



Agenda Item No. (5)

To: Rules, Policy and Industrial Relations Committee/Committee of the Board
Meeting of June 24, 2022

From: Kellee J. Hopper, Deputy General Manager, Administration and Development
Ewa Bauer-Furbush, District Engineer
Denis J. Mulligan, General Manager

Subject: **APPROVE ACTIONS RELATIVE TO ENGINEERING DEPARTMENT REORGANIZATION**

Recommendation

The Rules, Policy and Industrial Relation Committee recommends that the Board of Directors approve the following actions relative to the Engineering Department reorganization:

1. Amend the Table of Organization to establish seven Sections within the Department:
 - a. Bridge Design Section
 - b. Bus and Ferry Design Section
 - c. Bridge Construction Section
 - d. Bus and Ferry Construction Section
 - e. Inspection and Maintenance Support Section
 - f. Engineering Contracts Section
 - g. Engineering Document Controls Section
2. Establish three new job classifications for the positions that will lead the seven Sections:
 - a. Directing Civil Engineer, five positions, (to lead five Sections of the Bridge Design, Bus and Ferry Design, Bridge Construction, Bus and Ferry Construction and Inspection and Maintenance Support Sections), with an annual compensation range of \$161,787 to \$196,653, not including benefits, by reclassifying three existing Supervising Civil Engineer positions and adding two new Directing Civil Engineer positions;
 - b. Director of Engineering Contracts Section, one position, with an annual compensation range of \$121,888 to \$147,308, not including benefits, by reclassifying the existing Engineering Contracts Officer position;
 - c. Engineering Document Controls Manager with an annual compensation range of \$114,275 to \$138,091, not including benefits;
3. Expand the Engineering Department's professional development program to provide defined career paths for the Engineering Contract Assistant and Engineering Document Control Assistant positions by establishing the following two new job classifications:

- a. Senior Engineering Contracts Assistant, with an annual compensation range of \$89,190 to \$107,786, not including benefits;
 - b. Senior Engineering Document Control Assistant with an annual compensation range of \$82,930 to \$100,235, not including benefits;
4. Approve changes to the remaining Engineering Department's Engineer and Inspector position compensations to make it competitive with other employers, consistent with the position classifications and increased staff responsibilities, and reflective of the proposed Engineering Department Table of Organization (as outlined in the table beginning on page 7 of this report); and,
5. Increase the FY 2022/FY2023 Engineering Department's Budget by \$668,520 and Adjust Table of Organization accordingly. The changes recommended in this staff report be implemented the first day of the pay period in which the Board's approval falls.

This matter will be presented to the Board of Directors at its June 24, 2022, meeting for appropriate action.

Background

The Office of the District Engineer is responsible for developing and implementing capital improvement projects for the Golden Gate Bridge and all other Golden Gate Bridge, Highway and Transportation District (District) facilities as well as providing ongoing engineering support to the District's maintenance operations. The District Engineer, who leads the Engineering Department, is designated by the District's enabling legislation to direct the engineering and construction work for the District.

The Engineering Department soon will be undertaking management of the Golden Gate Suspension Bridge Seismic Retrofit Project construction, which is estimated at \$870 million. As approved by the Board, this construction contract will be procured by the Construction Manager/General Contractor procurement method and will consist of two phases. During the first or pre-construction phase, staff will be involved in the selection of the most qualified contractor organization, and in the management of the pre-construction services contract. Moreover, staff along with the contractor and the design consultant will conduct design review as well as estimation and negotiation with regard to the cost of construction. During the second or Project construction phase, staff will be involved in the management of the Project construction, including the monitoring of the construction contract and numerous other contracts for construction management support services at the Bridge and in fabrication facilities.

Concurrently with implementation of the Suspension Bridge Seismic Retrofit Project, Engineering will continue to manage the Golden Gate Bridge Physical Suicide Deterrent System construction until its 2025 completion, and will be working on the design and construction of the San Rafael Bus Transit Center Project and Ferry Terminal improvement projects. In addition, there are numerous other Bridge, Bus and Ferry facility capital improvement projects, such as rehabilitation and improvements to the Bridge, office buildings, parking lots, fueling facilities, maintenance

facilities, etc. Engineering Department staff will also continue to conduct Bridge inspections and provide support to the Bridge maintenance operations, including development of work access designs to accommodate maintenance operations at different locations along the Bridge.

