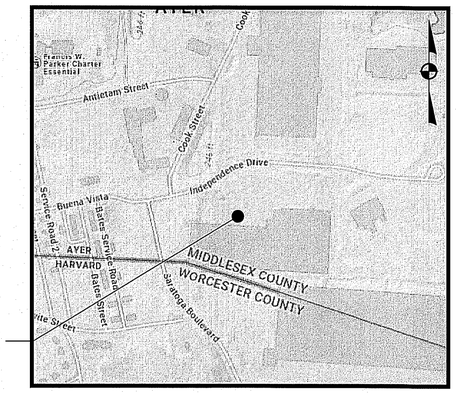
Level 2 Unified Permit Application Documents

July 3, 2025(Revised August 6, 2025)

SMC Ltd. Expansion & Addition

18 Independence Drive (Parcel ID#026.0-0013-0600.0)
Ayer & Harvard (Devens), Massachusetts 01434



PROJECT SITE

SCALE: 1"=500' ±

Applicant:
SMC Limited
18 Independence Drive
Devens, MA 01434
(978) 422-6800

Owner:
Mack Devens Development, LLC.
330 SMC Drive
Somerset, WI 54025
(715) 247-3500

Construction Manager:
McCarty Associates, Inc.
42 Tucker Drive
Leominster, MA 01453
(978) 534-8727

Civil Engineer/Landscape Architect:
McCarty Engineering, Inc.
42 Tucker Drive
Leominster, MA 01453
(978) 534-1318

Surveyor:
Tauper Land Survey, Inc.
701 Main Street
Oxford, MA 01537
(508) 987-2266

Architect:
J. Ferrera Associates, Inc.
2 Fern Lane
Sterling, MA 01564
(978) 407-8848

COMMONWEALTH OF MASSACHUSETTS
WESLEY R. FIJS
CIVIL
No. 45866
PROFESSIONAL ENGINEER
8/6/25

APPROVED BY THE DEVENS ENTERPRISE COMMISSION
DATE: _____

APPROVED: DATE:

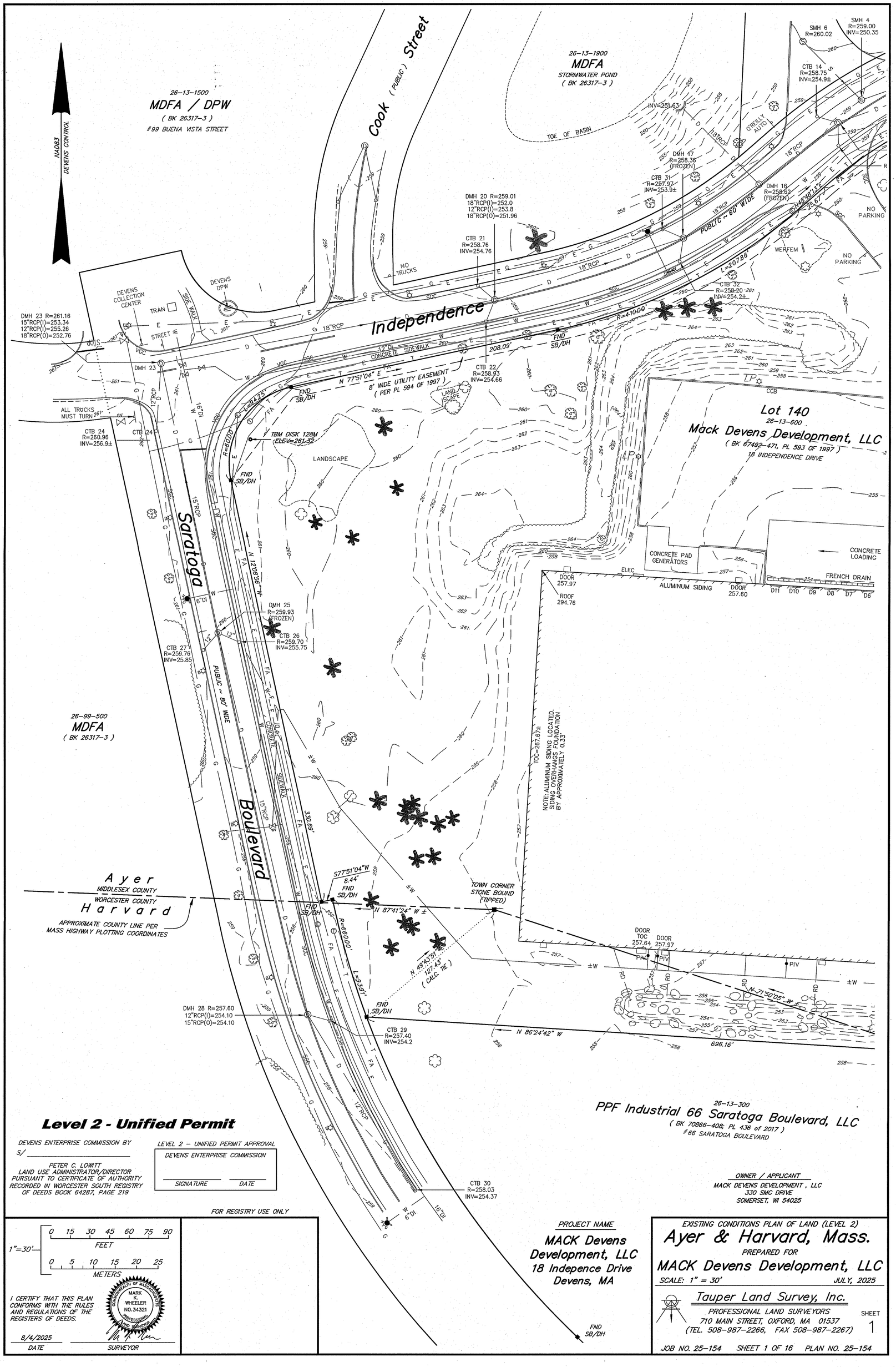
DEVENS ENTERPRISE COMMISSION CHAIRMAN

FOR REGISTRY USE ONLY

OWNER
MACK DEVENS DEVELOPMENT, LLC.
330 SMC DRIVE
SOMERSET, WI 54025

Sheet No. Sheet Title

Project Name
Mack Devens Development, LLC.
18 Independence Drive
Ayer & Harvard, MA
(Devens, MA)
Sheet Title
Cover Sheet
Job No: 127.01.001
File Name: 127.01.001P-CCV01
Date: July 3, 2023



Level 2 - Unified Permit

DEVENS ENTERPRISE COMMISSION BY

S/ _____

PETER C. LOWITT
LAND USE ADMINISTRATOR/DIRECTOR
PURSUANT TO CERTIFICATE OF AUTHORITY
RECORDED IN WORCESTER SOUTH REGISTRY
OF DEEDS BOOK 64287, PAGE 219

LEVEL 2 – UNIFIED PERMIT APPROVAL

DEVENS ENTERPRISE COMMISSION

SIGNATURE _____ DATE _____

FOR REGISTRY USE ONLY

1"=30'

0 15 30 45 60 75 90
FEET

0 5 10 15 20 25
METERS

I CERTIFY THAT THIS PLAN CONFORMS WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS.

COMMONWEALTH OF MASSACHUSETTS
MARK K. WHEELER
NO. 34321
REGISTERED PROFESSIONAL SURVEYOR

8/4/2025
DATE

SURVEYOR

PROJECT NAME

MACK Devens Development, LLC
18 Indepence Drive
Devens, MA

OWNER / APPLICANT
MACK DEVENS DEVELOPMENT , LLC
330 SMC DRIVE
SOMERSET, WI 54025

EXISTING CONDITIONS PLAN OF LAND (LEVEL 2)

Ayer & Harvard, Mass.

PREPARED FOR

MACK Devens Development, LLC

SCALE: 1" = 30' JULY, 2025

Tauper Land Survey, Inc.
PROFESSIONAL LAND SURVEYORS
710 MAIN STREET, OXFORD, MA 01537
(TEL. 508-987-2266, FAX 508-987-2267)

SHEET 1

JOB NO. 25-154 SHEET 1 OF 16 PLAN NO. 25-154

FOR REGISTRY USE ONLY

NAD83
DEVENS CONTROL

26-13-1500
MDFA / DPW
(BK 26317-3)
#99 BUENA VISTA STREET

26-13-1900
MDFA
STORMWATER POND
(BK 26317-3)

26-13-1300
O'Reilly Auto Enterpises, LLC
(BK 63222-533; PL 714 OF 2000)
#15 INDEPENDENCE DRIVE

Cook (PUBLIC) Street

Drive

Independence

Saratoga

PUBLIC ~ 60' WIDE

PUBLIC ~ 80' WIDE

Lot 140
26-13-600
Mack Devens Development, LLC
(BK 67492-471, PL 593 OF 1997)
18 INDEPENDENCE DRIVE

8' WIDE UTILITY EASEMENT
(PER PL 594 OF 1997)

TOE OF BASIN

N 3024425.23
E 629110.69
FND SB/DH
EL=260.95

TBM DISK 128M
ELEV=261.32

SMH 1 R=259.41
SMH 2 R=260.19 INV=249.88
SMH 3 R=259.91 INV=250.21
SMH 4 R=259.00 INV=250.35
SMH 6 R=260.02
DMH 4 R=260.20 INV=249.55
DMH 7 R=260.20 INV=249.45
DMH 8 R=259.60 INV=249.06
DMH 11 R=260.02 (FROZEN)
DMH 12 R=259.49 INV'S=250.26 24"RCP(I)=252.5± N
DMH 13 R=259.08 18"RCP(I)=251.08 12"RCP(I)=254.6± 18"RCP(O)=250.8
DMH 16 R=258.62 (FROZEN)
DMH 17 R=258.36 (FROZEN) INV=251.63
DMH 20 R=259.01 18"RCP(I)=252.0 12"RCP(I)=253.8 18"RCP(O)=251.96
DMH 25 R=259.93 (FROZEN)
DMH 1 R=256.30 12"HDPE(I)=251.0± 18"HDPE(O)=SILTED
DMH 2 R=255.13 18"(I)251.16 DMH 1 12"(I)=251.36 CTB 3 12"(I)=251.16 BUILD 24"(O)=251.22 DMH4
DMH 5 R=256.46 30"(I)=250.76 DMH 2 15"(I)=250.81 CTB 6 12"(O)=251.36 CTB 5 30"(O)=250.67 DMH7
CTB 9 R=259.30 INV=255.22
CTB 10 R=259.30 INV=255.27
CTB 14 R=258.75 INV=254.9±
CTB 15 R=258.81 254.8±
CTB 21 R=258.76 INV=254.76
CTB 22 R=258.93 INV=254.66
CTB 26 R=259.70 INV=255.75
CTB 27 R=259.76 INV=25.85
CTB 31 R=257.97 INV=253.9±
CTB 32 R=258.20 INV=254.2±
DCTB 3 R=254.94 INV=251.74
DCTB 5 R=256.26 INV=251.58
DCTB 6 R=255.17 INV(O)=251.50

L=273.57'
L=207.86'
R=410.00'
208.09'
N 77°51'04" E
N 12°05'56" W
330.69'
R=60.00'
S 86°24'42" E
553.10'

Level 2 - Unified Permit

DEVENS ENTERPRISE COMMISSION BY
S/ _____
PETER C. LOWITT
LAND USE ADMINISTRATOR/DIRECTOR
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DEVENS ENTERPRISE COMMISSION
_____ SIGNATURE
_____ DATE

OWNER / APPLICANT
MACK DEVENS DEVELOPMENT, LLC
330 SMC DRIVE
SOMERSET, WI 54025

1"=30'
0 15 30 45 60 75 90 FEET
0 5 10 15 20 25 METERS

I CERTIFY THAT THIS PLAN CONFORMS WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS.

COMMONWEALTH OF MASSACHUSETTS
MARK K. WHEELER
NO. 34321
PROFESSIONAL LAND SURVEYOR

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SURVEYOR

PROJECT NAME
MACK Devens Development, LLC
18 Indepence Drive
Devens, MA

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Ayer & Harvard, Mass.
PREPARED FOR
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SCALE: 1" = 30' JULY, 2025

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(TEL. 508-987-2266, FAX 508-987-2267)

SHEET 2

JOB NO. 25-154 SHEET 2 OF 16 PLAN NO. 25-154

NOTE: DURING AND AFTER THE CONSTRUCTION PERIOD, THE RESPONSIBLE PARTY FOR THE OPERATION AND MAINTENANCE OF THE SITE WILL BE THE PROPERTY OWNER / APPLICANT.

PROJECT DESCRIPTION
THE SITE CONTAINS APPROXIMATELY 21.6 ACRES OF LAND.
THE PROPOSED ADDITION IS APPROXIMATELY 60,214 SQUARE FOOT (FOOTPRINT) ALONG WITH ASSOCIATED PARKING, LANDSCAPING AND UTILITIES. THE TOTAL DISTURBED AREA IS APPROXIMATELY 4.8 ACRES.

CONSTRUCTION PROCESS
A SIGN FOR ALL JOB NOTICES MUST BE POSTED CONSPICUOUSLY NEAR THE MAIN CONSTRUCTION ENTRANCE TO THE SITE.
BEFORE CONSTRUCTION BEGINS, SILTATION CONTROL BARRIERS CONSISTING OF SILT FENCING ATTACHED TO WOOD POSTS AND BACKED BY STAKED STRAW WATTLES WILL BE PLACED BETWEEN THE WORK AREAS AND RESOURCE AREAS. ADDITIONAL SILTATION CONTROL BARRIERS WILL BE INSTALLED AROUND THE PROPOSED DRAINAGE AND AT OTHER CRITICAL LOCATIONS.

THE CONTRACTOR WILL RECORD:
1) DATES WHEN MAJOR GRADING ACTIVITIES OCCUR;
2) DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE; AND
3) DATES WHEN STABILIZATION MEASURES ARE INITIATED.

THE TIME OF CONSTRUCTION REQUIRING THE MOST ATTENTION AND CARE OCCURS BETWEEN THE STRIPPING OF NATURAL OVERBURDEN AND THE STABILIZATION OF CONSTRUCTION AREAS. CUT AND FILL AREAS CREATE ADDITIONAL RISK BY INCREASING THE POSSIBILITY OF STORMWATER RUNOFF CAUSING EROSION.
THE CONTRACTOR WILL, AS MUCH AS POSSIBLE, LEAVE NATURAL COVER UNTOUCHED. THE CONTRACTOR WILL LIMIT TO THE SHORTEST TIME POSSIBLE THE TIME THAT SLOPES ARE EXPOSED. THE FINAL STABILIZATION WILL BE COMPLETED AS EARLY AS CONSTRUCTION ACTIVITIES WILL ALLOW. DURING THE TIMES BETWEEN CLEARING AND LANDSCAPING, SLOPES WILL BE STABILIZED WITH A COMBINATION OF RIP-RAP, STRAW MULCH, TEMPORARY GRASS SEEDING AND OTHER MEASURES AS NECESSARY TO PREVENT ANY SIGNIFICANT EROSION OF SOILS.

WHEN NECESSARY, THE CONTRACTOR SHALL IMPLEMENT STRUCTURAL PRACTICES TO DIVERT FLOWS FROM EXPOSED SOILS, RETAIN/DETAIN FLOWS, OR OTHERWISE LIMIT RUNOFF AND THE DISCHARGE OF POLLUTANTS FROM EXPOSED AREAS OF THE SITE. SUCH MEASURES MUST BE DESIGNED AND INSTALLED IN COMPLIANCE WITH APPLICABLE FEDERAL, STATE OR LOCAL REQUIREMENTS.
ALL SOLID MATERIALS SUCH AS WASHINGS FROM CONCRETE TRUCKS, BUILDING MATERIALS, OR SURPLUS CONCRETE, SHALL NOT BE DIRECTED TO ANY DRAINAGE SYSTEM OR WETLAND RESOURCE AREA.
IN CONJUNCTION WITH THE SITE GRADING PROCESS, A NUMBER OF SEDIMENTATION CONTROL PROCEDURES WILL BE FOLLOWED. THE OBJECT OF THE PROCEDURES IS TO PREVENT THE EROSION OF SOILS AND THE TRANSPORT OF SEDIMENTS TO THE RESOURCE AREAS AND OFF THE SITE.

THE PROPONENT SHALL MEET THE US EPA CONSTRUCTION GENERAL PERMIT REQUIREMENTS.

STABILIZATION
TEMPORARY AND PERMANENT STABILIZATION OF DISTURBED SURFACES IS THE MOST RELIABLE METHOD OF PREVENTING THE EROSION AND TRANSPORT OF SITE SOILS. TOWARD THAT END, THE AREAS THAT ARE DISTURBED WILL BE PROVIDED TEMPORARY STABILIZATION WITHIN TWO WEEKS AFTER THE LAST DISTURBANCE WHEN:
1) WORK IS NOT COMPLETE IN THAT AREA;
2) WORK WILL REMAIN INCOMPLETE FOR A PERIOD OF TWO WEEKS OR MORE, AND
3) THE PLANTING SEASON HAS NOT BEEN REACHED IN AREAS WHICH WILL BE RE-VEGETATED.

PERMANENT STABILIZATION WILL TAKE PLACE WHEN:
4) WORK IS COMPLETE IN THAT AREA AND
5) THE PLANTING SEASON HAS BEEN REACHED AND AREAS CAN BE REVEGETATED.

BEST MANAGEMENT PRACTICES EMPLOYED
TO GUARD AGAINST THE TRANSPORT OF SOILS TO RESOURCE AREAS, SEVERAL BEST MANAGEMENT PRACTICES (BMPS), WILL BE EMPLOYED. SILTATION CONTROL BARRIERS, SEDIMENT SUMPS, STRAW CHECK DIKES, SWALES, TEMPORARY SETTLING BASINS, VEGETATIVE FILTER STRIPS, SITE ENTRANCE MAT, RIP-RAP OUTLET PROTECTION, FLOCCULANTS WITH JUTE MESH OR OTHER BIOMEDIA, WILL OR MAY BE USED ON THIS SITE AS APPROPRIATE TO THE NEEDS OF EROSION CONTROL. SOME OF THESE ITEMS, SUCH AS SEDIMENT SUMPS, ARE TEMPORARY. OTHER FEATURES, SUCH AS CATCH BASINS AND AREA DRAINS ARE PERMANENT.

SEDIMENT FROM SEDIMENT TRAPS OR SEDIMENTATION PONDS MUST BE REMOVED WHEN DESIGN CAPACITY HAS BEEN REDUCED BY 50 PERCENT.

SOILS
BASED ON NCRS WEB SOIL SURVEY THE PROJECT AREA CONTAINS CHARLTON-HOLLIS ROCK OUTCROP, WINDSOR LOAMY SAND, AND UDORTHENTS.

INSPECTION AND MAINTENANCE OF EROSION CONTROLS

1) AT ALL TIMES, SILTATION FABRIC FENCING, STAKES AND FILTER SOCKS SUFFICIENT TO CONSTRUCT AN EROSION CONTROL BARRIER A MINIMUM 100 FEET LONG WILL BE STOCKPILED ON THE SITE IN ORDER TO REPAIR ESTABLISHED BARRIERS THAT MAY HAVE BEEN DAMAGED OR BREACHED.

2) THE APPLICANT WILL DESIGNATE AN INSPECTOR, A PERSON OR ENTITY OTHER THAN THE SITE CONTRACTOR. THE INSPECTOR MUST BE ACCESSIBLE SEVEN DAYS A WEEK AND BE RESPONSIBLE FOR INSPECTING AND COORDINATING THE MAINTENANCE AND REPAIR OF ALL EROSION CONTROL SYSTEMS ON THE SITE.

3) AN INSPECTION OF ALL EROSION CONTROL MEASURES SHALL BE CONDUCTED BY THE INSPECTOR AT LEAST ONCE EACH WEEK UNTIL THE COMPLETION OF CONSTRUCTION OF THE PROJECT. THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL SYSTEMS DAILY AND SHALL NOTIFY THE INSPECTOR OF ANY BREACHES OR FAILURES. IN CASE OF ANY NOTED BREACH OR FAILURE, THE CONTRACTOR SHALL IMMEDIATELY MAKE APPROPRIATE REPAIRS.

4) THE INSPECTOR SHALL INSPECT ALL EROSION CONTROL SYSTEMS ON THE SITE BEFORE, DURING AND AFTER ANY STORM EVENT REACHING ONE OF THE FOLLOWING THRESHOLDS:
a) ANY STORM EVENT IN WHICH RAIN IS PREDICTED TO LAST FOR 12 CONSECUTIVE HOURS OR MORE;
b) ANY STORM EVENT FOR WHICH A FLASH FLOOD WATCH OR WARNING IS ISSUED;
c) ANY SINGLE STORM EVENT PREDICTED TO HAVE A CUMULATIVE RAINFALL GREATER THAN 1/2 INCH; OR
d) ANY STORM EVENT NOT MEETING THE PREVIOUS THREE THRESHOLDS BUT WHICH WOULD MARK THE THIRD CONSECUTIVE DAY OF MEASURABLE RAINFALL.

5) THE INSPECTOR SHALL INSPECT EROSION CONTROL MEASURES AT TIMES OF SIGNIFICANT INCREASE IN SURFACE WATER RUNOFF DUE TO RAPID THAWING WHEN THE RISK OF FAILURE OF THOSE MEASURES IS SIGNIFICANT.

6) IN SUCH INSTANCES AS REMEDIAL ACTION IS NECESSARY, THE INSPECTOR SHALL CAUSE TO BE REPAIRED WITHIN THREE DAYS, ANY AND ALL SIGNIFICANT DEFICIENCIES IN EROSION CONTROL MEASURES.

EROSION CONTROL DEVICES

1) CONSTRUCTION ENTRANCE BERM
A SITE ENTRANCE MAT WILL BE INSTALLED AT THE CONSTRUCTION ENTRANCE TO THE SITE. IT WILL CONSIST OF A 50-FOOT LONG MINIMUM, 6-INCH THICK LAYER OF 2" TO 4" CRUSHED STONE OVERLYING A 6-INCH THICK LAYER OF 3" TO 6" CRUSHED STONE. THE SITE ENTRANCE MAT WILL BE INSTALLED OVER A COMPACTED BASE. THE CRUSHED STONE WILL BE REFRESHED AS NECESSARY.
IF EARTHERN PRODUCTS ARE TRANSPORTED ONTO SURROUNDING STREETS DURING ANY OF THE CONSTRUCTION PHASES, THAN THE SITE CONTRACTOR IS RESPONSIBLE FOR REMOVING THESE EARTHERN PRODUCTS.
2) EROSION CONTROL BARRIERS
THE EROSION CONTROL BARRIERS WILL CONSIST OF AN APPROVED SILTATION FABRIC FENCING INSTALLED ON POSTS ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS AND BACKED BY STAKED UV DEGRADABLE STRAW WATTLES WHERE APPROPRIATE. THE FILTER FABRIC AND FILTER SOCKS WILL BE PLACED IN A MANNER THAT PREVENTS THE PASSAGE OF SOIL MATERIALS UNDER, AROUND OR OVER THE FENCING. ANY SEDIMENT THAT HAS BEEN CAPTURED AGAINST THE BARRIER WILL BE REMOVED PROMPTLY AND THE AREA THAT HAS AREAS OF EROSION WILL BE STABILIZED PROMPTLY.

EROSION CONTROL DEVICES (CONTINUED)

3) FILTER SOCK DIVERSION DIKES
FILTER SOCKS WILL BE PLACED IN OTHER LOCATIONS ON THE SITE IN ORDER TO FURTHER PREVENT THE FLOW OF SEDIMENT FROM THE SITE OR REDUCE THE VELOCITY OF RUNOFF CROSSING OPEN LAND OR RUNNING OFF OF STOCKPILE OR FILL AREAS. FILTER SOCK DIVERSION DIKES WILL ALSO BE PLACED WITHIN DEVELOPING RILLS TO REDUCE SURFACE RUNOFF VELOCITIES AND TO SHIFT THE PATH OF THE WATER FLOW. THE LOCATIONS WHERE FILTER SOCK DIVERSION DIKES ARE INSTALLED WILL BE DETERMINED IN THE FIELD AT THE INSPECTOR'S DISCRETION.
4) SLOPE STABILIZATION
SLOPES OR SURFACES THAT ARE CREATED DUE TO EXCAVATION OR FILLING OF THE SITE WILL BE STABILIZED WITH ONE OR MORE OF THE FOLLOWING:
- STRAW MULCH,
- SOFTWOOD AND HARDWOOD CHIPS, OR

PERMANENT STABILIZATION OF SLOPES AND SURFACES WILL EMPLOY ONE OR MORE OF THE FOLLOWING:
- LOAM AND GRASS,
- SOD,
- OR A COMBINATION OF GRASSES, JUTE NETTING AND/OR PLANTS AND SHRUBBERY.

5) RUNOFF DIVERSION SWALES
RUNOFF DIVERSION SWALES WILL BE PROVIDED IN ORDER TO INTERCEPT SHEET AND CONCENTRATED FLOWS ABOVE AREAS OF CUT, ABOVE ABUTTING PROPERTIES AND ABOVE RESOURCE AREAS. THE SWALES WILL DIRECT RUNOFF TO SEDIMENT SUMPS OR TEMPORARY SETTLING BASINS OR TO DETENTION BASINS.
6) SEDIMENT SUMPS
SEDIMENT SUMPS ARE EXCAVATED DEPRESSIONS 10-FOOT IN DIAMETER AND 2-FEET DEEP. THE SUMPS WILL COLLECT RUNOFF FROM THE UNFINISHED DRIVE AND SLOPES AND WILL ALLOW SEDIMENT TO SETTLE OUT BEFORE FLOW CONTINUES TO A DETENTION AREA OR SILTATION CONTROL BARRIER. SEDIMENT SUMPS WILL BE CLEANED WHENEVER THE ACCUMULATED SEDIMENT HAS REACHED ONE-HALF OF THE ORIGINAL DEPTH OF THE SUMP.
7) STONE-LINED SEDIMENT SUMPS
A 10-FOOT DIAMETER, 2-FOOT DEEP, STONE-LINED SEDIMENT SUMP WILL BE INSTALLED AT ALL POINTS WHERE STORM WATER IS DISCHARGED FROM THE PIPED COLLECTION SYSTEM. THESE SUMPS WILL SERVE TO COLLECT SEDIMENT WHICH MAY ERODE FROM THE SITE DURING THE CONSTRUCTION PERIOD. SEDIMENT WILL BE REMOVED FROM A STONE-LINED SEDIMENT SUMP WHEN IT HAS REACHED ONE-HALF OF THE ORIGINAL CAPACITY. STONE-LINED SEDIMENT SUMPS WILL BE CLEANED AND REMAIN IN PLACE AFTER PERMANENT STABILIZATION OF THE SITE HAS BEEN ACHIEVED.
8) TEMPORARY SETTLING BASINS
A TEMPORARY SETTLING BASIN IS A LARGE, EXCAVATED SEDIMENT SUMP THAT HAS A STONE FACE OVERFLOW LEADING TO A SWALE OR TO A DRAINAGE INLET STRUCTURE. THE SIZE VARIES WITH THE AREA DRAINING TO IT. TEMPORARY SETTLING BASINS WILL BE CLEANED WHENEVER THE ACCUMULATED SEDIMENT HAS REACHED ONE HALF OF THEIR ORIGINAL DEPTH.
9) RIP-RAP OUTLET PROTECTION
RIP-RAP OUTLET PROTECTION IS A STONE APRON BEGINNING AT A DRAINAGE SYSTEM DISCHARGE POINT AND EXTENDING DOWN THE SLOPE. THE RIP-RAP WILL SERVE TO REDUCE THE VELOCITY OF THE DISCHARGE, THEREBY PREVENTING EROSION.

CONSTRUCTION/WASTE MATERIAL
CONSTRUCTION/WASTE MATERIAL TO BE STORED ON SITE SHALL INCLUDE THE FOLLOWING:
- FILL MATERIAL
- DRAINAGE STRUCTURES/PIPING
- SEWER STRUCTURES/PIPING
- UTILITY CONDUIT/PIPING
- BUILDING MATERIAL

SEE BELOW FOR WASTE DISPOSAL PROCEDURE.

