



**NOTICE OF INTENT
AUTOMATED MULTI-PURPOSE MACHINE GUN RANGE
SOUTH POST RESERVE FORCES TRAINING AREA - HOTEL RANGE
FORT DEVENS - LANCASTER, MASSACHUSETTS**

Prepared for:

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**NOTICE OF INTENT NARRATIVE
AUTOMATED MULTI-PURPOSE MACHINE GUN RANGE
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1.0 INTRODUCTION

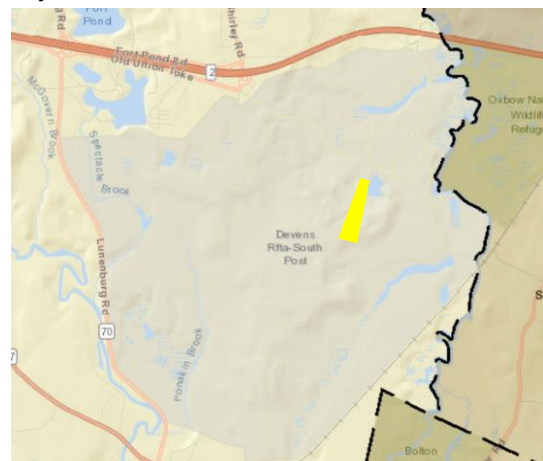
1.1 GENERAL INFORMATION

GeoInsight, Inc. prepared this Notice of Intent (NOI) on behalf The Mason & Hanger Group, Inc. (M&H) and its direct client, the United States Army (US Army), to address expected improvements to and redevelopment of the existing South Post Reserve Forces Training Area (RFTA), Hotel Range (the site), which is part of Fort Devens and located in Lancaster, Massachusetts. The planned redevelopment of the site is described in a comprehensive March 2020 site-civil design plan set prepared by M&H and titled *Devens, Massachusetts, Automated Multipurpose Machine Gun (MPMG) Range, FY21, PN: 088752*, hereinafter referred to as the "M&H design plans." Refer to the M&H Locus Plans attached as Figure 1A, taken from the M&H design plans sheet G-201. Figure 1B, taken from the M&H design plans sheet C-110, provides a larger scale view of the site and surrounding topography. Figure 2 identifies the extent of the South Post RFTA property.

The site has been developed as a weapons training area for decades. The vicinity of the project consists of rural, wooded and natural areas with the exception of several other nearby developed areas that are also similarly used as weapons training grounds as part of RFTA complex. The improvements and redevelopment of the site will include removing existing targeting and control facilities and replacing them with an Automated Multi-Purpose Machine Gun Range (MPMGR) system, as well as conducting clearing of existing vegetation and site regrading to improve firing trajectories and lines of sight for overall safety enhancements.

1.2 PROJECT SITE SETTING

The overall expanse of the RFTA property is approximately 4,700 acres and the individual training areas/ranges within the RFTA are not legally subdivided parcels. The South Post RFTA is bordered by: numerous private properties within the Town of Lancaster to the north, south, and west; the Town of Harvard and the Oxbow National Wildlife Refuge to the northeast; and the Bolton Flats State Wildlife Management Area to the southeast. The approximate location of Hotel Range within the South Post RFTA is show at right in yellow. The nearest abutter to the site is approximately 3,000 feet to the east (Ox Bow National Wildlife Refuge),



and the nearest residential abutter is approximately 4,600 feet to the northwest (Meditation Lane).

Hotel Range is approximately one mile south of the main entrance to the South Post and covers approximately 65 acres within its normal use area. Figure 3A illustrates an aerial view of the site. Figure 3B (from the M&H design plans sheet C-101) identifies existing site topography overlain by proposed line-of-sight/trajectory of the new range alignment. Existing conditions (and proposed demolition activities) are included on sheets CD101 to CD132 of the M&H design plans, which are included as Appendix A.

1.3 PROJECT PROPONENT

This project is being proposed by the US Army. This narrative is preceded by the Bureau of Resource Protection – Wetlands and Waterways BRPWPA Form 3 – Notice of Intent, which has been completed with relevant project information, including the names and addresses of the contact representative person(s) responsible for operation and maintenance. The US Army will be responsible for financing maintenance and emergency repairs at the site, if and as needed.

