

Attachment 12
ROADS AND GROUNDS
Real Property Maintenance Activities

ROADS AND GROUNDS

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1.0 ROADS AND GROUNDS - RPMA

1.1 ROADS AND GROUNDS – SCOPE

The Contractor shall provide all labor, material, and equipment to inspect, police, maintain, repair, and provide snow removal and ice control for the Roads and Grounds on Rock Island Arsenal including Army Family Housing (or AFH areas).

2.2 PAVED SURFACE AREAS – CRACKS

The Contractor shall seal cracks in bituminous pavement and concrete surfaced areas annually (1 September thru 15 November). Cracks shall be cleaned and dried with compressed air prior to sealing. Contractor shall annually utilize an amount not to exceed 13.5 tons (1.5 tons for AFH areas) of sealer conforming to Federal Specifications SS-S1401C and ASTM D3405. Contractor shall apply sand, as necessary, to the roads that are "bleeding". Contractor shall seal cracks IAW TM 5-624, Chapters 3-5.6, on bituminous concrete, and Chapters 4-6 on concrete repair. Contractor shall not over fill cracks so that the sealer over extends the limits of the crack IAW TM 5-624.

2.3 PAVED SURFACE AREAS – POTHoles – HOT MIX

The Contractor shall repair surfaced area potholes, upheavals, and depressions by cutting and patching IAW TM 5-624, Chapters 3-5.6. Contractor shall annually utilize, as required, an amount not to exceed 40 tons (5 tons for AFH areas) of hot mix patching (April thru November) to be placed within two (2) weeks of identification by the COR or designated government representative.

Paragraph 2.4, Paved Surface Areas – Potholes – Cold Patch is revised as follows:

2.4 PAVED SURFACE AREAS – POTHoles – COLD MIX

The Contractor shall repair surfaced area potholes, upheavals, and depressions by cutting and patching IAW TM 5-624, Chapters 3-5.6. Contractor shall annually utilize, as required, an amount not to exceed 9 tons (1 ton for AFH areas) of cold patch (throughout the contract year) to be placed within 24 hours or designated government representative.

2.13 SIGN INVENTORY

The Contractor shall annually (Oct/Nov) perform a field inspection (to include AFH areas) of all traffic control signs on CDRL 12.04, Traffic Sign Inventory Database, and submit a report to include (electronic file and hardcopy), the location, type of sign, MUTCD number, size, height, lateral distribution, date of sign, and date of inspection. Contractor shall also annotate all missing, additional, and relocated signs on hard copy of Traffic Sign Inventory provided to the contractor by the government. Enter the data of the inspection, initials of the inspector, and any deficiencies identified in the appropriate tabular column for each sign and submit a hard copy and an electronic file (in Excel mirroring the Government provided file) with all field data tabulated for each road segment and recapitulated on the last page and submit as CDRL-12-05 The contractor shall

monthly, (Mar – Nov), clean, ensure legibility, straighten and ensure proper position of all traffic signs, street signs, information signs, and traffic signals listed in the sign inventory, CDRL12-04.

2.14 SIGN REPLACEMENT

The contractor shall annually replace an amount not to exceed thirty-three (33) signs (3 for AFH areas) of various verbiage/markings as identified by the COR or designated government representative. The contractor shall annually replace an amount not to exceed thirty-nine (39) sign posts (4 for AFH areas) as identified by the COR or designated government representative. Newly installed or replaced signs shall be IAW the following:

