Dec 2nd, 2021

Attn: Neal Zuckerman, Chairperson, and Ronald J. Gainer, Planning Board Engineer
238 Main Street
Cold Spring, NY, 10516

Dear Mr. Zuckerman and Mr. Gainer,

Please see the following responses to questions and comments raised from the Nov 18th Planning board meeting:

- Flood prevention-This project is in special flood hazard zone AE with base flood elevation (also referred to as 100-year flood or 1-percent annual chance flood hazard) at EL. 7'. We propose to add ~ 12,000 cubic feet of fill to ensure the new dwelling unit stays above the flood level, the new finished floor height is at EL.10'. For your reference, Hurricane Sandy maximum flood height was measured to reach EL. 9.4'.

- Septic design and reverse osmosis system filtration of well water- Our civil engineer John Kalin PE will be joining the Dec 16th meeting to answer any septic and reverse osmosis related questions.

- Lighting impact on navigable waterways- Our marine engineer from Race coastal engineering has informed us that while she hasn't encountered exterior house lighting questions, there is a passage from the Army Corps of Engineers' permit for waterfront dock structure, which asks that 'outdoor lighting is located or shielded so that it is not confused with any aids to navigation and does not interfere with navigation on the adjacent waterway. If installed, the lights must be white and non-flashing.'
  All exterior lights on this project site including landscape and building exterior lights will be non-flashing, full spectrum (white), and dark sky compliant light fixtures.

Below is a list of site improvements and mitigatory measures to summarize and clarify the proposed site and building design:

- <u>Seawall replacement</u>
  - The existing gabion walls at 28 Hudson River Lane allow for settling as they age over time. We are working with Race Coastal Engineering on replacing the existing gabion walls with precast concrete block walls which will be more effective against shoreline erosion.
  - We propose to also replace the seawall cap at 30 Hudson River ln with L shape blocks which allow for more pervious lawn coverage. The finished top of seawall elevation on both properties will be EL. ± 6.3', 2' higher than existing. See Race Engineering's DEC & Army Corps of Engineers joint application for wall details.

- <u>Stormwater mitigation</u>

- Permeable driveway pavement- We are restoring a portion of the existing gravel driveway back to lawn area, the new driveway will have porous driveway pavement to help with stormwater retention.
- All decking on site will have spaced boards at >1/8" to limit impervious coverage on site.
- Extensive and intensive green roofs- The proposed dwelling unit will have ~180sf of intensive green roof on the garage roof and a minimum of 850sf of extensive green roof on the main roof. Green roofs can significantly reduce the volume of water runoff from the roof, catch and retain a portion of rainwater, and slow down the time it takes runoff to leave a roof.
- Water cisterns to capture and collect stormwater runoff for landscape irrigation.
- Rain garden with native plants along south property line to increase pollinator habitat and to reduce site water runoff.

- <u>Sustainable building and landscape design</u>
  - Passive house- The proposed single-family dwelling is designed to meet passive house standards. Passive house is designed to use 90% less energy than typical construction, we are eliminating use of all fossil fuels on site (including propane fired generator and propane tanks, oil burners, and oil tanks). This highly efficient home will likely consume no more than 10% in total energy compared to a similarly sized code-built home of similar size. The remaining energy demand will be met and likely exceeded by grid-tied solar panels with battery storage that will serve as backup power when the grid is down, and provide energy management daily to lessen demand on the grid throughout the year.
  - Bird safety glass has a special coating with patterns visible only to birds, these will be used on large window areas to prevent bird collisions.
  - We plan to remove existing invasive trees & plants, relocate native plants during construction, these plants along with new native species will be incorporated into the finished landscape.
  - Chemical free natural pool- Unlike a typical chlorinated pool or salt pool, the proposed chemical free natural pool contains no salt chlorine generators, ozone generators, ionizers, mineral systems, or any other devices. The engineered natural pool uses a bio-based filtration system with biofilm filters, water from this pool will not pollute the site or the Hudson River.

Please do not hesitate to contact us with any questions. We look forward to resuming this conversation with you.

Gratefully,

James Hartford | AIA, LEED AP, NCARB, CPHC
River Architects, PLLC | Principal
MWBE, DBE, & SBE Certified Business
Passive House | Net Zero | Living Buildings | LEED

