

San Carlos Rec Center T-Mobile

- **Project Objective**
 - Improve cellular coverage in surrounding residential neighborhood.
 - Including 911 service for emergency purposes.



Project Summary

- Install (2) 70 ft Light Poles with a base diameter of 20"-26"
 - 3 antennas per pole screened within radome (See photo sims)
 - Lights at top of pole to provide lighting for sports field
- CMU enclosure on currently unused slope
 - Total enclosure space is 47' x 11'
 - 27' x 11' for T-Mobile equipment
 - 20' x 11' for Parks & Rec. storage space
 - Designed to match existing buildings
 - Sloped composition shingle roof

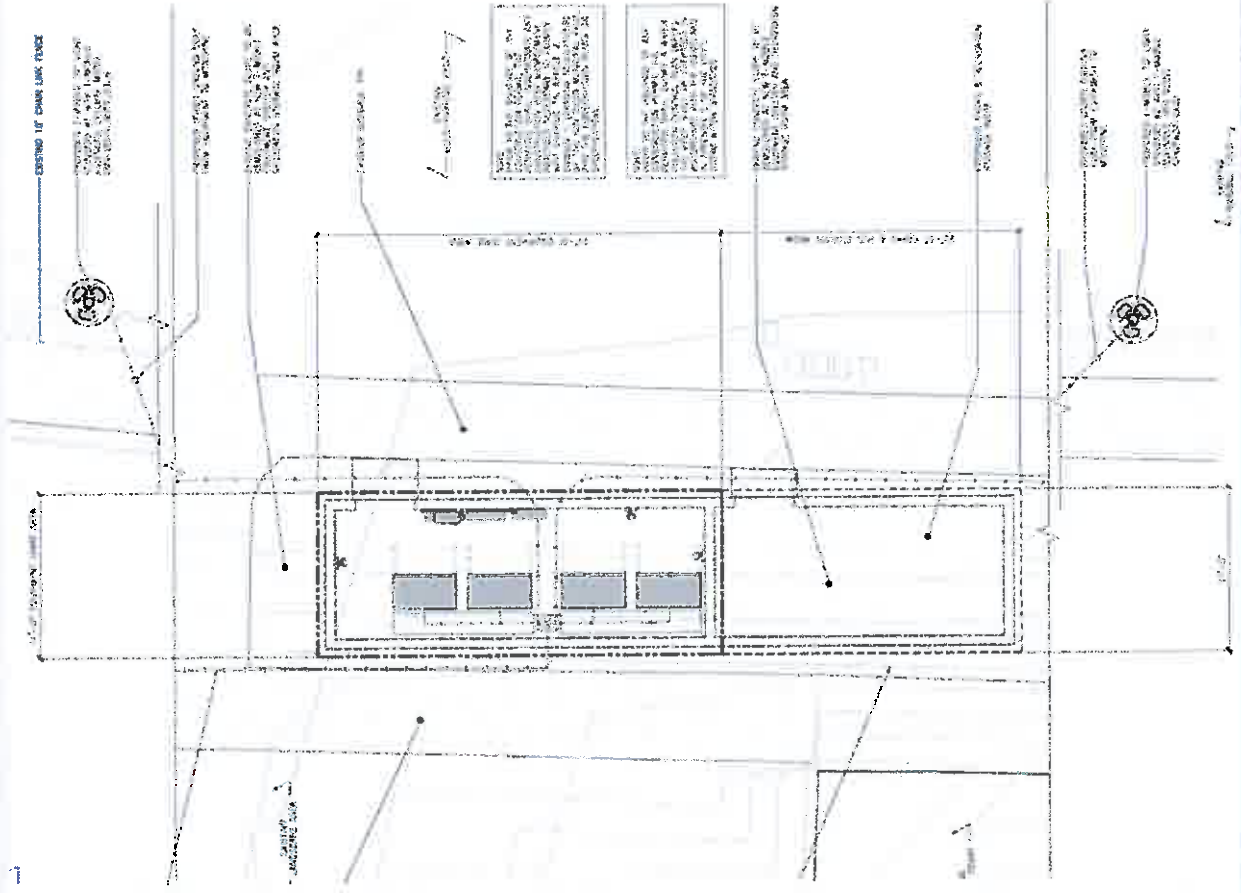


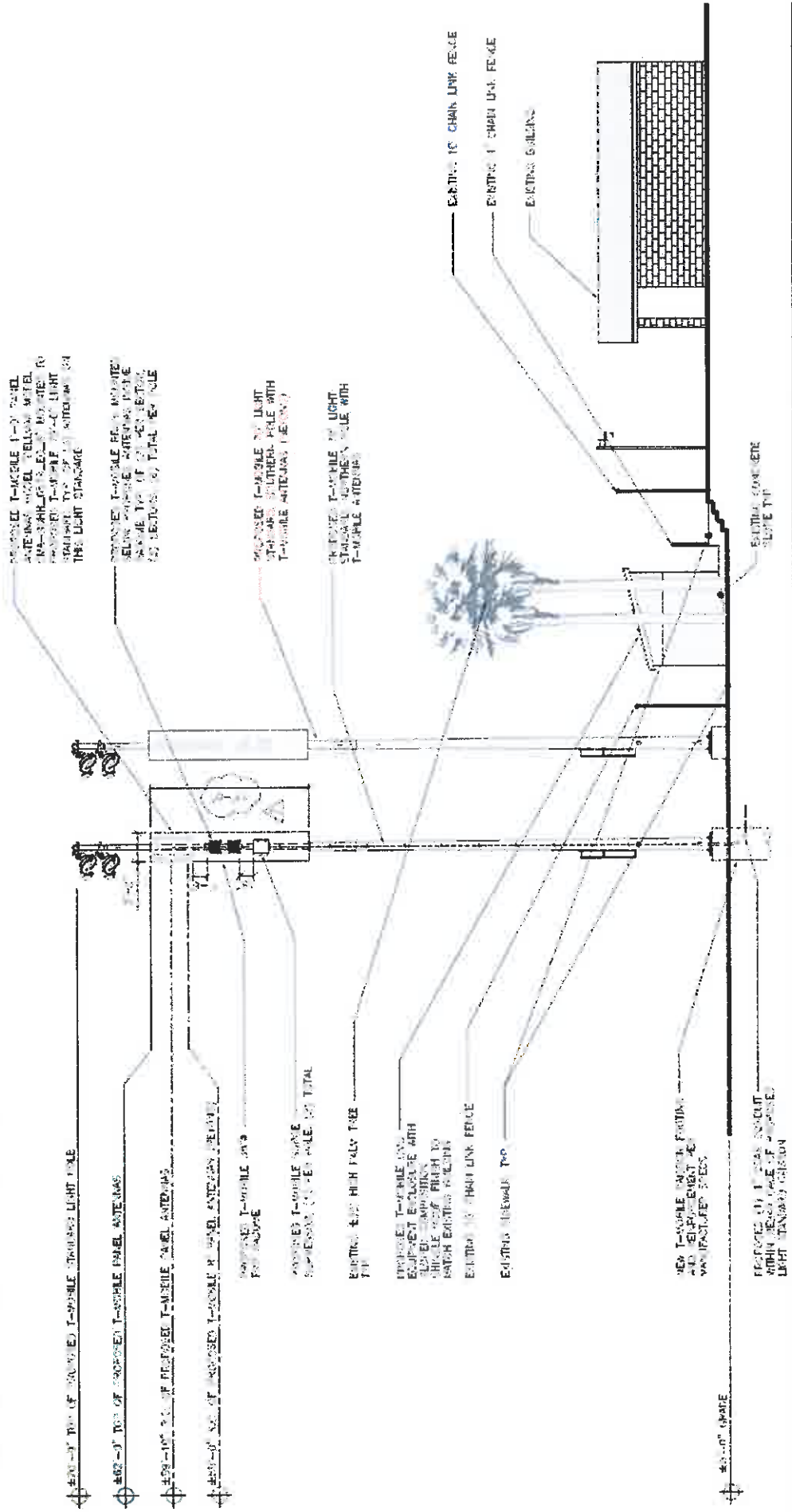
Project Benefits

- Sports field lit for use allowing more use of the park by the public
- Additional storage space for Parks & Rec
- Improved coverage including for emergency services
- Rent to City of San Diego for Parks & Rec and General Fund



