

EXHIBIT F.4



Gross Reservoir Expansion Project

MEETING AGENDA & MINUTES

Meeting Title:	Boulder County and Denver Water Facilities Coordination Meeting	Date/Time:	02/03/2021 2 p.m.
Prepared By:	M. Brasfield/A. Denault	Location:	Online - Teams
Reviewed By:	Denver Water Boulder County review pending	Project #/File #:	Docket SI-20-0003 1041 Permit Application for GRE Project

Meeting Summary:

Boulder County Planning and Permitting staff met with Denver Water staff to discuss facilities planning and permitting, in order facilitate a common understanding of timelines and expectations related to facilities permitting and address questions raised in Denver Water's 1041 permit application to the County for the Gross Reservoir Expansion (GRE) Project.

Attendees	
Travis Bray – Denver Water	Mike Thomas – Boulder County
Ashley Denault – Denver Water	Conrad Lattes – Boulder County
Doug Raitt – Denver Water	Amy Willits – Boulder County
Melissa Brasfield – Denver Water	Ron Flax – Boulder County
	Bob Keipe – Boulder County

Action Items:

- *Denver Water will look into fire protection requirements in the temporary field offices and will look into retaining someone who can help develop those plans.*
- *Denver Water will provide a detailed list and description of facilities/structures and what we think permit application materials might include to County building staff.*
- *After this list is complete, Boulder County and Denver Water will have a Building Permit pre-application meeting.*
- *Denver Water will add tree thinning around roads used for construction as a topic for future discussions with the County Wildfire Team and will reach out to U.S. Forest Service as well for these discussions.*
- *Denver Water will reach out to the contacts Mike Thomas provided and engage with them to help develop temporary recreation plans.*
- *The County will look into how the state regulates structures such as the HPU building*
- *The County will look into whether there are building code requirements for the Tower Crane, as there are not any local amendments for these cranes.*
- *Denver Water will develop a named and numbered site plans as one of their first deliverables to the County building department for permit application tracking purposes.*
- *Denver Water will work with other parties involved in permitting to ensure all involved understand the electronic portal and process.*

Notes:

Temporary Field Offices

- Doug outlined temporary field office plans and noted Denver Water heard and understands Boulder County concerns about ADA/accessibility, wind/snow loads, and fire protection.
- Ron confirmed the entire site is Zone 1 Wildfire Zone. Denver Water has had conversations with Coal Creek Canyon Fire Protection District and is working with them in this process as well.
- Discussion ensued around sprinkler systems in the field offices; Ron noted the County usually requires sprinkler systems in these units. Doug said he would investigate proposed fire protection measures.

Aggregate Crushing Plant

- Doug provided an overview of what the plant could look like and how it would operate. He also identified areas where Denver Water is aware the County will require a permit. Occupied structures and retaining walls will be County focus for the plant.
- Other discussion included how facilities would be powered. Denver Water is planning to use electrical power from Xcel but plan to have backup generators. Ron noted the County will also want to look at generators on site.

Concrete Batch Plants

- Doug went over plans for two, co-located concrete batch plants and what they will look like, rationale for two plants (due to production of two types of concrete), and components of the plants needed for production.
- Amy noted the County had questions around the concrete guppies.
 - Doug responded that they are associated with concrete production and are intermediate storage on site. There will be 1-3 depending on needs and will be parked/stored around the batch plant.

Materials Lab

- Doug discussed the planned Materials Lab, which will be a permanent structure. The lab will test for materials coming out of the aggregate crushing and concrete batch plants. The design is not started yet, but the building will include a small water/wastewater treatment facility. The materials lab is one of the earlier planned facilities.
 - Ron noted this building could likely require a floodplain development permit.
 - Doug said this will be noted in the floodplain meeting scheduled for Feb. 8 with Boulder County Floodplain Program.