178 Main Street Cold Spring New York 10516 t: 845.265.2254 f: 845.265.227

EROSION & SEDIMENT CONTROL GENERAL NOTES

1. The Contractor will be responsible for the implementation and maintenance of sediment and erosion control measures on the site prior to and during construction. All erosion control structures are to be maintained in proper functioning order and are to be replaced as necessary.
2. All construction activities involving the removal or disposition of soil are to be provided with appropriate protective measures to minimize erosion and contain sediment disposition within. Minimum soil erosion and sediment control measures shall be implemented as shown on the plans and shall be installed in accordance with "New York Standards and Specifications for Erosion and Sediment Controls," latest edition.
3. Wherever feasible, natural vegetation should be retained and protected.
4. Only the smallest practical area of land should be exposed at any one time during development, and the exposure shall be kept to the shortest practical period of time. Disturbance shall be limited to the areas required to perform construction.
5. Stabilized construction entrance, silt fence and hay bales shall be installed as shown on the drawing prior to beginning any clearing and grubbing or earthwork.
6. Filter fabric for silt fence is to be Mirafi 140 as manufactured by the Celanese Corporation or approved equal unless otherwise indicated.
7. All topsoil to be stripped from the area being developed shall be stockpiled as shown on the plan and immediately seeded with Manhattan rye grass.
8. Any graded areas not subject to further disturbance or construction traffic shall, within 10 days of final grading, receive permanent vegetation cover in combination with a suitable mulch. All seeded areas to receive a minimum of 4" topsoil and be seeded and mulched as per "New York Standards and Specifications for Erosion and Sediment Controls," latest edition.
9. Grass seed mix may be applied by either mechanical or hydroseeding methods. Hydroseeding shall be performed in accordance with the current edition of the "NYSDOT Standard Specification, Construction and Materials, Section 610-3.02, Method No. 1."
10. All cut slopes and embankment fills are to be immediately laid back and stabilized as follows:
    a. Grade to finished slopes.
    b. Scarified.
    c. Topsoiled with not less than four inches of suitable topsoil material.
    d. Seeded with Manhattan rye grass. Seed shall be applied at the rate of not less than five pounds per 1,000 square feet.
    e. Mulched with not less than one inch and not more than three inches of straw (two tons per acre) and anchored in a suitable manner.
11. All embankments are to be graded and seeded immediately upon being laid back.
12. On all embankment fill slopes, topsoil shall be stripped at least five (5) feet wider than required for the embankment toe of slope. A protective berm of topsoil shall be left in this area, running parallel to the contours for the purpose of restricting drainage runoff. The topsoil berm shall be seeded as required for stockpiles.
13. Paved and gravel roadways shall be kept clean at all times.
14. The site shall at all times be graded and maintained such that all stormwater runoff is diverted to soil erosion and sediment control facilities.
15. All storm drainage outlets shall be stabilized, as required, before the discharge points become operational.
16. Stormwater from disturbed areas must be passed through erosion control barrier before discharge beyond disturbed areas or discharged into other drainage systems.
17. Sedimentation and erosion control measures shall be inspected and maintained on a daily basis by the Contractor to insure that channels, temporary and permanent ditches and pipes are clear of debris, that embankments and berms have not been breached and that all straw bales and silt fences are intact. Any failure of sediment and erosion control measures shall be immediately repaired by the Contractor and inspected for approval by the O.F.R. and/or Town Engineer.
18. Dust shall be controlled by sprinkling or other approved methods as necessary, or as directed by the Engineer.
19. Cut and fills shall not endanger adjoining properties.
20. All fills shall be compacted to provide stability of material and to prevent settlement.
21. The Contractor shall inspect downgrade conditions for evidence of sedimentation on a weekly basis and after rainstorms. The contractor in resonsible for separately maintaining a stormwater inspection monitoring program to satisfy Local, State, and Federal Agencies and permits.
22. As warranted by field conditions, special additional sedimentation and erosion control measures, as specified by the Project Engineer, Town Engineer, and/or the Town of Philipstown shall be installed by the Contractor.
23. Erosion control measures shall remain in place until all disturbed areas are suitably stabilized.
24. A copy of the SWPPP will remain at the job site.

REQUIRED CONSTRUCTION ACTIVITY SWPPP CONTENTS

This stormwater pollution prevention plan (SWPPP) has been prepared pursuant to NYSDEC "SPDES General Permit for Stormwater Discharges from Construction Activity" (GP-0-10-001) and conforms with the most current version of "New York Standards and Specifications for Erosion and Sediment Control". Where the practices deviate from the standards, the plan has demonstrated equivalence to the standards. The following list of required SWPPP components is provided in accordance with Part III.B.1of General Permit GP-0-10-001:

a. Background Information: This project involves the demolition of two residences and garages, sea wall & sea wall cap replacement, new septic area, and the construction of a new single family residence at 28 & 30 Hudson River Lane in the Town of Philipstown.

b. Site Map / Construction Drawing: This plan serves to satisfy this SWPPP requirement.

c. Soil Description: Soils within this project are as follows: Urban Land Charlton-Chatfield complex.

d. Construction Phasing/ Sequence: This project shall be completed in two phases (demolition and proposed construction) as per the construction sequences provided within this plan.

e. Erosion and Sediment Control Practices Implemented: This plan provides the proposed erosion and sediment control measures that will be implemented as part of this construction project.

f. Temporary and Permanent Soil Stabilization: This plan details the proposed temporary and permanent soil stabilization measures proposed. They have been detailed in accordance with the "New York State Standards and Specifications for Erosion and Sediment Control."

g. Site Map / Construction Drawing: This plan serves to satisfy this SWPPP requirement for erosion and sediment control practices and locations.

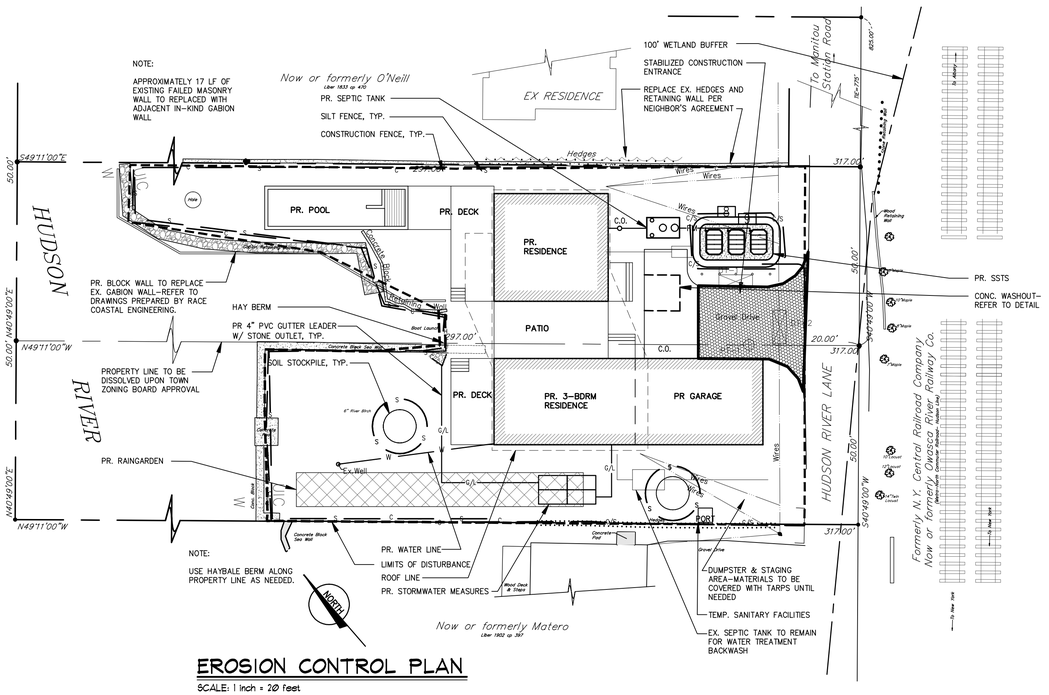
h. Dimensions and specifications of erosion and sediment control practices: The details, Erosion and Sediment Control Notes and Maintenance Schedule satisfy this SWPPP requirement.

i. Inspection Schedule: This project will be inspected on a daily basis for the duration of construction by the Town, Project Engineer or qualified NYSDEC Trained Contractor. Maintenance shall be performed as per Maintenance Schedule.

j. Pollution Prevention Measures: The Contractor shall be responsible for maintaining the site in a clean condition and provide waste barrels or dumpsters. Hazardous materials shall be stored in a secure manner with secondary containment measures. Contractor shall have all MSDS (material safety data sheets) material inventory and emergency contact numbers readily available at the site. The Contractor shall provide and maintain temporary sanitary facilities (portable toilets) during the course of construction.

k. Industrial Discharges: There are no known industrial related discharges associated with or proposed for this project.

l. Technical Standards Design Variances: All proposed elements of this SWPPP have been designed in accordance with the "New York State Standards and Specifications for Erosion and Sediment Control."



