

January 30, 2026

Mr. Hilario, CFM, Town Planner
Planning Board
Town of North Attleborough
43 South Washington Street
North Attleborough, MA 02760

RE: 34 Circle Court (667-1) – Parking Lot and Walkway Upgrades
North Attleborough Housing Authority
Additional Information

Dear Mr. Hilario:

GCG Associates, Inc., on behalf of the North Attleborough Housing Authority (NAHA) hereby submitting revised plans regarding comments received at the public hearing. The changes made area as follows.

- The ten new parking spaces will be stripped as 10'x20'.
- Two ADA ramps and crosswalk have been added as suggested along the road entering the site.

Attached are the revised plans. If you have any questions, please do not hesitate to contact our office.

Respectfully Submitted,
GCG Associates

Michael J. Carter

Michael J. Carter, P.E.
Project Manager

PARKING LOT & WALKWAY UPGRADES

CIRCLE COURT (667-1)

NORTH ATTLEBOROUGH, MASSACHUSETTS

NORTH ATTLEBOROUGH HOUSING AUTHORITY

EOHLC PROJECT #197161

OWNER/APPLICANT:

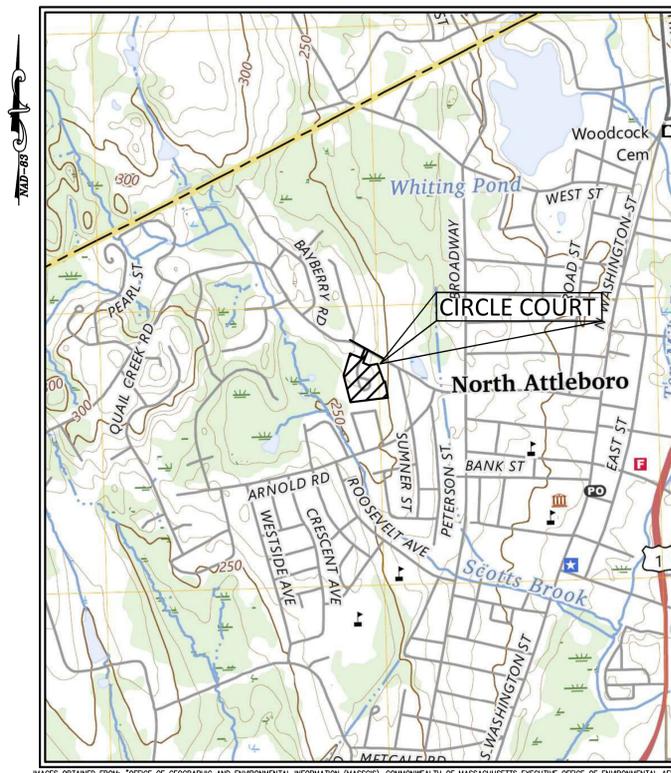
NORTH ATTLEBOROUGH HOUSING AUTHORITY (NAHA)
 20 SOUTH WASHINGTON STREET
 NORTH ATTLEBOROUGH, MA, 02760
 PHONE: (508) 695-5142

PROJECT ADDRESS:

CIRCLE COURT (667-1)
 NORTH ATTLEBOROUGH, MA 02760
 MAP 19, LOT 220.
 BOOK 20, PAGE 172, N.B.C.R.D..

NORTH ATTLEBOROUGH PLANNING BOARD

DATE: _____

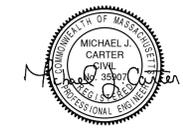


MAPS OBTAINED FROM: OFFICE OF GEOGRAPHIC AND ENVIRONMENTAL INFORMATION (MASSGIS), COMMONWEALTH OF MASSACHUSETTS EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS

LOCUS PLAN
 SCALE : 1"=1000'±

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01/28/2026

SITE PLAN REVIEW FOR (NAHA)
NORTH ATTLEBOROUGH HOUSING AUTHORITY
100% CONSTRUCTION DOCUMENTS

GCG ASSOCIATES INC. CONSULTING ENGINEERS WILMINGTON, MASSACHUSETTS

REVISED JANUARY 28, 2026
NOVEMBER 12, 2025

GENERAL NOTES

- PLANS AND TOPOGRAPHIC INFORMATION ARE PREPARED FROM GROUND SURVEY AND DRONE SURVEY PERFORMED BY GCG ASSOCIATES, INC., ON MARCH, 19, APRIL 29, AND OCTOBER 2, 2025.
- WETLAND DELINEATION WAS PERFORMED BY CHRISTOPHER J. CAPONE ON SEPTEMBER 5, 2025, AND FIELD LOCATED BY THIS OFFICE.
- ALL LOCATIONS OF SUBSURFACE UTILITIES AND STRUCTURES WERE OBTAINED FROM AVAILABLE UTILITY RECORDS. THE SIZE, TYPE, AND LOCATION OF UTILITIES SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL PROPERLY LOCATE THE UTILITIES PRIOR TO THE BEGINNING OF CONSTRUCTION. THE CONTRACTOR SHALL OBTAIN UTILITY INFORMATION BY CONTACTING DIG SAFE A MINIMUM OF 72 HOURS PRIOR TO CONSTRUCTION AT (811). THE CONTRACTOR SHALL EXCAVATE TEST PITS TO VERIFY UTILITY LINE LOCATIONS AS NECESSARY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UTILITIES ON SITE. THE CONTRACTOR SHALL HIRE A PRIVATE MARKING COMPANY TO LOCATE ONSITE UTILITIES. THE COST TO HIRE THE PRIVATE MARKING COMPANY SHALL BE INCLUDED IN THE CONTRACT PRICE.**
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL STATE OR LOCAL BUILDING PERMITS THAT MAY BE REQUIRED. THE NORTH ATTLEBOROUGH HOUSING AUTHORITY SHALL PAY FOR ALL PERMITS.
- THE CONTRACTOR SHALL PROVIDE THE OWNER WITH A CONSTRUCTION SCHEDULE DELINEATING THE SEQUENCE OF WORK AND ESTIMATED TIME OF COMPLETION OF EACH SEGMENT OF WORK, PRIOR TO THE COMMENCEMENT OF WORK.
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, AND PROCEDURES, AND FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH ALL WORK INCLUDED UNDER THIS CONTRACT. THE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR PROVIDING AND MAINTAINING ALL SAFETY BARRIERS, WARNING FLASHERS, ETC., AS REQUIRED BY THE CONDUCT OF THE WORK FOR THE PROTECTION OF WORKERS AND NON-WORKERS ALIKE. THE CONTRACTOR'S ATTENTION IS DIRECTED TO OSHA REQUIREMENTS.
- THE CONTRACTOR SHALL MAINTAIN CONTINUOUS TRAFFIC FLOW DURING CONSTRUCTION SATISFACTORY TO THE ENGINEER AND THE NORTH ATTLEBOROUGH HOUSING AUTHORITY. ACCESS TO ALL EXISTING RESIDENCES SHALL BE MAINTAINED AT ALL TIMES DURING THE COURSE OF CONSTRUCTION BY THE CONTRACTOR. ACCESS TO ALL EXISTING RESIDENCES SHALL BE MAINTAINED AT ALL TIMES DURING THE COURSE OF CONSTRUCTION BY THE CONTRACTOR. THE CONTRACTOR SHALL MAINTAIN ACCESS TO THE PARKING LOT DURING CONSTRUCTION FOR ALL RESIDENTS.
- NO EQUIPMENT SHALL BE ALLOWED TO BE PARKED ON THE ROAD WHEN NOT IN USE. MATERIALS SHALL NOT BE STOCKPILED ON THE ROAD OR IN PARKING AREAS. THE CONTRACTOR SHALL CONSULT THE NORTH ATTLEBOROUGH HOUSING AUTHORITY WITH RESPECT TO LOCATION OF STOCKPILED MATERIALS.
- ALL CONSTRUCTION SIGNAGE SHALL CONFORM TO THE REQUIREMENTS OF THE STATE OF MASSACHUSETTS DEPARTMENT OF TRANSPORTATION AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
- BUILDING LOCATIONS AS SHOWN ON ADJACENT PROPERTIES, ARE APPROXIMATE AND FOR REFERENCE PURPOSES ONLY.
- ALL CONSTRUCTION MATERIAL, DEBRIS, ASPHALT, SOIL, ETC. THAT IS REMOVED FROM THE SITE SHALL BE HANDLED AND DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS. THE COST FOR THIS SHALL BE INCLUDED IN THE CONTRACT PRICE.
- THE CONTRACTOR SHALL MAINTAIN THE EXISTING SITE DRAINAGE PATTERNS UNLESS OTHERWISE NOTED. ALL GRADING MODIFICATIONS SHALL DIRECT DRAINAGE AWAY FROM ALL EXISTING BUILDINGS AND TOWARDS THE APPROPRIATE AREAS.
- ALL GRADING MODIFICATIONS SHALL BE GRADUAL SO AS NOT TO CREATE ANY STEEP SLOPES, UNEVEN AREAS, ETC.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTING ANY DEBRIS, SEDIMENT OR SILTY WATER FROM ENTERING ANY DRAINAGE SYSTEM, ETC. DURING ALL PHASES OF CONSTRUCTION.
- DURING CONSTRUCTION THE CONTRACTOR SHALL PROTECT ALL TREES AND ROOTS OF TREES TO REMAIN. ROOTS ON TREES WHICH ARE IMPACTING THE SAFETY OF THE SITE OR AFFECTING WALKWAYS SHALL BE REMOVED BY THE CONTRACTOR.
- THE CONTRACTOR SHALL REMOVE OVERGROWN VEGETATION ALONG WALKWAYS AND FENCES AS NEEDED. COST SHALL BE INCLUDED IN THE CONTRACT PRICE.
- DURING THE COURSE OF CONSTRUCTION ANY DAMAGE BY THE CONTRACTOR TO FENCES, GUARD RAILS, PATHS, STAIRS, PAVEMENT AND VEGETATION SHALL BE REPAIRED OR REPLACED AND RESTORED TO ORIGINAL CONDITION AT NO ADDITIONAL COST TO THE CONTRACTOR. ANY REPLACEMENT FENCE AND/OR HANDRAILS SHALL MATCH EXISTING FENCE IN TYPE, FINISH (GALVANIZED AND VINYL CLAD), COLOR AND MESH SIZE.
- ALL CASTINGS, GATE BOXES, HYDRANTS, LIGHT POLES, ETC. DAMAGED DURING RECONSTRUCTION SHALL BE SUPPLIED AND REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CONTRACTOR. THE CONTRACTOR SHALL INCLUDE IN THE CONTRACT PRICE.
- SIDEWALKS, WALKWAYS AND DRIVEWAYS THAT ARE DAMAGED OR REMOVED DURING CONSTRUCTION SHALL BE REPLACED WITH THE SAME TYPE OF MATERIAL ONCE THE WORK IS COMPLETED AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SITE RESTORATION AND CLEAN UP UPON COMPLETION OF THE PROJECT AT NO ADDITIONAL COST TO THE OWNER.
- ANY POLICE DETAILS REQUIRED SHALL BE INCLUDED IN THE LUMP SUM PRICE AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR SHALL MAINTAIN ACCESS DURING CONSTRUCTION FOR ALL RESIDENTS. ANY TEMPORARY WALKS/RAMPS REQUIRED SHALL BE INCLUDED IN THE CONTRACT PRICE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR SITE RESTORATION AND CLEAN UP UPON COMPLETION OF THE PROJECT. ALL DISTURBED AREA IS TO BE RESTORED WITH LOAM (6" MINIMUM) AND SEED AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR SHALL PROVIDE TEMPORARY RAMPS AND WALKWAYS AS NECESSARY TO RESIDENTS.