- Date stamped on back face of sign (legible after sign erection).
- Replacement signage sheeting shall be high intensity grade.
- Replacement aluminum substrate shall be 0.080” thick sheeting.
- All corners of all replacement sign aluminum substrate shall be shaped to proper radius of sign face.
- All hardware shall be stainless steel locking type or provided with lock washers.
- Replacement fasteners shall be torqued to secure the sign but not to the extent that the face is bent, deflected, or damaged.
- The posts shall be unistrut, perforated powder coated “Lucy Brown” square tubing, installed in accordance with the Telespar design standards or equal.
- All sleeves shall be installed to a forty eight inch (48”) depth.
- In rock locations, rock shall be drilled until forty eight inch (48”) depth is obtained. Bottom twenty four inch (24”) of rock drilled holes shall be grouted after sleeves are installed.
- All sign post shall be of a height that the bottom of the sign to be supported is seven foot (7’) above grade.
- Posts shall be the same height as the top of the sign.
- Sign hardware shall be replaced with new when posts are replaced. Replacement hardware shall satisfy requirements indicated above for replacement signs.
- Designed in compliance with the Manual on Uniform Traffic Control Devices (MUTCD), Illinois Department of Transportation-Highway standards manual, and applicable Army pamphlets 55-14 and 55-17.
- Installed properly (including embedment of sleeves configuration for grass versus paved

areas, (base units of unistrut core must be core drilled twelve (12) inches, into rock (if depth of rock is less than forty-eight" (48), or else embedded into forth-eight (48) into soils. No Compromises), sign height, sign reinforcements, corrosion resistant fasteners with neoprene washers, etc.

- Sign post sleeves shall protrude between 1.5 and 2.5 inches out of ground once completely installed. Material matching surrounding material shall be used to backfill hole. No wood wedges shall be used.

3.0 SNOW REMOVAL AND ICE CONTROL

The Contractor shall provide removal and control of thirty-five (35) inches of snow and ice annually, which includes ice control of ice storms island wide. Ice storms (ice only events such as freezing rain) shall be paid as inches of ice accumulation against the quantity of snow and ice removal. The Contractor shall be prepared to execute twenty-five (25) optional snow and ice inches. Option quantities will be awarded on a not to exceed basis with the balance of unused quantities and funding returned to the Government in full at the end of the subCLIN's period of performance. The historical average snowfall for the area is 31.6 inches of snowfall based on the National Weather Service's current annual average (1981-2010) for Moline/Quad City Airport. Contractor shall provide a sufficient amount of qualified personnel available or on-call (November thru April), 24 hours per day, seven (7) days per week, to perform snow removal and ice control. Snow removal and/or ice control may be required during or outside normal duty hours. All damaged real property and sod shall be repaired or replaced by the contractor, at the contractors own expense if damage is due to snow and ice removal operations including but not limited to damage from plowing and salting activities. The contractor shall provide a Salt Usage Report each month October thru April IAW CDRL 12-06. Snow removal, ice control and associated SSP requirements are identified in Technical Exhibit 12-3-1 and 12-3-2. Contractor shall provide Snow Removal and Ice Control Plans IAW CDRL 12.0-2. The contractor shall place containers with approved de-icing material, scoops and shovels IAW TE 12-3-1.

Snow and Ice Control shall be subject to funding level controls. The performance of snow and ice removal shall be adjusted by the information listed below:

Level 1 – The snow and ice removal technical exhibits currently included in the contract define this funding level of service.

Level 2 – The attached technical exhibit, TE 12-3-4, shows the priority areas to be cleared under this funding level. The scope of services for funding level 2 is defined in this paragraph and does not necessarily match any of the conditions described for funding level 1 snow and ice removal except as listed. The areas shown in TE 12-3-4 should have snow removed from them and be fully passable by 0600 and should remain passable throughout the duty day. Fully passable shall be defined as a ¼ inch of snow or ice or less and continuous removal effort to ensure this condition continues. Snow removal and ice control operations should continue only on these areas until snowfall has ceased. The Contractor has 24 hours to clear snow and ice on the remaining areas of the installation. The Contractor should make continuous effort during the

24 hour period following snowfall and the effort should be similar in character (equipment and labor) to the effort provided prior to the end of snowfall. The Contractor shall establish priority of effort during the 24 hour recovery period based on the priority road and parking lot list established for Level 1. The Contractor should be prepared to support emergency services vehicles at any time during the event. All sidewalks and entry areas should be cleared as defined in funding level 1. The Contractor is responsible for ice control (refreeze conditions or otherwise) on all cleared areas.