EROSION CONTROL PLAN

SCALE: 1 inch = 20 feet

ALTERATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 7209 OF ARTICLE 145 OF THE EDUCATION LAW.

EROSION & SEDIMENT CONTROL MAINT. MEASURES

The Contractor shall be responsible for the continued maintenance of the erosion control measures, including repairs and replacement of any erosion control measures, as warranted. The Contractor shall inspect all erosion control measures following rainstorms to ensure all measures are properly functioning. Erosion control measures shall be checked weekly and shall be repaired as required.

SILT FENCE

1. Accumulated sediment must be removed periodically. The curtain must be inspected often and after each storm. Any damage must be repaired.

STABILIZED CONSTRUCTION ENTRANCE

1. The Stabilized Construction Entrance (S.C.E.) shall be maintained in a condition which will prevent tracking of sediment onto public Right-of-Ways or streets. This may require periodic top dressing with additional aggregate. All sediment spilled, dropped or washed onto public Right-of-Ways or streets must be removed immediately. When necessary, wheels must be cleansed to remove sediment prior to entrance onto public Right-of-Ways. When washing is required it shall be done on an area stabilized with aggregate which drains into an approved sediment trapping device. All sediment shall be prevented from entering storm drains, ditches, wetlands or watercourses.

SOIL STOCKPILES

1. Inspect silt fence and repair as needed to maintain soil containment.

PROPOSED CONSTRUCTION SEQUENCE

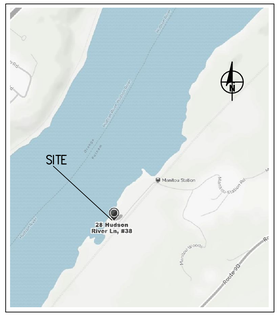
1. SECURE ALL NECESSARY PERMITS FOR CONSTRUCTION
2. POST ALL PERMITS AT JOB SITE
3. STAKE OUT PROPOSED IMPROVEMENTS & ESTABLISH OFFSET STAKES FOR FOUNDATIONS. CONFIRM BENCHMARK & FLOOD ELEVATION
4. CREATE CONSTRUCTION STAGING AREAS
5. DIG FOUNDATIONS OF PROPOSED BUILDING
6. INSTALL FOUNDATION
7. INSTALL FOOTING DRAIN
8. BACKFILL FOUNDATIONS TO SUBGRADE & COMPACT
9. CONSTRUCT BUILDING
10. EXCAVATE FOR WATER LINE, GAS LINE, & UTILITY LINE
11. INSTALL SEPTIC SYSTEM
12. INSTALL STORMWATER MEASURES
13. TEMPORARILY MULCH SITE
14. BROADCAST TOPSOIL AND LANDSCAPE SITE
15. RAKE, SEED, AND MULCH GRASS AREA
16. REMOVE SCE AND INSTALL DRIVEWAYS
17. REMOVE CONSTRUCTION FENCE & SILT FENCING ONCE SITE IS STABILIZED

GENERAL NOTES

1. ALL WELLS AND SSDS'S WITHIN 100 FEET OF THE PROPERTY LINE ARE SHOWN ON THE PLAN.
2. WATER IS SUPPLIED FROM AN EXISTING WELL.
3. TOPOGRAPHICAL AND PROPERTY LINE INFORMATION HAVE BEEN TAKEN FROM A PLANS PREPARED BY BADEY & WATSON, SURVEYING & ENGINEERING, P.C. DATED 06/12/19. DATUM IS APPROXIMATE USGS.
4. THIS PARCEL LIES IN THE AE FLOOD ZONE PER THE FEMA FLOOD INSURANCE RATE MAPS. FLOOD ELEVATION IS 7'.
5. THERE ARE NO WETLANDS ON THE PARCEL.
6. THE PROPERTIES ARE IDENTIFIED ON THE TOWN OF PHILIPSTOWN TAX MAPS AS 89.7-1-8 & 89.7-1-7.
7. THE COMBINED LOT AREA IS APPROXIMATELY 0.54 AC.
8. THIS PROJECT INVOLVES THE DEMOLITION OF TWO (2) HOUSES AND TWO (2) GARAGES AND THE CONSTRUCTION OF A NEW 5,288 SQ. FT. SINGLE FAMILY RESIDENCE, INCLUDING 859 S.F. GARAGE.

LEGEND:

- PROPOSED BUILDING
- W — WELL LINE
- 700 — EXIST. CONTOUR
- 526 PROP. CONTOUR
- PT-1 PERC. TEST LOCATION
- DT-1 TEST PIT LOCATION
- S — PROPOSED SILT FENCE
- FM — FORCE MAIN
- WRES
- LIMITS OF DISTURBANCE
- WETLAND BUFFER
- C — CONSTRUCTION FENCE
- SOIL STOCKPILE
- H — HAY BALE BARRIER



LOCATION MAP

SCALE: 1 inch = 1000 feet

SITE INFORMATION

ADDRESS:	28-30 HUDSON RIVER LN. GARRISON, NY 10524
TAX MAP ID:	89.7-1-8 & 89.7-1-7
TOPO DATUM:	APPROXIMATE USGS
PARCEL AREA:	0.54 AC
SEWER:	ON SITE
WATER SUPPLY:	PRIVATE WELL
RECEIVING WATERS:	HUDSON RIVER
WETLAND DISTURB:	N/A
WETLAND BUFFER DIST:	N/A
OUTSIDE WETLAND & BUFFER DIST:	11,900 SF
TOTAL AREA OF DIST:	11,900 SF