PAVING AND RECLAMATION NOTES

- ALL TRENCHES WILL BE COMPACTED TO ALLOW PROPER SETTLEMENT. ALL TRENCHES WILL BE COMPACTED TO 95% COMPACTION. INCLUDE PAYMENT UNDER ASSOCIATED ITEM.
- PRIOR TO RECLAIMING, THE CONTRACTOR SHALL COMPLETE ALL EXCAVATING AND PREPARING SUBGRADE REQUIRED TO PULVERIZE THE PAVEMENT AND SHALL LOWER ALL CASTINGS AS SPECIFIED IN THE CONTRACT SPECIFICATIONS.
- BOTH PARKING LOTS AND ROADWAYS SHALL BE RECLAIMED TO A MINIMUM DEPTH OF 16" BELOW THE PROPOSED FINISH GRADE WITHIN THE PROJECT LIMITS. THE EXISTING PAVEMENT SHALL BE PULVERIZED TO THE POINT WHERE NO MATERIAL IS GREATER THAN 3".
- THE CONTRACTOR SHALL RECLAIM THE ENTIRE WIDTH OF EXISTING MATERIAL. THE LIMITS (EDGE OF PAVEMENT) OF THE EXISTING PAVED SURFACES ARE SHOWN IN THE PLAN VIEW OF THESE CONSTRUCTION DRAWINGS.
- AFTER PULVERIZING THE PARKING LOT ASPHALT PAVEMENT AND UNDERLYING MATERIALS, THE CONTRACTOR SHALL REMOVE AND STOCKPILE (MINROW) THE RECLAIMED MATERIAL. THE CONTRACTOR SHALL THEN EXCAVATE AND REMOVE THE NECESSARY SUBGRADE MATERIAL IN ORDER TO MEET THE FINAL GRADES OF THE PARKING LOTS. THE CONTRACTOR SHALL THEN PLACE, GRADE AND COMPACT THE EXISTING RECLAIMED BASE COURSE TO A 12" DEPTH AS SHOWN ON THE TYPICAL ROADWAY CROSS SECTION. THE SUBBASE SHALL THEN BE FINE GRADED AND COMPACTED TO ALLOW FOR THE PLACEMENT OF: 2" BASE COURSE INTERMEDIATE COURSE PAVEMENT (SIC-19.0-TABLE 460.10-1) AND 1-1/2" SURFACE COURSE (SSC-9.5-TABLE 460.10-1) AND ACCORDING TO MASSDOT SECTION 460-"HOT MIX ASPHALT PAVEMENT FOR LOCAL STREETS"
- AFTER PULVERIZING THE EXISTING IN PLACE ASPHALT AND UNDERLYING MATERIAL (TOTAL OF 16" DEPTH), THE CONTRACTOR SHALL PLACE, GRADE AND COMPACT THE EXISTING RECLAIMED BASE COURSE TO A 12" DEPTH AS SHOWN ON THE TYPICAL CROSS SECTION.
- THE CONTRACTOR SHALL GRADE THE EXISTING RECLAIMED SUBBASE MATERIAL OR GRAVEL BORROW MATERIAL TO ALLOW THE FINAL PAVEMENT SURFACE TO MATCH THE EXISTING EDGE OF PAVEMENT GRADES UNLESS OTHERWISE NOTED. THE RECONSTRUCTION OF THE PARKING LOTS SHALL ALSO BE IN ACCORDANCE WITH THE TYPICAL CROSS SECTION DETAIL SHOWN ON THE PLANS. ANY GRADING MODIFICATIONS SHALL DIRECT DRAINAGE TOWARDS THE APPROPRIATE AREAS.
- ALL PROPOSED CUTS AND FILLS REQUIRED TO GRADE THE RECLAIMED MATERIAL TO A 12" DEPTH SHALL BE INCLUDED FOR PAYMENT UNDER THE APPROPRIATE ITEM.
- ALL DRAINAGE AND UTILITY CASTINGS SHALL BE LOWERED OR REMOVED AND PLATED PRIOR TO RECLAIMING THE PARKING LOTS. ALL STRUCTURES MUST BE LOWERED TO A DEPTH OF 6 INCHES BELOW THE BOTTOM OF THE PROPOSED RECLAIMED BASE COURSE.
- THE CONTRACTOR SHALL FINE GRADE THE EXISTING RECLAIMED BASE COURSE MATERIAL NO MORE THAN 24 HOURS PRIOR TO THE PLACEMENT OF THE 2" BASE COURSE PAVEMENT. ALL GRADING, COMPACTION AND DUST CONTROL ASSOCIATED WITH FINE GRADING TO BE INCLUDED IN THE APPROPRIATE RECLAIM ITEM.
- THE CONTRACTOR SHALL STOCKPILE AND RETAIN SUFFICIENT SURPLUS SUBBASE AND RECLAIMED PAVEMENT SUBBASE MATERIALS TO USE, AS NEEDED IN THE ENTIRE PROJECT AREA. THE COSTS ASSOCIATE WITH THE EXCAVATION, PLACEMENT AND DISPOSAL OF SURPLUS SUBBASE MATERIAL SHALL BE INCLUDED IN THE LUMP SUM PRICE. NO ADDITIONAL PAYMENT FOR PLACEMENT SHALL BE MADE. SURPLUS SUBBASE AND RECLAIMED PAVEMENT SUBBASE MATERIAL SHALL BE USED ONSITE PRIOR TO GRAVEL BORROW MATERIAL. ANY EXCESS RECLAIMED MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS. NO ADDITIONAL PAYMENT FOR DISPOSAL SHALL BE MADE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPACTION TESTING. SEE SPECIFICATION SECTION 02250 FOR COMPACTION CONTROL AND TESTING.
- PRIOR TO COMPLETING FINAL GRADING OF THE RECLAIMED BASE COURSE, THE ENGINEER SHALL REVIEW GRADES TO DETERMINE THAT SUFFICIENT CROSS SLOPES AND POSITIVE DRAINAGE FLOWS HAVE BEEN MAINTAINED. IF GRADES NEED TO BE ADJUSTED, THE CONTRACTOR SHALL REGRADE AS DIRECTED.
- CROSS SLOPES AT CATCH BASINS SHALL BE ADJUSTED AS NECESSARY TO ASSURE PROPER DRAINAGE.
- CONTRACTOR SHALL CONTROL DUST DURING CONSTRUCTION USING CALCIUM CHLORIDE AS NECESSARY.
- DRAINAGE STRUCTURES SHALL BE ADJUSTED OR REMODELED AS REQUIRED TO MEET GRADE AT NO ADDITIONAL COST TO THE OWNER.
- SHOULDERS OF DRIVEWAY AND PARKING AREAS SHALL BE GRADED FOR A SMOOTH TRANSITION FROM THE PROPOSED EDGE OF PAVEMENT/CURB TO THE EXISTING GRADE.
- ALL STRUCTURES SHALL BE LOWERED PRIOR TO RECLAIMING AND THEN RAISED TO FINISHED GRADE ONCE BINDER IS PLACED.

FINE GRADING AND COMPACTION

- THE CONTRACTOR SHALL FINE GRADE AND COMPACT ALL AREAS IN PREPARATION FOR PAVEMENT, INCLUDING, BUT NOT LIMITED TO THE PARKING LOT AREAS AND TRANSITION DRIVEWAY AREAS. THE CONTRACTOR SHALL ALSO STRAIGHT CUT ALL EXISTING JOINTS AND EDGES IN PREPARATION FOR FINAL PAVEMENT.
- PAYMENT FOR GRADING AND COMPACTION THE PROPOSED OR RECONSTRUCTED BITUMINOUS CONCRETE SIDEWALKS, RAMPS AND DRIVEWAY APRONS SHALL BE INCLUDED IN THE APPROPRIATE SIDEWALK, APRON, OR RAMP ITEM.
- PAYMENT FOR FINE GRADING AND COMPACTION THE RECONSTRUCTED BITUMINOUS PARKING LOTS SHALL BE INCLUDED IN THE APPROPRIATE CONTRACT ITEM.

RAISING CASTINGS

- ALL CASTINGS WILL BE RAISED TO FINISHED GRADE AFTER PLACEMENT OF THE 2" BASE PAVING COURSE, PRIOR TO PLACEMENT OF THE 1-1/2" FINAL PAVING COURSE.

CATCH BASIN & DRAIN LINE CLEANING NOTES

- ALL ACCUMULATED SEDIMENT, DEBRIS, ORGANIC MATTER, ETC. MUST BE REMOVED FROM CATCH BASINS AND DRAINAGE SYSTEM UPON COMPLETION OF THE PROJECT.
- SILT SACKS SHALL BE PLACED IN ALL CATCH BASINS AS SHOWN ON THE PLAN DURING CONSTRUCTION PERIOD.
- ALL SEDIMENT AND DEBRIS REMOVED FROM THE CATCH BASIN OR PIPE LINE SHALL BE PROPERLY HANDLED AND DISPOSED OF AT AN OFF-SITE LOCATION IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL GUIDELINES AND REGULATIONS.
- ANY REQUIRED MAINTENANCE OR REPAIRS NOTED DURING THE CLEANING AND INSPECTION SHOULD BE ADDRESSED IMMEDIATELY.
- THE EXISTING DRAIN LINE SHALL BE JETTED, CLEANED, AND A VIDEO OF THE LINE SHALL BE TAKEN AFTER CLEANING.
- HOOD SHOULD BE INSTALLED IN ALL EXISTING CATCH BASINS.