WASTE DISPOSAL
ALL WASTE MATERIALS WILL BE COLLECTED AND STORED SECURELY IN METAL DUMPSTERS. THE DUMPSTER WILL MEET LOCAL AND STATE SOLID WASTE MANAGEMENT REGULATIONS. ALL TRASH AND CONSTRUCTION DEBRIS WILL BE DEPOSITED IN THE DUMPSTER AND EMPTIED AS NECESSARY. A LICENSED COMPANY IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS WILL TRANSPORT THE TRASH. NO TRASH OR CONSTRUCTION DEBRIS WILL BE BURIED ON SITE. THE DISPOSAL OF LIQUID WASTE IS NOT ALLOWED. INDIVIDUALS WORKING ON THE SITE WILL BE INFORMED OF THE APPROPRIATE PROCEDURE FOR THE DISPOSAL OF CONSTRUCTION DEBRIS.
THE SITE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT THE PROJECT SITE IS FREE OF LITTER AND REFUSE.

HAZARDOUS WASTE
ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS AND IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. INDIVIDUALS WORKING ON THE SITE WILL BE INFORMED OF THE APPROPRIATE PROCEDURES FOR WASTE DISPOSAL. THE CONSTRUCTION SUPERVISOR WILL BE RESPONSIBLE FOR OVERSEEING THAT THE PROPER PROCEDURES ARE FOLLOWED.

SANITARY WASTE
ALL SANITARY WASTE WILL BE COLLECTED IN A TIMELY MANNER BY A LICENSED CONTRACTOR AND DISPOSED OF IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS.

EQUIPMENT & VEHICLE FUELING AND MAINTENANCE PRACTICES
LARGE EQUIPMENT WILL BE FUELED BY AN OVER THE ROAD FUEL TRUCK AND SMALL EQUIPMENT WILL BE FUELED BY PICKUP TRUCK FUEL TANKS. ALL EQUIPMENT WILL BE FUELED AT A MINIMUM 100 FEET FROM ANY WETLAND AND/OR WATER BODY. FUELING AREAS WILL BE INSPECTED FOR SIGNS OF LEAKS OR SPILLS.

EQUIPMENT & VEHICLE WASHING
NO HEAVY EQUIPMENT AND VEHICLE WASHING WILL BE ALLOWED ON THE SITE. ALL CONSTRUCTION EQUIPMENT WILL BE PARKED IN THE DESIGNATED STAGING AREA AT LEAST 100-FEET FROM ANY WETLAND OR WATER BODY.

SPILL PREVENTION AND CONTROL
ALL CONSTRUCTION PERSONNEL WILL BE INSTRUCTED REGARDING THE FOLLOWING MEASURES.
THE SITE CONSTRUCTION SUPERVISOR WILL BE RESPONSIBLE FOR OVERSEEING THAT ALL SPILL PREVENTION PROCEDURES WILL BE ADHERED TO. NO STORAGE , STOCKPILING, OR STAGING OF EQUIPMENT OR CONSTRUCTION MATERIAL WILL OCCUR WITHIN 100-FEET OF ANY WETLAND OR WATERBODY.
ALL MATERIALS STORED ONSITE WILL BE MAINTAINED IN AN ORDERLY MANNER AND IN THEIR APPROPRIATE CONTAINERS. MATERIALS WILL BE KEPT IN THERE ORIGINAL CONTAINERS WITH THEIR ORIGINAL LABELS. SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER. THE MANUFACTURERS GUIDELINES FOR THE PROPER USE AND DISPOSAL WILL BE IMPLEMENTED.
THE CONSTRUCTION SUPERVISOR WILL INSPECT THE PREMISES REGULARLY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS.

PETROLEUM PRODUCTS
ALL ONSITE CONSTRUCTION MACHINERY AND VEHICLES WILL BE MONITORED FOR LEAKS AND WILL RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE LIKELIHOOD OF LEAKAGE. NO VEHICLE MAINTENANCE OR HANDLING OF PETROLEUM OF PRODUCTS WILL OCCUR WITHIN 100-FEET OF ANY WETLAND OR WATERBODY. NO PETROLEUM PRODUCTS WILL STORED ONSITE.

FERTILIZERS
FERTILIZERS WILL BE APPLIED AT THE MINIMUM AMOUNT RECOMMENDED BY THE MANUFACTURER. THE STORAGE OF FERTILIZER PRODUCTS WILL NOT BE ALLOWED ONSITE.

SOLVENTS & PAINTS
ALL CONTAINERS WILL BE SEALED AND STORED WHEN NOT USED. EXCESS MATERIAL WILL NOT BE DISCHARGED TO THE STORM AND OR SEWER SYSTEMS AND WILL BE PROPERLY DISPOSED OF ACCORDING TO THE MANUFACTURERS SPECIFICATIONS INCLUDING ALL FEDERAL, STATE, AND LOCAL REGULATIONS. NO STORAGE WILL OCCUR WITHIN 100' OF A WETLAND OR WATERBODY.

CONCRETE TRUCK WASHOUT
CONCRETE TRUCKS WILL DISCHARGE INTO TEMPORARY BASINS, WHERE THE CONCRETE WILL BE ALLOWED TO CURE. ONCE THE CONCRETE IS CURED, THE CONCRETE WILL BE BROKEN UP AND USED AS COMMON FILL OR HAULED OFF SITE.

SPILL CONTROL PRACTICES
ALL OF THE MANUFACTURERS RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND SITE PERSONNEL WILL BE INFORMED OF THE NECESSARY PROCEDURES AND THE LOCATION OF THE CLEANUP SUPPLIES.
MATERIALS AND THE EQUIPMENT NECESSARY FOR CLEANUP OF A SPILL WILL BE KEPT ON SITE IN A DESIGNATED AREA. EXAMPLES OF CLEANING EQUIPMENT ARE: SHOVELS, RAKES, WHEEL BARROWS, BROOMS, DUST PANS, MOPS ,RAGS, SAFETY GLOVES AND EYE WEAR, ABSORBENT FOAMS, SAND, SAWDUST, AND PLASTIC OR METAL BINS DESIGNATED SPECIFICALLY FOR SPILL CLEANUP. AFTER DISCOVERY, ALL SPILLS WILL BE REMOVED AS SOON AS POSSIBLE.

REPORTING
REPORTABLE SPILLS, TOXIC OR HAZARDOUS (10 GALLONS OR MORE FOR PETROLEUM), MATERIAL WILL BE REPORTED TO THE MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION, BUREAU OF WASTE SITE CLEANUP CENTRAL REGIONAL OFFICE, 8 NEW BOND STREET, WORCESTER, MA 01608-PH-508-792-7653
THE CONSTRUCTION SUPERINTENDENT WILL BE RESPONSIBLE FOR SPILL PREVENTION AND CLEANUP COORDINATOR AND SUPERVISOR. THE CONSTRUCTION SUPERVISOR IS RESPONSIBLE FOR EDUCATING THE CONSTRUCTION PERSONNEL OF THE PROTOCOL IN THE EVENT OF A SPILL.

COPIES OF ANY SPILL REPORTS SHALL BE SENT TO D.E.C. AS THE LOCAL BOARD OF HEALTH.

NON STORAGE DISCHARGES
THE FOLLOWING NON-STORMWATER DISCHARGES ARE EXPECTED AS PART OF THE PROPOSED PROJECT DURING THE CONSTRUCTION PHASE:
WATER FROM UTILITY FLUSHING AND DUST CONTROL. PAVEMENT WASH WATER, WHERE NO SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE OCCURRED,
UNCONTAMINATED GROUNDWATER DURING THE DEWATERING EXCAVATIONS.
NON-STORMWATER DISCHARGES WILL BE DIRECTED TO VEGETATED SURFACES AND OR TEMPORARY SETTLING BASINS PRIOR TO DISCHARGE TO WETLANDS AND/OR WATERWAYS.

SEQUENCE OF INSTALLATION AND CONSTRUCTION
PRIOR TO THE START OF EARTH-MOVING ACTIVITIES, THE SEDIMENT CONTROL BARRIERS SHALL BE INSTALLED ALONG THE LIMIT OF WORK AS SHOWN ON THE SITE PLANS.

CONSTRUCTION ACCESS
AT EACH CONSTRUCTION ENTRANCE, A STONE ENTRANCE MAT SHALL BE INSTALLED TO REMOVE SOIL MATERIAL FROM THE EQUIPMENT TIRES. ANY OTHER BARE CONSTRUCTION ROUTES OR EQUIPMENT STAGING AREAS SHALL BE STABILIZED WITH GRAVEL, WOOD CHIPS, OR TEMPORARY VEGETATION. ANY TRACKING OF SEDIMENT ONTO SURROUNDING STREETS SHALL BE IMMEDIATELY SWEPT.

LAND CLEARING AND GRADING

SLOPE STABILIZATION TO FOLLOW 974 CMR 3.04

TO THE EXTENT PRACTICABLE, CLEARING, GRUBBING AND STRIPPING SHALL BE LIMITED. WHENEVER PRACTICAL,EXISTING STRIPS OF VEGETATIVE COVER WILL BE PRESERVED BETWEEN CLEARED AREAS AND RESOURCE AREAS TO PROVIDE RUNOFF FILTRATION. ALL SLOPES SHALL BE BROUGHT TO FINISH GRADE AND STABILIZED AS SOON AS POSSIBLE. SLOPES BETWEEN 1:1 AND 2:1 STEEPNESS SHALL BE FOLLOW THE FOLLOWING PROCESS: ONCE THE GRADE OF THIS SLOPE HAS BEEN ESTABLISHED, 4" OF LOAM SHALL BE SPREAD ON TOP OF THE SLOPE AND TRACKED VERTICALLY. ONCE THE LOAM HAS BEEN TRACKED, THE SOIL SHALL BE MODIFIED IN A THREE-STEP PROCESS.
STEP ONE- SLOPE SHALL BE SPRAYED WITH AGRICULTURAL LIME AT A RATE OF 8,668 LB/AC.

STEP TWO- "PROGANICS" A BIOTIC SOIL MEDIA SHALL BE APPLIED TO THE SLOPE AT A RATE OF 3,500 LB/AC. ALONG WITH:
- "NEUTRALLIME" AT A RATE OF 240 LB/AC
- "JUMPSTART" AT A RATE OF 1.25 GAL/AC,
- "BIOPRIME" SHALL BE APPLIED AT A RATE OF 40 LB/AC
- 50% OF THE SLOPE SEED MIX

STEP THREE- THE SLOPE SHALL BE SPRAYED WITH "FLEXTERRA HP-FGM AT A RATE OF 4,000 LB/AC. WITHIN THE HYDROSEED TANK, MEI RECOMMENDS THE FOLLOWING:
- NITROGEN BE ADDED AT A RATE OF 104.5 LB/AC
- PHOSPHOROUS BE ADDED AT A RATE OF 0.4 LB/AC
- POT ASH BE APPLIED AT A RATE OF 130.7 LB/AC.
- 50% OF THE SLOPE SEED MIX

SLOPES WHICH ARE 3:1 AND FLATTER SHALL BE STABILIZED WITH HYDROSEEDING AND/OR HAND SEEDING. ADDITIONAL RUN-OFF CONTROL MEASURES SHALL BE INSTALLED AS GRADING PROGRESSES, TO INCLUDE TEMPORARY BASINS, DIKES, AND SWALES.

TEMPORARY SEDIMENT BASINS AND SUMPS
AS NEEDED WITHIN CONSTRUCTION PHASES TEMPORARY SEDIMENT BASINS AND SUMPS WILL BE EXCAVATED PRIOR TO FURTHER SOIL DISTURBANCE ON THE SITE. THE BASINS SHALL INCLUDE STONE AND FILTER FABRIC. THE BASIN SLOPES AND BOTTOM SHALL BE STABILIZED WITH LOAM, SEED, AND/OR AN EROSION CONTROL PRODUCT, AND A STABILIZED EXIT SPILLWAY SHALL BE CONSTRUCTED WITH A FILTER FABRIC AND STONE APRON. TEMPORARY RISER PIPES MAY BE UTILIZED TO ALLOW RETENTION AND TREATMENT WITH CONTROLLED RELEASE OF STORMWATER RUNOFF DURING CONSTRUCTION. THE BASINS MAY BE OVER EXCAVATED AS NEEDED TO PROVIDE STORAGE FOR, AT A MINIMUM, 1,800CF PER DISTURBED ACRE OF RUN-OFF. ADDITIONAL TEMPORARY SEDIMENT BASINS OR SEDIMENT SUMPS, MAY BE CONSTRUCTED AS NECESSARY TO STORE AND INFILTRATE RUN OFF. SEDIMENT SUMPS ARE EXCAVATED DEPRESSIONS OF A MINIMUM 10-FOOT DIAMETER AND A 2-FOOT DEPTH AND STRATEGICALLY INSTALLED TO REDUCE VELOCITIES AND TO PROVIDE SEDIMENT TRAPPING. BASINS AND SUMPS WILL BE INSPECTED WEEKLY, BEFORE AND AFTER SIGNIFICANT STORM EVENTS. IF A SEDIMENTATION BASIN IS LOCATED WITHIN THE PROPOSED BASIN LOCATIONS, THE TEMPORARY BASIN GRADES SHALL BE LEFT A MINIMUM OF ONE FOOT ABOVE THE BOTTOM OF THE PROPOSED INFILTRATION BASIN BOTTOM AND WILL BE GRUBBED OUT AS PART OF THE FINAL GRADING OF THE PROPOSED INFILTRATION BASIN.

RUN OFF CONTROL AND CONVEYANCE SYSTEMS
AS NEEDED, DIVERSION SWALES AND /OR DIKES LEADING INTO THE BASINS SHALL BE CONSTRUCTED AND STABILIZED UTILIZING EARTH, CRUSHED STONE, OR FILTER SOCKS. ADDITIONAL SWALES OR DIKES SHALL BE CONSTRUCTED AS NECESSARY TO DIVERT RUNOFF INTO TEMPORARY SEDIMENT BASINS. STONE CHECK DAMS SHALL BE INSTALLED AT APPROPRIATE INTERVALS.

STOCKPILING
SOIL STOCKPILING SHALL TAKE PLACE IN DESIGNATED AREAS, OUTSIDE OF THE WETLAND BUFFER ZONES. ANY STOCKPILING THAT WILL REMAIN INACTIVE FOR MORE THAN 2 WEEKS SHALL BE HYDROSEEDED OR COVERED WITH PLASTIC COVERS.

SURFACE STABILIZATION
APPLY TEMPORARY OR PERMANENT STABILIZATION MEASURES IMMEDIATELY ON ALL DISTURBED AREAS WHERE WORK IS COMPLETED OR DELAYED GREATER THAN 2 WEEKS. ANY FIBER PAPER USED FOR SLOPE STABILIZATION SHALL BE FREE OF PFAS (POLYFLUROALKYL SUBSTANCES).

PARKING LOT & UTILITY CONNECTIONS
AFTER THE PARKING LOT, TEMPORARY SWALES WITH CHECK DAMS OR DIKES AND SETTLING BASINS WILL BE UTILIZED TO CONTROL RUNOFF UNTIL THE CLOSED DRAINAGE SYSTEM IS FUNCTIONAL. AFTER THE UTILITIES, INCLUDING THE CATCH BASINS HAVE BEEN INSTALLED, THE PARKING LOT WILL BE FINISH GRADED AND STABILIZED WITH A BINDER COAT OF PAVEMENT.

STORM WATER INFILTRATION SYSTEM
THE INFILTRATION AREA SHALL BE BROUGHT TO FINISH GRADE, STABILIZED, AND THE OUTLET STRUCTURES SHALL BE INSTALLED BEFORE THE PROPOSED BUILDING ROOF DRAINS ARE CONNECTED TO THE SYSTEM.

INLET PROTECTION
FOLLOWING THE INSTALLATION OF THE CLOSED DRAINAGE SYSTEM, DRIVEWAY PAVING, CATCH BASIN INLETS WILL BE PROTECTED WITH CATCH BASIN FILTERS.

BUILDING SITE PREPARATION
THE PROPOSED BUILDING CONSTRUCTION AREA WILL BE CLEARED AND GRUBBED AND STABILIZATION SHALL BE PROVIDED BETWEEN CONSTRUCTION INCREMENTS.

LANDSCAPING AND FINAL STABILIZATION
AFTER CONSTRUCTION IS COMPLETE IN A GIVEN AREA ANY EXPOSED SOILS WILL BE STABILIZED BY HYDROSEEDING AND OR LANDSCAPING IN ACCORDANCE WITH 974 CMR 4.08 (3).

CONSTRUCTION SCHEDULE
THE FOLLOWING IS A GENERAL CONSTRUCTION SEQUENCE FOR THE CONSTRUCTION OF THE SITE. THE ACTUAL SCHEDULE MAY VARY SOMEWHAT FROM THAT STATED IF SITE OR WEATHER CONDITIONS REQUIRE A DIFFERENT SCHEDULE AND IF SUCH CHANGE DOES NOT NEGATIVELY AFFECT THE PREVENTION OF POLLUTION. AN EXAMPLE OF A LOGICAL CHANGE TO THE SCHEDULE WOULD BE DEVIATING FROM THE SEQUENCE BELOW TO ALLOW THE LAYING OF DRIVEWAY BERM PRIOR TO A WINTER FREEZE IN ORDER TO BETTER CONTROL THE SITE DRAINAGE.

CONSTRUCTION HOURS ARE 7 A.M. TO 6 P.M. MONDAY THROUGH FRIDAY. ALL OTHER TIMES ARE NOT EXEMPT FORM NOISE STANDARDS. APPLICANT IS REQUIRED TO NOTIFY D.E.C. AND PUBLIC SAFETY OFFICER OF ANY WEEKEND WORK IN ADVANCE.

- THE APPLICANT WILL HOLD A PRE-CONSTRUCTION MEETING WITH REPRESENTATIVES OF THE DEVENS ENTERPRISE COMMISSION, THE ENGINEER, CONTRACTOR'S EMPLOYEES AND THE INSPECTOR IN ORDER TO REVIEW PERMITS, PROCEDURES AND CONSTRUCTION METHODS.
- ESTABLISH THE SITE ENTRANCE MAT AT THE CONSTRUCTION ENTRANCE TO THE SITE.
- ESTABLISH A CONSTRUCTION STAGING AND EQUIPMENT STORAGE AREA PROTECTED AGAINST EROSION BY LINES OF STAKED STRAW WATTLES AND SILTATION FENCING.
- INSTALL THE SILTATION CONTROL BARRIERS BETWEEN THE WORK AREAS AND IN OTHER LOCATIONS AS SHOWN WITHIN THE PLAN SET. INSTALL TREE PROTECTION FENCING AS REQUIRED.
- INSTALL PERIMETER CONSTRUCTION FENCE.
- TREE AND BRUSH CLEARING
- STRIP AND STOCKPILE TOPSOIL AT PROPOSED LANDSCAPE BERM AREA(S)
- PLACE THE STRAW WATTLES OR FENCING AT LEAST FIVE FEET FROM THE BASE OF THE LOAM PILE, IF APPLICABLE
- ON-SITE CUTS & FILLS TO ESTABLISH SUBGRADE
- EXCAVATE FOR FOUNDATION
- POUR CONCRETE FOUNDATION FOOTINGS AND FOUNDATION
- BACKFILL OF FOUNDATION
- STEEL ERECTION
- EXCAVATE FOR INTERIOR PLUMBING & ELECTRICAL SERVICES
- IMPORT PROCESSED GRAVEL FOR SLAB BASE
- POUR INTERIOR SLAB
- CONSTRUCT DRAINAGE SYSTEM
- APPLY TEMPORARY OR PERMANENT STABILIZATION MEASURES IMMEDIATELY ON ALL DISTURBED AREAS WHERE WORK IS COMPLETED OR DELAYED GREATER THAN 2 WEEKS
- COMPLETE SITE GRADING TO MATCH THE SITE DESIGN
- IMPORT PROCESSED GRAVEL FOR ALL PAVEMENT AREAS
- LAY THE BINDER COURSE OF PAVEMENT.
- INSTALL PERIMETER CURBING
- COMPLETE THE PERMANENT STABILIZATION OF SLOPES, REPAIR AREAS THAT HAVE BEEN DAMAGED, AND INSTALL ADDITIONAL EROSION CONTROL DEVICES AS REQUIRED.
- INSTALL CONCRETE FLATWORK
- INSTALL LANDSCAPE MATERIAL, REPLICATION AREAS AND SITE IMPROVEMENTS
- LAY FINISH COURSE OF PAVEMENT, SIGNAGE, FENCING
- REMOVE ACCUMULATED SEDIMENT AND TEMPORARY EROSION CONTROL MEASURES AFTER ALL SLOPES HAVE BEEN PERMANENTLY STABILIZED AND THE RISK OF EROSION HAS PASSED.
- EQUIPMENT MOVING, PROJECT PUNCHLIST AND CLOSEOUT

DEVENS UXO PROTOCOL AND PROCEDURES:

A. DEVENS UXO PROTOCOL AND PROCEDURES- PRIOR TO PERFORMING ANY INTRUSIVE SOIL WORK, ALL PERSONNEL ON SITE MUST VIEW AN INSTRUCTIONAL VIDEO DESCRIBING THE TYPES OF UNEXPLODED ORDNANCE ("UXO") WHICH COULD BE ENCOUNTERED AND PROVIDING INSTRUCTION OF THE PROCEDURES TO BE FOLLOWED IF A POTENTIAL UXO ITEM IS ENCOUNTERED. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE VIEWING O

OWNER
MACK DEVENS
DEVELOPMENT, LLC.
330 SMC DRIVE
SOMERSET, WI 54025

APPROVED: DATE:

DEVENS ENTERPRISE COMMISSION CHAIRMAN

FOR REGISTRY USE ONLY

26-13-1300
O'REILLY AUTO ENTERPRISES, LLC
(BK 65222-533, PL 714 OF 2000)
#15 INDEPENDENCE DRIVE

26-13-500
INDUSTRIAL 66 SARATOGA BOULEVARD, LLC
(BK 70566-408;, PL 456 OF 2017)
#66 SARATOGA BOULEVARD

COOK STREET

INDEPENDENCE DRIVE

SARATOGA BOULEVARD PUBLIC 80' WIDE

PROPOSED CATCH BASIN INLET PROTECTION (TYP.)

ZONING SETBACK LINE

PROTECT EXISTING TREES WITHIN RIGHT OF WAY (TYP.)

PROPOSED SAWCUT LINE (TYP.)

REMOVE AND DISPOSE OF EXISTING SIGN (TYP.)

REMOVE AND DISPOSE OF EXISTING LIGHT POLE (TYP.)

EXISTING TREE TO BE REMOVED (TYP.)

EXISTING TREE TO BE PROTECTED FOR DURATION OF PROJECT (SEE SHEET 7 FOR DETAIL) (TYP.)

LIMIT OF WORK AREA=4.8 AC

REMOVE AND DISPOSE OF EXISTING TRENCH DRAIN

PROTECT EXISTING TRANSFORMER DURING ALL PHASES OF CONSTRUCTION

PROPOSED SEDIMENTATION BASIN. SEDIMENTATION BASIN TO BE RELOCATED AS NECESSARY DURING CONSTRUCTION

REMOVE AND DISPOSE OF EXISTING DRAINAGE SYSTEM TO EXTENT SHOWN ON SHEET 6

PROVIDE CATCH BASIN INLET PROTECTION AT ALL PROPOSED CATCH BASIN'S AS THEY ARE INSTALLED

PULVERIZE EXISTING PAVEMENT TO SAWCUT LINE AND STOCKPILE FOR REUSE

CONTRACTOR TO VERIFY LOCATION OF UNDERGROUND TELECOMMUNICATION LINE PRIOR TO START OF CONSTRUCTION AND RELOCATE AS REQUIRED

REMOVE AND DISPOSE OF EXISTING CONCRETE PAD

APPROXIMATE LOCATION OF EXISTING WATER SERVICE (DEPTH TO SERVICE=7.5'±)

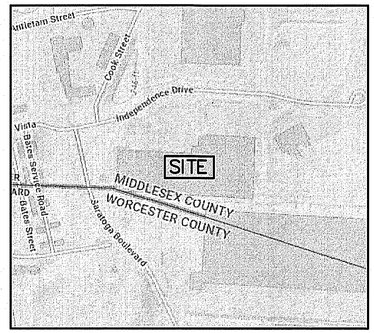
PROTECT TOWN LINE BOUND DURING CONSTRUCTION

PROPOSED STRAW WATTLE. AND SILT FENCE (TYP.)

POST CONSTRUCTION INFILTRATION BASIN SHALL BE USED AS AN INTERIM SEDIMENTATION BASIN. STORMWATER BASIN SHALL BE CLEANED AND EXCAVATED TO FINISH GRADE ONCE STORMWATER FEATURES ARE INSTALLED.

PROPOSED CONSTRUCTION FENCE TO ENCLOSE ENTIRE PARCEL

PROPOSED CONSTRUCTION ENTRANCED BERM WITH GATE ACCESS. ACCESS GATE TO BE LOCATED ON PROPERTY TO ALLOW CONSTRUCTION VEHICLES TO PULL OFF THE MAIN ROAD WHEN GATE IS CLOSED. (TYP.)



LOCUS PLAN
1"=500 FT.±

GENERAL NOTES;

1. EXISTING CONDITIONS INFORMATION SHOWN IS FROM AN ON-THE-GROUND SURVEY COMPLETED BY TAUPER LAND SURVEY, 710 MAIN STREET OXFORD, MA 01537 IN MAY OF 2025.
2. THE LAND SHOWN HEREON IS NOT SITUATED IN THE 100-YEAR FLOOD HAZARD ZONE PER FEMA FIRM PANEL 25017C0211F. SITE IS ZONE X AND IS TOO FAR AWAY FROM MEASURED ELEVATIONS TO INTERPRET.
3. NO WETLAND RESOURCE AREAS WERE OBSERVED WITHIN 100-FEET OF THE PROJECT SITE.
4. PROPOSED USE WILL NOT GENERATE ELECTROMAGNETIC INTERFERENCE TO ANY SENSITIVE RECEPTOR. INTERFERENCE WITH THE HARVARD-SMITHSONIAN RADIO TELESCOPE (1400-1720 MHz) IS SPECIFICALLY PROHIBITED.
5. PROPOSED USE WILL NOT CAUSE PRONOUNCED, MULTIPLE PATTERNS OF NOISE OR VIBRATION NUISANCE TO, OR INTERFERE WITH ANY SENSITIVE RECEPTOR.
6. A DEP AIR QUALITY PERMIT IS NOT REQUIRED.

DEVENS SOIL MANAGEMENT POLICY:

THE FOLLOWING REPRESENTS THE POLICY OF THE MASSACHUSETTS DEVELOPMENT FINANCE AGENCY ("MASS DEVELOPMENT" OR THE "AGENCY"), WITH REGARD TO THE DISTURBANCE, EXCAVATION, MOVEMENT AND/OR REMOVAL OF SOILS LOCATE DIN THE DEVENS REGIONAL ENTERPRISE ZONE ("DEVENS").

MASS DEVELOPMENT, PURSUANT OF CHAPTER 498 OF THE ACTS OF 1993, HAS BEEN DESIGNATED AS THE PUBLIC AGENCY RESPONSIBLE FOR THE REDEVELOPMENT, REUSE, AND OPERATION OF DEVENS.

WHEREAS, DEVENS IS A FORMER ACTIVE MILITARY INSTALLATION, IT IS POSSIBLE THAT UNEXPLODED ORDNANCE ("UXO") OR MUNITIONS OF EXPLOSIVE CONCERN ("MEC") AND ENVIRONMENTAL CONTAMINANTS MAY EXIST AND/OR BE ENCOUNTERED AT DEVENS. WITH THIS POLICY, MASSDEVELOPMENT SEEKS TO REDUCE ANY RISK TO HUMAN HEALTH AND SAFETY AND THE ENVIRONMENT.
UNTIL AMENDED OR RESCINDED, IT SHALL BE THE POLICY OF THE AGENCY THAT:

1. PRIOR TO COMMENCING ANY INTRUSIVE EARTH WORK WITHIN DEVENS (DUE DILIGENCE, CONSTRUCTION OR OTHERWISE) ALL PERSONNEL TO BE ON SITE SHALL VIEW A UXO/MEC VIDEO BRIEFING PROVIDED BY MASSDEVELOPMENT. THIS VIDEO IS INTENDED TO INSTRUCT ON-SITE PERSONNEL AS TO HOW TO VISUALLY RECOGNIZE UXO/MEC IF FOUND DURING CONSTRUCTION ACTIVITIES AND TO PROVIDE INSTRUCTIONS ON WHAT TO DO IF POTENTIAL SUSPECTED UXO/MEC IS OBSERVED.

