIR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
  - 12- BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

**DETAIL - SILT FENCE**  
NOT TO SCALE



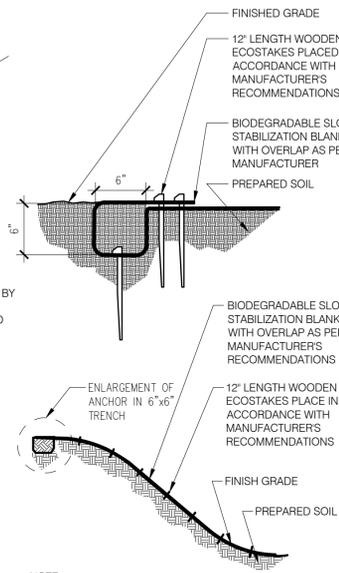
- NOTES:**
- 1- NO WASHING OUT OF CONCRETE TRUCKS OR WASHING OF SWEEPINGS FROM EXPOSED AGGREGATE CONCRETE INTO STORM DRAINS, OPEN DITCHES, STREETS OR STREAMS IS ALLOWED.
  - 2- EXCESS CONCRETE IS NOT ALLOWED TO BE DUMPED ON-SITE, EXCEPT IN DESIGNATED TEMPORARY CONCRETE WASHOUT PIT AREAS.
  - 3- ON-SITE TEMPORARY CONCRETE WASHOUT AREAS WILL BE LOCATED AT LEAST 50 FEET FROM STORM DRAINS, OPEN DITCHES, OR WATER BODIES AS DETERMINED IN THE FIELD.
  - 4- TEMPORARY CONCRETE WASHOUT FACILITIES WILL BE CONSTRUCTED AND MAINTAINED IN SUFFICIENT QUANTITY AND SIZE TO CONTAIN ALL LIQUID AND CONCRETE WASH GENERATED BY WASHOUT OPERATIONS.
  - 5- WASHOUT FACILITIES WILL BE CLEANED OUT OR REPLACED ONCE THE WASHOUT IS 75% FULL.
  - 6- PLASTIC LINING MATERIAL WILL BE A MINIMUM OF 10 MIL POLYETHYLENE SHEETING AND WILL BE FREE OF HOLES, TEARS, OR ANY OTHER DEFECTS.
  - 7- WHEN WASHOUT FACILITIES ARE NO LONGER REQUIRED FOR WORK, THE HARDENED CONCRETE WILL BE REMOVED AND DISPOSED OF OFF-SITE. MATERIALS USED TO CONSTRUCT TEMPORARY CONCRETE WASHOUT FACILITIES WILL BE REMOVED FROM THE SITE AND DISPOSED OF PROPERLY.

**CONCRETE WASHOUT DETAIL**  
NOT TO SCALE



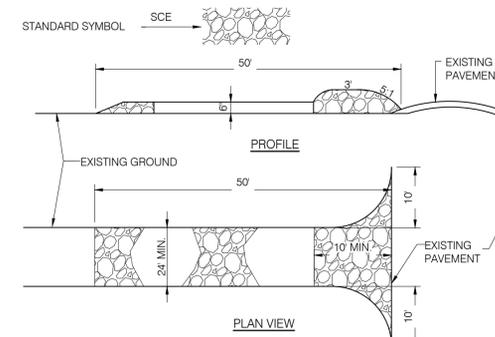
- CONSTRUCTION SPECIFICATIONS:**
- 1- CLEAR THE AREA OF ALL DEBRIS THAT WILL HINDER EXCAVATION.
  - 2- GRADE APPROACH TO THE INLET UNIFORMLY AROUND THE BASIN.
  - 3- WEEP HOLES SHALL BE PROTECTED BY GRAVEL.
  - 4- UPON STABILIZATION OF CONSTRUCTION DRAINAGE AREA, SEAL WEEP HOLES, FILL BASIN WITH STABLE SOIL TO FINAL GRADE, COMPACT SOIL PROPERLY AND STABILIZE WITH PERMANENT SEEDING.

**EXCAVATED DROP INLET PROTECTION**  
NOT TO SCALE



- NOTE:**
- INSTALL SLOPE STABILIZATION BLANKETS - CURLEX II EROSION CONTROL FABRIC OR EQUAL. INSTALL IN ALL AREAS WHERE SLOPE IS 4:1 OR GREATER AND AS SHOWN ON PLANS. PRIOR TO INSTALLING PLANTS, CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING SLOPE STABILIZATION BLANKET FOR LENGTH OF CONTRACT.

**SLOPE STABILIZATION DETAIL**  
NOT TO SCALE



- CONSTRUCTION SPECIFICATIONS:**
- 1- STONE SIZE - USE 2' STONE OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
  - 2- LENGTH - AS REQUIRED, BUT NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
  - 3- THICKNESS - NOT LESS THAN (6) INCHES.
  - 4- WIDTH - TWENTY FOUR (24) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
  - 5- FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE. FILTER WILL NOT BE REQUIRED ON A SINGLE FAMILY RESIDENCE LOT.
  - 6- SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCE SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPE WILL BE PERMITTED.
  - 7- MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANING OF ANY MEASURE USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAYS MUST BE REMOVED IMMEDIATELY.
  - 8- WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAYS. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
  - 9- PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

