California Underground Facilities Safe Excavation Board

April 11-12, 2022

Agenda Item No. 13 Information Item – Staff Report

Planning Ticket Workshop Discussion

PRESENTERS

Brittny Branaman, Policy Manager

SUMMARY

Board Member Johns led a workshop in February 2022 to gather information on planning tickets. The Board released surveys for both operators and designers to gather information on what utility information designers need in the early design phase of building projects and the challenges for designers and operators in the design process as it pertains to 811 excavation. Workshop and survey discussion participation was limited. Staff recommends the Board continue to conduct outreach to stakeholders to generate more responses and to inform potential development of a planning ticket.

STRATEGIC PLAN

2021 Strategic Plan Objective: Improve Excavation and Location Practice Safety
Strategic Activity: Looking Ahead: Locator Requirements and Best Practices

BACKGROUND

During the Board's May 2021 meeting, Executive Officer Tony Marino discussed comments made by James Wingate, Executive Director of USA North 811 (USAN) regarding complaints from both excavators and operators pertaining to perceived delays in the locate and mark process.[1] Mr. Wingate outlined in writing his perspective of issues in the locate and mark process, which expressed an opinion that one of the potential delays or stresses is caused by engineers and project designers creating "new" excavation tickets for planning and design purposes when the associated excavation is not planned to occur until weeks or months later.[2] USA North 811 did not provide data supporting perceived delays in the locate and mark process.

[1] May 11, 2021, Agenda Item No. 9 USAN Issues in Locate and Mark
[2] July 13, 2021, Agenda Item No. 8B, USAN Report Issues Identified in Locate and Mark

Data is Limited

As noted in a July 2021 staff report,[3] data supporting how a plan and design ticket process will alleviate locate workload strain is limited, and there do not appear to be any existing data-backed analyses that support the assertion. Staff have also begun to explore ticket volatility and locator workload separately to examine how notification (ticket) submission volatility affects locator workload and possibly cause delays in the locate and mark process.[4]

The Board discussed during the July 2021 meeting whether it was reasonable to assert that a planning and design ticket process would improve locate response times while also potentially improving safety, and if so, what would such a process look like. The Board considered possible solutions for addressing plan and design ticket needs, including operators sharing as-builts and maps with designers and communication between designers and operators during the design phase of construction. The Board also discussed whether aspects of the Colorado 811 planning ticket process may be worth adopting in California.

During the Board meeting in November 2021, staff compared and contrasted California's 811 ticket process to Colorado's 811 engineer or planning ticket.[5] While Colorado 811 requires the designer to share design information during the design phase of building projects with operators via the call centers, California has no requirements in the one-call law for designers and operators to share information or communicate during the planning and design phase of building projects via the one-call centers. While not mandated to, both call centers have created an option for designers to look up utility contacts for design purposes through their respective websites. In California, designers must contact the operators themselves to request underground utility information.

Review of Colorado's engineering ticket[6] found it requires communication between designer and operator in the design phase. It also implements several of the concepts later highlighted within the Common Ground Alliance (CGA) Next Practices Report, including having accurate information of underground utilities to assist in efficiently locating and marking underground utilities to prevent locate and mark delays, as well as prevent damages to underground utilities. The Colorado engineering ticket also implements the CGA recommendation of a flexible ticketing process to help locators manage workloads and accommodate influxes of tickets.[7] Board Members agreed to consider the benefits of creating a new ticket type.

DISCUSSION

On February 28th the Board held the first Planning Ticket Workshop virtually and released surveys for both designers and operators on the Board website. Though approximately 80

[3] July 13, 2021, Agenda Item No. 8, Discussion on Locate and Mark Issues
[4] November 9, 2021, Agenda Item No. 7, Measuring Ticket Volatility and Estimating Locator Workload
[5] November 9, 2021, Agenda Item No. 6, Comparing & Contrasting CO
[6] Colorado 811 Statutes §103
[7] Common Ground Alliance NEXT Practices Report February 2021

people were in attendance, discussion from participants was limited and garnered only a few responses offering feedback. Survey participation only garnered one response.

The purpose of the workshop was to understand how designers[8] develop their design plans to avoid contact with underground utilities during excavation, understand how operators respond to requests from designers, and what the information sharing, and communication challenges are under the current ticket process in 811, so that the Board can use this information to evaluate creating a planning ticket.

