City of Del Mar
Agenda Report

TO: Honorable Mayor and City Councilmembers

FROM: Martin Boyd, Principal Engineer
Joe Bride, Public Works Director
Via Ashley Jones, City Manager

DATE: January 6, 2025

SUBJECT: Undergrounding Program San Diego Gas & Electric Roadmap

REQUESTED ACTION/RECOMMENDATION:
Staff recommends the City Council receive a presentation from City staff and San Diego Gas & Electric (SDG&E) regarding their Project Plan Schedule Template/Roadmap (Attachment A) for the City's Undergrounding Program (UP).

BACKGROUND:
The City of Del Mar is moving forward with the citywide UP, which will remove utility poles and replace overhead cables for electricity and telecommunications with underground lines. A map of the planned citywide Utility Undergrounding Districts (UUDs) is included with this report as Attachment B.

To date, the City completed a small pilot project known as Tewa Court/10th Street in February 2023; started construction of Utility Undergrounding District (UUD) 1A with an expected completion date of August 2025; is finalizing design of UUD X1A with construction expected to begin in spring 2025 pending availability of financing; formed UUD 1B with 60% design nearing completion; and recently completed formation of UUD 2 with design on hold pending approval of a UP funding strategy.

Over the last year, staff has been collaborating with SDG&E to identify lessons learned and develop a roadmap to help deliver City undergrounding projects in a more efficient and timely manner. The goals of the roadmap are to identify the key project milestones and timelines for both SDG&E and the City, and to incorporate insights gained from the completed and active undergrounding districts to improve the project delivery of future districts. This agenda report summarizes the results of the development of the roadmap and lessons learned and focuses on the design process. City staff and SDG&E will revisit the lessons learned and make any necessary modifications upon the completion of construction for UUD 1A.

City Council Action:

NO ACTION TAKEN

DISCUSSION/ANALYSIS:

A. SDG&E Roadmap

The SDG&E Roadmap is included as Attachment A. This Roadmap outlines the primary sequential steps and estimated durations in the pre-construction process with SDG&E, which are broken down into the following stages: Stage 1 - Project Initiation; Stage 2 - Planning; Stage 3 – Design; and Stage 4 - Pre-Constriction.

Stage 1 - Project Initiation

Project Initiation identifies all the items SDG&E requires before they can begin the design process, which marks the official start of SDG&E's timeline. For the City, this includes completing the district pre-formation process needed to adopt a resolution that forms the district. Once district formation is complete, the City will develop a civil survey background, which visually captures the existing features of the project area, including topography, road edges, curbs and gutters, sidewalks, walls, utility boxes, underground utilities (water, wastewater, storm drains, and dry utilities), poles, trees, property lines, and more. These initial steps are expected to take approximately six months.

At the conclusion of this stage, the City will deliver to SDG&E the project resolution forming the district, boundary map, CAD files with civil survey background/topographic survey, streetlight plans (if applicable), confirmation of SDG&E vs. City trenching and conduit installation, and additional location information as needed.

Stage 2 - Planning

The Planning stage, also known as SDG&E's Preliminary Design Phase, is estimated to take 24 to 26 months. This stage includes the development of service worksheets and orders, base mapping, and 30% and 60% designs.

On SDG&E's end this work involves generating service worksheets to identify properties requiring the undergrounding of laterals and developing service orders for private property owners who will need to install services. Service orders are created after all easements and permit-to-enter forms are signed. Base mapping consists of survey control, boundary, topographic, and existing information for the project area as defined in the project scope of work. The 30% and 60% design activities deliver SDG&E's preliminary and final design sketches, which are the plan views for the proposed improvements. SDG&E has four different designs:

1. *Trench & Conduit*: Design for installation of project trenching, conduit, substructures, pads, and trench repair.
2. *Cable Pole & Overhead Re-Arrangement*: Design for installation of new cable poles, anchors and/or overhead guying, as well as some miscellaneous installation and removal of material for overhead re-arrangement in preparation for the underground conversion to be energized.

