



**Water Conservation**

9312 N. 94th Street  
Scottsdale, AZ 85258

PHONE 480-312-5650  
FAX 480-312-5663  
WEB [www.ScottsdaleAZ.gov/water](http://www.ScottsdaleAZ.gov/water)

April 28, 2009

John F. Kane, FAIA  
Architekton  
464 S. farmer Ave, Suite 101  
Tempe, AZ 85281

Re: Water Feature Approval

Dear John:

Enclosed is the approved plan for the water feature at SkySong Phase IV.

Thank you.

Sincerely yours,  
Karen Warner  
Water Conservation Specialist  
480-312-5659

88-DR-2005#6  
2nd: 5/12/09

April 27, 2009

City of Scottsdale  
Water Operations  
9312 N. 94<sup>th</sup> Street  
Scottsdale, AZ 85258

Attention: Karen Warner

Re: **Submittal Requirements for Water Features**  
Case Name: SkySong Phase IV / Case Number: 88-DR-2005#6 / 460-PA-2004

Karen:

The attached submittal is to obtain "evidence of approval" to address 1<sup>st</sup> Review DRB Comments issued by Greg Bloemberg at the City of Scottsdale Planning & Development Services on April 16, 2009.

Please find the following attached .pdf documents in 11x17 format:  
Sheet A010W – Overall Site Plan showing Condensate Cistern Locations  
Sheet A011W – Enlarged Building Entry Site Plans showing Condensate Cistern Locations  
Sheet A012W – Condensate Cistern Diagrams and Photo Examples

Below are responses to the requirements in the City of Scottsdale **Revised Code Section 49-242**:  
"Limitation on water features for commercial users, new industrial users and common areas of residential developments".

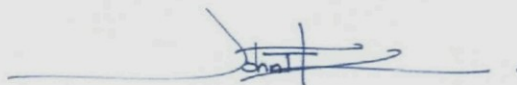
Line	Ordinance	Response
49-242 (a)	No person shall place into operation after February 1, 1991, any water feature that either sprays water into the air in a fine mist or sprays or drops water into the air in excess of six (6) feet in vertical height.	The features <u>will not</u> use potable water. The feature will not spray into the air and will gently flow to enhance landscape areas. The water will drop a maximum of 2 feet.
49-242 (b)(1)	Water features shall be: Outside of city right-of-way, not visible from the street unless approved by the water conservation office.	The features will not be in the right-of-way and are away from the main streets behind the building and landscaping.

49-242 (b)(2)	Water features shall be: Designed with a potable water make up. This make up shall include a reduced pressure principle backflow prevention assembly installed as per the current standard detail adopted by the City of Scottsdale Standards and Specification Committee. No water shall be used to supply any water feature from a landscape irrigation system.	The features will not use potable water. The source of the water will be from the condensate lines from the new building's HVAC system. The water will be treated with UV radiation before being released to the landscaping areas.
49-242 (b)(3)	Water features shall be: Designed with catch basins that will maximize the amount of water recycled and minimize make up water. Outdoor water features that may over-spray shall be equipped with wind shut-off valves.	HVAC condensate water will be used to supplement the landscape irrigation system for the native trees and plants. The features will not use potable water.
49-242 (b)(4)	Water features shall be: Designed using equipment that will minimize leakage throughout the life of the water feature.	The condensate cisterns will be made of cast-in-place concrete to minimize leakage and direct the flow to the landscape areas only.
49-242 (b)(5)	Water features shall be: Equipped with a recirculation pump. Filtered backwash shall be reused in a beneficial manner to surrounding plant material and landscaped areas.	The features will not use potable water. The source of the water will be from the condensate lines from the new building's HVAC system and used to supplement the landscape irrigation system.
49-242 (b)(6)	Water features shall be: Separately metered if using more than one thousand (1,000) gallons of water per day.	The features will not use potable water and will not tap into the domestic water system.
49-242 (c)(1)	Water features shall be: Operational only during normal business hours.	The features will not use potable water. The condensate will vary throughout the day and year based on the availability of condensate water from the new building's HVAC equipment.