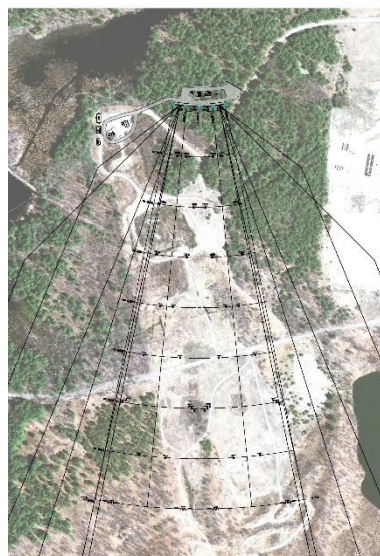
2.0 PROJECT DESCRIPTION

2.1 PROJECT SUMMARY

The Army plans to renovate Hotel Range in order to:

- (1) reorient the firing lanes so that the surface danger zones associated with the range are entirely within South Post boundaries; and
- (2) modernize the range so that it complies with current Army training and design standards.

The renovated range will include constructing the new Range Operations and Control Area (ROCA) approximately 500 feet east of the current ROCA, with the firing lines reoriented so that the surface danger zone is entirely within Fort Devens property. Much of the footprint of the new ROCA overlies existing woodlands. The Army's preferred new alignment adjustment for Hotel Range is based on utilization of the existing range footprint to the extent possible. This will result in a slight reorientation so that the renovated range would overlay much of the existing range, with a slight pivoting (NE/SW top and bottom of range) to allow for the firing range and distances needed to meet the surface danger zone requirements. An overlay of the existing and new range orientation is shown at right. The Army exercised avoidance and minimization measures and selected the preferred alternative that is the Least Environmentally Damaging Practicable Alternative (LEDPA) necessary to meet the basic project purpose, per Clean Water Act Section 404(b)(1) *Alternatives Analysis* guidelines.





The range firing positions will require an increase in elevation in order to maintain line of sight down the range. To accomplish this, relocated on-site soil will be used to raise the new ROCA elevation to approximately up to 15 feet higher than existing grades, and a gabion retaining wall is planned to be installed to the north of the firing line to contain the soil fill slope and reduce the footprint of the new fill to the extent practicable. The retaining wall will vary in height between 6 to 8 feet, dependent on the existing topography of the site and the required elevation for line of sight. The footprint area of the renovated range will be essentially the same as existing conditions.

In order to provide the required safe lines of sight for the length of the range, a forested area within the existing range boundaries will be cleared and soil regraded to a consistent height for the length of the range. Trees will be cleared within the proposed renovated range footprint, which will involve an estimated combined total of 18 acres of forested area. Areas to be cleared and grubbed are indicated on Figure 4 (Sheet CD-101 of the M&H design plans). Additional details regarding demolition, clearing and grubbing are included in Appendix A, which includes sheets CD101 to CD132 of the M&H design plans. Considerable grading will occur along the eastern boundary of the proposed renovated range, resulting in approximately 30,000-cubic yards of soil to be cut. None of the cut soil will be removed from the range; the excavated soil will be moved to the new firing line area in order to elevate the firing positions to the necessary line of sight position. A new gravel road for accessing the new ROCA will be built north of the firing positions. The current range facilities are to be demolished, and new range facilities will be built at the renovated range. These facilities will include a new control tower, classroom building, operations and storage building, covered bleachers, covered mess, and ammunition breakdown building. Many of the existing gravel roadways existing downrange will remain as is and a few will be improved, which in some cases will involve being elevated above their current grades.

2.2 ANTICIPATED PROJECT ACTIVITIES

As described previously, the MPMGR project will include improvement and redevelopment of the existing range based around the installation of new mechanical target systems that can be remotely operated. In addition to the target systems, supporting infrastructure will include buried utilities, several new buildings, new and expanded parking areas, improved existing driveways and field access roads, and new driveways and field access roads. A portion of the improvements, such as the new ROCA and regrading to provide direct lines of site, will be located in currently undisturbed wooded or vegetated areas.

The Hotel Range area where the MPMGR redevelopment is proposed constitutes approximately 65 acres; approximately 37 acres of that total area will undergo some disturbance to facilitate the range improvement. Figure 4 (taken from the M&H design plans, sheet CD-101) identifies areas to undergo tree clearing and grubbing. Except for the large areas that will be cleared and grubbed (18 acres), most of the disturbances will be in focused and isolated locations. Ground disturbance is anticipated due to:



- brush/tree clearing and grubbing (this includes some areas where vegetation has grown back in previously cleared locations);
- cutting of existing grades to achieve a proper line of sight;
- demolition of several existing small buildings/structures;
- demolition and cutting associated with removal of former target emplacements;
- filling of existing grades to achieve a proper line of sight;
- filling for the new ROCA;
- filling of existing grades for several new roadway sections; and
- filling at numerous small, isolated locations where individual new target structures will be installed.

