

	EXISTING ROOF LEADER LOCATION
	SEWER MANHOLE
	UNKNOWN MANHOLE
	UTILITY WIRE AND/OR UTILITY POLE
	ELECTRIC BOX
	HYDRANT
	WATER VALVE
	ROUND DROP INLET
	ELECTRIC METER
	UTILITY POLE WITH LIGHT
	COMMUNICATION BOX
	OVERHEAD WIRES
	FENCE
	DROP INLET
	GAS METER
	LAMP
	UNKNOWN VALVE
	EXISTING WATER EDGE
	EXISTING PROPERTY LINE
	100-YEAR FLOOD LINE
	100-YEAR FLOODWAY LINE
	PROPOSED EASEMENT LINE
	PROPOSED CATCH BASIN WITH INLET PROTECTION
	PROPOSED CLEANOUT
	PROPOSED HYDRANT
	PROPOSED WATER VALVE
	PROPOSED SANITARY MANHOLE
	PROPOSED RETAINING WALL
	PROPOSED CULVERT
	PROPOSED UNDERDRAIN
	PROPOSED ROOF LEADER PIPE
	PROPOSED MINOR CONTOUR
	PROPOSED MAJOR CONTOUR
	PROPOSED SPOT ELEVATION
	EXISTING CATCH BASIN
	EXISTING UTILITY POLE
	PROPOSED CLEANOUT
	PROPOSED SEWER SERVICE LINE
	PROPOSED WATER SUPPLY LINE
	PROPOSED FENCE
	IMPERVIOUS SURFACE
	PROPOSED RIP RAP
	UTILITY CROSSING LOCATION
	PROPOSED ROOF LEADER LOCATION
	PROPOSED WATER SERVICE LINE
	PROPOSED WATER SHUT-OFF VALVE

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 SUMPS 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.

HYDRO-PUMP DEVICES:

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 FIRST YEAR AND THE SECOND YEAR). THE FULL STRUCTURE SHALL BE VISUALLY INSPECTED FOR BLOCKAGES OR OBSTRUCTIONS IN THE INLET OR SEPARATION CHAMBER. 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 FOR 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).

INFILTRATION BASIN:

THE INFILTRATION BASIN 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. PLANTINGS SHALL BE INSPECTED MONTHLY FOR HEIGHT, FERTILIZER, QUANTITY AND HEALTH. PLANTINGS SHOULD BE REPLANTED AS NECESSARY. THE BASIN SHOULD BE MAINTAINED FREE OF WEEDS AND OTHER UNDESIRABLE PLANTS. THE BASIN FLOOR SHALL BE MOWED AS REQUIRED; HOWEVER, THE GRASS HEIGHT SHALL NOT EXCEED 18". SEDIMENT SHALL BE CLEANED OUT OF THE INFILTRATION BASIN ANNUALLY.

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.

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 CITY OF CHICAGO.

2. THE CONTRACTOR SHALL PERFORM A UTILITIES CALL-OUT PRIOR TO CONSTRUCTION TO VERIFY ALL UNDERGROUND UTILITY LOCATIONS BY CONTACTING OFFICE 1-800-962-7962.

3. 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.

4. 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 SEWER LATERALS).

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.

1. THE SECTIONS OF SEWER MAIN TO REMAIN IN-PLACE ON SITE SHALL BE INSPECTED AND CLEANED TO VERIFY THE CONDITION OF THE PIPE. THIS WORK SHALL BE COORDINATED WITH THE CITY ENGINEER AND SEWER DEPARTMENT. THE PIPES TO REMAIN IN-PLACE SHALL THEN BE SLIP-LINED BETWEEN EXISTING MANHOLE 11 TO PROPOSED SEWER MANHOLE 12, AND BETWEEN PROPOSED SEWER MANHOLE 14 AND EXISTING SEWER MANHOLE 15.
2. UPON COMPLETION OF CONSTRUCTION OF THE WATER AND SEWER FACILITIES, AS-BUILT DRAWINGS OF FINAL WATER AND SEWER MAIN LOCATIONS SHALL BE PROVIDED TO THE CITY OF BEACON.
3. THE COMPLETED WATER MAIN EXTENSION AND SEWER MAIN RE-LOCATION SHALL BE CERTIFIED BY THE LICENSED PROFESSIONAL OBSERVING CONSTRUCTION TO THE CITY OF BEACON.
4. THE WATER AND SEWER MAINS SHALL BE DEDICATED TO THE CITY OF BEACON UPON ACCEPTANCE OF THE CERTIFICATION.