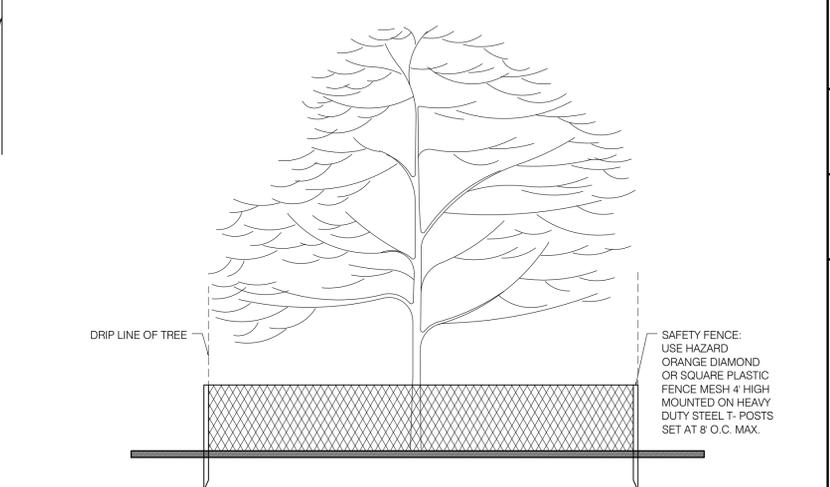
**STABILIZED CONSTRUCTION ENTRANCE**  
NOT TO SCALE

**EROSION CONTROL:**

1. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE INSTALLED IN ACCORDANCE WITH THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN STATE STANDARDS AND WILL BE INSTALLED IN PROPER SEQUENCE AND MAINTAINED UNTIL PERMANENT STABILIZATION IS ESTABLISHED.
2. ANY DISTURBED AREA THAT WILL BE LEFT EXPOSED FOR MORE THAN THIRTY (30) DAYS AND NOT SUBJECTED TO CONSTRUCTION TRAFFIC SHALL IMMEDIATELY RECEIVE TEMPORARY SEEDING AND MULCHING. IF THE SEASON PROHIBITS TEMPORARY SEEDING, THE DISTURBED AREA WILL BE MULCHED WITH SALT HAY OR EQUIVALENT AND BOUND IN ACCORDANCE WITH THE NY STANDARDS (I.E. PEG AND TWINE, MULCH NETTING, OR LIQUID MULCH BINDER). SOIL STABILIZATION WILL OCCUR AFTER 14 DAYS OF BEING EXPOSED.
3. IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING, ALL CRITICAL AREAS SUBJECT TO EROSION WILL RECEIVE A TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR SUITABLE EQUIVALENT, AT A RATE OF 2 TONS PER ACRE, ACCORDING TO NY STANDARDS. STABILIZATION SPECIFICATIONS:
4.
  - A. TEMPORARY SEEDING AND MULCHING:
    - LIME - 90 LBS./1,000 SF GROUND LIMESTONE; FERTILIZER - 11 LBS./1,000 SF. 10-20-10 OR EQUIVALENT WORKED INTO THE SOIL A MINIMUM OF 4"
    - SEED - PERENNIAL RYE GRASS 40 LBS./ACRE (1 LB / 1,000 SF) OR OTHER APPROVED SEEDS, PLANT BETWEEN MARCH 1 AND MAY 15 OR BETWEEN AUGUST 15 AND OCTOBER 1.
    - MULCH - SALT HAY OR SMALL GRAIN STRAW AT A RATE OF 70 TO 90 LBS./1,000 SF TO BE APPLIED ACCORDING TO THE NY STANDARDS. MULCH SHALL BE SECURED BY APPROVED METHODS (I.E. PEG AND TWINE, MULCH NETTING, OR LIQUID MULCH BINDER).
  - B. PERMANENT SEEDING AND MULCHING:
    - TOPSOIL - UNIFORM APPLICATION TO A DEPTH OF 5" (UNSETTLED).
    - LIME - 90 LBS./1,000 SF GROUND LIMESTONE; FERTILIZER - 11 LBS./1,000 SF. 10-20-10 OR EQUIVALENT WORKED INTO THE SOIL A MINIMUM OF 4"
    - SEED TURF TYPE TALL FESCUE (BLEND OF 3 CULTIVARS) 150 LBS./ACRE (3.5 LBS./1,000 SF) OR OTHER APPROVED SEED, PLANT BETWEEN MARCH 1 AND OCTOBER 15.
    - MULCH - SALT HAY OR SMALL GRAIN STRAW AT A RATE OF 70 TO 90 LBS./1,000 SF TO BE APPLIED ACCORDING TO THE NY STANDARDS. MULCH SHALL BE SECURED BY APPROVED METHODS (I.E. PEG AND TWINE, MULCH NETTING OR LIQUID BINDER).
5. THE SITE SHALL AT ALL TIMES BE GRADED AND MAINTAINED SUCH THAT ALL STORM WATER RUNOFF IS DIVERTED TO SOIL EROSION AND SEDIMENT CONTROL FACILITIES.
6. SOIL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSPECTED AND MAINTAINED ON A REGULAR BASIS, INCLUDING AFTER EVERY STORM EVENT.
7. STOCKPILES ARE NOT TO BE LOCATED WITHIN 50' OF A FLOOD PLAIN SLOPE, ROADWAY OR DRAINAGE FACILITY. THE BASE OF ALL STOCKPILES SHALL BE CONTAINED BY A STRAW BALE SEDIMENT BARRIER AND/OR SILT FENCE.
8. A CRUSHED STONE, VEHICLE WHEEL-CLEANING BLANKET WILL BE INSTALLED WHEREVER A CONSTRUCTION ACCESS ROAD INTERSECTS ANY PAVED ROADWAY. SAID BLANKET WILL BE COMPOSED OF 1" - 2" CRUSHED STONE, 6" THICK, WILL BE AT LEAST 30' X 100' AND SHOULD BE UNDERLAIN WITH A SUITABLE SYNTHETIC SEDIMENT FILTER FABRIC AND MAINTAINED.
9. MAXIMUM SIDE SLOPES OF ALL EXPOSED SURFACES SHALL NOT EXCEED 3:1 UNLESS OTHERWISE APPROVED BY THE ENGINEER.
10. DRIVEWAYS MUST BE STABILIZED WITH 1" - 2" CRUSHED STONE OR SUBBASE PRIOR TO INDIVIDUAL LOT CONSTRUCTION.
11. ALL SOIL WASHED, DROPPED, SPILLED OR TRACKED OUTSIDE THE LIMIT OF DISTURBANCE OR INTO PUBLIC RIGHT-OF-WAYS, WILL BE REMOVED IMMEDIATELY. PAVED ROADWAYS MUST BE KEPT CLEAN AT ALL TIMES.
12. CATCH BASIN INLETS WILL BE PROTECTED WITH AN INLET FILTER DESIGNED IN ACCORDANCE WITH NY STANDARDS.
13. STORM DRAINAGE OUTLETS WILL BE STABILIZED, AS REQUIRED, BEFORE THE DISCHARGE POINTS BECOME OPERATIONAL.
14. DEWATERING OPERATIONS MUST DISCHARGE DIRECTLY INTO A SEDIMENT CONTROL BAG OR OTHER APPROVED FILTER IN ACCORDANCE WITH NY STANDARDS.
15. DUST SHALL BE CONTROLLED VIA THE APPLICATION OF WATER, CALCIUM CHLORIDE OR OTHER APPROVED METHOD IN ACCORDANCE WITH NY STANDARDS.
16. TREES TO REMAIN AFTER CONSTRUCTION ARE TO BE PROTECTED WITH A SUITABLE FENCE INSTALLED AT THE DRIP LINE OR BEYOND IN ACCORDANCE WITH NY STANDARDS.
17. THE PROJECT OWNER SHALL BE RESPONSIBLE FOR ANY EROSION OR SEDIMENTATION THAT MAY OCCUR BELOW STORM WATER OUTFALLS OR OFF-SITE AS A RESULT OF CONSTRUCTION OF THE PROJECT.
18. ANY REVISION TO THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN MUST BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO IMPLEMENTATION IN THE FIELD.
19. A COPY OF THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN MUST BE AVAILABLE AT THE PROJECT SITE THROUGHOUT CONSTRUCTION.
20. SILT FENCING SHALL BE ADJUSTED IN FIELD AND NOT ENCR OACH ONTO EXISTING TREES TO REMAIN AND SHALL ENCOMPASS LIMITS OF DISTURBANCE INCLUDING SEEPAGE PIT LOCATIONS.
21. THE TREE PROTECTION AND PRESERVATION WILL BE IMPLEMENTED IN ORDER TO PROTECT AND PRESERVE BOTH INDIVIDUAL SPECIMEN TREES AND BUFFER AREA WITH MANY TREES. STEPS THAT WILL BE TAKEN TO RESERVE AND PROTECT EXISTING TREES TO REMAIN ARE AS FOLLOWS:
  - A. NO CONSTRUCTION EQUIPMENT SHALL BE PARKED UNDER THE TREE CANOPY.
  - B. THERE WILL BE NO EXCAVATION OR STOCKPILING OF EARTH UNDERNEATH THE TREES.
  - C. TREES DESIGNATED TO BE PRESERVED SHALL BE MARKED CONSPICUOUSLY ON ALL SIDES AT A 5 TO 10 FOOT HEIGHT.
  - D. THE TREE PROTECTION ZONE FOR TREES DESIGNATED TO BE PRESERVED WILL BE ESTABLISHED BY ONE OF THE FOLLOWING METHODS:
    - ONE (1) FOOT RADIUS FROM TRUNK PER INCH DBH.
    - DRIP LINE OF THE TREE CANOPY.

