

Last Chance Grade On-Site Construction Manager / General Contractor (CMGC) Industry Day August 20, 2024

I. Introduction

On August 20, 2024, Caltrans hosted an On-Site Construction Manager / General Contractor (CMGC) Industry Day in Crescent City, California. The meeting purpose was to provide interested contractors with more information on the Last Chance Grade (LCG) Project and an opportunity to visit the project site. The LCG Project proposes a long-term solution to the geologic and roadway instability along a segment of U.S. Highway 101 in Del Norte County by constructing a tunnel bypass. CMGC is an innovative delivery method which allows Caltrans to engage a construction manager (CM) to provide input during the design process. Utilization of CMGC on the LCG Project will allow for continual improvements to the design and constructability of the selected alternative. The selected alternative consists of a nearly mile-long tunnel which avoids the slowly moving landslides at LCG and minimizes environmental impacts by passing deep underground.

The Industry Day event was advertised via the project website, lastchancegrade.com. Contractors were asked to provide RSVPs in advance, including the three most important questions that they wished to have answered at Industry Day. The event consisted of a meeting held at the Sam Lopez Community Room at Elk Valley Rancheria in Crescent City, and an opportunity for contractors to take a self-guided tour of the project site. The meeting included a presentation on the project and vision for the CMGC contract, followed by a question-and-answer session.

II. Meeting Format and Attendance

A. Attendance

The meeting was attended by 37 design and construction contractors and other interested parties. For a list of companies/organizations in attendance, see Appendix A: Meeting Attendance

B. Meeting Materials

Materials provided to attendees included an agenda, an LCG Project Map giving directions for the self-guided tour, presentation slides, and an event feedback form. All meeting materials are reproduced in Appendix B, Meeting Materials.

In addition to the question already submitted via RSVP, which were addressed during the presentation, attendees were provided with three different methods for submitting new questions during the meeting: shorter Q&A breaks taken during the presentation; writing questions on post-its to be addressed during the Q&A session which followed the presentation; and the event Feedback Form.

C. Agenda

The agenda for the meeting consisted of the following activities:

- Welcome, Goals for the Meeting, and Introductions. Jaime Matteoli, Caltrans District 1 Corridor Manager, welcomed attendees and thanked them for their attendance, expressing his hope that not only would they gain insights into the complexities and requirements of the project, but also the unique environment in which it is located. He explained that there were three goals for the meeting:

 to transparently provide interested parties with specifics about the project;
 to help attendees understand what Caltrans is looking for in a partner; and
 to talk about how Caltrans implements the CMGC process. He then asked everyone in the room to briefly introduce themselves, stating their name, company or organization represented, their position in that organization, and the nature of their interest in the project.
- **Presentation: Answers to RSVP Questions and Vision for the CM Partnership.** The presentation included the following information:
 - Project Background and Timeline
 - Selected Alternative
 - Project Team
 - Project Challenges
 - Funding
 - Why CMGC
 - CMGC Benefits and Caltrans Process
 - Key Procurement Dates
- **Question and Answer.** After the presentation, following a 15-minute break, the project team answered questions submitted in writing by the attendees.
- Next Steps, Closing Remarks and Feedback Form.
 - At the conclusion of the Q&A period, Mr. Matteoli explained that the presentation slides and other materials, including the list of those attending, would be made available on the project website. He encouraged attendees to watch for the release of the CMGC Request for Qualifications (RFQ) on the Cal eProcure website at https://caleprocure.ca.gov/pages/index.aspx, most likely in late October of this year. He noted that if any change was made to the procurement schedule detailed during the presentation, Caltrans would advertise that change as soon as possible.
 - Lianna Winkler-Prins, Caltrans District 1 Last Chance Grade Project Manager, briefly discussed the self-guided tour, explaining that the map identifies the sites of the various components of the project, and includes safety tips for navigating the narrow winding roads.
 - In closing, Mr. Matteoli thanked all again for coming, and urged them to fill out the feedback form, as well as sending any additional questions or identifying materials that it would be helpful to include in the RFQ, to Ms. Winkler-Prins at lastchancegrade@dot.ca.gov.

III. Presentation and Discussion

A. Presentation

Caltrans staff provided a presentation on their vision for the CMGC partnership.

Prior to the meeting, the project team reviewed all questions submitted in RSVPs, and included answers to those questions during the presentation whenever possible. Please note: the information summarized

here focuses on that which is additional to the information appearing on the presentation slides. The slides are included in Appendix B.

Jaime Matteoli presented the opening portion of the presentation, which included the following:

- Project Vicinity Map.
- Location of Landslides. Landslides are the major concern at Last Chance Grade. An aerial view of the project area was shown with boundaries of four large, deep-seated landslides in the project area. A large section to the south is mélange formation, in which the land moves a couple inches per year. Slides in the northernmost mile of LCG are in the Broken Formation, which present the most challenging battle against land movement. Trees to the north are old growth (also referred to as late successional in the Draft Environmental Document (DED)) redwoods within the Redwood National and State Park system which is a UNESCO World Heritage Site. The area is home to sensitive species and the area is ancestral territory of 5 tribal governments. The highway has been sinking and sliding westward since the alignment was placed here in 1937, which leads to high maintenance and repair costs. Coastal erosion has been increasing and is expected to only get worse with climate change.
- Project Purpose.
- Emergency Road Closure Impacts. Why are construction delays and risk of closure such a big deal for the people of the region? There is no reasonable detour for LCG. There is a minimum 6-hour detour for people travelling between Crescent City and Eureka. That becomes 8 hours for members of the Yurok Tribe in Klamath traveling to Crescent City and that's assuming all the roads on the detour route are open. Those roads are often closed during winter storms. Many locals commute through LCG multiple times daily. An economic study conducted in 2019 showed that the estimated cost of a one-year closure would be extremely impactful to the region in terms of travel costs, foregone trips, jobs lost, and reduced business output.
- **Project Timeline: Overview.** A timeline showed project progress since 2021 (at the beginnings of the Environmental Phase). The project started in 2012, when, after many decades of maintaining the status quo of frequent repairs to the existing road, stakeholders were convened and reached the consensus that the status quo was no longer an option, and a better solution was needed.
- **Project Timeline: Future Work.** Caltrans is currently working on procurement for the CMGC, with the intent to have a Notice to Proceed in place by Spring 2025.
- Emergency Repairs for a Landslide, February 2021. Caltrans has two jobs at LCG: 1) to keep the current highway safe and open, and 2) to build a long-term solution. As a reminder of how active the landslides are at LCG, a photo was shown of an emergency \$17M project after a major slide occurred along the existing alignment in February of 2021.
- Current Condition. The road finally re-opened to two-lane traffic again in 2023, after nine years of
 nearly constant work and one-way reversing traffic control, including six emergency projects and the
 construction of ten retaining walls on both sides of the highway. This represented a big, and
 welcome, change for local residents.
- **Driving Last Chance Grade.** The next slide showed photos representing the experience of driving on Last Chance Grade, including the two most recent slides which showed the construction to repair retaining walls. There has been ongoing slide movement over the years a section of the road has dropped vertically and moved 40 feet laterally since it was built in 1937.
- **Public Engagement.** Throughout the project, it has been crucial to keep local residents, who feel isolated and worried about the impact of damage and closures at LCG, engaged and informed about