1. THE SITE OWNER WILL UTILIZE A LOADER TO MOVE SNOW TO THE AREAS DESIGNATED FOR SNOW STORAGE.
2. SNOW SHALL BE REMOVED WITHIN 8 HOURS AFTER A SNOW EVENT.

1. SITE CLEARING SHALL OCCUR BETWEEN OCTOBER 1ST THROUGH MARCH 31ST IN ACCORDANCE WITH NYSDEC REGULATIONS.

1. ROCK REMOVAL (IF NECESSARY) SHALL BE ACCOMPLISHED BY MECHANICAL METHODS AS MUCH AS POSSIBLE AND SHALL ONLY BE PERMITTED BETWEEN 8:00AM AND 5:00 PM ON ANY DAY WHICH ROCK REMOVAL IS PERMITTED.
2. ACCEPTABLE ROCK REMOVAL METHODS ARE RIPPING, HYDRAULIC HAMMER OR DRILLING HOLES WITH USE OF EXPANSIVE TOOLS AND/OR WEDGES.
3. IF MECHANICAL METHODS BECOME INEFFECTIVE DUE TO HARD ROCK, AND IT IS DETERMINED THAT BLASTING IS REQUIRED, IT SHALL BE BROUGHT TO THE ATTENTION OF THE CITY OF BEACON BUILDING DEPARTMENT, NO BLASTING SHALL COMMENCE UNTIL A BLASTING PROTOCOL IS SUBMITTED TO THE CITY OF BEACON BUILDING DEPARTMENT FOR REVIEW AND APPROVAL.
4. BLASTING PROTOCOL SHALL BE IN ACCORDANCE WITH §111 OF THE CITY OF BEACON CODE.

5. HYDRANT FLOW TESTS IN THE WENTON OF THE PROJECT REQUIRED STATIC PRESSURES RANGING FROM 88 PSI TO 100 PSI. THEREFORE PRESSURE REDUCING VALVES WILL BE REQUIRED AT ALL PROPOSED DOMESTIC WATER CONNECTIONS TO BUILDINGS.
6. PRESSURE REDUCING VALVES (PRV) SHALL BE FURNISHED BY THE SELLER OR WATTS AND COORDINATED WITH THE MECHANICAL ENGINEERING CONSULTANT AS TO TYPE AND SIZE. SPECIFICATIONS FOR THE PROPOSED PRV SHALL BE PROVIDED TO THE CITY OF BEACON BUILDING DEPARTMENT PRIOR TO INSTALLATION.
7. DOUBLE CHECK VALVES SHALL BE PROVIDED ON ALL SERVICE CONNECTIONS TO THE ON-SITE BUILDINGS.
8. DOUBLE CHECK VALVES SHALL BE WATTS SERIES 909 OR APPROVED EQUAL ON DOMESTIC CONNECTIONS AND COORDINATED WITH THE MECHANICAL ENGINEERING CONSULTANT AS TO TYPE AND SIZE.
9. SPECIFICATIONS FOR THE PROPOSED DOUBLE CHECK VALVES SHALL BE PROVIDED TO THE CITY OF BEACON PRIOR TO INSTALLATION.

1. ALL RETAINING WALLS SHOWN ON THIS PLAN SHALL BE DESIGNED BY A NEW YORK STATE LICENSED ENGINEER AND PLANS SHALL BE SUBMITTED TO THE BEACON BUILDING DEPARTMENT PRIOR TO CONSTRUCTION.