THE METHOD CHOSEN SHOULD BE BASED ON PROVIDING THE MAXIMUM PROTECTION ZONE POSSIBLE. A BARRIER OF SNOW FENCE OR EQUAL IS TO BE PLACED AND MAINTAINED ONE YARD BEYOND THE ESTABLISHED TREE PROTECTION ZONE. IF IT IS AGREED THAT THE TREE PROTECTION ZONE OF A SELECTED TREE MUST BE VIOLATED, ONE OF THE FOLLOWING METHODS MUST BE EMPLOYED TO MITIGATE THE IMPACT:

  - LIGHT TO HEAVY IMPACTS - MINIMUM OF EIGHT INCHES OF WOOD CHIPS INSTALLED IN THE AREA TO BE PROTECTED. CHIPS SHALL BE REMOVED UPON COMPLETION OF WORK.
  - LIGHT IMPACT ONLY - INSTALLATION OF 3/4 INCH OF PLYWOOD OR BOARDS, OR EQUAL OVER THE AREA TO BE PROTECTED. THE BUILDER OR ITS AGENT MAY NOT CHANGE GRADE WITHIN THE TREE PROTECTION ZONE OF A PRESERVED TREE UNLESS SUCH GRADE CHANGE HAS RECEIVED FINAL APPROVAL FROM THE PLANNING BOARD. IF THE GRADE LEVEL IS TO BE CHANGED MORE THAN (6) INCHES, TREES DESIGNATED TO BE PRESERVED SHALL BE WELLED AND/OR PRESERVED IN A RAISED BED, WITH THE TREE WELL A RADIUS OF THREE (3) FEET LARGER THAN THE TREE CANOPY.



- 1- THE PROJECT DEVELOPER SHALL TAKE REASONABLE PRECAUTION TO SAVE SPECIMEN QUALITY TREES IN AREAS NOTED ON THE PLANS FOR CLEARING. WHEN POSSIBLE, THE DEVELOPER SHALL PROTECT INDIVIDUAL SPECIMEN TREES THROUGH THE INSTALLATION OF SAFETY FENCING AROUND THE DRIP LINE PERIMETER OF THE TREE.
- 2- SAFETY FENCING SHALL BE INSTALLED AT THE ONSET OF SITE CONSTRUCTION TO PREVENT VEHICLE TRAFFIC FROM COMPACTING THE SOILS IN THE VICINITY OF THE TREE ROOT STRUCTURE.

**TREE PROTECTION DETAIL**  
NOT TO SCALE

**REVISIONS:**

1	10/20/2025	FOR CONSULTANT REVIEW
2	11/20/2025	PB RESUBMIT

IF IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW, ARTICLE 145 FOR ANY PERSON, UNLESS HE OR SHE IS ACTING UNDER THE DIRECTION OF A PROFESSIONAL ENGINEER, TO ALTER THE DRAWING IN ANY MANNER.

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**PROJECT:**  
81 TWEED BLVD.  
NYACK, NY  
71.17-1-27

**EROSION CONTROL**

**SEAL & SIGNATURE:**



JOREL J. VACCARO  
NY PE 093362

TO THE BEST OF THE SIGNING PROFESSIONAL'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE MINIMUM BUILDING CODES.