Detailed Site Plan





NORTH ELEVATION



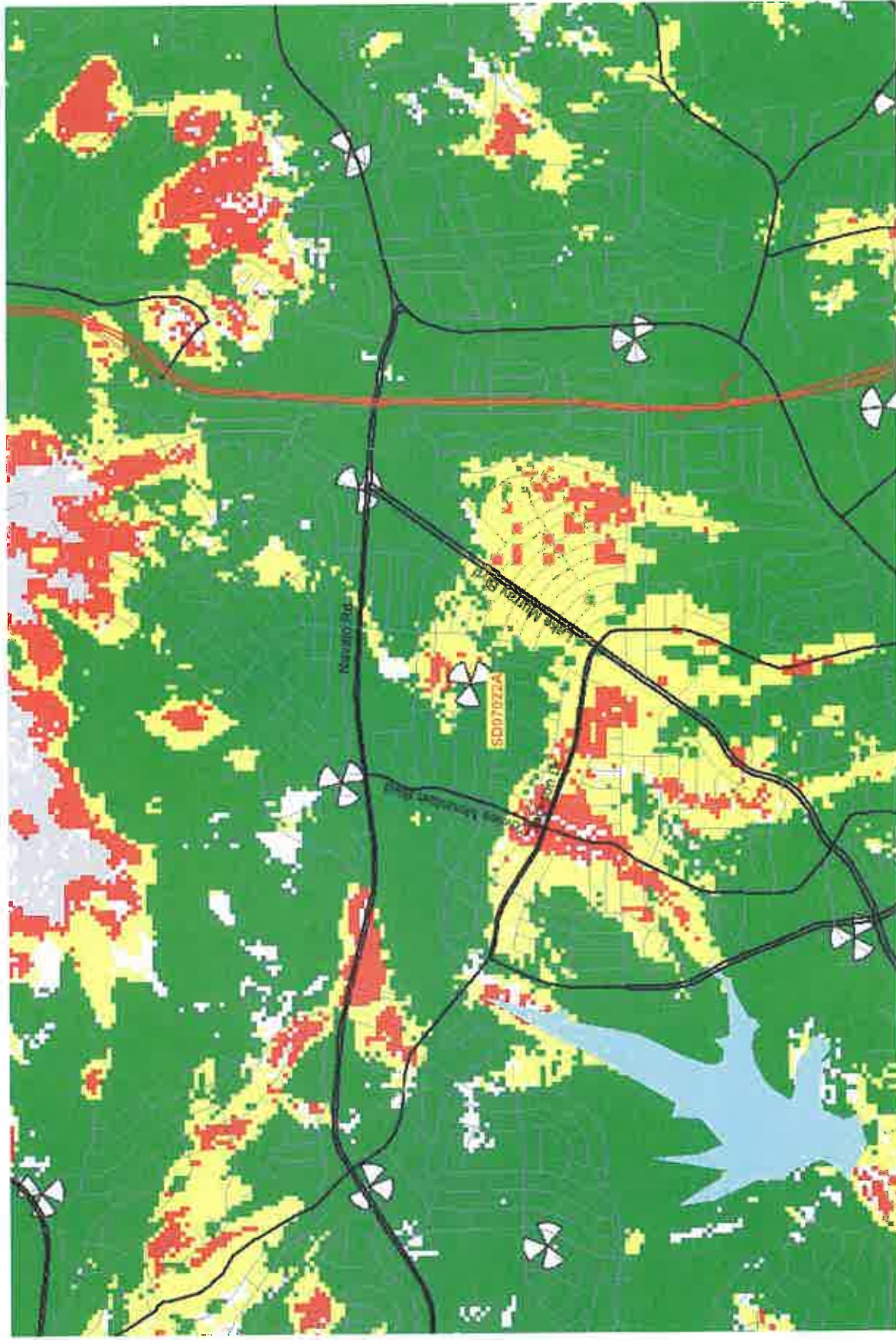




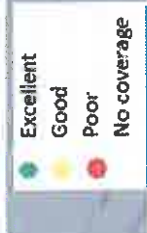
