LEGEND

- EXISTING PROPERTY LINE
- EXISTING ADJOINER LINE
- EXISTING TREE
- 30 — EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- 130 — PROPOSED MAJOR CONTOUR
- 128 — PROPOSED MINOR CONTOUR
- PROPOSED SILT FENCE
- X — EXISTING FENCE
- W — EXISTING WATER MAIN
- WS — WS — EXISTING WATER SERVICE LINE
- WS — WS — PROPOSED WATER SERVICE LINE
- SEWER MANHOLE
- UTILITY POLE
- HYDRANT
- WATER VALVE
- ROUND DROP INLET
- ELECTRIC METER
- UTILITY POLE WITH LIGHT
- OH — OH — EXISTING OVERHEAD WIRES
- DROP INLET
- GAS METER
- PROPOSED CATCH BASIN WITH INLET PROTECTION
- PROPOSED RETAINING WALL
- EXISTING CATCH BASIN
- PROPOSED SILT FENCE
- IMPERVIOUS SURFACE
- PROPOSED RIP RAP
- ST — PROPOSED STORMWATER LINE
- S — PROPOSED SEWER LINE
- W — PROPOSED WATER LINE

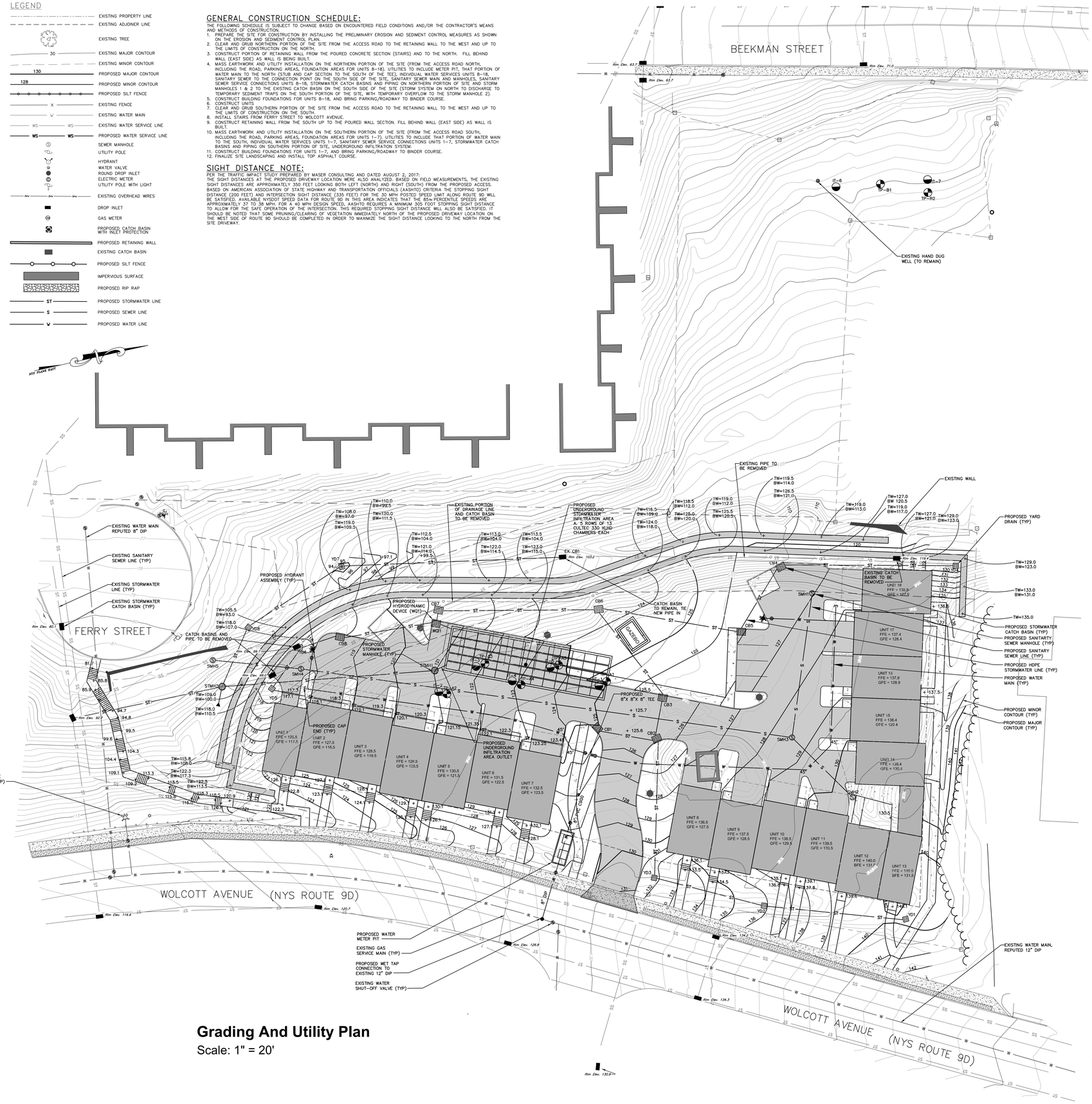
GENERAL CONSTRUCTION SCHEDULE:

THE FOLLOWING SCHEDULE IS SUBJECT TO CHANGE BASED ON ENCOUNTERED FIELD CONDITIONS AND/OR THE CONTRACTOR'S MEANS AND METHODS OF CONSTRUCTION.

1. PREPARE THE SITE FOR CONSTRUCTION BY INSTALLING THE PRELIMINARY EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN ON THE EROSION AND SEDIMENT CONTROL PLAN.
2. CLEAR AND GRUB NORTHERN PORTION OF THE SITE FROM THE ACCESS ROAD TO THE RETAINING WALL TO THE WEST AND UP TO THE LIMITS OF CONSTRUCTION ON THE NORTH.
3. CONSTRUCT PORTION OF RETAINING WALL FROM THE POURED CONCRETE SECTION (STAIRS) AND TO THE NORTH. FILL BEHIND WALL (EAST SIDE) AS WALL IS BEING BUILT.
4. MASS EARTHWORK AND UTILITY INSTALLATION ON THE NORTHERN PORTION OF THE SITE (FROM THE ACCESS ROAD NORTH, INCLUDING THE ROAD, PARKING AREAS, FOUNDATION AREAS FOR UNITS 8–18). UTILITIES TO INCLUDE METER PIT, THAT PORTION OF WATER MAIN TO THE NORTH (STUB AND CAP SECTION TO THE SOUTH OF THE TEE), INDIVIDUAL WATER SERVICES UNITS 8–18, SANITARY SEWER TO THE CONNECTION POINT ON THE SOUTH SIDE OF THE SITE, SANITARY SEWER MAIN AND MANHOLES, SANITARY SEWER SERVICE CONNECTIONS UNITS 8–18, STORMWATER CATCH BASINS AND PIPING ON NORTHERN PORTION OF SITE AND STORM MANHOLES 1 & 2 TO THE EXISTING CATCH BASIN ON THE SOUTH SIDE OF THE SITE (STORM SYSTEM ON NORTH TO DISCHARGE TO TEMPORARY SEDIMENT TRAPS ON THE SOUTH PORTION OF THE SITE, WITH TEMPORARY OVERFLOW TO THE STORM MANHOLE 2).
5. CONSTRUCT BUILDING FOUNDATIONS FOR UNITS 8–18, AND BRING PARKING/ROADWAY TO BINDER COURSE.
6. CONSTRUCT UNITS
7. CLEAR AND GRUB SOUTHERN PORTION OF THE SITE FROM THE ACCESS ROAD TO THE RETAINING WALL TO THE WEST AND UP TO THE LIMITS OF CONSTRUCTION ON THE SOUTH.
8. INSTALL STAIRS FROM FERRY STREET TO WOLCOTT AVENUE.
9. CONSTRUCT RETAINING WALL FROM THE SOUTH UP TO THE POURED WALL SECTION. FILL BEHIND WALL (EAST SIDE) AS WALL IS BUILT.
10. MASS EARTHWORK AND UTILITY INSTALLATION ON THE SOUTHERN PORTION OF THE SITE (FROM THE ACCESS ROAD SOUTH, INCLUDING THE ROAD, PARKING AREAS, FOUNDATION AREAS FOR UNITS 1–7). UTILITIES TO INCLUDE THAT PORTION OF WATER MAIN TO THE SOUTH, INDIVIDUAL WATER SERVICES UNITS 1–7, SANITARY SEWER SERVICE CONNECTIONS UNITS 1–7, STORMWATER CATCH BASINS AND PIPING ON SOUTHERN PORTION OF SITE, UNDERGROUND INFILTRATION SYSTEM.
11. CONSTRUCT BUILDING FOUNDATIONS FOR UNITS 1–7, AND BRING PARKING/ROADWAY TO BINDER COURSE.
12. FINALIZE SITE LANDSCAPING AND INSTALL TOP ASPHALT COURSE.