**DATE:** 09/30/2025  
**PROJECT #:** 25011  
**DRAWN/CHECKED:** PJM/JJV  
**SCALE:** NTS  
**PAGE:** 09 OF 09

**C-400.00**

#### GENERAL NOTES

- The governing Code for this Project is the New York State Building Code, 2020. This Code prescribes which edition of each referenced standard applies to this Project.
- To the best of our knowledge, the Structural Drawings and Specifications comply with the applicable requirements of the governing Building Code.
- Construction is to comply with the requirements of the governing Building Code and all other applicable Federal, State, and Local Codes, Standards, Regulations and Laws.
- The Structural Documents are to be used in conjunction with the Architectural and/or Landscape Design Documents. If a conflict exists, the more stringent governs.
- See the State Building Code for inspection requirements.
- Details labeled "typical" apply to all situations that are the same or similar to those specifically referenced, whether or not they are keyed in at each location. Questions regarding the applicability of typical details shall be resolved by the Architect.
- Openings shown on Structural Drawings are only pictorial. See the Architectural and M.E.P. drawings for the size and location of openings in the structure.
- Contractors who discover discrepancies, omissions or variations in the Contract Documents during bidding shall immediately notify the Architect. The Architect will resolve the condition and issue a written clarification.
- The General Contractor shall coordinate all Contract Documents with field conditions and dimensions and Project Shop Drawings prior to construction. Do not scale drawings; use only printed dimensions. Report any discrepancies in writing to the Architect prior to proceeding with work. Do not change size or location of structural members without written instructions from the Structural Engineer of Record.
- The Contractor shall protect adjacent property, his own work and the public from harm. The Contractor is solely responsible for construction means and methods, and jobsite safety including all OSHA requirements.
- The Structure is designed to be structurally sound when completed. Prior to completion, the Contractor is responsible for stability and temporary bracing, including, but not limited to, masonry walls. Wherever the Contractor is unsure of these requirements, the Contractor shall retain a New York State Licensed Engineer to design and inspect the temporary bracing and stability of the structure.
- Design Superimposed Loads:

OCCUPANCY	LIVE LOAD	DEAD LOAD
Yard	100 psf	N/A

Ground Snow Load: 30 psf

#### SHOP DRAWINGS AND OTHER SUBMITTALS

- Incomplete submittals will be returned without review.
- Submit specific components, such as columns, footings, etc., in a single package. Submit similar floors together.
- On first submittal, clearly flag and cloud all differences from the Contract Documents. On resubmittals, flag and cloud all changes and additions to previous submittal; only clouded items will be reviewed.
- Submittals for special structural, load-carrying items that are required by Codes or Standards to resist forces must be prepared by, or under the direct supervision of, a Delegated Engineer.
- A Delegated Engineer is defined as a New York State Licensed Engineer who specializes in and undertakes the design of Structural Components or Structural Systems included in a specific submittal prepared for this Project and is an employee or officer of, or consultant to, the Contractor or Fabricator responsible for the submittal. The Delegated Engineer shall sign, seal and date the submittal, including calculations and drawings. See Specifications for more specific criteria.
- The Trade Contractor is responsible for confirming and correlating dimensions at the job sites, for tolerances, clearances, quantities, fabrication processes and techniques of construction, coordination of the work with other trades and full compliance with the Contract Documents.
- The General Contractor/Construction Manager shall review and approve submittals and shall sign and date each drawing prior to submitting to the Architect. This approval is to confirm that the Submittal is complete, complies with the Submittal Requirements and is coordinated with field dimensions, other trades, erection sequencing and constructability.
- The Structural Engineer reviews submittals to confirm that the submittal is in general conformance with the design concept presented in the Contract Documents. Quantities and dimensions are not checked. Notations on submittals do not authorize changes to the contract sum. Checking of the submittal by the Structural Engineer shall not relieve the Contractor of responsibility for deviations from the Contract Documents and from errors or omissions in the submittal.
- In addition to the above, the Structural Engineer's review of Delegated Engineer submittals is limited to verifying that the specified structural submittal has been furnished, signed and sealed by the Delegated Engineer and that the Delegated Engineer has understood the design intent and used the specified Structural Criteria. No detailed check of calculations will be made. The Delegated Engineer is solely responsible for his/her design, including but not limited to the accuracy of his/her calculations and compliance with the applicable codes and standards.
- CAD files of Structural Drawings may be used as an aid in preparing Shop Drawings only upon the Contractor signing an Agreement. When CAD files or copies of the Structural Drawings are made available, it is under the following conditions:
  - All information contained in the CAD files or copies of the Structural Drawings are instruments of service of the Architect/Engineer and shall not be used for other projects, additions to the Project or the completion of the Project by others. CAD files and copies of the Structural Drawings remain the property of Martos Engineering PLLC, and in no case shall their transfer be considered a sale;
  - CAD files or copies of the Structural Drawings are not Contract Documents. In the event of a conflict, the Structural Drawings shall govern;
  - The use of CAD files or copies of the Structural Drawings shall not in any way relieve the Contractor's responsibility for proper checking and coordination of dimensions, details, sizes and quantities of materials as required for the preparation of complete and accurate Shop Drawings; and
  - The Contractor shall revise all references to Contract Document sheet numbers and section marks and shall remove information that is not required for their work from the CAD files or copies of the Structural Drawings, including the Title Block.
  - Dimensions in the CAD files may not be precise and, in some cases, have been intentionally altered for presentation purposes. Do not scale dimensions electronically or otherwise.

#### DEMOLITION NOTES

- The contractor is required to provide all temporary scaffolding, platforms, barricades, railings, screening, etc. Necessary to protect existing facilities, structures and the public during demolition and erection of the new

construction, as well as, for job safety. Job safety, construction and demolition procedures are the sole responsibility of the contractor. The contractor is required to take all precautions to minimize vibration, noise, dust and debris in all areas adjacent to areas of demolition.