The delivery of the District's much needed capital improvement and maintenance projects and the District's prudent use of available project funding depend on the experience and expertise of Engineering Department staff assigned to various facets of the project delivery. All of these projects will require significant staffing resources and a high degree of experience in and knowledge of all aspects of the project delivery process, such as: organizing and performing Bridge and other facility inspections and condition assessments; developing project scopes, schedules and cost estimates; performing project technical designs; obtaining project environmental clearances; obtaining project permits; developing engineering consulting services agreements and construction contract documents; managing consulting services including providing direction to consultants; performing construction contract management and administration, including assuring the quality of construction contractors' quality control and undertaking claim prevention and defense; providing engineering support to Bridge maintenance operations; processing payments to consultants and contractors; enforcing compliance with Small and Disadvantage Business Enterprise contract participation, prompt payment and prevailing wage contract provisions; and, organizing filing and managing the flow of project documents and internal and external project communications.

With the passage of the over trillion-dollar Bipartisan Infrastructure Bill 2021, the demand for experienced and knowledgeable project delivery personnel is expected to continue to increase. A report published by the Federal Highway Administration Office of Infrastructure in February 2021 on the Case Study on Managing Risk to Assets, stated that among the seven most common risks presented in state DOTs' Transportation Asset Management Plans (TAMP) was the loss of skilled staff because of retirements, low salaries and competitive markets. Caltrans' TAMP identified as a risk a loss of agency knowledge and knowledge gaps.

Current Engineering staff possesses extensive experience and expertise in all above-described aspects of project delivery and in federal, state and District's procurement rules in addition to in-depth knowledge of District facilities gained during their employment with the District. Considering how critical knowledgeable and experienced staff is to accomplishing project delivery, it is of utmost importance that current Engineering staff have opportunities to employ their talents at higher levels of responsibility. The increased responsibility would include training of interns and new hires to enable their professional development and to assure continuity of the institutional knowledge amid staff retirements. In addition, there will be increased demands placed on the existing staff to manage numerous consultants to augment Engineering staff during the implementation of the large-scale and complex Suspension Bridge Seismic Retrofit Project and other capital improvement and maintenance projects.

Proposed Changes to the Engineering Department Table of Organization

It is proposed that the Engineering Department be reorganized as presented below to provide the framework needed to implement the District's essential facility capital improvement and maintenance programs during the next decade, especially in light of the federal funding that may

become available under the Bipartisan Infrastructure Bill 2021 to support financing of these projects.

To accomplish these extensive project delivery programs in the most efficient way, it is proposed that the following seven project delivery Sections, each focusing on a specific portion of the capital improvement and maintenance support program delivery, be created within the Engineering Department (Attachment A to this report shows the proposed Organization Chart):

1. The Bridge Design Section will be responsible for implementing the design phases of bridge facilities' capital improvement projects and will be led by the Directing Civil Engineer.
2. The Bus and Ferry Design Section will be responsible for implementing design phases of Bus, Ferry and Administration facilities' capital improvement projects, and will be led by the Directing Civil Engineer.
3. The Bridge Construction Section will be responsible for implementing construction phases of bridge capital improvement projects and will be led by the Directing Civil Engineer.
4. The Bus and Ferry Construction Section will be responsible for implementing construction phases of Bus, Ferry and Administration capital improvement projects, and will be led by the Directing Civil Engineer.
5. The Inspection and Maintenance Support Section will be responsible for implementing the facility inspection program, including bridge inspections, and for the engineering support of the Bridge Section maintenance operations, and will be led by the Directing Civil Engineer.
6. The Engineering Contracts Section will be responsible for developing engineering consulting services agreements and construction contracts in collaboration with the project managers; advertising requests for proposals and construction bids; administering awarded contracts, including processing payments to consultants and contractors; enforcing compliance with Small and Disadvantage Business Enterprise participation, prompt payment and prevailing wage contract provisions; and will be led by Director of Engineering Contracts.
7. The Engineering Document Controls Section will be responsible for managing project document files and project document distribution, including implementing a document management software to streamline document sharing internally and externally; assisting project managers in organizing project communications, including establishing internal and external lines of communication; administering the Engineering Department operating budget, including monitoring staff cost charges to projects, and, will be led by the Engineering Document Controls Manager.

