

**NPPC UTILITY BOX TASK FORCE**  
***DRAFT* ISSUE PAPER**  
**7-13-10**

**I. ISSUE**

North Park residents and businesses are concerned about the number, placement, design, and maintenance of various “utility boxes”<sup>1</sup> located prominently throughout the North Park community, primarily within public rights-of-way (ROW) such as sidewalks and parkways. The proliferation of these unsightly utility boxes over the past several years is negatively impacting community aesthetics, pedestrian safety, and the ability of individual residents and businesses to maintain their property in an attractive manner and protect property values. Community concerns relate to existing boxes and the ongoing addition of new boxes, as well as the future North Park Utility Conversion Project (undergrounding of utility poles and lines) which will result in many more aboveground boxes to house relocated transformers and appurtenances. North Park’s conversion project is scheduled to begin in 2016.

**II. NORTH PARK PLANNING COMMITTEE (NPPC) UTILITY BOX TASK FORCE**

In early 2010, the North Park Planning Committee (NPPC) formed a North Park Utility Box Task Force to research this issue and to develop recommendations to present to the NPPC as a whole. Members of the Task Force are elected NPPC members and include Robert Barry, Task Force Chairman, Cheryl Dye, Lynn Elliott and Liz Studebaker. The Task Force has researched City documents and communicated with City Planning and Engineering staff. Task Force members have also met with utility representatives (SDG&E, Cox Communications, and AT&T) to learn about pertinent City, State, and Utility regulations, agreements, policies, and practices.

The Task Force presented progress reports to the NPPC Public Facility Subcommittee on April 14, 2010, the NPPC Urban Design Subcommittee on May 3, and the NPPC on April 20 and June 15. NPPC members and Task Force members are communicating with neighboring Community Planning Groups in order to coordinate information gathering and potentially to form a coalition of CPGs to take formal recommendations forward to the City Council.

**III. NORTH PARK CONCERNS**

The Utility Box Task Force has identified numerous community concerns as summarized below:

1. The cumulative impact of unsightly utility box installations being placed by multiple utilities within community sidewalks and parkways - and in some cases on private property - is detrimental to North Park revitalization efforts
2. Large, unattractive boxes are being located prominently in North Park, often directly in front of single family homes and small businesses, creating negative impacts on property values
3. Utility boxes are negatively impacting historic homes and buildings
4. Utility boxes are being placed within sidewalk right of way, impeding local walkability, an important element of the North Park Urban Village experience
5. Unsightly and ill-placed utility boxes located within North Park business districts deter shoppers, negatively impacting small business profitability
6. Utility boxes within sidewalk areas endanger pedestrian safety, particularly that of physically handicapped individuals
7. Utility boxes are graffiti magnets and there is a lack of adequate graffiti removal activity

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<sup>1</sup> This paper uses the term “utility boxes” to generally refer to above-ground pad-mounted transformers, junction boxes, and service terminals on pedestals used to distribute electrical and communication services

8. Utility box installations appear to have been increasing disproportionately over the past few years increasing visual blight
9. The problems will be further exacerbated by the upcoming North Park Conversion Project (undergrounding of utility poles, lines, and appurtenances scheduled to begin in 2016) which will result in significantly more above-ground boxes to house relocated transformers, etc
10. Other communities have experienced inadequate public notice of the "pre-Conversion Project" public meeting and a lack of advance information regarding where new above-ground utility boxes were to be located, what they would look like, and how they would be maintained
11. Other communities have experienced insufficient opportunity for public input prior to installation plans being developed and the project going out to bid
12. Other communities have experienced utility companies bringing previously undergrounded boxes above ground as part of the Conversion Project

#### IV. RESEARCH FINDINGS TO-DATE

##### A. Which utility box belongs to which utility?

**SDG&E's** facilities are pad-mounted green boxes which serve four basic functions: 1) transformers (change voltage); 2) fuse cabinets (overcurrent protection); 3) switches (circuit breaker); and 4) terminators (cables end there). The dark green transformers, at 3'X3'X3', are among the largest boxes of all the utilities.

**Cox Cable** used to install metal cabinets but now uses only low-profile, light green, plastic boxes, referred to as "pedestals". These Cox pedestals have vents on the doors to allow needed air circulation. Unlike the older metal cabinets, they do not rust and graffiti does not easily adhere. Their approximate size is 14"X33"X15".