2. TO THE EXTENT REASONABLY PRACTICABLE, NO SOIL SHALL LEAVE ANY CONSTRUCTION SITE AT DEVENS. CONSTRUCTION SITES AT DEVENS SHOULD BE "BALANCED, I.E., ENGINEERED THAT ALL SOILS REMAIN ON THE DEVELOPMENT SITE AND RESULT IN NO EXCESS SOIL.

3. IN THE EVENT THAT EXCESS SOILS MUST BE REMOVED FORM A DEVELOPMENT SITE, THE FOLLOWING PROTOCOL SHALL APPLY:

(A) EXCESS SOILS MAY BE TRANSPORTED TO ANOTHER SUITABLE LOCATION WITHIN DEVENS, PROVIDED HOWEVER, THAT:
i. THE SOILS MUST BE RESTRICTED FOR USE ONLY AT A COMMERCIAL SITE.
ii. THERE IS WRITTEN DOCUMENTATION EVIDENCING THE CONSENT AND APPROVAL OF THE PARTY AGREEING TO ACCEPT THE SOILS FOR A SPECIFIC USE AND THE USE, LOCATION AND DISPOSITION OF THE SOILS SHALL BE APPROVED IN WRITING BY MASSDEVELOPMENT;
iii. CHEMICAL TESTING OF SOILS TO BE TRANSPORTED MUST BE PERFORMED IN CONFORMITY WITH THE SOIL MANAGEMENT PLAN DEVELOPED BY HALEY AND ALDRICH (TO BE PROVIDED BY MASSDEVELOPMENT UPON REQUEST) AND ANY SITE SPECIFIC REQUIREMENTS IMPOSED BY THE MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION ("MA DEP"). THE MA DEP MUST REVIEW AND APPROVE THE RESULTS OF THE SOILS TEST PRIOR TO THE SOILS BEING TRANSPORTED;
IV. UPON APPROVAL OF SOIL TEST RESULTS BY THE MA DEP, THE OWNER OF THE SOILS SHALL REQUEST THAT MASSDEVELOPMENT PROVIDE WRITTEN APPROVAL FOR THE SOILS TO BE TRANSPORTED; AND
V. ANY RELOCATION OF SOILS SHALL BE COMPLIANT WITH ALL APPLICABLE DEC REGULATIONS AND BYLAWS.

(b) IF THERE IS NO SUITABLE LOCATION ON DEVENS TO RELOCATE THE SOILS, THE SOILS MAY BE REMOVED TO A LOCATION OUTSIDE OF DEVENS, PROVIDED HOWEVER, THAT:
i. THE REQUIREMENTS OF PARAGRAPHS 3(A)(i-v) SHALL APPLY; AND
ii. ALL SOILS TO BE RELOCATED OUTSIDE OF DEVENS SHALL BE PASSED THROUGH A 1" DIAMETER SCREEN UNDER THE SUPERVISION OF QUALIFIED PERSONNEL;
iii. ALL TAILINGS (I.E. DEBRIS/MATTIER NOT PASSING THROUGH THE SCREEN) SHALL BE UTILIZED ON SITE; AND
IV. IF UXO/MEC IS FOUND IN THE TAILINGS (OR ELSEWHERE), OPERATIONS IN THE VICINITY OF THE FOUND ITEM SHALL IMMEDIATELY CEASE AND THE MASSDEVELOPMENT AND STATE POLICE SHALL BE NOTIFIED BY THE CONTRACT (STATE POLICE PHONE #978-772-7200)

4. IN THE EVENT THAT AREAS OF SUSPECTED ENVIRONMENTAL CONTAMINATION (I.E UNDERGROUND STORAGE TANKS, FOREIGN MATERIALS, SUBSTANCES, ETC.) ARE FOUND, OPERATIONS IN THE AREAS IN THE VICINITY OF THE SUSPECTED CONTAMINATION SHALL CEASE AND THE CONTRACTOR SHALL IMMEDIATELY NOTIFY MASSDEVELOPMENT (DEVENS ENVIRONMENTAL MANAGER: PHONE#978-784-2917 OR DEVENS EVP: PHONE#978-784-2929)

MASSDEVELOPMENT SHALL WORK WITH ITS ENVIRONMENTAL CONSULTANTS AND MA DEP AND/OR EPA TO PROMPTLY AGREE UPON A PLAN TO TEMPORARILY RELOCATE THE FOREIGN MATERIALS, IF POSSIBLE, IN ORDER TO PERMIT WORK ON THE SITE CONTINUE WHILE A PERMANENT DISPOSAL/REMEDIATION PLAN IS ESTABLISHED.

PLEASE NOTE THAT ADDITIONAL SOIL MANAGEMENT POLICIES ARE IN FORCE AT CERTAIN SPECIFIC AREAS IN DEVENS. CONTACT THE DEVENS ENVIRONMENTAL MANAGER FOR DETAILS.

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

APPROVED BY THE DEVENS ENTERPRISE COMMISSION
DATE:

No.	Date	Revision
1	8/6/2025	Response to Comments

COMMONWEALTH OF MASSACHUSETTS
WESLEY R. FLIS
CIVIL
No. 45866
PROFESSIONAL ENGINEER
8/6/25

Drawn By: JLL | Designed By: JLL | Checked By: WRF

McCarty Engineering, Inc.
Civil Engineers
42 Tucker Drive, Leominster, MA 01453
phone:(978) 534-1318 fax: (978) 840-6907
www.mccartydb.com

Project Name
Mack Devens Development, LLC.
18 Independence Drive
Ayer & Harvard, MA
(Devens, MA)

Sheet Title
Demolition & Erosion Control Plan

Job No: 127.01.001 | Sheet No. 4
File Name: 127.01.001P-DEM01
Date: July 3, 2025
Scale: 1"=40'

OWNER
MACK DEVENS
DEVELOPMENT, LLC.
330 SMC DRIVE
SOMERSET, WI 54025

APPROVED: DATE:

DEVENS ENTERPRISE COMMISSION CHAIRMAN

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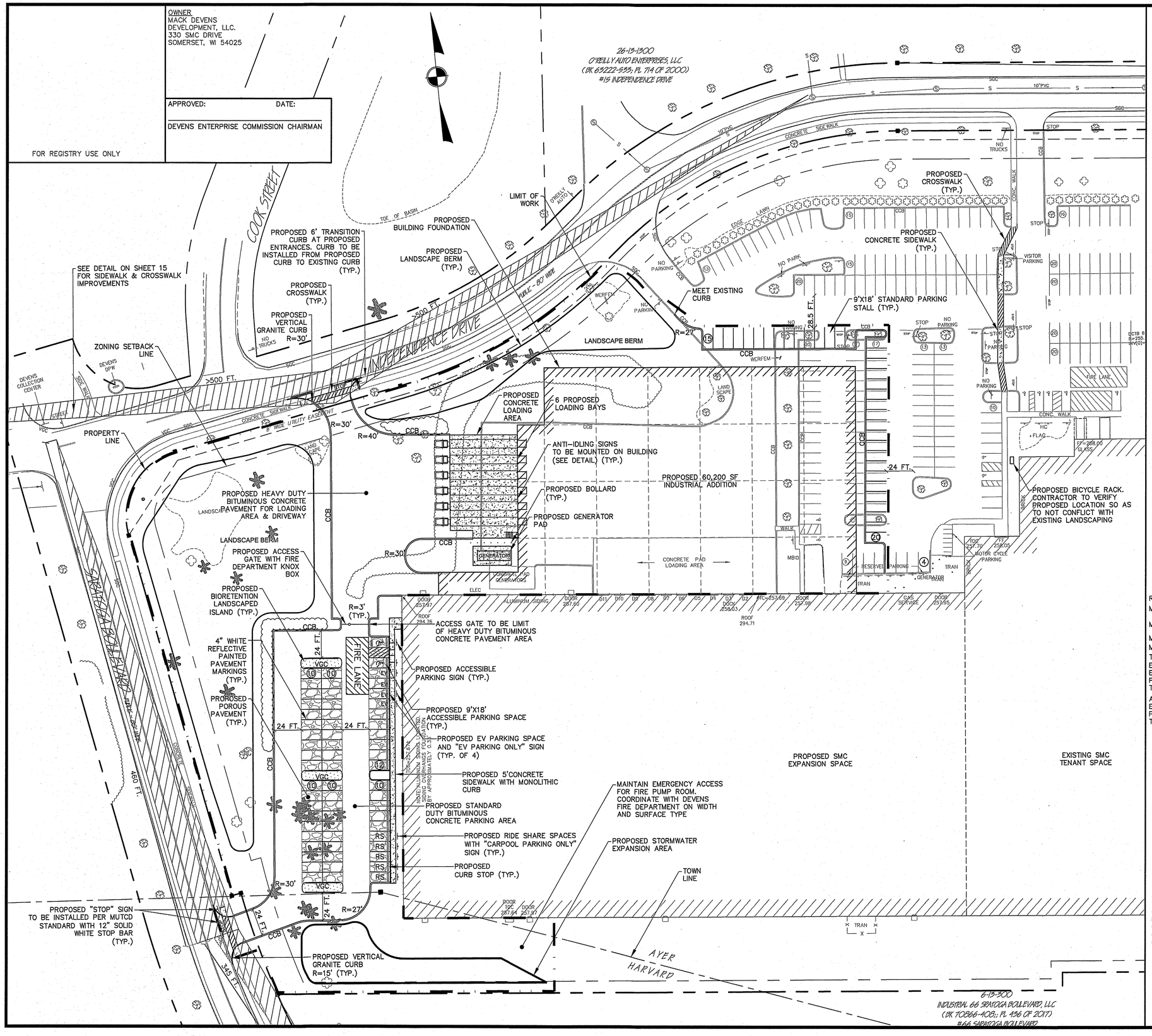

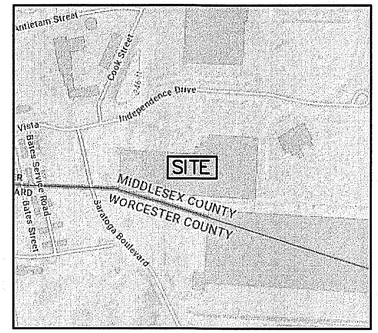

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6. A DEP AIR QUALITY PERMIT IS NOT REQUIRED.
7. SNOW STORAGE SHALL BE LOCATED AS SHOWN ON PLAN. OWNER AND PRIVATE CONTRACTOR SHALL COORDINATE REMOVAL OF EXCESS SNOW FROM SITE.

ZONING SUMMARY:

DISTRICT: RAIL, INDUSTRIAL & TRADE RELATED

DIMENSIONAL

REQUIREMENTS:	REQUIRED:	EXISTING:	PROPOSED:	CONFORMANCE:
MIN. LOT AREA:	2 AC.	21.6 AC.	21.6 AC.	Y
TOTAL AREA DIST:	N/A	4.8 AC.	4.8 AC.	Y
FRONTAGE:	100 FT.	2,077 FT.	2,077 FT.	Y
MIN. SIDE YARD:	10 FT.	65.3 FT.	65.3 FT.	N/A
MIN. FRONT YARD:	25 FT.	128.7 FT.	38.0 FT.	Y
MIN. REAR YARD:	25 FT.	N/A	N/A	N/A
MAX. BLDG HEIGHT:	75 FT.	<75 FT.	<75 FT.	Y
FAR COVERAGE:	0.5	0.34	0.41	Y
MAX IMP SURFACE:	0.73	0.58	0.63	Y
TOTAL IMP COV:	N/A	12.53 AC.	13.61 AC.	N/A
BUILDING IMP:	N/A	7.46 AC.	8.85 AC.	N/A
BUILDING IMP:	N/A	0.35	0.41	N/A
PERVIOUS PVMNT:	N/A	0 SF	10,229 SF.	N/A
TOTAL HARDSCAPE:	N/A	2,817 SF.	3,936 SF.	N/A
HARDSCAPE (%)	N/A	0.3 %	0.4%	N/A
OPEN SPACE	N/A	18,295 SF	16,117 SF	N/A

REQUIREMENTS:

MANUFACTURING/INDUSTRIAL: 2 SPACE/1,000 SF GFA

MAX PARKING:

MANUFACTURING/INDUSTRIAL: 73,088 SF X 2/1000 = 146.2 SPACES
MAX PARKING PER 2015 APPROVAL: 463 SPACES
TOTAL MAXIMUM PARKING: 610 SPACES
EXISTING SPACES: 381
EXISTING SPACES LOST AS PART OF DEVELOPMENT: 24 SPACES
PROPOSED SPACES: 62 NEW SPACES
TOTAL SPACES: 419 SPACES

ADA ACCESSIBLE PARKING REQUIRED: 9 SPACES
EXISTING ADA ACCESSIBLE PARKING PROVIDED: 12 SPACES
PROPOSED ADA ACCESSIBLE PARKIGN PROVIDED: 2 SPACES
TOTAL ADA ACCESSIBLE PARKING PROVIDED: 14 SPACES

PARKING & TRAFFIC SUMMARY:

	REQUIRED:	EXISTING:	PROPOSED:	CHANGE:	CONFORMANCE:
MAX PARKING SP	610	381	419	38	Y
RESERVE PARKING	N/A	0	0	0	N/A
MAX TOTAL PARKING	610	381	419	38	Y
COMPACT SP	N/A	0	0	0	N/A
MIN EV/HYBRID PLUG IN SP	5%	0	4	4	Y
MIN EV/HYBRID PREFERRED SP	5%	0	4	4	Y
MIN RIDE SHARE SP	5%	0	5	5	Y
MIN HANDICAP SP	9	12	14	2	Y
ADT	N/A	N/A	N/A	N/A	N/A
EMPLOYEE COUNT	N/A	356	423	67	N/A
EMPLOYEE SHIFTS	N/A	2	2	0	N/A
EMPLOYEE COUNT PER SHIFT	N/A	223 1ST 70 2ND	298 1ST 125 2ND	75 50	N/A

BUILDING AREA & USE

	EXISTING:	PROPOSED:	CHANGE:	FAR BY USE:
GROSS FLOOR AREA	325,289± SF.	446,752± SF.	96,242 SF.	0.48
TOTAL AREA	325,289± SF.	385,503± SF.	60,214± SF.	0.41
COMMERCIAL	N/A	N/A	N/A	N/A
MANUFACTURING	195,345± SF.	268,433± SF.	73,088± SF.	0.29
OFFICE	30,900± SF.	30,900± SF.	0± SF.	0.03
OTHER (WAREHOUSE)	99,044± SF0	122,193± SF.	23,149± SF.	0.13
GENERATOR/CHILLERS				

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

APPROVED BY THE DEVENS ENTERPRISE COMMISSION
DATE:

No.	Date	Revision
1	8/6/2025	Response to Comments

COMMONWEALTH OF MASSACHUSETTS
WESLEY R. FLIS
CIVIL
No. 45866
PROFESSIONAL ENGINEER

Drawn By: JLL | Designed By: JLL | Checked By: WRF

McCarty Engineering, Inc.
Civil Engineers
42 Tucker Drive, Leominster, MA 01453
phone:(978) 534-1318 fax: (978) 840-6907
www.mccartydb.com

Project Name

Mack Devens Development, LLC.
18 Independence Drive
Ayer & Harvard, MA
(Devens, MA)

Sheet Title

Layout & Materials Plan

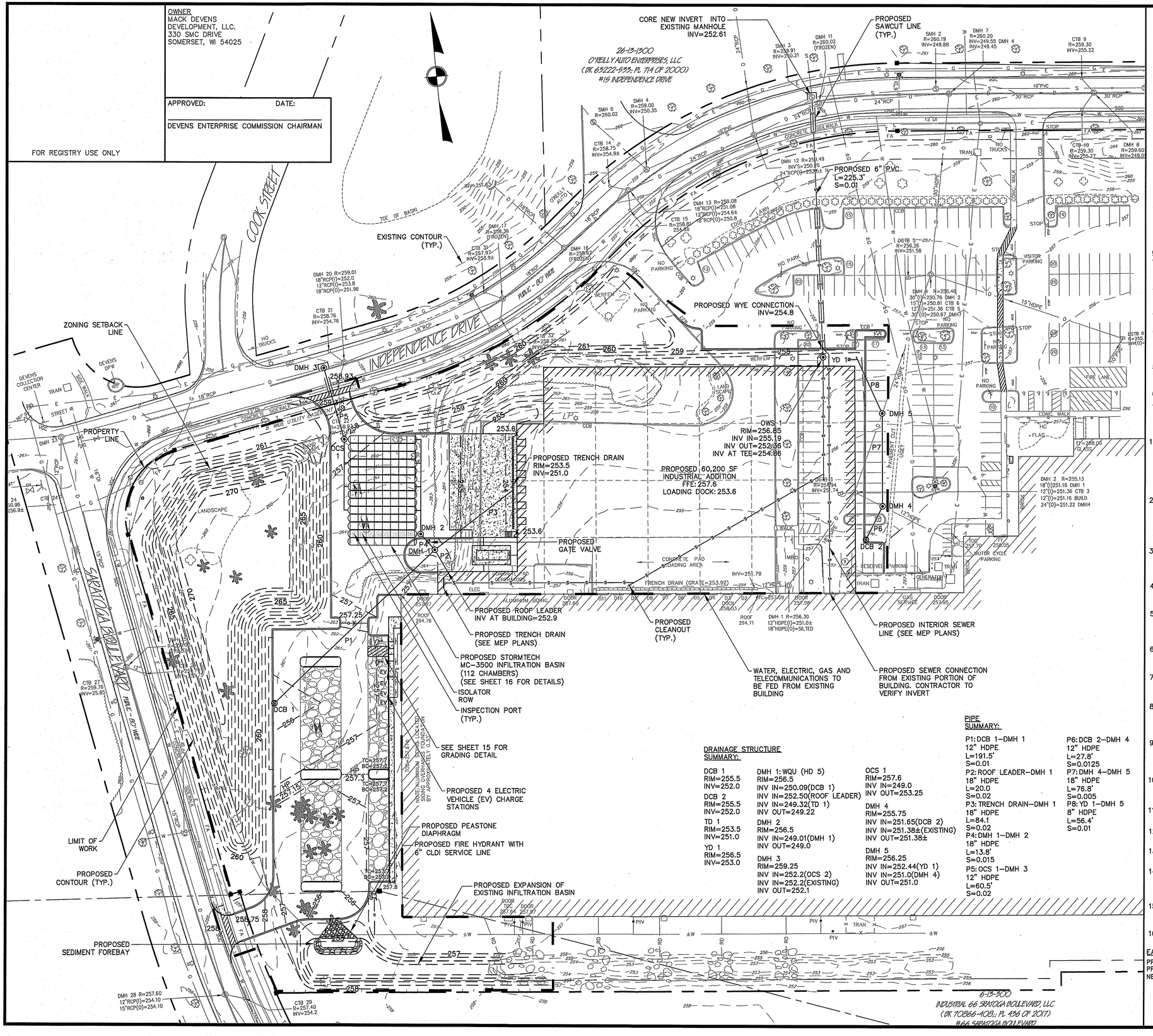
Job No: 127.01.001 Sheet No. 5
File Name: 127.01.001P-CMA01
Date: July 3, 2025
Scale: 1"=40'

OWNER
MACK DEVENS
DEVELOPMENT, LLC.
330 SMO DRIVE
SOMERSET, WI 54025

APPROVED: DATE:

DEVENS ENTERPRISE COMMISSION CHAIRMAN

FOR REGISTRY USE ONLY



DRAINAGE STRUCTURE SUMMARY:

DCB 1
RIM=255.5
INV=252.0

DCB 2
RIM=255.5
INV=252.0

TD 1
RIM=253.5
INV=251.0

YD 1
RIM=256.5
INV=253.0

DMH 1: WQU (HD 5)
RIM=256.5
INV IN=250.09(DCB 1)
INV IN=252.50(ROOF LEADER)
INV IN=249.32(TD 1)
INV OUT=249.22

DMH 2
RIM=256.5
INV IN=249.01(DMH 1)
INV OUT=249.0

DMH 3
RIM=259.25
INV IN=252.2(OCS 2)
INV IN=252.2(EXISTING)
INV OUT=252.1

OCS 1
RIM=257.6
INV IN=249.0
INV OUT=253.25

DMH 4
RIM=255.75
INV IN=251.65(DCB 2)
INV IN=251.38±(EXISTING)
INV OUT=251.38±

DMH 5
RIM=256.25
INV IN=252.44(YD 1)
INV IN=251.0(DMH 4)
INV OUT=251.0

PIPE SUMMARY:

P1: DCB 1–DMH 1
12" HDPE
L=191.5'
S=0.01

P2: ROOF LEADER–DMH 1
18" HDPE
L=20.0
S=0.02

P3: TRENCH DRAIN–DMH 1
18" HDPE
L=84.1
S=0.02

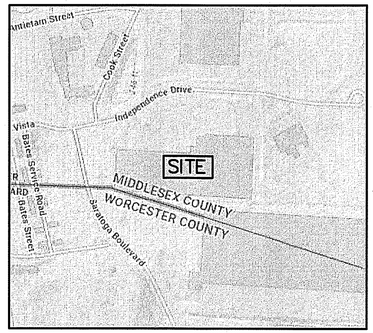
P4: DMH 1–DMH 2
18" HDPE
L=13.8'
S=0.015

P5: OCS 1–DMH 3
12" HDPE
L=60.5'
S=0.02

P6: DCB 2–DMH 4
12" HDPE
L=27.8'
S=0.0125

P7: DMH 4–DMH 5
18" HDPE
L=76.8'
S=0.005

P8: YD 1–DMH 5
8" HDPE
L=56.4'
S=0.01



LOCUS PLAN
1"=500 FT.±

GENERAL NOTES:

1. EXISTING CONDITIONS INFORMATION SHOWN IS FROM AN ON-THE-GROUND SURVEY COMPLETED BY TAUPER LAND SURVEY, 710 MAIN STREET OXFORD, MA 01537 IN MAY OF 2025.
2. THE LAND SHOWN HEREON IS NOT SITUATED IN THE 100-YEAR FLOOD HAZARD ZONE PER FEMA FIRM PANEL 25017C0211F. SITE IS ZONE X AND IS TOO FAR AWAY FROM MEASURED ELEVATIONS TO INTERPRET.
3. NO WETLAND RESOURCE AREAS WERE OBSERVED WITHIN 100-FEET OF THE PROJECT SITE.
4. PROPOSED USE WILL NOT GENERATE ELECTROMAGNETIC INTERFERENCE TO ANY SENSITIVE RECEPTOR. INTERFERENCE WITH THE HARVARD-SMITHSONIAN RADIO TELESCOPE (1400-1720 MHz) IS SPECIFICALLY PROHIBITED.
5. PROPOSED USE WILL NOT CAUSE PRONOUNCED, MULTIPLE PATTERNS OF NOISE OR VIBRATION NUISANCE TO, OR INTERFERE WITH ANY SENSITIVE RECEPTOR.
6. A DEP AIR QUALITY PERMIT IS NOT REQUIRED.
7. REFER TO SHEET 8 FOR OPERATION AND MAINTENANCE OF STORMWATER MANAGEMENT SYSTEM.

GENERAL NOTES

1. THE CONSTRUCTION OF ALL PROPOSED UTILITIES SHALL CONFORM TO THE DEVENS UTILITY DEPARTMENT STANDARDS AND SPECIFICATIONS, LATEST EDITION, AS WELL AS THE COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF PUBLIC WORKS STANDARDS AND SPECIFICATIONS, LATEST EDITION. CONTRACTOR SHALL CONFORM TO ALL APPLICABLE LOCAL, STATE, AND FEDERAL CODES AND REQUIREMENTS DURING CONSTRUCTION.
2. THE LOCATIONS AND ELEVATIONS OF ALL EXISTING UTILITIES SHALL BE CONSIDERED APPROXIMATE AND MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY CONSTRUCTION. ANY DISCREPANCIES IN THE LOCATION OF ANY UTILITIES SHOWN OR ENCOUNTERED DURING CONSTRUCTION SHALL BE REPORTED TO MCCARTY ENGINEERING, INC. AT 978-534-1318.
3. THE CONTRACTOR SHALL CALL "DIG-SAFE" AT 1-888-DIG-SAFE (344-7233) 72 HOURS PRIOR TO CONSTRUCTION TO INFORM THE UTILITY COMPANIES OF ANY EXCAVATION ADJACENT TO EXISTING UTILITIES.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSAL OF ALL WASTE MATERIAL AT AN APPROVED SITE. BURIAL OF WASTE MATERIAL ON-SITE IS NOT PERMITTED.
5. CONTRACTOR SHALL STRIP TOP SOIL AND STOCKPILE ON-SITE FOR REUSE. SOIL STOCKPILES SHALL BE NO HIGHER THAN 8'. STOCKPILES SHALL BE ENCLOSED BY TEMPORARY SILT FENCES TO PREVENT TRAVEL OF SEDIMENT TO ADJACENT DRAINAGE WAYS.
6. EROSION CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL SURFACE RESTORATION IS COMPLETE AND SHALL BE MAINTAINED IN GOOD CONDITION AT ALL TIMES.
7. CONTRACTOR SHALL PROTECT ADJACENT PROPERTIES FROM ON-SITE CONSTRUCTION ACTIVITIES AND REMOVE ANY SEDIMENT OR DEBRIS DEPOSITED THEREON IMMEDIATELY.
8. DRAINAGE GENERATED AS A RESULT OF TRENCH DEWATERING SHALL BE DISCHARGED TO EXISTING DRAINAGE COURSES WITH PROPER EROSION CONTROL MEASURES. DISCHARGE ONTO PAVEMENT OR PRIVATE PROPERTY SHALL NOT BE ALLOWED.
9. WHEN TAPPING EXISTING PRECAST MANHOLES OR SEWER PIPE, DRILL HOLES AT 4" CENTER TO CENTER WITH A STARDRILL AROUND THE PERIPHERY OF THE OPENING TO CREATE A PLANE OF WEAKNESS BEFORE BREAKING THE SECTION OUT.
10. SANITARY SEWER AND WATER MAIN SHALL BE SEPARATED BY 10 FEET MINIMUM HORIZONTALLY. WHEN SEWER AND WATER CROSS, THE WATER MAIN SHALL BE A MINIMUM OF 18" ABOVE THE SEWER PIPE CROWN.
11. UNLESS OTHERWISE SPECIFIED ON THE PLANS, TOP OF ALL WATER MAINS SHALL BE 5.0 FEET BELOW FINISH GRADE.
12. VERIFY LOCATION OF BUILDING UTILITY CONNECTIONS WITH ARCHITECTURAL, MECHANICAL AND PLUMBING PLANS.
13. ALL CLEARING, GRADING, DRAINAGE, CONSTRUCTION AND DEVELOPMENT SHALL BE CONDUCTED WITH STRICT ACCORDANCE WITH THESE PLANS.
14. CONTRACTOR SHALL REFER TO THE STORMWATER POLLUTION PREVENTION PLAN PREPARED FOR THIS PROJECT SITE FOR ALL CONSTRUCTION PERIOD INSPECTIONS, CONTROLS, AND MANAGEMENT PRACTICES REQUIRED.
15. ANY UNSUITABLE FILL MATERIAL SHALL BE REMOVED WITHIN THE LIMITS OF THE INFILTRATION BASIN AND REPLACED WITH CLEAN SAND/STONE.
16. ANY WORK INCLUDING GAS, ELECTRIC, WATER, AND SEWER SHALL BE COORDINATED WITH THE DEVENS UTILITIES DEPARTMENT.