- the process. A slide listed the variety of methods used to do so, including a public Open House held at least once a year.
- Stakeholder Engagement. The Last Chance Grade project is a collaborative effort between Caltrans and its many partners. Engagement with these project stakeholders is key. These stakeholders make up four working groups: 1) partners with land ownership and management responsibilities; 2) & 3) experts on cultural and biological resources; and 4) the stakeholder group convened by Congressman Jared Huffman in 2015 to ensure consensus among all involved parties. These working groups include representatives from local government, agencies with responsibilities for natural and cultural resources management and permitting, tribal groups, businesses, agencies, and environmental groups. They meet regularly with Caltrans to provide their feedback to all partners. In addition, Caltrans meets regularly with tribal governments. The working groups have been immensely helpful in narrowing down the alternatives for a long-term solution, from approximately twenty that had been initially considered to two. From those two alternatives, Caltrans has selected to proceed with Alternative F, the tunnel bypass.
- Last Chance Grade Selected Alternative: Alternative F. The next section of the presentation covered details of Alternative F: the background of selecting the alternative, the features included, and the risks involved. A 3-D view of the selected Alternative F, as it would appear looking east from a point over the Pacific Ocean, was shown, as well as a schematic map of the alternative and its features. The site of the 2021 "Valentine's Day" slide can be seen near the site of the North Tunnel Portal, and erosion along the roadway and the coast caused by landslides is also visible. The view shows where the highway will shift eastwards from its current alignment to approach a single-bore tunnel; the location of the South Tunnel Portal, including the Engineered Deformation Absorption System (EDAS); the North Portal, including a 120-foot-long bridge over wetlands; and the Operations and Maintenance Center (OMC) for the tunnel, located to the south. It was also noted that the California Coastal Trail currently crosses the highway near the proposed North Portal area. The intention is to slightly re-route the trail so that it traverses the hillside above the North Portal. Hikers would no longer have to cross the highway.
- Alternative F Proposed South Tunnel Portal and Approach; Proposed North Tunnel Portal and Approach; Proposed Operations and Maintenance Center (OMC). The next three slides showed photo simulations of the proposed South and North Tunnel Portals and Approaches and the OMC, as currently conceptualized and included in the Draft Environmental Document (DED). These designs will be refined and may change prior to construction. Mr. Matteoli noted that the environment around the North Tunnel Portal is the most environmentally sensitive area of the project, featuring a bridge that avoids wetlands and impacts to old growth redwood trees. The OMC also has a visual impact on the surrounding landscape. More details of these proposed features can be found in the project DED.
- Alternative F Profile and Plan Views.
- Alternative F South Portal Section and Typical Section. Several questions were asked regarding why a single-bore, SEM (sequential excavation method) tunnel design was selected. Twin-bore tunnels were considered during the alternative analysis process. However, the need to minimize impacts to the forest at the north portal resulted in design refinement and a single-bore tunnel. This allows for a single two-lane bridge at the north portal approach. The horseshoe-shaped tunnel envelope minimizes the tunnel's cross-sectional area and excavation off-haul. For the SEM method, the tunnel is dug out in small sections and stabilized as soon as soil is removed. The proposed Engineered Deformation Absorption System (EDAS) at the south portal is designed to allow for/absorb earthflow movement without displacing the south portal, using columns engineered to

- compress over time. As the earthflow continues to move downhill toward the Pacific Ocean, the portal would remain intact. This is a novel, innovative design proposed by HNTB, Caltrans' engineering consultants. This is the current state of the design; Caltrans will continue to seek refinements to manage that earthflow.
- Alternative F Proposed North Tunnel Portal and Approach Bridge Over Wetlands. This plan
 profile showed the bridge that will bypass sensitive wetlands located at the North Tunnel Portal, as
 well as the location of some of the old growth trees that will be impacted. This design will also be
 refined to lessen these impacts if possible.
- Alternative F Proposed Operations and Maintenance Center. The plan view shows how the OMC will fit into the surrounding landscape.
- Costs/Construction/Impacts. Key facts considered when evaluating the alternatives included estimated costs and construction impacts, including construction time, volume of excavated materials, and lane closures during construction (minimal as Alternative F is located off the current alignment of the highway). These are all preliminary numbers as the design will continue to be refined. Environmental impacts were also considered, including one of the most important biological impacts of the project: the estimated numbers of very large trees (four foot in diameter and greater) to be removed at the North Portal.
- Project Team. Caltrans showed an organizational chart of what the project team will look like, including Caltrans staff and consultants. For the Design phase of the project, there will be the CMGC, a project-specific design consultant, and an Independent Cost Estimator, working under Caltrans staff and a design oversight consultant. The current setup is similar, with HNTB Corporation as the project-specific consultant providing design, Geotech, project management, environmental, and other development items.
- Project Challenges. The following slide summarized the many environmental, design, and
 operational challenges faced by the project. The area's status as a UNESCO World Heritage Site
 brings unique risk with the possibility of inviting international opposition; starting and maintaining
 good relationships is key to mitigating that risk. There are also restrictions including a sensitive
 environment, noise limits, work windows, remote location, limited construction staging and spoil
 disposal areas, limited / challenging access for additional geotechnical investigations that are
 needed, and significant coordination required with partners.
- **Funding Status and Future Plans.** While the Last Chance Grade project is currently funded through the environmental phase, and Caltrans expects to secure design phase funding next year, Caltrans acknowledges that more work needs to be done to secure full funding. They will continue to engage with stakeholders and explore all funding options to achieve this goal.
- Why CMGC. An explanation was provided as to why CMGC was selected as the project delivery method for the LCG project.