CURB AND SIDEWALK NOTES

- BITUMINOUS CONCRETE SIDEWALKS SHALL BE CONSTRUCTED WITH 1-1/2" TOP COURSE AND A 1-1/2" BINDER COURSE, ACCORDING TO THE CONSTRUCTION DETAILS AND AS SPECIFIED.
- CEMENT CONCRETE WALKS SHALL BE A OF MINIMUM 4" THICK. CEMENT CONCRETE RAMPS AND DRIVEWAY APRONS SHALL BE A MINIMUM OF 6" THICK.
- CEMENT CONCRETE WALKS, RAMPS, AND DRIVEWAY APRONS SHALL BE MINIMUM 4,000 PSI REINFORCED CEMENT CONCRETE.
- STOCKPILED EXCESS RECLAIMED GRAVEL SHALL BE USED TO REPLACE OR ADJUST THE GRAVEL BASE FOR THE PROPOSED SIDEWALKS THROUGHOUT THE PROJECT AND SHALL BE INCLUDED IN THE SIDEWALK PRICE.
- ALL GRANITE CURB SHALL BE OF TYPE VA-4 AS SPECIFIED BY MASSDOT AND SHALL INCLUDE ALL LENGTHS - STRAIGHT, RADIUS, TRANSITION AND CURB INLETS.
- NEW AND/OR SALVAGED GRANITE CURBING SHALL BE SET IN ACCORDANCE WITH THE CONSTRUCTION DETAIL PROVIDED IN CONTRACT DRAWINGS.
- NEW AND/OR SALVAGED GRANITE CURBING SHALL BE INSTALLED BY THE CONTRACTOR AT THE NEW PROPOSED GRADES AND EDGE OF ROADWAY LINES AS DEPICTED ON THE PLANS

CONSTRUCTION PHASING

- THE PROPOSED WORK SHALL BE COMPLETED IN PHASES SO AS TO PROVIDE ADEQUATE PARKING DURING CONSTRUCTION FOR RESIDENTS AND VISITORS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING CONSTRUCTION PHASING WITH THE NORTH ATTLEBOROUGH HOUSING AUTHORITY AND THE ENGINEER.

ABBREVIATIONS

APPROX	APPROXIMATE
BB	BITUMINOUS BERM CURB
BC	BOTTOM OF CURB
BLDG	BUILDING
BIT	BITUMINOUS CONCRETE
CB	CATCH BASIN
CC	CONCRETE CURB
CCB	CAPE COD BERM
CIP	CAST-IN-PLACE
CLF	CHAIN LINK FENCE
CONC	CONCRETE
D	DRAIN
DI	DUCTILE IRON
DRV	DRIVEWAY
DMH	DRAIN MANHOLE
E	ELECTRIC
EMH	ELECTRIC MANHOLE
ECC	EDGE OF CONCRETE
EOP	EDGE OF PAVEMENT
EX	EXISTING
HCR	HANDICAPPED RAMP
HYD	HYDRANT
INV	INVERT
LF	LINEAR FEET
LP	LIGHT POLE
MH	MANHOLE
N/F	NOW OR FORMERLY
NO	NUMBER
PROP	PROPOSED
R	RIM
SMH	SEWER MANHOLE
SPEC	SPECIFICATION
SW	SIDEWALK
TC	TOP OF CURB
TH	THRESHOLD
TYP	TYPICAL
UP	UTILITY POLE
VGC	VERTICAL GRANITE CURB