EARTHWORK VOLUMES:

PROPOSED CUT: 10,832 CU. YD.
PROPOSED FILL: 11,070 CU. YD.
NET: 238 CU. YD. (FILL)

GRAPHIC SCALE

40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

APPROVED BY THE DEVENS ENTERPRISE COMMISSION
DATE:

No.	Date	Revision
1	8/6/2025	Response to Comments

COMMONWEALTH OF MASSACHUSETTS
WESLEY R. FLIS
CIVIL
No. 45866
PROFESSIONAL ENGINEER
8/6/25

Drawn By: JLL | Designed By: JLL | Checked By: WRF

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Civil Engineers
42 Tucker Drive, Leominster, MA 01453
phone:(978) 534-1318 fax: (978) 840-6907
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Project Name
Mack Devens Development, LLC.
18 Independence Drive
Ayer & Harvard, MA
(Devens, MA)

Sheet Title
Grading, Drainage & Utility Plan

Job No: 127.01.001 Sheet No. 6
File Name: 127.01.001P-CPG01
Date: July 3, 2025
Scale: 1"=40'

OWNER
MACK DEVENS
DEVELOPMENT, LLC.
330 SMC DRIVE
SOMERSET, WI 54025

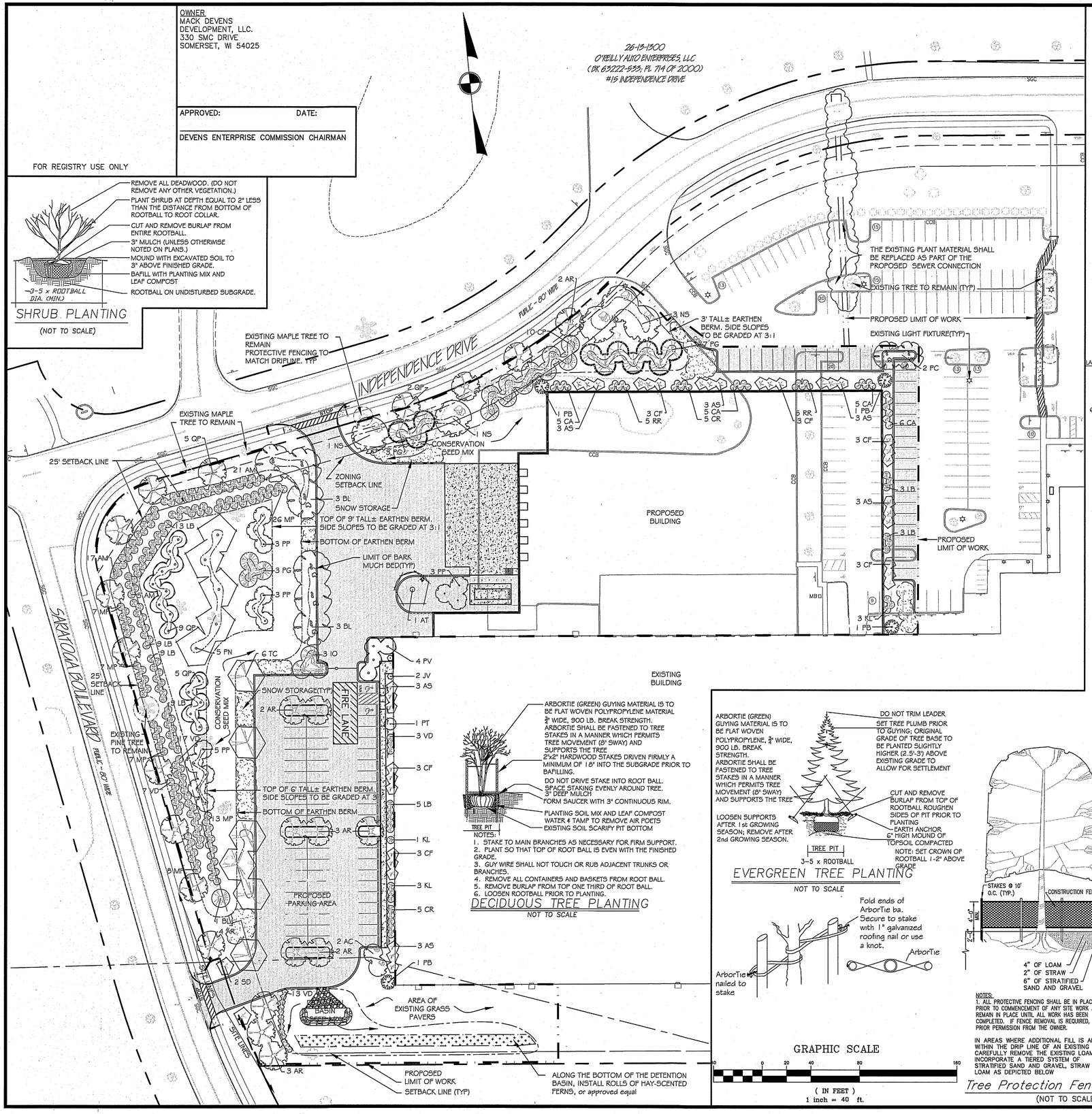
APPROVED: DATE:

DEVENS ENTERPRISE COMMISSION CHAIRMAN

FOR REGISTRY USE ONLY

SHRUB PLANTING

(NOT TO SCALE)



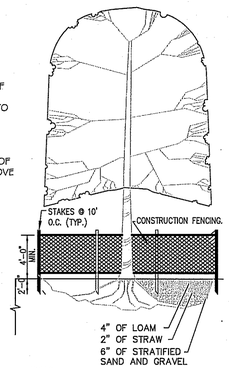
NOTES:
1. STAKE TO MAIN BRANCHES AS NECESSARY FOR FIRM SUPPORT.
2. PLANT SO THAT TOP OF ROOT BALL IS EVEN WITH THE FINISHED GRADE.
3. GUY WIRE SHALL NOT TOUCH OR RUB ADJACENT TRUNKS OR BRANCHES.
4. REMOVE ALL CONTAINERS AND BASKETS FROM ROOT BALL.
5. REMOVE BURLAP FROM TOP ONE THIRD OF ROOT BALL.
6. LOOSEN ROOTBALL PRIOR TO PLANTING.

DECIDUOUS TREE PLANTING

NOT TO SCALE

EVERGREEN TREE PLANTING

NOT TO SCALE



NOTES:
1. ALL PROTECTIVE FENCING SHALL BE IN PLACE PRIOR TO COMMENCEMENT OF ANY SITE WORK AND REMAIN IN PLACE UNTIL ALL WORK HAS BEEN COMPLETED. IF FENCE REMOVAL IS REQUIRED, OBTAIN PRIOR PERMISSION FROM THE OWNER.

IN AREAS WHERE ADDITIONAL FILL IS ADDED WITHIN THE DRIP LINE OF AN EXISTING TREE, CAREFULLY REMOVE THE EXISTING LOAM AND INCORPORATE A TIERED SYSTEM OF STRATIFIED SAND AND GRAVEL, STRAW AND LOAM AS DEPICTED BELOW

Tree Protection Fencing

(NOT TO SCALE)

GRAPHIC SCALE

0 0 20 40 80 160

(IN FEET)

1 inch = 40 ft.

Qty.	Key	Common Name	Botanical Name	Size	Remarks
TREES					
2	AC	Hedge Maple	*Acer campestre*	3" Cal.	B&B
16	AR	"Red Sunset" Red Maple	*Acer rubrum 'Red Sunset'*	3" Cal.	B&B
18	AS	Shadblow Serviceberry	*Amelanchier canadensis*	12' Ht.	B&B(Multi-stem)
1	AT	Silver Maple	*Acer Saccharinum*	3" Cal.	B&B
7	BL	Yellow Birch	*Betula lenta*	12' Ht.	B&B(Multi-stem)
18	CF	Flowering Dogwood	*Cornus florida*	3" Cal.	B&B
10	CP	Pagoda Dogwood	*Cornus alternifolia*	3" Cal.	B&B
3	IO	American Holly	*Ilex opaca*	8' Ht.	B&B
2	JV	Eastern Red Cedar	*Juniperus virginiana*	8' Ht.	B&B
5	NS	Black Tupelo	*Nyssa sylvatica*	3" Cal.	B&B
4	PB	White Spruce	*Picea glauca*	8' Ht.	B&B
2	PC	"Aristocrat" Pear	*Pyrus calleryana 'Aristocrat'*	3" Cal.	B&B
13	PG	Colorado Blue Spruce	*Picea pungens 'Glauca'*	8' Ht.	B&B
5	PN	Austrian Pine	*Pinus nigra*	8' Ht.	B&B
14	PP	Pitch Pine	*Pinus rigida*	8' Ht.	B&B
1	PT	Japanese Black Pine	*Pinus thunbergii*	8' Ht.	B&B
4	PV	Common Chokeberry	*Prunus virginiana*	3" Cal.	B&B
21	QP	Pin Oak	*Quercus palustris*	3" Cal.	B&B
6	TC	Redmond Linden	*Tilia americana 'Redmond'*	3" Cal.	B&B
2	SD	Showy Mountain Ash	*Sorbus decora*	3" Cal.	B&B
SHRUBS					
43	AM	Black Chokeberry	*Aronia melanocarpa*	36"Ht.	B&B
21	CA	Silky Dogwood	*Cornus amomum*	36"Ht.	B&B
10	CR	Gray Dogwood	*Cornus racemosa*	36"Ht.	B&B
11	KL	Mountain Laurel	*Kalmia latifolia*	48" Ht.	B&B
51	LB	Common Spicebush	*Lindera benzoin*	36" Ht.	B&B
68	MP	Northern Bayberry	*Myrica pensylvanica*	48" Ht.	B&B
10	RR	Roseshell Rhododendron	*Rhododendron roseum*	48" Ht.	B&B
33	VD	Northern Arrowwood	*Viburnum dentatum*	48" Ht.	B&B

ROLLS OF HAY-SCENTED FERNS- OR APPROVED EQUAL

LANDSCAPING NOTES

1. NOTIFY DIG-SAFE AT 1-888-DIG-SAFE AND LOCAL AUTHORITIES PRIOR TO ANY TYPE OF SITE PREPARATION OR CONSTRUCTION.
2. THE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIAL AND MULCH IN SUFFICIENT QUANTITIES TO COMPLETE PLANTING AS SHOWN ON THE DRAWINGS.
3. DRAWING QUANTITIES TAKE PRECEDENCE OVER PLANT LIST QUANTITIES.
4. ALL PLANT MATERIAL SHALL CONFORM TO THE GUIDELINES SET FORTH BY THE AMERICAN NURSERY & LANDSCAPE ASSOCIATION.
5. ALL TREES AND SHRUBS SHALL BE PLANTED WITH THE "BEST FACE" SHOWING. ALL PLANTS SHALL BE BALLED AND BURLAPPED OR CONTAINER GROWN, UNLESS OTHERWISE APPROVED BY THE LANDSCAPE ARCHITECT.
6. ALL CONTAINER GROWN STOCK SHALL BE HEALTHY, VIGOROUS, WELL ROOTED AND ESTABLISHED IN THE CONTAINER IN WHICH THEY ARE GROWING. THEY SHALL HAVE TOPS OF GOOD QUALITY, NO APPARENT INJURY AND BE IN A HEALTHY GROWING CONDITION. A CONTAINER GROWN PLANT SHALL HAVE A WELL ESTABLISHED ROOT SYSTEM REACHING THE SIDES OF THE CONTAINER TO MAINTAIN A FIRM BALL.
7. THE QUALITY OF ALL TREES & SHRUBS IS TO BE NORMAL FOR THE SPECIES. ALL PLANTS ARE TO HAVE DEVELOPED ROOT SYSTEMS, TO BE FREE OF INSECTS AND DISEASES AS WELL AS MECHANICAL INJURIES, AND IN ALL RESPECTS BE SUITABLE FOR PLANTINGS.
8. ALL CONIFERS SHALL HAVE DORMANT BUDS AND SECONDARY NEEDLES.
   WHERE SPECIFIED, CALIPER SIZE IS TO BE THE OVERRIDING FACTOR IN TREE SELECTION. CALIPER SIZE SHALL BE MEASURED 12" ABOVE THE ROOTBALL.
9. PLANT SUBSTITUTIONS ARE NOT ALLOWED UNLESS APPROVED BY THE PROJECT LANDSCAPE ARCHITECT.
10. ALL DISTURBED AREAS NOT SHOWN OTHERWISE SHALL BE LOAMED AND SEEDED AND BLENDED INTO EXISTING GRADE AND CONDITIONS.
11. PRIOR TO INSTALLING ANY PLANT MATERIAL, THE CONTRACTOR SHALL SUBMIT A LOAM SOIL SAMPLE FOR A ROUTINE, ORGANIC, SALTS, AND NITRATE SOIL TEST. UPON THE RESULTS OF THIS TEST, THE SITE CONTRACTOR SHALL AMEND THE LOAM AS RECOMMENDED. LAWN SEED MIX SHALL BE THE PREVIOUS YEARS CROP: 35% JEFFERSON KENTUY BLUEGRASS, 35% CARMEN CHEWING FESCUE AND 30% STALLION PERENNIAL RYEGRASS, OR APPROVED EQUAL. PLANT AT A RATE OF 1 LB. PER 150 SQUARE FEET.
12. ALL SLOPE STABILIZATION FOR SLOPES IN EXCESS OF 3:1 SHALL BE A COMBINATION OF JUTE NETTING AND A NATIVE NEW ENGLAND EROSION CONTROL OR CONSERVATION WILDLIFE SEED MIX (FOR LOW-NO MAINTENANCE SLOPE AREAS).
13. DETENTION BASIN SEED MIX SHALL BE NEW ENGLAND EROSION CONTROL/RESTORATION MIX FOR DETENTION BASINS. PLANT AT A RATE OF ONE POUND PER 1,750SF. SEED MIX IS COMPRISED OF: RIVERBANK WILD RYE, LITTLE BLUESTEM, RED FESCUE, BIG BLUESTEM, SWITCHGRASS, NEW YORK IRONWEED, UPLAND BENTGRASS, BEGGAR TICKS, SPOTTED JOE PYE WEED, BONESET, NEW ENGLAND ASTER, WOOL GRASS, SOFT RUSH.
14. CONSERVATION SEED MIX SHALL BE NEW ENGLAND CONSERVATION/WILDLIFE SEED MIX, FROM NEW ENGLAND WETLAND PLANTS INC. PLANT AT A RATE OF ONE POUND PER 1,750SF. VIRGINIA WILD RYE, LITTLE BLUESTEM, BIG BLUE STEM, RED FESCUE, INDIAN GRASS, SWITCH GRASS, PARTRIDGE PEA, SHOWY TICK TREFOIL, BUTTERFLY MILKWEED, BEGGAR TICKS, PURPLE JOE PYE WEED, BLACK EYED SUSAN, HEATH ASTER, EARLY GOLDENROD.
15. LAWN SEED AREAS SHALL BE NOT BE DEEMED ACCEPTABLE UNTIL IN EXCESS OF 90% OF EACH AREA, INDEPENDENTLY, GROWING AND DISPLAYING HEALTHY, UNIFORM GROWTH AND HAS BEEN CUT TWICE. THE SITE CONTRACTOR IS RESPONSIBLE FOR APPLYING AT A MINIMUM 1" OF WATER A WEEK UNTIL THE SEEDED AREAS HAVE BEEN ACCEPTED. THE WATERING SHALL OCCUR IN SMALL DOSES. THE SITE CONTRACTOR IS RESPONSIBLE FOR REMOVING ANY WEEDS (CRAB GRASS) WITHIN THE SEEDED AREAS UNTIL THE SEEDED AREAS HAVE BEEN ACCEPTED.
16. THE HYDRO SEED SLURRY SHALL BE A WOOD BASED BONDED FIBER MATRIX. THE APPLICATION RATE SHALL BE 2,500-3,000LB. PER ACRE SPRAYED IN A LEAST TWO DIRECTIONS. DO NOT APPLY HYDRO SEED SLURRY IF RAIN IS EXPECTED WITHIN 12 HOURS, AND WHEN TEMPERATURES ARE BELOW 50 DEGREES.
17. PRIOR TO PLANTING, THE LANDSCAPER SHALL REVIEW AND COORDINATE WITH THE SITE UTILITY PLAN AND GRADING PLAN.
18. THE ROOTS OF NEWLY PLANTED TREES AND SHRUBS MUST BE KEPT STEADILY MOIST, AS THE DEVELOPING ROOTS ESTABLISH IN THE NEW SOIL. AT PLANTING, WATER THOROUGHLY TO SOAK THE ROOTS AND TO SETTLE THE NEW SOIL AROUND THE ROOT BALL THE AMOUNT OF SUPPLEMENTAL WATER NEEDED EACH WEEK DURING THE FIRST GROWING SEASON AFTER PLANTING DEPENDS ON RECENT RAINFALL, TEMPERATURE, AND WIND. IF LESS THAN ONE-INCH OF RAIN HAS FALLEN OVER THE PAST FIVE TO SEVEN DAYS, THE NEW PLANTINGS MUST BE WATERED. LAWNS, TREES, AND SHRUBS WATERING SHALL OCCUR AT A MINIMUM OF TWO (2) TIMES A DAY FOR THE FIRST TWO (2) MONTHS; ONCE IN THE EARLY MORNING AND THEN THE OTHER IN THE LATE AFTERNOON. IN GENERAL TEN GALLONS OF WATER APPLIED TWICE A WEEK WILL WET A 20"-24" ROOT BALL AND PROVIDE THE EQUIVALENT OF ONE INCH OF RAIN FALL. NEW LAWNS SHALL BE WATERED SO THAT IS RECEIVES AT A MINIMUM ONE INCH (1") OF WATER EVERY WEEK.
19. WITHIN THE LANDSCAPE BEDS ADJACENT TO THE BUILDING FOUNDATIONS, NO (HEMLOCK, PINE, SPRUCE, OR CEDAR) MULCH OR OTHER COMBUSTIBLE LANDSCAPE MATERIALS SHALL BE INSTALLED WITHIN 18" OF THE FOUNDATION.
20. ALL LANDSCAPE BEDS SHALL RECEIVE THREE-INCHES OF BARK MULCH.
21. LANDSCAPE AREAS SHALL BE DEEP TILLED TO A DEPTH OF TWELVE INCHES TO FACILITATE DEEP WATER PENETRATION.
22. ALL TREE AND VEGETATION REMOVAL SHALL BE IN COORDINATION WITH THE PROJECT LANDSCAPE ARCHITECT.

LANDSCAPE EXCAVATION PROTOCOLS WITHIN TREE ROOT ZONES

TO PROTECT TREE HEALTH AND STABILITY DURING EXCAVATION, FOLLOW THESE PROTOCOLS, PARTICULARLY WITHIN THE CRITICAL ROOT ZONE (CRZ):

1. DEFINING THE CRITICAL ROOT ZONE (CRZ) AND TREE PROTECTION ZONE (TPZ)
   - CRITICAL ROOT ZONE (CRZ): THIS AREA SURROUNDS THE TREE TRUNK AND EXTENDS OUTWARD, TYPICALLY MEASURED AS ONE FOOT IN RADIUS FOR EVERY INCH OF THE TREE'S DIAMETER AT BREAST HEIGHT (DBH).
   - TREE PROTECTION ZONE (TPZ): THIS IS A LARGER ZONE, DETERMINED BY AN ARBORIST, THAT AIMS TO SAFEGUARD THE ROOTS AND SOIL CRUCIAL FOR THE TREE'S FUTURE HEALTH.
   - THE TPZ SHOULD IDEALLY EXTEND BEYOND THE DRIPLINE (THE EDGE OF THE TREE'S CANOPY).
2. PLANNING AND PREPARATION
   - EARLY ASSESSMENT: BEFORE ANY EXCAVATION, ASSESS THE TREE'S HEALTH AND CONDITION WITH AN ARBORIST.
   - TREE PROTECTION PLAN (TPP): DEVELOP A TPP DETAILING PROTECTIVE MEASURES, INCLUDING THE DEFINED TPZ AND PROPOSED EXCAVATION METHODS.
   - COMMUNICATE THE PLAN: ENSURE ALL CONTRACTORS AND WORKERS UNDERSTAND THE TPP AND THE IMPORTANCE OF TREE PROTECTION.
3. SITE PROTECTION
   - FENCING: INSTALL STURDY FENCING AROUND THE TPZ TO PREVENT MACHINERY AND FOOT TRAFFIC FROM ENTERING THE AREA.
   - SIGNS: CLEARLY MARK THE TPZ WITH VISIBLE SIGNS INDICATING THAT IT IS A PROTECTED AREA.
   - BARRIERS: IF NECESSARY, USE STEM, BRANCH, AND ROOT PADDING OR WRAPS FOR HIGH-VALUE TREES IN ADDITION TO FENCING.
   - MATERIAL STORAGE: DESIGNATE AREAS OUTSIDE THE TPZ FOR STORING MATERIALS AND EQUIPMENT.
4. EXCAVATION TECHNIQUES WITHIN THE ROOT ZONE
   - AVOID TRENCHING WITHIN THE CRZ: WHEREVER POSSIBLE, ALTER TRENCH ROUTES OR USE TRENCHLESS TECHNIQUES LIKE TUNNELING OR BORING TO INSTALL UTILITIES AND MINIMIZE ROOT DAMAGE.
   - MINIMUM TUNNELING DEPTH: TUNNEL AT LEAST 18 INCHES TO TWO FEET BENEATH THE CRZ,
   - TUNNELING DISTANCE: IT'S BEST TO TUNNEL AT LEAST 1 TO 2 FEET AWAY FROM THE TREE'S CENTER TO AVOID THE TAPROOT.
   - HAND EXCAVATION: FOR EXCAVATION WITHIN THE CRZ, PRIORITIZE HAND TOOLS OR SPECIALIZED EQUIPMENT LIKE AIR-SPADES™ OR OTHER AIR OR HYDRO EXCAVATION TOOLS.
   - SHARP, CLEAN CUTS: IF ROOTS MUST BE CUT, MAKE SHARP, CLEAN CUTS WITH APPROPRIATE TOOLS (ROOT SAWS, LOPPERS) TO PROMOTE HEALING AND REDUCE THE RISK OF DECAY AND INSTABILITY.
   - PROFESSIONAL ROOT PRUNING: CONSULT WITH AN ARBORIST FOR GUIDANCE AND SUPERVISION WHEN PRUNING ROOTS, ESPECIALLY LARGER ONES, TO AVOID COMPROMISING TREE STABILITY.
5. SOIL MANAGEMENT
   - MINIMIZE COMPACTION: AVOID DRIVING HEAVY MACHINERY OR COMPACTING SOIL WITHIN THE TPZ.
   - BACKFILLING: REPLACE SOIL AS SOON AS POSSIBLE AFTER ROOT EXPOSURE. COVERING EXPOSED ROOTS WITH WET BURLAP OR MULCH CAN PREVENT THEM FROM DRYING OUT.
   - SOIL PERMEABILITY: CHOOSE PERMEABLE MATERIALS FOR WALKWAYS OR PAVED SURFACES WITHIN THE TPZ, ALLOWING WATER AND AIR TO REACH THE ROOTS.
   - GRADE CHANGES: AVOID SIGNIFICANT GRADE CHANGES (MORE THAN 3 INCHES) WITHIN THE TREE'S DRIPLINE, AS THEY CAN NEGATIVELY IMPACT THE ROOT SYSTEM.
6. POST-EXCAVATION CARE
   - WATERING: ENSURE ADEQUATE MOISTURE, ESPECIALLY IF THERE'S INSUFFICIENT RAINFALL, SAYS CASTINE.ME.US.
   - MULCHING: APPLY A LAYER OF WOOD CHIPS OR MULCH OVER THE ROOT ZONE TO CONSERVE MOISTURE AND REGULATE SOIL TEMPERATURE.
   - MONITOR HEALTH: OBSERVE THE TREE FOR SIGNS OF STRESS, LIKE BRANCH DIEBACK, WHICH MIGHT INDICATE ROOT DAMAGE.
   - FERTILIZATION AND AERATION: CONSIDER HIGH-PRESSURE, SOIL-INJECTED DEEP-ROOT FERTILIZATION AND AERATION IF RECOMMENDED BY AN ARBORIST.

APPROVED BY THE DEVENS ENTERPRISE COMMISSION
DATE:

No.	Date	Revision
1.	08/06/25	Responce to Comments

Drawn By: LCG | Designed By: LCG | Checked By:

McCarty Engineering, Inc.
Civil Engineers
42 Tucker Drive, Leominster, MA 01453
phone:(978) 534-1318 fax: (978) 840-6907
www.mccartydb.com

Project Name

Mack Devens Development, LLC.
18 Independence Drive
Ayer & Harvard, (Devens, MA)

Sheet Title

Landscape Plan

Job No: 127.01.001 | Sheet No. 7
File Name: 127.01.001P-LA01
Date: July 3, 2025
Scale: 1"=40'

GENERAL NOTES:

1. THE GENERAL GOAL OF THE LANDSCAPE MAINTENANCE PLAN IS TO ESTABLISH AND MAINTAIN AESTHETIC AND FUNCTIONAL VALUES OF THE LANDSCAPE AND HARD SCAPE THROUGH A BALANCE OF ALL AVAILABLE METHODS. THE PLAN UTILIZES THE PRINCIPLES OF INTEGRATED PEST MANAGEMENT (IPM), I.E. FOCUSING ON PEST PREVENTION USING THE LEAST TOXIC, MOST EFFECTIVE & PRACTICAL METHODS; AND PLANT HEALTH CARE MANAGEMENT (PHM), FOCUSING ON MAINTAINING THE ECOSYSTEM TO PROMOTE HEALTHY GROWTH AND REDUCE SUSCEPTIBILITY TO PESTS. PLANTING THE BEST SUITED PLANTS AND THEN WATERING, MOWING AND FERTILIZING THEM PROPERLY HELPS TO REDUCE PEST DAMAGE AND PROVIDES A HABITAT FOR BENEFICIAL ORGANISMS.
2. TEE OTHER PLANS, WITHIN THIS SET, FOR INFORMATION REGARDING STRUCTURAL LOCATIONS, UNDERGROUND UTILITIES (PROPOSED AND EXISTING) AND OTHER SITE CONSTRUCTION INFORMATION. REFER TO THE LIGHTING PLAN FOR LIGHT POLE LOCATIONS AND MOUNTING HEIGHT. REFER TO THE LANDSCAPE PLAN FOR EXISTING TREE PROTECTION.
3. ALL PLANTS AND PLANTING METHODS SHALL BE IN CONFORMANCE WITH THE AMERICAN NURSERY & LANDSCAPE ASSOCIATION.
4. LANDSCAPE INSTALLATION AND MAINTENANCE SHALL BE PERFORMED UNDER THE SUPERVISION OF A QUALIFIED AND EXPERIENCED FOREMAN OR MAINTENANCE PERSONNEL. SUCH EXPERIENCE SHALL CONSIST OF A MINIMUM OF FIVE YEARS EXPERIENCE IN LANDSCAPE INSTALLATION AND MAINTENANCE ON SIMILAR PROJECTS. ALL LABORERS SHALL BE SUPERVISED CONTINUOUSLY DURING LANDSCAPE OPERATIONS BY A FOREMAN OR MAINTENANCE SUPERVISOR. ALL PLANTED AREAS AND "MAINTAINED" LAWNS SHALL PITCH AT 1:50 MINIMUM SLOPE TO ENSURE POSITIVE DRAINAGE ON PLANTED AREAS.
5. LOCATION OF ALL TREES AND SHRUBS SHALL BE STAKED OR PLANTS PLACED IN THE FIELD FOR APPROVAL OF THE LANDSCAPE ARCHITECT PRIOR TO PLANTING.
6. LOCATION OF INDIVIDUAL PLANTS AND PLANTING GROUPINGS MAY BE MODIFIED IN THE FIELD, SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT, TO INSURE EQUAL SPACING, THE CORRECT PLANT FACING, AND TO PROVIDE ADJUSTMENT TO FIELD CONDITIONS AND CONFLICTS.