3. *Cable & Connections*: Design for installation of pad-mount switches, fuse structures, transformers, primary and secondary connectors and cable, service cable for intercepts of existing service cable poles, and removal of any unneeded underground pad-mount equipment, cable, or connectors.

4. *Overhead Remove from Service*: Design for removal of primary and secondary wires, poles, transformers, and other overhead material and equipment within the conversion boundary, excluding specific exempt equipment (e.g., SCADA poles and stub/anchor poles).

After 30% design, the City will provide an initial conflict review, begin the environmental review of the project, and start preliminary easement coordination. After 60% design, there is a required step for the City to conduct a formal review before design proceeds. Additionally, extensive homeowner outreach will occur after the 60% trench and conduit design to gather feedback and include it in the City's review. The City will distribute preliminary lateral and easement exhibits for homeowners to reference along with permit-to-enter forms for signature. The goal is for the City to provide a comprehensive review at this stage of the project and provide SDG&E all necessary comments/changes because the 60% design represents their final sketch. Providing comments after this point in the project schedule will result in delays, additional costs, and necessitate revisiting the 60% design.

Stage 3 - Design

The Design stage, also referred to as the Final Design Phase, is estimated to take approximately five to seven months and is focused on finalizing the design details. The work includes environmental clearance and permitting, acquisition of easements, 90% design, cost estimates, and contract and invoice. The City will obtain the necessary California Environmental Quality Act (CEQA) approval prior to SDG&E proceeding with the 90% design. Other required permits will also be obtained by the City at this time. SDG&E will prepare and send easements for signature, and the City will obtain signed permit-to-enter forms. Any delay in obtaining these documents from the property owners will delay the project, as the City cannot move forward with bidding until all documents are signed. The 90% design involves finalizing quantities based on the final sketch from 60% design. SDG&E will provide a cost estimate upon completion of the 90% design and once all easements are secured, but prior to the bidding process. During this stage, the City will also coordinate with telecommunication companies and the City civil engineering design team to prepare and finalize their respective designs.

Stage 4 - Pre-Construction

The Pre-Construction stage, also known as SDG&E's Bidding Phase, is estimated to take three to five months, and is where SDG&E finalizes all construction documents and issues them for bidding (similar to City bidding process). Once the bidding process is complete, the City will receive the final contract and preliminary invoice from SDG&E. After signing the contract, SDG&E will issue a Notice to Proceed to begin construction.

B. Lessons Learned

The following section outlines key lessons learned during the design process with SDG&E that provide insights to guide future efforts and improve overall processes associated with the citywide UP.

1. The Roadmap identifies a more accurate timeline of 29-33 months for SDG&E to complete the planning and design phases, which is aligns with SDG&E's completion of this work on UUD's Tewa Court/10th Street, 1A, and X1A. The City can now plan for this timeline by starting future projects earlier to achieve a desired construction date.

2. The Roadmap clearly identifies items required for the City to complete prior to SDG&E proceeding with the design as part of Stage 1 (Project Initiation), including the civil survey background, which was not previously identified as a requirement for SDG&E to start the design work.

3. SDG&E will follow a standard base mapping process and the City will provide civil survey background for inclusion with the base map (S1-1100 and S1-1150). There have been several back-and-forth submittals during the 60% SDG&E design review stage for UUD 1A and X1A based on conflicting locations of City wet utilities. This process improvement will assist with reducing City review and SDG&E revisions at the 60% SDG&E design stage.

4. The Roadmap includes a designated step (procedure) (S2-1261) for a comprehensive City review. The City will also conduct extensive homeowner outreach after 60% trench & conduit design (S2-1340) to gather feedback and provide a complete review to SDG&E. There has also been a lot of back-and-forth between the City and SDG&E during the 60% SDG&E design review stage for UUDs 1A and X1A based on homeowner coordination. This process improvement will assist with reducing review at the 60% SDG&E design stage and changes at the 90% design stage by coordinating significant homeowner concerns during these steps.