OWNER / APPLICANT

OWNER: J. WILDRICK & J. GIROUARD

ADDRESS: 28-30 HUDSON RIVER LANE GARRISON, NY 10524

NOTE:
SOIL BOUNDARIES HAVE BEEN REPRODUCED FROM WEB SOIL SURVEY, PUTNAM COUNTY, NEW YORK (NY079)

UIC - Urban Land-Charlton-Chatfield Complex
W - Water

* SEA WALL IS THE BOUNDARY

DIG SAFE NOTE:
UTILITIES ARE PLOTTED FROM FIELD LOCATION AND ANY RECORD INFORMATION AVAILABLE, AND SHOULD BE CONSIDERED APPROXIMATE. OTHER UTILITIES MAY EXIST WHICH ARE NOT EVIDENT OR FOR WHICH RECORD INFORMATION WAS NOT AVAILABLE. CONTRACTORS MUST CONTACT ALL UTILITY COMPANIES BEFORE EXCAVATING AND DRILLING. CALL "DIG SAFELY NEW YORK" AT 1(800)962-7962.

TOWN OF PHILIPSTOWN E & S CONTROL GENERAL NOTES

1. PRIOR TO COMMENCEMENT OF ANY CLEARING, GRADING, OR EXCAVATION IN CONNECTION WITH ANY PROPOSED CONSTRUCTION ACTIVITY, WHERE GREATER THAN 5,000 S.F. OF AREA WILL BE DISTURBED. THE OWNER OF RECORD SHALL FILE A NOTICE OF INTENT (NOI) WITH THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC) AND THE TOWN OF PHILIPSTOWN. WHEN ALL CONSTRUCTION HAS BEEN COMPLETED AND THE SITE HAS REACHED FINAL STABILIZATION, THE OWNER SHALL SUBMIT A NOTICE OF TERMINATION (NOT) TO THE NYSDEC AND THE TOWN OF PHILIPSTOWN.
2. A COPY OF ALL CONTRACTOR'S CERTIFICATIONS, REQUIRED PURSUANT TO THE NYSDEC "SPDES GENERAL PERMIT FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITY" (PERMIT NO. GP-0-10-001) FOR ALL LAND DISTURBANCES, DEVELOPMENT, OR REDEVELOPMENT LOCATED WIYTHIN THE TOWN OF PHILIPSTOWN, SHALL ALSO BE FILED WITH HE PHILIPSTOWN PLANNING DEPARTMENT.
3. ALL CONSTRUCTION ACTIVITIES INVOLVING THE REMOVAL OR DEPOSITION OF SOIL ARE TO BE PROVIDED WITH APPROPRIATE PROTECTIVE MEASURES TO MINIMIZE EROSION AND CONTAIN SEDIMENT DEPOSITION WITHIN THE SITE . MINIMUM SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED AS SHOWN ON THE PLANS APPROVED BY THE TOWN OF PHILIPSTOWN. ALL EROSION AND SEDIMENT CONTROL MEASURES EMPLOYED DURING CONSTRUCTION SHALL COMPLY WITH THE NYSDEC'S "NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL", LATEST EDITION.
4. PRIOR TO BEGINNING ANY CONSTRUCTION OR LAND DISTURBANCE ACTIVITIES THE OWNER SHALL PROVIDE IN WRITING A LIST OF ALL CONTRACTORS AND SUBCONTRACTORS RESPONSIBLE FOR INSTALLING, CONSTRUCTING, REPAIRING, INSPECTING , AND MAINTAINING THE EROSION AND SEDIMENT CONTROL PRACTICES AND POST-CONSTRUCTION STORMWATER MANAGEMENT PRACTICES INCLUDED IN THE SWPPP. THE LIST SHALL IDENTIFY THE SPECIFIC PORTION OF THE SWPPP THE CONTRACTOR OR SUBCONTRACTOR WILL BE RESPONSIBLE FOR. THE OWNER, CONTRACTOR, AND SUBCONTRACTOR (TOGETHER HEREAFTER THE "O.F.R.") WILL BE RESPONSIBLE FOR THE IMPLEMENTATION AND MAINTENANCE OF SEDIMENT AND EROSION CONTROL MEASURES ON THE SITE PRIOR TO AND DURING CONSTRUCTION. ALL EROSION CONTROL MEASURES ARE TO BE MAINTAINED IN PROPER FUNCTIONING ORDER AND ARE TO BE REPAIRED OR REPLACED AS NECESSARY, OR AS REQUIRED BY THE BUILDING INSPECTOR, TOWN WETLANDS INSPECTOR, OR TOWN ENGINEER.
5. SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE INSPECTED AND MAINTAINED ON A DAILY BASIS BY THE O.F.R. TO ENSURE THAT CHANNELS, TEMPORARY AND PERMANENT DITCHES AND PIPES ARE CLEAR OF DEBRIS, THAT EMBANKMENTS AND BERMS HAVE NOT BEEN BREACHED AND THAT ALL STRAW BALES AND SILT FENCES ARE INTACT. ANY FAILURE OF SEDIMENT AND EROSION CONTROL MEASURES SHALL BE IMMEDIATELY REPAIRED BY THE CONTRACTOR AND INSPECTED FOR APPROVAL BY THE O.F.R. AND/OR SITE ENGINEER.
6. THE O.F.R. SHALL INSPECT DOWNSTREAM CONDITIONS FOR EVIDENCE OF SEDIMENTATION ON A WEEKLY BASIS AND AFTER RAINSTORMS OF 0.5 INCHES OR GREATER.
7. ALL EROSION CONTROL MEASURES ARE TO BE INSPECTED AND MAINTAINED ON A REGULAR BASIS THROUGHOUT THE CONSTRUCTION PERIOD AND UNTIL ALL DISTURBED LAND HAS BEEN STABILIZED BY VEGETATION OR PAVING. RESPONSIBILITY FOR THE EROSION AND SEDIMENT CONTROL PLAN REST WITH THE LANDOWNER OF RECORD. THIS RESPONSIBILITY INCLUDES INSTALLATION AND MAINTENANCE OF ALL CONTROL MEASURES INFORMING ALL PARTIES INVOLVED IN SITE CONSTRUCTION OF THE PLAN'S OBJECTIVE AND REQUIREMENTS, NOTIFYING THE TOWN OF PHILIPSTOWN OF ANY TRANSFER OF ITS RESPONSIBILITY AND TRANSFERRING A COPY OF THE CERTIFIED EROSION AND SEDIMENT CONTROL PLAN SHOULD THE TITLE OF ALL OR PART OF THE LAND BE TRANSFERRED.
8. SITE INSPECTIONS SHALL BE CONDUCTED BY A QUALIFIED SOIL EROSION CONTROL PROFESSIONAL (RETAINED BY THE OWNER) AT LEAST EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM EVENT OF 0.5 INCHES OR GREATER.
9. WHEREVER FEASIBLE, NATURAL VEGETATION SHOULD BE RETAINED AND PROTECTED. ONLY THE SMALLEST PRACTICAL AREA OF LAND SHOULD BE EXPOSED AT ANY ONE TIME DURING DEVELOPMENT AND THE EXPOSURE SHALL BE KEPT TO THE SHORTEST PERIOD OF TIME. DISTURBANCE SHALL BE LIMITED TO THE AREAS REQUIRED TO PERFORM CONSTRUCTION.
10. PHASING SHALL BE REQUIRED ON ALL SITES DISTURBING GREATER THAN (5) ACRES, WITH THE SIZE OF EACH PHASE TO BE ESTABLISHED BY THE PLANNING BOARD OR TOWN ENGINEER.
11. STABILIZED CONSTRUCTION ENTRANCES, SILT FENCES, AND OTHER EROSION AND SEDIMENT CONTROLS SHALL BE INSTALLED AS SHOWN ON PLANS APPROVED BY THE TOWN OF PHILIPSTOWN PRIOR TO BEGINNING ANY CLEARING AND GRUBBING OR EARTHWORK.