Next, Amy Norris, Caltrans Office of Innovative Design and Delivery, the Headquarters office responsible for overseeing and guiding the CMGC process, presented more detailed information on that process:

• Caltrans CMGC Process. Ms. Norris explained that CMGC is a qualification-based process, intended to procure a Construction Manager during the environmental or design phase of a project. The Construction Manager provides pre-construction input and services during the environmental and design phases, and if an agreed-to price is reached, then the CM becomes the General Contractor (GC). It is hoped that an agreed--to price can be arrived at, but if not, the project will be advertised to seek a General Contractor. Additional information is available on Caltrans' CMGC information page

- (URL shown in presentation). The Independent Cost Estimator (ICE) will be procured around the same time as the CM. There will be separate procurements during the design phase for a project-specific designer and a design oversight consultant.
- CMGC Two-Phase Contract. A slide detailed how the CMGC contract is set up in two phases: 1) a
 Construction Manager for pre-construction services, and 2) a General Contractor for construction
 services. Various services for preconstruction were listed, including the Value Analysis, which must
 be performed with an established Department consultant through a specific VA process, which the
 CMGC contractor will participate on for this project.
 - During pre-construction services a pre-construction schedule will be developed collaboratively between Caltrans and the contractor. The CM will also be asked to develop an overall construction schedule and update it at each milestone, which is critically important to establish agreement on time-driven quantities and cost.
 - At 30, 60, 95, and 100% plan milestones, Design workshops, quantity reconciliations, cost estimates and the evaluation of Risk and estimating assumptions will take place. The process is repeated as the design progresses and more information is gathered, to continue refining and improving accuracy of plans before beginning construction and aligning on cost.
 - o Innovations are presented and evaluated. The savings in time and costs achievable through this process are an important value of the CMGC process.
 - During the preconstruction process Caltrans also assesses risk, ultimately assigning risk ownership, with the value of that risk held either by Caltrans or the contractor, whoever is best able to manage the risk.
 - Around 95%, a subcontracting and DBE plan is developed. Subcontractor work will be packaged for bid Ultimately, the contractor is responsible for selecting their subcontractors, but selections are done in coordination with Caltrans, while considering DBE goals set for the project.
 - Pre-construction services can be utilized to help with utility and environmental coordination, or third-party agreements. Understanding the methods of construction helps provide accurate information to assist in obtaining these agreements. Pre-construction services can also be used for early material procurement.
 - The second phase is after reaching the agreed-to-price, the CMGC contractor proceeds to construction.
- CMGC Benefits. The CMGC process helps improve design quality through constructability reviews, design workshops, quantity takeoffs, alignment on means and methods of construction, coordination on construction staging and traffic handling, which leads to improved constructability AND less errors, change orders, and quantity overruns. It provides opportunities for innovation, utilizing new technologies and reducing cost and time. It provides risk mitigation through evaluating, mitigating, retiring, or accepting risk; pricing and assigning risk to the party best able to manage it; and monitoring and managing risk through construction. Early work packages can be utilized (based on the project need) to accommodate the project schedule, cost, and scope. Finally, project issues are addressed prior to price development yielding higher cost certainty upon reaching Agreed-to-Price.
- Procurement Schedule (estimated dates, subject to change). The procurement schedule as
 provided is the most accurate schedule that can be provided at this time; it is subject to change.
 Caltrans has worked hard to develop this schedule while respecting both the CM and CT team's
 vacation time during the holidays; if it is delayed, it is thus likely to be delayed by 2-3 months due to
 the holidays.
- Other Consultant Services Contracts Procurement Dates (estimated, subject to change). Dates for
 procurement of the other project consultant services contracts were provided; these are also subject
 to change.

• **Response to RSVP Inquiries.** Finally, Ms. Norris provided responses to questions submitted through the RSVPs that she had not yet included in her presentation.

B. Questions and Answers

Following the presentation and a 15-minute break, Caltrans provided a Q&A session, during which they answered questions asked or submitted in writing during the meeting. These questions and answers are included below, categorized by key topics.

Project Environmental Phase

- Who is doing the preliminary engineering ... and what percentage is complete now?
 - Caltrans Response: HNTB, who is our project-specific consultant for the environmental phase. It's
 an umbrella contract under which they are performing design, environmental work, geotechnical
 work, surveys, project management, public engagement. We feel we're at approximately 15%,
 although that's an approximation as that number may mean different things to different
 members of the project team.
- Who are HNTB's main subconsultants?
 - Subconsultants include: Kleinfelder for Geotechnical work; Crux Drilling and another driller; ICF
 as the environmental sub; MIG assisting with public and stakeholder engagement; Chaudhary as
 the surveyor. This information will also be included in the RFQ.
- For the Draft EIS, what have been some of the most prominent comments received?
 - Caltrans Response: The most common was the request to get the project completed as fast as we possibly can. The second most common was probably the comment that it's understood the project needs to happen, but it does have substantial impacts, particularly to old growth redwoods, and Caltrans must develop commensurate mitigation. There were also many who expressed that they are in support of Alternative F as the selected alternative.