Level 3 – The attached technical exhibit, TE 12-3-5, shows the priority areas to be cleared under this funding level. The scope of services for funding level 3 is defined in this paragraph and does not necessarily match any of the conditions described for funding level 1 snow and ice removal except as listed. The road areas shown in TE 12-3-5 should have snow removed from them and be fully passable by 0600 and should remain passable throughout the duty day. Fully passable shall be defined as a ¼ inch of snow or ice or less and continuous removal effort to ensure this condition continues. Parking areas shown in TE 12-3-5 may be allowed to accumulate 3 inches of snow before they require clearing. Contractor shall clear snow from these parking lots prior to 0600 if the snow event will cause more than 3 inches of accumulation prior to 0600. If this accumulation happens during the duty day or while occupied the Contractor will only be required to clear the aisles and unused portions of the parking lot to assist vehicles with exit and entry. When cleared the parking areas should be cleared to the fully passable standard defined above. Parking areas may be allowed to accumulate snow after clearing, but may not exceed the 3 inch standard. The Government fully understands that the parking lot guidance may allow accumulations in inaccessible areas to exceed 3 inches. Parking areas should be fully cleared during the 36 hour period following the event similar to other areas of the island. Snow removal and ice control operations should continue only on these areas until snowfall has ceased. The Contractor has 36 hours to clear snow and ice on the remaining areas of the installation. The Contractor should make continuous effort during the 36 hour period following snowfall and the effort should be similar in character (equipment and labor) to the effort provided prior to the end of snowfall. The Contractor shall establish priority of effort during the 36 hour recovery period based on the priority road and parking lot list established for Level 1. The Contractor should be prepared to support emergency services vehicles at any time during the event. All sidewalks and entry areas should be cleared for Buildings 25, 33, 35, 40, 41, 43, 46, 60, 68, 208, 210, 211, 212, 220, 222, 225, 230, 240, 250, 299, 350 and 390 as defined in funding level 1. All other sidewalks and entry areas should be cleared during the 36 hour recovery period following the end of snowfall. The Contractor is responsible for ice control (refreeze conditions or otherwise) on all cleared areas.

3.1 OBSTACLE MARKERS

The Contractor shall erect markers annually (October) to identify obstacles and obstructions that are likely to be damaged or will be a hindrance during snow removal. Obstacles and obstructions are to include fire hydrants, curbs, culverts, and position indicator valves, shut off valves etc. Reflective markers shall be utilized to identify fire hydrants and other obstacles. Contractor shall remove all markers annually by 30 April.

4.1 IMPROVED GROUNDS – GRASS MOWING

The contractor shall perform the following improved grounds mowing and trimming tasks as required below. The Contractor shall schedule and perform grass mowing on improved grounds identified on the Ground Maintenance Plan/map in Technical Exhibits, 12-4-1 and 12-4-2. Contractor shall mow the levee along Blunt Road, between structures 18 and 306, as improved grounds. Contractor shall set mowers to cut at a height of not less than three (3) inches at all times and begin the grass cutting cycle when it reaches a height of five (5) inches. At no time shall the height of turf exceed five (5) inches. During periods of abnormally fast growth, the contractor will be required to apply additional effort to maintain the performance standard for mowing and trimming at no cost to the Government. During periods of drought, the standard may be adjusted, as directed by the COR or designated government representative, to allow grass to attain a height of six (6) inches before cutting. All sidewalks and paved areas shall be free of grass clippings after mowing operations are performed. Mowed areas shall be raked clean when accumulations of grass clippings are evident.

4.2 IMPROVED GROUNDS – GRASS TRIMMING

The contractor shall trim grass and vegetation around trees, shrubs, fences, poles, buildings, structures, sidewalks, parking lot restrains, and other obstacles while performing grass mowing so that grass height does not exceed that of adjacent grass. The contractor shall not scalp turf areas while trimming.

4.3 IMPROVED GROUNDS – EDGING

Contractor shall power edge along all sidewalks monthly, between April and October. Edging debris shall be cleaned up same day as edging activities take place. Edging shall be accomplished by equipment specifically designed for this task; use of string trimmers for this requirement is not acceptable.