- The contractor is required to coordinate with owner and building management the temporary suspension of use of any facility or portion thereof and the associated barricading requirements a minimum of 7 days prior to commencing work.
- The contractor is required to perform his work in a manner which will not conflict with any operation which is to remain functional during the course of the project, until such operation is scheduled to be shut down.
- The contractor is required to coordinate with owner or building management the temporary suspension of use of any utility system, a minimum of 3 days prior to commencing work.
- At all locations where new construction will interface with existing elements, cut through existing structure in straight and true lines to ensure a neat interface.
- At all locations where the demolition of a concrete member leaves the ends of reinforcing steel exposed, provide the following:
  - Chip concrete from around the steel to a depth of 1".
  - Cut off reinforcing steel not less than 3/4" below the concrete surface.
  - Fill the cavity flush with a high modulus gel epoxy. See specifications for accepted manufacturers.
- Before demolishing any structural element, install all required temporary and/or permanent bracing and supports.
- Provide temporary closure of all roof fascia, wall and other openings to protect building from exposure to undesirable elements until new construction is weatherproofed, at which time such temporary construction shall be removed. All temporary exterior walls that are subject to wind loads are to be designed by a delegated (specialty) engineer.
- Upon completion of new construction under each phase, all demolished areas shall be restored to acceptable usage according to the contract documents as determined by the a/e.
- Remove completely from the site and legally dispose of all debris generated by the demolition work as the work progresses.

#### SHALLOW FOUNDATIONS

- Foundation design, soil preparation and compaction are based on Geotechnical Investigation, Data and Recommendations in Geotechnical Investigation Report by Petry Engineering, LLC, dated August 29,2022. The Geotechnical Report is not available at this time.
- Foundation design is based on bearing capacities of 5,000 psf for foundation bearing on native undisturbed soil, 5,000 psf for footings bearing on controlled fill overlying native undisturbed soil, 20,000 psf for footing bearing on natural bedrock, and 6,000 psf for footings bearing on controlled fill overlay natural bedrock. All soil are to be prepared per the Geotechnical report. Weathered rock is to be removed, and rock is to be chipped as necessary to provide a level bearing surface.
- See details for all footings elevations
- All bottom of footing elevations are subject to change upon inspection of soil condition. Elevation of adjacent footings shall vary on a slope not steeper than one vertical to two horizontal.
- The contractor shall notify the engineer where bottom of footing elevation is changed and obtain revised design of the foundation and retaining walls as required.
- Soil supported footings shall be founded upon undisturbed natural subgrade (or controlled compacted fill) with a minimum bearing capacity as noted and as field verified and approved by the contractor's soil inspection agency. The bottom of the footing elevations and bearing capacities as shown on the drawings are estimated and will require verification. Final, exact elevations and bearing capacities shall be field determined.
- All fill required below any portion of the structure shall be compacted in 6" lifts to at least 95% of the maximum dry density per ASTM D-1557. Remove unsuitable fill and replace with controlled fill as required for sound placement of foundations.
- Subgrade preparation shall be field controlled and tested by a Licensed Soils Engineer in accordance with the Geotechnical Report. At completion, that Engineer shall prepare and submit to the Owner, Architect, Contractor and Structural Engineer a signed and sealed letter indicating that the recommendations of the Geotechnical Report have been followed.
- Center all footings under their respective columns or walls, u.o.n.
- Bottom of all footings is 48" below the grade, u.o.n.

#### EXCAVATION, BACKFILL AND DEWATERING

- The Contractor is solely responsible for all excavation procedures including lagging, shoring, and protection of adjacent property, structures, streets and utilities in accordance with the requirements of the local building department and OSHA regulations. Do not excavate within one foot of the angle of repose of any soil bearing foundation unless the foundation is properly protected against settlement.
- Do not backfill against walls until 7 days after the walls are braced by the structure or are temporarily braced. Do not backfill cantilevered retaining walls until concrete is 28 days old. Do not backfill until after completion and inspection of any waterproofing.
- Refer to Geotechnical Report for subgrade preparation more than 12" below bottom of slab.
- Above subgrade, use fill containing not more than 10% passing #200 sieve and maximum 1 inch diameter. Compact to 95% of maximum dry density as determined by modified proctor ASTM D-1557. Each layer of fill shall not exceed 6" loose thickness. Compact prior to placement of the next layer.
- Fill placement and compaction shall be monitored and accepted by the testing agency. Take a min. of one field density test (ASTM D-1556 or D-2922) for each 2,500 square feet of each layer. The testing agency shall randomly select test locations.
- The Contractor is responsible for the disposal of all accumulated water in a manner that does not inconvenience or damage the work.
- The contractor shall provide all measures and precautions necessary to prevent damage and settlement (horizontal and vertical) of existing or new construction, inside or outside the project limits).
- The contractor shall provide all measures necessary to control ice, frost, surface and subsurface water so that the foundation work is performed on dry subgrade.
- New excavation shall not undermine nor disturb any existing adjacent footings. New footings shall be supported in a manner to maintain an excavation slope between the bottom of footing and excavation of one (1) vertical to two (2) horizontal.

#### REINFORCED CONCRETE

- Comply with ACI 301 and 318.

- Provide structural concrete with a minimum ultimate compressive design strength in 28 days as follows:

Element	Strength
Footings	4,000 psi
Poured Walls	4,000 psi

- Use normal weight concrete for all structural members. u.o.n.