49-242 (c)(2)	Water features shall be: Sited allow significant environmental enhancement to on-site users and used to cool surrounding area and mask objectionable noises. Allowable examples: Courtyards and restaurant seating areas not visible from the street.	The condensate cisterns will be ephemeral water features. They will provide a learning experience for the appreciation of water in the Sonoran Desert. The flow of condensate water will vary throughout the year, but will be most prominent in the warmer months. Depending on the flow rate, they will provide a unique aural and visual experience as people sit in the plaza or make their way to the building lobby.
49-242 (d)	Any person installing a water feature must provide a water feature plan to the city and obtain a permit before commencing construction.	Drawings as required will be submitted to obtain a construction permit.
49-242 (e)	<ul style="list-style-type: none"> <li>(1) Any system that injects or drops water into the air solely for the purpose of cooling a confined air space.</li> <li>(2) Water parks.</li> <li>(3) Single-family residential properties.</li> </ul>	These items do not describe the intent of the proposed condensate cistern concept.

If there are additional questions or comments regarding the attached documents or the proposed concept, please contact myself, Glen Wollenhaupt, or Tom Reilly at 480-894-4637.

Sincerely,



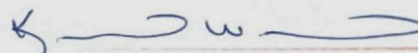
John F. Kane, FAIA

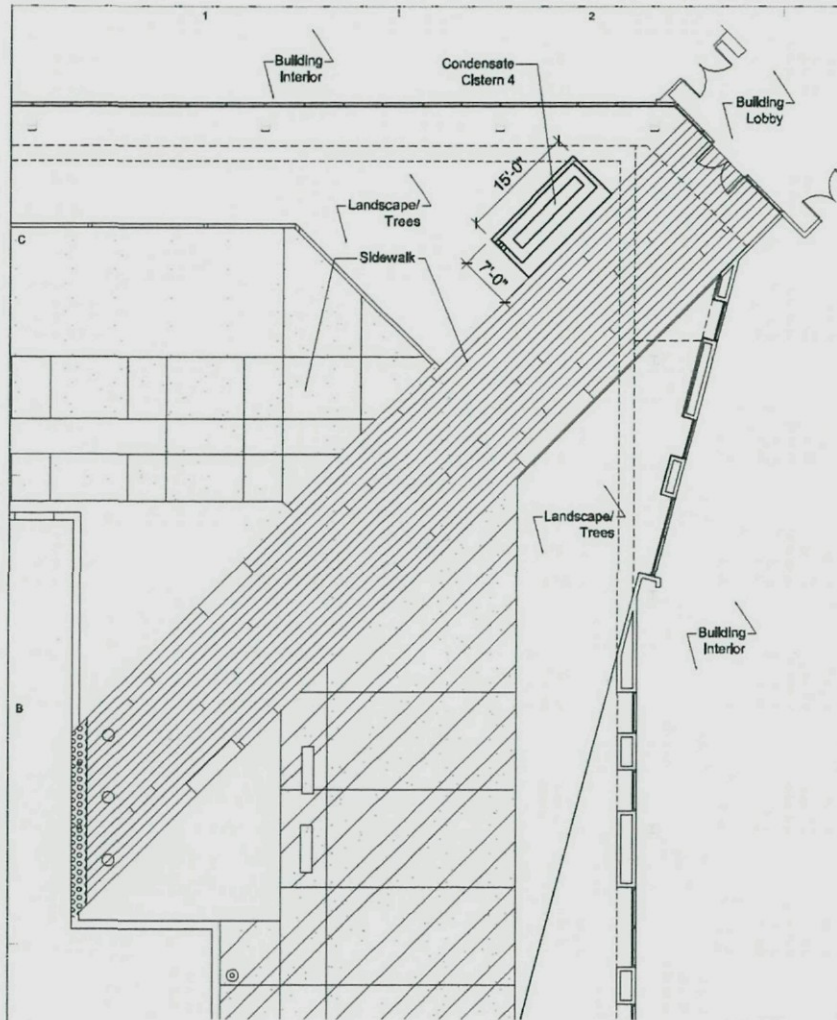
APPROVED

Date 28 April 09

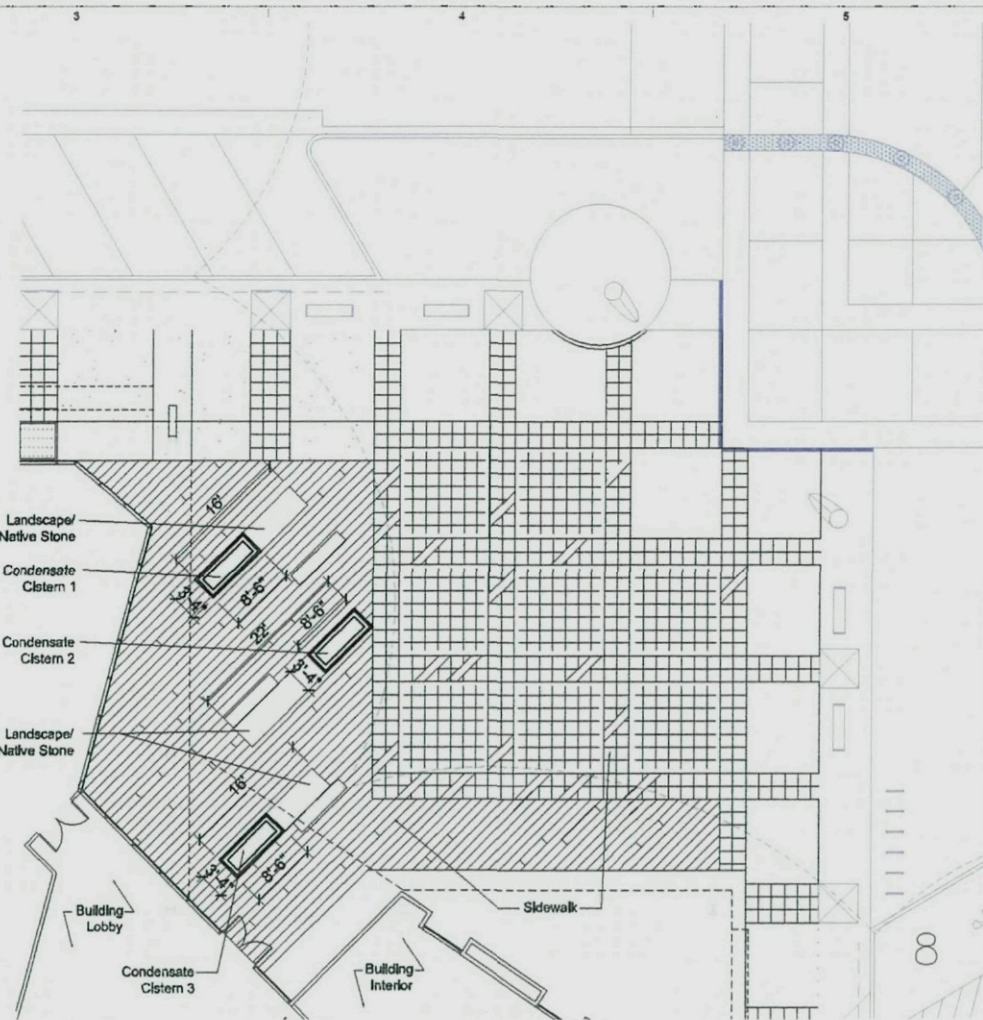
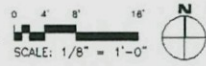
Case # 88-DR-2005#6

