

08/20/25 BCC AGENDA SHEET

PUBLIC HEARING

APP. NUMBER/OWNER/DESCRIPTION OF REQUEST

ET-25-400073 (UC-23-0302)-USA:

USE PERMITS FIRST EXTENSION OF TIME for the following: **1)** public utility structures (electrical substation and 500 kV overhead transmission lines) and associated equipment; **2)** increase height of public utility structures; **3)** eliminate landscaping; and **4)** eliminate trash enclosures.

DESIGN REVIEW for public utility structures with all ancillary and accessory structures in conjunction with an existing electrical substation on a portion of 1,107.8 acres in an OS (Open Space) Zone.

Generally located northwest of I-15 and north of Las Vegas Boulevard North within the Northeast County Planning Area. MK/rp/cv (For possible action)

RELATED INFORMATION:

APN:

083-09-000-001; 083-10-000-001 ptn

USE PERMITS:

1. Public utility structures including a 500 kV electrical substation and 500 kV overhead transmission lines with all associated equipment.
2. Increase the height of public utility structures up to 180 feet where 35 feet is the maximum permitted per Table 30.40-7 (a 414% increase).
3. Eliminate street, parking lot, and perimeter landscaping where required per Table 30.44-1 and Table 30.64-2 (a 100% reduction).
4. Eliminate on-site trash enclosures where required per Table 30.44-1 and Section 30.56.120.

LAND USE PLAN:

NORTHEAST COUNTY (APEX) - OPEN LANDS

BACKGROUND:

Project Description

General Summary

- Site Address: 19485 Las Vegas Boulevard North
- Site Acreage: 1,107.8 (portion)
- Project Type: Public utility structures (substation & overhead transmission lines)
- Building Height (feet): 180 (maximum)
- Square Feet: 24.6 acres (substation area)

History & Request

The original request was approved on August 2023 via UC-23-0302 and allowed public utility structures (electrical substation and 500 kV overhead transmission lines) and associated equipment. The applicant is requesting an extension of time to allow additional time to commence the proposed substation.

Site Plan

The submitted plan depicted a 1,107.8 acre site located northeast of the Apex Heavy Industrial Park and approximately 2,400 feet north of Las Vegas Boulevard North. An existing electric substation is shown on the south-central portion of the site. Approximately, 400 feet north of the existing electrical substation is the proposed 24.6 acre, 500 kV electrical substation. The plans indicated that proposed substation was shown to be 390 feet south of the northern edge of the site.

The approved plans for the electrical substation show that the 24.6 acre site will be enclosed by a 15 foot tall security fence that will have a fabric screening material. The fencing will enclose 2 separate substations and a switch yard. The support buildings include a 50,000 square foot shunt capacitor building along with a 3,240 square foot control building. The substation contains a 30 foot access loop surrounding the substation and switch yard equipment. There will be three, 30 foot access gates to enter the substation site, 1 in the northeast corner, 1 in southeast corner, and 1 in the southwest corner. The site will be accessed through a 2.5 mile network of access roads that will access the substation site as well as the towers. These access roads will connect with Las Vegas Boulevard North.

The approved plan shows that the proposed substation site will be connected to the existing northern and southern bound transmission corridors. A series of 13 towers will start at the existing Crystal Substation and travel 1,239 feet north to 2 towers that will connect the existing substation with the proposed. Two lines will leave the proposed substation with 1 line traveling 1,641 feet to connect with the north bound transmission lines and the other line traversing 5 towers and traveling 3,080 feet to connect with the middle interconnection line. All line and towers will be located on the eastern half of the overall site.

Landscaping

No landscaping has been proposed for the site and will maintain the existing natural desert landscaping.

Elevations

The approved plans show that there will be several variations of electrical utility structures that will be present on the site. The plans show 3 different transmission line towers that will be used, which include the lattice V-String self-supporting structure, the 3 pole dead end tubular steel structure, and the hi-lo 3 pole dead end tubular steel structure. The elevations indicate that these structures will vary in height between 80 feet and 120 feet. Within the electrical substation and switchyard area, various steel pole towers, transformers, and similar structures will be used. The tallest structure within the substation is anticipated to be 110 feet tall. The control building is shown as a white painted metal building reaching 25 feet tall.