RFQ and Procurement Process

- Will any draft RFQs be issued?
 - Caltrans Response: No. The team is focusing on developing the RFQ and getting it ready to
 advertise in accordance with the proposed schedule. The information to develop SOQs will be
 listed there.
- Will other consultant services contracts (ICE, Design Oversight, Final Design) be procured through pre-qualified firms or released to the public via RFP?
 - Caltrans Response: We will have separate RFQs for those A&E contracts, which will be posted on the Cal eProcure website. There will be no pre-qualifying.
- How will the procurement of the additional contracts come out? Annual quals? Bid? (i.e., design review, individual cost estimate, etc.)
 - Caltrans Response: We will work with the contracting group at Caltrans, DPAC. Cal eProcure is their public-facing resource for that. We'll start that process early next year. The other contracts such as design oversight, ICE, etc. will be listed on Cal eProcure, similar to how our CMGC RFQ is posted. Those are not put out by the OIDD office like the CMGC RFQ, but as A&E contracts the District works with DPAC to procure the additional consultants that are needed on the project. So, watch for those to also be posted on Cal eProcure.
- Will the draft Pre-construction Phase Contract be made available with the RFQ?

- Caltrans Response: Understood that those of you who may not have been involved in a CMGC contract before may want to know what the preconstruction contract looks like. If your team has worked on Caltrans CMGC projects before, the Preconstruction Contract is a standard template, modified for the project. The template does receive occasional updates. I can inquire about providing a draft Preconstruction Contract if you have not been involved in our CMGC projects.
- Will we be required to provide pre-construction pricing with the RFQ, and will this be scored?
 - Caltrans Response: No. However, you do include your costs for payroll / overhead for your employees who will be working on the pre-construction as an attachment, sealed in a separate envelope, which we do not open and review until a contractor is selected, and then only for the selected contractor. There's no element of pricing for the construction of the project itself included in the pre-construction SOQ.
- Can you tell us what page count you'll require for a scope in the RFQ?
 - Caltrans Response: We're not certain yet.
- What do you think DBE goals will be?
 - Caltrans Response: Generally, our goal is somewhere from 20 23% range for a standard project, however the Office of Civil Rights (OCR) will need to evaluate the project's bid item list and Engineer's estimate to make that determination for this project. It is very important for the Caltrans/CMGC project team to strive to meet the DBE project goal, or a Good Faith Effort will need to be submitted and approved prior to Awarding the Construction Contract.

Contract and Scope

- Is the pre-construction contract going to be fairly similar to those templates you used for your other CMGC contacts, or will you modify it for this project?
 - Caltrans Response: The pre-construction contract is a template, modified slightly with the
 details specific to the project. It is updated occasionally; however, it will be materially similar to
 past CMGC contracts.
- You talked about the design consultants you're going to have and about the timeline for those
 procurements relative to the CMGC procurement. Could any of those firms be potentially in conflict
 of interest because of their involvement in this project?
 - Caltrans Response: This is a complex issue. The goal is to have as many firms able to bid as
 possible, and Caltrans will write the various contracts accordingly.
- In terms of procurement delivery, have you considered progressive design-build?
 - Caltrans Response: There are two major reasons for choosing CMGC over progressive design-build for Last Chance Grade. We had extensive conversations internally about that option as progressive design-build became possible for us at Caltrans. The first reason is that CMGC has a proven track record within Caltrans on complex jobs. The second reason is that CMGC affords Caltrans the ability to retain control and ownership of the design, and to remain more flexible as the potential for change in what happens to the current road is likely.
- Besides early work packages, will Caltrans consider separate contracts for certain scopes, such as the portals, or bridge, or the OMC?
 - Caltrans Response: The District makes the decision on whether to separate early work packages out. They would be part of the overall umbrella of the CMGC project, constructed by the CMGC contractor if an Agreed-to-Price is reached. Early work packages become their own stand-alone projects. Each early work package receives its own EA and project funding. They have to be independent and severable so the Department is not obligated to continue the next work package with the CMGC contractor if an agreed-to-price cannot be reached on the next package.

There are both benefits and downfalls to early work packages. There is an increased effort by the team to create early work packages – the entire project is priced, then early work packages split out. Plans and specs are created, and the team proceeds with constructability reviews, quantities, and cost estimates and reconciliations on multiple packages. Therefore, an early work package needs to be what is best for the project. We want to be able to make those decisions early and schedule accordingly. Early work packages provide value to CMGC projects by advancing the schedule, saving time and money, and/or advancing critical path early work. We're looking for our ICE and CMGC to add value to that conversation during the design process.

- Will the bridge at the north portal be included in the CMGC scope?
 - Caltrans Response: Yes, all the elements we've described, including the tunnel, bridge, and OMC, will be included in the CMGC scope. Right now, it appears that the minimum number of work packages is best, but the CMGC contract does give us the option to break those out into "child projects."
- From a design perspective, is there any work in the scope that Caltrans is planning on self-performing, like highway geometry, pavement design, bridge foundation design?
 - Caltrans Response: No, the current plan is to have the consultant do all the design while Caltrans (and its design oversight consultant) provides oversight of that design.
- Will additional geotechnical investigations remain under Caltrans' scope or the CMGC scope?
 - We are working to clarify the best way to approach that, because we want both for the designer to have capacity to focus on that task, but we also want the CM to have the capacity to perform additional investigations. There are advantages and disadvantages to both paths. If we have, for example, a 12-foot diameter pilot tunnel, there might be an advantage to breaking that out as a child project and performing it as a separate work package.
- Professional liability: Who will be the Engineer of Record for the job, and what level of responsibility or liability will they have?
 - Caltrans Response: The designer of record will be the project-specific design consultant. Caltrans does not have adequate tunnel design expertise in-house, so a design consultant is required.

