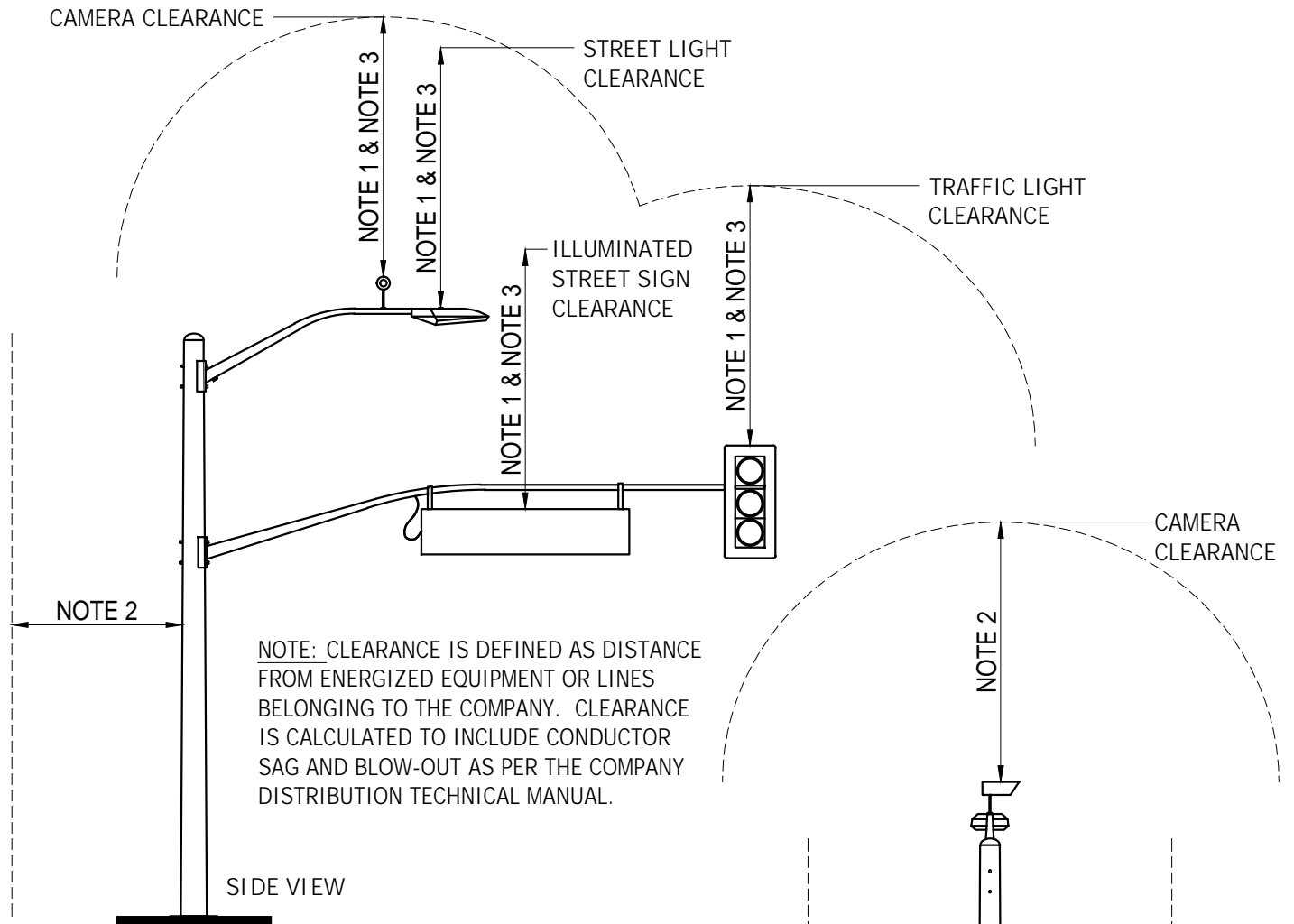


USE: OVERHEAD DISTRIBUTION LINES WITH VOLTAGE LESS THAN 20.8kV

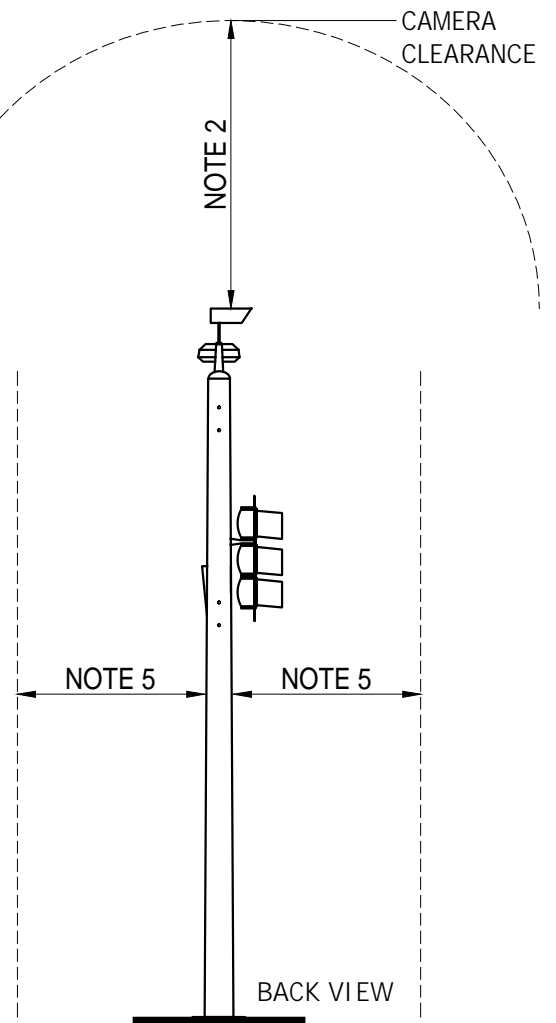
## DESIGN PRINCIPLES FOR OVERHEAD DISTRIBUTION LINES NEAR PUBLIC FACILITIES



**OSHA AND NESC CODE REFERENCE:**

NATIONAL ELECTRIC SAFETY CODE (NESC) REQUIRES VERITICAL CLEARANCE OF 4'-6" AND HORIZONTAL CLEARANCE OF 5'-0" FOR DISTRIBUTION VOLTAGES UP TO 20.8kV. THESE MINIMUM CLEARANCES WILL BE MAINTAINED AT ALL TIMES. VOLTAGES ON THE COMPANY SYSTEM GREATER