Headquarters and Caretakers' Quarters

- Doug discussed planned change to Gross Reservoir Headquarters – primarily security-related improvements – and noted that, although there are no changes planned to caretakers' quarters there is a question about tree thinning around the quarters.
 - Ron noted fences over 8' high will require a permit and suggested discussing tree thinning with the County wildfire team.

Recreation Facilities

- Doug outlined temporary recreation changes, including closing boating access at Osprey Point and potential temporary recreation improvements at the North Shore, including potential changes to parking, restrooms, and the boat house. Currently, this change is planned for April 2022.
- Discussion ensued around North Shore resident concerns about the current recreation situation, particularly around parking overflow.
 - Mike said Lakeshore Drive residents have been in contact with him/his department about recreation usage and traffic.

- Melissa and Ashley noted Denver Water has received a lot of the same feedback, which will be incorporated into recreation plans that are in development. Some ideas include “lot spot” technology and parking lot modifications.
- Mike provided a list of people to connect with as Denver Water conducts outreach on this topic.
- Attendees also discussed permanent recreation facilities, noting the focus is on preserving the current level and experience. Travis noted Denver Water has been working with Miramonte and is hoping to work with the County. These changes will also allow for efficiency improvements, e.g., parking lot redesign.

Dam Surface Prep

- Doug provided an overview of hydro blasting, used to prep the dam.
 - Ron asked if the process was loud and noted Denver Water will want to make sure the public is aware of the process.

Dam Control (HPU) Building

- Doug discussed the function of the HPU building and raised the question of how the building should be permitted since it is not regularly occupied and may be considered part of the dam.
 - Ron noted we will need to look into how the state regulates these structures.

Design Criteria

- Doug highlighted current design criteria, which accounts for wind gusts of up to 170 mph and a ground snow load of up to 50 lbs/sq.ft.

Tower Cranes

- Ron noted there aren't any local amendments for these cranes and was unsure if they were covered in the building code.

County Permitting Requirements

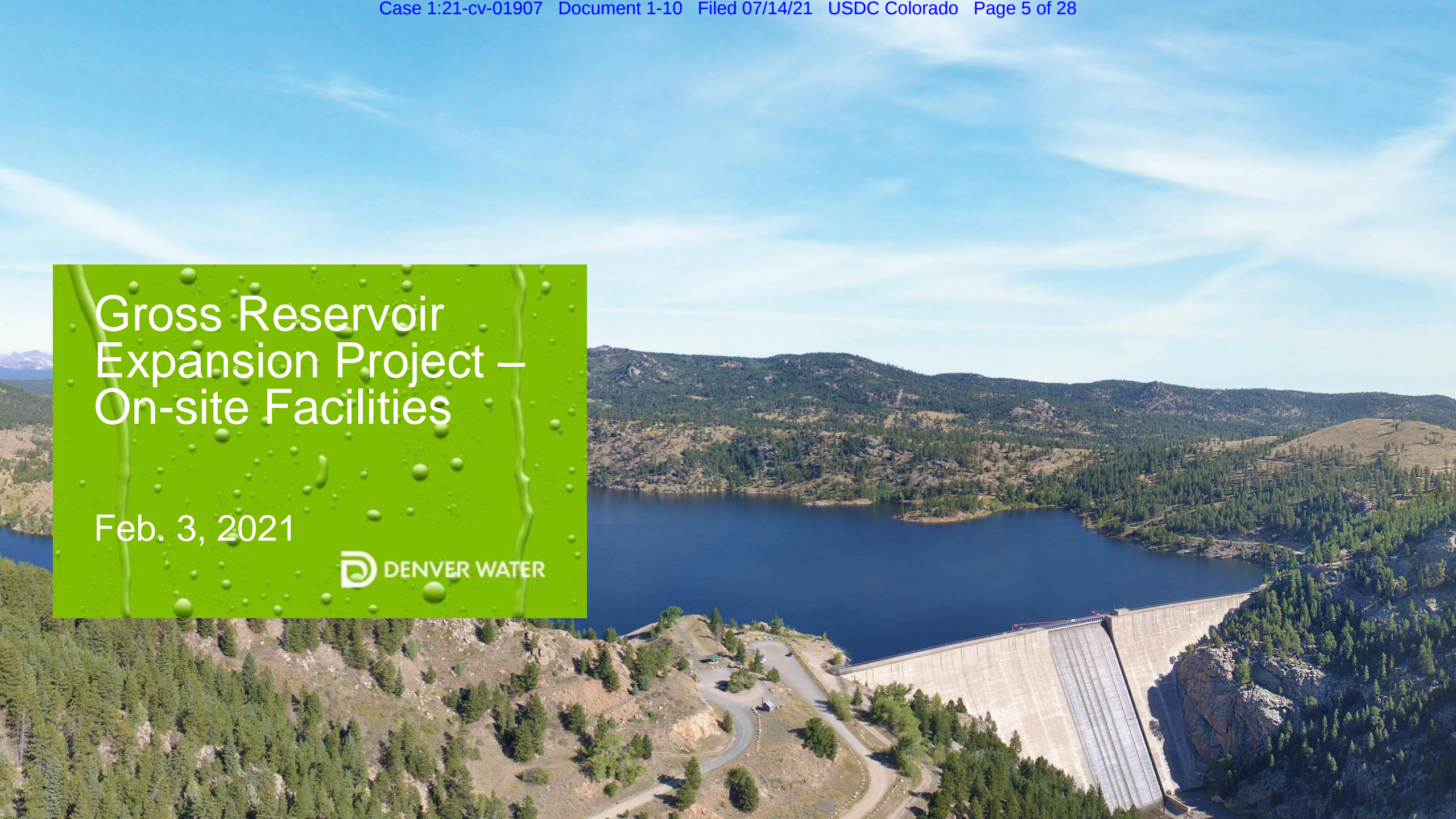
- Doug went over the county requirements as we understand them.
 - Ron noted that the permitting system will put all applications in under a single address and therefore would like to have a unified site plan that lists and numbers all buildings up front, so things don't get tangled in the permitting system.