The portions of the site where development is planned currently consist of mostly gently to moderately sloping ground, much of which is generally sparsely vegetated. Existing conditions overlain by proposed new grades and development are included on sheets CG101 to CG132 of the M&H design plans, which are included as Appendix B.

2.3 ANTICIPATED PROJECT SEQUENCE

The expected general sequence of activities at the site is expected to include the following:

- contractor mobilization;
- establish temporary erosion and sedimentation controls and construction entrance;
- perform brush/tree clearing and grubbing;
- establish temporary laydown areas;
- perform demolition of several existing small buildings/structures, and removal of old buried utilities;
- complete rough cutting and filling, including ROCA retaining wall;
- install new stormwater structures;
- install MPMGR features and new electrical services;
- complete fine grading and surfacing for roadways and new ROCA;
- construct new buildings and structures; and
- perform final stabilization measures; and
- remove temporary erosion and control structures and demobilization.

2.4 ANTICIPATED PROJECT SCHEDULE

The Hotel Range MPMGR project is expected to be bid in early winter 2021 with construction starting in spring 2021, and continuing until mid-summer 2022.

3.0 PROJECT SITE CONDITIONS

3.1 SITE TOPOGRAPHY

The site and surroundings are generally flat to gently sloping, but topography generally drops moderately toward the north near the northeastern end of the site where a waterbody is present



(Slate Rock Pond, which flows into the Nashua River), and grades rise moderately upward where a small hill exists at the to the southwest end of the Hotel Range. Within the site, there are many localized areas with subtle and abrupt topographical changes on a small or moderate scale. These existing are best described on sheets CD101 to CD132 of the M&H design plans (Appendix A), which depict site topography at 1-foot contour intervals that include the wetland areas associated buffer zones. Although these particular plan sheets describe proposed demolition, they also clearly identify existing topography, site conditions, and areas to be cleared and grubbed.

3.2 WETLAND AREAS

As part of the overall Environmental Assessment for the MPMGR, the Army retained Normandeau Associates, Inc. (Normandeau) to conduct a study of existing wetland features at the site. A copy of the Normandeau report is included as Appendix C and describes wetland delineation methodologies, areas identified, and findings, along with names and contact information for the Normandeau personnel involved in the delineation and evaluation.

The Normandeau report identified several wetlands at the Site and designated them as Wetlands #1, #2, #3, #4, and #5. Normandeau also identified two stream channels and designated them Stream #1 and Stream #2. The borders of these features were flagged and mapped. Because several of the previously indicated wetlands surround the two stream channels, a condition does not exist where a stream is impacted but not its surrounding wetland and therefore, impacts discussed herein are related to the wetlands, which by reason of proximity, thereby includes the streams. The Normandeau report includes several figures that identify the mapped areas and their relation to each other, as well as representative photographs of the wetland areas. The designated delineation mapping performed by Normandeau is also depicted on the M&H design plans referenced herein.

In summary, wetland resource areas and buffer zones expected to be affected as part of the site redevelopment include:

Wetland #1	Forested Bordering Vegetated Wetland (connected to Stream #1)
Wetland #2	Isolated Wetland (wet meadow)
Wetland #3	Forested Seasonally Flooded Bordering Vegetated Wetland (southern edge of Slate Rock Pond);
Wetland #4	Isolated Depression/Possible Vernal Pool
Wetland #5	Bordering Vegetated Wetland (connected to Stream #2)

GeoInsight's attached Figure 5, taken from the M&H design plans, depicts the overall locations of the mapped wetlands and buffer zones in the vicinity of the proposed new construction, and identifies 25-foot, 50-foot, 100-foot, and 200-foot buffer zone boundaries where fill placement is expected.

Tree clearing and grubbing will occur within the state-designated 100-foot wetland buffer zones at each of the five Wetlands identified in the Normandeau report. Relatively minor grading



activities (filling of a small area and with a small quantity) will occur within the state-designated 100-foot wetland buffer zones for Wetlands #1, #2, and #5. Significant fill placement, construction of the retaining wall and unpaved access roads will occur within the state-designated 100-foot wetland buffer zone at Wetlands #3, and #4.