EXISTING LEGEND

△	EXIST. MAG NAIL BENCHMARK
□	EXIST. CATCH BASIN
○	EXIST. ROUND CATCH BASIN
⊙	EXIST. DRAIN MANHOLE
⊗	EXIST. SEWER MANHOLE
⊕	EXIST. MANHOLE
⊖	EXIST. ELECTRIC MANHOLE
⊗	EXIST. PULL BOX
⊕	EXIST. HYDRANT
⊖	EXIST. WATER GATE VALVE
⊗	EXIST. GAS GATE VALVE
⊕	EXIST. BOLLARD
⊖	EXIST. LIGHT POST
⊗	EXIST. SIGN
⊕	EXIST. FLAG POLE
⊖	EXIST. SITE BENCH
▨	EXIST. BLDG. (APPROX.)
-D-	EXIST. DRAIN LINE
-S-	EXIST. SEWER LINE
-W-	EXIST. WATER LINE
-E-	EXIST. ELECTRIC LINE
-G-	EXIST. GAS LINE
-T-	EXIST. TELEPHONE LINE
-P-	EXIST. PLUMBING
-C-	EXIST. CURB
-N-	EXIST. CHAIN LINK FENCE
-V-	EXIST. VINYL FENCE
-R-	EXIST. WALL
-140-	EXIST. 5' CONTOURS
-130-	EXIST. 1' CONTOURS
×41.29	EXIST. SPOT GRADE
⊗36"	EXIST. TREE W/ DIAMETER
~~~~~	EXIST. TREE/VEGETATION LINE
- - - - -	APPROX. BUTTER LOT LINE

100% CONSTRUCTION DOCUMENTS  
EOHLC PROJECT #197161

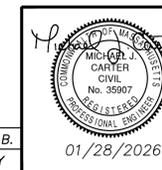
**NOTES AND LEGEND**

**PARKING LOT & WALKWAY UPGRADES  
NORTH ATTLEBOROUGH HOUSING AUTHORITY  
NORTH ATTLEBOROUGH, MASSACHUSETTS**

**GCG ASSOCIATES, INC.**  
WILMINGTON MASSACHUSETTS

SCALE: NOT TO SCALE DATE: NOVEMBER 12, 2025

JOB NO. \ FILE NAME:	DESIGNED BY: W.R.H.	PLAN NO.
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	CHECKED BY: M.J.C.	

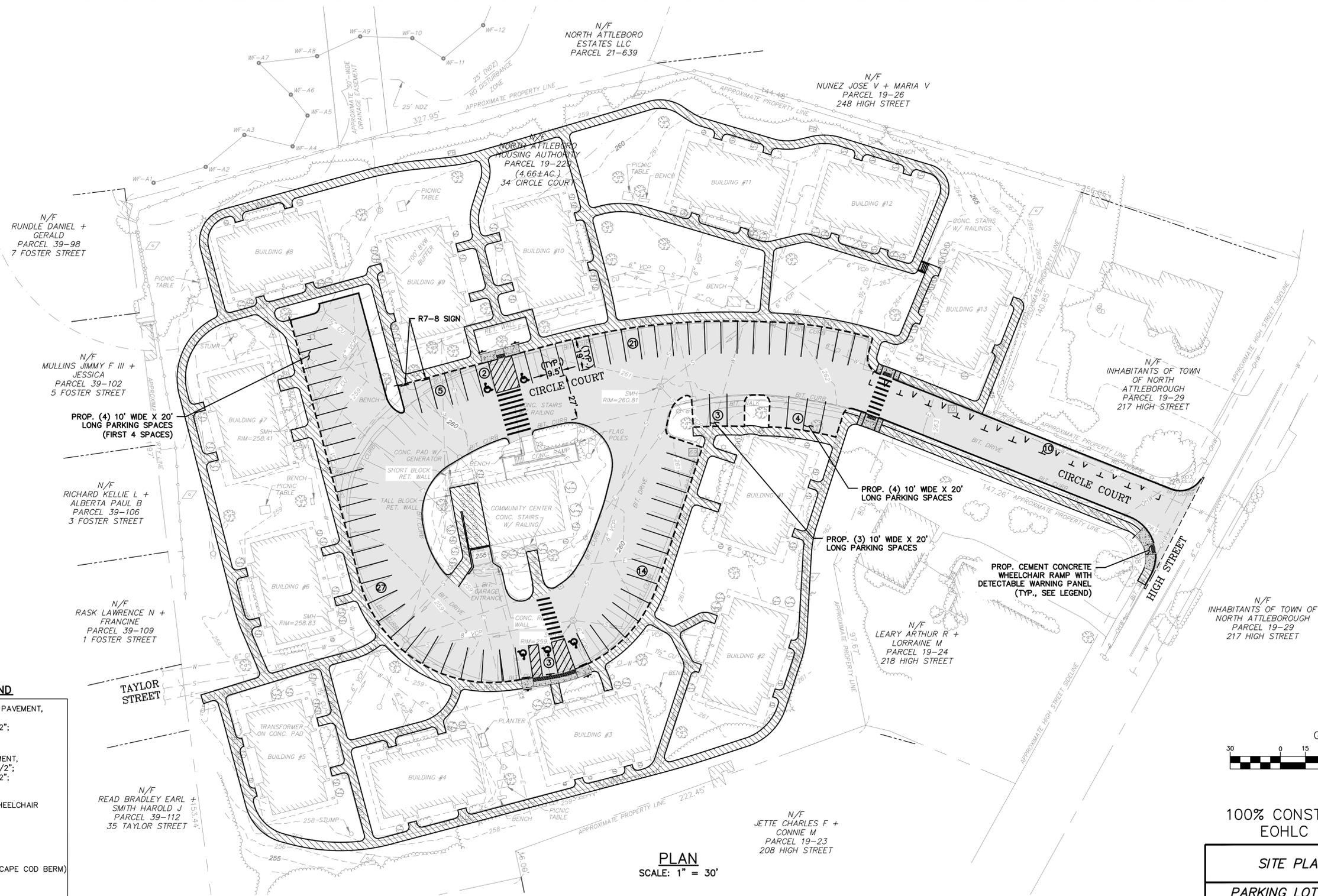


REV.	DATE	DESCRIPTION	L.P.B.	BY
1	1/28/26	REVIEW COMMENTS		





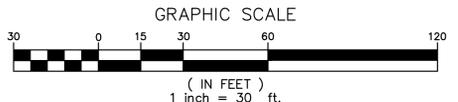
# CIRCLE COURT HOUSING DEVELOPMENT



### SITE IMPROVEMENT LEGEND

- ROADWAY & PARKING LOT PAVEMENT, HMA BASE COURSE = 2"; HMA TOP COURSE = 1-1/2"; GRAVEL BASE = 12";
- SIDEWALK/WALKWAY PAVEMENT, HMA BASE COURSE = 1-1/2"; HMA TOP COURSE = 1-1/2"; GRAVEL BASE = 8";
- NEW CEMENT CONCRETE WHEELCHAIR RAMP, THICKNESS = 6"
- REMOVE & RESET OR NEW VERTICAL GRANITE CURB
- HOT MIX ASPHALT CURB (CAPE COD BERM)
- EXISTING PARKING SPACE  
EXISTING TOTAL PARKING SPACES=79  
(69 PARKING SPACES, 10 VISITOR SPACE, ADA/AAB SPACE NOT ASSIGNED)
- PROPOSED PARKING SPACE  
PROPOSED TOTAL PARKING SPACES=89  
(74 PARKING SPACES, 10 VISITOR SPACE, AND 5 ADA/AAB SPACES)

PLAN  
SCALE: 1" = 30'



100% CONSTRUCTION DOCUMENTS  
EOHLC PROJECT #197161

### SITE PLAN - CIRCLE COURT

PARKING LOT & WALKWAY UPGRADES  
NORTH ATTLEBOROUGH HOUSING AUTHORITY  
NORTH ATTLEBOROUGH, MASSACHUSETTS

### GCG ASSOCIATES, INC.

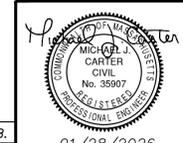
WILMINGTON MASSACHUSETTS

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**OWNER/APPLICANT:**  
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20 SOUTH WASHINGTON STREET  
NORTH ATTLEBOROUGH, MA 02760  
PHONE: (508) 695-5142

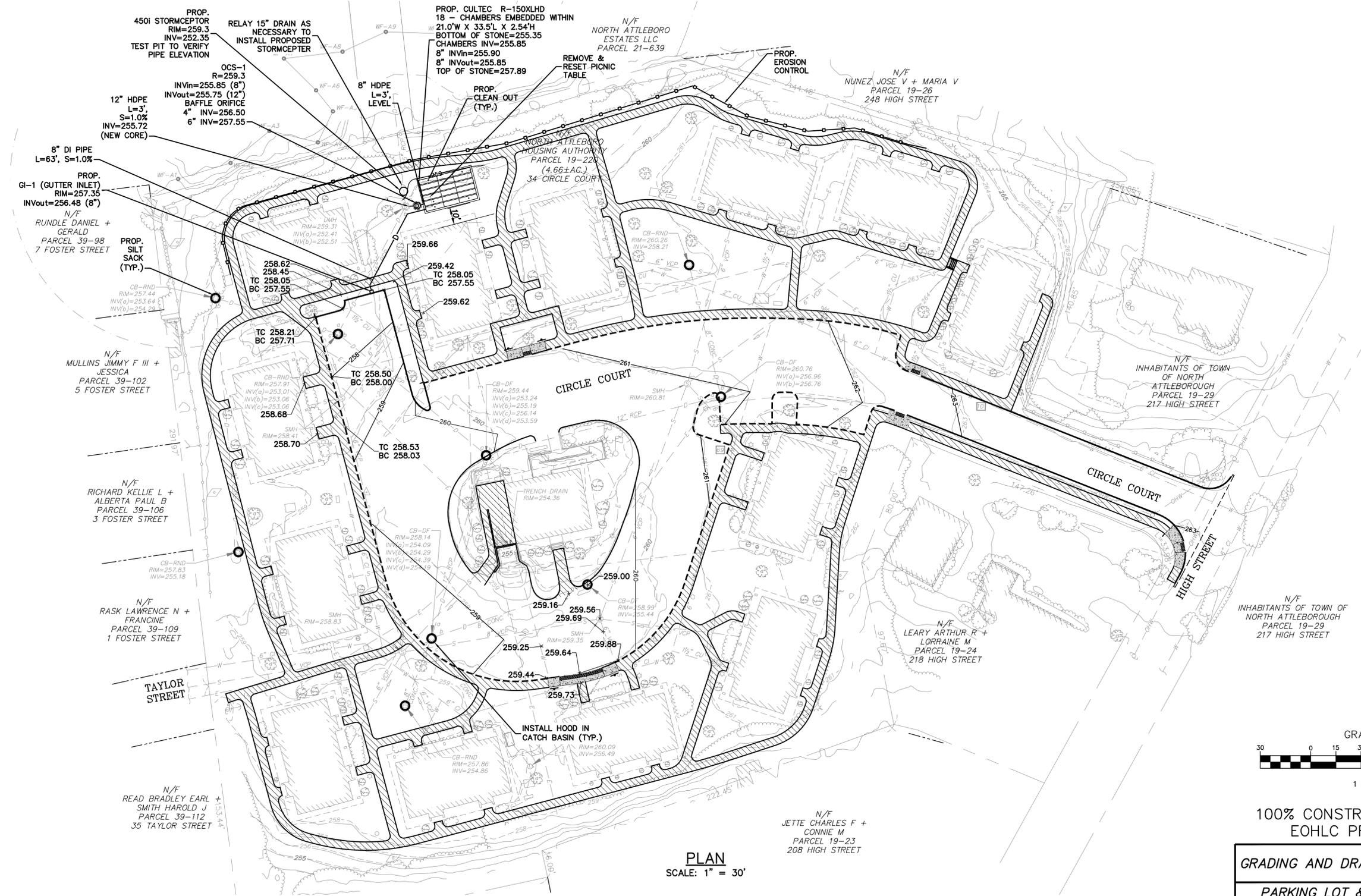
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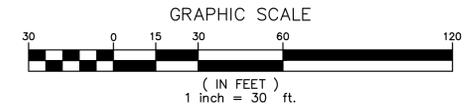
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01/28/2026

# CIRCLE COURT HOUSING DEVELOPMENT



PLAN  
SCALE: 1" = 30'



100% CONSTRUCTION DOCUMENTS  
EOHLC PROJECT #197161

GRADING AND DRAINAGE - CIRCLE COURT

PARKING LOT & WALKWAY UPGRADES  
NORTH ATTLEBOROUGH HOUSING AUTHORITY  
NORTH ATTLEBOROUGH, MASSACHUSETTS

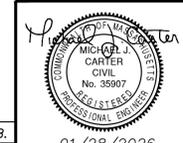
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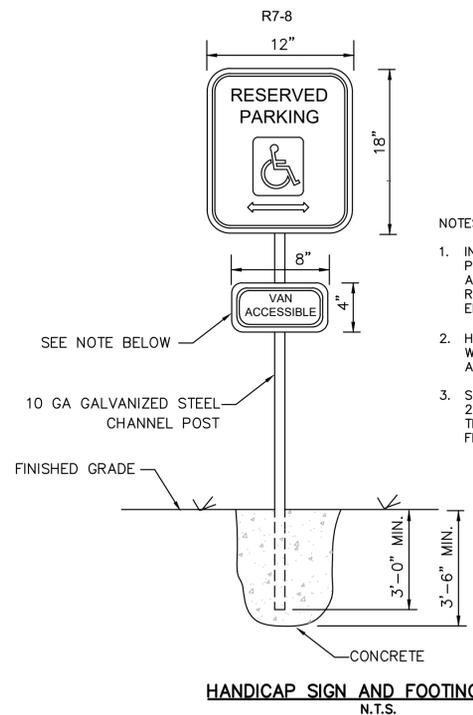
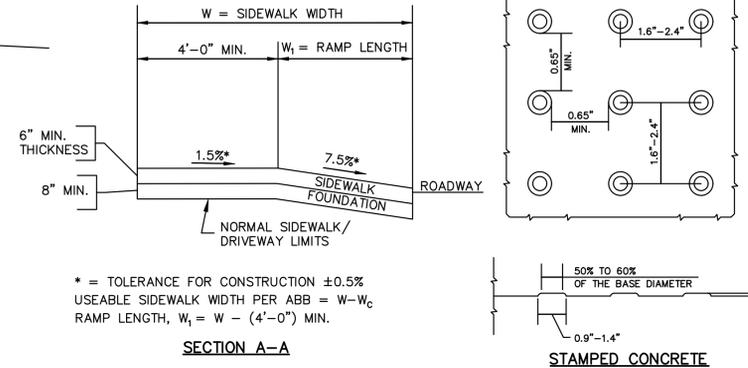
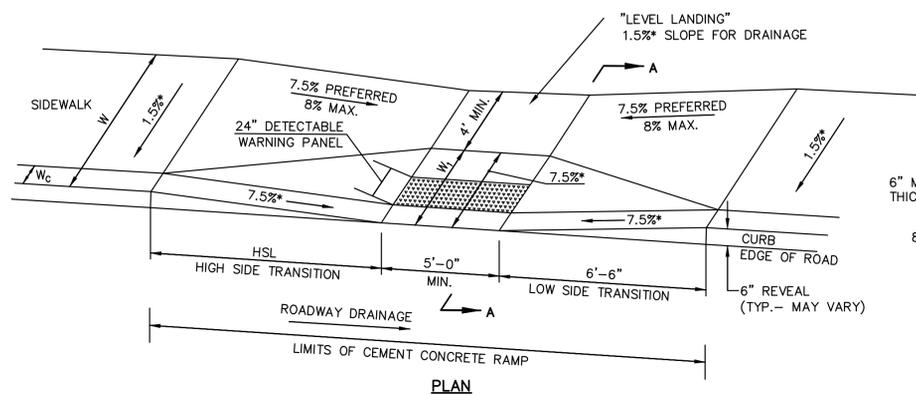
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CIRCLE COURT (667-1)  
HIGH STREET  
NORTH ATTLEBOROUGH, MA 02760



1	1/28/26	REVIEW COMMENTS	L.P.B.
REV.	DATE	DESCRIPTION	BY

01/28/2026





- NOTES:
1. INSTALL NEW SIGNS AT HANDICAP PARKING LOCATIONS. EXISTING ACCESSIBLE PARKING SIGNS MAY BE REUSED AT THE DISCRETION OF THE ENGINEER OR HOUSING AUTHORITY.
  2. HANDICAP SPACES ADJACENT TO 8' WIDTH PAINTED AISLES SHALL HAVE THE ADDITIONAL VAN ACCESSIBLE SIGN.
  3. SIGNAGE SHALL COMPLY WITH 521 CMR 23.6. SUCH SIGN SHALL BE NO LESS THAN FIVE FEET NOR MORE THAN EIGHT FEET TO THE TOP OF THE SIGN.

**DETAIL NOTES:**

1. ALL HANDICAP RAMPS SHALL BE PORTLAND CEMENT CONCRETE 6" THICK.
2. CURBING FOR ALL CONCRETE RAMPS SHALL BE VERTICAL GRANITE CURB (Wc=6") OR SLOPED GRANITE CURB (Wc=0"); SEE PLAN FOR TYPE.
3. THE DIMENSIONS SHOWN AT ROADWAY EDGE ARE FIXED DISTANCES.
4. RAMP CROSS SECTION TO BE SAME AS ADJACENT SIDEWALK; e.g DEPTH OF SURFACES.
5. PORTLAND CEMENT CONCRETE RAMPS ARE TO BE TEXTURED BY BROOMING IN A DIRECTION PARALLEL TO THE LENGTH OF THE RAMP.
6. THESE DIMENSIONS ARE SUBJECT TO CHANGE IN THE FIELD IF EXISTING APPURTENANCES OR CONDITIONS WILL MAKE THE RAMP LOCATIONS IMPRACTICAL OR UNSAFE.

ROADWAY PROFILE GRADE %	*HIGH SIDE TRANSITION LENGTH