5. The Roadmap clarifies the easement steps (S3-1430 and S3-1470) that occur after the completion of the 60% design and City concurrence. SDG&E will initiate discussions with their Land Team earlier in the process. UUD 1A experienced delays because of the easement acquisition process, which was not clearly defined. Defining the easement steps to occur during this part of the process will assist with reducing the timeline to initiate the SDG&E bidding process and assigning of an SDG&E trench inspector.

6. SDG&E will provide the 30% design so the City can initiate the environmental review process and identify required easements to start engaging property owners. The 30% design is not typically provided and was not provided previously.

7. The Roadmap identifies the four different designs required and prepared by SDG&E, including Trench & Conduit; Cable & Connections; Cable Pole; and Service. SDG&E now identifies these designs as sequential, which the City did not previously understand to be the process. SDG&E will provide the individual 60% design for each as they are completed for City review, helping to expedite the overall design process, rather than providing them all at once. The City's design efforts are primarily focused on the Trench & Conduit design, which will be provided first.

8. SDG&E will now separate the designs for Trench & Conduit from those for Cable & Connections, providing the City with greater flexibility when completing work related to the Trench & Conduit.

Next Steps
The City and SDG&E will continue to implement the Roadmap with the goal of delivering the undergrounding program in an efficient and timely manner. Lessons learned will continue to be documented throughout the undergrounding process and refinements to the Roadmap will be made as needed.

FISCAL IMPACT:
There is no fiscal impact or action to be taken by the City Council related to this agenda item.

ENVIRONMENTAL IMPACT:
The proposed City Council action does not constitute a "project" under the definition set forth in California Environmental Quality Act (CEQA) Guidelines Section 15378 because it will not have a potential to result in a direct or indirect physical change in the environment and is, therefore, not subject to CEQA. No further action under CEQA is required.

NEXUS TO CITY COUNCIL GOALS AND PRIORITIES:
Utility Undergrounding is listed as a Tier 1 City Council priority for FY 2024-2025.

ATTACHMENTS:
Attachment A – SDG&E Project Plan Schedule Template (Roadmap)
Attachment B – Citywide Undergrounding Program Map