Estimated Earth Volume Changes within 100-ft Buffer:		
Wetland #1 and Wetland #2	750 cy	Fill
Wetland #2	670 cy	Cut
Wetland #3	1,400 cy	Fill
Wetland #4	8,300 cy	Fill
Wetland #5	50 cy	Fill

Notes:

Wetland #1 and #2 fill is impractical to separate between the two.

Wetland #3 Fill does not include volume counted for Wetland #4.

Despite the use of a retaining wall to minimize impacts, a small portion of the proposed footprint for the new ROCA fill encroaches into Wetland #3 at a distance less than 25 feet from the mapped edge of Wetland #3; this occurs at a location where the Wetland #3 locally protrudes south in a narrow formation and therefore represents a relatively small area.

The proposed new unpaved access road and retaining wall will unavoidably require construction through Wetland #4, a 0.03-acre (approximately 1,300 square feet) anthropogenic isolated depression that was identified as a possible vernal pool. The proposed grading scheme will require vegetation removal and placement of fill/gravel directly within Wetland #4, resulting in complete loss of the wetland feature. As of the date of this NOI, this feature is not believed to fall under federal jurisdiction; the Army has initiated an additional assessment and determination with the U.S. Army Corps of Engineers for the Wetland #4 project area to confirm jurisdictional status.

Wetlands #1, #2, and #4 were also evaluated to determine if they met the criteria for a vernal pool per the Massachusetts Department of Fisheries and Wildlife standards and criteria. The survey results indicate that only Wetland #4 potentially meets the applicable criteria for vernal pool designation. It does not meet the criteria for Isolated Land Subject to Flooding (ILSF, 310 CMR 10.57) as defined in the Wetlands Protection Act Regulations. However, Wetland #4 is an anthropogenic feature, having likely been excavated to collect soil for use in constructing the adjacent service road when Hotel Range was constructed.

With specific regard to Wetland #4, the Army exercised avoidance and minimization measures, as indicated previously herein, including comprehensive design team discussions with Range Control to assess relocating the service drive adjacent to Firing Lane 4 to avoid Wetland #4 impacts. However, the service drive fell into the SDZ (Surface Danger Zone) of the firing range, which would require the service drive to be closed during live fire operations and have a major adverse impact on the functionality of the range operations. The MPMGR operations must include keeping soldiers rotating back-and-forth from the ROCA to the firing line. Closing the



road during firing operations would unacceptably disrupt operations and having the road open during firing operations is not an option due to safety issues. With Wetland #4 being a small isolated depression, the design team, with input from Range Control, decided that the removal of the wetland feature and keeping the current service drive location as proposed is the best and most safe option. Also, the service drive is a fill area and with 3:1 slopes, and the toe of those slopes will extend out further than the service road. The vertical curves were designed to the fullest extent feasible to lessen the impact of the grading for the service road and ROCA.

3.3 SOIL CONDITIONS

The Normandeau report (Appendix C) includes a brief description of shallow soil conditions related to wetland areas. In addition, GeoInsight coordinated and oversaw a geotechnical soil exploration program across the planned MPMGR site to facilitate site design planning. Over the three-day period of November 18 through 20, 2019, a GeoInsight engineer oversaw the advancement of a total of eighteen geotechnical borings used to characterize subsurface soil conditions and provide definable soil strength data for design purposes. Drilling depths ranged from approximately 17 to 32 feet below ground surface (bgs). GeoInsight's Boring Location Plan and Soil Boring Logs are included as Appendix D.

Subsurface conditions at the site differed somewhat across the area of interest and can be broken down into three different formations.

In Borings B-1 through B-5, the soil profile generally included relatively uniform natural soil (glacial outwash) comprised primarily of loose to medium dense, fine to medium sand from just below ground surface (0.5') to 10 feet bgs. The material below the upper sand deposit was primarily a medium dense to dense sand and gravel. In borings B-1 through B-3 an apparent weathered rock layer was encountered at depths ranging from 20-25 feet bgs.

In borings B-6 through B-13, the soil profile generally included relatively uniform natural soil (glacial outwash) comprised primarily of loose to medium dense, fine to medium sands with varying degrees of silt. Soil profiles for borings B-6, B-7, B-13 and B-14 varied slightly in that soil changed from primarily sand to silt as the borings advanced in depth, with the silt (depths vary from 5-10 feet).