12. THE EXPOSURE OF AN AREA BY THE SITE PREPARATION SHALL BE KEPT TO THE SHORTEST PRACTICAL PERIOD OF TIME. EROSION AND SEDIMENT CONTROL REQUIREMENTS SHALL INCLUDE SURFACE STABILIZATION MEASURES APPLIED AS SOON AS PRACTICAL IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN SEVEN (7) DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. FROM NOVEMBER 1 THROUGH MARCH 31 ANY DISTURBED AREA MUST BE STABILIZED USING A HEAVY MULCH LAYER, A ROLLED EROSION CONTROL PRODUCT, OR ANOTHER METHOD THAT DOES NOT REQUIRE SEED GERMINATION TO CONTROL EROSION. ANY GRADED AREA NOT SUBJECT TO FURTHER DISTURBANCE OR CONSTRUCTION TRAFFIC SHALL BE IMMEDIATELY BROUGHT TO FINAL GRADE AND RECEIVE PERMANENT VEGETATION COVER IN COMBINATION WITH A SUITABLE MULCH.
13. THE PERMANENT FINAL VEGETATION AND STRUCTURES SHALL BE INSTALLED AS SOON AS PRACTICAL AND AS MAY BE DIRECTED BY THE TOWN BUILDING INSPECTOR, TOWN WETLANDS INSPECTOR, OR TOWN ENGINEER.
14. ALL TOPSOIL TO BE STRIPPED FROM THE AREA BEING DEVELOPED SHALL BE STOCKPILED NOT LESS THAN TWO HUNDRED (200) FEET FROM ANY SURFACE WATER BODY AND SHALL BE IMMEDIATELY SEEDED WITH A RYE GRASS MIXTURE HAVING A QUICK GERMINATION TIME.
15. GRASS SEED MIX MAY BE APPLIED BY OTHER MECHANICAL OR HYDROSEEDING METHODS. ALL SEEDING AND TURF ESTABLISHMENT SHALL BE PERFORMED IN ACCORDANCE WITH THE CURRENT EDITION OF NYS DOT'S "STANDARD SPECIFICATIONS – CONSTRUCTION AND MATERIALS", SECTION 610-3.02, METHOD NO. 1. IF SEEDING IS PERFORMED BETWEEN MAY 15TH AND AUGUST 15TH, IRRIGATION MAY BE REQUIRED TO ENSURE PROPER LAWN ESTABLISHMENT, AND SHALL BE PERFORMED IF SO DIRECTED BY THE PROJECT ENGINEER OR THE TOWN'S REPRESENTATIVES.
16. ALL CUT SLOPES AND EMBANKMENT FILLS ARE TO BE IMMEDIATELY LAID BACK AND STABILIZED USING APPROPRIATE TECHNIQUES WHICH MEET THE DESIGN STANDARDS FOUND IN THE "NEW YORK STANDARDS AND SPECIFICATION FOR EROSION AND SEDIMENT CONTROL", LATEST EDITION. AT A MINIMUM, SLOPES AND EMBANKMENTS SHALL BE STABILIZED AS FOLLOWS:
    A. GRADE TO FINISHED SLOPES
    B. SCARIFIED
    C. TOPSOILED WITH NOT LESS THAN FOUR (4) INCHES OF SUITABLE TOPSOIL MATERIAL
    D. SEEDED WITH A GRASS TYPE AND RATE APPROPRIATE FOR THE SPECIFIC SOIL TYPE AND SLOPE AS IDENTIFIED IN THE SWPPP
    E. MULCHED WITH NOT LESS THAN ONE (1) INCH AND NOT MORE THATN THREE (3) INCHES OF STRAW (TWO TONS PER ACRE) AND ANCHORED IN A SUITABLE MANNER
    F. ALL GRADED SLOPES GREATER THAN A 2H:1V SHALL USE A ROLLED EROSION CONTROL PRODUCT OR OTHER MEANS NECESSARY TO PROVIDE PERMANENT STABILIZATION, AND SHALL BE APPROVED BY THE TOWN OF PHILIPSTOWN PRIOR TO INSTALLATION.
17. ON ALL EMBANKMENT FILL SLOPES, TOPSOIL SHALL BE STRIPPED AT LEAST FIVE (5) FEET WIDER THAN REQUIRED FOR THE EMBANKMENT TOE OF SLOPE. A PROTECTIVE BERM OF TOPSOIL SHALL BE LEFT IN THIS AREA, PARALLEL TO THE CONTOURS FOR THE PURPOSE OF RESTRICTING RUNOFF. THE TOPSOIL BERM SHALL BE SEEDDE AS REQUIRED FOR STOCKPILES.
18. PAVED ROADWAYS SHALL BE KEPT CLEAN AT ALL TIMES.
19. THE SITE SHALL AT ALL TIMES BE GRADED AND MAINTAINED SUCH THAT ALL STORMWATER RUNOFF IS DIVERTED TO SOIL EROSION AND SEDIMENT CONTROL FACILITIES.
20. ALL STORM DRAINAGE OUTLETS SHALL BE STABILIZED BEFORE THE DISCHARGE POINTS BECOME OPERATIONAL.
21. STORMWATER FROM DISTURBED AREAS MUST BE PASSED THROUGH SEDIMENT CONTROL DEVICES BEFORE DISCHARGE BEYOND DISTURBED AREAS OR DISCHARGED INTO OTHER DRAINAGE SYSTEMS.
22. DUST SHALL BE CONTROLLED BY SPRINKLING OR OTHER APPROVED METHODS AS NEEDED, OR AS DIRECTED BY THE O.F.R.
23. CUTS AND FILLS SHALL NOT ENDANGER ADJOINING PROPERTY, NOR DIVERT WATER ONTO THE PROPERTY OF OTHERS.
24. ALL FILLS SHALL BE COMPACTED TO PROVIDE STABILITY OF MATERIAL AND TO PREVENT SETTLEMENT.
25. EROSION CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL ALL SOIL DISTURBING ACTIVITIES HAVE BEEN COMPLETED AND ALL DISTURBED AREAS ARE SUITABLY STABILIZED. A DISTURBED AREA SHALL BE DEEMED TO BE "SUITABLY STABILIZED" UPON ESTABLISHMENT OF A UNIFORM PERENNIAL VEGETATIVE COVER (HAVING A DENSITY OF AT LEAST 80%) ON ALL UNPAVED AREAS NOT COVERED BY PERMANENT STRUCTURES. AREAS WHICH ARE PAVED OR COVERED BY PERMANENT STRUCTURES SHALL ALSO BE CONSIDERED TO BE "SUITABLY STABILIZED".
26. TEMPORARY ON-SITE SEDIMENTATION BASINS FOR THE IMMEDIATE CONTROL OF EROSION AND SEDIMENT TRANSPORT ARE TO BE PROVIDED WHEN AND WHERE REQUIRED OR ORDERED. THE LENGTH, WIDTH, AND DEPTH OF SUCH BASINS ARE TO BE DETERMINED IN THE FIELD IN ACCORDANCE WITH THE "NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL", LATEST EDITION.
27. AS WARRANTED BY FIELD CONDITIONS, SPECIAL ADDITIONAL SEDIMENTATION AND EROSION CONTROL MEASURES, AS SPECIFIED BY THE SITE ENGINEER, THE BUILDING INSPECTOR, THE TOWN WETLANDS INSPECTOR, AND/OR THE TOWN ENGINEER SHALL BE INSTALLED BY THE CONTRACTOR AT NO COST TO THE TOWN.
28. NO TOPSOIL SHALL BE REMOVED FROM THE SITE UNLESS OTHERWISE SPECIFICALLY STATED ON THE PLAN.
29. WOVEN EROSION CONTROL MESH (VEG-NET) AS MANUFACTURED BY CARTHAGE MILLS, VEG-NET SHALL BE PROVIDED ON ALL DISTURBED SLOPES STEEPER THAN 1 VERTICAL OVER 3 HORIZONTAL.