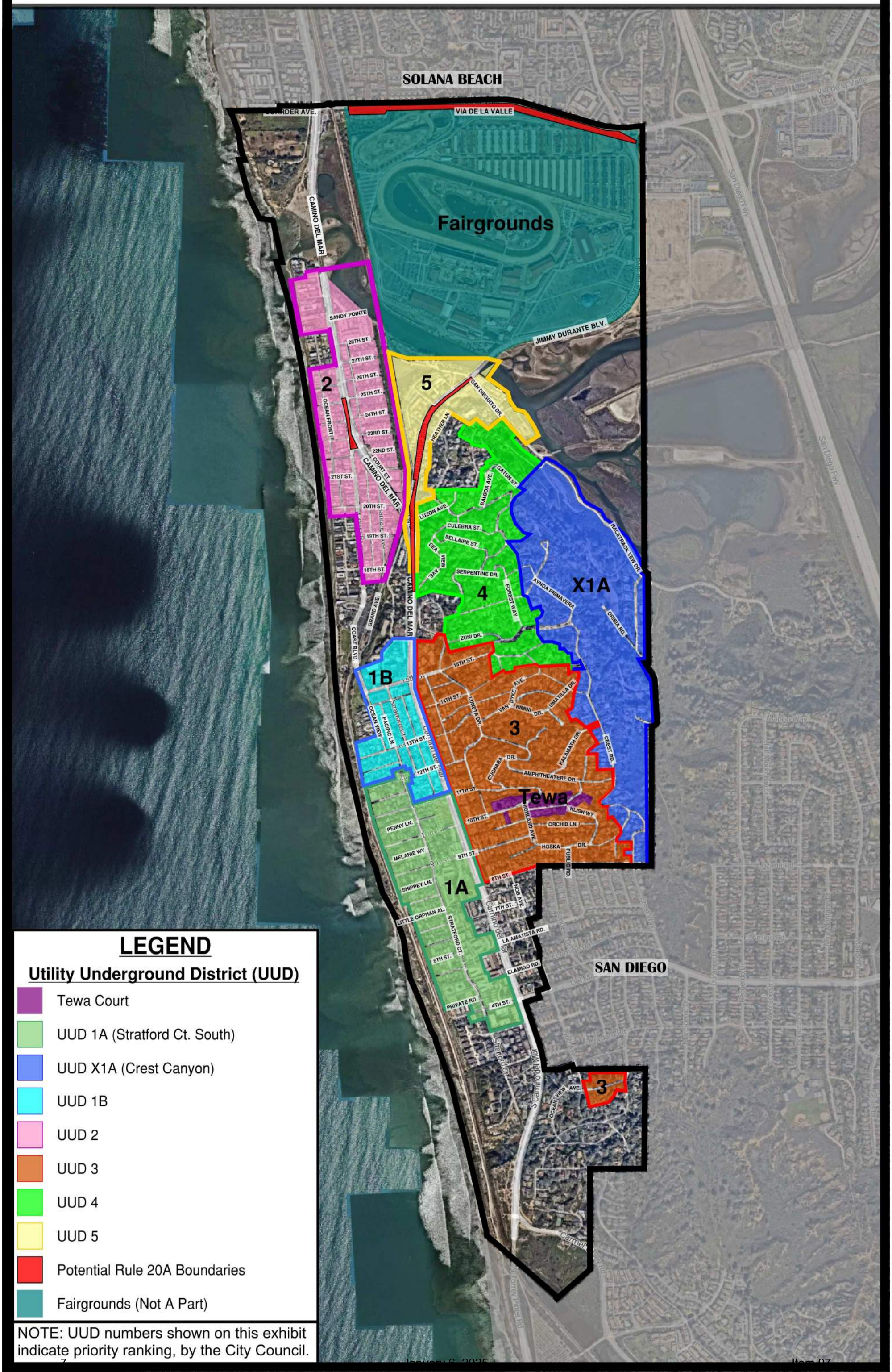
#	Activity ID	Activity Name	Duration
1	**Rule 20B - Project Plan Schedule Template**		
2	**Stage 1 (Project Initiation)**		
3	S1-1090	City to Provide Project Resolution	0w
4	S1-1100	City to Provide Boundary Map	0w
5	S1-1150	City to Provide CAD Files with Topo	0w
6	S1-1160	City to Provide Streetlight Plans	0w
7	S1-1170	City to Confirm SDGE vs. City Trench	0w
8	S1-1180	City to Provide Location Information for Other Utilities (Communication Information Providers, Water, Sewer, etc.)	0w
9	**Stage 2 (Planning) Estimated Duration 24-26 Months**		
10	**Services**		
11	S2-1080	Generate Services Worksheet	8w
12	S2-1110	Write Service Orders	13w
13	**Base Mapping**		
14	S2-1480	Basemap Prepare 100%	6w
15	**Trench & Conduit Design**		
16	S2-1210	30% Trench & Conduit Layout Concept Drawing	4w
17	S2-1340	60% Prepare Trench & Conduit Design Layout	16w
18	**Cable & Connections Design**		
19	S2-1490	30% Prepare Cable & Connections Design Layout + One Line	4w
20	S2-1410	60% Prepare Cable & Connections Design Layout + One Line	6w
21	**Cable Pole Design**		
22	S2-1220	30% Cable Pole Layout Concept Drawing	3w
23	S2-1310	60% Prepare Cable Pole Design Layout	6w
24	**Remove From Service Design**		
25	S2-1230	30% Remove From Service Layout Concept Drawing	3w
26	S2-1260	60% Prepare Remove From Service Design Layout	6w
27	S2-1261	City Review and Concur	9w
28	S2-1262	Implement changes and Finalize Sketch	6w
29	**Stage 3 (Design) Estimated Duration 5-7 Months**		
30	**Environmental**		
31	S3-1930	City Prepares and Submit CEQA	3w
32	S3-1950	CEQA Approval	9w
33	S3-1920	SDGE Environmental Release	7w
34	**Easements (#)**		
35	S3-1430	Prepare and Send Easements	9w
36	S3-1470	Easements Signed	6w
37	**Joint Trench Offer's**		
38	S3-1940	City and CIPs Execute Joint Trench Offers	12w
39	**Permits**		
40	S3-1810	City to Obtain Customer Permit to Enter (#)	18w
41	S3-1910	Permit Under City Review	12w
42	**Trench & Conduit Design**		
43	SUM-1180	90% Design Trench & Conduit - Summary	15w
44	**Cable & Connections Design**		
45	SUM-1220	90% Design Cable & Connections - Summary	13w
46	**Cable Pole Design**		
47	SUM-1190	90% Design Cable Pole - Summary	13w
48	**Remove From Service Design**		
49	SUM-1090	90% Design Remove From Service - Summary	16w
50	**Cost Estimates**		
51	S3-1310	Prepare Cost Estimate	2w
52	S3-1290	Cost Estimate to City for Review	2w
53	**Cost & Contract**		
54	S3-1670	Cost & Contract SDGE Preparation and Approval	6w
55	S3-1645	Agreement and Payment	13w
56	**Stage 4 (Pre-Construction) Estimated Duration 3-5 Months**		
57	**Construction Award**		
58	S4-1020	Pre-Digitizing (All Packages)	6w
59	S4-1040	Issue for Construction (IFC) (All Packages)	10w
60	S4-1090	Notice to Proceed (NTP) (All Packages)	3w