4.4 IMPROVED GROUNDS - LEAF REMOVAL/COMPOST PILE

The Contractor shall mechanically mulch all grass clippings and leaves, and deposit them in an organic compost pile at a location to be determined by the COR or designated government representative.

The Contractor shall deposit all the mulch material collected during a calendar year into one pile. This same pile shall uniformly be spread onto the improved and semi-improved grounds the following calendar year (April thru June). This process shall be continuous throughout the term of the contract and managed in such a manner as to result in no more than two (2) separate compost piles. One compost pile for material collected during the current year, and one compost pile collected from the previous year, for spreading during the current year at a location to be determined by the COR or designated government representative.

The Contractor shall manage, to include shaping, sizing, forming, mixing, turning, and layering,

the surface exposure of both compost piles monthly in such a manner as to create and foster the maximum rate of decomposition of the organic material.

4.10 RECREATIONAL AREAS

The Contractor shall maintain recreational areas, identified on the Ground Maintenance Plan/Map as improved grounds unless otherwise specified. The frequency shall vary by funding level and is shown in the funding level scope below:

Level 1 – Recreational areas shall be cleaned daily, seven (7) days per week (April thru October), prior to 1000 hours.

Level 2 - Recreational areas shall be cleaned three (3) days per week (Monday, Thursday, Saturday) (April thru October), prior to 1000 hours.

Level 3 - Recreational areas shall be cleaned one day per week (Monday) (April thru October), prior to 1000 hours.

Contractor shall clean all-recreational areas. Recreational areas include the picnic and playground areas, Memorial park, AFH area structures (8,76, 78, 84, 342, Structure 344, 364), child development centers, (buildings 15, 16 and 11 and 150), three soft ball fields, soccer field and the summer day camp area structure 17. The contractor shall remove debris from Recreational Trails using back- pack blowers designed for sidewalks and Recreational Trails and empty trash containers along the trail twice weekly (once at the beginning of the week and once at the end of the week) regardless of funding level.

Contractor shall wash (hose-off) the concrete slabs, and wipe down and rearrange picnic tables at the pavilions located at the summer day camp, Memorial Field, and Structure 344, (Col. Davenport pavilion). The frequency of these activities shall correspond to the established funding level.

The Contractor shall daily, (7 days per week), (April thru October), clean the public toilet (building 121) regardless of funding level. Cleaning requirements shall include policing grounds, and dumping trash can contents into dumpsters. Contractor shall daily, (7 days per week), (April thru October), in conjunction with cleaning, service one public toilet facility located in the Memorial Field area. Servicing the public toilets shall include dusting, sweeping, wet mopping, washing and wiping, disinfecting, and providing an adequate supply of toilet paper for facilities.

4.21 TREE REMOVAL

The Contractor shall remove trees identified by the COR or designated government representative. Contractor shall remove six hundred and sixty (660) inch diameter (60 inches for AFH areas) of trees per contract year. The diameter shall be measured at a point two (2) feet above the highest ground level at the tree and shall be determined by dividing the measured

circumference of the tree by pi (3.1416). When a tree is removed, the stump shall also be removed and the hole left shall be filled with dirt. All debris shall be removed from RIA within two weeks of removal. Contractor shall resod and/or reseed as directed by COR or designated government representative. Turf repair and re-establishment for trees removed during winter months shall be completed by the end of April or within two (2) weeks for trees removed during other than winter months.

4.22 TREE PRUNING

The Contractor shall utilize a minimum two hundred and twenty (220) man-hours (20 man-hours for AFH areas) per year, as directed by the COR or designated government representative, to prune and remove dead wood from trees greater than four (4) inch caliper measured at two (2) feet above ground. Work shall be accomplished by a certified arborist or non-certified personnel proficient in pruning and trimming and directly supervised by a certified arborist. Non-certified personnel shall receive detailed instructions from the arborist in how to accomplish each required task. All debris shall be removed from RIA within two weeks of trimming/pruning or as directed by COR or designated government representative. Trees shall be pruned when they are dormant (typically late October thru mid-April) in accordance with recommended methods.