PREVENTING DAMAGE TO EXISTING TREES DURING CONSTRUCTION:
CONSTRUCTION EQUIPMENT CAN INJURE THE ABOVEGROUND PORTION OF A TREE BY BREAKING BRANCHES, TEARING THE BARK AND WOUNDING THE TRUNK. EXCAVATION NECESSARY FOR CONSTRUCTION AND UNDERGROUND UTILITY INSTALLATION CAN SEVER PORTIONS OF ROOTS AND CAN COMPACT SOILS, INHIBITING ROOT GROWTH AND DECREASING OXYGEN IN THE SOIL. PREVENTION METHODS FOLLOW:
1. ERECT CONSTRUCTION FENCES AROUND TREES THAT ARE TO BE RETAINED. PLACE FENCES OR OTHER PROTECTIVE MEASURES APPROVED BY THE DIRECTOR, 12" BEYOND THE DRIP-LINE OF THE TREES TO BE PROTECTED.
2. INSTRUCT CONSTRUCTION PERSONNEL TO KEEP THE FENCED AREA CLEAR OF BUILDING MATERIALS, WASTE AND CONCRETE SOIL.
3. NO DIGGING, TRENCHING OR OTHER SOIL DISTURBANCE SHOULD BE ALLOWED IN THE FENCED AREA.
4. SPECIFY ACCESS ROUTE ON AND OFF THE PROPERTY AND STORAGE AREAS FOR EQUIPMENT, SOIL AND CONSTRUCTION MATERIALS FOR ALL CONTRACTORS.
5. KEEP AREAS FOR BURNING (IF PERMITTED), CEMENT WASHOUT PITS AND CONSTRUCTION WORK ZONES AWAY FROM PROTECTED TREES.
6. WHEN INSTALLING NEW LANDSCAPING MATERIALS, AVOID EVEN SMALL INCREASES IN GRADE; AS LITTLE AS 2" TO 6" OF ADDITIONAL SOIL OVER EXISTING TREE ROOTS CAN REDUCE THE RATIO OF OXYGEN TO CARBON DIOXIDE AROUND TREE ROOTS.
7. TREES THAT ARE DAMAGED DURING CONSTRUCTION MAY REQUIRE SEVERAL YEARS TO ADJUST, AND ARE MORE PRONE TO HEALTH PROBLEMS. MONITOR REGULARLY AND EVALUATE PERIODICALLY FOR DECLINING HEALTH OR SAFETY HAZARDS.

MAINTENANCE:
ESTABLISHED LAWN MAINTENANCE
1. MOWING:
* MOWING SHALL OCCUR AT A REGULAR WEEKLY SCHEDULE OR ACCORDING TO SEASONAL PRECIPITATION. THE SEASON'S FIRST MOWING SHALL OCCUR PRIOR TO MAY 1ST, PENDING ENVIRONMENTAL CONDITIONS.
MOWING DIRECTION/ANGLE PATTERN SHALL BE ALTERED
PERIODICALLY THROUGHOUT THE GROWING SEASON.
* A MULCHING MOWER SHALL BE UTILIZED FOR ALL MOWING.
* MOWER BLADES SHALL BE SHARPENED EVERY (4) FOUR MOWINGS.
* CLEAN AND SWEEP ALL WALKS AFTER MOWING OR AS NEEDED.
* EDGE ALL WALKS AFTER MOWING OR AS NEEDED.

ONCE ESTABLISHED FOR YEARS TWO AND THREE, MOW JUST REMOVING NO MORE THAN TWO INCHES AT A TIME BAG NEWLY CUT GRASS UNTIL GRASS IS 90% ESTABLISHED, REMOVE WEEDS AS NECESSARY IN SUMMER MONTHS RAISE MOWING HEIGHT AND IN THE FALL RETURN MOWING HEIGHT
TINE THATCH IN THE SPRING TO REMOVE WINTER DEBRIS AND ANY POTENTIAL SNOW MOLD, AERATE AS NECESSARY. APPLY FERTILIZERS, HERBICIDES AS NECESSARY, MONITOR FOR RODENTS AND TREAT AS NECESSARY IN THE FALL REMOVE THE LEAVES FROM THE LAWN AREA, IF THE GRASS AREAS DIE OUT, THE DEAD AREAS SHALL BE CUT OUT AND DISCARDED. EXPOSED SOIL SHALL BE AMENDED AS REQUIRED AFTER TESTING, (I.E. LIME OR FERTILIZER ADDED). SEED SHALL BE APPLIED AND IRRIGATED REGULARLY UNTIL GRASS AREAS IS ESTABLISHED. A LOOSE HAY MULCH SHALL BE APPLIED TO THE NEWLY PLANTED AREA TO A DEPTH OF 3/4", AND AERIAL COVER OF 70%. THERE SHOULD BE NO SEEDS IN THIS HAY. COORDINATE WITH MAINTENANCE SECTIONS OF THIS DOCUMENT

2. SOD/LAWN REPLACEMENT:
* EXISTING DEAD LAWN SHALL BE CUT OUT AND DISCARDED.
* EXPOSED SOIL SHALL BE AMENDED AS REQUIRED AFTER TESTING, ((I.E. LIME OR FERTILIZER ADDED).
* GRASS SEED SHALL BE APPLIED AND IRRIGATED REGULARLY UNTIL LAWN IS ESTABLISHED.
* A LOOSE HAY MULCH SHALL BE APPLIED TO THE NEWLY PLANTED AREA TO A DEPTH OF 3/4", AND AERIAL COVER OF 70%. THERE SHOULD BE NO SEEDS IN THIS HAY.

3. FERTILIZATION
* ORGANIC FERTILIZATION APPLICATIONS WILL BE BASED UPON SOIL ANALYSES AND/OR MONITORING FOR SYMPTOMS OF NUTRIENT DEFICIENCY.
ROUND 1:
APPLICATION OF A BALANCED FERTILIZER WITH A PRE-EMERGENT CRABGRASS CONTROL (19-0-7 W/ PRODIAMINE OR EQUIVALENT) DONE APRIL / EARLY MAY DEPENDING ON SPRING WEATHER. SPOT SPRAY FOR BROADLEAF AND GRASSY WEEDS (SPEED ZONE HERBICIDE OR EQUIVALENT).
ROUND 2 :
SECOND APPLICATION OF A BALANCED FERTILIZER WITH A PRE-EMERGENT CRABGRASS CONTROL (19-0-6 W/ DIMENSION OR EQUIVALENT) DONE END OF MAY / EARLY JUNE. SPOT SPRAY FOR BROADLEAF AND GRASSY WEEDS (SPEED ZONE HERBICIDE OR EQUIVALENT)
ROUND 3:
APPLICATION OF A BALANCED SLOW RELEASE FERTILIZER WITH PREVENTATIVE GRUB CONTROL (20-0-5 W/ IMIDACLOPRID (MERIT) OR EQUIVALENT). SPOT TREAT FOR BROADLEAF AND GRASSY WEEDS (SPEED ZONE HERBICIDE OR EQUIVALENT)
ROUND 4:
APPLICATION OF A BALANCED SLOW RELEASE FERTILIZER (18-0-6 OR EQUIVALENT). SPOT SPRAY FOR BROADLEAF AND GRASSY WEEDS (Q4 HERBICIDE OR EQUIVALENT)
ROUND 5:
APPLICATION OF A BALANCED FERTILIZER TO PROMOTE HEALTHY ROOT GROWTH W/ LIME TO HELP MAINTAIN A NEUTRAL SOIL (12-0-4 W CALSTAR OR EQUIVALENT)

4. LAWN AREA ESTABLISHMENT FOR NEW CONSTRUCTION;
DETERMINE THE LIMITS OF AREAS THAT NEED TO BE SEEDED, PERFORM A SOIL ANALYSIS, REGRADE THE SITE AS NECESSARY, INSTALL THE TOPSOIL AND TILL THE SOIL TO A DEPTH OF 4-6", AMEND THE SOILS AS NECESSARY. PERFORM FINE GRADING, SELECT SEED MIX FOR DESIRED AREAS, CHOOSE HIGH QUALITY SEED. PERFORM HYDRO-SEEDING WITH THE DESIRED SEED MIX, SEED IN TWO DIRECTIONS, WITHIN HYDROSEED SLURRY INCORPORATE STARTER FERTILIZER,-HERBICIDES, WATER SEEDED AREAS, AND MINIMIZE TRAFFIC ON NEWLY SEEDED AREAS.

5. RESTORATION SEED ESTABLISHMENT FOR NEW CONSTRUCTION;
DETERMINE THE LIMITS OF AREAS THAT NEED TO BE SEEDED, PERFORM A SOIL ANALYSIS, REGRADE THE SITE AS NECESSARY, INSTALL THE TOPSOIL AND TILL THE SOIL TO A DEPTH OF 4-6", AMEND THE SOILS AS NECESSARY. PERFORM FINE GRADING, SELECT SEED MIX FOR DESIRED AREAS, CHOOSE HIGH QUALITY SEED. PERFORM HYDRO-SEEDING WITH THE DESIRED SEED MIX, SEED IN TWO DIRECTIONS, WITHIN HYDROSEED SLURRY INCORPORATE STARTER FERTILIZER,-HERBICIDES, WATER SEEDED AREAS, AND MINIMIZE TRAFFIC ON NEWLY SEEDED AREAS.

MAINTENANCE FOR CONSERVATION SEED MIX AREAS:

ONCE ESTABLISHED, MOW ONCE A YEAR IN THE MONTH OF SEPTEMBER, IN THE SPRING IF AREAS ARE COVERED WITH ROAD, SAND RAKE OUT ACCUMULATED SAND IN THE FALL IF HEAVY LEAF LITTER OCCURS REMOVE THE LEAVES ACCORDINGLY PERFORM SOIL ANALYSIS AND AMEND AS NECESSARY.

BED MAINTENANCE:

* PAVEMENT EDGES SHALL BE INSPECTED EVERY SPRING AND REINFORCED AS NEEDED.
* PULL WEEDS OUT OF BEDS AS NEEDED.
* RAKE FLOWER BEDS EVERY OTHER WEEK.
* EDGE PLANTER BEDS AS NEEDED.
* PINCH DEAD FLOWER HEADS TO PROMOTE NEW GROWTH AND TOO KEEP PLANT AESTHETICS.
* PROVIDE MONTHLY WEEDING OF GARDENS DURING GROWING SEASON, THROUGH THE FIRST YEAR.
WEED ONE TIME PER YEAR IN FOLLOWING YEARS.

SHRUB MAINTENANCE:

1. ANNUAL INSPECTION/MAINTENANCE: ALL LANDSCAPED SHRUBS SHALL BE INSPECTED PRIOR TO MAY 1ST. PRUNE/REMOVE DEAD LIMBS AND SUCKER GROWTH, IF NECESSARY, * PRUNE TO MAINTAIN PLANT SHAPE OR TO MAINTAIN LINE OF SITE VISIBILITY AFTER FLOWERING.

2. ORGANIC FERTILIZATION APPLICATIONS WILL BE BASED UPON SOIL ANALYSES AND/OR MONITORING FOR SYMPTOMS OF NUTRIENT DEFICIENCY.

MAINTENANCE FOR RESTORATION SEEDED AREA FOR YEARS TWO AND THREE (CONT):

TREE MAINTENANCE:
1. ANNUAL INSPECTION/MAINTENANCE:
* ALL LANDSCAPED TREES SHALL BE INSPECTED PRIOR TO MAY 1ST.
* ALL DEAD LIMBS SHALL BE PRUNED AND REMOVED.
* SUCKER GROWTH SHALL BE PRUNED.
* PRUNING SHALL BE PERFORMED IN ORDER TO MAINTAIN PLANT HEALTH, PUBLIC SAFETY AND WHERE APPLICABLE LINE OF SITE/VISIBILITY.
* IF REQUIRED, WHEN PLANTED, SAPLINGS SHALL BE SECURED WITH A GUY WIRE WITH * A TURNBUCKLE SECURED TO EITHER GUY STAKES OR 'DUCK BILL' STAKES.
* THE GUY WIRES SHALL INSTALLED PER THE TREE PLANTING DETAIL. A PIECE OF RUBBER HOSE OR EQUIVALENT SHALL COVER THE GUY WIRE WHERE IT WRAPS AROUND THE SAPLING'S TRUNK.
* THE GUY WIRE SHALL REMAIN LOOSE UNLESS DURING SPRING INSPECTION THE TREES ARE LEANING IN A UNHEALTHY AND OR UNSIGHTLY WAY, THE GUY-WIRES AND TURNBUCKLES SHALL BE TIGHTENED. IF INSTALLED THE GUY WIRE STABILIZATION SHALL BE REMOVED FROM THE TREE AFTER (3) YEARS.

2. FALL CLEANUP SHALL OCCUR BETWEEN SEPTEMBER 15TH AND NOVEMBER 15TH OR TO COINCIDE WITH LEAF DROP.

MULCHING:
* A COMMERCIAL UN-DYED BARK MULCH SHALL BE APPLIED TO ALL LANDSCAPING BEDS.
* A MINIMUM OF 3" OF PINE OR HEMLOCK MULCH SHALL BE APPLIED TO ALL BEDS.
* MULCHING SHOULD BE DONE IN A WIDE BAND, APPROXIMATELY THREE (3) TIMES THE DIAMETER OF THE ROOTBALL OF TREES OR SHRUBS, AND NO MORE THAN A 4" DEPTH, TAPERING TO BUT NOT TOUCHING THE TRUNK. CARE SHALL BE TAKEN TO AVOID 'MOUNDING' MULCH UP AGAINST TREE TRUNKS.
* MULCH SHALL BE REAPPLIED TO BEDS ANNUALLY, DURING SPRING INSPECTIONS.

WATERING:
FOR NEW INSTALLATION OF TREES, AND SHRUBS WATERING SHALL OCCUR AT A MINIMUM OF TWO (2) TIMES A DAY FOR THE FIRST TWO (2) MONTHS; ONCE IN THE EARLY MORNING AND THEN THE OTHER IN THE LATE AFTERNOON. IF DURING DROUGHT CONDITIONS, THE AMOUNT OF WATERING MAY BE EXTENDED TO UP TO THREE YEARS. ESTABLISHED LAWNS SHALL BE WATERED SO THAT IS RECEIVES AN INCH (1") OF WATER EVERY WEEK. ESTABLISHED TREES AND SHRUBS SHALL BE WATERED SO THAT THEY RECEIVE THREE AND A HALF INCHES (3¼") OF WATER A MONTH. AN IRRIGATION SYSTEM IS NOT PROPOSED FOR THIS SITE. DROUGHT TOLERANT LAWN HAS BEEN SPECIFIED.
FOR WATERING NEWLY SEEDED AREAS, WATER SO THAT THE SOIL IS WET TO A DEPTH OF 4". FOR THE FIRST TWO WEEKS, WATER TWICE A DAY, ONCE IN THE EARLY MORNING AND THEN THE OTHER IN THE LATE AFTERNOON. WATER UNTIL THE SOIL IS DAMP FOR THE FIRST INCH. CONTINUE TO WATER UNTIL THE GRASS GERMINATES, IF THE SEED DOES NOT GERMINATE WITHIN FIFTEEN DAYS, RE-SOW. ONCE THE GRASS HAS GERMINATED, CUT THE WATERING BACK TO ONCE A DAY. WEED THE NEWLY PLANTED AREAS AS NECESSARY.

PESTICIDES:
THE TERM PESTICIDES INCLUDES INSECTICIDES, HERBICIDES AND FUNGICIDES. PESTICIDE USE WILL BE MINIMIZED THROUGH SELECTION OF SPECIES AND VARIETIES THAT ARE INSECT AND DISEASE RESISTANT, PESTICIDES ARE TO BE USED SECONDARY TO THE IPM PROGRAM, ONLY AS NECESSARY, AND ACCORDING TO "UMASS EXTENSION MANAGEMENT GUIDE FOR INSECTS, DISEASES, AND WEEDS OF TREES AND SHRUBS IN NEW ENGLAND", CURRENT EDITION AND THE FOLLOWING GUIDELINES:

1. INVENTORY:
* USE PESTICIDES WITH A LOW LEACHING POTENTIAL (PLP) INDEX. PLP INDICES ARE BASED ON THE SOIL RETENTION, PERSISTENCE, RATE OF APPLICATION AND PERCENT PESTICIDE REACHING THE GROUND.
* STORE PESTICIDES ONLY IN ORIGINAL CONTAINERS.
* KEEP CONTAINERS CLOSED TIGHTLY; MONITOR CONTAINERS FOR DAMAGE AND/OR LEAKS.
* STORE LIKE PESTICIDES TOGETHER.
* STORE FLAMMABLE PESTICIDES SEPARATELY.
* MAINTAIN AN UP-TO-DATE INVENTORY OF PESTICIDES.

2. APPLICATION & SAFETY
* COMPLY WITH EMERGENCY PLANNING AND RIGHT-TO-KNOW REGULATIONS.
* ENSURE APPLICATION IS BY INDIVIDUALS TRAINED IN PROPERTY APPLICATION TECHNIQUES AND ACCORDING TO LABEL DIRECTIONS. NOTE GROUNDWATER ADVISORIES AND OTHER SAFETY ADVISORIES. THE LABEL IS A LEGAL DOCUMENT.
* SPOT TREAT WHENEVER POSSIBLE.
* DETERMINE THE SIZE OF THE AREA OF APPLICATION AND MIX ONLY THE QUANTITY OF PESTICIDE NEEDED IN ORDER TO SAVE MONEY, AVOID DISPOSAL AND PROTECT PLANTS.
* MIX THE PESTICIDE AND LOAD THE SPREADER OR SPRAYER CAREFULLY TO AVOID SPILLS. MIX IN AREAS WHERE SPILLS MAY BE SAFELY CONTAINED.
* FILL SPRAY TANKS AWAY FROM WELLS AND/OR WATERBODIES.
* RECHECK CALIBRATION OF THE SPREADER OR SPRAYER BEFORE APPLICATION.
* APPLY RINSATE TO A LABELED SITE AT NOT MORE THAN LABELED RATES OR SAVE RINSATE AND USE IT TO MAKE UP WATER FOR SIMILAR APPLICATIONS. DO NOT RELEASE RINSATE IN UNCONTAINED AREAS.
* TRIPLE-RINSE EMPTY CONTAINERS AND PUNCTURE, CRUSH AND RECYCLE THEM, IF POSSIBLE, OR DISPOSE AT LANDFILL.

RODENT CONTROL:
DESIGN PREVENTATIVE MEASURES:
* SELECTION OF PLANTS AND TREES WILL BE MADE WITH THE CONSIDERATION OF SEED AND FRUIT AND SHALL BE KEPT AT A MINIMUM TO AVOID SUPPORT OF INSECTS, RODENTS AND UNDESIRED BIRDS.
* ALL DENSELY GROWING PLANTS WILL SEPARATED FROM EACH OTHER AND THE BUILDING AT A CONSIDERABLE DISTANCE TO REDUCE RODENT HARBORAGE AND PASSAGE.

OPERATIONAL PREVENTATIVE MEASURES:

* INSPECTIONS OF THE LAWN WILL OCCUR DURING WEEKLY SCHEDULED MOWING TO SCOUT FOR PEST ACTIVITY
* IF APPARENT PEST ACTIVITY IS FOUND, CAUSE OF THE ISSUE WILL BE IDENTIFIED AND APPROPRIATE CONTROL MEASURES WILL BE TAKEN TO CORRECT ISSUES.
* PROPERTY WILL BE INSPECTED REGULARLY TO AVOID THE ACCUMULATION OF MISCELLANEOUS ARTICLES TO ELIMINATE RODENT HARBORAGE.
* TREES LOCATED NEAR THE BUILDING WILL BE PRUNED ACCORDINGLY TO MAINTAIN AN ADEQUATE CLEARANCE TO AVOID PEST ACCESS.
* ALL WASTE MATERIALS WILL BE STORED IN A SECURE CONTAINER AT JUSTIFIABLE DISTANCE FROM THE BUILDING AND DISCARDED IN ACCORDANCE WITH WEEKLY SCHEDULED PICKUPS.

CASES THAT DO NOT WARRANT EMERGENCY TREATMENT

—PRIOR TO APPLYING CHEMICAL PESTICIDES OR BAITS, ALTERNATIVE PEST CONTROL METHODS WILL BE USED IN 100% OF CASES. IF ALTERNATIVE METHODS FAIL, LEAST TOXIC PESTICIDES WILL BE USED PRIOR TO RESORTING TO THE USE OF NON-LEAST TOXIC PESTICIDES OR BAITS IN 100% OF CASES

CASES THAT DO WARRANT EMERGENCY TREATMENT OR USE OF NON-LEAST TOXIC PESTICIDES
—IN 100% OF NON-LEAST TOXIC PESTICIDE APPLICATIONS, OCCUPANTS WILL RECEIVE NOTIFICATION ACCORDING TO THE NOTIFICATION PROCEDURES DESCRIBED BELOW.

PROPERTY MANAGER RESPONSIBILITIES:
* ENSURING THAT THIS PLAN IS EXECUTED
* ENSURING THAT THE CONTRACTED IPM VENDOR IS FULLY TRAINED ON THIS PLAN AND ADHERES TO THE PLAN PROCEDURES
* COORDINATING SITE VISITS BY THE VENDOR FOR REGULAR INSPECTIONS AND AS NEEDED FOR IMPLEMENTATION OF PEST CONTROLS
* OVERSEEING WORK PERFORMED BY THE VENDOR
* APPROVING THE USE OF PESTICIDES WHEN THEY ARE NECESSARY
* PROVIDING PROPER NOTIFICATION TO OCCUPANTS WHEN NON-LEAST TOXIC PESTICIDES ARE APPLIED
* ENSURING TENANT CONTRACTS ARE AWARE OF THE PROCEDURES IN THIS PLAN
* EVALUATING PERFORMANCE AND MAKING UPDATES TO THE PLAN AS NECESSARY

PEST CONTROL VENDOR RESPONSIBILITIES:
* ADHERING TO THE PROCEDURES OUTLINED IN THIS PLAN
* IDENTIFYING PEST DURING SITE VISITS AND INSPECTIONS
* REPORTING THE RESULTS OF THE SITE VISITS AND INSPECTIONS TO THE OVERALL

INVASIVE SPECIES
IF INVASIVE SPECIES HAVE ESTABLISHED THEMSELVES IN ONE OR MORE OF THE LANDSCAPE AND LAWNS AREA:
PULL THE SEEDLINGS AND SMALL OR SHALLOW-ROOTED PLANTS WHEN SOIL IS MOIST. DIG OUT LARGER PLANTS, INCLUDING THE ROOT SYSTEMS. USE A FORKED SPADE OR WEED WRENCH FOR TREES OR SHRUBS
DEADHEAD TO PREVENT SPREAD OF SEEDS OF INVASIVE PLANTS. CUT OFF SEEDS OR FRUITS BEFORE THEY RIPEN. BAG, AND BURN OR SEND TO A LANDFILL
MOW OR CUT AT LEAST 4 TIMES A SEASON TO DEPLETE PLANTS' STORE OF NUTRIENTS AND CARBOHYDRATES, REDUCE SEED FORMATION, AND KILL OR MINIMIZE SPREAD OF PLANTS. IF NECESSARY, REPEAT EACH YEAR.

*BITTERSWEET
FOR YOUNG VINES, HAND PULLING CAN WORK AND REPEATED MOWING MAY BE EFFECTIVE IN FIELDS. WHEN LARGE VINES HAVE GROWN INTO TREES, CUT THE VINES WHEN THE LEAVES AREN'T PRESENT, AND APPLY A SYSTEMIC HERBICIDE TO THE FRESHLY CUT STEM. ANY DEAD VINES THAT CANNOT EASILY REMOVED CAN BE LEFT TO DECAY ON THE TREES.

CONTROLLED BURNING
DURING THE SPRING, REPEATED OVER SEVERAL YEARS, ALLOWS NATIVE VEGETATION TO COMPETE MORE EFFECTIVELY WITH THE INVASIVE SPECIES. THIS REQUIRES A PERMIT. SPOT TREATMENT WITH GLYPHOSATE IN LATE FALL CAN BE USED TO MAKE THIS METHOD MORE EFFECTIVE.
USE A CORN-BASED PRE-EMERGENCE HERBICIDE ON ANNUAL WEEDS
IN LAWNS, SPOT TREAT WITH BROAD-LEAF WEEDKILLER.
CUT DOWN THE TREE. GRIND OUT THE STUMP OR CLIP OFF RE-GROWTH
GIRDLE TREE: CUT THROUGH THE BARK AND GROWING LAYER (CAMBIUM) ALL AROUND THE TRUNK, ABOUT 6" ABOVE THE GROUND. GIRDLING IS MOST EFFECTIVE IN SPRING WHEN THE SAP IS RISING, AND FROM MIDDLE TO LATE SUMMER WHEN THE TREE IS SENDING DOWN FOOD TO THE ROOTS. CLIP OFF SUCKER SPROUTS.
FRILL: USING A MACHETE, HATCHET OR SIMILAR DEVICE, HACK SCARS (SEVERAL HOLES IN LARGER TREES) DOWNWARD INTO THE CAMBIUM LAYER, AND SQUIRT IN GLYPHOSATE (OR TRICLOPYR IF RECOMMENDED IN TEXT ABOVE). FOLLOW LABEL DIRECTIONS FOR INJECTION AND FRILL APPLICATIONS. THIS IS MOST EFFECTIVE FROM MIDDLE TO LATE SUMMER. CLIP OFF ANY SUCKER SPROUTS OR TREAT WITH GLYPHOSATE
CUT STEM / CUT STUMP WITH GLYPHOSATE (OR TRICLOPYR IF SPECIFIED ABOVE).
FOLLOW LABEL DIRECTIONS FOR CUT STUMP APPLICATION. CLIP OFF SUCKER SPROUTS OR PAINT WITH GLYPHOSATE. SEE NOTE ON HERBICIDES

FOLIAR SPRAY WITH GLYPHOSATE HERBICIDE (SEE NOTE ON HERBICIDES).
USE A BACKPACK OR GARDEN SPRAYER OR MIST BLOWER, FOLLOWING LABEL DIRECTIONS. AVOID OVERSPRAY AND/OR DRIPPING ONTO NON-TARGET PLANTS, BECAUSE GLYPHOSATE KILLS MOST PLANTS EXCEPT MOSS. IF IT ROLLS OFF WAXY OR GRASS-LIKE FOLIAGE, USE ADDITIONAL STICKER-SPREADER. DECIDUOUS TREES, SHRUBS, AND PERENNIALS MOVE NUTRIENTS DOWN TO THE ROOTS IN LATE SUMMER. GLYPHOSATE IS PARTICULARLY EFFECTIVE AT THIS TIME AND WHEN PLANTS HAVE JUST GONE OUT OF FLOWERING. SEVERAL INVASIVE SPECIES RETAIN THEIR FOLIAGE AFTER NATIVE PLANTS HAVE LOST THEIRS, AND RESUME GROWTH EARLIER IN SPRING THAN MOST NATIVES. THIS ALLOWS YOU TO TREAT THEM WITHOUT HARMING THE NATIVES. HOWEVER, THE PLANT MUST BE ACTIVELY GROWING FOR THE HERBICIDE TO WORK. RETREATMENTS MAY BE NECESSARY THE FOLLOWING YEAR IF SUCKERING OCCURS OR THE PLANT HASN'T BEEN ENTIRELY KILLED.

SEASONAL CLEANUP
1. SPRING CLEANUP:
* REMOVE ALL SAND AND DEBRIS FROM LAWN AREAS.
* RAKE OR THATCH OUT ALL WINTER DIE OUT FROM THE LAWN.
* PRUNE ALL WINTER DAMAGE FROM SHRUBS AND TREES AND ANY OTHER OTHER GROWTH TO HELP KEEP PLANT SHAPE.
* EDGE AND MULCH ALL BEDS.
* ALL TURF AREAS SHALL BE LIMED, FERTILIZED-IF NEEDED APPLY PRE-EMERGENT CRABGRASS CONTROL.

2. CRABGRASS CONTROL:
* IF NEEDED APPLY ANY INSECTICIDE.
* ALL PARKING AREAS SHALL BE SWEPT.
* CATCHBASINS SHALL BE CLEANED OUT.
* INSPECT DRAINAGE BASIN, CLEAN IF NEEDED. SEE EROSION & SEDIMENTATION PLAN.