1. PARCEL 6054-37-066670 (7-15 CREEK DRIVE) IS CONVEYING 14,700.76 SQFT, (0.337 AC.) TO THIS PARCEL 6054-37-037625 (23-28 CREEK DRIVE),
2. THE RESULTANT AREA FOR PARCEL 6054-37-066670 (7-15 CREEK DRIVE) AFTER THE LOT LINE RE-ALIGNMENT IS ±69,918.03 SQFT, OR ±1.605 AC.
3. THE RESULTANT AREA FOR PARCEL 6054-37-037625 (23-28 CREEK DRIVE) AFTER THE LOT LINE RE-ALIGNMENT IS ±136,918.88 SQFT, OR ±3.144 AC.

[illegible]

STORM SEWER STRUCTURE TABLE	
STRUCTURE	STRUCTURE DETAILS
CB1	R/W = 95.31 SUMP = 92.20
	PPE 1 INV OUT = 93.20
CB2	R/W = 96.10 SUMP = 91.90
	PPE 1 INV IN = 93.00 PPE 2 INV OUT = 92.90
CB3	R/W = 91.36 SUMP = 86.70
	PPE 2 INV IN = 88.60 PPE 6 INV IN = 87.80 PPE 3 INV OUT = 87.70
CB4	R/W = 86.91 SUMP = 82.90
	PPE 3 INV IN = 83.90 PPE 4 INV OUT = 83.90
CB5	R/W = 91.14 SUMP = 87.10
	PPE 6 INV OUT = 88.10
WC5	R/W = 88.98 SUMP = 82.25
	PPE 4 INV IN = 83.20 PPE 5 INV OUT = 83.20

STORM SEWER STRUCTURE TABLE	
STRUCTURE	STRUCTURE DETAILS
CB7	RIM = 97.01 SUMP = 92.60 PIPE 7 INV OUT = 93.60
CB8	RIM = 94.74 SUMP = 88.90 PIPE 7 INV IN = 91.00 PIPE 8 INV OUT = 89.90
CB9	RIM = 91.58 SUMP = 87.60 PIPE 8 INV IN = 88.70 PIPE 9 INV OUT = 88.60

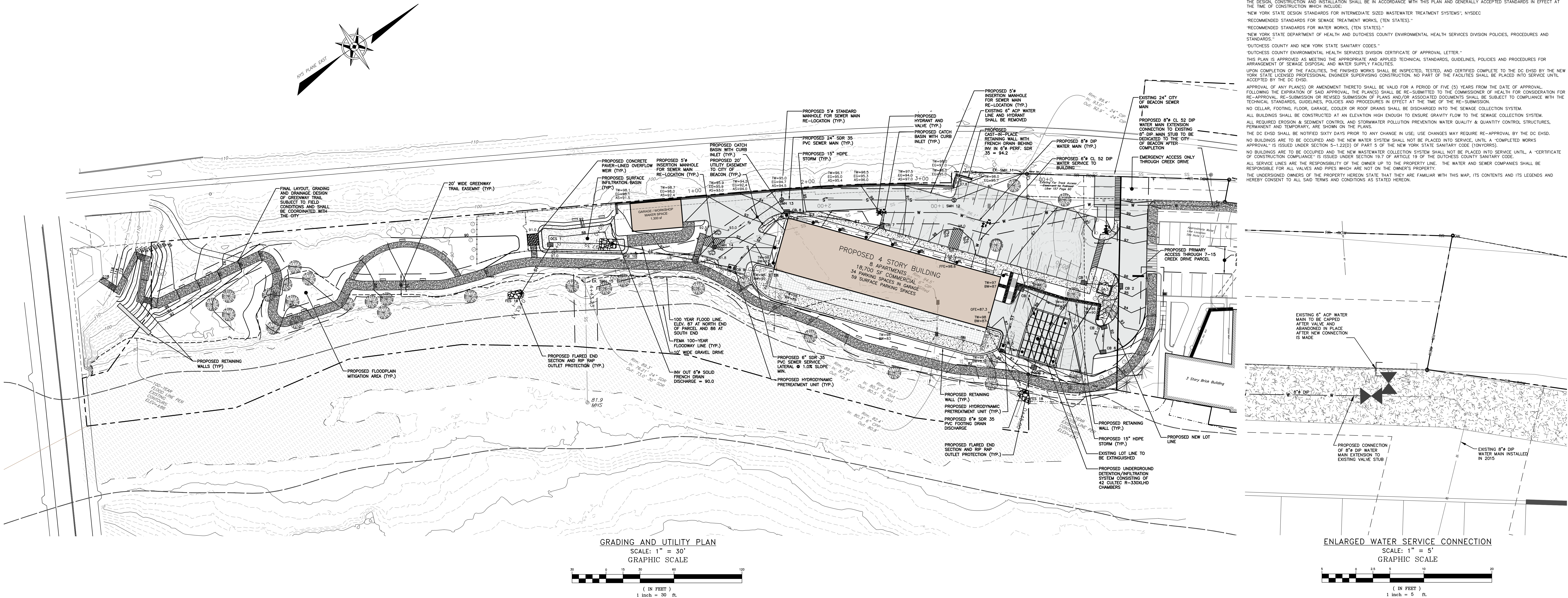
SANITARY SEWER STRUCTURE TABLE	
STRUCTURE	STRUCTURE DETAILS
EX. SMH 11	RM = 99.23 PIPE 11 INV OUT = 92.80
EX. SMH 15	RM = 89.23 PIPE 14 INV IN = 76.21
SMH 13	RM = 94.24 PIPE 12 INV IN = 87.00 PIPE 13 INV OUT = 86.90
SMH 12	RM = 97.63 PIPE 11 INV IN = 89.85 PIPE 12 INV OUT = 89.70
SMH 14	RM = 92.00 PIPE 14 INV IN = 81.90 PIPE 14 INV OUT = 81.20