4.27 WEEKLY YARD WASTE REMOVAL

The Contractor shall weekly (Monday) remove any accumulated yard waste including but not limited to leaves, grass clippings in paper bags, tree limbs and landscape trimmings from in front of all family housing facilities. Any yard waste shall be transported to the compost area and disposed of similar to yard waste produced by the Contractor in other grounds activities. The period of performance for this activity shall be April to October.

4.30 GROUNDS CARE – SEED

The Contractor shall fill, level, and slit seed, or hydro seed as directed by COR or designated government representative, any turf areas damaged by vehicular traffic, utility system work, pollution spills, and/or worn areas and maintain to conform to adjacent turf areas and maintain until growth is established. Pollutants, contaminated solids, rocks, and debris shall be removed before turf repair and re-establishment.

Contractor shall annually utilize 1,100 pounds (100 for AFH areas) of seed in support of turf repair and re-establishment. The contractor shall assure that seeded areas are well established before returning areas to normal grounds maintenance requirements. Areas in which grass does not establish itself IAW master specifications will be redone at contractor expense. Holes in levees, resulting from groundhogs, erosion, etc., shall be corrected and filled as directed by COR or designated government representative. All turf repairs shall be accomplished IAW herbicide applications and coordinated with the certified pest management specialists. Contractor shall complete the turf repair and re-establishment requirements within two (2) weeks after being directed by COR or designated government representative. In addition to these requirements the contractor shall repair snow and ice removal damage as specified in section 3.0 of this

attachment. Quantities listed in section 4.30 may not be used to supplement snow and ice removal damage.

4.32 LANDSCAPED AREAS – MULCH

The Contractor shall maintain landscaped areas, identified in Technical Exhibit 12-5, the first and third week of each month (April thru October). Maintenance shall include pulling weeds and dead shrubs, straighten brick edging, and providing for a good overall appearance of landscaped areas. Mulch shall be added to landscaped areas annually (April). Contractor shall annually add two hundred and twenty (220) cubic yards (20 for AFH areas) of cedar mulch to landscaped areas. Note: Materials required by this paragraph shall not be used to supplement requirements of paragraph 3.0.

4.34 MULCHING - SHRUBS, HEDGES, AND TREES

The Contractor shall annually (April thru May) mulch/remulch, with cedar mulch, approximately three hundred and thirty (330) trees (30 for AFH areas), which have six (6) inch or less diameter as measured two (2) feet above the ground, on improved grounds as directed by COR or designated government representative. Trees shall be mulched in a two (2) foot radius around the tree trunk. Mulch shall be 3" - 4" inches above ground and no closer than 6" radius from the trunk of the tree.

4.35 PRUNING SHRUBS, HEDGES AND SMALL TREES

The Contractor shall prune shrubs, hedges, and small trees (measured two (2) feet above ground with a four (4) inch or less caliper) on improved grounds and in landscaped areas. Work shall be accomplished by a certified arborist, or by non-certified personnel proficient in pruning and trimming supervised by a certified arborist. Personnel shall receive detailed instructions from the arborist in how to accomplish the required task. Contractor shall not allow trees to grow on or within twenty (20) feet of a levee or dike. Contractor shall twice annually (May thru September) prune shrubs, hedges, and small trees. Trimming shrubs, trees and hedges shall be performed on an "as required basis" to remove suckers from the trunks and roots, broken and/or damaged branches, etc., to maintain the health, shape, and appearance. Pruning procedures shall be accomplished in accordance with the blooming cycle. (Prune AFTER flowering).

6.0 APPENDICES

6.1 LOGS

6.2 TECHNICAL EXHIBITS

- T.E. 12-3-1 Snow Removal and Ice Control Requirements
- T.E. 12-3-2 Snow Removal and Ice Control Level 1 Maps
- T.E. 12-4-1 Ground Maintenance Plan/Map Level 1 West
- T.E. 12-4-1 Ground Maintenance Plan/Map Level 1 East
- T.E. 12-5 Landscaped Areas