CERTIFICATION STATEMENT

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND AND AGREE TO COMPLY WITH THE TERMS AND CONDITIONS OF THE ECS PLAN FOR THE CONSTRUCTION SITE IDENTIFIED IN SUCH ESC PLAN AS A CONDITION OF AUTHORIZATION TO DISCHARGE STORMWATER. I ALSO UNDERSTAND THAT THE OPERATOR MUST COMPLY WITH THE TERMS AND CONDITIONS OF THE NEW YORK STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM ("SPDES") GENERAL PERMIT FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES AND THAT IT IS UNLAWFUL FOR ANY PERSON TO CAUSE OR CONTRIBUTE TO A VIOLATION OF WATER QUALITY STANDARDS"

BUILDER/CONTRACTOR (PRINT) _____ SIGNATURE _____

ADDRESS _____

TELEPHONE _____ FAX _____ E-MAIL _____

D.C. ENGINEERING, PC
JOHN A. KALIN, PE
NYS LIC. NO 079024
OFFICE: 3 MEMORIAL AVE. PAWLING, NY 12564
PHONE: (845) 855-2000
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EMAIL: JKALINDC@COMCAST.NET

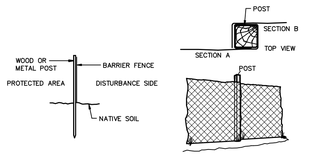
NO.	BY	REVISION	DATE

TITLE: E & SC PLAN

PROJ: WILDRICK RESIDENCE — 28-30 HUDSON RIVER LN. GARRISION, NY 10512

SCALE: NOTED | DATE: NOV. 30, 2021 | SHEET: ESC-1

DRN BY: JAK | APPV'D BY: | PROJ: 113021



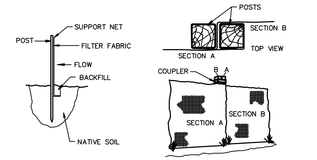
TOE-IN METHOD JOINING SECTIONS OF FENCING

INSTALLATION NOTES

1. LOCATE BOUNDARY LINE AS PER PLAN AND NO CLOSER THAN 4' FROM SILT FENCE.
2. POSITION THE POSTS ALONG THE LINE ON 10' CENTERS OR AS DICTATED BY SITE CONDITIONS. DRIVE POSTS INTO GROUND UNTIL FIRMLY PLACED.
3. UNROLL BARRIER FENCING AND ZIP TIE FENCING TO DISTURBANCE SIDE OF POSTS WHILE PULLING FENCING TAUNT.
4. JOIN SECTIONS AS SHOWN ABOVE.
5. PERIODICALLY INSPECT FENCING TO CONFIRM THAT IT IS UPRIGHT AND IN SOUND CONDITION. IMMEDIATELY REPAIR ANY DAMAGED LOCATIONS.