THAN 20.8kV REQUIRE ADDITIONAL CLEARANCE AND ARE NOT ADDRESS IN THIS STANDARD. IF EXPECTED ACTIVITY UNDER A LINE REQUIRES GREATER CLEARANCE THE TALLEST OBJECT THAT MIGHT PASS UNDER THE LINE WILL BE TAKEN INTO ACCOUNT.

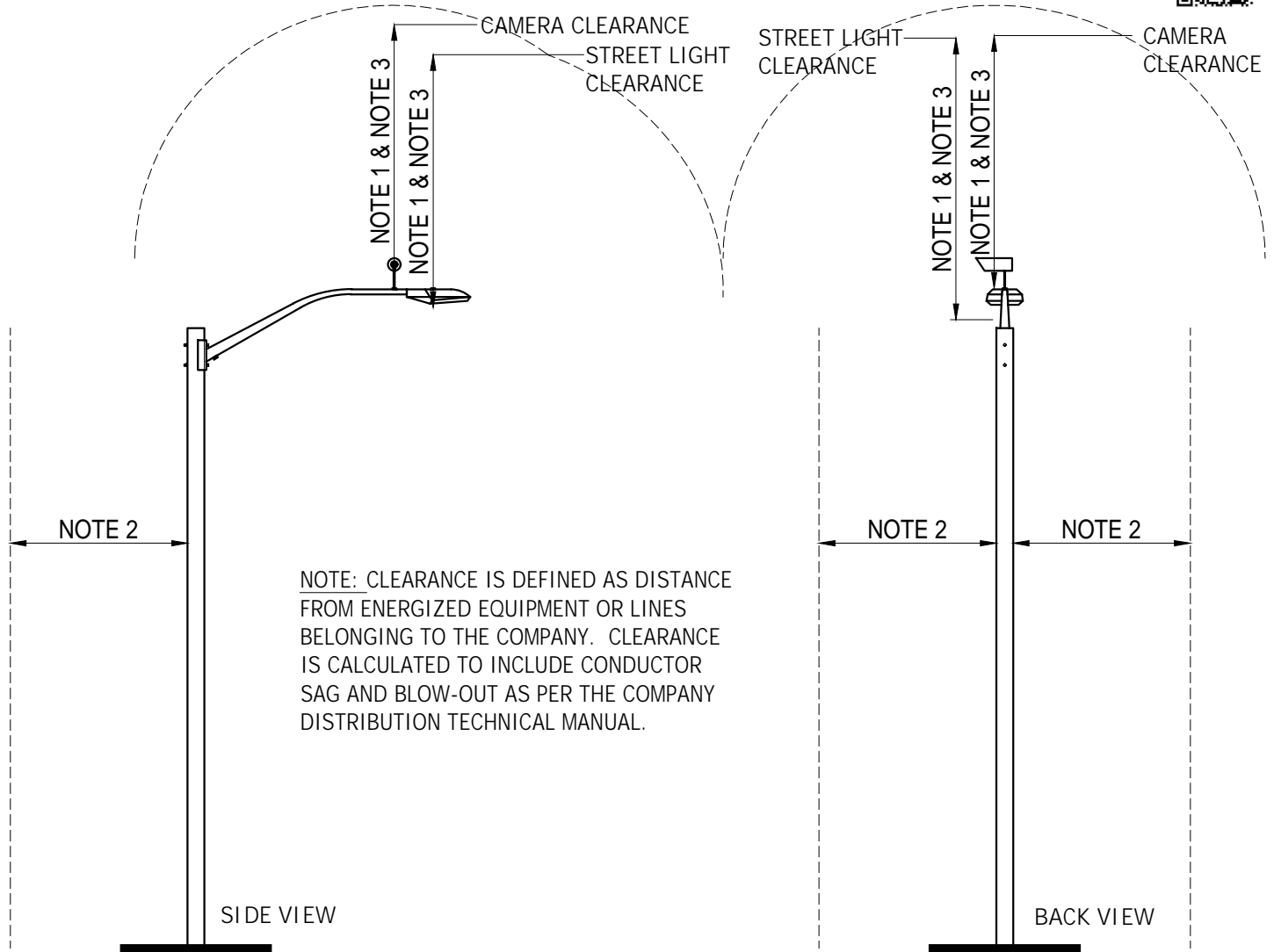
OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REQUIRES A MINIMUM CLEARANCE OF 10'-0" FOR NON-UTILITY PERSONNEL AND THEIR EQUIPMENT WORKING IN CLOSE PROXIMITY TO ELECTRIC POWER LINES ENERGIZED UP TO 50kV, OSHA RULE: 1910.333 (C)(3)(I).