Signature

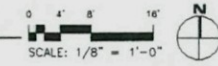




2 Parking Entry Plaza - Large Condensate Cisterns  
 Scale: 1/8" = 1'-0"



1 Main Entry Plaza - Small Condensate Cisterns  
 Scale: 1/8" = 1'-0"

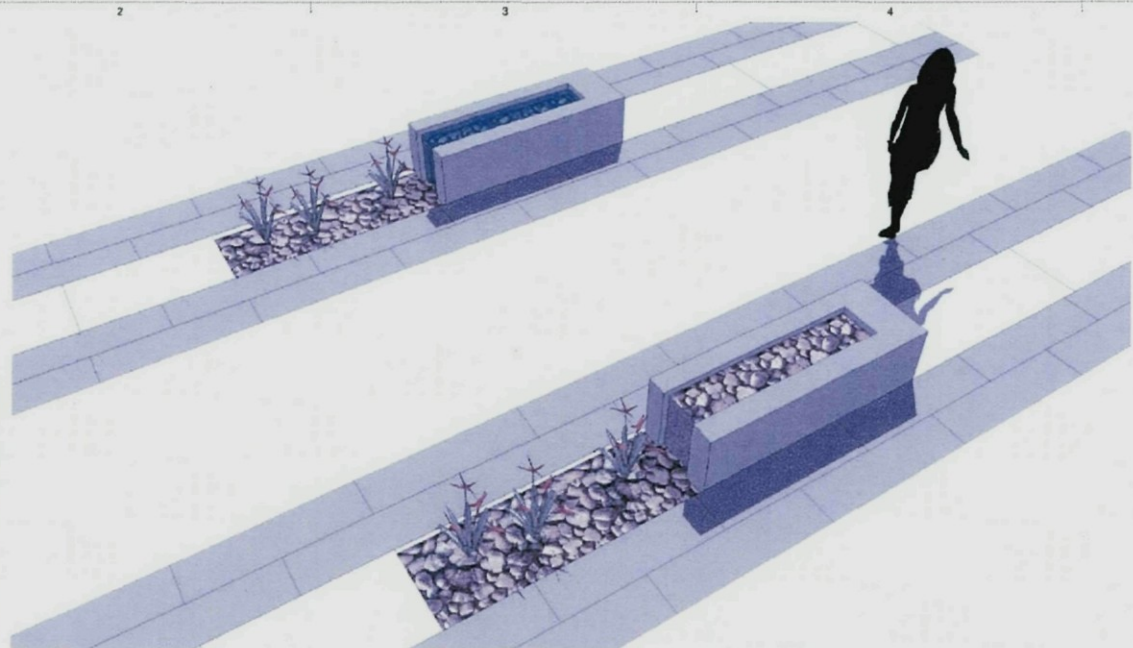


APPROVED

Date 28 April 09  
 Case # 88-DR-2005#6  
 Signature [Handwritten Signature]