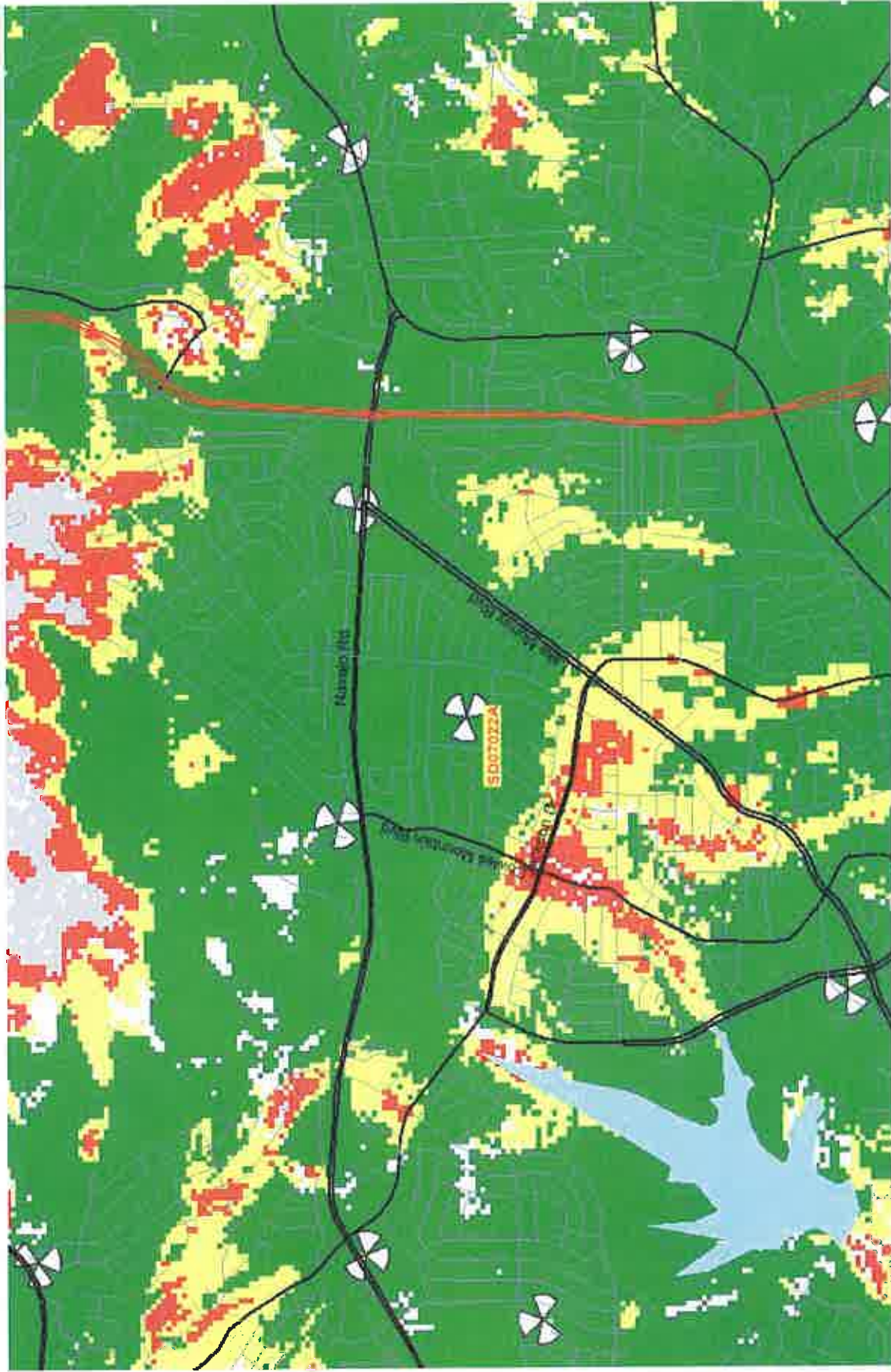
PROPOSED LOOKING EAST FROM LAKE BADIN AVENUE