- Provide ASTM A-615 Grade 60 reinforcing steel. Reinforcing shall be accurately placed, rigidly supported and firmly tied in place, with appropriate bar supports and spacers. Lap continuous reinforcing 48 bar dia. Lap bottom steel over supports and top steel at midspan (u.o.n.). Hook discontinuous ends of all top bars and all bars in walls, u.o.n. provide cover over reinforcing as follows:

Element	Bottom	Top	Sides
Footings	3"	2"	3"
Walls Retaining Fill	-	-	2"

- Where specified, provide plain, cold-drawn electrically-welded wire reinforcement conforming to ASTM A-185. Supply in flat sheets only. Lap splice one cross wire spacing plus two inches.
- In addition to specified reinforcing, provide additional reinforcing bars to be detailed, fabricated, delivered to site and placed as directed by the Architect/Engineer to account for unforeseeable conditions.
- Utilities shall not penetrate beams or columns but may pass through slabs and walls individually, u.o.n.. For openings 24" long or less, cut reinforcing and replace alongside opening with splice bars of equivalent area with 48 bar dia. lap. Prepare and submit shop drawings for openings longer than 24". For rectangular openings 12" long or longer, add 1#5 x 6' mid depth diagonal at all 4 corners.
- Where reinforcing steel congestion permits, conduit and pipes up to 1" diameter may be embedded in concrete per ACI 318, Section 6.3. Space at 3 diameters o.c. Place between outer layers of reinforcing. If conduits are significantly congested, additional reinforcing perpendicular to piping may be required. Requests to embed larger pipes should be accompanied by a detailed description and be submitted to the architect for evaluation.
- Provide construction joints in accordance with ACI 318, Section 6.4. Provide keyways and adequate dowels. Submit drawings showing location of construction joints and direction of pour for review.
- Provide 3/4" chamfer for all exposed corners.
- Provide reinforcing steel placer with a set of Structural Drawings for field reference. Inspect reinforcing steel placing from structural drawings.

#### CONCRETE POST-INSTALLED ANCHORS

- All post-installed anchors shall comply with ACI 318, and be tested and qualified under the provisions of ACI 355.2 and ICC ES AC 193. Anchors are to be manufactured from carbon steel and shall have an electroplated or mechanically galvanized finish, UON.
- Contractor shall obtain approval from Engineer of Record (EOR) prior to using post-installed anchors for missing or misplaced cast-in-place anchors and reinforcing.
- Confirm the absence of reinforcing steel by drilling a 1/4" diameter pilot hole for each anchor. Do not cut reinforcing steel without approval of the EOR.
- Anchors shall be installed per the manufacturer's specifications and installation instructions at not less than minimum edge distances and/or spacing indicated in the manufacturer's literature. Maintain manufacturer's installation procedures on site at all times during anchor placement.
- Refer to manufacturer's installation instructions for appropriate drilled hole size.
- Thoroughly clean hole including removal of dust prior to filling with epoxy, use a compressor to blow holes clean, vacuuming of holes as sole means of cleaning will not be approved.
- Use minimum of A-36 galvanized steel threaded rods for epoxy anchor rods, u.o.n.
- Unless specified otherwise on drawings or manufacture requirements, anchors shall be embedded in the appropriate substrate with a minimum embedment of 8 times the nominal anchor diameter.
- Requirements for types post installed anchors:
  - Expansion Anchors: Use wedge-type expansion anchors such as the Hilti Kwik Bolt III or approved equivalent.
  - Epoxy Anchorage For: Reinforcing Bars, Threaded Rods, and Anchor Bolts: Use an epoxy, acrylic or polyester resin adhesive system such as the Hilti HIT HY200 for concrete or HY270 for masonry or approved equivalent.
- Substitution requests, for products other than those listed above, shall be submitted to the EOR with calculations that are prepared & sealed by a licensed Professional Engineer showing that the substituted product will achieve an equivalent capacity using the appropriate design procedure required by the Building Code.

#### DRAWING LIST

S-100	Structural Notes
S-200	Retaining Wall Plans
S-400	Retaining Wall Details

# MARTOS

reinforcing design  
ENGINEERING

Christian L. Martos Engineering PLLC

660 White Plains Road, Suite 525  
Tarrytown, NY 10591  
646 543 1940  
info@martosengineering.com

NO.	DATE	DESCRIPTION
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REVISIONS\*

SIGNATURE AND SEAL:



Bryan C. Mahoney, P.E.  
NY\_097167-01

TO THE BEST OF THE SIGNING PROFESSIONAL'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE MINIMUM BUILDING CODES.

PROJECT NAME / ADDRESS:

**81 TWEED BOULEVARD  
NYACK, NY 10960**

PROJECT NO.: 25062

ISSUED FOR: PERMIT SET

ISSUE DATE: 2025-11-20

SHEET NAME:

**STRUCTURAL NOTES**

SCALE: N/A

SHEET NO:

# \$100.00

PAGE # 1 OF 3

SHEET LEGEND	
	NEW CONCRETE RETAINING WALL
	NEW FOOTING
	RETAINING WALL CALL OUT, INDICATING EXTENT OF WALL AND ENDS
	PROPERTY LINE
	PROPOSED TOPO CONTOUR
	EXISTING TOPO CONTOUR

GENERAL PLAN NOTES

- A SEE CIVIL DRAWINGS FOR ALL DIMENSIONS. CONTACT E.O.R. CONTRACTOR TO VERIFY ALL FIELD CONDITIONS AND THAT LATEST CIVIL DRAWINGS DO NOT INCREASE SPANS OF MEMBERS PAST THE SCALED DIMENSION SHOWN ON THESE DRAWINGS.
- B CONTRACTOR TO PROVIDE ALL SOIL SHORING AND BRACING DURING DEMOLITION. PROVIDE SOIL SHORING PLANS TO E.O.R. FOR APPROVAL.

ALL FOUNDATION TO BEAR ON BEDROCK. WHERE FILL IS REQUIRED, REFER TO REQUIREMENTS SPECIFIED IN THE GEOTECH REPORT. PREPARE ALL SUBGRADE IN ACCORDANCE WITH THE GEOTECH REPORT

EXISTING TOPO LINES TAKEN FROM SITE PLAN C-100 PER CIVIL DRAWING BASED ON PRELIMINARY LAND SURVEY PERFORMED BY OTHERS. TOPO LINES ARE SHOWN FOR REFERENCE ONLY AND ARE SUBJECT TO CHANGE. CONTACT E.O.R. IF FINAL UNBALANCED FILL HEIGHT EXCEEDS THAT SHOWN ON RETAINING WALL SCHEDULE

PROPOSED RETAINING WALL ELEVATIONS BASED ON PRELIMINARY LAND SURVEY PERFORMED BY OTHERS AND ARE SUBJECT TO CHANGE.

