City of Santa Fe

Residential Roof Top Rain Water Harvesting Permit Application Checklist

No cistern water shall be used domestically

No yard spigots/hydrants shall be used to distribute cistern water

Completed Applications are accepted Monday through Friday 8:00 a.m. to 12:00 p.m. and 1:00 p.m. through 5:00 p.m. by the Building Permit Division located at 200 Lincoln Avenue, Santa Fe, New Mexico, 87504. Questions may be directed in person or by phone (505) 955 6588. Checklist available at www.santafenm.gov.

Applications will be accepted only after full completion of the items herein once verified by the City Building Permit Specialist. Contents herein are minimum compliance requirements for applicable federal, state and local ordinances and standards including the 2006 New Mexico Building Code. For specifics, contact a Building Plan Reviewer at (505) 955-6588.

PRE-REQUISITE-APPROVALS: The following pre-requisite approvals must accompany the building permit application: (if applicable)

- ☐ Address Issuance or Verification
- ☐ Preliminary approval from all applicable State, Federal, and other Governmental Agencies.
- ☐ Floodplain Verification – Technical Review Division
- ☐ Historic Preservation District Approval-Form D
- ☐ Escarpment Overlay District Approval-Form E
- ☐ Archeological Clearance Permit – Historic Preservation Division

MINIMUM SUBMITTALS/BUILDING PERMIT APPLICATION

Three (3) complete sets of proposed construction plans, pre-requisite compliance documents, and information described below:

_____1. **Building Permit Application:** Complete all required fields and answer all questions. Blue or Black ink only.

_____2. **Legal Lot of Record:** City approved subdivision plat. In the absence of an approved plat, provide a warranty deed and/or survey dated pre 1962 describing the meets and bounds of the property.

_____3. **Property Location/Vicinity Map**: Depict nearest street intersections and north arrow. May be placed on the site plan.

_____4. **Development Plan (if applicable)**: City approved with signatures and Santa Fe County recording data.

_____5. **Site Plan:** (Minimum scale 1"=20') *Must comply with Chapter 14-6.3*

a. North arrow
b. Official property address
c. Zone district
d. Street names
e. Lot Dimensions, meets and bounds
f. Lot area and acreage
g. Existing and proposed improvements
h. Parking layout. (*Reference Article 14-8.6 SFCC) (if impacted by cistern placement)*
i. Easements including any and all encumbrances; access, public utility, private, etc.
j. Existing and proposed impervious areas
k. Existing and proposed wall and fences *(if screening is required for above ground placement)*
l. Flood zones and other drainage discharges

_____6. **Rainwater Harvesting Plan** (minimum scale: 1" = 20').

This information can be included on the Site Plan if all requirements are still legible. (Rainwater harvesting plan is to be coordinated with the Grading and Drainage Plan)

a. North arrow
b. Official property address
c. A plan indicating all roof drainage directed to canales (or if pitched roof, gutters to a discharge point), including sizing of cistern calculations.
d. Types and sizes of catch basins or grates to be used.
e. Label the type of conveyance system to be used such as location, type and size of pipes, surface swales and designate direction of flows.
f. Interim and final inspections required.

Cisterns:

- Indicate location of cisterns on the plan supported by specifications of the type and calculations for sizing of the cistern(s).
- If the cistern is to be buried, provide information about the type and the outflow/overflow and a section of the excavation indicating the depth and type of controlled backfill material. (This type of cistern will need electrical and plumbing review/approval)
- If the cistern is to be above ground, (gravity flow) provide information about the type and the outflow/overflow. In addition, indicate if the

cistern will be enclosed within a structure. (Encouraged due to freezing potential). This structure may be required to be screened with trees. (This type of cistern may require electrical and plumbing review and approval.)

- If the cistern is to be constructed in place, provide information about the type and the outflow/overflow and a proposed section of the structure. Include the type of material to be used. (This type of structure will need electrical, plumbing and building review/approval due to the necessity of a footing. This structure will need to be stamped by a professional engineer.

g. Indicate the location of surface pond in compliance with surface ponding requirements for the 1% chance event ("100-year storm") event.

NOTE: The proposed Rainwater Harvesting Plan shall be coordinated with the proposed Grading and Drainage Plan. Cisterns cannot be used in lieu of surface storage ponds for new structures in order to comply with the Terrain and Stormwater Management Requirements of Article 14-8.2 (F) of the Santa Fe City Code.

_____**7. Terrain Management**

Background

Minor Development Project. All of the following four criteria must exist for a project to be considered "Minor Development". *(Article 14-8.2(E), SFCC 1987).*

1. No more than 3,500 square feet of new impervious surface proposed;
2. No more than 5,000 square feet of total disturbance on the legal lot;
3. No more than 10% slopes disturbed, and
4. Drainage pattern is maintained (any new impervious surface means that the drainage pattern is NOT maintained).