3. FALL CLEANUP:
* REMOVE ALL LEAVES AND DEBRIS FROM LAWNS AND PLANT BEDS.
* LEAF MULCHING WILL OCCUR WHEN DEEMED APPROPRIATE.
* IN THE EVENT OF EXCESSIVE LEAF ACCUMULATION LEAVES WILL BE SHREDDED AND COMPOSTED OFFSITE.
* FERTILIZE AND APPLY BROADLEAF WEED CONTROL IF NEEDED.
* APPLY INSECT CONTROL IF NEEDED.
* RESEED LAWN AREAS IN SEPTEMBER AS NEEDED.
* IRRIGATION SHUT DOWN TO INCLUDE BLOWING ALL LINES FREE OF WATER.
* SWEEP ALL WALKWAYS, PARKING LOTS, AND DRIVEWAYS.
* INSPECT ALL CATCH BASINS AND CLEAN IF NEEDED.
INSPECT ALL RAIN LEADERS AND CLEAN OUT IF NEEDED.

LANDSCAPE MAINTENANCE:
VEGETATED AREAS IN THE LANDSCAPE WILL REDUCE EROSION, ENCOURAGE INFILTRATION OF RAINWATER, AND KEEP STORMWATER CLEAN. IT IS IMPORTANT TO MAINTAIN THE VEGETATED AREAS OF THE SITE.
—PROPER MOWING IS ONE OF THE MOST IMPORTANT WAYS TO MAINTAIN A HEALTHY LAWN. MOW ONLY WHEN THE GRASS IS DRY TO GET A CLEAN CUT AND MINIMIZE THE SPREAD OF DISEASE. MOW GRASS TO A HEIGHT OF 3". MOW FREQUENTLY, CUTTING NO MORE THAN ⅓ OF THE HEIGHT OF THE GRASS AT A TIME. SHARPEN YOUR MOWER BLADES AFTER EVERY 10 HOURS OF MOWING.
—GRASS CLIPPINGS CONTAIN HIGH AMOUNTS OF NITROGEN, A KEY INGREDIENT IN FERTILIZER. MAKE ALL ATTEMPTS TO USE YOUR GRASS CLIPPINGS BY LEAVING THEM ON YOUR LAWN. IF THE GRASS CLIPPINGS ARE NOT USED, DO NOT DISPOSE OF THEM NEAR ANY WETLANDS OR ON WATERBBODIES AND DESIGNATE A PLACE TO COMPOST THEM IN AN UPLAND AREA.
—IF YOUR LAWN AREAS AND PLANT MATERIAL DEMAND FERTILIZER THEN USE ORGANIC OR SLOW RELEASE FERTILIZERS. FERTILIZE IN THE FALL, BUT IN COORDINATION WITH WEATHER PATTERNS.
—THE BEST DEFENSE AGAINST PESTS WITHIN THE GRASS IS TO USE AN INTEGRATED PEST MANAGEMENT SYSTEM WHICH CONSISTS OF BENEFICIAL INSECTS(LADY BUGS, SPIDERS,CERTAIN NEMETODES AND BACTERIA.)
—MINIMIZE WATERING THE LAWN AREAS. IF NEEDED WATER IN THE EARLY MORNING AND WATER DEEPLY AND INFREQUENTLY.
—IF NEEDED, THE TREES AND SHRUBS SHALL BE PRUNED BUT AT A MINIMUM OF ONCE A YEAR.

IMPERVIOUS SURFACE MAINTENANCE:
THE PARKING LOTS SHALL BE SWEPT AT A MINIMUM OF TWICE A YEAR.
ACCUMULATED LEAVES AND GRASS CLIPPINGS SHALL ALSO BE REMOVED FROM THE IMPERVIOUS SURFACES AT A MINIMUM OF TWICE A YEAR.

LONG TERM POLLUTION PREVENTION PLAN:

A LONG-TERM POLLUTION PREVENTION PLAN IS AN IMPORTANT ELEMENT OF THE ROUTINE OPERATION AND MAINTENANCE OF AN INDUSTRIAL FACILITY THAT IS DESIGNED TO REDUCE OR ELIMINATE THE CREATION OF POLLUTANTS AT THE SOURCE. IN ADDITION TO THE OBVIOUS ENVIRONMENTAL BENEFITS OF PROTECTING THE NATURAL RESOURCES DOWNSTREAM OF THE FACILITY, MAINTAINING A LONG-TERM POLLUTION PREVENTION PLAN WILL PROVIDE FOR A HEALTHIER AND SAFER WORK ENVIRONMENT. THE FOLLOWING LONG TERM POLLUTION PREVENTION PRACTICES WILL BE EMPLOYED AT THE FACILITY.

* GOOD HOUSEKEEPING PRACTICES:
MAINTAINING A CLEAN PROPERTY WILL PREVENT OR REDUCE THE AMOUNT OF POLLUTANTS IN THE STORMWATER RUNOFF DISCHARGING FROM THE SITE. THIS WILL BE ACHIEVED THROUGH PERIODIC PARKING LOT SWEEPING, AT THE OWNERS DISCRETION, AND THROUGH CATCH BASIN AND INFILTRATION BASIN CLEANING AS DETAILED WITHIN THE SITES STORMWATER OPERATION AND MAINTENANCE PLAN.

* PROVISIONS FOR STORING MATERIALS AND WASTE PRODUCTS INSIDE OR UNDER COVER:
MATERIALS WILL BE STORED IN THEIR APPROPRIATE CONTAINERS AND SHALL BE STORED UNDER COVER OR IN A SECURE ENCLOSURE TO REDUCE THE RISK OF SPILLS. WASTE PRODUCTS WILL BE PLACED IN PROPER BINS UNTIL EMPTIED BY A LICENSED SOLID WASTE MANAGEMENT COMPANY.

* VEHICLE WASHING CONTROLS:
VEHICLE WASHING IS NOT ANTICIPATED TO OCCUR AT THIS SITE, HOWEVER IF WASHING IS NEEDED IT SHALL BE CONDUCTED IN PAVEMENT AREAS WHERE THE WAS WATER WILL BE COLLECTED AND CONVEYED THROUGH CATCH BASINS AND WATER QUALITY UNITS PRIOR TO DISCHARGING TO THE ONSITE INFILTRATION BASINS.

* REQUIREMENTS FOR ROUTINE INSPECTIONS AND MAINTENANCE OF STORMWATER BMPS:
REFER TO THE MAINTENANCE SCHEDULE PROVIDED IN THE STORMWATER OPERATION AND MAINTENANCE PLAN.

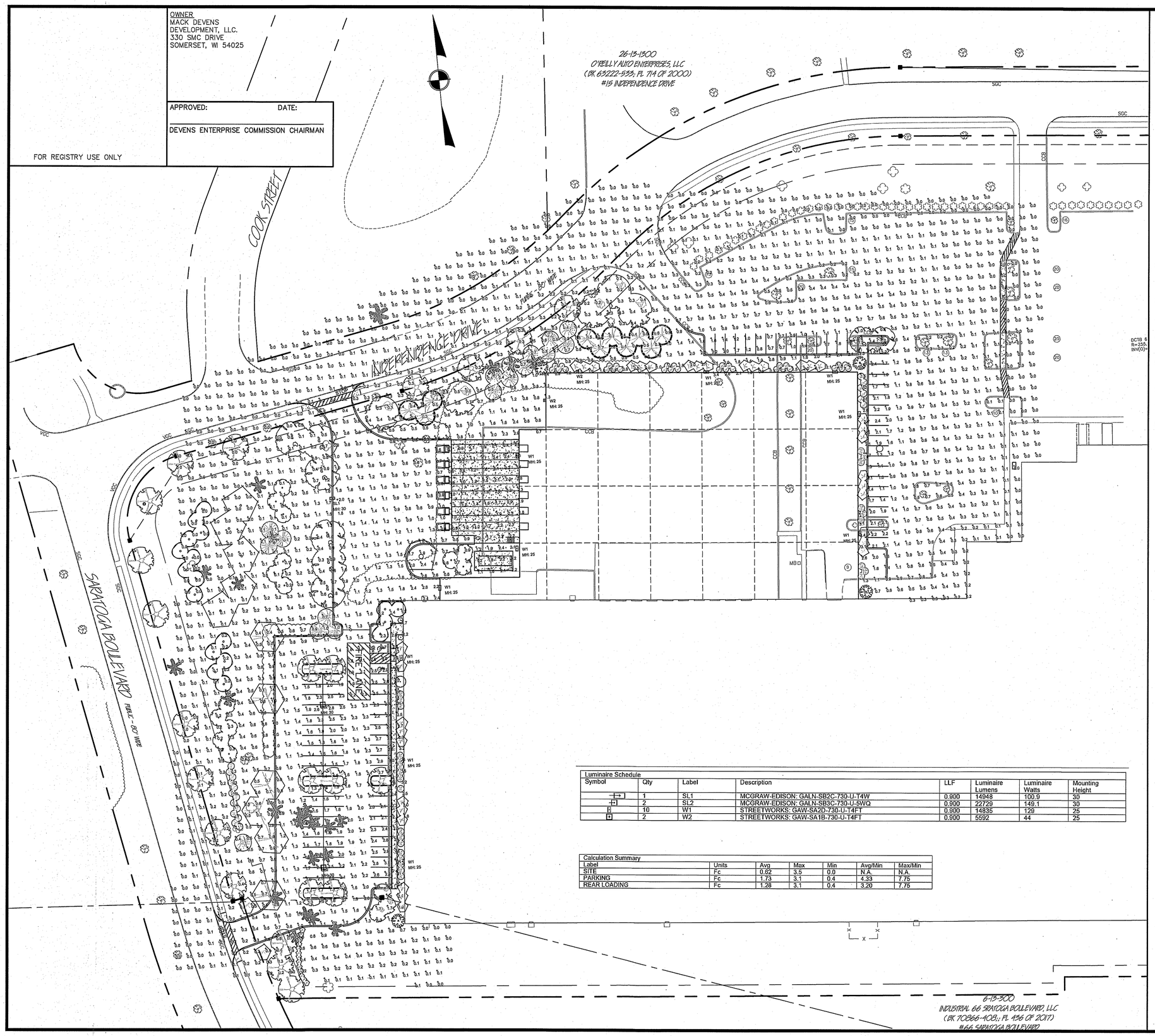
* SPILL PREVENTION AND RESPONSE PLANS:
MATERIALS SHALL BE STORED IN THEIR PROPER ORIGINAL CONTAINER IN A SECURE LOCATION. NO MIXING OF MATERIALS SHALL OCCUR UNLESS RECOMMENDED BY MANUFACTURERS. THE MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL SHOULD BE STRICTLY ADHERED TO. IN THE CASE OF A SPILL THE MANUFACTURER'S METHOD FOR CLEANUP SHALL BE FOLLOWED. THE AREA SHALL BE KEPT VENTILATED AND PERSONNEL HANDLING THE CLEANUP SHALL WEAR PROPER PROTECTIVE CLOTHING. SPILLS OF TOXIC OR HAZARDOUS MATERIAL SHALL BE REPORTED TO THE APPROPRIATE STATE AND/O

OWNER
MACK DEVENS
DEVELOPMENT, LLC.
330 SMC DRIVE
SOMERSET, WI 54025

APPROVED: DATE:

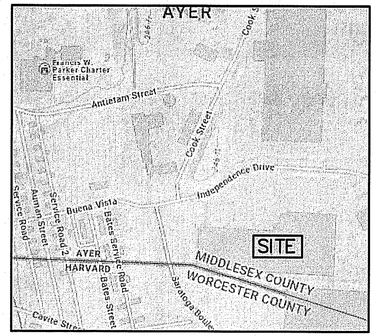
DEVENS ENTERPRISE COMMISSION CHAIRMAN

FOR REGISTRY USE ONLY



Luminaire Schedule							
Symbol	Qty	Label	Description	LLF	Luminaire Lumens	Luminaire Watts	Mounting Height
	1	SL1	MCGRAW-EDISON: GALN-SB2C-730-U-T4W	0.900	14948	100.9	30
	2	SL2	MCGRAW-EDISON: GALN-SB3C-730-U-5WQ	0.900	22729	149.1	30
	10	W1	STREETWORKS: GAW-SA2D-730-U-T4FT	0.900	14835	129	25
	2	W2	STREETWORKS: GAW-SA1B-730-U-T4FT	0.900	5592	44	25

Calculation Summary						
Label	Units	Avg	Max	Min	Avg/Min	Max/Min
SITE	Fc	0.62	3.5	0.0	N.A.	N.A.
PARKING	Fc	1.73	3.1	0.4	4.33	7.75
REAR LOADING	Fc	1.28	3.1	0.4	3.20	7.75



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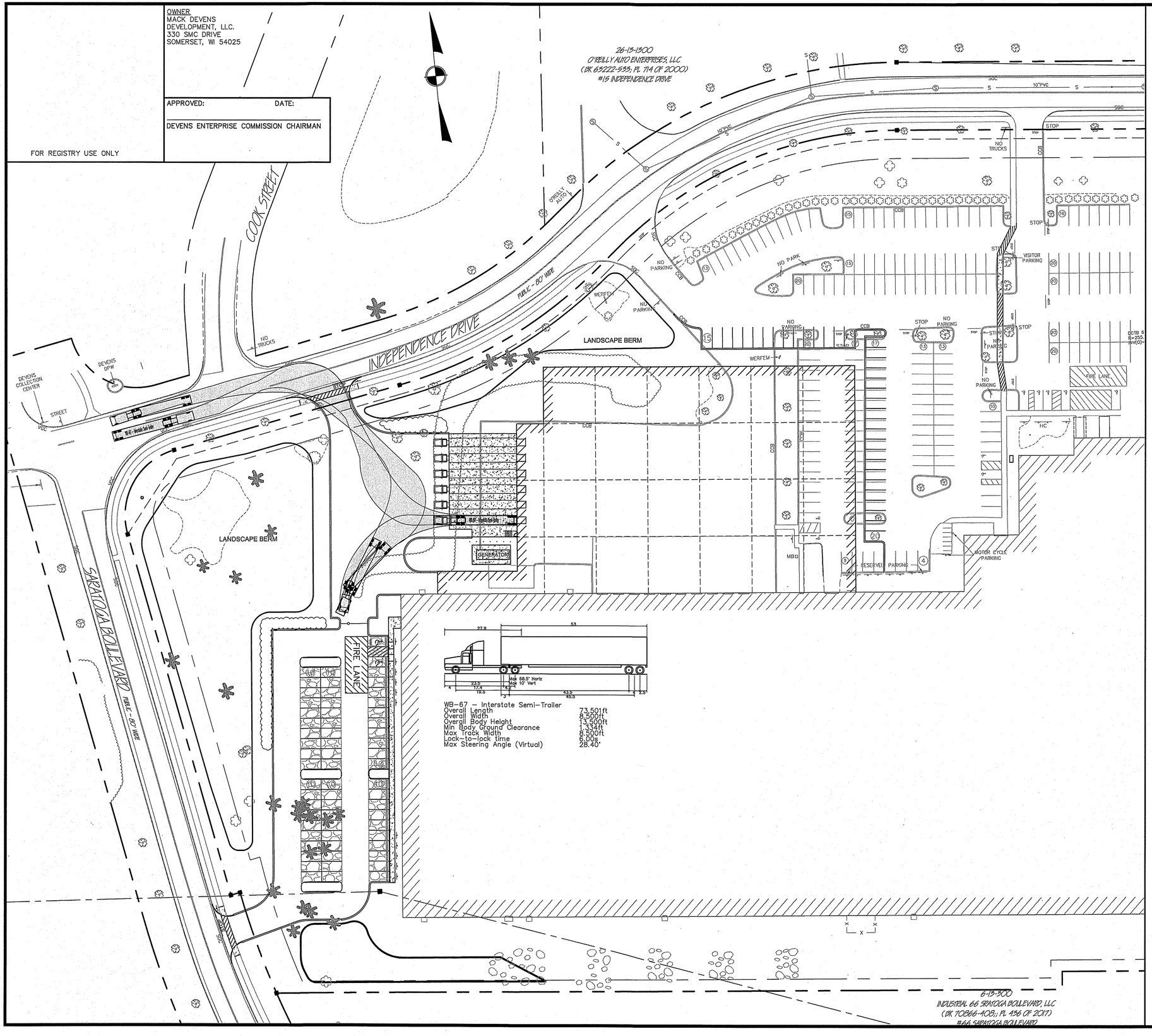
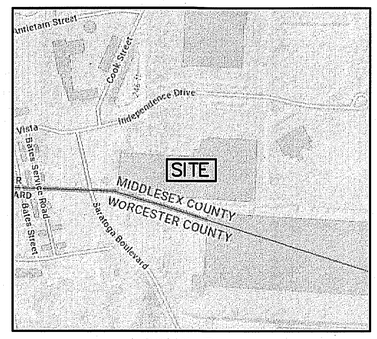




LOCUS PLAN
1"=500 FT.±

GENERAL NOTES:

1. EXISTING CONDITIONS INFORMATION SHOWN IS FROM AN ON-THE-GROUND SURVEY COMPLETED BY TAUPER LAND SURVEY, 710 MAIN STREET OXFORD, MA 01537 IN MAY OF 2025.
2. THE LAND SHOWN HEREON IS NOT SITUATED IN THE 100-YEAR FLOOD HAZARD ZONE PER FEMA FIRM PANEL 25017C0211F. SITE IS ZONE X AND IS TOO FAR AWAY FROM MEASURED ELEVATIONS TO INTERPRET.
3. NO WETLAND RESOURCE AREAS WERE OBSERVED WITHIN 100-FEET OF THE PROJECT SITE.
4. PROPOSED USE WILL NOT GENERATE ELECTROMAGNETIC INTERFERENCE TO ANY SENSITIVE RECEPTOR. INTERFERENCE WITH THE HARVARD-SMITHSONIAN RADIO TELESCOPE (1400-1720 MHz) IS SPECIFICALLY PROHIBITED.
5. PROPOSED USE WILL NOT CAUSE PRONOUNCED, MULTIPLE PATTERNS OF NOISE OR VIBRATION NUISANCE TO, OR INTERFERE WITH ANY SENSITIVE RECEPTOR.
6. A DEP AIR QUALITY PERMIT IS NOT REQUIRED.

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

APPROVED BY THE DEVENS ENTERPRISE COMMISSION
DATE:

No.	Date	Revision
1	8/6/2025	Response to Comments

COMMONWEALTH OF MASSACHUSETTS
WESLEY R. FLIS
CIVIL
No. 45866
PROFESSIONAL ENGINEER
8/6/25

Drawn By: JLL | Designed By: JLL | Checked By: WRF

McCarty Engineering, Inc.
Civil Engineers
42 Tucker Drive, Leominster, MA 01453
phone:(978) 534-1318 fax: (978) 840-6907
www.mccartydb.com

Project Name
Mack Devens Development, LLC.
18 Independence Drive
Ayer & Harvard, MA
(Devens, MA)

Sheet Title
Truck Turning Plan

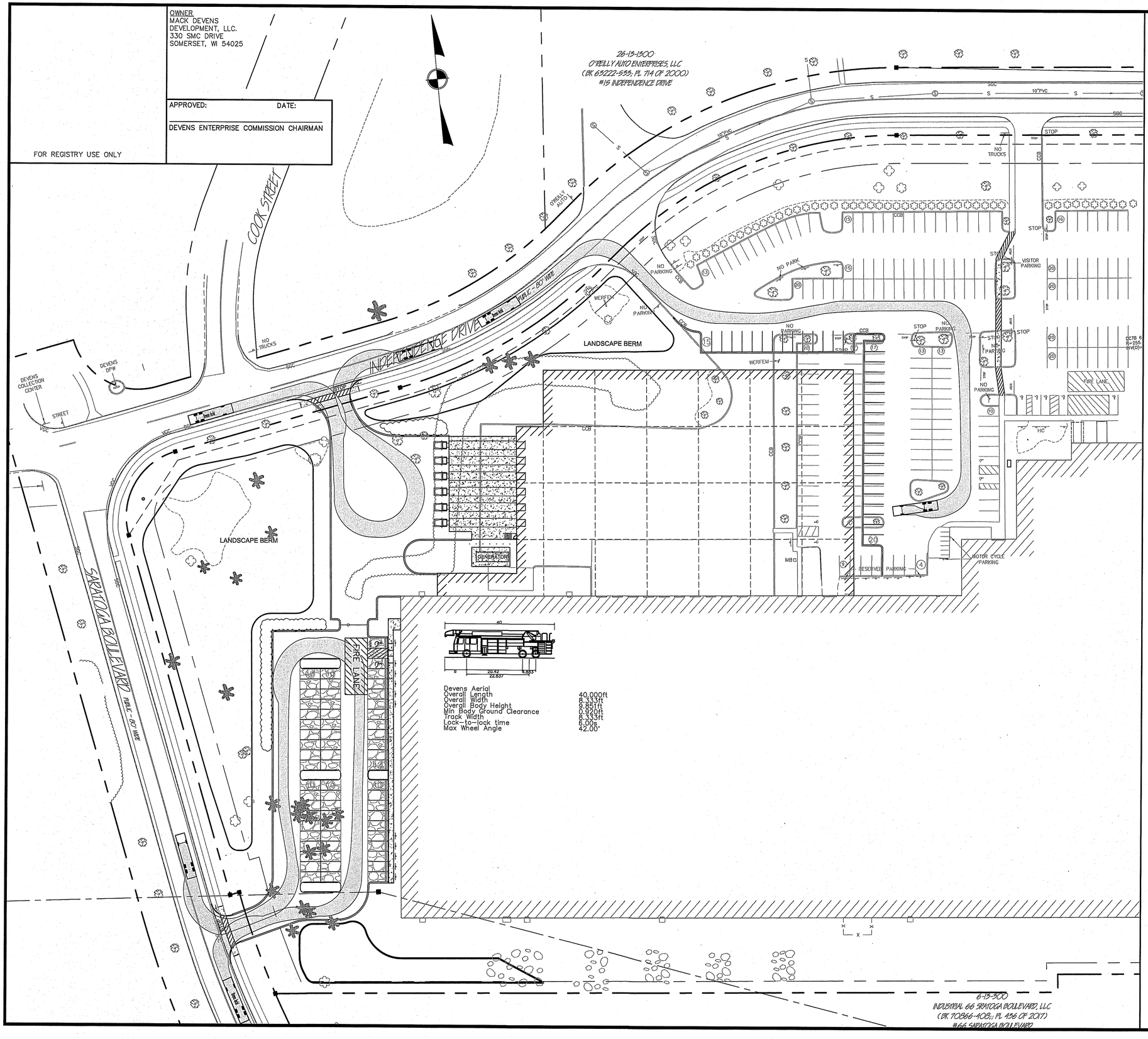
Job No: 127.01.001 Sheet No.
File Name: 127.01.001P-TRN01
Date: July 3, 2025 **10**
Scale: 1"=40'

OWNER
MACK DEVENS
DEVELOPMENT, LLC.
330 SMC DRIVE
SOMERSET, WI 54025

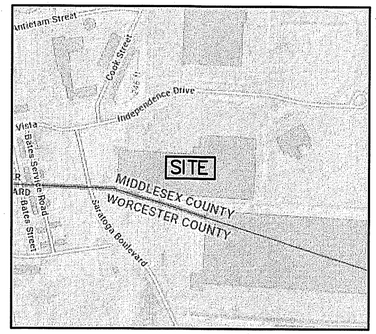
APPROVED: DATE:

DEVENS ENTERPRISE COMMISSION CHAIRMAN

FOR REGISTRY USE ONLY



Devens Aerial	
Overall Length	40.000ft
Overall Width	8.333ft
Overall Body Height	9.851ft
Min Body Ground Clearance	0.920ft
Track Width	8.333ft
Lock-to-lock time	6.00s
Max Wheel Angle	42.00°



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3. NO WETLAND RESOURCE AREAS WERE OBSERVED WITHIN 100-FEET OF THE PROJECT SITE.
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(IN FEET)
1 inch = 40 ft.

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No.	Date	Revision
1	8/6/2025	Response to Comments

COMMONWEALTH OF MASSACHUSETTS
WESLEY R. FLIS
CIVIL
No. 45866
PROFESSIONAL ENGINEER
8/6/25

Drawn By: JLL | Designed By: JLL | Checked By: WRF

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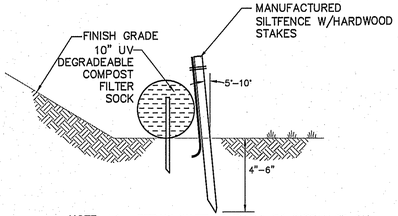
Project Name

Mack Devens
Development, LLC.
18 Independence Drive
Ayer & Harvard, MA
(Devens, MA)

Sheet Title

Fire Truck
Turning Plan

Job No: 127.01.001 Sheet No.
File Name: 127.01.001P-TRN02
Date: July 3, 2025 **11**
Scale: 1"=40'

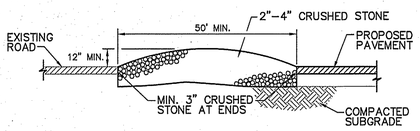


NOTE: 1. STRAW WATTLES SHALL BE INSTALLED ON CONTOUR AND STAKED WITH 18 OR 24 INCH WOOD STAKES AT FOUR FEET ON CENTER

2. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES ½ OF ROLL HEIGHT

STRAW WATTLE / SILT FENCE DETAIL

N.T.S.



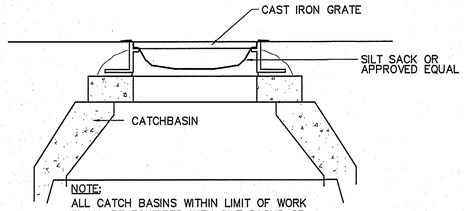
NOTES:

THE PURPOSE OF THIS TEMPORARY BERM IS TO REMOVE MUD FROM THE TIRES OF VEHICLES LEAVING THE SITE DURING CONSTRUCTION.

PROVIDE LEVEL AREA OF CRUSHED STONE 50 FEET IN FROM EDGE OF EXISTING ROAD.

CONSTRUCTION ENTRANCE BERM

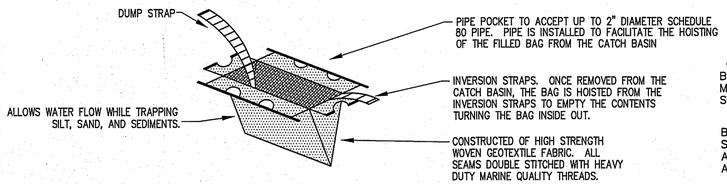
N.T.S..



NOTE:
ALL CATCH BASINS WITHIN LIMIT OF WORK SHALL BE EQUIPPED WITH SILT SACKS OR APPROVED EQUAL.

TEMPORARY CATCHBASIN FILTER

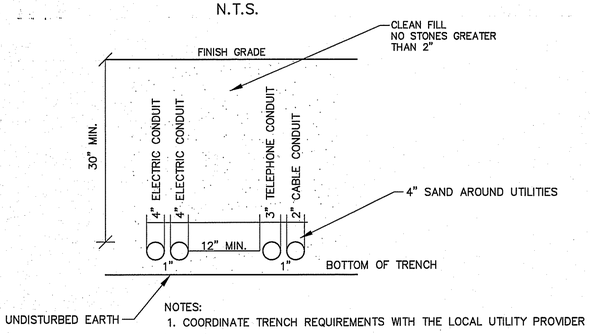
N.T.S.



NOTES:
1. PRODUCT TO BE "SILT SACK" MANUFACTURED BY REED AND GRAHM, INC. SACRAMENTO, CA, OR APPROVED EQUAL.

SILT BAG

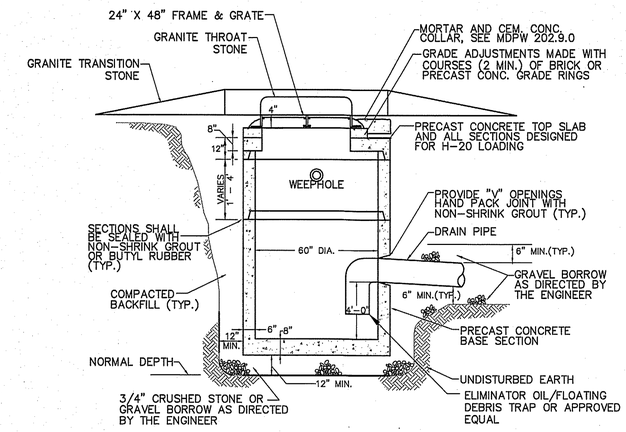
N.T.S.