SIGHT DISTANCE NOTE:

PER THE TRAFFIC IMPACT STUDY PREPARED BY MASER CONSULTING AND DATED AUGUST 2, 2017:
THE SIGHT DISTANCES AT THE PROPOSED DRIVEWAY LOCATION WERE ALSO ANALYZED. BASED ON FIELD MEASUREMENTS, THE EXISTING SIGHT DISTANCES ARE APPROXIMATELY 350 FEET LOOKING BOTH LEFT (NORTH) AND RIGHT (SOUTH) FROM THE PROPOSED ACCESS. BASED ON AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) CRITERIA THE STOPPING SIGHT DISTANCE (200 FEET) AND INTERSECTION SIGHT DISTANCE (335 FEET) FOR THE 30 MPH POSTED SPEED LIMIT ALONG ROUTE 9D WILL BE SATISFIED. AVAILABLE NYSDOT SPEED DATA FOR ROUTE 9D IN THIS AREA INDICATES THAT THE 85TH PERCENTILE SPEEDS ARE APPROXIMATELY 37 TO 38 MPH. FOR A 40 MPH DESIGN SPEED, AASHTO REQUIRES A MINIMUM 305 FOOT STOPPING SIGHT DISTANCE TO ALLOW FOR THE SAFE OPERATION OF THE INTERSECTION. THIS REQUIRED STOPPING SIGHT DISTANCE WILL ALSO BE SATISFIED. IT SHOULD BE NOTED THAT SOME PRUNING/CLEARING OF VEGETATION IMMEDIATELY NORTH OF THE PROPOSED DRIVEWAY LOCATION ON THE WEST SIDE OF ROUTE 9D SHOULD BE COMPLETED IN ORDER TO MAXIMIZE THE SIGHT DISTANCE LOOKING TO THE NORTH FROM THE SITE DRIVEWAY.



Grading And Utility Plan

Scale: 1" = 20'

INSPECTION SCHEDULE & LONG TERM MAINTENANCE OF STORMWATER STRUCTURES

CATCH BASINS AND PIPING:

ALL CATCH BASINS SHALL BE INSPECTED AFTER EACH STORM EVENT FOR SEDIMENT ACCUMULATION, AND DEBRIS, AND REMOVE AS NECESSARY. WHEN SEDIMENT ACCUMULATION WITHIN THE CATCH BASIN SUMP REACHES 1/2 OF THE SUMP DEPTH, IT SHALL BE REMOVED. ASSOCIATED PIPING SHALL BE INSPECTED ANNUALLY AND ACCUMULATED SEDIMENT SHALL BE REMOVED AS NEEDED.

HYDRODYNAMIC DEVICE:

THE VORTEX UNITS SHALL BE INSPECTED QUARTERLY DURING THE FIRST YEAR OF OPERATION. THE MANUFACTURER RECOMMENDS THAT THE CDS UNITS BE INSPECTED BI-ANNUALLY (ONCE IN THE SPRING AND ONCE IN THE FALL). THE STRUCTURE SHALL BE VISUALLY INSPECTED FOR BLOCKAGES OR OBSTRUCTIONS IN THE INLET OR SEPARATION SCREEN. THE INSPECTION SHOULD ALSO QUANTIFY ACCUMULATION OF HYDROCARBONS, SEDIMENT AND TRASH WITHIN THE SYSTEM. INSPECTIONS AND MAINTENANCE SHALL BE PERFORMED BY QUALIFIED PERSONNEL WITH ADEQUATE TRAINING IN THESE TYPES OF UNITS. THE UNITS SHALL BE CLEANED BY VACUUM TRUCK ONCE A YEAR (EXCEPT FOR THE FIRST YEAR WHERE MORE FREQUENT CLEANINGS MAY BE REQUIRED).