The District Engineer, with the assistance of the Deputy District Engineer, will provide direction to the Directing Civil Engineers, Director of Engineering Contracts and Engineering Document Controls Manager regarding project priorities and technical standards, contract management and administration requirements, implementation of the employee development program, collaboration among the Engineering Department Sections to assure the most effective and efficient use of staff's experience and expertise, and the collaboration with other District's departments and outside agencies

Proposed New Classifications Within the Engineering Department

The proposed new Engineering Department organization requires establishment of three new position classifications:

1. Directing Civil Engineer

The Directing Civil Engineer, with an annual compensation range of \$161,787 to \$196,653, not including benefits, will be responsible for organizing operations of their specific Engineering Department Sections, supervising the assigned staff, conducting staff performance evaluations and handling of disciplinary matters; and will report to the Deputy District Engineer. Five Directing Civil Engineer positions are proposed and will be created by reclassifying three existing Supervising Civil Engineer positions and adding two new Directing Civil Engineer positions.

2. Director of Engineering Contracts

The Director of Engineering Contracts, with an annual compensation range of \$121,888 to \$147,308, not including benefits, will be responsible for organizing operations of the Engineering Contracts Section, supervising the assigned staff, conducting their performance evaluations and handling disciplinary matters, and will report to the Deputy District Engineer. One Director of Engineering Contracts position would be created by reclassifying the existing Engineering Contracts Officer position.

3. Engineering Document Controls Manager

The Engineering Document Controls Manager, with an annual compensation range \$114,275 to \$138,091, not including benefits, will be responsible for organizing operations of the Engineering Document Controls Section, supervising the assigned staff, conducting their performance evaluations and handling disciplinary matters; and, will report to the Deputy District Engineer.

Proposed Expansion of the Engineering Department Professional Development Program

In September 2019, the Board of Directors approved the Civil Engineer, Engineering Inspector and Steel Inspector professional development programs to improve recruitment, retention and succession planning for the Engineering Department and to afford current and future employees the benefit of defined career paths and advancement opportunities. As presented above, both engineering contract and document control staff play key roles in the engineering project implementation, and it is anticipated that the delivery of capital improvement and maintenance programs will substantially increase the number of engineering contracts and the volume of engineering documents.

Considering the expected surge in need for engineering contracting and document control aspects of project delivery, it is necessary to assure both the retention of current engineering contracts and document control staff and the improvement of the recruitment for additional positions that will be needed to deliver the capital improvement projects. Hence, it is proposed that the professional development program be expanded to provide defined career paths and advancement opportunities

for the Engineering Contracts Assistant and the Engineering Document Control Assistant positions by establishing two new job classifications:

1. Senior Engineering Contracts Assistant classification as an in-place promotional opportunity for Engineering Contracts Assistants with an annual salary range of \$89,190 to \$107,786, not including benefits.
2. Senior Engineering Document Control Assistant classification as an in-place promotional opportunity for Engineering Document Control Assistants with an annual salary range of \$82,930 to \$100,235, not including benefits.

The Assistant positions will provide an employment opportunities for job candidates at an entry level. Under the supervision of the Director of Engineering Contracts or the Engineering Document Controls Manager, as applicable, and with the support of the Senior Assistants, employees in these positions will have access to the job training, guidance and feedback regarding assignments and performance evaluations. After meeting education and job related experience requirements of a corresponding Senior Assistant position and showing good performance, the Assistant level employees will be eligible for an in-place promotion to a Senior Assistant position.

The compensation for these new positions is based on the 5th step compensation of the Senior Associate position being 11% more than the 5th step compensation of the Associate position, which is consistent with past practice. Each compensation range consists of five steps differing by about 5%.

Proposed Increase of the Engineer and Inspector Position Compensation

For several years, the Engineering Department has experienced difficulty in filling vacant positions. There are currently eight (8) unfilled vacancies in the Engineering Department (20% of the authorized staff level - seven Engineer positions and one Inspector position). This is in addition to the fact that fully one-third of current Engineering staff is eligible for retirement in the next several years.

The ability to recruit for the vacant Engineer and Inspector positions has been severely hindered by the high cost of living in the Bay Area, and by higher salaries available at other public and private employers. District salary surveys have confirmed that the District must offer more competitive salaries for engineering and inspector positions to compete in this highly competitive labor market.

Because of the inability to fill these vacant positions with candidates possessing Senior Engineer level qualifications, it is expected that the vacant positions by candidates with lower levels of experience, e.g., Junior Engineer or Assistant Engineer or Associate levels, which will require an on-the-job training consistent with the professional development program approved by the Board in September 2019. Similarly and consistent with the Board approved professional development program for Associate Inspector positions, it is expected that the District might fill the Associate Inspector positions by offering full-time employment at the entry-level position of Inspector

Trainee 1 to recent graduates. It is anticipated that 3 to 4 years of training will be required to achieve a fully productive level of work experience.