 Tucson Electric Power	 SANTA CRUZ COUNTY	INITIATED BY	EKD	REVISION NO.	0	SR-901 Pg. 1 of 2
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USE: OVERHEAD DISTRIBUTION LINES WITH VOLTAGE LESS THAN 20.8kV

## DESIGN PRINCIPLES FOR OVERHEAD DISTRIBUTION LINES NEAR PUBLIC FACILITIES



**NOTES:**

1. NEW COMPANY OVERHEAD LINES BUILT NEAR PUBLIC FACILITIES REQUIRING PERIODIC MAINTENANCE, SUCH AS TRAFFIC CAMERAS, TRAFFIC SIGNALS, STREET LIGHT HEADS AND ILLUMINATED STREET SIGNS WILL BE DESIGNED TO TRY TO AVOID, OR MINIMIZE CONFLICT FOR MAINTENANCE BY USING 10'-0" OF CLEARANCE.
2. NEW COMPANY OVERHEAD LINES BUILT NEAR PUBLIC FACILITIES NOT REQUIRING PERIODIC MAINTENANCE, SUCH AS STREET AND TRAFFIC LIGHT POLES, SUPPORT ARMS, ETC. WILL BE DESIGNED TO MINIMIZE CONFLICT BY USING 6'-6" FOR CLEARANCE.
3. WHERE PROVIDING A MINIMUM OF 10'-0" OF CLEARANCE FROM ENERGIZED CONDUCTORS TO PUBLIC FACILITIES REQUIRING PERIODIC MAINTENANCE CREATES OPERATIONAL DIFFICULTIES FOR THE COMPANY, THE COMPANY POLICY IS TO REDUCE THE MINIMUM CLEARANCE TO ANY FIXED STRUCTURE OR EQUIPMENT TO 6'-6" AT THE CLOSEST APPROACH. A MINIMUM OF 4'-6" TO ANY FIXED STRUCTURE OR EQUIPMENT, NOT OWNED BY THE COMPANY, WILL BE MAINTAINED FOR ALL INSTALLATIONS.
4. TO MINIMIZE CONFLICT DUE TO CONDUCTOR SAG AND BLOW-OUT PUBLIC FACILITIES SHOULD BE DESIGNED TO BE INSTALLED WITHIN CLOSE PROXIMITY TO COMPANY STRUCTURES. MINIMUM CLEARANCE SEPERATION MUST BE MAINTAINED AND CLEARANCE CALCULATIONS WILL BE PERFORMED ON EACH INDIVIDUAL LOCATION DUE TO NUMEROUS VARIABLES OF OVERHEAD LINE CONSTRUCTION.
5. EXISTING COMPANY OVERHEAD FACILITIES WILL BE REVIEWED FOR RELOCATION, DUE TO ROAD IMPROVEMENT PROJECTS, BASED ON A MINIMUM CLEARANCE OF 4'-6" TO ANY NEW PUBLIC FACILITY, UPON COMPLETION OF INSTALLATION.
6. WHEN WORKING NEAR COMPANY OVERHEAD LINES AND EQUIPMENT, MINIMUM APPROACH DISTANCES MUST BE MAINTAINED TO PROTECT THE WORKER AND COMPANY EQUIPMENT. REFER TO THE COMPANY OVERHEAD PROTECTION POLICY AT [WWW.TEP.COM/OVERHEAD-EXCAVATION/#OVERHEAD](http://WWW.TEP.COM/OVERHEAD-EXCAVATION/#OVERHEAD) .

<b>Tucson Electric Power</b>	<b>UniSourceEnergy SERVICES</b> SANTA CRUZ COUNTY	INITIATED BY	EKD	REVISION NO.	0	<b>SR-901</b> Pg. 2 of 2
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