CONSTRUCTION FENCE DETAIL

NTS



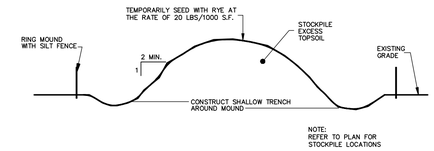
TOE-IN METHOD JOINING SECTIONS OF FENCING

INSTALLATION NOTES

1. EXCAVATE A 4 INCH TRENCH ALONG THE LOWER PERIMETER OF THE SITE.
2. UNROLL A SECTION AT A TIME AND POSITION THE POSTS AGAINST THE BACK (DOWNSTREAM) WALL OF THE TRENCH (NET SIDE AWAY FROM DIRECTION OF FLOW).
3. DRIVE THE POST INTO THE GROUND UNTIL THE NETTING IS APPROXIMATELY 2 INCHES FROM THE TRENCH BOTTOM.
4. LAY THE TOE-IN FLAP OF FABRIC ONTO THE UNDISTURBED BOTTOM OF THE TRENCH, BACKFILL THE TRENCH AND TAMP THE SOIL. STEEPER SLOPES REQUIRE AN INTERCEPT TRENCH.
5. JOIN SECTIONS AS SHOWN ABOVE.

SILT FENCE DETAIL

NTS



TOPSOIL STOCKPILE DETAIL

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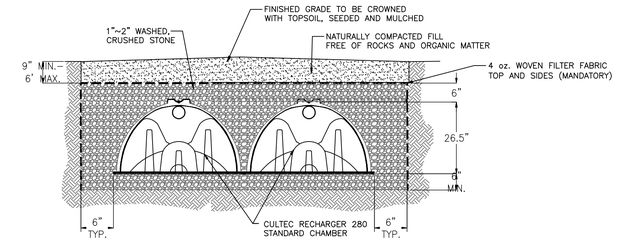
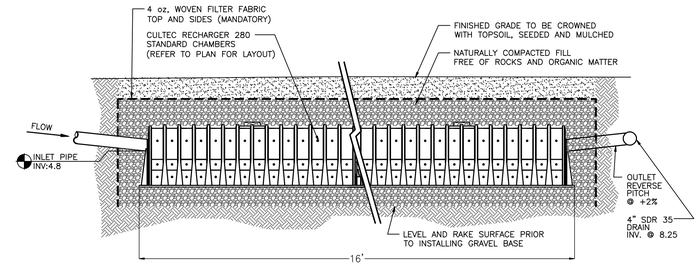


STORM WATER RETENTION CROSS SECTION

NTS



STORM WATER RETENTION DETAIL

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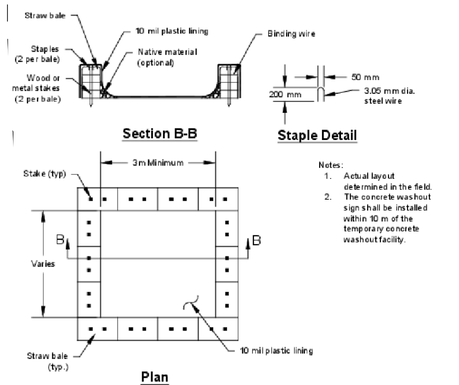
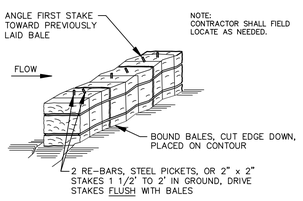


Notes:
1. Actual layout determined in the field.
2. The concrete washout sign shall be installed within 10 m of the temporary concrete washout facility.

Maintenance
1. All concrete washout facilities shall be inspected daily. Damaged or leaking facilities shall be deactivated and repaired or replaced immediately. Excess rainwater that has accumulated over hardened concrete should be pumped to a stabilized area, such as a grass filter strip.
2. Accumulated hardened material shall be removed when 75% of the storage capacity of the structure is filled. Any excess wash water shall be pumped into a containment vessel and properly disposed of off site.
3. Dispose of the hardened material off-site in a construction/demolition landfill. On-site disposal may be allowed if this has been approved and accepted as part of the projects SWPPP. In that case, the material should be recycled as specified, or buried and covered with a minimum of 2 feet of clean compacted earthfill that is permanently stabilized to prevent erosion.
4. The plastic liner shall be replaced with each cleaning of the washout facility.
5. Inspect the project site frequently to ensure that no concrete discharges are taking place in non-designated areas.

CONCRETE WASHOUT DETAIL

NTS

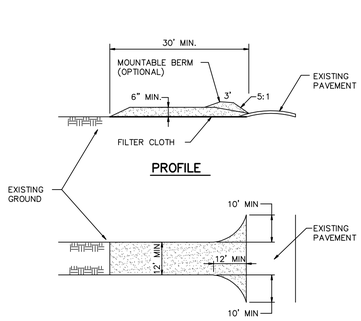


CONSTRUCTION SPECIFICATIONS

1. DRAINAGE AREA, NO MORE THAN 1/4 ACRE PER 100 FEET OF STRAW BALE DIKE FOR SLOPES LESS THAN 25%.
2. BALES SHALL BE PLACED AT THE TOE OF A SLOPE OR ON THE CONTOUR AND IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
3. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF (4) INCHES, AND PLACED SO THE BINDINGS ARE HORIZONTAL.
4. BALES SHALL BE SECURELY ANCHORED IN PLACE BY EITHER TWO OR RE-BARS STAKES 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 FLUSH WITH THE BALE.
5. INSPECTION SHALL BE FREQUENT AND REPAIR/REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
6. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE FLOW OR DRAINAGE.

HAY BERM DETAIL

NTS



INSTALLATION NOTES

1. STONE SIZE – USE 2" STONE.
2. LENGTH – NOT LESS THAN 30 FEET.
3. THICKNESS – NOT LESS THAN SIX (6) INCHES.
4. WIDTH – TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
5. FILTER CLOTH – WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACTED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. 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 DETAILS

NTS

DIG SAFE NOTE:

UTILITIES ARE PLOTTED FROM FIELD LOCATION AND ANY RECORD INFORMATION AVAILABLE, AND SHOULD BE CONSIDERED APPROXIMATE. OTHER UTILITIES MAY EXIST WHICH ARE NOT EVIDENT OR FOR WHICH RECORD INFORMATION WAS NOT AVAILABLE. CONTRACTORS MUST CONTACT ALL UTILITY COMPANIES BEFORE EXCAVATING AND DRILLING. CALL "DIG SAFELY NEW YORK" AT 1(800)962-7962.