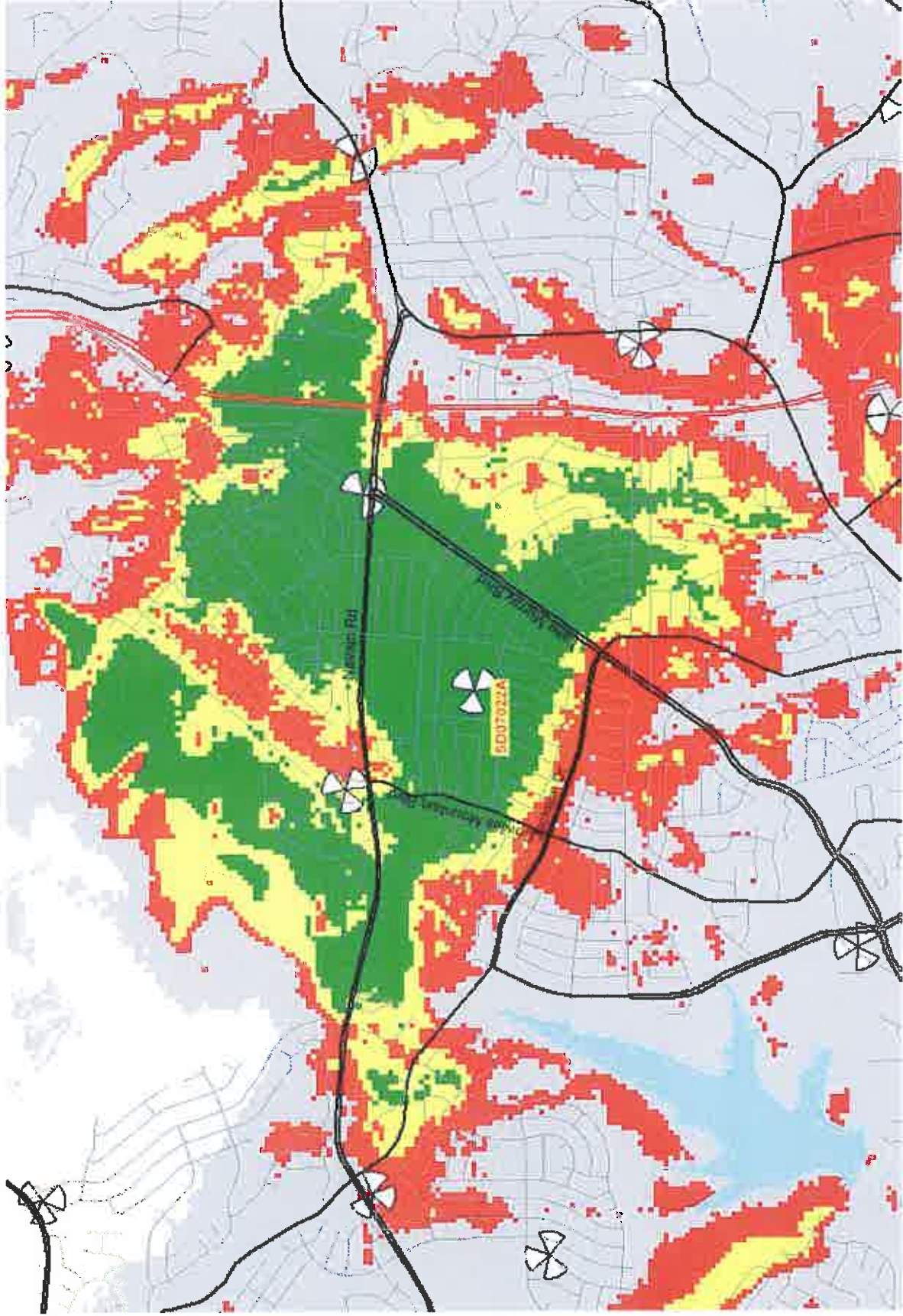


Existing On-Air sites coverage with San Carlos Rec Center Site



T-Mobile

SD07022A Coverage



- Excellent
- Good
- Poor
- No coverage



San Carlos Rec Center T-Mobile

- Why is a site needed at the Rec Center?
 - Needed due to local topography blocking coverage from nearby cell sites.
 - First choice of locations was the water tank near the 125 freeway. The elevation would have provided better coverage, but the Water District denied the proposal due to an upcoming construction project at the site.



- Radio Frequency Emissions
 - The public's safety is a priority to T-Mobile.
 - All of T-Mobile's cell sites are designed to comply with federal safety limits for RF emissions.

An independent RF Study indicates that the exposure to the public at ground level from the proposed site will be no more than 2.4% of the maximum allowed by the FCC.

Table 1: EMF Summary

T-Mobile	Summary
Access Type	Walk-Up
Access to antennas locked	NA
RF Sign(s) @ access point(s)	Yellow Caution (recommended)
