

GRADING & DRAINAGE NOTES:

- ALL CONSTRUCTION SHALL CONFORM TO THE APPLICABLE REGULATIONS AND STANDARDS INCLUDING LOCAL, MDOT, MADEC, MUTC, AND AASHTO.
- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND FOR CONDITIONS AT THE SITE THESE PLANS, PREPARED BY ALLEN & MAJOR ASSOCIATES, INC., EXCLUDES OR INCLUDE SYSTEMS PERTAINING TO THE SAFETY OF THE CONSTRUCTION CONTRACTOR OR THEIR EMPLOYEES, AGENTS, OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK, OR THE OWNER'S EMPLOYEES, CUSTOMERS, OR THE GENERAL PUBLIC. THE SEAL OF THE ENGINEER AS INCLUDED IN THE PLANS SET DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEMS THAT MAY NOW HEREAFTER BE INCORPORATED INTO THESE PLANS. THE CONSTRUCTION CONTRACTOR SHALL PROVIDE THE APPROPRIATE SAFETY SYSTEMS WHICH MAY BE REQUIRED BY THE
- ALL ELEVATIONS REFER TO NAVD 88.
- PIPE DIMENSIONS ARE MEASURED FROM THE CENTER OF THE STRUCTURE.
- CONTRACTOR IS RESPONSIBLE FOR DEMOLITION OF EXISTING STRUCTURES INCLUDING REMOVAL OF ANY EXISTING UTILITIES SERVING THE STRUCTURE. UTILITIES ARE TO BE REMOVED TO THE RIGHT-OF-WAY.

ASSOCIATED WITH CONSTRUCTION ACTIVITIES.

- ALL CUT OR FILL SLOPES SHALL BE 3:1 OR FLATTER UNLESS OTHERWISE NOTED.
- EXISTING AND PROPOSED GRADE CONTOUR INTERVALS SHOWN AT 2 FOOT
- ROOF DRAINS SHALL BE COLLECTED BY GUTTER SYSTEM AND DIRECTED TO A LOCAL SUBSURFACE INFILTRATION SYSTEM.
- IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER.
- ALL STORM PIPE ENTERING STRUCTURES SHALL BE GROUTED TO ASSURE CONNECTION AT STRUCTURE IS WATERTIGHT.
- ALL STORM SEWER MANHOLES IN PAVED AREAS SHALL BE FLUSH WITH PAVEMENT AND SHALL HAVE TRAFFIC BEARING RING & COVERS. MANHOLES IN UNPAVED AREAS SHALL BE 6" ABOVE FINISH GRADE. LIDS SHALL BE LABELED "DRAIN".
- THE CONTRACTOR SHALL ADHERE TO ALL TERMS & CONDITIONS AS OUTLINED IN THE GENERAL N.P.D.E.S. PERMIT FOR STORMWATER DISCHARGE
- ALL DRAINAGE SHALL CONFORM TO LOCAL AND MADEC REQUIREMENTS.