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NO.	BY	REVISION	DATE

TITLE: E & SC DETAILS
PROJ: WILDRICK RESIDENCE 28-30 HUDSON RIVER LN. GARRISION, NY 10512
SCALE: NOTED DATE: NOV. 30, 2021 SHEET: ESC-2
DRN BY: JAK APP'D BY: PROJ: 113021

Phase 1- Seawall & Demolition

1. Set up temporary construction fence along north and south property lines.
2. Set up temporary cofferdam for seawall replacement work.
3. Remove & relocate plants & trees on site.
4. Demolish all existing structures on 28 HRL.
5. Demolish all existing structures on 30 HRL.

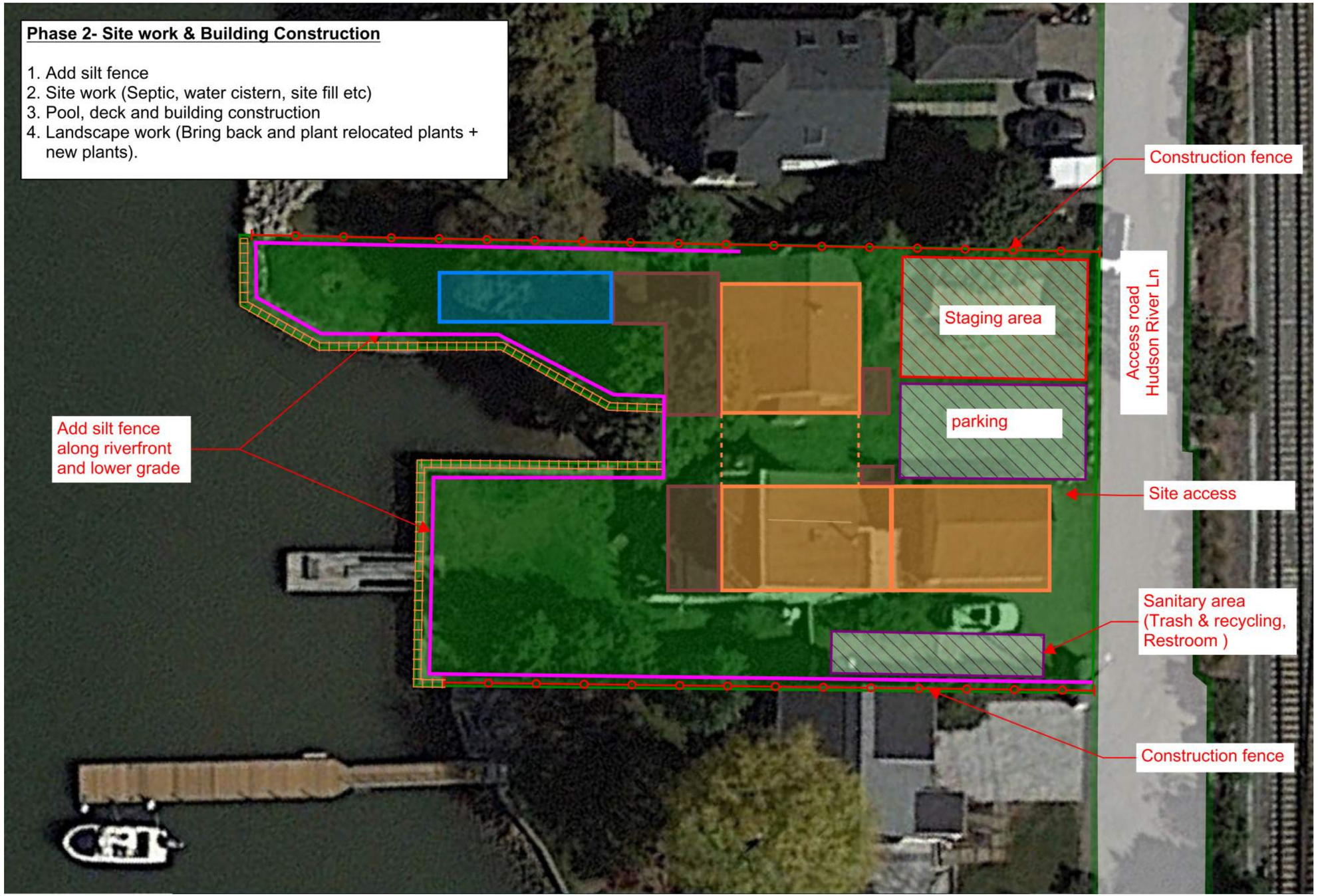
River ARCHITECTS

WILDRICK RESIDENCE

CONSTRUCTION SEQUENCE DIAGRAM_PHASE 1

NOT TO SCALE

12/2/2021



WILDRICK RESIDENCE

CONSTRUCTION SEQUENCE DIAGRAM_PHASE 2

River ARCHITECTS

NOT TO SCALE

12/2/2021

0953 0015 (9)

ROAD MAINTENANCE AGREEMENT

1. The undersigned parties, being all of those who own property affected by the easement or private street described below, agree to the following:

a. The expenses of maintenance, repair and/or restoration of the easement or private street covered by this Agreement shall be apportioned equally.

b. The right-of-way shall be maintained in good, passable condition under all traffic and weather conditions.

c. That this agreement shall run with the land and shall be appurtenant thereto and is not a personal right afforded each party, and shall bind all heirs, distributees and assigns.

d. This Agreement is made by and between all parties who own property affected by the easement or private street.

2. The easement or private street covered by this agreement is described as follows:

(describe easement)

See Attached

STATE OF NEW YORK)
COUNTY OF PUTNAM) ss.:

On this 18TH day of April 1987, before me personally came

to me known and known to me to be the individuals** described in and who executed the foregoing instrument, and they duly acknowledged to me that they executed the same.

Andra Sramek
Notary Public

ANDRA SRAMEK 4873905
Notary Public, State of New York
Qualified in Dutchess County
Commission Expires 2/6/27

07275

** whose names are fully detailed on exhibit "A" attached

0953 0016

Description of Easement

The private roadway is a strip of land along the easterly borders of the affected properties for the purpose of ingress and egress, said strip being of a uniform width of twenty (20) feet and extending over and across the affected properties beginning at the end of Manitou Station Road and extending southward approximately nine hundred seventy five (975) feet ending at the last affected property (Lang property).