RF Sign(s) @ antennas	None
Barrier(s) @ sectors	NA
Max cumulative EMF level for T-Mobile on Ground	2.4% General Population
Max cumulative EMF level for T-Mobile At Light Elevation	75.0% General Population (15.6% Occupational)
Min Clearance Distance from Face of T-Mobile's Antennas	16 Feet



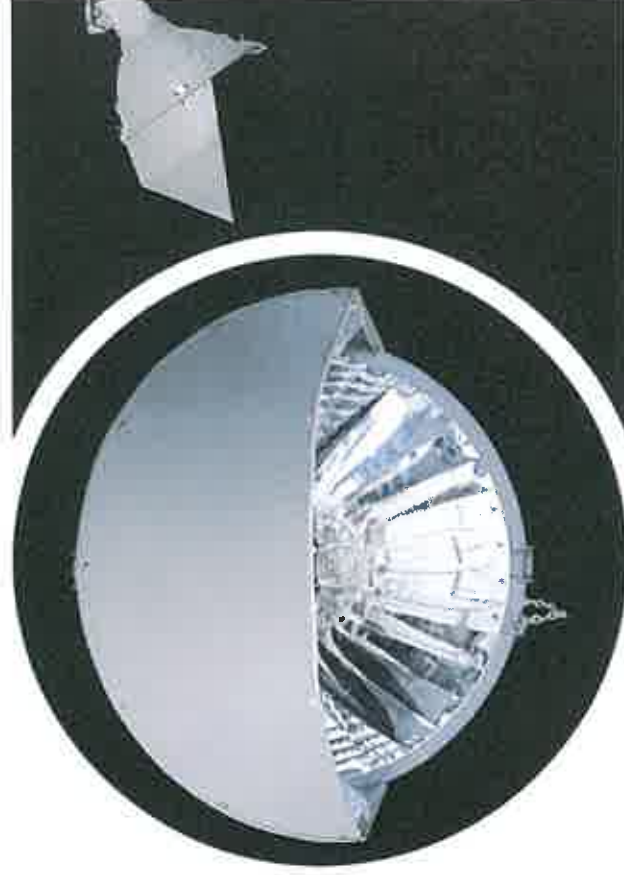
- Light Pollution
- Optional visors can be installed to direct light and reduce glare.



7" Visor

14" Visor

Maximum glare/light spill reduction, but in aerial sports the ball can travel above the light beam. Players could lose track of the ball until it falls back into light beam.



Light Structures
Hudoco



- **Property Values**
 - **Number of households with cell phones only is now approximately 44%.**
(Source: CTIA, Super Mobility Week Conference 2015)
 - **Cell phone coverage has become an important factor when homebuyers are looking at homes.**



Conclusion

- The proposed site will benefit the community by improving cellular coverage and by allowing citizens use of the park after dark for sporting activities.