**AT&T** installs a variety of "utility boxes", the most prevalent being the Serving Area Interface (SAI), a tall, thin, light green metal cabinet. Other AT&T installations include the smaller, cylindrical, light green fixture, and the relatively new Video Ready Access Device - commonly known as VRAD. The VRAD provides DSL access (broadband internet), HDTV programming, and phone service to customers subscribed to AT&T's U-verse program. There are two types of VRAD systems used by AT&T: FTTN (fiber to the node) and FTTP (fiber to the premises). FTTN is used where copper wiring exists in established neighborhoods - like North Park. Due to the VRAD's copper wiring, there are distance limitations from the VRAD to the customer's home. Typically, each VRAD serves 250-300 homes. The VRAD is the largest utility box at about 59"w X 48"h X 26"d - and is distinguishable by the meter located on its side. VRAD has been controversial in several cities, including Chicago where a lawsuit was filed by AT&T against competitor Comcast for publishing ads that criticized U-verse for VRAD's large size and unattractiveness.

**Other utilities** install "boxes", such as backflow preventers (metal mesh boxes enclosing large yellow pipes which prevent pollutants from flowing into the drinking water system) and landscape irrigation timers.

##### B. Why are new utility boxes installed?

According to SDG&E, Cox and AT&T representatives, there are three (3) categories of new utility box installations:

1. *Additional Demand*: New construction and/or new businesses require utility services
2. *Upgrades to service*: Improvements are needed to ensure service reliability and/or adequate capacity, including keeping up with new technology
3. *Conversions of electrical lines*: Undergrounding of poles and electrical wires result in the need to relocate transformers and other facilities within new utility boxes

### **C. How is it determined where the various utility boxes will be located?**

The utilities place the boxes within the public rights of way (sidewalks, parkways) when possible. SDG&E selects locations for its utility boxes based upon many different criteria, including load, cable pulling, voltage, state code, line of sight restrictions, CPUC/SDG&E safety standards, minimum eight foot (8') clearance for working space access, etc. They try to locate their boxes near the property line.

According to the utility representatives, in the case of conversion projects, SDG&E initiates the conversion route and design. AT&T and Cox Cable coordinate their installation of above-ground facilities with SDG&E's placements - in accordance with the City's request to cluster the three (3) utility facilities together whenever possible.

AT&T will locate their facilities in the parkway if there is adequate space, to avoid locating them in the sidewalk public right of way and to avoid noncompliance with ADA requirements. (Note: Typically there is a total 10 ft right of way from the curb, including a 5 ft parkway.

When Cox converts their lines, they install one pedestal and run conduit to each property line (If the pedestal must be located in a resident's yard due to lack of public right of way, Cox will install the pedestal such that it straddles the property lines when possible, to share the burden of the installation between neighbors.)

### **D. Can the boxes be undergrounded?**

SDG&E currently installs two (2) types of facilities subsurface:

1. *Man-hole*: An underground utility vault used for larger facilities. It is located in the street or parkway and provides an access point for making connections and performing maintenance. Only a cast iron lid is visible above ground.
2. *Hand-hole*: A concrete box with cable connections. Only a concrete or traffic bearing lid is visible above ground.

Below ground vaults are not located in residential areas. Some large commercial SDG&E customers may elect to install transformers in a vault room below ground. The customer is responsible for building and maintaining the vault room to SDG&E standards (e.g. sealed, vented, suitable for SDG&E maintenance worker access, etc) and at their own expense. SDG&E maintains the equipment only. *This is very costly for the customer.* These vaults are typically found downtown (usually below the building's underground parking) where large buildings require their own transformer. Per state Rule 16, transformers serving only one (1) customer must be built on private property; they cannot go within the public right of way. Because these downtown properties are built to property line, there is limited private land space available. As a result, they must either build a subterranean vault room or locate the transformer within their ground floor space. They most frequently elect to build the underground vault for economic reasons. Easements would be required if serving more than one customer.