0	6'-6"
> 0 - 1	7'-8"
> 1 - 2	9'-0"
> 2 - 3	11'-0"
> 3 - 4	14'-0"
> 4	15'-0" MAX.

* BASED ON DESIGN SLOPE = 7.5% AND A CURB REVEAL OF 6".

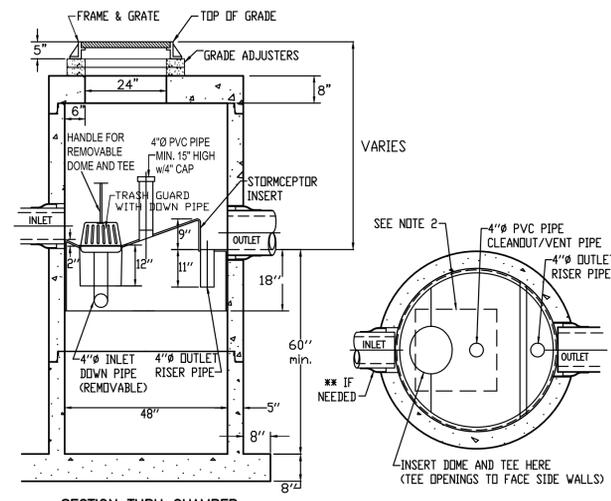
**CURB TRANSITION LENGTH FOR WHEELCHAIR RAMPS**

**WHEELCHAIR RAMP NOTES**

1. ROADWAY SIDEWALK CROSS SLOPES, FOR BRICK, CEMENT CONCRETE, AND HMA, AS INDICATED IN THE STANDARD SPECIFICATIONS, WILL BE 1.5%. A CONSTRUCTION TOLERANCE OF ±0.5% IS ACCEPTABLE ON ROADWAY SIDEWALKS. IN ACCORDANCE WITH 521 CMR THE RULES AND REGULATIONS OF THE ARCHITECTURAL ACCESS BOARD (AAB), THE SIDEWALK CROSS SLOPE CANNOT EXCEED 2.0%.
2. AN UNOBSTRUCTED PATH OF TRAVEL WITH A MINIMUM WIDTH OF 3'-3" SHALL BE MAINTAINED PAST ALL OBSTRUCTIONS (UTILITY POLES, SIGNS, SIGNAL FOUNDATIONS AND MASTS, MAILBOXES, ALONG DRIVE OPENINGS, ETC.).
3. THE WHEELCHAIR RAMP SLOPES AND SIDE SLOPES (TRANSITIONS) WILL BE 7.5% WITH A CONSTRUCTION TOLERANCE OF ±0.5%. HOWEVER, THESE SLOPES MAY BE FLATTER WHEN WARRANTED BY SURROUNDING CONDITIONS.
4. IF THE ROAD PROFILE EXCEEDS 4%, THE HIGH SIDE TRANSITION LENGTH UNDER ANY CONDITIONS NEED NOT EXCEED 15'.
5. IN NO CASE WHERE A STOP LINE IS WARRANTED, SHALL A RAMP BE PLACED ON THE TRAFFIC APPROACH SIDE OF THAT STOP LINE.
6. FIXED OBJECTS (I.E. UTILITY POLES, HYDRANTS, SIGNS, SIGNAL FOUNDATIONS, ETC.) MUST NOT ENCR OACH UPON ANY PART OF THE WHEELCHAIR RAMP INCLUDING TRANSITION SLOPES.
7. AT NO TIME IS ANY PART OF THE WHEELCHAIR RAMP, EXCLUDING CURB TRANSITIONS, TO BE LOCATED OUTSIDE THE CROSSWALK OR PEDESTRIAN TRAVEL PATH. THE WHEELCHAIR RAMP ENTRANCE IS TO BE CENTERED IN THE CROSSWALK OR PEDESTRIAN TRAVEL PATH WHENEVER POSSIBLE.
8. CATCH BASINS WHICH ARE IN THE VICINITY OF A WHEELCHAIR RAMP SHALL BE LOCATED UPGRADE OF THE RAMP ENTRANCE.
9. THE ENTRANCE OF A WHEELCHAIR RAMP SHALL BE FLUSH WITH THE ROADWAY.
10. TESTING SURFACE: WHEN TESTING WITH A STRAIGHTEDGE PLACED PARALLEL TO THE LINE OF THE SLOPE THERE SHALL BE NO DEVIATION FROM A TRUE SURFACE IN EXCESS OF 1/4".
11. SIDEWALK CONSTRUCTION SHALL BE IN CONFORMANCE WITH MASS HIGHWAY CONSTRUCTION STANDARDS FOR WHEELCHAIR RAMPS.

**TYPICAL WHEELCHAIR RAMP CONDITION**

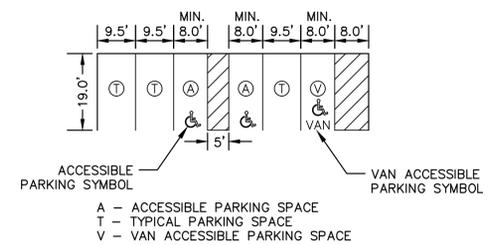
N.T.S.



- NOTE :
1. THE USE OF FLEXIBLE CONNECTIONS IS RECOMMENDED AT THE OUTLET WHERE APPLICABLE.
  2. THE COVER SHOULD BE POSITIONED OVER THE 4"Ø CLEANOUT/VENT PIPE AND THE 4"Ø INLET DOWN PIPE.
  3. THE STORMCEPTOR SYSTEM IS PROTECTED BY ONE OR MORE OF THE FOLLOWING U.S. PATENTS: #4985148, #5498331, #5725760, #5753115, #5849181, #6068765, #6371690.

**STORMCEPTOR STC 450i DETAIL**

N.T.S.



- NOTES:
1. VAN ACCESSIBLE SPACES MUST HAVE AN 8' WIDE MINIMUM ACCESS AISLE.
  2. ALL OTHER ACCESS AISLES SHALL BE 5' WIDE, MINIMUM.
  3. TYPICAL PARKING STALLS SHALL BE 9' WIDE UNLESS NOTED ON THE PLANS.
  4. ACCESSIBLE SPACES AND AISLES 2% MAX SLOPE IN ANY DIRECTION.
  5. RE-NUMBER PARKING SPACES WHERE APPLICABLE.

**TYPICAL LINE STRIPING DETAIL**

N.T.S.

100% CONSTRUCTION DOCUMENTS  
EOHLC PROJECT #197161

**DETAILS II**

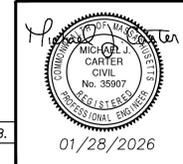
PARKING LOT & WALKWAY UPGRADES  
NORTH ATTLEBOROUGH HOUSING AUTHORITY  
NORTH ATTLEBOROUGH, MASSACHUSETTS

**GCG ASSOCIATES, INC.**  
WILMINGTON MASSACHUSETTS

SCALE: NOT TO SCALE DATE: NOVEMBER 12, 2025

JOB NO. \FILE NAME: 2507-100R_CD - CIRCLE CT. NOI PLAN SET-EDITED  
DESIGNED BY: W.R.H.  
DRAWN BY: W.R.H.  
CHECKED BY: M.J.C.

PLAN NO.  
8 OF 10



REV.	DATE	DESCRIPTION	BY
1	1/28/26	REVIEW COMMENTS	L.P.B.

Title Block Details: Plan Set: GCG 2025.01.28. Rev: 1.0. Drawn By: W.R.H.

**CULTEC RECHARGER® 150XLHD SPECIFICATIONS**

**GENERAL**  
CULTEC RECHARGER® 150XLHD CHAMBERS ARE DESIGNED FOR UNDERGROUND STORMWATER MANAGEMENT. THE CHAMBERS MAY BE USED FOR RETENTION, RECHARGING, DETENTION OR CONTROLLING THE FLOW OF ON-SITE STORMWATER RUNOFF.

**CHAMBER PARAMETERS**  
1. THE CHAMBERS SHALL BE MANUFACTURED BY CULTEC, OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5832)  
2. THE CHAMBERS SHALL BE DESIGNED AND TESTED VIA FINITE ELEMENT ANALYSIS IN ACCORDANCE WITH THE ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". THE LOAD CONFIGURATION SHALL INCLUDE:  
a. INSTANTANEOUS AASHTO DESIGN TRUCK LIVE LOAD AT MINIMUM COVER.  
b. MAXIMUM PERMANENT (50-YEAR) COVER LOAD.  
c. 1-WEEK PARKED AASHTO DESIGN TRUCK LOAD.

3. THE INSTALLED CHAMBER SYSTEM SHALL PROVIDE RESISTANCE TO THE LOADS AND LOAD FACTORS AS DEFINED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS SECTION 12.12, WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS. THE STRUCTURAL DESIGN OF THE CHAMBERS SHALL INCLUDE THE FOLLOWING:  