Cost Estimates

- You mentioned 30-60-95-100 percent. Is it 95 or at 100 at which agreed-to-price is reached?
 - Caltrans Response: It depends on the schedule, as CMGC can be flexible. We can advertise to subcontractors at 95%, but we prefer to proceed to agreed-to price with the CMGC at 100% We will need to have permits, and utility certifications (items required for RTL certification) prior to going to the California Transportation Commission for funding. We'll often advertise for and select subs at 95% plans, which can help advance the preconstruction schedule to Agreed-to Price. However, plans and specifications should be very well developed, considering that changes after sub bids (or Agreed-to Price) can create change orders for construction. The team will need to evaluate these risks based on the project specifics at 95 and 100% milestones.
- Are you envisioning 3 or 4 estimates?
 - Caltrans Response: 4 estimates. One at each 30-60-95 and 100% milestones.
- For the independent cost estimate contract, will you also be checking in at each step (30-60-95-100)?
 - Caltrans Response: ICE is contracted through the District A&E contract. Their estimators work with the team at the same 30, 60, 95and 100% milestones. Ultimately, everybody's trying to come together on how the work will be performed and align on cost. We compare the Engineer's estimate to the ICE and CM estimates, however, Caltrans does not have the volume of

historical data for tunneling as we have for other items of work. This will be one of our challenges in developing an Engineer's estimate for this project.

Construction

- An expedited schedule for the pre-construction was mentioned, from a design and pricing standpoint. If pre-construction can be expedited, what potential roadblocks are there to starting construction prior to 2030/2031?
 - Caltrans Response: We talked about a few of the challenges For example, the sensitivity of the environment. Getting through the permitting process will likely be critical path. We expect obtaining the Coastal Development Permit will be challenging. There Are many potential delays. For example, the mitigation agreements may reach an impasse or, alternately, they may continue to evolve as we go as we try to reach agreement with stakeholders. Also, performing the needed geotechnical studies will be difficult and will take time.
- Will the team be co-located (meaning, both on-site and remote locations)? If so, when does that start and where will that be?
 - Caltrans Response: In Pre-Construction Services, we are able to perform a lot of work remotely and do not need to co-locate. However, we have some in-person meetings that we will ask the team to be present for. When we get to the point of construction, where your team is mobilized to the jobsite, we can discuss co-location. But until then, everyone can work from their current locations with in-person meetings, as necessary.
- Have you identified a spoils disposal site in the DED?
 - Caltrans Response: No; however, the disposal site is anticipated to be at an already licensed facility, with the goal of it being located somewhere between Smith River, CA (just north of Crescent City) and the US101/SR 299 interchange (locations may occur east along SR 299, between Arcata and Willow Creek).
- Is the existing road going to be not maintained, torn apart, or made into a hiking or bike path?
 - Caltrans Response: The current proposal is to recontour and demolish the existing roadway and relinquish ownership to Parks. However, some key stakeholders have different opinions, such as the Coastal Commission, who would like to see it converted into a trail. This is something that we'll have to continue negotiating, so our plans may change. This speaks to the risk of change, which is going to be very significant on this project. Caltrans would like to stay flexible and work with our partners to solve problems as we go.
- The project itself could be over 10 years long, so there could be additional movement on the existing roadway. Would it fall to the project team to continue to maintain that road until this project can be on-line?
 - Caltrans Response: The District will make that determination should an event occur during construction.
- For the pilot tunnel, has it been considered for that to be a drainage tunnel? Water will be a risk factor for this project.
 - Caltrans Response: There are concerns by various permitting agencies about impacting
 groundwater. Therefore, the intent is to design a tunnel that is water-tight, to the extent
 possible, and minimize impacts to groundwater during and after tunnel construction. Utilizing
 the pilot tunnel to collect water from minor seeps and stormwater has not been considered, yet.

Last Chance Grade On-Site CMGC Industry Day August 20, 2024 Companies / Organizations in Attendance		
Arup	J.F. Shea Construction, Inc.	
Barnard Construction Company, Inc.	Kiewit Corporation	
Del Norte County	Myers & Sons Construction	
Delve Underground	Obayashi Corporation	
Drill Tech Drilling & Shoring, Inc.	Pini Group USA, Inc.	
Flatiron West, Inc.	Schnabel Engineering	
G2 Consultants	Skanska	
Gannett Fleming	Stanton Constructability Services	
GHD	Traylor Bros., Inc.	
Granite Construction Company	WSP	
Guy F Atkinson Construction, LLC		



Last Chance Grade On-Site CMGC Industry Day AGENDA August 20, 2024

Meeting Location:

Elk Valley Rancheria Sam Lopez Community Room 2332 Howland Hill Road, Crescent City, CA 95531

Times (approximate)	Торіс
9:30 AM	Pre-Meeting Coffee and Breakfast Snacks Provided by Caltrans
10 AM	I. Welcome II. Goal for the Meeting III. Introductions (Name, Company, Position, Project Interest) IV. Answers to RSVP Questions and Vision for the CM Partnership a. Project Background and Timeline b. Selected Alternative c. Project Team d. Project Challenges e. Funding f. Why CMGC g. CMGC Benefits and Caltrans Process h. Key Procurement Dates
11 AM	BREAK TIME
11:15 AM	V. Q&A VI. Next Steps, Closing Remarks and Feedback Form
12 PM	Adjourn





Caltrans District 1

PRESENTATION





On-Site CMGC Industry Day Agenda

- 1. Welcome
- Goal for the Meeting: To provide interested contractors more information on the Last Chance Grade project
- 3. Introductions: Name, Company, Position, Project Interest
- 4. Answers to RSVP Questions and Vision for the CM Partnership
 - a. Project Background and Timeline
 - b. Selected Alternative
 - c. Project Team
 - d. Project Challenges
 - e. Funding
 - f. Why CMGC
 - g. CMGC Benefits and Caltrans Process
 - h. Key Procurement Dates
 - ***** Break (15 min) *****
- 5. Q&A
- 6. Next Steps, Closing Remarks and Feedback Form



