1603 CITY OF NORTH LAS VEGAS

Section 204

A completed **Drainage Submittal Checklist (Standard Form 2)** must be included with the initial technical drainage study submittal.

Section 303.6.1

The City of North Las Vegas does not permit the construction of permanent structures within a Federal Emergency Management Agency (FEMA) designated Special Flood Hazard Area (SFHA). Under this policy, any developer/builder proposing to place structures within a SFHA must meet the following requirements prior to the issuance of various permits and certificates-of-occupancy:

a. **Grading and off-site construction permits** may be issued by the City of North Las Vegas, Department of Public Works, once the improvement plans and drainage study have been approved and a copy of the completed Conditional Letter of Map Revision (CLOMR) application has been submitted to FEMA for processing.

b. **Building permits** can be issued once a CLOMR has been obtained from the FEMA.

c. **Certificates-of-Occupancy** can be issued once a Letter of Map Revision (LOMR) has been obtained from FEMA.

Section 304.4, Paragraph 4

Where downstream storm sewer facilities are not available, the City of North Las Vegas requires bubbler laterals for the conveyance of storm water under streets with right-of-way widths greater than or equal to 80 feet. The bubbler laterals must consist of a minimum 18-inch diameter reinforced concrete pipe. To accommodate the draining of the bubbler system prior to future downstream extension of the storm sewer system, a minimum 6-inch diameter PVC pipe must be daylighted downstream.

Section 304.4, Major Storm Street Capacity Limitations, Item A

Within the interior streets of a residential subdivision, the depth times velocity for the major storm event shall be less than or equal to 6.

Section 803.3

The City of North Las Vegas requires that stormwater drop inlet signage is obtained from the City's Resources/Environmental Division to be affixed to any installed drop inlets. Quality control inspectors will verify that the signs are properly installed.

Section 905

A minimum longitudinal street slope of 0.5 percent (0.005 ft/ft) shall be used. If the Engineer can demonstrate, to the satisfaction and approval of the City Engineer, severe topographic constraints or other mitigating factors, the design of streets with slopes less than 0.5 percent may be permitted.

General

Side Lot Drainage Easements

Side lot drainage easements are generally discouraged unless the engineer can demonstrate design constraints that render alternative site layout and drainage facility design options as impossible or impractical.

Wail openings

All wall openings must be designed to pass the 100-year storm event flows using the assumption that the bottom 50% of the openings are obstructed.

Emergency Overflow

When a storm drain system is proposed at a sump area, a non-damaging emergency surface flow path must be provided to convey the 100-year flows.

Lot Drainage Beneath Air-Conditioning Pads

For any ground-mounted air-conditioning pad that encroaches to within three (3) feet of a property line, the engineer must indicate on the plot plans how lot drainage will be accommodated beneath the pad. This can include, but is not limited to, the placement of a 4-inch diameter PVC pipe, with the inlet and outlet inverts of the pipe constructed to correspond with the flow line of the obstructed lot drainage swale.

1604 CLARK COUNTY PUBLIC WORKS - COUNTY POLICIES

1. Drainage Easements

a. Public Drainaae Easements - Public drainage easements are required for situations where a publicly maintained facility must drain through a private parcel. The easements must comply with the Clark County Public Works public drainage easement policy which follows:

- Subdivisions are to be designed to minimize the need for drainage easements;
- The drainage easement must be a minimum of 15 feet wide;
- The drainage easements must be fully concrete lined, with a low flow area constructed to a minimum grade of 1 percent in 50 feet or less or 0.5 percent for lengths greater than 50 feet;
- Block walls or combination of block wall and wrought iron to meet zoning's wall height requirements. Walls are to be located outside of the drainage easement;
- At a minimum, removable locking bollards must be placed at each end of the easement. In easements 50 feet long or less, a single galvanized gate may be installed at approximately the midpoint. In easements greater that 50 feet, two galvanized gates may be installed but they must be recessed at least 10 feet or at the front yard set backs as determined by Zoning, whichever is greater, from the public rights-of-way. Gates are to be hinged to allow 180-degree movement;
- Joint or multi-use easements are not acceptable, unless the above conditions are met;
- Where existing storm drainage facilities exist, to provide an outlet, underground storm drains will be used through an underground drainage easement with overflow section. The minimum width for a public underground drainage easement is 10 feet;

'b. Private drainage easements are to be used to convey flows from one private parcel through an adjacent private parcel. The