Cox Cable and AT&T do not underground their utility boxes due to the risk of water damage. Because phone service is now on cable lines, the FCC requires that cable service cannot be down for more than a specified period of time. Cox uses coaxial broadband cable to link the signal to the side of the house. Water seepage to subterranean facilities erodes the electronics and results in damage that impacts more than the one house. While Cox *did* underground some boxes in Talmadge in the past, these boxes filled with water and failed creating a "maintenance nightmare". Because of this, Cox may elect to bring these boxes above ground as part of the on-going Talmadge conversion. (The Talmadge representative noted that the City of Irvine elected to bring all their undergrounded Cox boxes above ground in 1999 - due to maintenance issues.)

AT&T does not underground any of their boxes, with no exceptions. Representatives indicate that the company tested the undergrounding these facilities a few years ago; the results were extensive water damage, The CPUC levied fines and the pilot program was halted.

**E. How many utility boxes have been installed by utility companies within Greater North Park over the past 5 years?**

According to SDG&E, a total of 45 pad-mounted utility boxes have been installed within Greater North Park over the past five (5) years. These are broken down per the table below:

Category of Installation	Project Name/ Location	# of Boxes
Conversions (undergrounding poles/lines)	30 <sup>th</sup> Street 20A Phase I: University Avenue to Maple Phase II: Maple to "A" Street	7
	Meade Avenue 20SD I-805 to Park	12
	<i>Conversion Subtotal</i>	<i>19</i>
Existing or new businesses/ development requesting more power	<i>Business Request Subtotal</i>	<i>26</i>
	<b>SDG&amp;E GRAND TOTAL</b>	<b>45</b>

New installation numbers are being requested from the other utilities as well in order to determine the cumulative impact in the community.

**F. What type of permitting process is required by the City?**

According to SDG&E, Cox and AT&T representatives, these utilities are allowed to work within the public Right of Way (streets, sidewalks, parkways) to install their utility boxes with minimal review. The City requires the utilities to secure a Public Right of Way permit from the City Engineering Department, including submittal of plans showing the impact on the right of way. The City reviews these plans only for the purpose of tracking utility lines and managing trenching repairs and traffic control. City inspectors must sign off that street and/or sidewalk repairs were completed per City standards. Plans are not reviewed by Development Services or other departments to evaluate utility box design or placement. (One utility representative noted that "most cities have an ordinance requiring review of the larger cabinets".)

Sections of the San Diego Municipal Code that have been preliminarily identified as pertinent to utility box permitting requirements include:

- Chapter 6, Article 2, Div.11: "Procedures for Work on Utility Installations in Public ROW"  
Chapter 6, Article 2, Division 11 provides procedures for the use of public rights of way in order to: "1) conserve the limited space with public ROW; 2) maintain safe conditions for the public use of public ROW; 3) minimize inconvenience to the public; 4) provide specific guidelines for the coordination of placement of installations to ensure a level of street improvement that is functionally safe; and 5) to establish cost recovery system for inspections." This division states that "all persons shall obtain written authorization from the City Engineer before commencing any work on public rights of way within the city" and that "The City Engineer is authorized to adopt procedures to implement this division." The major focus is on streets, as evidenced by the language describing the City Engineer inspection of work "for compliance with laws, ordinances and construction standards with emphasis on: 1) traffic control procedures; 2) compliance with city street restoration standards, and 3) compliance with pavement cutting procedure."
- Chapter 12, Article 9, Div. 7: "Public Right-of-Way Permits"  
Chapter 12, Article 9, Division 7 indicates that a Public ROW Permit is required for the construction of privately owned structures or facilities in the Public ROW. It establishes the process for review of Public ROW Permit applications to ensure compliance with Chapter 5, Art.4 (public pay phones) and Chapter 6, Art. 2 (utility installations; see paragraph above) (Note: Section 129.0710(b) also states that, per Section 126.0502(d)(7), a Site Development Permit is

required when “Any encroachment or object which is erected, placed, constructed, established or maintained in the public right-of-way when the applicant is not the record owner of the property on which the proposed encroachment will be located.” (*Note: Clarification is needed as to how the Site Development Permit requirement relates, if at all, to utility box installations.*)

Sec. 129.0715 reads: “The encroachment shall be installed and maintained in a safe and sanitary condition at the sole cost, risk, and responsibility of the owner....and shall not adversely affect the public’s health, safety or general welfare.” Notably, this division indicates that “If the proposed encroachment includes underground or overhead structures which extend into the public ROW farther than the ultimate curb line, or other encroachments which, in the opinion of the City Manager, are of sufficient public interest to warrant City Council approval, the item shall be scheduled for early consideration by the City Council in accordance with Council Policy 600-16, prior to the issuance of a Public ROW Permit.”