It is proposed that the Engineering Department compensations for the Engineer and Inspector positions be established by increasing them by 6% as presented in the table below to make them competitive with other employers, consistent with the position classifications and increased staff responsibilities, and reflective of the proposed new Engineering Department Table of Organization:

POSITION TITLE	CURRENT COMPENSATION RANGE*		PROPOSED COMPENSATION RANGE*	
	FROM	TO	FROM	TO
Junior Civil Engineer			\$100,141	121,722
Assistant Civil Engineer			\$111,231	135,202
Associate Civil Engineer			\$123,027	149,540
Senior Civil Engineer	\$129,556	156,594	\$136,560	165,989
Senior Engineer (Environmental)	\$129,556	156,594	\$136,560	165,989
Senior Electrical Engineer	\$129,556	156,594	\$136,560	165,989
Senior Mechanical Engineer	\$129,556	156,594	\$136,560	165,989
Facilities Engineer	\$129,556	156,594	\$136,560	165,989
Directing Civil Engineer (currently Supervising Civil Engineer)	\$153,526	185,522	\$161,787	196,653
Deputy District Engineer	\$168,169	209,177	\$182,416	221,727
Associate Steel Inspector	\$92,876	112,245	\$97,886	118,980
Associate Engineering Inspector	\$92,876	112,245	\$97,886	118,980
Senior Steel Inspector	\$102,120	123,485	\$108,653	132,068

Each compensation range consists of five steps with a difference of approximately 5% between consecutive steps, to avoid compression issues. Because of Junior Civil through Associate Civil positions have not been utilized for almost a decade, the compensation ranges for these positions are based on an 11% difference to the higher classification, which is consistent with the past practice, (e.g., the 5th step of the Associate Civil Engineer compensation is 11% lower than the 5th step compensation of the Senior Civil Engineer).

Proposed Engineering Department Budgeted Positions for FY 2022/23:

ENGINEERING DEPARTMENT CLASSIFICATIONS AND CHANGES				
POSITION	FY22/23 BUDGET	PROPOSED ENG. BUDGET	DIFFERENCE	COMMENTS
Junior Civil Engineer (R)*	0	0	0	No Change - Classification for Professional Development Program
Assistant Civil Engineer (R)*	0	0	0	No Change - Classification for Professional Development Program

ENGINEERING DEPARTMENT CLASSIFICATIONS AND CHANGES				
POSITION	FY22/23 BUDGET	PROPOSED ENG. BUDGET	DIFFERENCE	COMMENTS
Associate Civil Engineer (R)*	0	0	0	No Change - Classification for Professional Development Program
Senior Civil Engineer (R)*	14	12	-2	Compensation Increase and Move Two Positions to Directing Civil Engineer
Senior Engineer, Environmental (R)	1	1	0	Compensation Increase
Senior Engineer, Electrical (R)	1	1	0	Compensation Increase
Senior Engineer, Mechanical (R)	1	1	0	Compensation Increase
Senior Engineer, Facilities (R)	1	1	0	Compensation Increase
Supervising Civil Engineer (R)	3	0	-3	Eliminate Classification and Move Incumbents to Directing Civil Engineer
Directing Civil Engineer (NR)	0	5	5	Add New Classification, Move Incumbents from Supervising Civil Engineer and Add Two Additional Budgeted Positions
Deputy District Engineer (NR)	1	1	0	Compensation Increase
Associate Steel Inspector (R)	3	3	0	Compensation Increase
Associate Engineering Inspector (R)	3	3	0	Compensation Increase
Senior Steel Inspector (R)	1	1	0	Compensation Increase
Engineering Design Technician (R)	1	0	-1	Move Current Incumbent to Senior Engineering Technicians as part of PDP
Senior Engineer, Design Technician (R)	1	1	0	Compensation Increase and Move Current Incumbent from Engineering Design Technician as part of PDP
Engineering Contracts Assistant (R)	3	0	-3	Moving Current Incumbent and Budgeted Position to Senior Engineering Contracts Assistant
Senior Engineering Contracts Assistant (R)	0	3	3	Add New Classification and Move Incumbents from Engineering Contracts Assistant
	1	0	-1	