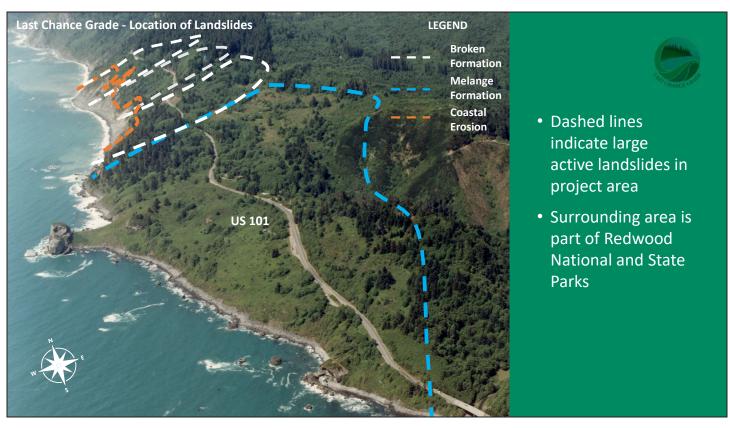
REMINDERS:

- Industry Day Meeting Materials will be posted to the LCG project website next week.
- Questions? Please write your questions down on post-its and we will collect them prior to the 15-minute break.

Project Vicinity Map

- 11 miles south of Crescent City
- 73 miles north of Eureka
- 6 hours north of San Francisco





Project Purpose



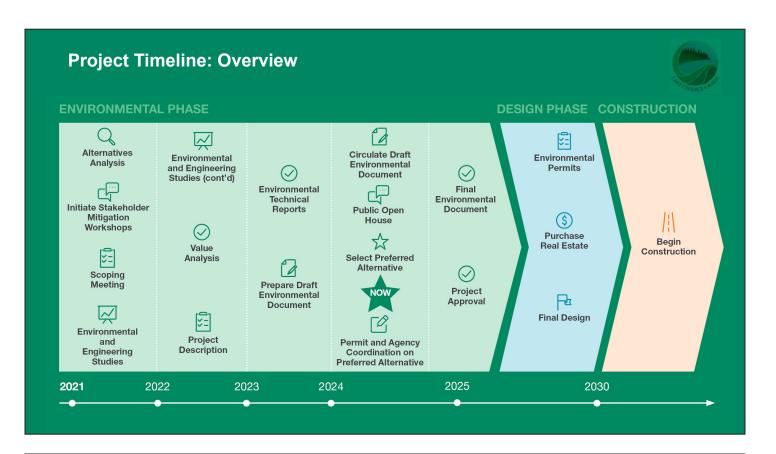
To develop a long-term solution to the instability and potential roadway failure at Last Chance Grade.



Emergency Road Closure Impacts



- An emergency closure of the current highway would require a 407-mile, 8-hour detour between Klamath and Crescent City
- Cost of one-year closure:
 - \$236M in travel costs
 - \$417M in foregone trips
 - 3,800 jobs lost
 - \$456M in reduced business output



Project Timeline: Future Work



- Now through 2025 Advance the Preliminary Design
- Spring 2025 CMGC Preconstruction Services Begin
- Fall 2025 Publish Final Environmental Document
- End of 2025 Environmental Phase Ends, Design Phase Begins
- Early 2026 Start Final Design, Environmental Permitting, ROW Acquisition
- 2030 Come to Price Agreement (or Advertise)
- 2031 Begin Construction

Emergency Repairs for a Landslide, February 2021





Current Condition



- Emergency repairs following February 2021 landslide are completed
- Construction of other retaining walls completed
- Returned to two-way traffic in 2023





Driving Last Chance Grade

























Public Engagement



- Goal: to keep local community engaged and informed
- January 2015 Feasibility Study Workshops public input helped reduce number of alternatives for study
- Annual informational open houses to update public
 - July 2018 Open House HoloLens virtual reality helped public see what alternatives sites are really like
- Dedicated website animated video explaining "Why Does it Take So Long?"

Stakeholder Engagement



- Federal, state, local agencies; tribes; interest groups; elected officials
- Regular meetings and communications with:
 - LCG Partners
 - Huffman Stakeholder group
 - Biological and Cultural working groups
 - Tribes
- Helping Caltrans refine the alternatives, avoid and minimize impacts
- Stakeholder Mitigation Workshops site tour, discussion of preliminary impact data and mitigation ideas







Last Chance Grade Selected Alternative: Alternative F

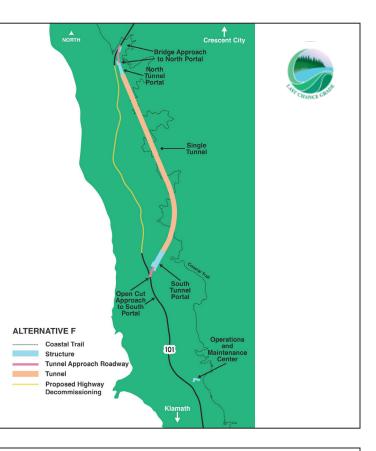




Alternative F

Tunnel Option

- Off-alignment bypass
- Portals located near existing alignment
- Tunnel would include separated pedestrian-bike pathways
- · Bridge at north portal
- Approach earthwork and retaining structure / EDAS at south portal
- Operations and Maintenance Center