UNDERGROUND DETENTION/INFILTRATION:

THE UNDERGROUND DETENTION/INFILTRATION AREA SHALL BE INSPECTED MONTHLY FOR SEDIMENT AND DEBRIS ACCUMULATION. INFLOW PIPES, OUTLET STRUCTURES AND SPILLWAYS SHOULD ALSO BE INSPECTED FOR SEDIMENT AND DEBRIS MONTHLY. ANY ACCUMULATED SEDIMENT OR DEBRIS SHOULD BE REMOVED AS NECESSARY BY MEANS OF A VACUUM TRUCK. AFTER STORM EVENTS, THE UNDERGROUND DETENTION/INFILTRATION AREA'S DE-WATERING DURATION SHOULD ALSO BE MONITORED. IF IT TAKES LONGER THAN 24 HOURS TO DE-WATER, THE BASIN SHALL BE JET CLEANED TO PROVIDE FULL DE-WATERING IN 24 HOURS. SEDIMENT SHALL BE CLEANED OUT OF THE INFILTRATION BASIN ANNUALLY.

EXISTING UNDERGROUND UTILITY NOTES:

1. CONTRACTOR SHALL DIG TEST PITS TO VERIFY LOCATION, SIZE AND PIPE MATERIAL OF EXISTING UNDERGROUND UTILITIES. IF ANY EXISTING UTILITIES ARE NOT IN THE LOCATION WHERE THEY ARE SHOWN ON THE PLAN, IT SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION IMMEDIATELY.

GENERAL CONSTRUCTION NOTES:

1. ALL OTHER UTILITIES (TELEPHONE, ELECTRIC, GAS, CABLE, ETC.) SHALL BE INCORPORATED PRIOR TO CONSTRUCTION. ALL SUCH UTILITY DESIGNS SHALL BE DEVELOPED IN COOPERATION WITH THE RESPECTIVE UTILITY COMPANIES.
1. THE CONTRACTOR SHALL PERFORM A UTILITIES CALL-OUT PRIOR TO CONSTRUCTION TO VERIFY ALL UNDERGROUND UTILITY LOCATIONS (CONTACTING UFPO @ 1-800-962-7962.
2. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS AND INVERTS OF ALL CATCH BASINS & STORM SEWER LINES, SANITARY MANHOLES & SEWER LINES, WATERLINES AND OTHER UNDERGROUND UTILITY LINES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOT ASSUME THAT ALL LOCATIONS AS SHOWN ON THE PLAN ARE CORRECT. INVESTIGATIVE TEST PITS MAY BE REQUIRED TO VERIFY LOCATIONS.
3. PIPE CONNECTIONS TO ALL CATCH BASINS SHALL BE MADE WATERTIGHT, WITH PARTICULAR ATTENTION BEING PAID TO CONNECTIONS LOCATED WITHIN 10 FEET OF SEWER MAINS (AND SERVICE LATERALS).

POST CONSTRUCTION NOTES:

1. UPON COMPLETION OF CONSTRUCTION OF THE STORMWATER FACILITIES, AS-BUILT DRAWINGS OF ALL STORMWATER PRACTICES AND AN OPERATION AND MAINTENANCE PLAN MANUAL SHALL BE PROVIDED TO THE CITY OF BEACON.