a. THE MINIMUM SAFETY FACTOR FOR LIVE LOADS SHALL BE 1.75.  
b. THE MINIMUM SAFETY FACTOR FOR DEAD LOADS SHALL BE 1.95.

4. THE CHAMBER SHALL BE VACUUM THERMOFORMED OF HIGH MOLECULAR WEIGHT HIGH DENSITY POLYETHYLENE (HMWHDPE) WITH A BLACK INTERIOR AND BLUE EXTERIOR  
5. THE CHAMBER SHALL BE ARCHED IN SHAPE.  
6. THE CHAMBER SHALL BE OPEN-BOTTOMED.

7. THE CHAMBER SHALL BE JOINED USING AN INTERLOCKING OVERLAPPING RIB METHOD. CONNECTIONS MUST BE FULLY SHOULDERED OVERLAPPING RIBS, HAVING NO SEPARATE COUPLINGS OR SEPARATE END WALLS.  
8. THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC RECHARGER 150XLHD SHALL BE 18 INCHES (457 mm) TALL, 30 INCHES (762 mm) WIDE AND 11 FEET (3.35 m) LONG. THE INSTALLED LENGTH OF A JOINED RECHARGER 150XLHD SHALL BE 10.25 FEET (3.12 m).

9. MAXIMUM INLET OPENING ON THE CHAMBER ENDWALL IS 12 INCHES (300 mm) HDPE OR 15" (375 mm) SMOOTH-WALL PVC.  
10. THE CHAMBER SHALL HAVE TWO SIDE PORTALS TO ACCEPT CULTEC HVLV FC-24 FEED CONNECTORS TO CREATE AN INTERNAL MANHOLD. THE NOMINAL INSIDE DIMENSIONS OF EACH SIDE PORTAL SHALL BE 8.5 INCHES (216 mm) HIGH BY 12 INCHES (304 mm) WIDE. MAXIMUM ALLOWABLE OUTER DIAMETER (O.D.) PIPE SIZE IN THE SIDE PORTAL IS 10.25 INCHES (260 mm).

11. THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC HVLV FC-24 FEED CONNECTOR SHALL BE 12 INCHES (305 mm) TALL, 18 INCHES (457 mm) WIDE AND 24 INCHES (610 mm) LONG.  
12. THE NOMINAL STORAGE VOLUME OF THE RECHARGER 150XLHD CHAMBER SHALL BE 2.65 CF/FT (0.245 m³/m) WITHOUT STONE. THE NOMINAL STORAGE VOLUME OF A JOINED RECHARGER 150XLHD SHALL BE 27.16 FT³ / UNIT (0.77 m³ / UNIT) WITHOUT STONE.

13. THE NOMINAL STORAGE VOLUME OF THE HVLV FC-24 FEED CONNECTOR SHALL BE 0.913 FT³ / FT (0.085 m³ / m) - WITHOUT STONE.  
14. THE RECHARGER 150XLHD CHAMBER SHALL HAVE THIRTY DISCHARGE HOLES BORED INTO THE SIDEWALLS OF THE UNITS CORE TO PROMOTE LATERAL CONVEYANCE OF WATER.  
15. THE RECHARGER 150XLHD CHAMBER SHALL HAVE 20 CORRUGATIONS.

16. THE ENDWALL OF THE CHAMBER, WHEN PRESENT, SHALL BE AN INTEGRAL PART OF THE CONTINUOUSLY FORMED UNIT. SEPARATE END PLATES CANNOT BE USED WITH THIS UNIT.  
17. THE RECHARGER 150XLHD STAND ALONE UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING TWO FULLY FORMED INTEGRAL ENDWALLS AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS.  
18. THE RECHARGER 150XLHD STARTER UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING ONE FULLY FORMED INTEGRAL ENDWALL AND ONE PARTIALLY FORMED INTEGRAL ENDWALL WITH A LOWER TRANSFER OPENING OF 10 INCHES (254 mm) HIGH X 20.5 INCHES (521 mm) WIDE.

19. THE RECHARGER 150XLHD INTERMEDIATE UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING ONE FULLY OPEN ENDWALL AND ONE PARTIALLY FORMED INTEGRAL ENDWALL WITH A LOWER TRANSFER OPENING OF 10 INCHES (254 mm) HIGH X 20.5 INCHES (521 mm) WIDE.  
20. THE RECHARGER 150XLHD END UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING ONE FULLY FORMED INTEGRAL ENDWALL AND ONE FULLY OPEN END WALL AND HAVING NO SEPARATE END PLATES OR END WALLS.

21. THE HVLV FC-24 FEED CONNECTOR MUST BE FORMED AS A WHOLE CHAMBER HAVING TWO OPEN END WALLS AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS. THE UNIT SHALL FIT INTO THE SIDE PORTALS OF THE RECHARGER 150XLHD AND ACT AS CROSS FEED CONNECTIONS.  
22. CHAMBERS MUST HAVE HORIZONTAL STIFFENING FLEX REDUCTION STEPS BETWEEN THE RIBS.  
23. THE CHAMBER SHALL HAVE A RAISED INTEGRAL CAP AT THE TOP OF THE ARCH IN THE CENTER OF EACH UNIT TO BE USED AS AN OPTIONAL INSPECTION PORT OR CLEAN-OUT.  
24. THE UNITS MAY BE TRIMMED TO CUSTOM LENGTHS BY CUTTING BACK TO ANY CORRUGATION.  
25. THE CHAMBER SHALL BE MANUFACTURED IN AN ISO 9001:2008 CERTIFIED FACILITY.  
26. MAXIMUM ALLOWED COVER OVER TOP OF UNIT SHALL BE 12 FEET (3.65 m).  
27. THE INSTALLED CHAMBER SYSTEM SHALL BE STRUCTURALLY DESIGNED TO PROVIDE RESISTANCE TO LIVE LOADS AS DEFINED BY THE AASHTO H-20/HL-93 SPECIFICATION WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS.

**CULTEC HVLV FC-24 FEED CONNECTOR PRODUCT SPECIFICATIONS**

**GENERAL**  
CULTEC HVLV FC-24 FEED CONNECTORS ARE DESIGNED TO CREATE AN INTERNAL MANHOLD FOR CULTEC RECHARGER 150XLHD STORMWATER CHAMBERS.

**CHAMBER PARAMETERS**  
1. THE CHAMBERS SHALL BE MANUFACTURED BY CULTEC, OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5832)  
2. THE CHAMBER SHALL BE VACUUM THERMOFORMED OF HIGH MOLECULAR WEIGHT HIGH DENSITY POLYETHYLENE (HMWHDPE) WITH A BLACK INTERIOR AND BLUE EXTERIOR.  
3. THE CHAMBER SHALL BE ARCHED IN SHAPE.  