Example Photo: of Small Condensate Cistern Concept

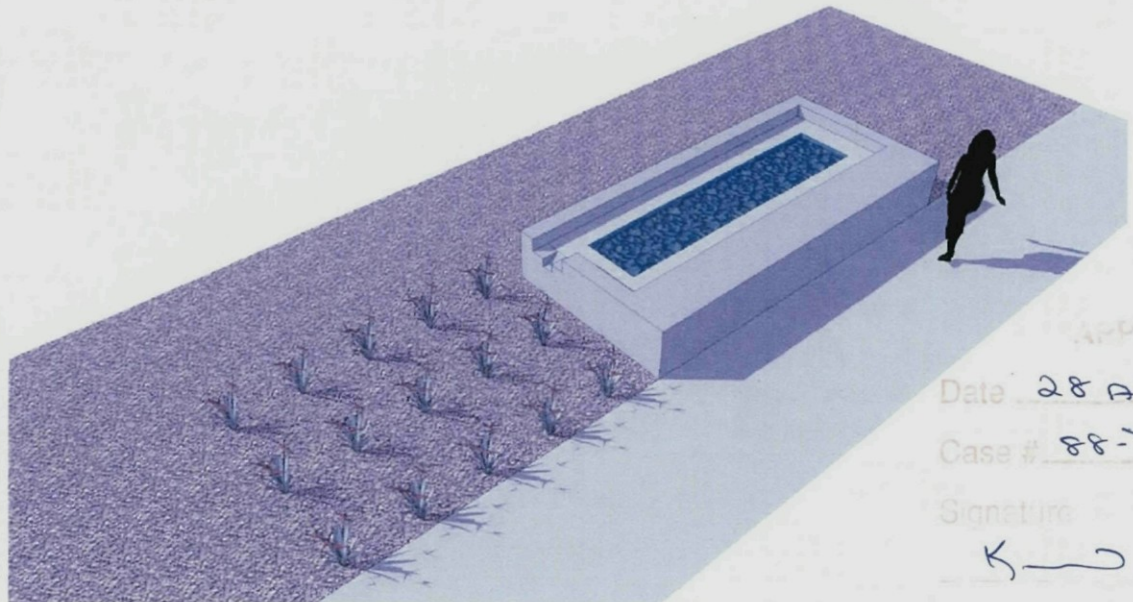


1 Main Entry Plaza - Small Condensate Cisterns (Qty=3)  
Scale: 1/8" = 1'-0"

Dimensions (LxWxH): 22' max. x 3'-4"x2'-0"



Example Photo: Large Condensate Cistern Concept



2 Parking Entry Plaza - Large Condensate Cistern (Qty=1)  
Scale: 1/8" = 1'-0"

Dimensions (LxWxH): 15'-0"x7'-0"x 2'-0"

**WATER HARVESTING**

At the parking lot side of the building, bio-swale gardens, a condensate cistern, porous concrete paving capture some of the storm drainage and condensate water from the buildings mechanical system. These strategies help to reduce the need to utilize domestic water for landscape irrigation. At the shade structure side of the building, condensate water features would have variable flow rates responding to the seasonal changes that impact the mechanical equipment. All of these features express the importance of water in the Sonoran Desert.

**CONDENSATE FEATURES**

At the north entry to the building a series of three intimate cistern features are proposed while at the parking lot entry, a larger cistern integrated with pedestrian seating is proposed. These cisterns are not typical water features as the water used for the cisterns is supplied by the condensate water produced from the building's HVAC system. Condensate water is pure water that is normally diverted to the sanitary sewer. This water will also be sent through a UV filter before being delivered to the cisterns. Utilizing condensate water for the features eliminates the need for potable water for the cisterns. The condensate is only available the warmest of months and will flow into planting areas supplementing the water needs of the vegetation when it needs the additional deep watering the most. The cisterns also serve as a sculptural seating element that when dry will reflect the memory of water.