In borings B-15 through B-18, the soil profile generally included relatively uniform natural soil (glacial outwash) comprised primarily of loose to medium dense, silt.

The natural sand deposits are generally identified to be associated with river and/or flood plain alluvium deposited in water once flowing in the surrounding valley environment. These deposits are typically horizontally stratified, with layer discontinuities and variations in thickness possible. The soils were generally observed to be slightly coarser in the upper zone of the stratigraphy (i.e., containing minor amounts of coarse sand and gravel) and transitioned to a more well-graded, fine to medium sand deeper in the profile.



As noted in the boring logs, it is apparent that surficial fill and/or disturbed native soil is present across the site. It is likely that many areas of the site may contain surficial fill materials and/or disturbed natural soil based simply upon observation of disturbed surface conditions and site use. Where disturbed native material is present, it will likely be difficult to differentiate it from undisturbed native material.

3.4 GROUNDWATER DEPTH

The Normandeau report (Appendix C) references depth to groundwater in the context of its wetland delineation study.

Groundwater was also evaluated during GeoInsight's geotechnical evaluation (Appendix D) and found to be present in 17 of the 18 GeoInsight borings. No groundwater was observed to be present in B-12. Groundwater fluctuated greatly across the site, but was the shallowest in borings B-1 through B-4, with water present between 5 and 6 feet bgs. Groundwater was deepest in the northeast corner of the Site where ground elevations were higher and bordered a wetland approximately 20 feet lower in elevation. In the area of the new ROCA groundwater was observed at 7 feet bgs at B-6 (near Wetland #4) and then between 15 to 21 feet bgs in the other borings. Evidence of seasonal high groundwater was not obvious based upon examination of the soil samples collected during the geotechnical evaluation.

3.5 SITE PHOTOGRAPHS

Photographs taken on June 11 and 12, 2018 during the wetlands delineation are included in the Normandeau report (Appendix C). Photographs taken on October 16, 2019 are included on sheets CD701 and CD702 of the M&S design plans and are included in Appendix E). GeoInsight took photographs on November 12, 2019 as part of our geotechnical evaluation that are included in Appendix F. Together, these photographs are considered to be representative of existing conditions at the site.

4.0 REGULATORY COMPLIANCE

4.1 NATURAL RESOURCES AND ENDANGERED SPECIES DATA REVIEW

GeoInsight conducted a review of the Massachusetts Natural Heritage and Endangered Species Program (NHESP) databases by accessing "Oliver" - the Massachusetts Geographical Information System (Mass GIS) viewer application. Based upon review of the Mass GIS program the entire South Post RFTA property is included within an even larger area mapped as an Area of Critical Environmental Concern (ACEC), as identified in Figure 6. An inquiry to US Fish and Wildlife Service indicated no critical habitats were present at the site but that the Northern Long-Eared Bat could be threatened, endangered, or candidate species present. Review of the MassGIS NHESP Certified Vernal Pools map did not indicate vernal pools at the site.



Independent of GeoInsight activities related to this NOI, the US Army Garrison Fort Devens, who is the proponent of the MPMGR project, prepared a comprehensive Environmental Assessment (EA) of the impacts of the proposed improvements on the environment, in accordance with the National Environmental Policy Act (NEPA). The EA provided significant detail regarding redevelopment options considered by the Army and their potential effects on flora and fauna of concern. A copy of the EA report, including all attachments, is included as Appendix G. The information in the EA is considered to satisfy a formal MESA evaluation. Garrison Fort Devens continues to interact with MESA representatives in the application of the 2019 "Fort Devens Integrated Natural Resources Management Plan," which includes the Hotel Range.

4.2 WETLANDS REGULATIONS

The work at the site is eligible to be reviewed under the project provisions at 310 CMR 10.53(3)(i) and therefore must meet the resource area performance standards to the maximum extent possible. The project's general compliance requirements with resource area performance standards are outlined in the following sections:

- 310 CMR 10.03 General Provisions (7)(c)3 Category (a) (b) + (c);
- 310 CMR 10.53: General Provisions;
- 310 CMR 10.55(4) Bordering Vegetated Wetlands for Bordering Land Subject to Flooding; and
- 310 CMR 10.57(4) Isolated Land Subject to Flooding.