NOTES:
1. COORDINATE TRENCH REQUIREMENTS WITH THE LOCAL UTILITY PROVIDER

TYPICAL UTILITY TRENCH DETAIL

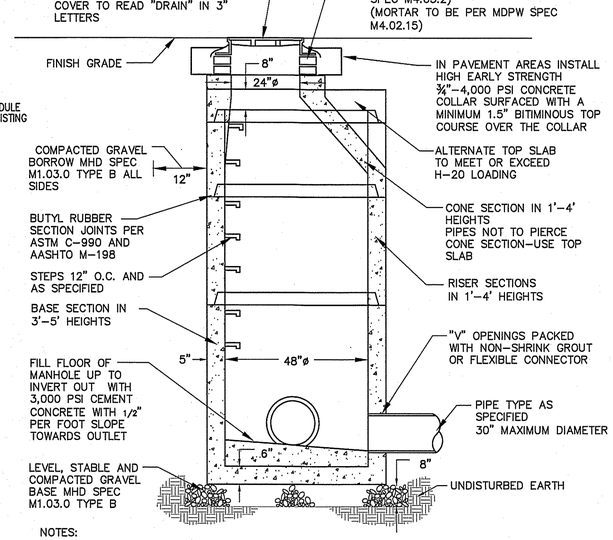
N.T.S.



NOTES:
1. CATCH BASIN SHALL BE PRECAST CEMENT CONCRETE MANUFACTURED IN ACCORDANCE WITH ASTM C-478 DESIGNED FOR H-20 LOADING.
2. DRAIN PIPE FOR LATERAL CONNECTIONS SHALL BE INSTALLED AND TEMPORARILY PLUGGED AS REQUIRED OR DIRECTED.
3. SEE GENERAL PLANS FOR PIPE SIZE, LINE AND GRADE.
4. BACKFILL MATERIAL SHALL CONSIST OF SUITABLE EXCAVATED MATERIAL AND/OR GRAVEL BORROW AS DIRECTED BY THE ENGINEER.
5. INSTALL FRAME & GRATE WITH 24" SIDE ALONG CURB INLET.

PRECAST CONCRETE 60" DIAMETER DOUBLE CATCH BASIN DETAIL

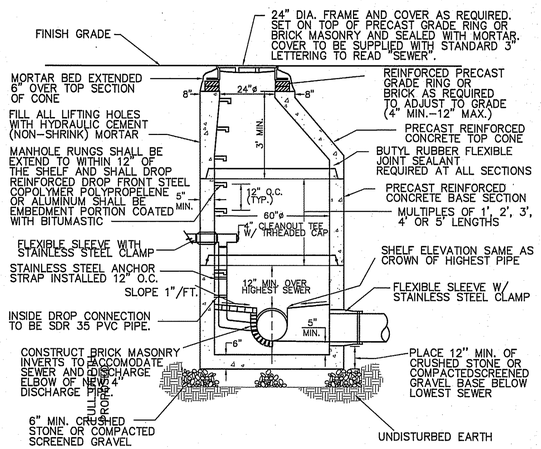
N.T.S.



NOTES:
1. EXCAVATION TO ALLOW FOR FREE TRAVEL OF COMPACTION EQIPMENT
2. ALL COMPACTION TO A MINIMUM 95 PERCENT DRY DENSITY DETERMINED BY ASTM D1557 SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS
3. ALL PRECAST TO MEET OR EXCEED ASTM C-478 AND ASSHTO M 199 SPECIFICATIONS
4. REINFORCED STEEL TO MEET OR EXCEED ASTM A185 AND H-20 LOADING REQUIREMENTS
5. ALL PRECAST CONCRETE TO BE 4,000 PSI MIMIMUM AND MEET ASTM C-478 (6.1)
6. IF NO STEPS ARE SPECIFIED THAN AS THE LOCAL MUNICIPALITY REQUIRES OR IF NO MUNICIPALITY REQUIREMENTS THEN COPOLYMER POLYPROPYLENE COATED REINFORCED PER ASTM C-478 AND OSHA (STD 1-1.9)
7. CONTRACTOR TO CONFIRM WITH CITY OR TOWN DPW THAT BRICK INVERTS ARE NOT A REQUIREMENT
8. FILL ALL INTERNAL AND EXTERNAL HOLES WITH NON-SHRINK GROUT

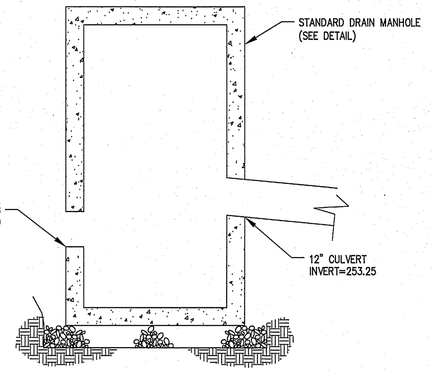
PRECAST CONCRETE DRAIN MANHOLE DETAIL

N.T.S.



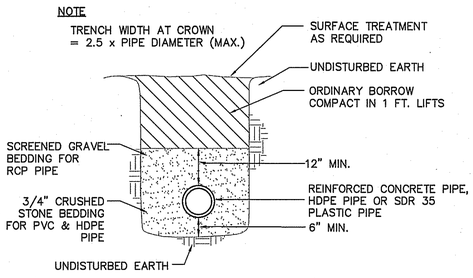
PRECAST CONCRETE SEWER WITH INSIDE DROP MANHOLE

N.T.S.



OUTLET CONTROL STRUCTURE BASIN 1 DETAIL

N.T.S.



NOTES:
1. TRENCH EXCAVATION WIDTH TO ALLOW FOR FREE TRAVEL OF COMPACTION EQUIPMENT
2. ALL COMPACTION TO A MINIMUM 95 PERCENT DRY DENSITY DETERMINED BY ASTM D1557.
3. SEE MANUFACTURERS SPECIFICATIONS FOR ADDITIONAL INSTALLATION REQUIREMENTS
4. AVOID HEAVY EQUIPMENT LOADS OVER PIPE DURING CONSTRUCTION

DRAIN PIPE TRENCH DETAIL

N.T.S.

OWNER
MACK DEVENS DEVELOPMENT, LLC.
330 SMC DRIVE
SOMERSET, WI 54025

APPROVED: DATE:

DEVENS ENTERPRISE COMMISSION CHAIRMAN

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APPROVED BY THE DEVENS ENTERPRISE COMMISSION
DATE:

No.	Date	Revision
1	8/6/2025	Response to Comments

COMMONWEALTH OF MASSACHUSETTS
WESLEY R. FLIS
CIVIL
No. 45666
PROFESSIONAL ENGINEER
8/6/25

Drawn By:	Designed By:	Checked By:
JLL	JLL	WRF

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Project Name
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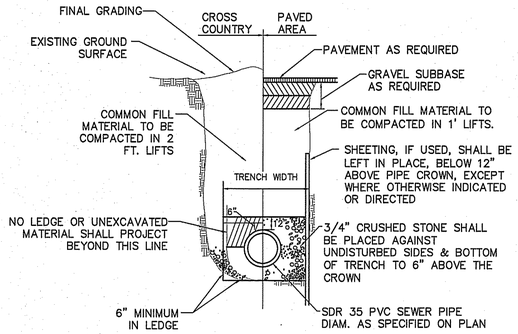
Ayer & Harvard, MA
(Devens, MA)

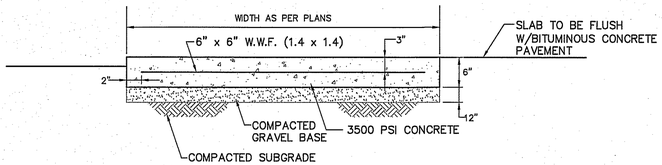
Sheet Title
Construction Details

Job No: 127.01.001 Sheet No.
File Name: 127.01.001P-DET01
Date: July 3, 2025 **12**
Scale: N.T.S.



SEWER TRENCH SECTION

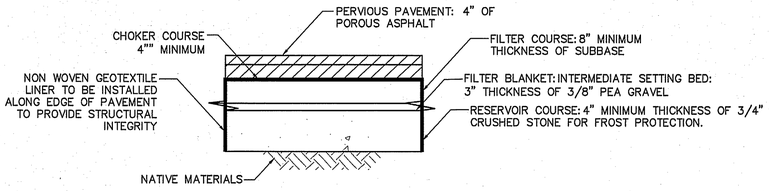
N.T.S.



NOTE:
CONSTRUCTION JOINTS ARE TO BE AT 6' INTERVALS

CONCRETE LOADING AREA PAD DETAIL

N.T.S.



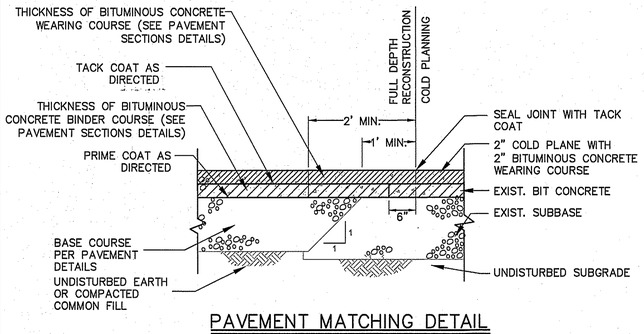
POROUS PAVEMENT DETAIL

N.T.S.

NOTES:

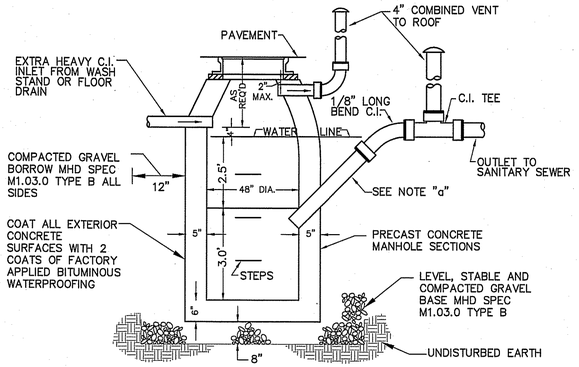
1.POROUS ASPHALT TO BE CONSTRUCTED IN ACCORDANCE WITH UNHSC DESIGN SPECIFICATIONS FOR POROUS ASPHALT PAVEMENT AND INFILTRATION BEDS.

2.POROUS ASPHALT TO BE INSTALLED BY A QUALITY CONTRACTOR EXPERIENCED INTO PERMEABLE PAVING INSTALLATION



PAVEMENT MATCHING DETAIL

N.T.S.



(a) HUBLESS C.I. SOIL PIPE AND FITTINGS WITH APPROVED COUPLINGS
(b) SERVICE WEIGHTS SOIL PIPE WITH APPROVED RESILIENT GASKETS OR LEAD AND OKUM JOINTS.
(c) EXTRA HEAVY SOIL PIPE WITH APPROVED RESILIENT GASKETS OR LEAD AND OKUM JOINTS.

GENERAL CONSTRUCTION NOTES

WHERE SUBJECT TO FROST OR CRUSHING CONDITIONS, OUTLET SHALL BE AT LEAST THREE FEET BELOW THE SURFACE.

THE NEW SEPERATOR MUST BE FILLED WITH CLEAN WATER BEFORE USING, AND AFTER BEING EMPTIED FOR PERIODIC CLEANING.

ALL OIL AND GASOLINE MUST BE REMOVED BEFORE CLEANING OUT THE BASIN, AND MUST NOT BE DISCHARGED INTO THE SEWER THROUGH OTHER FIXTURES.

SPECIFICATIONS FOR COVERING SPECIAL CASES OR CONDITIONS, SHALL BE APPROVED BY THE LOCAL AUTHORITIES, AND THE AUTHORITIES OF THE COMMONWEALTH OF MASSACHUSETTS.

STEPS SHALL BE SPACED 12" APART

BOTH VENTS SHALL BE EXTENDED INDEPENDENTLY 18" ABOVE THE ROOF, OR AS APPROVED BY THE LOCAL AUTHORITIES, AND THE AUTHORITIES OF THE COMMONWEALTH OF MASSACHUSETTS.

SEPERATOR TO BE LOCATED OUTSIDE OF BUILDING WHERE POSSIBLE, COVER TO HAVE A CENTER HOLE.

A TIGHT COVER MUST BE USED IF SEPERATOR IS LOCATED INSIDE OF BUILDING.

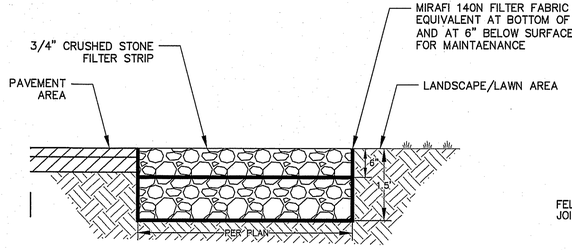
OPENING SHALL BE NOT LESS THAN 24" DIA.

THE SEPERATOR SHALL BE SO LOCATED AND CONSTRUCTED THAT SURFACE WATER SHALL BE EXCLUDED.

INLET PIPE SHALL BE AT LEAST FOUR INCHES ABOVE NORMAL WATER LINE.

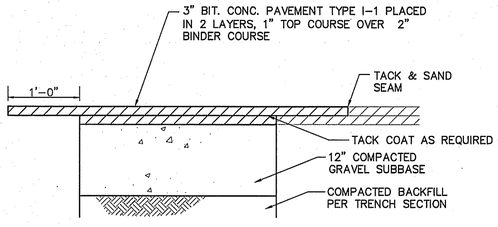
OIL/WATER SEPARATOR

N.T.S.



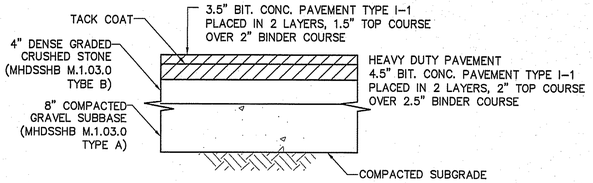
PEA STONE DIAPHRAGM DETAIL

N.T.S.



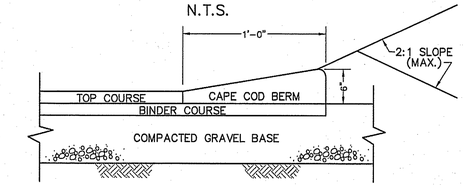
PERMANENT TRENCH REPAIR DETAIL

N.T.S.



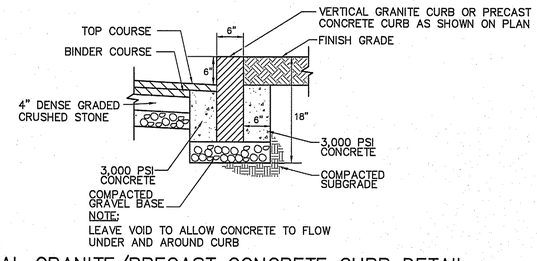
BITUMINOUS CONCRETE PAVEMENT DETAIL

N.T.S.



BITUMINOUS CONCRETE BERM DETAIL (TYPE A)

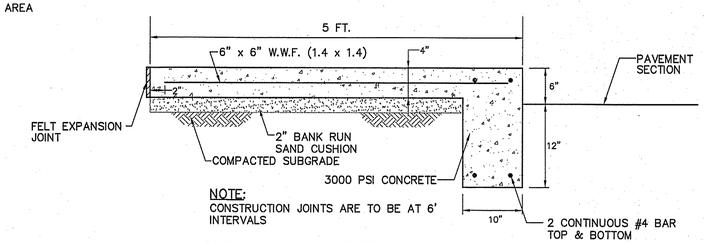
N.T.S.



NOTE:
LEAVE VOID TO ALLOW CONCRETE TO FLOW UNDER AND AROUND CURB

VERTICAL GRANITE/PRECAST CONCRETE CURB DETAIL

N.T.S.



NOTE:
CONSTRUCTION JOINTS ARE TO BE AT 6' INTERVALS

MONOLITHIC CONCRETE CURB & SIDEWALK DETAIL

N.T.S.

OWNER
MACK DEVENS DEVELOPMENT, LLC.
330 SMC DRIVE
SOMERSET, WI 54025

APPROVED: DATE:

DEVENS ENTERPRISE COMMISSION CHAIRMAN

FOR REGISTRY USE ONLY

APPROVED BY THE DEVENS ENTERPRISE COMMISSION
DATE:

No.	Date	Revision
1	8/6/2025	Response to Comments

COMMONWEALTH OF MASSACHUSETTS
WESLEY R. FLIS
CIVIL
No. 45866
PROFESSIONAL ENGINEER
8/6/25

Drawn By: JLL | Designed By: JLL | Checked By: WRF

McCarty Engineering, Inc.
Civil Engineers
42 Tucker Drive, Leominster, MA 01453
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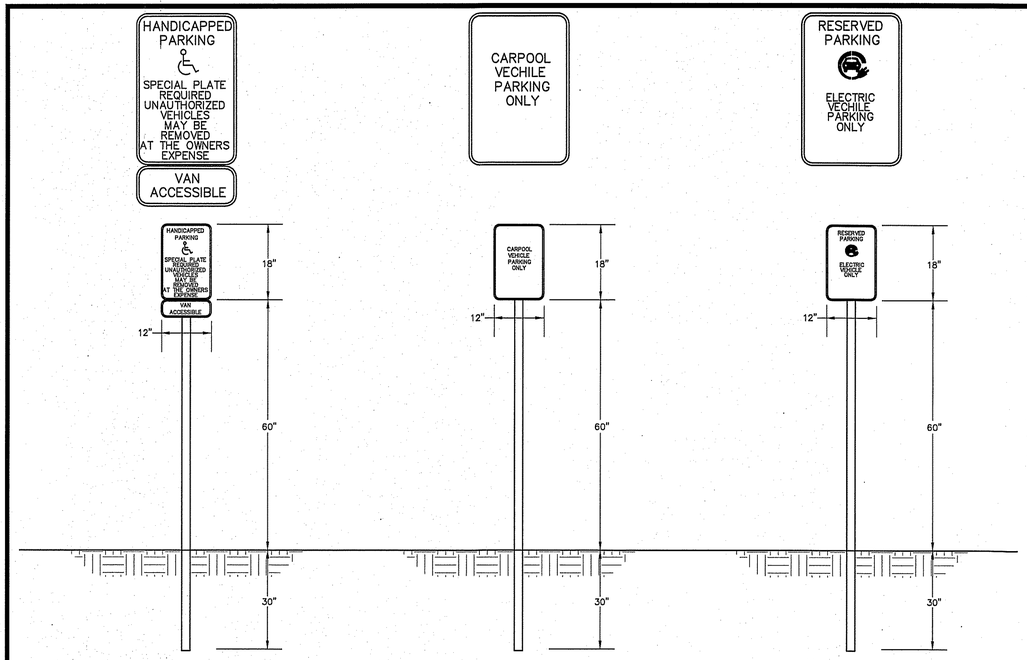
Project Name
Mack Devens Development, LLC.
18 Independence Drive
Ayer & Harvard, MA
(Devens, MA)

Sheet Title
Construction Details

Job No: 127.01.001 Sheet No. 13
File Name: 127.01.001P-DET02
Date:July 3, 2025
Scale: N.T.S.



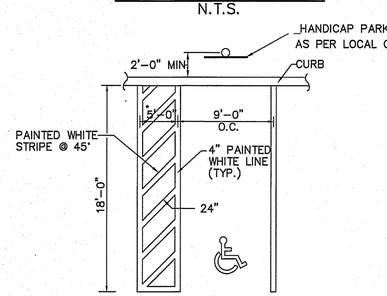
HANDICAP PARKING SIGN DETAIL
N.T.S.

RIDE SHARING PARKING SIGN DETAIL
N.T.S.

ELECTRIC VEHICLE PARKING SIGN DETAIL
N.T.S.

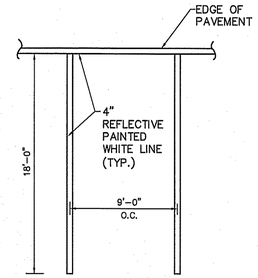
NOTE:
TO BE MOUNTED ON BUILDING

NO IDILING SIGN DETAIL
N.T.S.

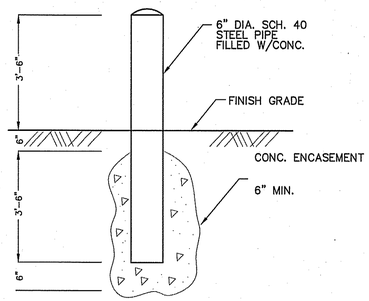


* PAINTED AISLE 8'-0" MIN WIDE FOR HC VAN SPACES.

HANDICAP PARKING SPACE DETAIL
N.T.S.



STANDARD SPACE DETAIL
N.T.S.



BOLLARD DETAIL
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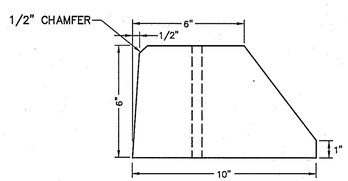
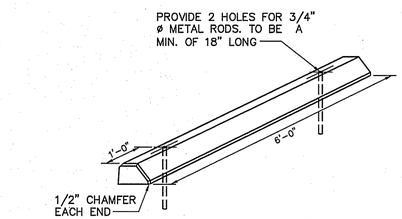
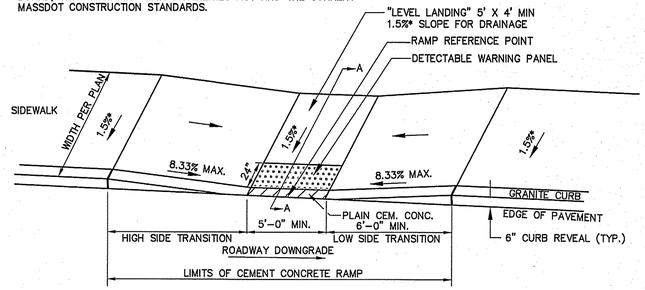


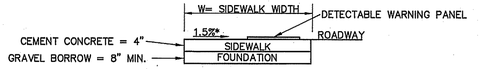
SECTION



PRECAST CONCRETE CURB STOP DETAIL
N.T.S.

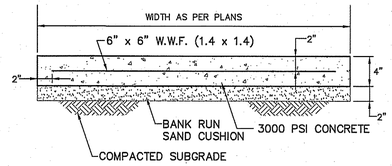
WHEELCHAIR RAMPS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE CURRENT REGULATIONS OF THE ARCHITECTURAL ACCESS BOARD, THE AMERICANS WITH DISABILITIES ACT AND THE CURRENT MASSDOT CONSTRUCTION STANDARDS.





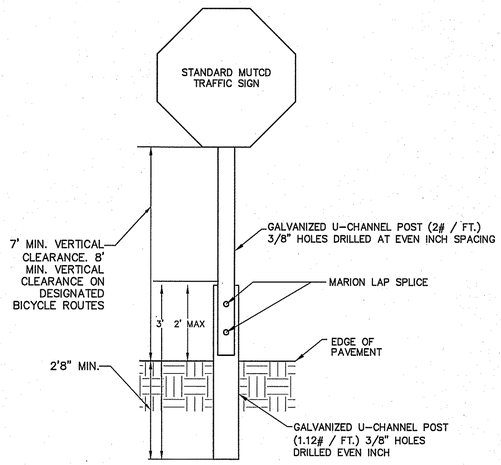
SECTION A–A

WHEELCHAIR RAMP TYPE A
N.T.S.



NOTE:
CONSTRUCTION JOINTS ARE TO BE AT 6' INTERVALS

CONCRETE SIDEWALK DETAIL
N.T.S.



TRAFFIC SIGN DETAIL
N.T.S.

OWNER
MACK DEVENS
DEVELOPMENT, LLC.
330 SMC DRIVE
SOMERSET, WI 54025

APPROVED: DATE:

DEVENS ENTERPRISE COMMISSION CHAIRMAN

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COMMONWEALTH OF MASSACHUSETTS
WESLEY R. FLIS
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Drawn By: JLL | Designed By: JLL | Checked By: WRF

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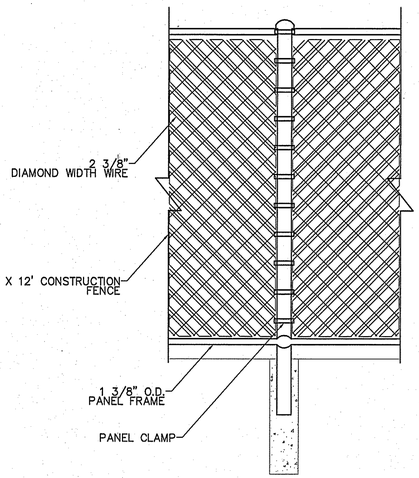
www.mccartydb.com

Project Name
Mack Devens Development, LLC.
18 Independence Drive
Ayer & Harvard, MA
(Devens, MA)

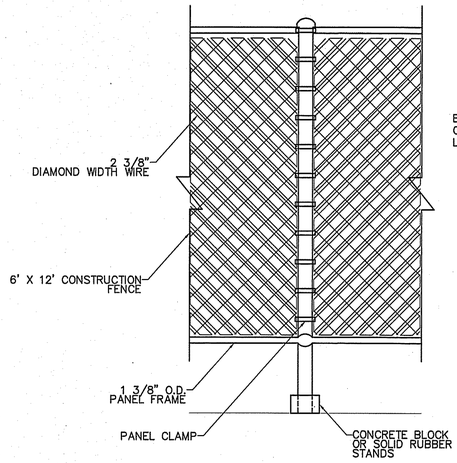
Sheet Title
Construction Details

Job No: 127.01.001 Sheet No.
File Name: 127.01.001P-DET03
Date: July 3, 2025 14
Scale: N.T.S.



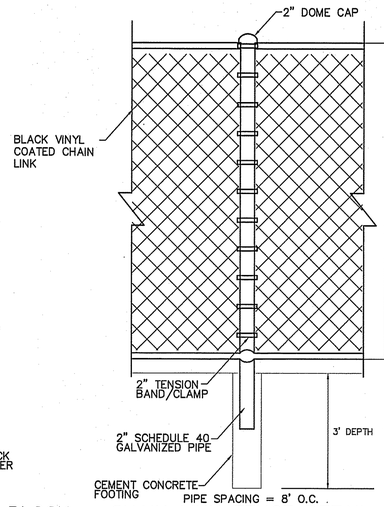
CONSTRUCTION FENCE DETAIL WITH POST

N.T.S.



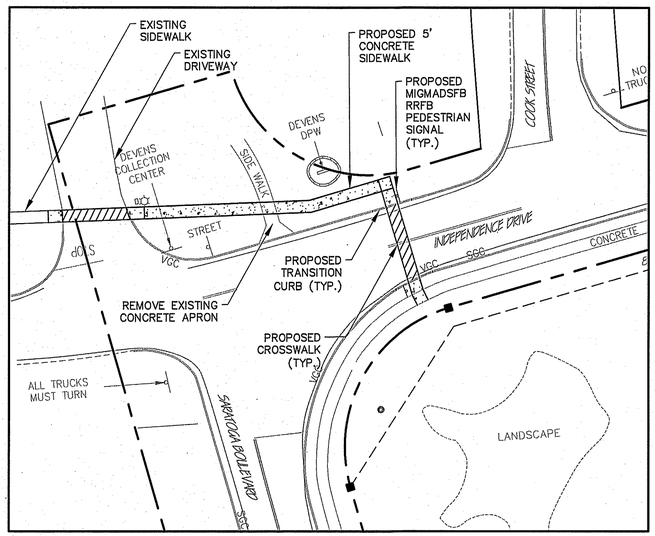
CONSTRUCTION FENCE DETAIL WITH BLOCK

N.T.S.



CHAIN LINK FENCE DETAIL

N.T.S.



SIDEWALK IMPROVEMENT DETAIL

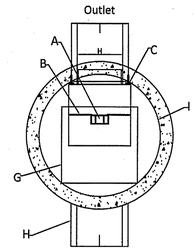
1"=30'

Specifications

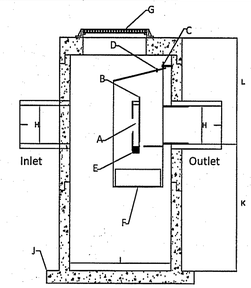
1. The separator must be designed based on the following criteria:

HydroDome Components

A. Siphon
B. Overflow Weir
C. Wall Anchor
D. Air Check Valve
E. Foam Debris Screen
F. Perforated Bottom
G. Grate or Cover
H. Inlet and Outlet Pipes
I. Structure Diameter
J. Base Extension
K. Sump Depth
L. Invert to Top of Structure



Plan



Profile

2. The separator must be independently tested and verified to the 2013 NJDEP separator protocol and 2014 ETV Canada Separator protocol

3. Vendor testing and/or field testing is not acceptable to determine an alternate equal due to the lack of repeatability.