SDG&E IS PROVIDING THESE ESTIMATED SCHEDULE DURATIONS FOR REFERENCE PURPOSES ONLY AND MAKES NO REPRESENTATIONS, WARRANTIES OR PROMISES REGARDING THE ACCURACY, TIMELINESS, QUALITY OR COMPLETENESS. SCHEDULES ARE BASED ON KNOWN, CURRENT INFORMATION AND ACTUAL CIRCUMSTANCES. ACTUAL RESULTS MAY CHANGE AS THE PROJECT OR CIRCUMSTANCES CHANGE AND RESULTS WILL BE BASED ON ACTUAL CIRCUMSTANCES, NOT ESTIMATED SCHEDULES. SAN DIEGO GAS & ELECTRIC COMPANY WILL NOT BE LIABLE FOR ANY DAMAGES, CAUSES OF ACTION OR LOSSES ARISING OR CLAIMED TO ARISE OUT OF THE USE OF THESE ESTIMATES.

05/06/2021

Citywide Utility Undergrounding Map

ATTACHMENT B



LEGEND

Utility Underground District (UUD)

- Tewa Court
- UUD 1A (Stratford Ct. South)
- UUD X1A (Crest Canyon)
- UUD 1B
- UUD 2
- UUD 3
- UUD 4
- UUD 5
- Potential Rule 20A Boundaries
- Fairgrounds (Not A Part)

NOTE: UUD numbers shown on this exhibit indicate priority ranking, by the City Council.

Item 7: Undergrounding Program SDG&E Roadmap

City Council

January 6, 2025

CITY OF DEL MAR™

SDG&E Roadmap

SDG&E Roadmap

- City staff collaborating with SDG&E to identify lessons learned and develop a roadmap
- Goal of outlining the key milestones and timelines
- Focus on design process, but revisit upon completion of construction for UUD 1A

Stage 1 (Project Initiation)

- Identifies all necessary items SDG&E requires before beginning the design process
- City’s district pre-formation process and adopting a resolution to form the district
- City’s civil survey background to capture existing project area features.
- These initial steps are expected to take approximately 6 months.
- The City will provide SDG&E with the project resolution, boundary map, CAD files with civil/topographic survey, streetlight plans (if applicable), trenching & conduit information, and additional location details.