Alternative F – Proposed South Tunnel Portal and Approach





Alternative F - Proposed North Tunnel Portal and Approach

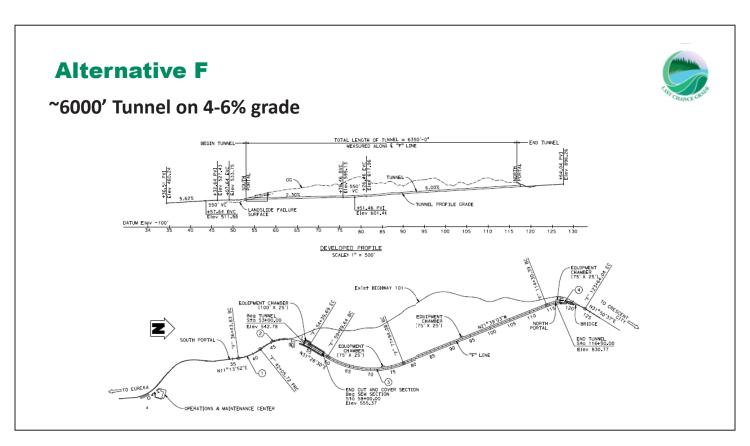


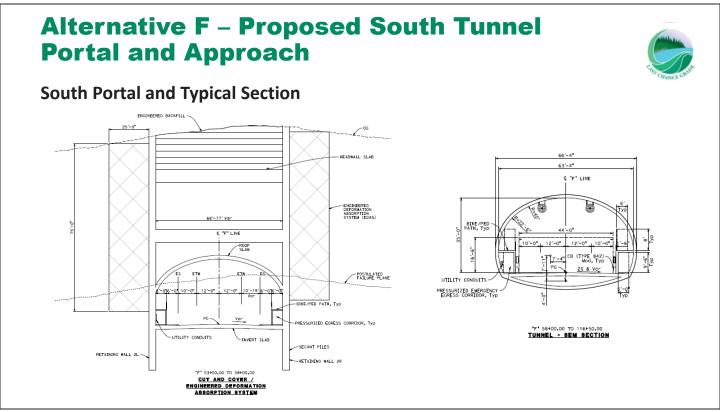


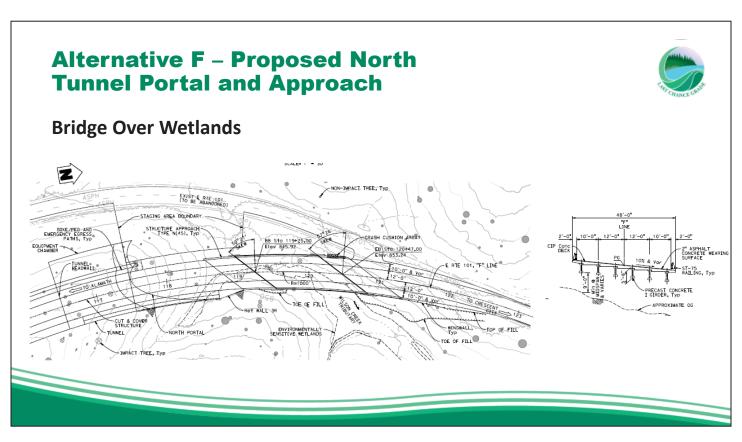
Alternative F – Proposed Operations and Maintenance Center (OMC)