Previous Conditions of Approval

Listed below are the approved conditions for UC-23-0302:

Comprehensive Planning

- Fence screening mesh to match surrounding desert colors.
- Applicant is advised that the County is currently rewriting Title 30 and future land use applications, including applications for extensions of time, will be reviewed for conformance with the regulations in place at the time of application; a substantial change in circumstances or regulations may warrant denial or added conditions to an extension of time; the extension of time may be denied if the project has not commenced or there has been no substantial work towards completion within the time specified; and that this application must commence within 2 years of approval date or it will expire.

Public Works - Development Review

- Drainage study and compliance.

Clark County Water Reclamation District (CCWRD)

- Applicant is advised that there are no public sanitary sewer facilities available in the area and none are planned within the next 5 years.

Applicant's Justification

The applicant states they have made significant progress including federal survey work, engineering, key contracts, issuance of the BLM Notice to Proceed in April 2023, and commencement of multi-state construction. The applicant is requesting 2 additional years to begin construction.

Prior Land Use Requests

Application Number	Request	Action	Date
UC-25-0272	Expansion of public utility structures with all ancillary and accessory structures with increased height	Approved by PC	May 2025
UC-23-0302	Expansion of existing utility corridor with overhead electrical power lines and towers with increased height	Approved by BCC	August 2023
UC-19-0403	Use permit and design review for solar photovoltaic facility	Approved by BCC	July 2019
UC-18-0417	Expansion of existing utility corridor with overhead electrical power lines and towers with increased height	Approved by PC	July 2018
UC-1238-01	Electric substation expansion with eliminated landscaping	Approved by PC	January 2002
UC-1249-01	500 kV power transmission line corridor	Approved by PC	November 2001
UC-0498-01	500 kV switch yard with eliminated landscaping	Approved by PC	June 2001
UC-0901-97	Electric substation with overhead power transmission lines	Approved by PC	June 1997

Prior Land Use Requests

Application Number	Request	Action	Date
WT-0900-97	Waived off-site improvements	Approved by PC	June 1997
ZC-1238-96	Reclassified the site to O-S for an open space buffer zone along boundary of the Apex Heavy Industrial Site	Approved by BCC	October 1996

Surrounding Land Use

	Planned Land Use Category	Zoning District	Existing Land Use
North	Tribal Land (Moapa River Indian Reservation)	RS80 & OS	Solar generation facility & undeveloped
South	Open Lands	OS	Undeveloped
East	Open Lands	RS80	Undeveloped
West	Tribal Land (Moapa River Indian Reservation); Open Lands; & Industrial Employment	OS & RS80	Existing utility corridor & undeveloped

STANDARDS FOR APPROVAL:

The applicant shall demonstrate that the proposed request is consistent with the Master Plan and is in compliance with Title 30.

Analysis

Comprehensive Planning

The applicant states that there is major equipment supply shortages and increased lead times due to supply chain disruptions. Despite these challenges, the applicant is actively advancing the construction of the project. Furthermore, the Bureau of Land Management (BLM) issued its Notice to Proceed (NTP) for the project on April 10, 2023. Per the applicant, TransWest negotiated key contracts to support the construction of the project, and the applicant anticipates construction to commence within Clark County at the first quarter of 2026. Staff finds that the applicant demonstrated diligent progress on the project, therefore, staff can support this application.

Staff Recommendation

Approval.

If this request is approved, the Board and/or Commission finds that the application is consistent with the standards and purpose enumerated in the Master Plan, Title 30, and/or the Nevada Revised Statutes.

PRELIMINARY STAFF CONDITIONS:

Comprehensive Planning

- Until August 2, 2027 to commence or the application will expire unless extended with approval of an extension of time.
- Applicant is advised a substantial change in circumstances or regulations may warrant denial or added conditions to an extension of time; the extension of time may be denied if the project has not commenced or there has been no substantial work towards completion within the time specified; the County has adopted a rewrite to Title 30 effective January 1, 2024, and future land use applications, including applications for extensions of time, will be reviewed for conformance with the regulations in place at the time of application; and the applicant is solely responsible for ensuring compliance with all conditions and deadlines.

Public Works - Development Review

- Compliance with previous conditions.

Fire Prevention Bureau

- No comment.

Clark County Water Reclamation District (CCWRD)

- No comment.

TAB/CAC:

APPROVALS:

PROTEST:

APPLICANT: TRANSWEST EXPRESS, LLC

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