1
Project Initiation
6 months
2
Planning
24 to 26 months
3
Design
5 to 7 months
4
Pre-Construction
3 to 5 months
5
Construction
Project Specific

Stage 2 (Planning)

- “SDG&E’s Preliminary Design Phase” estimated to take 24 to 26 months
- Service worksheets and orders for private properties requiring laterals
- Service orders created after easements and permit-to-enter forms are signed
- Base mapping consists of survey control, boundary, topographic and existing information for the project area
- The 30% and 60% design activities deliver SDG&E’s preliminary and final design sketches
- Sketches are the plan views for the proposed improvements

Stage 2 (Planning)

1. **Trench & Conduit:** Installation of project trenching, conduit, substructures, pads, and trench repair.
2. **Cable Pole & Overhead Re-Arrangement:** Installation of new cable poles, anchors and/or overhead guying, as well as some miscellaneous installation and removal of material for overhead re-arrangement in preparation for the underground conversion to be energized.
3. **Cable & Connections:** Installation of pad-mount switches, fuse structures, transformers, primary and secondary connectors and cable, service cable for intercepts of existing service cable poles, and removal of any unneeded underground pad-mount equipment, cable, or connectors.
4. **Overhead Remove from Service:** Removal of primary and secondary wires, poles, transformers, and other overhead material and equipment within the conversion boundary, excluding specific exempt equipment (e.g. SCADA poles and stub/anchor poles).

Stage 2 (Planning)

- After 30% design, the City will provide an initial conflict review, begin environmental review, and start preliminary easement coordination
- After 60% design, the City will conduct a formal review before design proceeds
- Extensive homeowner outreach will be conducted after the 60% trench & conduit design to gather feedback and include it in the review.
- The goal is for the City to provide a comprehensive review, as the 60% design represents the final sketch.
- Providing comments after this point will result in schedule delays, additional costs, and necessitate revisiting the 60% design phase.


1
Project Initiation
6 months
2
Planning
24 to 26 months
3
Design
5 to 7 months
4
Pre-Construction
3 to 5 months
5
Construction
Project Specific

Stage 3 (Design)

- “Final Design Phase” estimated to take 5 to 7 months with focus on finalizing design details
- Obtain necessary CEQA approval before 90% and other required permits
- SDG&E will prepare easements for signature, and the City will obtain signed permit-to-enter forms. Delays in securing these documents will impact the project timeline.
- 90% design involves finalizing quantities based on the final sketch from 60% design.
- SDG&E will provide a cost estimate upon completion of the 90% design and once the easements are secured.
- Coordinate with telecommunication companies and the City civil engineering design team to prepare and finalize their respective designs.


1
Project Initiation
6 months
2
Planning
24 to 26 months
3
Design
5 to 7 months
4
Pre-Construction
3 to 5 months
5
Construction
Project Specific

Stage 4 (Pre-Construction)

- “Bidding Phase” estimated to take 3 to 5 months with focus on finalizing construction documents for bidding
- Once complete, the City will receive the final contract and preliminary invoice.
- After signing the contract, SDG&E will issue a Notice to Proceed to begin construction.

Lessons Learned

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1. The Roadmap identifies a more accurate timeline of 29-33 months for SDG&E to complete the planning and design phases, which aligns with SDG&E's completion of this work on UUD's Tewa Court/10th Street, 1A, and X1A. The City can now plan for this timeline by starting future projects earlier to achieve a desired construction date.

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Lessons Learned

4. The Roadmap includes a designated step (procedure) (S2-1261) for a comprehensive City review. The City will also conduct extensive homeowner outreach after 60% trench & conduit design (S2-1340) to gather feedback and provide a complete review to SDG&E. There has also been a lot of back-and-forth between the City and SDG&E during the 60% SDG&E design review stage for UUDs 1A and X1A based on homeowner coordination. This process improvement will assist with reducing review at the 60% SDG&E design stage and changes at the 90% design stage by coordinating significant homeowner concerns during these steps.

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Next Steps

- The City and SDG&E will continue to implement the Roadmap with the goal of delivering the undergrounding program in an efficient and timely manner.
- Lessons learned will continue to be documented throughout the undergrounding process and refinements to the Roadmap will be made as needed.

Milestone/Summary Schedule	Rule 20B - Project Plan Schedule Template	SDGE

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