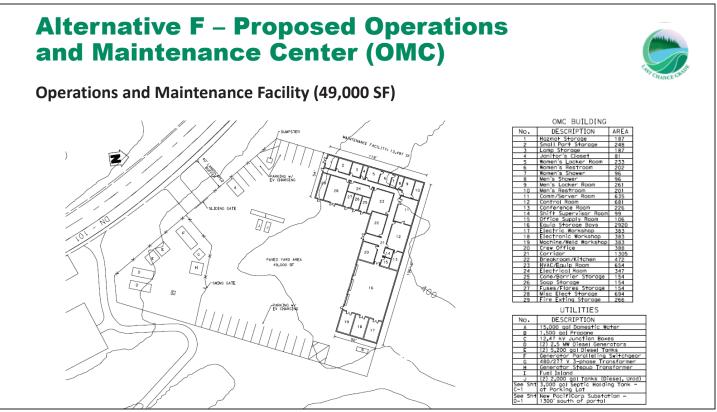


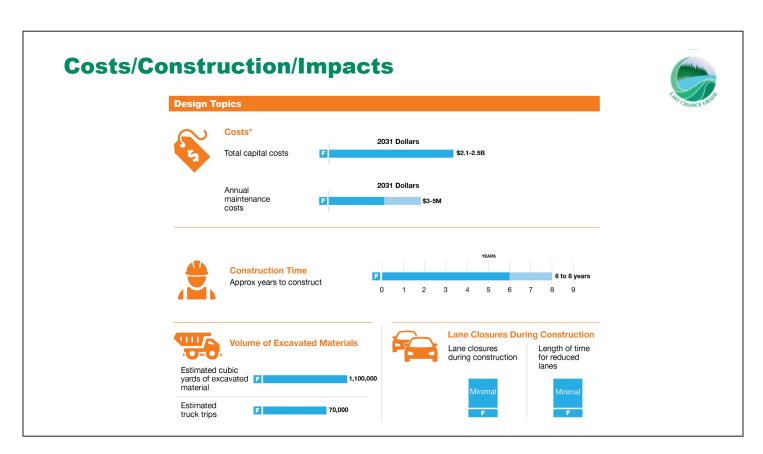


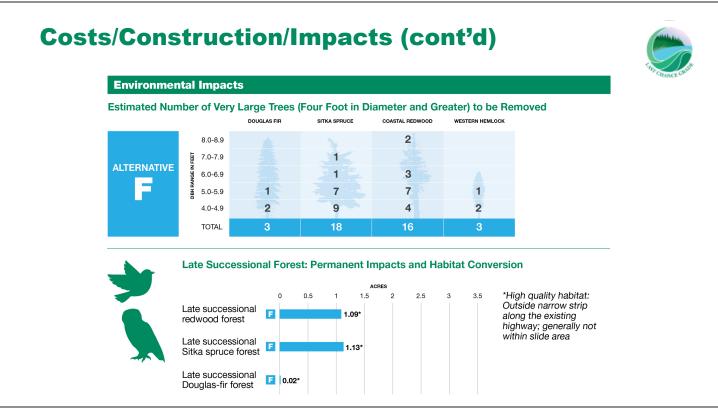


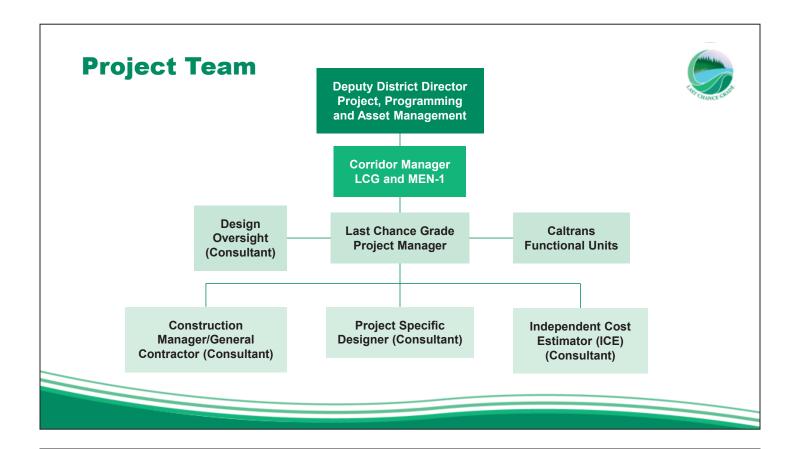












Project Challenges



- Redwood National and State Park in UNESCO World Heritage Site
- Very sensitive habitat / endangered species (noise restrictions, strict work windows, etc.)
- Remote project location
- South Portal within earthflow novel earthflow mitigation structure proposed for South Portal (Engineered Deformation Absorption System)
- Limited construction staging areas
- Remote earthwork spoils site (off-haul required)
- Additional geotechnical investigations needed to establish a Geotechnical Baseline Report, and access is limited and challenging.
- Significant coordination will be required with landowners (Redwood National and State Parks), tribes, and permitting agencies.



Carrow Cal

Funding Status and Future Plans

- Currently Funded through Environmental Phase (to end of 2025)
- Design Phase begins in 2026; Seeking Design Phase funding in 2025
- Funding sources include state, federal, and other grants with support from several stakeholders from local to national level
- Construction will not commence until full funding is secured
- CMGC RFQ will be issued before Design Phase funding is secured to allow for advancing the current preliminary design

Why CMGC

TANT CHANCE GUIN

- Provides opportunities for refinement to current preliminary design
- Allows for early coordination identify, understand, and overcome challenges ahead of time
- Streamlines coordination with permitting agencies, facilitates permits
- Improves accuracy and certainty of schedule and construction cost estimates
- Provides opportunities for early work (construction packages)
- Owner maintains design and proven track record





Questions? Please write your questions down on post-its.

Caltrans CMGC Process



- Procure a Construction Manager during environmental or design phase based on Qualifications.
- Construction Manager provides input and services during design phase (aka Preconstruction Services)
- If price is agreed to, Construction Manager becomes the General Contractor
- If price is not agreed to, advertise project
- Additional information:
 - o https://dot.ca.gov/programs/design/construction-manager-general-contractor



CMGC Two-Phase Contract



PRE-CONSTRUCTION Construction Manager

Pre-Construction Services

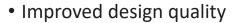
- Value Analysis
- Constructability Reviews
- Design Workshops
- Quantity verification
- Cost Estimating
- Scheduling PSC and Construction
- Innovation
- Risk
- Subcontracting and DBE Plan
- Utility/Environmental Coordination
- Third Party Agreements
- Early Material Procurement

CONSTRUCTION General Contractor

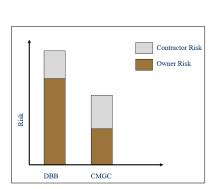
Construction Services



CMGC Benefits



- Specialized CM qualifications
- Innovative solutions
- Risk mitigation
- Less Change Orders and claims
- Greater cost certainty
- Streamlines project delivery schedule through elimination of time required for advertise and award
- Early work packages





Procurement Schedule (estimated dates, subject to change)



CMGC Procurement Schedule:

8/20/2024	Outreach Event - On-site Industry Day
10/25/2024	Issue CMGC RFQ
11/25/2024	Final Date for Receipt of Proposers' Questions
12/13/2024	SOQ Due Date for Submittal (Electronic & Hard Copy)
2/12/2025	Notice of Short List
2/20/2025	Proposer Interviews
2/28/2025	Anticipated Ranking Determination
3/21/2025	Anticipated Award of Preconstruction Services Contract
4/14/2025	Anticipated Notice to Proceed

Other Consultant Services Contracts Procurement Dates (estimated, subject to change)



Estimated Notice to Proceed Dates:

- Independent Cost Estimator Q2 2025
- Final Design Consultant Q1 2026
- Design Oversight Consultant Q1 2026

Response to RSVP inquiries



- CMGC is advertised through a Request For Qualifications (RFQ) selection process (not RFP)
- The Department is responsible for and controls the design of the project in CMGC projects.
- No draft RFQs will be provided before the RFQ advertisement date
- The following items were specifically asked about they are being developed and will be included in the RFQ:
 - Key personnel and minimum qualifications
 - Scope of the preconstruction services contract
 - o List of available project documents



Break (15 min)

Questions? Please write your questions down on post-its and we will collect them during this break, for the Q&A session coming up next.



Questions & Answers



- Next Steps
 - RFQ will be advertised on the Cal eProcure website https://caleprocure.ca.gov/pages/index.aspx
- Closing Remarks
 - Self-Guided Tour
- Industry Day Feedback Form (please leave your completed feedback form on the table)



Last Chance Grade ON-SITE CMGC INDUSTRY DAY FEEDBACK FORM	
August 20, 2024	
Please write your responses to the following questions, and leave the completed form in the collection box on the sign-in table:	
1. What was most valuable for you today?	
2. What are your recommendations for follow-up?	
3. What are your suggestions for future events?	
4. What are your unanswered questions?	
THANK YOU FOR YOUR PARTICIPATION, TIME, AND FEEDBACK!	