- CONTRACTOR SHALL ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE.
- CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED AREAS.
- ALL UNSURFACED AREAS DISTURBED BY GRADING OPERATION SHALL RECEIVE 4 INCHES OF TOPSOIL. CONTRACTOR SHALL APPLY STABILIZATION FABRIC TO ALL SLOPES 3H:1V OR STEEPER. CONTRACTOR SHALL GRASS DISTURBED AREAS AND ADHERE TO COUNTY SPECIFICATIONS UNTIL A HEALTHY STAND OF GRASS IS OBTAINED.
- PRIOR TO CONSTRUCTION OF IMPERVIOUS AREAS, ALL DRAINAGE STRUCTURES, PIPES AND BASINS SHALL BE INSTALLED AND INSPECTED FOR PROPER FUNCTION.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THE PROJECT WORK SCOPE PRIOR TO THE START OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DRAWINGS, SPECIFICATIONS, OR RELATED CODES, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ENGINEER AND/OR ARCHITECT PRIOR TO START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY THE ENGINEER AND/OR ARCHITECT SHALL CONSTITUTE A VIOLATION OF THE CONTRACT AND THE CONTRACTOR TO COMPLETE THE SCOPE OF WORK AND/OR DESIGN INTENT OF THE DRAWINGS AND IN FULL COMPLIANCE WITH LOCAL REGULATIONS AND CODES.