- Chapter 6, Article 1, Div. 5: “Underground Utilities Procedural Ordinance”

Chapter 6, Article 1, Division 5 lays out the procedures for the undergrounding of utilities. It provides for the “creation of underground utility districts in which poles, overhead wires and associated overhead structures shall *not* be permitted”. Unless otherwise provided in the resolution creating the District, this Division’s regulations do NOT apply to “utility boxes” . However, this division does lay out public meeting and notification procedures related to the undergrounding of the poles and wires that result in the need for more aboveground boxes. These undergrounding-related procedures include:

- 1) Council *may* call public hearings to ascertain where the public health, safety or general welfare requires the removal of poles, overhead wires....and the underground installation of wires and facilities....” The City Clerk will notify affected persons and the utilities at least 15 days prior to the hearing and publish notice at least 5 days prior.
- 2) If after the public hearing, the Council determines undergrounding is necessary, it may declare the area an Underground Utility District.
- 3) The City Manager establishes a schedule for the conversion within the District and must notify affected persons and the utilities by personal service or by mail within 15 days of the schedule adoption. (There are no mandatory requirements for the schedule; no additional public meetings are required)

### **G. Is advance notice given to impacted businesses and residents?**

SDG&E, Cox Cable and AT&T indicate that no public notice is required if the utility box is located within the public right of way. In the case of utility conversions, the City’s practice is to hold a public forum prior to the project implementation. The purpose of the forum is to provide the impacted neighborhoods with information about pole undergrounding plans. SDG&E indicates that property owners are also made aware of conversion plans due to the fact that they must sign an SDG&E “Permit to Enter” form allowing SDG&E workers to access their property in order to install a meter. A March 25, 2010 staff report to the City Council on the status of the undergrounding program states that “Approximately 6 months prior to the construction start date for their streets, affected residents within areas scheduled for undergrounding are invited via U.S. mail to an informational seminar. Representatives from the local Community Planning Group (CPG) as well as the relevant City Council office are also invited.....representatives from each utility company also attend to answer questions. The events include an hour long presentation, and focus on answering questions about schedules.... what residents can expect during construction....and the type of work that will happen on their properties...”. There have been many resident complaints about this forum process, including inadequate noticing, poor timing of the meeting itself, and lack of information regarding the specific locations of utility boxes and of visuals illustrating the true impacts.

### **H. What authority to these utilities have to install improvements on City property?**

SDG&E, Cox Cable, and Times Warner are subject to franchise agreements with the City of San Diego. AT&T holds a franchise with the State of California and is governed by the CPUC.

The SDG&E franchise agreement (Ordinance 10466) was executed in 1970. The agreement has a 50 year term with a re-opener for the final 20 years. The agreement sets franchise fees (for SDG&E's use of City streets), and requires the utility to work with the City to prepare an "administrative manual governing the installation and removal of SDG&E facilities within City right of way". It is the "joint responsibility of the Grantee (utility) and the City to review and update such administrative practices...by a method of mutual cooperation." The updated practices must be approved by the City Council each year. (The agreement reserves the right for the City to construct, repair, remove, relocate or maintain improvements under or over the City streets, and using its police powers to require the utility to remove or relocate to either overhead or underground locations the poles, wires, and appurtenances at the sole cost of the utility.) The franchise agreement requires SDG&E to participate in the California Public Utility Commission (CPUC) undergrounding program, and as of 2002, also requires the utility to participate in the City of San Diego undergrounding program. (see Sec I, below). The franchise agreement is subject to the right of the majority of City voters at any election to "repeal or modify the terms of the franchise."