**MATERIALS**

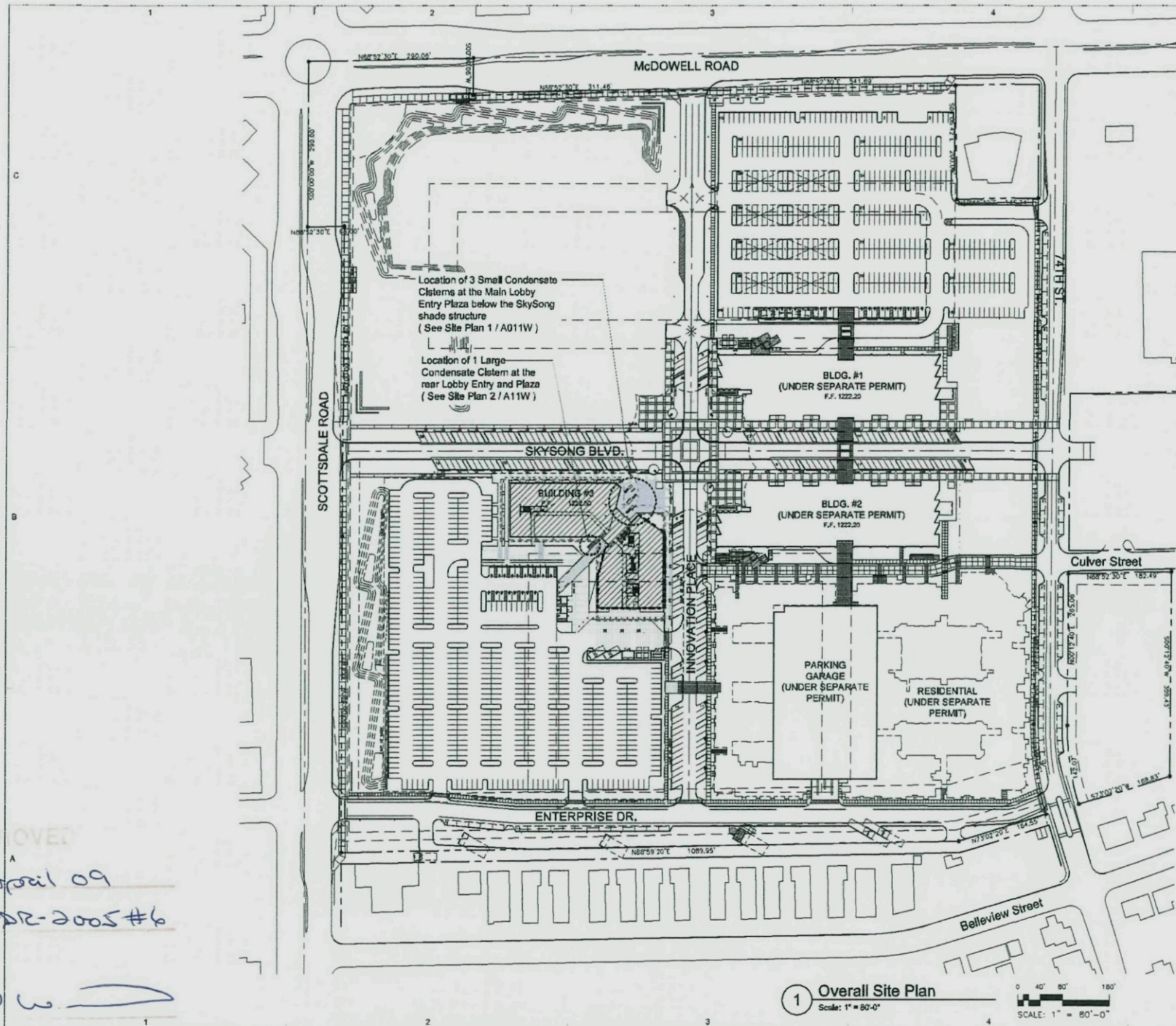
The Condensate Features would be made cast-in-place concrete, filled with native stone. The landscape areas would include native plants compatible with the Sonoran Desert.

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Case # 88-DR 2005 #6

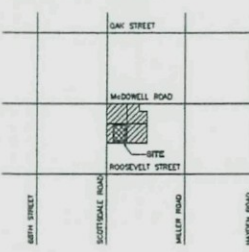
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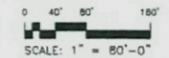
The Overall Site Plan shows proposed condensate cistern locations.  
 For additional information, see Enlarged Entry Plaza Site Plans - Sheet A011W

General contractor shall comply with City of Scottsdale Revised Code Section 49-242. Limitation on water features for commercial users, new industrial users and common areas of residential developments.

**VICINITY MAP**



**1 Overall Site Plan**  
 Scale: 1" = 80'-0"



28 April 09  
 88-12-2005#6