Notes:

1. Sump depths shown are typical. Additional depth can be added as required.

2. Single or multiple inlet pipes allowed.

3. Drops allowed.

4. Inlet Grate Shown. HydroDome can be design with a closed cover if required.

5. Oil capacities given are spill capacities.

6. Sediment depths are maximum holding capacities and not recommended capacities for regular maintenance.

7. Capacities are rounded down to nearest 5 gal or ft3 (5L or 0.1 m3 for metric units)

8. Minimum rim to top of structure [L] required may vary for HydroDome. Please call Hydroworks for site-specific design questions.

9. Hydraulics vary with pipe size and model number. Please call Hydroworks for site-specific headloss calculations.

HydroDome by Hydroworks, LLC
U.S. Patent # 10,801,196
www.hydroworks.com
888-290-7900

HydroDome Dimensions / Capacities *

Model	Diameter ft (m)	Sump Depth ft (m) K	Max. Pipe In (mm) H	Total Volume gal (L)	Oil Spill Volume gal (L)	Sediment Volume ft3 (m3)
HD 3	3 (0.9)	4 (1.2)	18 (450)	210 (800)	30 (120)	15 (0.5)
HD 4	4 (1.2)	4.5 (1.4)	21 (525)	420 (1600)	70 (285)	30 (0.9)
HD 5	5 (1.5)	5.5 (1.7)	27 (675)	805 (3055)	125 (480)	60 (1.7)
HD 6	6 (1.8)	6.5 (2.0)	33 (825)	1375 (5200)	210 (800)	100 (2.8)
HD 7	7 (2.1)	7.5 (2.3)	39 (975)	2155 (8170)	320 (1225)	160 (4.6)
HD 8	8 (2.4)	8.5 (2.6)	42 (1050)	3195 (12095)	490 (1860)	235 (6.8)
HD 10	10 (3.0)	10.5 (3.2)	54 (1350)	6185 (23350)	955 (3615)	455 (13.0)
HD 12	12 (3.8)	12.5 (3.8)	66 (1650)	10575 (40030)	1640 (6220)	780 (22.2)

* HD dimensions can be customized to provide site specific oil or sediment volumes

Hydroworks HydroDome

PROJECT:

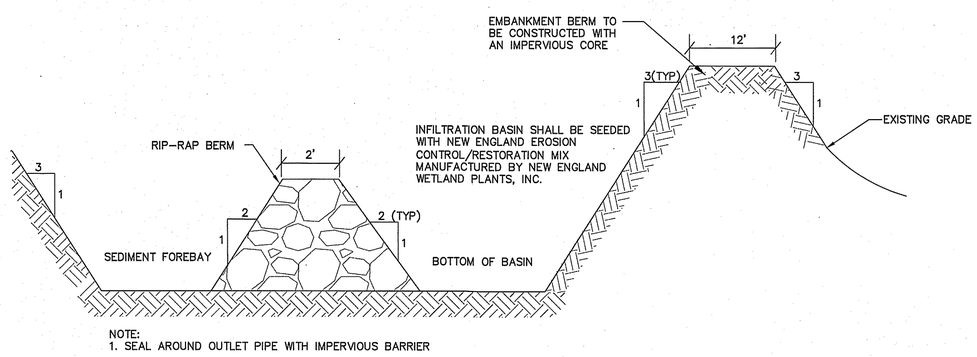
LOCATION:

REVISION DATE: 08/08/2022

Hydroworks

HYDROWORKS HYDRODOME HD5 DETAIL

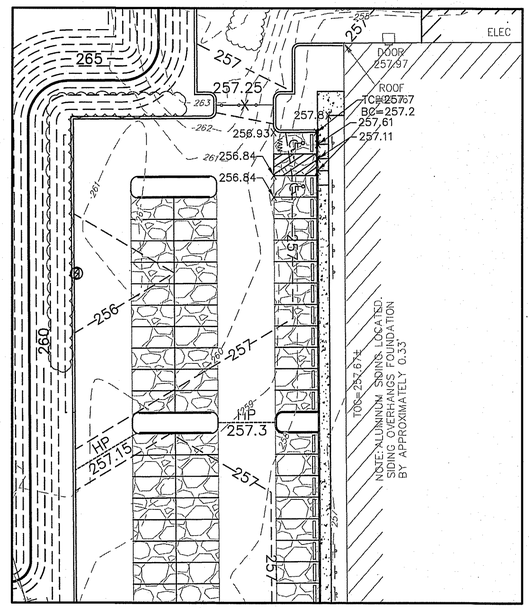
N.T.S.



NOTE:
1. SEAL AROUND OUTLET PIPE WITH IMPERVIOUS BARRIER

CROSS-SECTION OF TYPICAL INFILTRATION BASIN DETAIL

N.T.S.



ACCESSIBLE RAMP DETAIL

1"=20'

OWNER
MACK DEVENS DEVELOPMENT, LLC.
330 SMC DRIVE
SOMERSET, WI 54025

APPROVED: DATE:

DEVENS ENTERPRISE COMMISSION CHAIRMAN

FOR REGISTRY USE ONLY

APPROVED BY THE DEVENS ENTERPRISE COMMISSION
DATE:

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COMMONWEALTH OF MASSACHUSETTS
WESLEY R. FLIS
CIVIL
No. 45866
PROFESSIONAL ENGINEER
8/6/25

Drawn By: JLL | Designed By: JLL | Checked By: WRF

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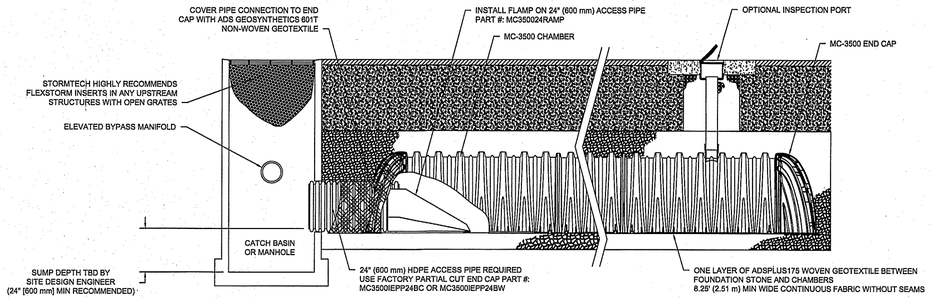
www.mccartydb.com

Project Name
Mack Devens Development, LLC.
18 Independence Drive
Ayer & Harvard, MA
(Devens, MA)

Sheet Title
Construction Details

Job No: 127.01.001 | Sheet No. 15
File Name: 127.01.001P-DET04
Date: July 3, 2025
Scale: N.T.S.



MC-3500 ISOLATOR ROW PLUS DETAIL
NTS

INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR PLUS ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
    - I) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - II) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

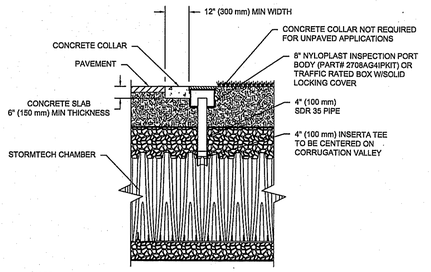
STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45° (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.



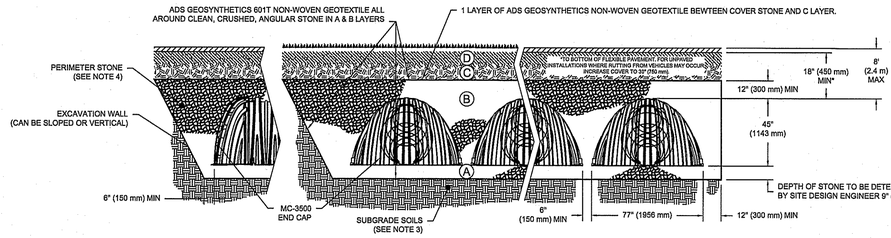
NOTE:
INSPECTION PORTS MAY BE CONNECTED THROUGH ANY CHAMBER CORRUGATION VALLEY.

4" PVC INSPECTION PORT DETAIL (MC SERIES CHAMBER)
NTS

ACCEPTABLE FILL MATERIALS: STORMTECH MC-3500 CHAMBER SYSTEMS

	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[1] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 24" (600 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 12" (300 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 4	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 4	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE[2,3]

PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



NOTES:

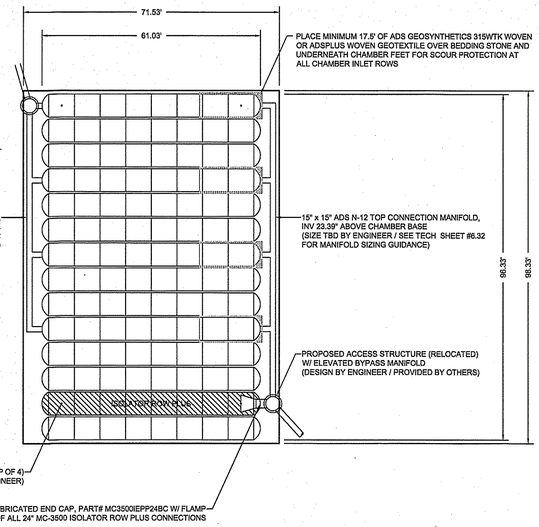
1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16a, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 45x76 DESIGNATION SS.
2. MC-3500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 500 LBS/IN/IN. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

CONCEPTUAL LAYOUT

(112) STORMTECH MC-3500 CHAMBERS
(28) STORMTECH MC-3500 END CAPS
INSTALLED WITH 12" COVER STONE, 9" BASE STONE, 40% STONE VOID
INSTALLED SYSTEM VOLUME: 23115 CF
AREA OF SYSTEM: 7034 **FT²**
PERIMETER OF SYSTEM: 340 **FT**

PROPOSED ELEVATIONS

MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED):	261.50
MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC):	255.50
MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC):	255.00
MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT):	255.00
MINIMUM ALLOWABLE GRADE (TOP OF RIGID CONCRETE PAVEMENT):	255.00
TOP OF STONE:	254.50
TOP OF CHAMBER:	253.50
15" TOP CONNECTION INVERT:	251.70
24" BOTTOM (ISOLATOR ROW PLUS) CONNECTION INVERT:	249.92
15" BOTTOM CONNECTION INVERT:	249.88
BOTTOM OF CHAMBER:	249.75
BOTTOM OF STONE:	249.00



OWNER
MACK DEVENS
DEVELOPMENT, LLC.
330 SMC DRIVE
SOMERSET, WI 54025

ADVANCED DRAINAGE SYSTEMS, INC.

SiteASSIST by Stormtech
FOR STORMTECH INSTRUCTIONS, DOWNLOAD THE INSTALLATION APP

FOR REGISTRY USE ONLY

SMC DEVENS

DEVENS, MA

APPROVED: DATE:

DEVENS ENTERPRISE COMMISSION CHAIRMAN

MC-3500 STORMTECH CHAMBER SPECIFICATIONS

1. CHAMBERS SHALL BE STORMTECH MC-3500.
2. CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
3. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16a, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 45x76 DESIGNATION SS.
4. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
5. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
6. CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
7. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 500 LBS/IN/IN. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
8. ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
   - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
   - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
   - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
9. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF MC-3500 CHAMBER SYSTEM

1. STORMTECH MC-3500 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
2. STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
   - STONESHOOTER LOCATED OFF THE CHAMBER BED.
   - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
   - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
6. MAINTAIN MINIMUM - 6" SPACING BETWEEN THE CHAMBER ROWS.
7. INLET AND OUTLET MANIFOLDS MUST BE INSERTED A MINIMUM OF 12" (300 mm) INTO CHAMBER END CAPS.
8. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE MEETING THE AASHTO M43 DESIGNATION OF #3 OR #4.
9. STONE MUST BE PLACED ON THE TOP CENTER OF THE CHAMBER TO ANCHOR THE CHAMBERS IN PLACE AND PRESERVE ROW SPACING.
10. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
11. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

1. STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
2. THE USE OF EQUIPMENT OVER MC-3500 CHAMBERS IS LIMITED:
   - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
   - NO RUBBER TIRED LOADER, DUMP TRUCK, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
   - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY USING THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

APPROVED BY THE DEVENS ENTERPRISE COMMISSION
DATE:

No.	Date	Revision
1	8/6/2025	Response to Comments

COMMONWEALTH OF MASSACHUSETTS
WESLEY R. FLIS
CIVIL
No. 45866
PROFESSIONAL ENGINEER
8/6/25

Drawn By:	Designed By:	Checked By:
JLL	JLL	WRF

McCarty Engineering, Inc.
Civil Engineers
42 Tucker Drive, Leominster, MA 01453
phone:(978) 534-1318 fax: (978) 840-6907
www.mccartydb.com

Project Name

Mack Devens Development, LLC.
18 Independence Drive
Ayer & Harvard, MA
(Devens, MA)

Sheet Title

Stormtech Detail Sheet

Job No: 127.01.001 Sheet No.
File Name: 127.01.001P-DET05
Date: July 3, 2025 **16**
Scale: N.T.S.

OWNER
MACK DEVENS
DEVELOPMENT, LLC.
300 SMC DRIVE
SOMERSET, WI 54025

APPROVED: **DATE:**

DEVENS ENTERPRISE COMMISSION CHAIRMAN

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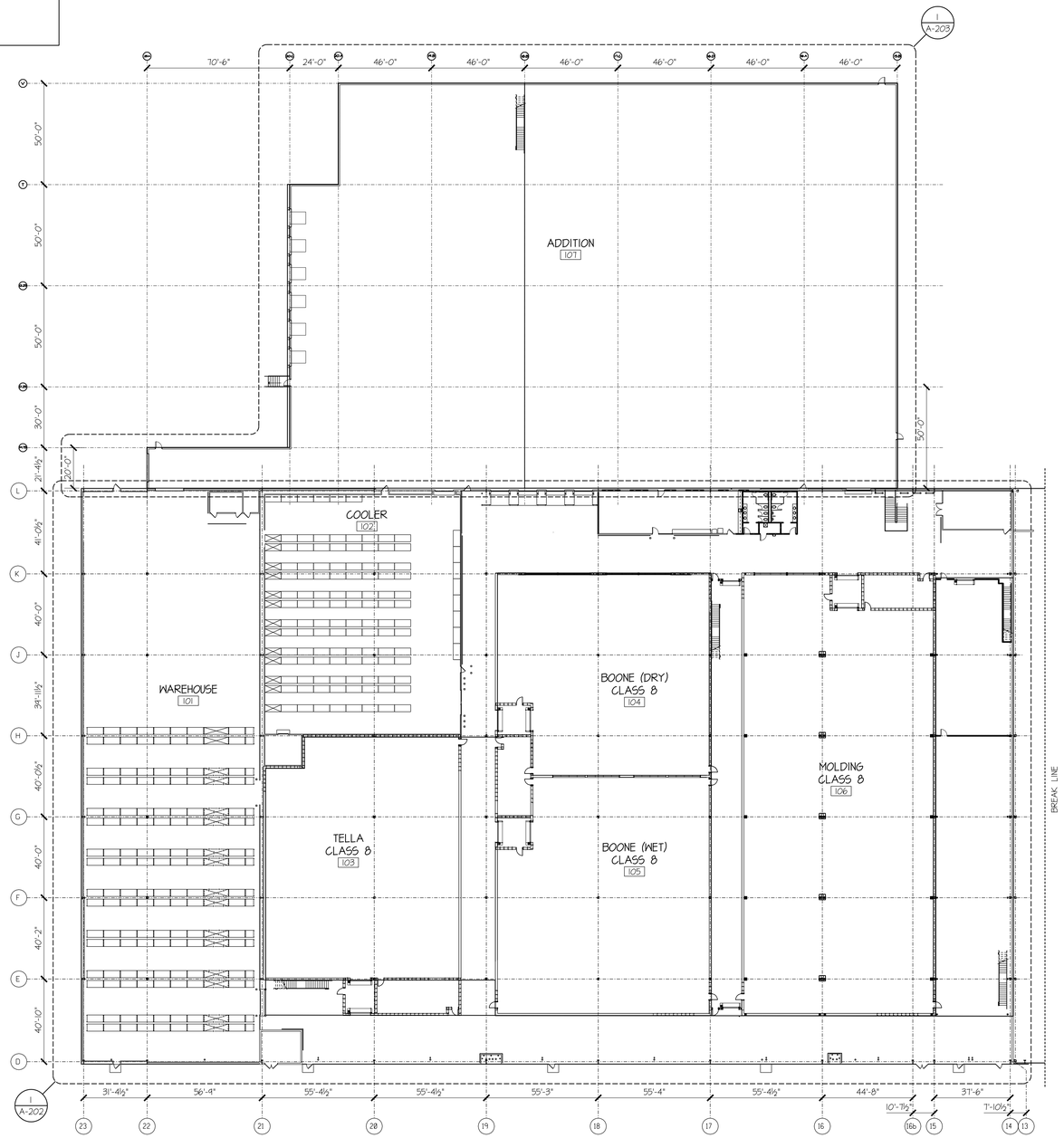

1 OVERALL FLOOR PLAN

SCALE: 1/32" = 1'-0"

SMC ltd.

18 Independence Drive
Devens, MA

Renovation

J FERRERA ASSOCIATES INC.
Architecture • Design • Planning
2 Fern Lane - Sterling, MA 01564
tel:(978) 407-8848
email: jaferrera@comcast.net

McCARTY companies
Total Project Solutions
From Concept to Completion
42 Tucker Drive- Leominster, MA 01453
Tel: 978.534.8727

REGISTERED ARCHITECT
JOHN A. FERRERA
No. 20301
PITTSBURG, NH
USA

NO.	DATE	DESCRIPTION
4	06-30-25	GENERAL REVISIONS
3	06-27-25	GENERAL REVISIONS
2	02-20-25	GENERAL REVISIONS
1	01-23-25	GENERAL REVISIONS

SHEET TITLE:

OVERALL
MAIN FLOOR PLAN

Job No.:	**24150**
FILE:	
DRAWN:	
SCALE :	**1/32" = 1'-0"**
DATE:	**01/09/2025**

SHEET IDENTIFICATION:

A-201

OWNER
MACK DEVENS
DEVELOPMENT, LLC.
300 SMC DRIVE
SOMERSET, WI 54025

APPROVED: **DATE:**

DEVENS ENTERPRISE COMMISSION CHAIRMAN

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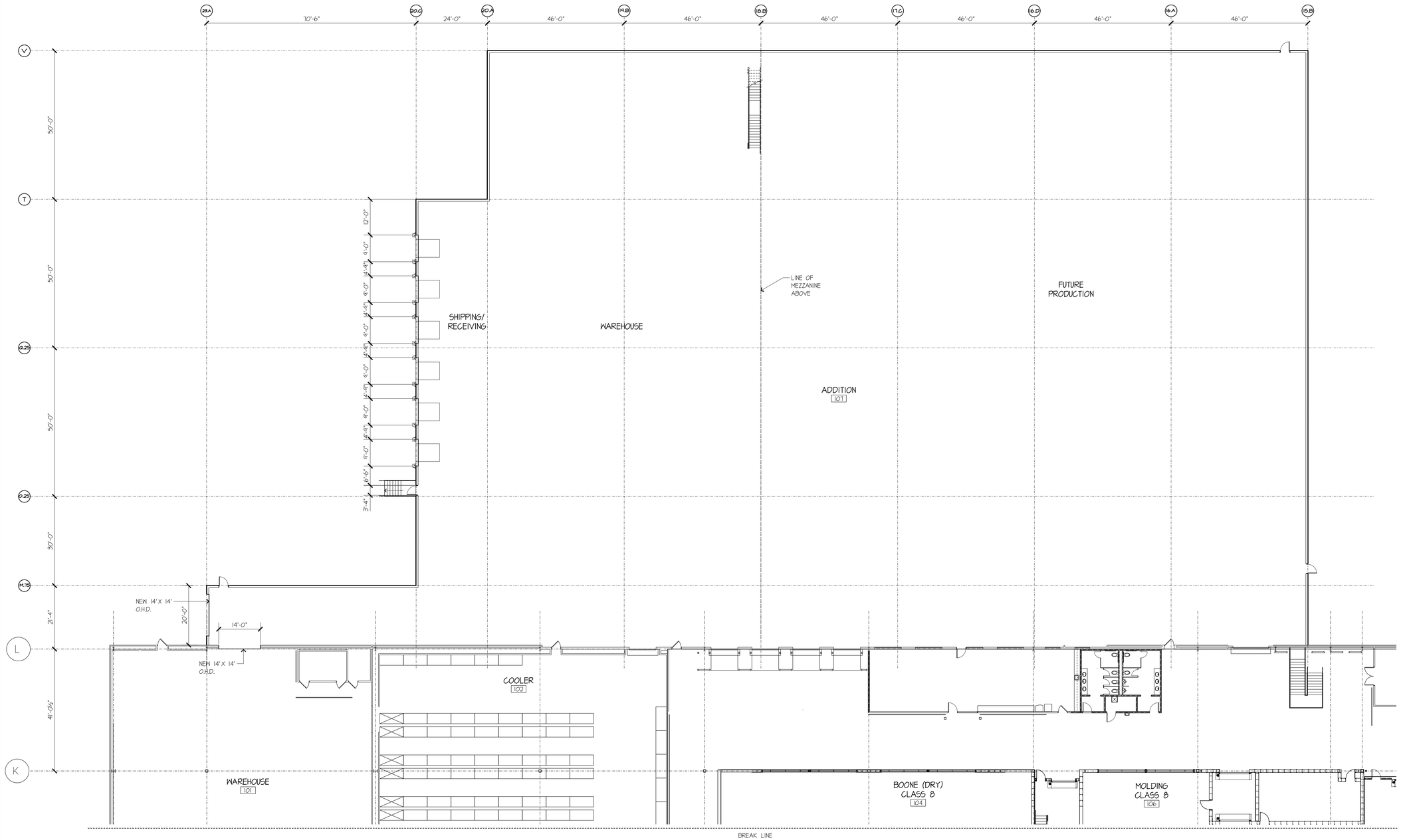

1 ENLARGED FLOOR PLAN - AREA "B"

SCALE: 1/16" = 1'-0"

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NO.	DATE	DESCRIPTION
3	06-27-25	GENERAL REVISIONS
2	02-20-25	GENERAL REVISIONS
1	01-23-25	GENERAL REVISIONS

SHEET TITLE:

ENLARGED AREA "B" FLOOR PLAN

Job No.:	**24150**
FILE:	
DRAWN:	
SCALE :	**1/16" = 1'-0"**
DATE:	**01/09/2025**

SHEET IDENTIFICATION:

A-203

OWNER
MACK DEVENS
DEVELOPMENT, LLC.
300 SMC DRIVE
SOMERSET, WI 54025

APPROVED: **DATE:**

DEVENS ENTERPRISE COMMISSION CHAIRMAN

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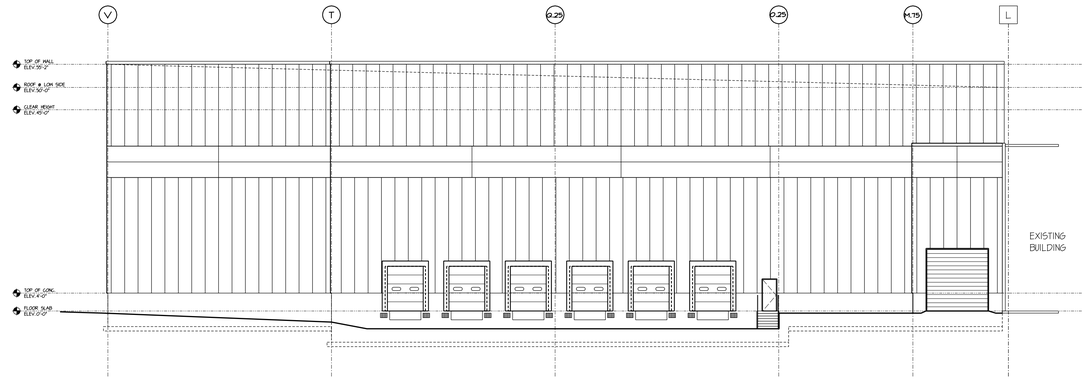
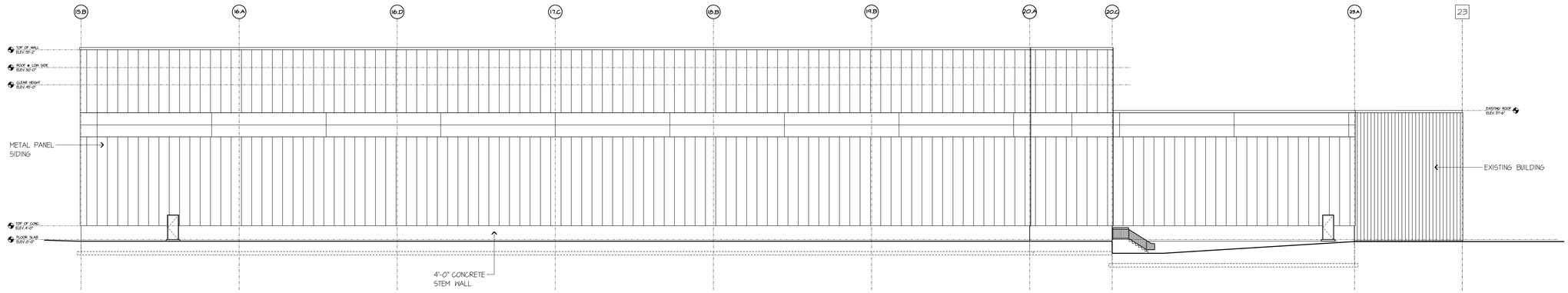


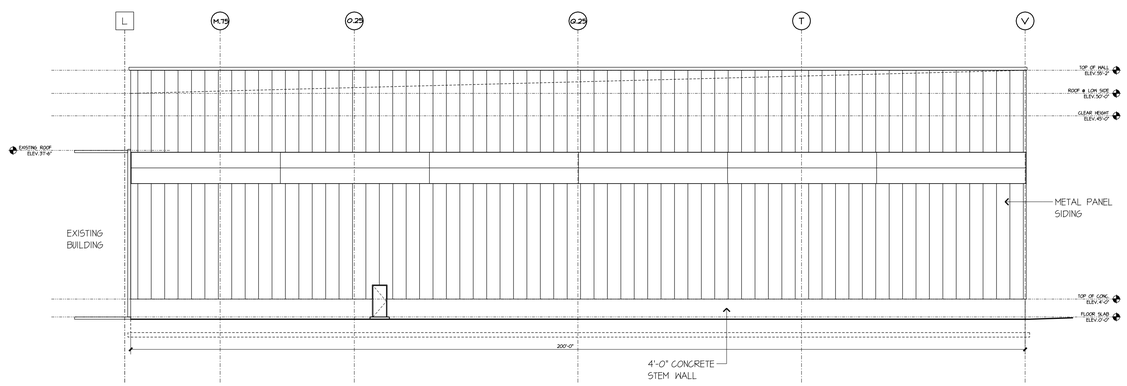
3 SOUTH ELEVATION

SCALE: 1/16" = 1'-0"



2 WEST ELEVATION

SCALE: 1/16" = 1'-0"



1 NORTH ELEVATION

SCALE: 1/16" = 1'-0"

SMC ltd.

18 Independence Drive
Devens, MA

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NO.	DATE	DESCRIPTION
3	06-27-25	GENERAL REVISIONS
2	02-20-25	GENERAL REVISIONS
1	01-23-25	GENERAL REVISIONS

SHEET TITLE:

EXTERIOR ELEVATIONS

Job No.:	**24150**
FILE:	
DRAWN:	
SCALE :	**1/16" = 1'-0"**
DATE:	**01/09/2025**

SHEET IDENTIFICATION:

A-301