### **I. Who funds and administers local Conversion (Undergrounding) Projects?**

A statewide Conversion Program has been in place since 1967 (the only statewide program in the country). Known as the Rule 20A Program, it is administered by the CPUC. In order to be eligible for inclusion in the 20A Program, a street must meet "general public benefit" criteria, i.e. support heavy vehicular or pedestrian traffic. Most residential streets do not qualify. The 20A Program primarily converts streets within commercial districts. (In North Park, 30<sup>th</sup> Street, University Avenue, and El Cajon Blvd were each converted under the 20A program). The 20A program does not fund undergrounding projects. All costs are paid directly by participating utilities; no surcharge is billed to customers.

In 2003 the City of San Diego initiated its local Surcharge Program designed to convert overhead lines to underground lines throughout the entire city (the only city doing this in the state). The Surcharge Program's goal is to underground all areas not covered by 20A - essentially, all residential neighborhoods. It is funded by surcharges levied on the utilities' monthly bills.

#### SDG&E Pays into CPUC Rule 20A and City Surcharge Programs

SDG&E pays for their share of "state mandated" 20A undergrounding projects, plus helps fund the City of San Diego's residential undergrounding program. SDG&E's franchise agreement has a re-open clause that allowed the City and the utility to modify terms in January 2002. The new 2002 terms provided for SDG&E to continue to access state CPUC funds to convert high traffic streets within the City, and for the utility to separate out their "embedded" undergrounding charges, showing them as a surcharge on customers' monthly bills earmarked for the City conversion program.

#### Cox Cable, Time Warner Cable, AT&T Pay into City Surcharge Program

In 2003, the City agreed to terms with Cox and Time Warner Cable that secured their participation in the City's new residential Surcharge Program. An agreement was reached with AT&T in Dec. 2004, and approved by the CPUC in Dec 2006. AT&T has a Rule 32 that mirrors Rule 20A. Whenever SDG&E undergrounds poles and lines under Rule 20A, AT&T must participate under Rule 32. AT&T is *not* reimbursed from phone surcharges. Cable companies are required to underground at their own cost, per their local franchises.

### **J. What has been the experience of neighboring communities with Conversion projects?**

As a result of bad experiences with utility undergrounding and the related proliferation of aboveground utility boxes, individual members of surrounding Community Planning Groups (CPGs), including Uptown Planners, Kensington/Talmadge Planning Group (KTPG), and Normal Heights Community Planning Group, have informally expressed interest in collaborating with North Park on this issue. A North Park Utility Box Task Force member attended a May 12, 2010 KTPG meeting in which the Kensington community's future conversion project (starts 2012; ends 2014) was discussed at length amid much controversy. A Talmadge representative provided a power point presentation

highlighting significant problems experienced by the Talmadge community during their still ongoing Conversion Project, including:

- Poor notification and inconvenient scheduling of the Conversion Project public forum
- Lack of adequate information at the public forum; No visuals of the utility boxes
- Excessive number of boxes installed; *estimated one utility box cluster every five houses*
- Utility boxes placed on private lawns or sidewalks when no parkway space available
- Potential for utilities to bring up already undergrounded utility boxes as part of the conversion process
- Inconsistent policy concerning undergrounding of boxes; e.g. a few tenacious individuals were able to negotiate undergrounding of SDG&E boxes (in vaults “the size of a VW”)
- Onion Award given to Talmadge by San Diego Architect Foundation for unsightly utility boxes

Many Kensington residents are questioning whether the community should forego the undergrounding project altogether, keeping poles and lines in the alleys and avoiding ugly boxes in front of their homes.

## V. NEXT STEPS

The Utility box Task Force will be obtaining direction from the North Park Planning Committee (NPPC) regarding future coordination of this issue with potentially key players, including:

- Councilman Todd Gloria
- Community Plan Update Advisory Committee
- Community Planners Committee
- Historic Resources Board

The Utility box Task Force will also be seeking NPPC input related to the following potential recommendations to City Council:

1. That Council establish a *moratorium* on new installations within North Park, pending creation of a comprehensive utility box policy as part of the GNPCPU. In the interim, an exception could be made for utility boxes requested by the property owner and approved by the NPPC and/or City Council.
2. That Council establish *minimum standards* related to utility box size, design, placement, maintenance, graffiti prevention/removal, and disposition of deactivated/abandoned facilities
3. That Council establish adequate public notification and *opportunity for input* prior to new utility box plan development, bidding, and installation.