EXISTING TOPO LINES SHOWN FOR REFERENCE. REFER TO CIVIL FOR PROPOSED GRADING PLAN

T.O. WALL = 505'  
B.O. WALL = 500'

T.O. WALL = 505'  
B.O. WALL = 490'

T.O. WALL = 505'  
B.O. WALL = 490'

PROPOSED T.O. GRADE ELEV = ±506' ARCH. TO CONFIRM

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PROPOSED T.O. GRADE ELEV = ±506' ARCH. TO CONFIRM

PROPOSED 4"Ø PIPE PER CIVIL DRAWINGS TO PASS THROUGH RETAINING WALL. CONTRACTOR TO ENSURE PIPE IS LOCATED 1" CLEAR FROM VERTICAL AND HORIZONTAL REINFORCEMENT

PROPOSED 10"Ø PIPE PER CIVIL DRAWINGS TO PASS THROUGH WALL FOOTING WHERE VERTICAL BARS ARE INTERRUPTED, PROVIDE (2) BARS EACH SIDE OF PIPE SEE 3/5/400

PROPOSED MANHOLE PER CIVIL TYP.

PROPOSED CATCH BASIN PER CIVIL TYP.

DRIVEWAY PAVY BY OTHERS

PROPOSED DWELLING PER STRUCTURAL SCOPE BY OTHERS

PROPOSED SEPTIC SYSTEM PER CIVIL BY OTHERS

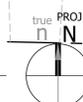
1 VERT-4.5 HORIZ

4/5/400

S.F.

TWEED BOULEVARD

A RETAINING WALL PLAN



NO. DATE DESCRIPTION

REVISIONS\*

SIGNATURE AND SEAL:



Bryan C. Mahoney, P.E.  
 NY 097167-01

TO THE BEST OF THE SIGNING PROFESSIONAL'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE MINIMUM BUILDING CODES.

PROJECT NAME / ADDRESS:

81 TWEED BOULEVARD  
 NYACK, NY 10960

PROJECT NO.: 25062

ISSUED FOR: PERMIT SET

ISSUE DATE: 2025-11-20

SHEET NAME:

RETAINING WALL  
 PLANS

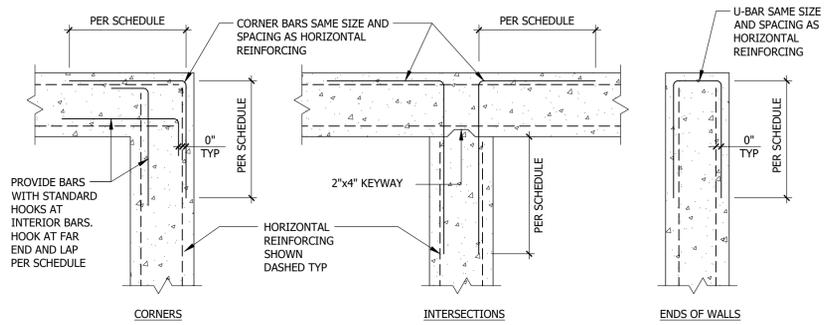
SCALE: 1" = 10'-0"

SHEET NO:

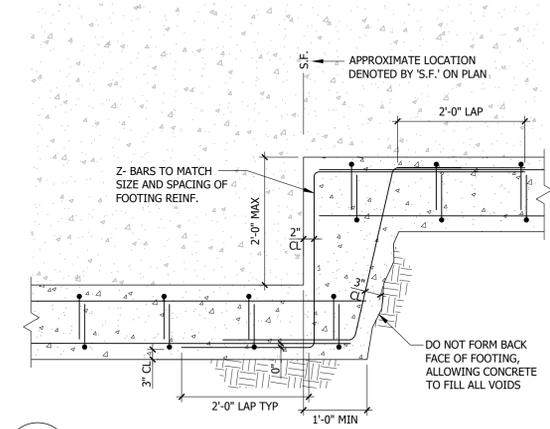
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PAGE # 2 OF 3

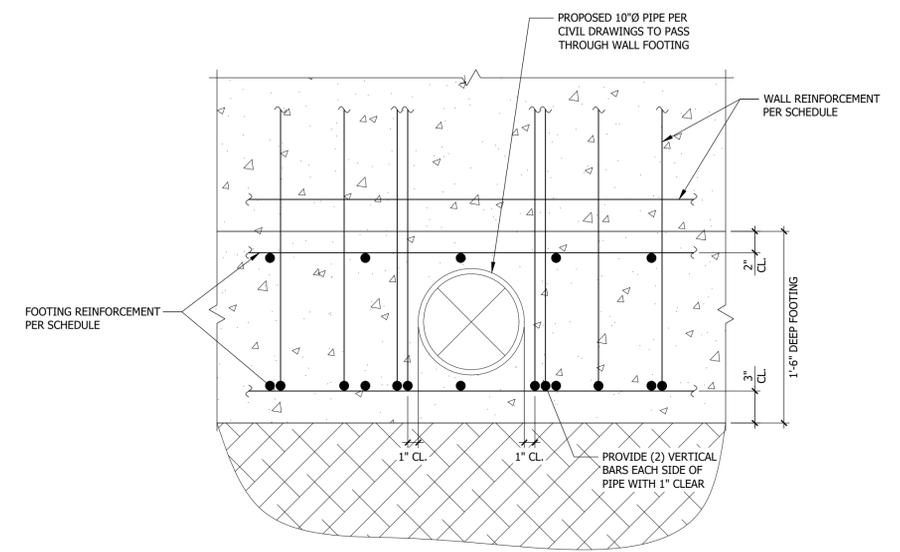
NOTE: THE ADDITIONAL HOOKED BARS MAY BE ELIMINATED IF HORIZONTAL REINFORCING IS PROVIDED WITH HOOKS.  
 PROVIDE SIMILAR CORNER AND INTERSECTION DETAILS AT WALLS AND FOOTINGS. END OF WALL DETAIL NOT TO BE USED IN FOUNDATIONS U.O.N.