4.3 PERMIT FEES

Based upon GeoInsight's review of the applicable regulations, the MPMGR project would fall under Category 2.j per 310 CMR 10.03 General Provisions 7(c). However, as the project proponent is a Government Agency, no Fee will be applicable to the NOI filing and, therefore, a Wetlands Fee Transmittal Form is not included with the NOI application.

4.4 STORMWATER MANAGEMENT

4.4.1 Construction Stormwater

The planned construction activities at the Hotel Range are anticipated to be generally localized and most work areas will be manageable in size, which will facilitate straightforward control over stormwater quality. Sediment and erosion control practices will also be localized and adapted/slightly modified to the work-area-specific conditions where erosion or deposition of sediment into a drainage structure could potentially occur.

The M&H design plans for the new MPMGR include erosion and sediment controls and best management practices notes, details, and locations plan regarding implementation during all site preparation and construction, including but not limited to appropriate sequencing of construction, silt fencing, sediment traps, covering soil stockpiles, and watering exposed areas.



The M&H design plan sheets CG701 to CG804 include Erosion and Sediment Control Plan information and are included as Appendix H. In Appendix I, M&H design plans CG501 to CG504 are included that address several new drainage structures that will be installed as part of the site improvements, and associated drainage calculations.

In addition to the M&H Erosion and Sediment Control Plan, GeoInsight prepared a draft National Pollutant Discharge Elimination System (NDPES) Construction General Permit Stormwater Pollution Prevention Plan (SWPPP) for the project. The SWPPP further describes stormwater management activities and details to protect stormwater quality during construction. The SWPPP has not been included with this NOI submittal but GeoInsight can provide a copy to interested parties if requested for their information.

The potential for impacts to stormwater from the planned construction will be mitigated by implementing straightforward controls immediately upslope and/or downslope of the work areas, or at multiple locations on extended slopes, and at any overland flow surface discharge area leading to adjacent surface water bodies, if applicable. Practices and controls will be designed to minimize: contact of precipitation with disturbed soil; erosive forces of water on disturbed soil; and sediment-laden water from passing beyond the work areas.

4.4.2 Post-Construction Stormwater Flow

Pre-improvement and post-improvement stormwater flow includes infiltration into permeable surfaces, overland sheet flow into vegetated buffers, a few areas of shallow concentrated flow, and a few areas of ditch/swale flow. Three existing 12-inch diameter stream culverts will be replaced by a single 36-inch diameter culvert. An existing 24-in diameter stream culvert will remain, and an existing ditch crossing will be improved with the use of articulated concrete block.

The MADEP has established ten (10) Stormwater Management Standards. A project that meets or exceeds the standards is presumed to satisfy the regulatory requirements regarding stormwater management. A description of the Project's anticipated compliance with the Standards is outlined below:

Standard #1: *No new stormwater conveyances (e.g. outfalls) may discharge untreated stormwater directly to or cause erosion in wetlands or waters of the Commonwealth.*

There will be no new stormwater conveyances discharging untreated stormwater into or having the potential to cause erosion to wetlands or waters of the Commonwealth. The proposed project will not result in measurable runoff different than the existing site conditions.

Standard #2: *Stormwater management systems shall be designed so that post-development peak discharge rates do not exceed pre-development peak discharge rates. This Standard may be waived for discharges to land subject to coastal storm flowage as defined in 310 CMR 10.04.*



The proposed project will not result in measurable runoff or discharges different than the existing site conditions.

Standard #3: *Loss of annual recharge to groundwater shall be eliminated or minimized through the use of infiltration measures including environmentally sensitive site design, low impact development techniques, stormwater best management practices, and good operation and maintenance. At a minimum, the annual recharge from the post-development site shall approximate the annual recharge from pre-development conditions based on soil type. This Standard is met when the stormwater management system is designed to infiltrate the required recharge volume as determined in accordance with the Massachusetts Stormwater Handbook.*

The proposed project will result in an overall increase to groundwater recharge at the site due to: creating more exposed soil areas; making new grade changes at roadway embankments that will trap overland flow; and an overall reduction in steep and moderate slopes and an increase in flat and gently sloping areas.

Standard #4: *Stormwater management systems shall be designed to remove 80% of the average annual post-construction load of Total Suspended Solids (TSS). This Standard is met when:*

- a. Suitable practices for source control and pollution prevention are identified in a long-term pollution prevention plan, and thereafter are implemented and maintained;*
- b. Structural stormwater best management practices are sized to capture the required water quality volume determined in accordance with the Massachusetts Stormwater Handbook; and*
- c. Pretreatment is provided in accordance with the Massachusetts Stormwater Handbook.*

The proposed project will include properly designed and sized stormwater controls that will not change stormwater flow conditions and will maintain pretreatment, and a SWPPP has been prepared for the site.