4. THE CHAMBER SHALL BE OPEN-BOTTOMED.

5. THE NOMINAL CHAMBER DIMENSIONS OF THE HVLV FC-24 FEED CONNECTOR SHALL BE 12 INCHES (305 mm) TALL, 18 INCHES (457 mm) WIDE AND 24 INCHES (610 mm) LONG.  
6. THE NOMINAL STORAGE VOLUME OF THE HVLV FC-24 FEED CONNECTOR SHALL BE 0.913 FT³ / FT (0.085 m³ / m) - WITHOUT STONE.  
7. THE HVLV FC-24 FEED CONNECTOR CHAMBER SHALL HAVE 2 CORRUGATIONS.

8. THE HVLV FC-24 FEED CONNECTOR MUST BE FORMED AS A WHOLE CHAMBER HAVING TWO OPEN END WALLS AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS. THE UNIT SHALL FIT INTO THE SIDE PORTALS OF THE CULTEC RECHARGER STORMWATER CHAMBER AND ACT AS CROSS FEED CONNECTIONS CREATING AN INTERNAL MANHOLD.  
9. THE CHAMBER SHALL BE DESIGNED TO WITHSTAND TRAFFIC LOADS WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS.  
10. THE CHAMBER SHALL BE MANUFACTURED IN AN ISO 9001:2008 CERTIFIED FACILITY.

**CULTEC NO. 410™ NON-WOVEN GEOTEXTILE**  
CULTEC NO. 410™ NON-WOVEN GEOTEXTILE MAY BE USED WITH CULTEC CONTACTOR® AND RECHARGER® STORMWATER INSTALLATIONS TO PROVIDE A BARRIER THAT PREVENTS SOIL INTRUSION INTO THE STONE.

**GEOTEXTILE PARAMETERS**  
1. THE GEOTEXTILE SHALL BE PROVIDED BY CULTEC, OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5832)  
2. THE GEOTEXTILE SHALL BE BLACK IN APPEARANCE.  
3. THE GEOTEXTILE SHALL HAVE A TYPICAL WEIGHT OF 4.5 OZ/SY (142 G/M²).  
4. THE GEOTEXTILE SHALL HAVE A TENSILE STRENGTH VALUE OF 120 LBS (533 N) PER ASTM D4632 TESTING METHOD.

5. THE GEOTEXTILE SHALL HAVE AN ELONGATION @ BREAK VALUE OF 50% PER ASTM D4632 TESTING METHOD.  
6. THE GEOTEXTILE SHALL HAVE A MAXIMUM BURST VALUE OF 225 PSI (1551 KPA) PER ASTM D3786 TESTING METHOD.  
7. THE GEOTEXTILE SHALL HAVE A PUNCTURE STRENGTH VALUE OF 65 LBS (289 N) PER ASTM D4833 TESTING METHOD.  
8. THE GEOTEXTILE SHALL HAVE A CBR PUNCTURE VALUE OF 340 LBS (1513 N) PER ASTM D6241 TESTING METHOD.

9. THE GEOTEXTILE SHALL HAVE A TRAPEZOIDAL TEAR VALUE OF 91 LBS (222 N) PER ASTM D4533 TESTING METHOD.  
10. THE GEOTEXTILE SHALL HAVE A K05 VALUE OF 10 U.S. SIEVE (0.212 MM) PER ASTM D4751 TESTING METHOD.  
11. THE GEOTEXTILE SHALL HAVE A PERMITTIVITY VALUE OF 1.7 SEC-1 PER ASTM D4491 TESTING METHOD.  
12. THE GEOTEXTILE SHALL HAVE A WATER FLOW RATE VALUE OF 135 GAL/MIN/SQ (5500 L/MIN/SQ) PER ASTM D4491 TESTING METHOD.  
13. THE GEOTEXTILE SHALL HAVE A UV STABILITY @ 500 HOURS VALUE OF 70% PER ASTM D4355 TESTING METHOD.

**CULTEC AFAB-HPF™ WOVEN GEOTEXTILE**  
CULTEC AFAB-HPF WOVEN GEOTEXTILE IS DESIGNED AS AN UNDERLAYMENT TO PREVENT SCOURING CAUSED BY WATER MOVEMENT WITHIN THE CULTEC CHAMBERS AND FEED CONNECTORS UTILIZING THE CULTEC MANHOLD FEATURE. IT MAY ALSO BE USED AS A COMPONENT OF THE CULTEC SEPARATOR ROW TO ACT AS A BARRIER TO PREVENT SOIL/CONTAMINANT INTRUSION INTO THE STONE WHILE ALLOWING FOR MAINTENANCE.

**GEOTEXTILE PARAMETERS**  
1. THE GEOTEXTILE SHALL BE PROVIDED BY CULTEC, OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5832)  
2. THE GEOTEXTILE SHALL BE BLACK IN APPEARANCE.  
3. THE GEOTEXTILE SHALL HAVE A TENSILE STRENGTH OF 320 X 320 LBS (1,420 X 1,420 N) PER ASTM D4632 TESTING METHOD.  
4. THE GEOTEXTILE SHALL HAVE AN ELONGATION @ BREAK RESISTANCE OF 15 X 15% PER ASTM D4632 TESTING METHOD.

5. THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE OF 3,563 X 3,563 LBS/FT (52 X 52 KN/M) PER ASTM D4595 TESTING METHOD.  
6. THE GEOTEXTILE SHALL HAVE A CBR PUNCTURE RESISTANCE OF 1,500 LBS (6,670 N) PER ASTM D6241 TESTING METHOD.  
7. THE GEOTEXTILE SHALL HAVE A TRAPEZOIDAL TEAR RESISTANCE OF 120 X 120 LBS (540 X 540 N) PER ASTM D4533 TESTING METHOD.  
8. THE GEOTEXTILE SHALL HAVE AN APPARENT OPENING SIZE OF 30 US STD. SIEVE (0.60 MM) PER ASTM D4751 TESTING METHOD.  
9. THE GEOTEXTILE SHALL HAVE A PERMITTIVITY RATING OF 0.2 SEC-1 PER ASTM D4491 TESTING METHOD.  
10. THE GEOTEXTILE SHALL HAVE A WATER FLOW RATING OF 22 GPM/FT² (900 LPM/M²) PER ASTM D4491 TESTING METHOD.  
11. THE GEOTEXTILE SHALL HAVE A UV RESISTANCE OF 70% @ 500 HRS. PER ASTM D4355 TESTING METHOD.

12. THE GEOTEXTILE SHALL HAVE A PERMITTIVITY VALUE OF 1.7 SEC-1 PER ASTM D4491 TESTING METHOD.  
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71. THE GEOTEXTILE SHALL HAVE A K05 VALUE OF 10 U.S. SIEVE (0.212 MM) PER ASTM D4751 TESTING METHOD.  
72. THE GEOTEXTILE SHALL HAVE A PERMITTIVITY VALUE OF 1.7 SEC-1 PER ASTM D4491 TESTING METHOD.  
73. THE GEOTEXTILE SHALL HAVE A WATER FLOW RATE VALUE OF 135 GAL/MIN/SQ (5500 L/MIN/SQ) PER ASTM D4491 TESTING METHOD.  