- THE DESIGN ENGINEER WAIVES AND ASSUMES ALL RESPONSIBILITY AND LIABILITY FOR ANY CLAIMS WHICH ARISE FROM CONSTRUCTION OF THE PLANS, SPECIFICATIONS, AND/OR DRAWINGS, WHETHER THEY CONCERN, OR FOR PROBLEMS WHICH ARISE FROM OTHERS' FAILURE TO OBTAIN AND/OR FOLLOW THE GUIDANCE OF THE DESIGN ENGINEER WITH RESPECT TO ANY ERRORS, OMISSIONS, INCONSISTENCIES, AMBIGUITIES, OR CONFLICTS WHICH ARE DISCOVERED OR ALLEGED.
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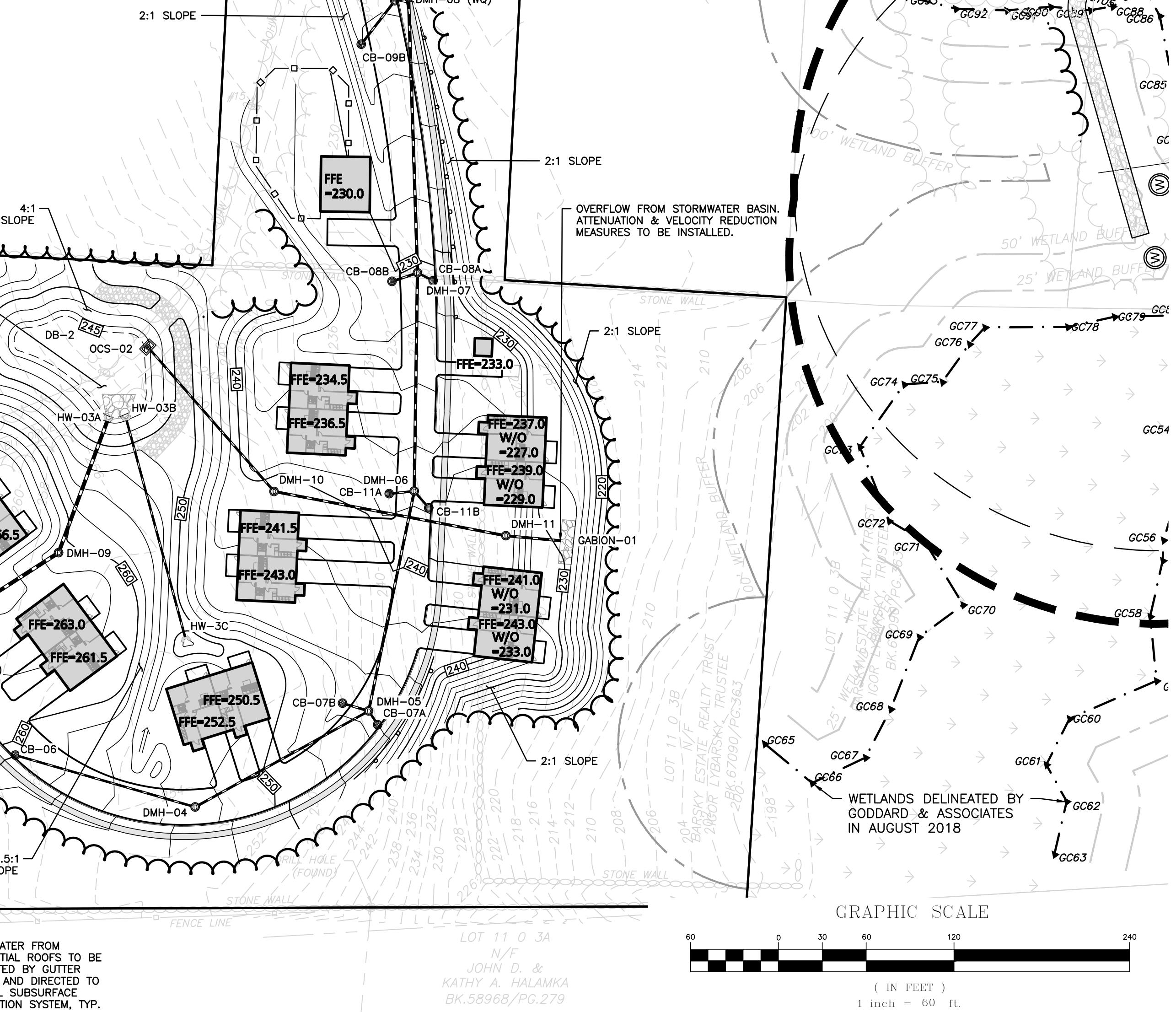
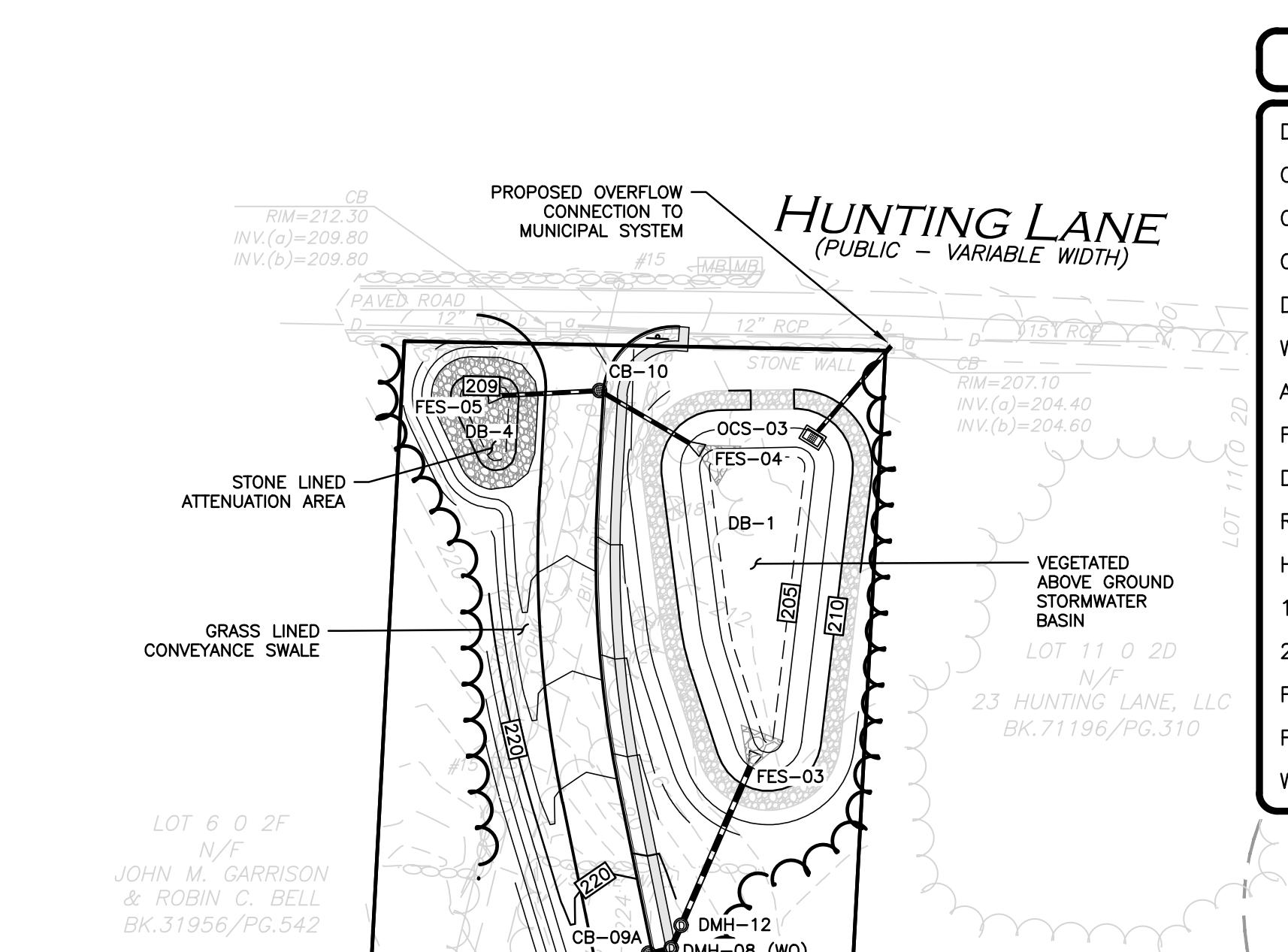
DRAINAGE STRUCTURE TABLE	
STRUCTURE	STRUCTURE DETAILS
CB-02 (WQ)	RIM=268.75 INV.OUT=265.25 (HW-01) 46LF, 12"HDPE, S=1.50%
CB-03 (WQ)	RIM=268.00 INV.OUT=264.25 (HW-02) 46LF, 15"HDPE, S=1.06%
CB-05 (WQ)	RIM=264.00 INV.OUT=260.80 (DMH-03) 20LF, 12"HDPE, S=1.53%
CB-06	RIM=259.50 INV.OUT=256.30 (DMH-04) 128LF, 12"HDPE, S=5.09%
CB-07A	RIM=245.50 INV.OUT=241.89 (DMH-05) 11LF, 12"HDPE, S=3.00%
CB-07B	RIM=245.00 INV.OUT=241.80 (DMH-05) 19LF, 12"HDPE, S=1.34%
CB-08A	RIM=230.50 INV.OUT=227.30 (DMH-07) 12LF, 12"HDPE, S=4.19%