Designer Needs and Challenges

Designers discussed the following needs and challenges:

Designers Need Information in the Design Phase

Designers shared that having precise location of utilities in the design phase helps create design plans that are precise and identify complications to the excavation before construction begins.

Challenges for Designers using the Current 811Ticket Process

Discussion of challenges for designers centered around several issues: communicating design requests for underground utility information, difficulty obtaining underground utility information and accuracy of information once obtained.

Communication: Contacting Utility Owners using Current Process

Designers shared that they experience delays in receiving utility information from operators through the utility contact look up list provided by the one-call centers. Designers said that one of the reasons for the delay is that sometimes they cannot get a call back from the operator or it takes several attempts before they reach an operator. Representatives of the one-call centers agreed that this occurs and explained that many operators have not updated their contact information. [9]

No Standardized Form for Underground Utility Requests for Information

Lack of standardization creates mutual communication issues. There are no statutory or standardized requirements for what type of underground utility information operators should provide to designers when they request underground utility location information. Different operators provide different types of underground utility location information. This inconsistency makes gathering underground utility location information time consuming and can cause project delays for designers who repeat requests for information to gather the type of information they are looking for.

[8] Designer Architect Defined, Business and Professions Code §§ 5500-5500.1

[9] This problem persists despite state regulations requiring operators to maintain updated contact information with the one-call center.19 CCR § 4003.

Similarly, there is no statutory requirement or standard for what type of information operators should receive from designers to process requests for underground utility information. An operator shared this can cause delays for operators if designer requests lack the information operators need.

Maps and Locating Underground Utilities with Precision

Designers shared that they rarely receive utility maps and that even when they do, the utility maps are not precise or do not always contain the information they need. A designer explained that maps are sometimes too general, causing them to seek and gather additional information from different sources to create a precise design plan. Designer discussion also noted that they discover the imprecision of underground utility maps only after they pothole to determine the exact location of a facility.

Other designer discussion stated as-built plans can contain more precise information for designers, but discussion shared that as-builts can be difficult to obtain. As-builts are a revised set of drawings prepared by the excavator that show the original design drawings plus the revisions to reflect any changes made during construction, and that show the exact dimensions and locations of the construction.[10]

Additionally, designers are sometimes charged fees for the utility information they request. The Board did not hear from operators on why they charge fees to designers for utility information requests. We also do not know if fees for underground utility information discourages designers from requesting utility information.

Challenges for Operators in the Current 811 Ticket Process

Discussion of challenges for designers centered around operational issues:

Operators Records

Operator discussion noted challenges such as missing underground utility records. An operator explained that underground utility records are sometimes not transferred to a new company after mergers or changes in a company. Other operator discussion reported that they do not provide utility depth information because grading can cause changes of the depth of a utility but did not share any data relating to this.

Resources

While an operator shared having limited staffing resources as a challenge to process design requests, another operator working for a city shared how Geographic Information System (GIS) utility information is readily available on their website.

Starting January 1, 2023, all new subsurface installations are required to be mapped using a

[10] Law Insider, As-Builts Definition

geographic information system and maintained as permanent records of the operator, with exceptions to gas and oil lines in certain locations. [11] What we do not know are the ways that this data could be used and how it would be made available.

Other

During the discussion, feedback from a participant reported that some utility information is not readily accessible due to national security risk of utility infrastructure being targeted by terrorists.

An operator discussed that a planning ticket might help workload issues if a design request for utility information might provide more than two-days to fulfill the request.

Survey Response

Surveys contained similar questions to the Planning Ticket Workshop discussion questions and were made available at the same time as the workshop date. When asked what challenges are experienced currently without a planning ticket, respondent answered,

> *"The maps that are acquired from different utility companies only show the general location on a given street. It could be aerial or underground and only shows if they have utilities there or not. PG&E gas lines are based on property lines or easements that are not visible on a given road or area."*

The respondent's overall answers to the survey indicated different types of construction projects require operators to communicate utility information throughout the planning and design process and standardizing the communication may alleviate some of the challenges in the locate and mark process.

RECOMMENDATION

Further outreach is needed because we do not have enough information to inform work in developing a planning ticket. Staff recommends the Board and staff conduct outreach to encourage further stakeholder input.

ATTACHMENTS

A. Planning Ticket Workshop Discussion Questions

[11] Gov't Code § 4216.3 (a)(5)