ENGINEERING DEPARTMENT CLASSIFICATIONS AND CHANGES				
POSITION	FY22/23 BUDGET	PROPOSED ENG. BUDGET	DIFFERENCE	COMMENTS
Engineering Contracts Officer (NR)				Eliminate classification and Move Incumbent to Director of Engineering Contracts
Director of Engineering Contracts (NR)	0	1	1	Add Classification and Move Incumbent from Engineering Contracts Officer
Engineering Document Control Assistant (R)	3	0	-3	Eliminate Budgeted Positions and Move Incumbents to Senior Engineering Document Control Assistant
Senior Engineering Document Control Assistant (R)	0	3	3	Add New Classification and Move Incumbents from Engineering Document Control Assistant
Executive Assistant (NR)	1	1	0	No Change
Engineering Document Controls Manager (NR)	0	1	1	Add New Classification and Add One Budgeted Position
TOTAL	39	39	1	(R) – Represented Position (NR) – Non-represented Position

** The General Manager has authority to offer an employment at the Civil Engineer classification commensurate with the qualifications of a job candidate.*

While, at this time, staff is not recommending increasing the number of authorized Engineering Department staff positions, it is anticipated that additional engineer, inspector, contract administration and document control positions will be required to deliver the capital improvement and maintenance programs in the coming years. This will include bringing on board interns and entry level full-time staff in advance to provide sufficient time for training. If a need for additional full-time staff is identified, a recommendation for adding new positions in the Engineering Department will be brought for the Board’s consideration.

The proposed approach to staffing Engineering projects is to fill the long term staffing needs with the Engineering Department employees and to augment Engineering staff with consultants who would provide specific expertise for the project specific assignments.

Fiscal Impact

There are sufficient savings in the Engineering Department operating budget to cover the proposed compensation increases during last two weeks of the current Fiscal Year 2021/22.

If approved, the proposed changes would result in an annual increase in expenses for the FY 2022/2023 Adopted Budget for the Engineering Department of approximately \$668,520 consisting of \$496,537 in salaries and \$171,983 in payroll and fringe benefits. The Engineering Department traditionally is budgeted 50% in the District Division Operating Budget and 50% in Capital

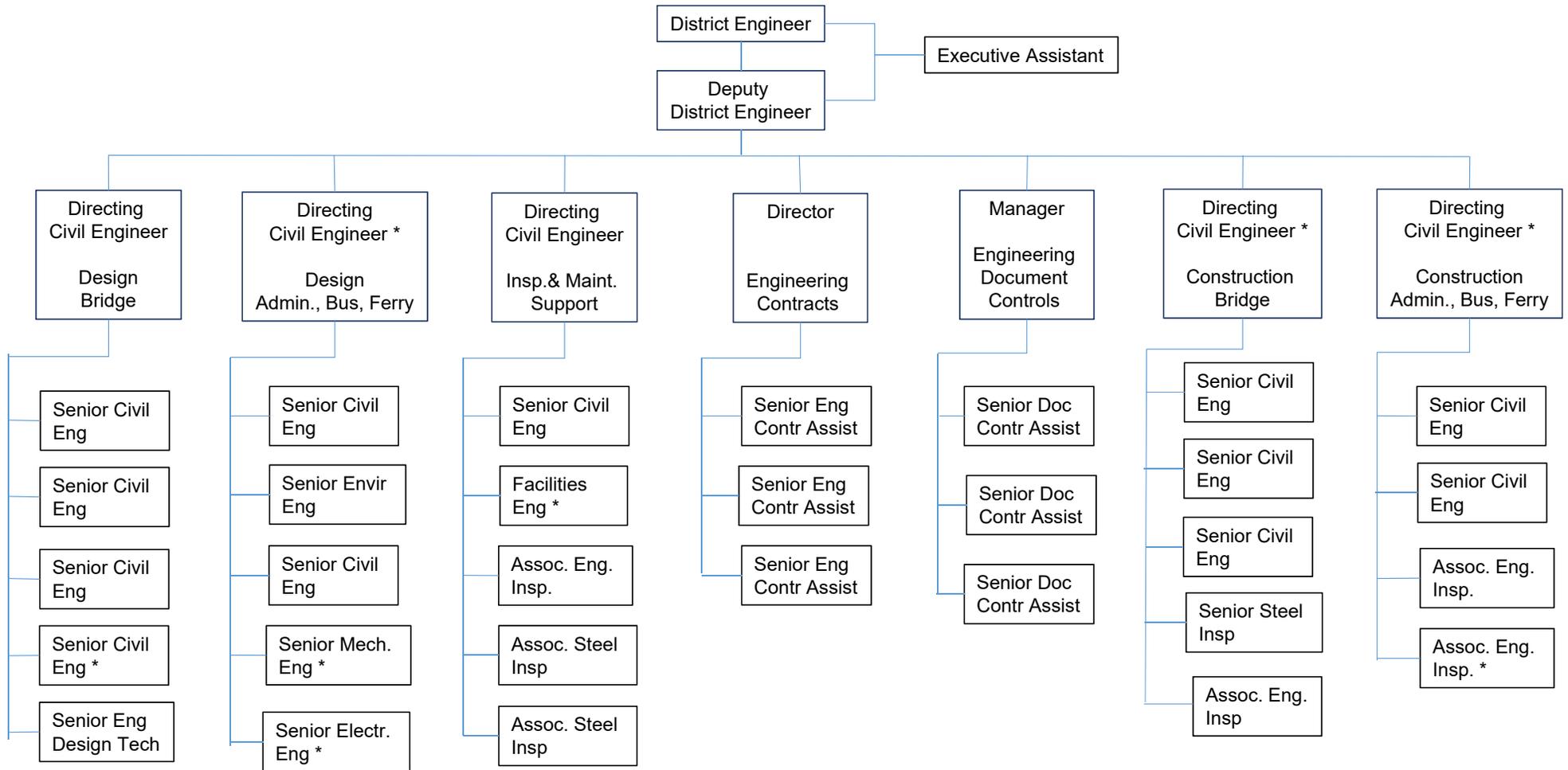
Projects because Engineering Department work hours are chargeable to the capital project budgets. Subsequent years will be budgeted through the annual budget process. If approved, the FY 2022/2023 Adopted Budget will also include the following changes to the Table of Organization.