DRAINAGE STRUCTURE TABLE	
STRUCTURE	STRUCTURE DETAILS
CB-08B	RIM=230.50 INV.OUT=227.30 (DMH-07) 18LF, 12"HDPE, S=2.73%
CB-09A	RIM=221.50 INV.IN=218.43 (CB-09B) INV.OUT=216.20 (DMH-08 (WQ)) 10LF, 15"HDPE, S=3.00%
CB-09B	RIM=212.20 INV.IN=218.80 (CB-09A) 37LF, 12"HDPE, S=1.00%
CB-10	RIM=237.50 INV.IN=233.30 (DMH-05) INV.IN=233.80 (CB-11A) INV.OUT=238.00 (CB-11B) 43LF, 15"HDPE, S=1.15%
CB-11A	RIM=237.50 INV.IN=234.14 (DMH-06) 17LF, 12"HDPE, S=2.00%
CB-11B	RIM=237.83 INV.OUT=234.10 (DMH-06) 15LF, 12"HDPE, S=2.00%
DMH-03	RIM=264.22 INV.IN=260.00 (OCS-01) INV.IN=260.50 (CB-05 (WQ)) 96LF, 24"HDPE, S=3.34%

DRAINAGE STRUCTURE TABLE	
STRUCTURE	STRUCTURE DETAILS
DMH-04	RIM=235.00 INV.IN=249.80 (CB-06) INV.OUT=249.70 (DMH-05) 138LF, 12"HDPE, S=6.20%
DMH-05	RIM=221.50 INV.IN=241.55 (CB-07A) INV.IN=241.30 (DMH-04) INV.OUT=241.55 (CB-07B) 153LF, 15"HDPE, S=5.05%
OCS-01	RIM=221.50 INV.IN=216.88 (DMH-08 (WQ)) INV.OUT=230.87 (FES-03) 72LF, 24"HDPE, S=2.50%
OCS-02	RIM=266.30 INV.OUT=263.00 (DMH-03) 96LF, 24"HDPE, S=1.00%
HW-01	RIM.IN=264.50 (CB-02 (WQ))
HW-02	RIM.IN=263.75 (CB-03 (WQ))
HW-03A	RIM.IN=247.00 (DMH-09)
HW-03B	RIM.IN=246.50 (HW-03C)
HW-03C	RIM.OUT=248.00 (HW-03B) 154LF, 12"HDPE, S=0.97%

DRAINAGE STRUCTURE TABLE	
STRUCTURE	STRUCTURE DETAILS
FES-01	RIM=239.00 INV.IN=235.80 (DMH-10) 37LF, 12"HDPE, S=5.00%
FES-02	RIM=226.50 INV.IN=208.00 (DMH-12) 72LF, 15"HDPE, S=1.75%
FES-03	RIM=209.00 (CB-10) 40LF, 15"HDPE, S=1.00%
FES-04	RIM=208.00 (CB-10) 40LF, 15"HDPE, S=1.00%
FES-05	RIM=209.00 (CB-10) 40LF, 15"HDPE, S=1.00%
OCS-03	RIM=209.00 (CB-10) 40LF, 15"HDPE, S=1.00%
HW-03	RIM=207.00 INV.IN=204.40 (INV.B-04) 96LF, 24"HDPE, S=1.00%
HW-03C	RIM=204.60 (INV.B-04) 96LF, 24"HDPE, S=1.00%

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- THE CONTRACTOR SHALL CONTACT "DIGSAFE" AND THE TOWN OF SHERBORN DEPARTMENT OF PUBLIC WORKS AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION WORK TO REQUEST THE LOCATION OF THE EXISTING UTILITIES. DIGSAFE: 1-800-344-7233 SHERBORN DEPARTMENT OF PUBLIC WORKS: 508-651-7878
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PROFESSIONAL ENGINEER FOR ALLEN & MAJOR ASSOCIATES, INC.

3 10-01-2020 ISSUED FOR ZBA APPLICATION
2 05-19-2020 MISC. REV. PER MASSHOUSING & ABUTTER WALK
1 01-21-2020 MISCELLANEOUS REVISIONS
REV DATE DESCRIPTION
APPLICANT/OWNER:
BARSKY ESTATE REALTY TRUST
23 HUNTING LANE
SHERBORN, MA 01770
PROJECT:
APPLE HILL ESTATES
31 HUNTING LANE
SHERBORN, MA 01770
PROJECT NO. 2513-02 DATE: 10-23-20
SCALE: 1"= 60' DWG. NAME: C2513-02
DESIGNED BY: SM CHECKED BY: MAM
PREPARED BY:
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DRAWING TITLE: GRADING & DRAINAGE PLAN SHEET NO. C-103
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