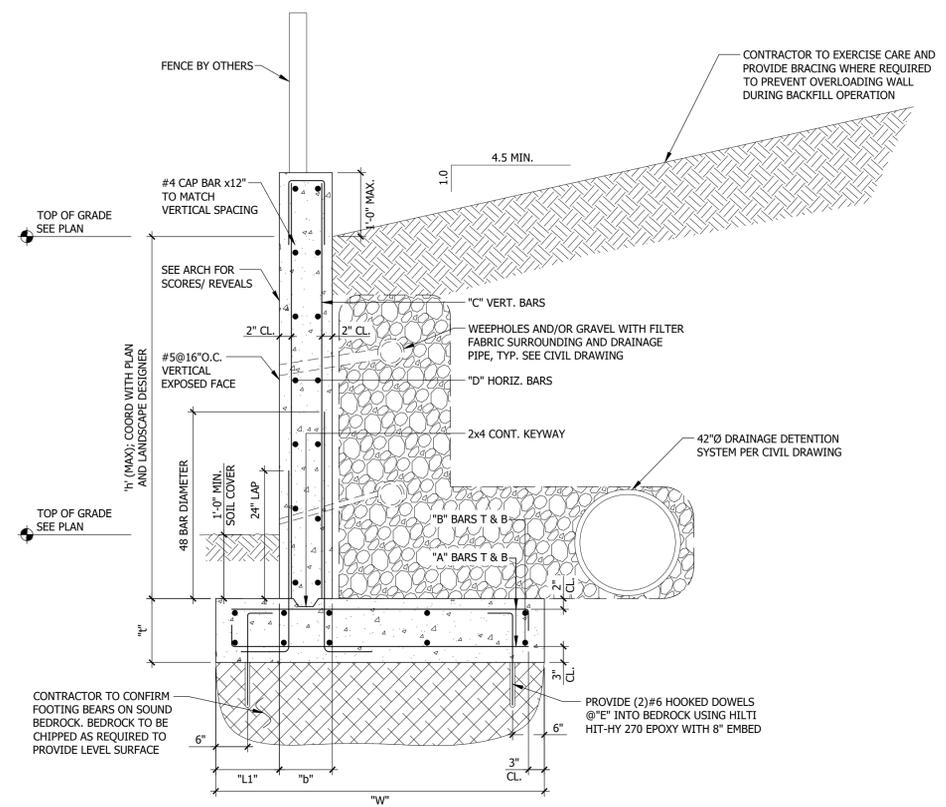
**1** TYPICAL HORIZONTAL REINFORCING  
 CONCRETE WALLS, AND FOOTINGS  
 SCALE 3/4"=1'-0"



**2** TYP CONCRETE STEPPED FOOTING DETAIL  
 VERTICAL STEP < 2'-0"  
 SCALE 3/4"=1'-0"



**3** TYP WALL FOOTING PENETRATION DETAIL  
 RW-1  
 SCALE 1-1/2"=1'-0"



MARK	(h) MAX	W	t	L1	FOOTING REINFORCING		b	WALL REINFORCING		DOWELS INTO BEDROCK
					A	B		C	D	
					E	E				
RW-1	19'-0"	11'-0"	1'-6"	2'-0"	#8@6"O.C. (8)#5xCONT	1'-8"	#8@6"O.C. #5@16"O.C.	6"O.C.		
RW-2	13'-0"	8'-0"	1'-2"	2'-0"	#6@6"O.C. (6)#5xCONT	1'-0"	#6@6"O.C. #5@16"O.C.	16"O.C.		
RW-3	6'-0"	4'-0"	1'-0"	1'-0"	#5@12"O.C. (3)#5xCONT	0'-10"	#5@12"O.C. #5@16"O.C.	24"O.C.		

**4** CONCRETE RETAINING WALL SCHEDULE  
 SCALE: 3/4" = 1'-0"

STANDARD HOOK DETAILS				
EXTENT OF LENGTH ON DRAWING	EXTENSION TO MAKE HOOK	EXTENT OF LENGTH ON DRAWING	EXTENSION TO MAKE HOOK	A or G
db	4db OR 2 1/2" MIN	db	12db	

END HOOK DIMENSIONS, ALL GRADES				
BAR SIZE	D	180° HOOKS		90° HOOKS
		A or G	J	A or G
#3	2 1/2"	0'-5"	0'-3"	0'-6"
#4	3"	0'-6"	0'-4"	0'-8"
#5	3 1/2"	0'-7"	0'-5"	0'-10"
#6	4 1/2"	0'-8"	0'-6"	1'-0"
#7	5 1/4"	0'-10"	0'-7"	1'-2"
#8	6"	0'-11"	0'-8"	1'-4"
#9	9 1/4"	1'-3"	0'-11 3/4"	1'-7"
#10	10 3/4"	1'-5"	1'-1 1/4"	1'-10"
#11	12"	1'-7"	1'-2 3/4"	2'-0"

BAR TYPE	MIN. LAP SPLICE LENGTH SCHEDULE									
	#3	#4	#5	#6	#7	#8	#9	#10	#11	
48 BAR DIAMETER	18"	24"	30"	36"	42"	48"	54"	61"	68"	
FOOTINGS	16"	18"	22"	26"	38"	43"	49"	55"	61"	
COLUMNS	-	-	22"	26"	38"	45"	56"	69"	83"	
WALLS	16"	18"	22"	26"	38"	45"	56"	69"	-	
SLABS	16"	22"	32"	43"	69"	86"	-	-	-	
BEAMS (TOP)	-	-	28"	34"	49"	59"	73"	90"	107"	
BEAMS (MID. & BOTT.)	-	-	22"	26"	38"	45"	56"	69"	83"	
STIRRUPS	16"	18"	22"	26"	-	-	-	-	-	
MASONRY FILLED CELLS	-	-	30"	56"	76"	-	-	-	-	

NO. DATE DESCRIPTION  
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PROJECT NO.: 25062  
 ISSUED FOR: PERMIT SET  
 ISSUE DATE: 2025-11-20  
 SHEET NAME:

**RETAINING WALL  
 DETAILS**

SCALE: 3/4" = 1'-0"  
 SHEET NO:

**\$400.00**