The following table reflects the current Table of Organization and the Proposed Table of Organization. It also reflects the difference in salaries per position. If it is a new classification the total new salary is reflected.

POSITION	POSITION BUDGETED	POSITION PROPOSED	Difference	Current Step 5	Proposed Step 5	Difference per FTE Salary
Junior Civil Engineer	0	0	0	\$0	\$121,722	\$121,722
Assistant Civil Engineer	0	0	0	\$0	\$135,202	\$135,202
Associate Civil Engineer	0	0	0	\$0	\$149,540	\$149,540
Senior Civil Engineer	14	12	-2	\$156,594	\$165,989	\$9,395
Senior Engineer, Environmental	1	1	0	\$156,594	\$165,989	\$9,395
Senior Engineer, Electrical	1	1	0	\$156,594	\$165,989	\$9,395
Senior Engineer, Mechanical	1	1	0	\$156,594	\$165,989	\$9,395
Senior Engineer, Facilities	1	1	0	\$156,594	\$165,989	\$9,395
Supervising Civil Engineer	3	0	-3	\$185,515	Eliminate	N/A
Directing Civil Engineer	0	5	5	\$0	\$196,653	\$196,653
Deputy District Engineer	1	1	0	\$209,177	\$221,727	\$12,550
Associate Steel Inspector	3	3	0	\$112,245	\$118,980	\$6,735
Associate Engineering Inspector	3	3	0	\$112,245	\$118,980	\$6,735
Senior Steel Inspector	1	1	0	\$123,485	\$132,068	\$8,583
Engineering Design Technician	1	0	-1	\$96,512	\$96,512	\$0
Senior Engineer Design Technician	1	1	0	\$106,122	\$106,122	\$0
Engineering Contracts Assistant	3	0	-3	\$96,512	\$96,512	\$0
Senior Engineering Contracts Assistant	0	3	3		\$107,786	\$107,786
Engineering Contracts Officer	1	0	-1	\$138,091	Eliminate	N/A
Director of Engineering Contracts	0	1	1		\$147,308	\$147,308
Engineering Document Control Assistant	3	0	-3	\$89,773	\$89,773	\$0
Senior Engineering Document Control Assistant	0	3	3		\$100,235	\$100,235
Executive Assistant	1	1	0	\$127,962	\$127,962	\$0
Engineering Document Controls Manager	0	1	1		\$138,091	\$138,091
TOTAL	39	39	0			

Attachment A: Proposed Engineering Department Organization Chart

ATTACHMENT A - PROPOSED ENGINEERING DEPARTMENT ORGANIZATION CHART



* Vacant position