All Other Development If the proposed project does not meet all four of the criteria for Minor Development, then the project must meet the criteria for "All Other Development". *(Article 14-8.2(F), SFCC 1987).*

A. **Grading and Drainage Plan** (Minimum scale 1"=20') This information can be included on the Site Plan if all requirements are still legible. (Only if new impervious surface for rainwater)
   a. North arrow
   b. Official property address
   c. All Easements
   d. Existing and proposed grades (two foot contour intervals minimum)
   e. Existing and proposed impervious areas (include locations, exact measurements and square footage)

f. Stormwater calculations based on SFCC 14-8.2(E) if Minor Development.
   - The 16% rule allows for the calculation of the new impervious surface square footage multiplied by .16 to equal the amount of cubic feet required for stormwater storage.
   - Example 100 square feet of new impervious surface x .16 = 16 cubic feet of stormwater storage required
   - *Note: one cubic foot equals 7.48 gallons*

g. Stormwater storage compliance (identify location and measurements)
   - For Minor Development Projects, stormwater storage can be active water harvesting, passive water harvesting, retention basin (less than 6" deep) or detention basin (greater than 6" deep. If this option is used, there must be an engineer's statement that the pond will drain within 24 hours)
   - For All Other Development Projects, stormwater storage can be retention, detention or infiltration. Stormwater management must be calculated based on the 100 year 24-hour event and must meet the standards as identified in 14-8.2(F)(2).

h. Existing and proposed wall and fences (for retaining walls, include top of wall elevation and bottom of wall grades)

i. All drainage from roof to storage

j. Flood zones and other drainage discharges

B. **Certified Slope and Topography Map** This map must be included if the project is considered "All Other Development". *(if applicable)*

a. 0-19.9%, 20-29.9% and 30% and greater slopes are to be identified
b. two foot contour intervals minimum
c. 30% slope can be identified based on a five foot contour interval
d. certification by a licensed New Mexico surveyor

_____ **8. Construction Plans & Details (Minimum ¼"=1') must include:**

- Foundation Plans
- Footing Details
- Concrete Tank Pads and Anchoring Patterns
- Concrete Drainage/Retaining Structures
- Imbedded Concrete Pole Mount Supports
- Wall and fence elevation. Label height
- Wall section/typical

Architectural Design Standards *(Article 14-3.10 SFCC for applicability)*

- Wall and fence elevations
- Color Samples
- Label equipment screening on site plan

_____ **9. Electrical Plan must include:**

- All electrical work must be done in accordance with the 2008 National Electrical Code and New Mexico Electrical Code and by a licensed Electrical Contractor.

- A diagram showing electrical cistern design
- The electrical system design must show all locations of any and all electrical equipment such as but not limited to :
  - over current protection
  - pumps
  - motors
  - switches
  - receptacles
- All wiring installed underground must be in an approved raceway and in accordance with the table 300.5 of the NEC.
- Ground fault circuit protection shall be required for all 120 / 240 volt pumps, motors, receptacles and similar equipment that is associated with the system.

_____ **10. Plumbing Plan must include:**

- All plumbing work must be done in accordance with the 2006 Uniform Plumbing Code and the New Mexico Plumbing Code, and be conducted by a licensed installer. Rainwater Harvesting Systems with interconnection to City water will be required to have a minimum of an MS-6 license (lawn sprinklers). Rainwater Harvesting Systems with no interconnection to City water will be required to have a GF-4 (drainage or flood control systems) or GS-29 (specialties) license.
- The plumbing system design must show all locations of all plumbing equipment such as valves, unions, pumps, backflow preventors, air gaps, vents and approved overflows.
- If potable water is used to re-charge the cistern, an approved backflow preventor shall be used and installed above all overflows and protected against freezing. Potable water shall enter the cistern with a one inch air gap minimum.
- All roof drains and vertical rainwater piping shall be in compliance with Chapter 11 of the 2006 Uniform Plumbing Code.
- Cistern shall be marked as non potable water with a sign with a yellow background with black lettering with the words: "Caution: Non-potable Water, do not drink"
- No yard spigots/hydrants shall be used to distribute cistern water

_____ **11. Affidavit for Abandonment**

System Abandonment. If the owner of a rainwater harvesting system elects to cease use of, or fails to properly maintain such system, they shall abandon the system. To abandon the system one shall:

Remove the system entirely;

a) Replace the rainwater harvesting pipe system with an approved potable water supply pipe system. Where an existing potable pipe system is already in place, fixtures may be re-connected to the existing system; and
b) Record the abandonment in the County Clerks Office noting the deletion of the system. A copy of the recorded document shall be supplied to City Staff.

Rainwater harvesting system abandonment and potable water installations require permit, inspection(s) and approval(s).

IMPORTANT INFORMATION ABOUT SUBMITTAL:

Submittal: Three (3) complete sets of plans meeting the minimum criteria of the Building Permit Submittal Checklist are to be submitted in person to the Building Permit Division, 200 Lincoln Avenue, Santa Fe, NM 87504, First Floor, West Wing.

Fees: Fees for electrical and/or plumbing permits will be collected at time of permit issuance. Permit fees are based on Resolution No 2008.83 which is available upon request or at http://www.santafenm.gov/index.asp?nid=167

Application Tracking: Monitor the status of the application using the City's Voice Inspections/Permit System **(VIPS).** (505) 955-6110, Option 4. The pass code is the Application Tracking Number.

Revisions: Plans will be reviewed for compliance and either approved or rejected. Rejected plans must be corrected for compliance and resubmitted after the initial review cycle has been completed. The applicant will receive a phone call from the Building Permit Expeditor when revisions can be accepted.

General Contractor Licensing: Contractors must obtain valid Santa Fe City Business License and a valid New Mexico State Contractor's License before a permit will be issued.

Permit Notification and Inspections: Once a building permit is issued, it is the responsibility of the permittee to immediately post the Building Permit Poster in a conspicuous place visible from the public way, to place the approved perforated plans and supporting documents at the site for inspectors and to schedule required inspections.

Permit Expiration/Extensions: A building permit is valid for one year from date of issuance provided construction has commenced within 180 days, otherwise, the permit becomes invalid. An extension may be granted by the Building Permit Division if requested in writing by the applicant before the permit expires.

Appeals: Appeals may be filed by any person aggrieved by any decision made by officials administering Article 14-3.17, SFCC 1987. Such appeals must be filed within thirty (30) days of issuance of the building permit.