STORM SEWER STRUCTURE TABLE	
STRUCTURE	STRUCTURE DETAILS
CB1	RIM = 125.10 SUMP = 121.10 CB1–CB2 INV OUT = 122.10
CB3	RIM = 125.70 SUMP = 120.60 CB2–CB3 INV IN = 121.30 CB3–CB5 INV OUT = 121.20
CB4	RIM = 126.00 SUMP = 121.80 YD4–CB4 INV IN = 123.10 CB4–CB5 INV OUT = 123.00
CB5	RIM = 125.90 SUMP = 120.10 CB4–CB5 INV IN = 122.50 CB5–CB6 INV OUT = 122.40
CB6	RIM = 123.50 SUMP = 118.00 CB5–CB6 INV IN = 120.60 CB3–CB5 INV IN = 120.60 CB6–CB7 INV OUT = 120.50
CB7	RIM = 121.08 SUMP = 117.00 CB6–CB7 INV IN = 118.10 CB7–WQ1 INV OUT = 118.00
CB8	RIM = 118.40 SUMP = 112.50 YD6–CB8 INV IN = 113.60 CB8–WQ1 INV OUT = 113.50

STORM SEWER STRUCTURE TABLE	
STRUCTURE	STRUCTURE DETAILS
EX CB1	RIM = 103.16 SUMP = 98.92 EX CB1–YD7 INV OUT = 98.90
EX CB3	RIM = 81.86 SUMP = 76.94 STMH3–EX CB3 INV IN = 67.80 EX CB3 OUT INV OUT = 67.09
STMH1	RIM = 121.00 SUMP = 110.60 INF A OUT–STMH1 INV IN = 111.90 STMH1–STMH2 INV OUT = 111.60
STMH2	RIM = 100.07 SUMP = 88.60 YD8–STMH2 INV IN = 89.60 STMH1–STMH2 INV IN = 89.70 STMH2–EX CB2 INV OUT = 89.60
STMH3	RIM = 84.89 SUMP = 77.50 INF B(1)–STMH3 INV IN = 79.50 INF B(2)–STMH3 INV IN = 80.30 STMH3–EX CB3 INV OUT = 73.30
WQ1	RIM = 120.50 SUMP = 111.80 CB7–WQ1 INV IN = 117.60 CB8–WQ1 INV IN = 112.90 WQ1–CULTEC INV OUT = 112.80
YD1	RIM = 139.00 SUMP = 133.80 YD1–YD2 INV OUT = 136.00

STORM SEWER STRUCTURE TABLE	
STRUCTURE	STRUCTURE DETAILS
YD2	RIM = 135.90 SUMP = 131.90 YD1–YD2 INV IN = 133.00 YD2–YD3 INV OUT = 132.90
YD3	RIM = 131.76 SUMP = 127.70 YD2–YD3 INV IN = 128.80 YD3–CB2 INV OUT = 128.70
YD4	RIM = 129.00 SUMP = 125.10 YD4–CB4 INV OUT = 126.10
YD5	RIM = 117.20 SUMP = 113.30 YD5–YD6 INV OUT = 114.30
YD7	RIM = 94.50 SUMP = 90.50 EX CB1–YD7 INV IN = 91.60 YD7–YD8 INV OUT = 91.50
YD8	RIM = 92.20 SUMP = 85.34 YD7–YD8 INV IN = 89.80 YD8–STMH2 INV OUT = 89.80

STORM SEWER PIPE TABLE			
PIPE NAME	LENGTH	SIZE AND MATERIAL	SLOPE
CB1–CB2	35 LF	15" ø CORR HDPE	1.15%
CB2–CB3	24 LF	15" ø CORR HDPE	1.26%
CB3–CB5	63 LF	15" ø CORR HDPE	0.95%
CB4–CB5	44 LF	15" ø CORR HDPE	1.14%
CB5–CB6	84 LF	15" ø CORR HDPE	2.15%
CB6–CB7	93 LF	15" ø CORR HDPE	2.59%
CB7–WQ1	8 LF	15" ø CORR HDPE	5.07%
CB8–WQ1	56 LF	15" ø CORR HDPE	1.07%
ES1–ES2	25 LF	15" ø CORR HDPE	1.22%

