**ENVIRONMENTAL DEVELOPMENT PLAN**

**Between**

**RFMS, Inc. (a Nevada Corporation)**

**And**

**THE CITY OF MESQUITE, NEVADA**

As prescribed in City of Mesquite Ordinance Number 270, all development within the lands acquired by the City of Mesquite (“City”) under the 1996 Mesquite Land Act and the 1999 Mesquite Land Act, (“the Subject Property”) shall be done in accordance with an Environmental Development Plan (“EDP”) entered into by and between the Developer of any portion of the Subject Property and the City. This EDP sets forth measures and practices to be employed by Developer (as development and construction proceed) to insure, to the maximum extent practicable, that affects of construction on any portion of the Subject Property has been considered and that Developer will minimize the affects of such activities on the Virgin River Species.

**NOW, THEREFORE,** in consideration of the foregoing premises and the following terms and conditions, the Parties hereto agree as follows:

**RFMS, Inc.**, a Nevada Corporation, (“Developer”) the owner of the portion of the Subject Property set forth on Exhibit “A”, agrees to the following conditions for the work to be done under a grading permit issued by City and the subsequent development and construction of improvements on its portion of the Subject Property:

1. Developer will comply with all applicable requirements of the Clark County Multiple Species Habitat Conservation Plan, or, alternatively when available, with all applicable requirements of a Habit Conservation Plan in cooperation with, and approved by, the U.S. Fish & Wildlife Service.

2. Developer will comply with all requirements of the City of Mesquite Ordinance Number 270.

3. Best Management Practices (BMPs) will be utilized to prevent or minimize non-point source pollution and soil loss and sedimentation in natural drainage areas, including:

a. locating waste and excess excavated materials outside of drainages to
   avoid sedimentation;

 b. installation of silt fences, temporary earthen berms, temporary water
   bars, sediment traps, stone check dams, or other equivalent measures
   (installing erosion-control measures around the perimeter of stockpiled
   fill material) prior to construction;

 c. siting of equipment and material staging areas, as well as vehicle
   parking areas in upland areas, a sufficient distance from drainages
   conducting regular site inspections during the construction period to
   ensure that erosion control measures were properly installed and are
   functioning effectively; storing, using and disposing of chemicals,
   fuels and other toxic materials in a proper manner;
 d. refueling construction equipment only in upland areas a significant
   distance from the drainage areas to prevent fuel spills near water
   resources;

e. avoid construction during wet periods, when possible, to minimize
   unnecessary soil disturbance and compaction;

f. avoid or minimize any temporary diversions of drainages; and
g. avoid or  minimize crossing of drainages.

These BMPs are further discussed in EXHIBIT “B”, attached hereto and incorporated herein by reference.

4. Developer will insure, to the maximum extent practicable, that storm water or urban runoff from all grading, development and/or construction
activities within the Subject Property will not enter the washes within the Subject Property greater than traditional and historic flows until the necessary assessments/studies and plans are formulated and incorporated into the HCP.  In the interim, temporary on-site retention facilities will be constructed to minimize new urban runoff (in excess of traditional or historic flows) from the grading, development and construction of the Subject Property or, alternatively, water quality control systems may be installed near clusters of development to control non-point source pollution.

1. A no disturbance buffer and berm will be established no closer than one hundred (100) feet from any major washes, if applicable, as determined by the City. A no disturbance buffer will be required when, in the opinion of the City, the grading, development and/or construction on the Subject Property is likely to cause storm water or urban runoff to enter the washes in the Subject Property in excess of traditional or historic flows. When required by the City, such buffer will be clearly marked near construction sites prior to initiating surface disturbance to ensure disturbance does not occur in the buffer area.
2. Developer will, as appropriate, contract with an independent qualified wildlife biologist to monitor all construction activities or any disturbed land to insure compliance with Ordinance 270 or this Plan.
3. Developer and City agree to the replacement of the Environmental Development Plan (EDP), signed and dated April 27, 2004, with this revised EDP. (i.e., this EDP supersedes all previous versions pertaining to Highland Vistas PUD.)

 **IN WITNESS WHEREOF**, the parties set their hands the day and date of the year set forth below:

**CITY OF MESQUITE, NEVADA** **RFMS, Inc.**

By: By:

 Bill Nicholes, Mayor Ken Phillips, Project Manager

 DATED: DATED:

**ATTEST:**

By:

 Carol Woods, City Clerk

**APPROVED AS TO FORM:**

By:

 Christi M. Thunder, City Attorney

# EXHIBIT “A”

Attach Plat and Legal Description of Property

**EXHIBIT “B”**

Best Management Practices

**Background Information for Developers or Landowners**

The U.S. Fish and Wildlife Service (Service) is concerned about the indirect effects to the Virgin River and the federally listed species which occupy that aquatic habitat, that may result from development activities in the Mesquite area. The following list of Best Management Practices (BMPs) were developed by the Service in coordination with the City of Mesquite to assist them, their partners and future developers in avoiding or minimizing indirect effects to the Virgin River, specifically in regard to potential alterations to the four major ephemeral washes (Town, Abbott, Unnamed and Pulsipher) that drain into the Virgin River. The Service believes these BMPs can assist in reducing indirect effects to the Virgin River, mostly with regard to storm water runoff and non-point source pollution.

Implementation of these BMPs to protect the Virgin River will be an integral piece of the Virgin River Habitat Conservation Plan (HCP), which is currently under development. The Virgin River HCP is required by Congressional legislation to protect the federally listed species in the Virgin River, while allowing development to proceed in specific areas of the City of Mesquite. The City of Mesquite is committed to developing a Virgin River HCP with the Service and other partners to protect listed species in accordance with City of Mesquite Ordinance 270.