PIPE NAME	LENGTH	SIZE AND MATERIAL	SLOPE
PIPE 1	19 LF	15" Ø CORR HDPE	1.03%
PIPE 2	31 LF	15" Ø CORR HDPE	14.61%
PIPE 3	81 LF	15" Ø CORR HDPE	4.67%
PIPE 4	57 LF	15" Ø CORR HDPE	1.05%
PIPE 5	17 LF	15" Ø CORR HDPE	1.18%
PIPE 6	22 LF	15" Ø CORR HDPE	1.37%

PIPE NAME	LENGTH	SIZE AND MATERIAL	SLOPE
PIPE 7	85 LF	15" Ø CORR HDPE	3.06%
PIPE 8	69 LF	15" Ø CORR HDPE	1.73%
PIPE 9	106 LF	15" Ø CORR HDPE	0.47%

PIPE NAME	LENGTH	SIZE AND MATERIAL	SLOPE
PIPE 11	65 LF	24 inch PVC	4.62%
PIPE 12	152 LF	24 inch PVC	1.78%
PIPE 13	73 LF	24 inch PVC	6.86%
PIPE 14	117 LF	24 inch PVC	4.25%


STRUCTURE	STRUCTURE DETAILS
FES 11	PIPE 9 INV IN = 88.10
FES 18	PIPE 15 INV IN = 80.00
FES 19	PIPE 16 INV IN = 79.50



DRAWN BY: MAB				CHECKED BY: DGK			
REVSIONS:				REVSIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	12/25/18	REVISED FOR PLANNING BOARD SUBMISSION	MAB				
2	02/22/19	REVISED BUILDING USE	MAB				
3	02/26/19	REVISED FOR PLANNING BOARD SUBMISSION	MAB				
4	03/26/19	REVISED PER PLANNING BOARD COMMENTS	MAB				
5	04/29/19	REVISED PER PLANNING BOARD COMMENTS	MAB				
6	05/28/19	REVISED PER PLANNING BOARD COMMENTS	MAB				

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GRADING AND UTILITY PLAN
23-28 CREEK DRIVE
23-28 CREEK ROAD
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-37-037625

JOB #:	2018:029
DATE:	10/23/2018
SCALE:	SCALE: AS SHOWN
TITLE:	GU-1
SHEET:	7 OF 12