STORM SEWER PIPE TABLE			
PIPE NAME	LENGTH	SIZE AND MATERIAL	SLOPE
EX CB1–YD7	128 LF	15" ø CORR HDPE	5.70%
INF A OUT–STMH1	8 LF	12" ø CORR HDPE	1.32%
INF B(1)–STMH3	32 LF	4" ø CORR HDPE	4.69%
INF B(2)–STMH3	32 LF	6" ø CORR HDPE	4.69%
STMH1–STMH2	124 LF	15" ø CORR HDPE	17.72%
STMH2–EX CB2	87 LF	15" ø CORR HDPE	1.04%
STMH3–EX CB3	37 LF	15" ø CORR HDPE	14.91%
WQ1–CULTEC	11 LF	15" ø CORR HDPE	16.52%
YD1–YD2	82 LF	15" ø CORR HDPE	3.64%

STORM SEWER PIPE TABLE			
PIPE NAME	LENGTH	SIZE AND MATERIAL	SLOPE
YD2–YD3	66 LF	15" ø CORR HDPE	6.24%
YD3–CB2	81 LF	15" ø CORR HDPE	8.68%
YD4–CB4	101 LF	15" ø CORR HDPE	2.96%
YD5–YD6	29 LF	15" ø CORR HDPE	1.04%
YD6–CB8	24 LF	15" ø CORR HDPE	1.24%
YD7–YD8	64 LF	15" ø CORR HDPE	2.64%
YD8–STMH2	38 LF	15" ø CORR HDPE	0.53%

SANITARY SEWER STRUCTURE TABLE	
STRUCTURE	STRUCTURE DETAILS
EX SMH	RIM = 89.97 SMH5 TO EX SMH INV IN = 83.75
SMH1	RIM = 126.90 SMH1–SMH2 INV OUT = 120.80
SMH2	RIM = 130.17 SMH2–SMH3 INV OUT = 124.00
SMH3	RIM = 128.54 SMH1–SMH2 INV IN = 120.30 SMH2–SMH3 INV IN = 120.30 SMH3–SMH4 INV OUT = 120.20
SMH4	RIM = 117.59 SMH3–SMH4 INV IN = 112.80 SMH4–SMH5 INV OUT = 95.27
SMH5	RIM = 92.53 SMH4–SMH5 INV IN = 85.00 SMH5 TO EX SMH INV OUT = 84.90

SANITARY SEWER PIPE TABLE			
PIPE NAME	LENGTH	SIZE AND MATERIAL	SLOPE
SMH1–SMH2	84 LF	8" SDR-35 PVC	0.59%
SMH2–SMH3	49 LF	8" SDR-35 PVC	7.51%
SMH3–SMH4	287 LF	8" SDR-35 PVC	2.58%
SMH4–SMH5	51 LF	8" SDR-26 PVC	20.00%
SMH5 TO EX SMH	81 LF	8" SDR-35 PVC	1.42%

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE

_____ DAY OF _____, 20_____ SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____ 20_____ BY

_____ CHAIRMAN

_____ SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.

STATE OF NEW YORK · JON D. BODENDORF · 076245 · LICENSED PROFESSIONAL ENGINEER

SEAL

JON D. BODENDORF, P.E.
NYS LICENSE NO. 076245
DANIEL G. KOEHLER, P.E.
NYS LICENSE NO. 082716

REVISIONS:			
NO.	DATE	DESCRIPTION	BY
1	8/29/2017	PER PLANNING BOARD COMMENTS	DGK
2	9/26/2017	PER PLANNING BOARD COMMENTS	DGK
3	10/31/2017	REVISED RETAINING WALL	DGK
4	11/28/2017	REVISED STAIRWAY TO FERRY STREET	DGK
5	12/22/2017	REMOVED INTERNAL PATH AND POCKET PARK	DGK

Grading and Utility Plan

Sheet 7 of 11

Owner:
River Ridge Views, LLC
445 Main Street
Beacon, NY 12508

Architect:
Aryeh Siegel, Architect
84 Mason Circle
Beacon, New York 12508

Site / Civil Engineer:
Hudson Land Design
174 Main Street
Beacon, New York 12508

Surveyor:
TEC Land Surveying, P.C.
15C Tioronda Avenue
Beacon, New York 12508

River Ridge Townhouses

Beacon, New York
Scale: As Noted
July 25, 2017