Until the Virgin River HCP is completed, development of certain lands may proceed on a case-by-case basis once an Environmental Development Plan (EDP) is approved by the City of Mesquite and Service, as required by Ordinance 270. An EDP is a document that outlines the measures (including BMPs) that will be implemented on the property to protect any ephemeral washes and limit indirect effects to the Virgin River. If an EDP is not established for a specific property, the development cannot proceed.

When using any of these BMPs, developers and their contractors must ensure they are in compliance with regulations enforced by the City of Mesquite, Clark County, State Division of Environmental Protection or any other regional, state or federal agency. Some BMPs may work in concert with other BMPs, while certain BMPs may be in conflict with another that is listed. These potential BMPs should serve as examples of the types of BMPs that could be implemented on and included in EDPs for lands to be developed within the City of Mesquite. The Service and the City of Mesquite strongly encourage developers to creatively utilize these BMPs or similar ones to assist the community in protecting the Virgin River.

**Pre-Construction or Design Activities and BMPs**

1. Salvage native plants and/or seed for later use in restoration activities, especially cacti species protected by Nevada State Law (NRS 527.060-.120).
2. Establish or partner with a local nursery/landscape company/school to run a native plant nursery.
3. Establish buffer zones (typically 100’) along the main stem of the four major ephemeral washes; buffers will assist in protecting the integrity of the wash, provide a natural flood plain, assist in filtering storm water runoff, allow passive recreational uses, increase property values, avoids homeowner payment of flood insurance, etc.
4. Design and construct clustered or open space development on property containing the main stem of the four major ephemeral washes. Development would occur in areas containing the numerous, smaller ephemeral tributaries which drain into the ephemeral wash, with the main stem of the ephemeral wash protected by large buffers of open space. The intention of this design component is to only change the location of development, not its density.
5. Design and construct environmentally sensitive road crossings of ephemeral streams which consider: the route of least disturbance; bottomless or arch culverts; proper sizing (e.g., a structure to withstand at least a 100-year flood); and designs which capture and detain runoff from bridge versus sheet flowing over bridge into wash.
6. Design and utilize alternative turnaround or cul-de-sac designs to reduce impervious surfaces.
7. Design and install alternatives to concrete such as porous concrete or pavers in common areas, driveways, trails (if use by maintenance vehicles is infrequent), parking areas, etc.
8. Design and utilize alternatives to curbs and gutters.
9. Design and construct narrower residential streets to reduce runoff.
10. Design and install bioretention structures in residential areas, parking lots, etc. **a**
11. Design and install grassed filter strips. **a**
12. Design and install sand filters.
13. Design and install on-site extended detention basins (dry basins). **a**
14. Design and install retention ponds on sites where water features are desired, e.g., golf courses or commercial properties.

**a** May work best on commercial properties or subdivisions where owner(s) desire to have grass/turf and/or treed areas.

**Construction Site Activities and BMPs**

1. Demarcate buffers or areas not to be disturbed by construction activities in a clear fashion.
2. Utilize gravel or stone filter berms to control sediment on graded sites.
3. Utilize soil roughening techniques on graded sites.
4. Utilize earthen perimeter dikes.
5. Construct brush barriers.
6. Preserve natural vegetated buffers or construct temporary vegetated buffers.
7. Utilize storm water and sediment basins.
8. Install sediment traps.
9. Provide for construction site waste management, including: a) covered trash containers; b) frequent scheduled collections; c) oil and fuel products in covered area with dikes in place to contain spills during refueling; d) immediate clean-up of spills; and e) vehicle washing and maintenance areas in appropriate areas where untreated discharges can be captured.
10. Sequence construction to avoid large expanses of graded, vacant land.
11. Inspect and maintain BMPs on a daily basis via the contractor, as well as on a weekly basis of the construction site via City inspector/enforcement.
12. Restore or landscape areas with native plants, possibly utilizing pre-construction salvaged plants in buffer areas, common areas of residential developments, park and recreational areas, etc.
13. Develop a process for volunteers (comprised of individuals, organizations and/or home owner’s associations) to monitor, restore and maintain ephemeral streams and open space.

**BMPs for City of Mesquite to Undertake**

**Public Education and Outreach**

1. Develop and distribute public outreach pamphlets and utility bill inserts discussing water quality control and storm water pollution prevention, e.g., issues involving non-point source pollution, responsible lawn care, disposal of household or vehicle waste, pet waste collection and disposal, car washing, illegal dumping, etc.
2. Develop and distribute business/Commercial outreach pamphlets discussing water quality control with regard to their business practices.
3. Outreach and partner with nurseries and landscaping companies, to empower them to promote xeriscaping, use of native plants, and responsible lawn care to their customers.
4. Work with Water District to develop information to inform homeowners of proper watering techniques of their landscape (turf, trees, shrubs and xeriscaped plantings) throughout the year.

**Public Involvement and Participation**

1. Engage stakeholders, landowners and home owner’s associations with regard to water quality and storm water pollution prevention.
2. Develop a program for volunteers (comprised of individuals, organizations and/or home owner’s associations) to monitor, restore and maintain ephemeral streams and open space.

**References**

Schueler, T.R. and H.K. Holland. 2000. Stormwater Strategies for Arid and Semi-Arid Watersheds *In* The Practice of Watershed Protection. Center for Watershed Protection, Article 66, pp. 41-51.

Urban Drainage and Flood Control District. 2002. Urban Storm Drainage Criteria Manual, Volume – 3 Best Management Practices. Revised June, 2002. Denver, Colorado. On-line at http://www.udfcd.org/