Standard #5: *For land uses with higher potential pollutant loads, source control and pollution prevention shall be implemented in accordance with the Massachusetts Stormwater Handbook to eliminate or reduce the discharge of stormwater runoff from such land uses to the maximum extent practicable. If through source control and/or pollution prevention all land uses with higher potential pollutant loads cannot be completely protected from exposure to rain, snow, snow melt, and stormwater runoff, the proponent shall use the specific structural stormwater BMPs determined by the Department to be suitable for such uses as provided in the Massachusetts Stormwater Handbook. Stormwater discharges from land uses with higher potential pollutant loads shall also comply with the requirements of the Massachusetts Clean Waters Act, M.G.L. c. 21, §§ 26-53 and the regulations promulgated thereunder at 314 CMR 3.00, 314 CMR 4.00 and 314 CMR 5.00.*

The proposed project includes localized regrading of areas adjoining existing vegetated buffer zones along with implementation of temporary erosion controls and permanent



stabilization measures, and the proposed site use will not change; therefore, the proposed improvements will not result in higher potential pollutant loads.

Standard #6: *Stormwater discharges within the Zone II or Interim Wellhead Protection Area of a public water supply, and stormwater discharges near or to any other critical area, require the use of the specific source control and pollution prevention measures and the specific structural stormwater best management practices determined by the Department to be suitable for managing discharges to such areas, as provided in the Massachusetts Stormwater Handbook. A discharge is near a critical area if there is a strong likelihood of a significant impact occurring to said area, taking into account site-specific factors. Stormwater discharges to Outstanding Resource Waters and Special Resource Waters shall be removed and set back from the receiving water or wetland and receive the highest and best practical method of treatment. A "storm water discharge" as defined in 314 CMR 3.04(2)(a)1 or (b) to an Outstanding Resource Water or Special Resource Water shall comply with 314 CMR 3.00 and 314 CMR 4.00. Stormwater discharges to a Zone I or Zone A are prohibited unless essential to the operation of a public water supply.*

The proposed improvements will result in essentially the same stormwater discharges that currently occur, with natural buffers and vegetated detention providing the highest and best practical methods of treatment.

Standard #7: *A redevelopment project is required to meet the following Stormwater Management Standards only to the maximum extent practicable: Standard 2, Standard 3, and the pretreatment and structural best management practice requirements of Standards 4, 5, and 6. Existing stormwater discharges shall comply with Standard 1 only to the maximum extent practicable. A redevelopment project shall also comply with all other requirements of the Stormwater Management Standards and improve existing conditions.*

While the project includes reuse of an existing site, the proposed project does not qualify as re-development project because stormwater discharges and patterns will essentially remain unchanged, as will the use of the site.

Standard #8: *A plan to control construction-related impacts including erosion, sedimentation and other pollutant sources during construction and land disturbance activities (construction period erosion, sedimentation, and pollution prevention plan) shall be developed and implemented.*

The proposed project includes a site-specific Erosion and Sedimentation Control Plan and SWPPP that both include provisions to control construction-related impacts using straightforward and easily implemented control and stabilizing measures.



Standard #9: *A long-term operation and maintenance plan shall be developed and implemented to ensure that stormwater management systems function as designed.*

The proposed project will not result in measurable runoff or discharges significantly different than the existing site conditions. The new stormwater management structures planned will simply provide improvements over those currently in place. Short term operation and maintenance is described in the SWPPP. Property stormwater management will be required as part of safe range operations. The anticipated schedule of maintenance for the improved and existing culverts and improved articulated block crossing will be annual, and consist of inspection for and removal of, if needed, accumulated sediment and/or unwanted vegetation.

Standard #10: *All illicit discharges to the stormwater management system are prohibited.*

There is no known potential for illicit discharges at the site. Operations at the range are strictly controlled and access to the site is very restricted, making the potential for future illicit discharges highly unlikely.



FIGURES



ABUTTER NOTIFICATION MATERIALS



NOTICE OF INTENT – WPA FORM 3





WETLANDS FEE TRANSMITTAL FORM





NOTICE OF INTENT NARRATIVE



APPENDIX