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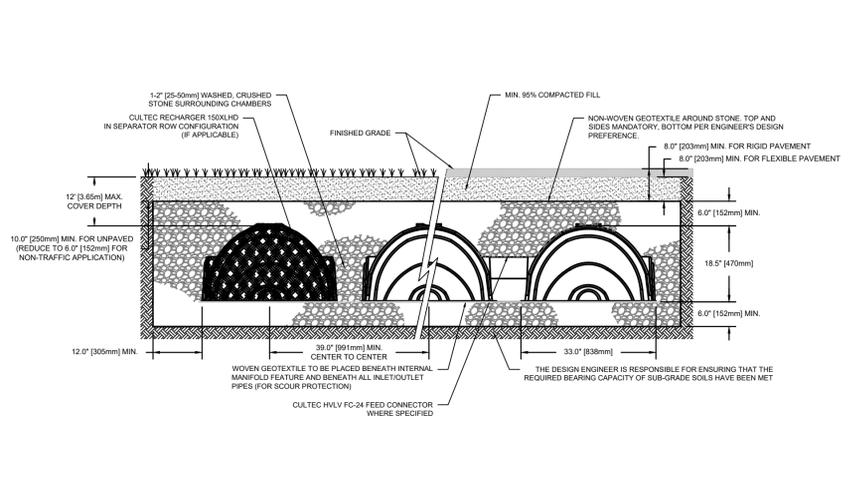
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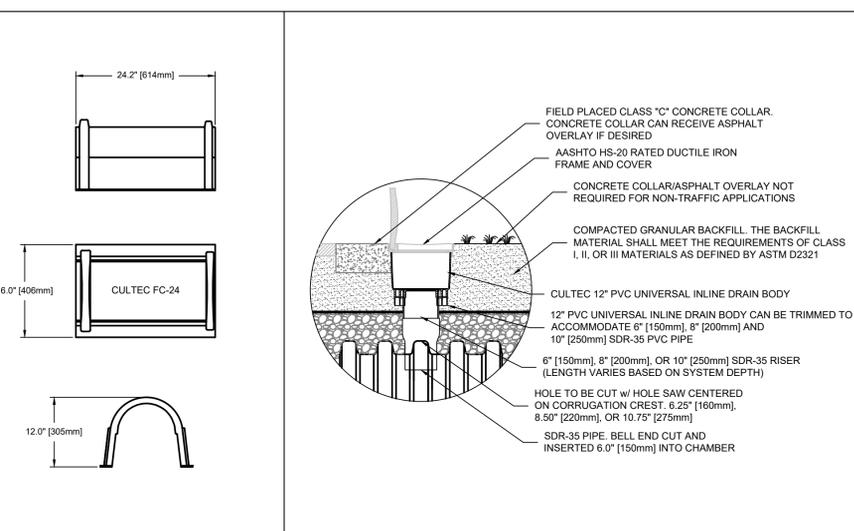
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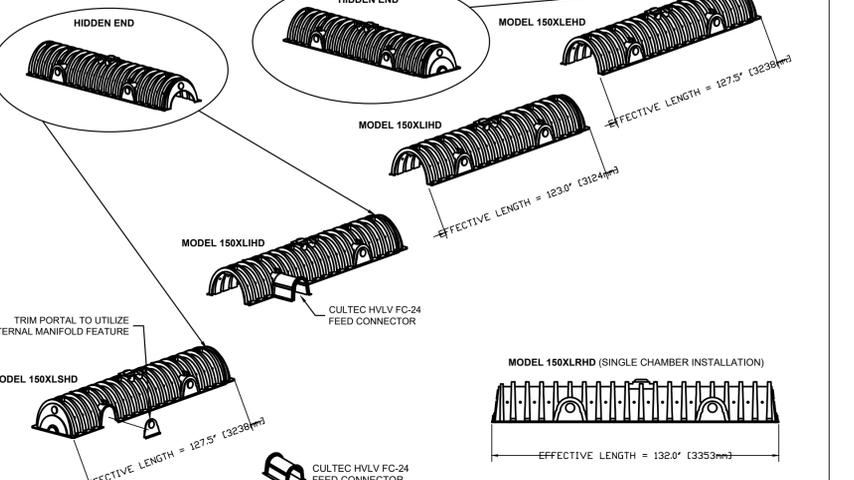
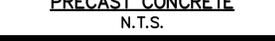
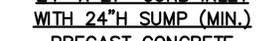
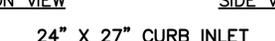
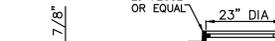
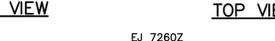
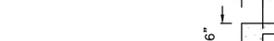
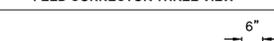


**CULTEC RECHARGER 150XLHD CROSS SECTION**

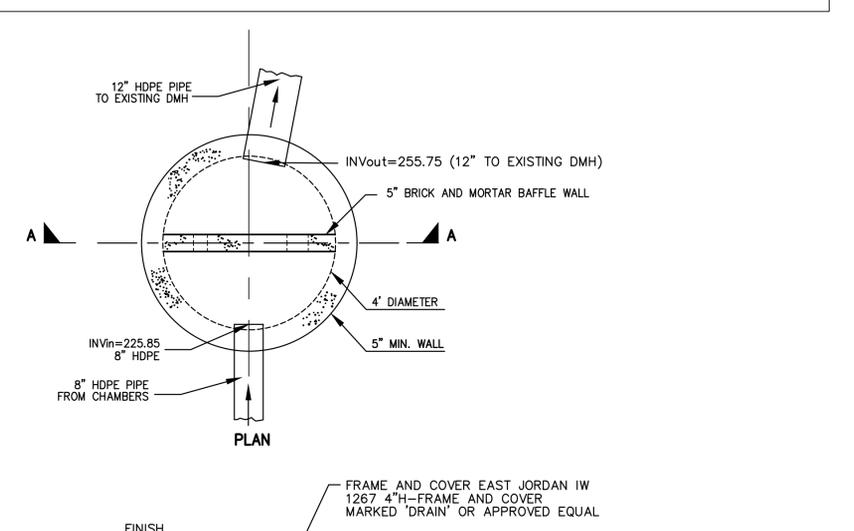


**CULTEC HVLV FC-24 FEED CONNECTOR THREE VIEW**

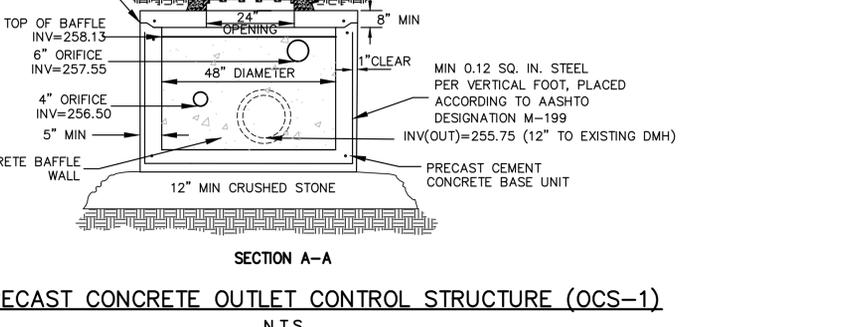
**OPTIONAL CULTEC INSPECTION PORT - ZOOM DETAIL**



**CULTEC RECHARGER 150XLHD HEAVY DUTY TYPICAL INTERLOCK**

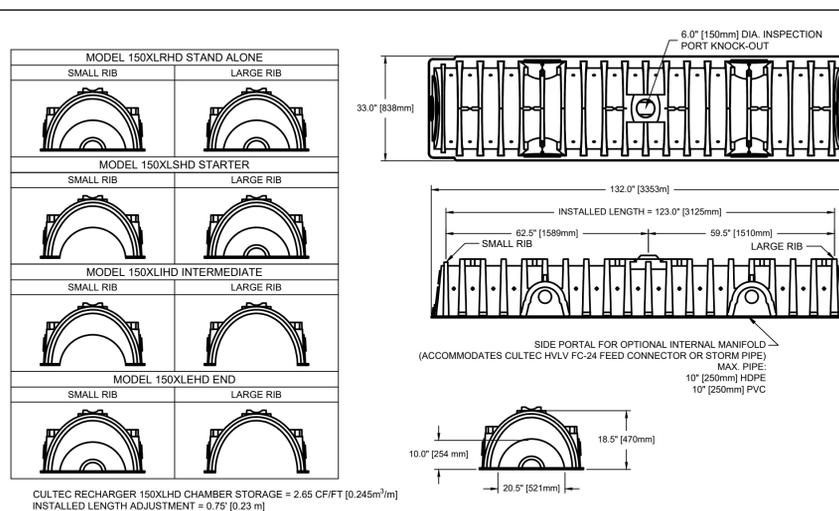


**PRECAST CONCRETE OUTLET CONTROL STRUCTURE (OCS-1)**



**PRECAST CONCRETE OUTLET CONTROL STRUCTURE (OCS-1) N.T.S.**

**GENERAL NOTES**



CULTEC RECHARGER 150XLHD CHAMBER STORAGE = 2.65 CF/FT [0.245m³/m] INSTALLED LENGTH ADJUSTMENT = 0.75' [0.23 m]

**CULTEC RECHARGER 150XLHD HEAVY DUTY THREE VIEW**



24\"/>

- NOTES:**  
1. CONCRETE: 5,000 PSI MINIMUM AFTER 28 DAYS.  
2. DESIGNED FOR H-20 LOADING.  
3. REINFORCEMENT ASTM A-615 GRADE 60, 1\"/>

REV.	DATE
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**EROSION AND SEDIMENT CONTROL MAINTENANCE**

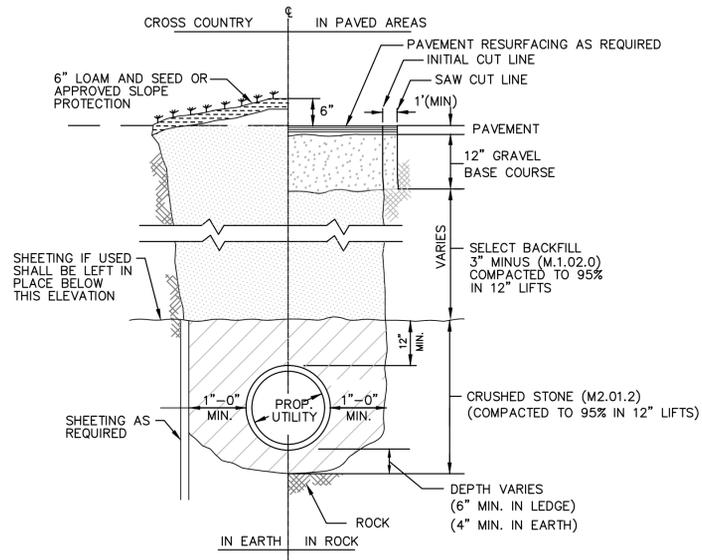
DURING CONSTRUCTION, AS SMALL AN AREA OF SOIL AS POSSIBLE SHOULD BE EXPOSED OR AS SHORT A TIME AS POSSIBLE. AFTER CONSTRUCTION, GRADE, RESPREAD TOPSOIL, AND STABILIZE SOIL BY SEEDING AND MULCHING AS TO PREVENT EROSION.

ALL SEDIMENTATION AND EROSION CONTROL DEVICES SHALL BE INSPECTED DURING CONSTRUCTION ON A DAILY BASIS AND FOLLOWING ALL STORMS BY THE RESIDENT ENGINEER. THE CONTRACTOR SHALL MAINTAIN AND MAKE REPAIRS AND REMOVE SEDIMENT AS REQUESTED BY THE RESIDENT ENGINEER. THIS WORK SHALL BE PERFORMED WITHIN 24 HOURS OF REQUEST.

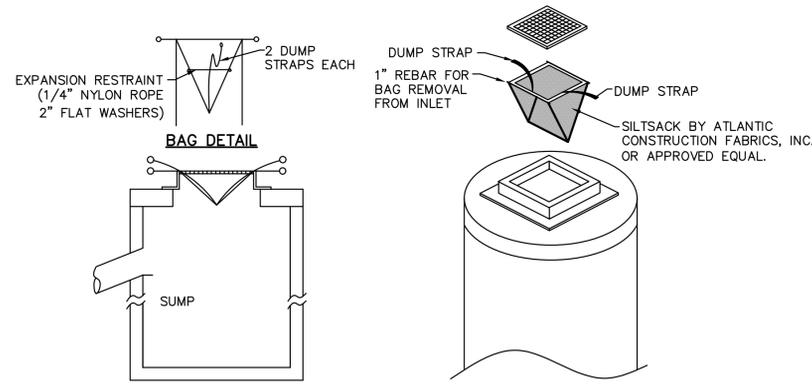
THE CONTRACTOR SHALL CLEAN SEDIMENT AND DEBRIS FROM ALL DRAINAGE STRUCTURES, AND PIPES AT THE COMPLETION ON CONSTRUCTION, THE CONTRACTOR SHALL REPAIR ALL ERODED AREAS AND ENSURE A GOOD STAND OF TURF IS ESTABLISHED THROUGHOUT. THE CONTRACTOR SHALL REPAIR ALL ERODED OR DISPLACED RIPRAP, AND CLEAN SEDIMENT COVERED STONES.

TRENCHES WITHIN PAVED ROADWAY TO BE CLOSED WITH 3" TEMPORARY PAVEMENT AT THE END OF EACH WORK DAY.

CONTRACTOR TO PERFORM STREET SWEEPING AT THE END OF EACH WORK DAY.



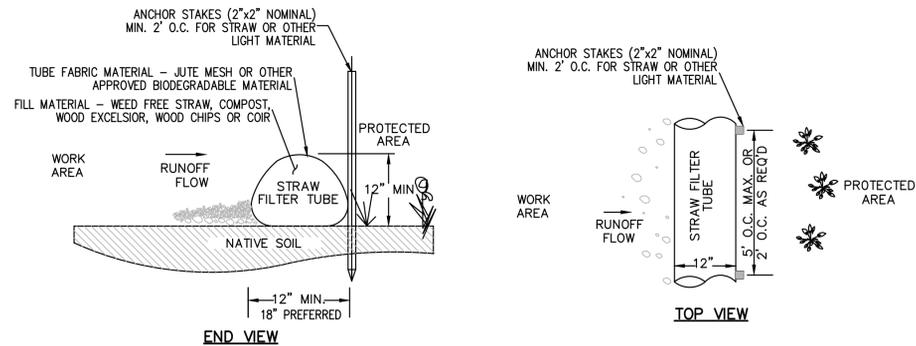
**TYPICAL DRAIN TRENCH DETAIL**  
N.T.S.



**INSTALLATION DETAIL**

1. SILT SACKS SHALL BE INSTALLED IN ALL CATCH BASINS DURING CONSTRUCTION PERIOD.
2. INSPECTION SHALL BE WEEKLY AND REPAIR/REPLACEMENT MADE PROMPTLY AS NEEDED.
3. SILT SACKS SHALL BE KEPT CLEAN AND FREE OF DEBRIS.

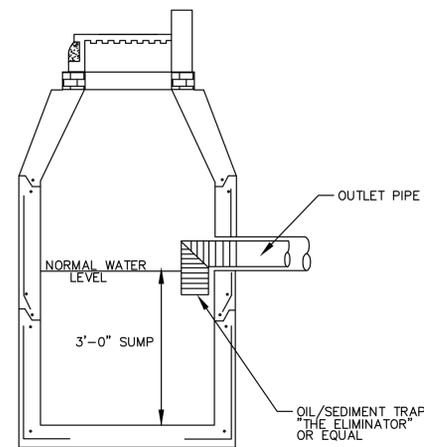
**SILTSACK DETAIL**  
N.T.S.



**NOTES:**

1. TUBES MAY BE FILLED ON SITE OR SHIPPED.
2. ENSURE PROPER LOCATION AT SITE FOR EFFECTIVENESS.
3. TUBES SHALL BE PLACED AND STAKED IN PLACE AS REQUIRED TO ENSURE STABILITY AGAINST WATER FLOWS.
4. TUBES FILLED WITH LIGHT MATERIAL SHALL BE STAKED AT A MAXIMUM OF 2 FEET ON CENTER. FOR HEAVIER MATERIAL, 5 FEET ON CENTER.
5. TUBES SHALL BE TAMPED TO ENSURE GOOD CONTACT WITH SOIL.
6. INSPECT AFTER EACH RAINFALL OR DAILY DURING RAINFALL EVENTS. CORRECT ALL DEFICIENCIES IMMEDIATELY.
7. FAILURE INCLUDES BUT IS NOT LIMITED TO WASHOUT, OVERTOPPING, CLOGGING, AND EROSION. IF OVERTOPPING OR WASHOUT OCCURS, NEW FILTER TUBES WITH ADDITIONAL STAKING OR STRAW MATERIAL SHALL BE INSTALLED AS DIRECTED BY THE ENGINEER.
8. FILTER TUBES SHALL BE REMOVED ONCE SITE WORK IS COMPLETE, SITE IS STABLE, ADEQUATE GROWTH HAS BEEN ESTABLISHED AND AS DIRECTED BY THE ENGINEER. TUBE FABRIC SHALL BE CUT, REMOVED AND DISPOSED OF OFF-SITE BY THE CONTRACTOR AT NO ADDITIONAL COST.

**STRAW FILTER TUBE DETAIL**



**EXISTING CATCH BASIN**  
NOT TO SCALE

100% CONSTRUCTION DOCUMENTS  
EOHLC PROJECT #197161

**DETAILS IV**

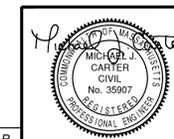
**PARKING LOT & WALKWAY UPGRADES  
NORTH ATTLEBOROUGH HOUSING AUTHORITY  
NORTH ATTLEBOROUGH, MASSACHUSETTS**

**GCG ASSOCIATES, INC.**

WILMINGTON MASSACHUSETTS

SCALE: NOT TO SCALE DATE: NOVEMBER 12, 2025

JOB NO. \FILE NAME: DESIGNED BY: W.R.H. PLAN NO.  
2507-100R_CD - CIRCLE CT. DRAWN BY: W.R.H.  
NOI PLAN SET-EDITED CHECKED BY: M.J.C. 10 OF 10



01/28/2026

REV.	DATE	DESCRIPTION	BY
1	1/28/26	REVIEW COMMENTS	L.P.B.