Anticipated Schedule

- Doug presented Denver Water's current schedule and noted some items that will be sent to FERC require Boulder County review. These plans will also be discussed in the 1041 permit application responses. Doug also noted FERC has mandated a construction start date in 2022 and in order to hit that milestone there are a number of things that will need to be completed by the end of 2021. Denver Water currently anticipates the first quarter of 2022 will be the most active time for permitting based on our current timeline.

Gross Reservoir Expansion Project – On-site Facilities

Feb. 3, 2021



Safety Moment – Look for Mobile Equipment Blind Spots

A blind spot is the area around a vehicle or piece of construction equipment that is not visible to operators, either by direct line-of sight or indirectly by use of internal and external mirrors.

- Always try to walk on the driver side of equipment as the passenger side has a larger blind spot.
- Wear high visibility clothing and Personal Protective Equipment
- Many times when workers think they can be seen by the operators of heavy equipment they can't. You may be in a blind spot or the operator has been driving in a designated travel path for a period of time and the only thing that has changed is you!!!! Make eye contact with operators



Purpose of the Meeting

To facilitate a common understanding across stakeholders of timelines and expectations relating to facilities permitting.

What we have heard:

- All occupied facilities require Boulder County permitting.
- The scope and timing of the permit application process is important for Boulder County to understand the resource demands on the County.



Agenda

- Introductions
- Timeline overview
- Topics:
 - Temporary Occupied Facilities
 - Aggregate crushing and concrete batch plant
 - Recreation Facilities
 - Permanent Occupied Facilities
 - Facilities related to construction infrastructure
 - Wind and Snow load expectations
 - Building permit applications - scope and process
 - Schedule
- Discussion

Housekeeping

- Please turn on your cameras.
- We will go topic by topic with time for larger discussion between each...
- But let us know if you have a question:
 - Drop them in the chat.
 - Use the “Raise Hand” function.
 - Jump in!

Introductions

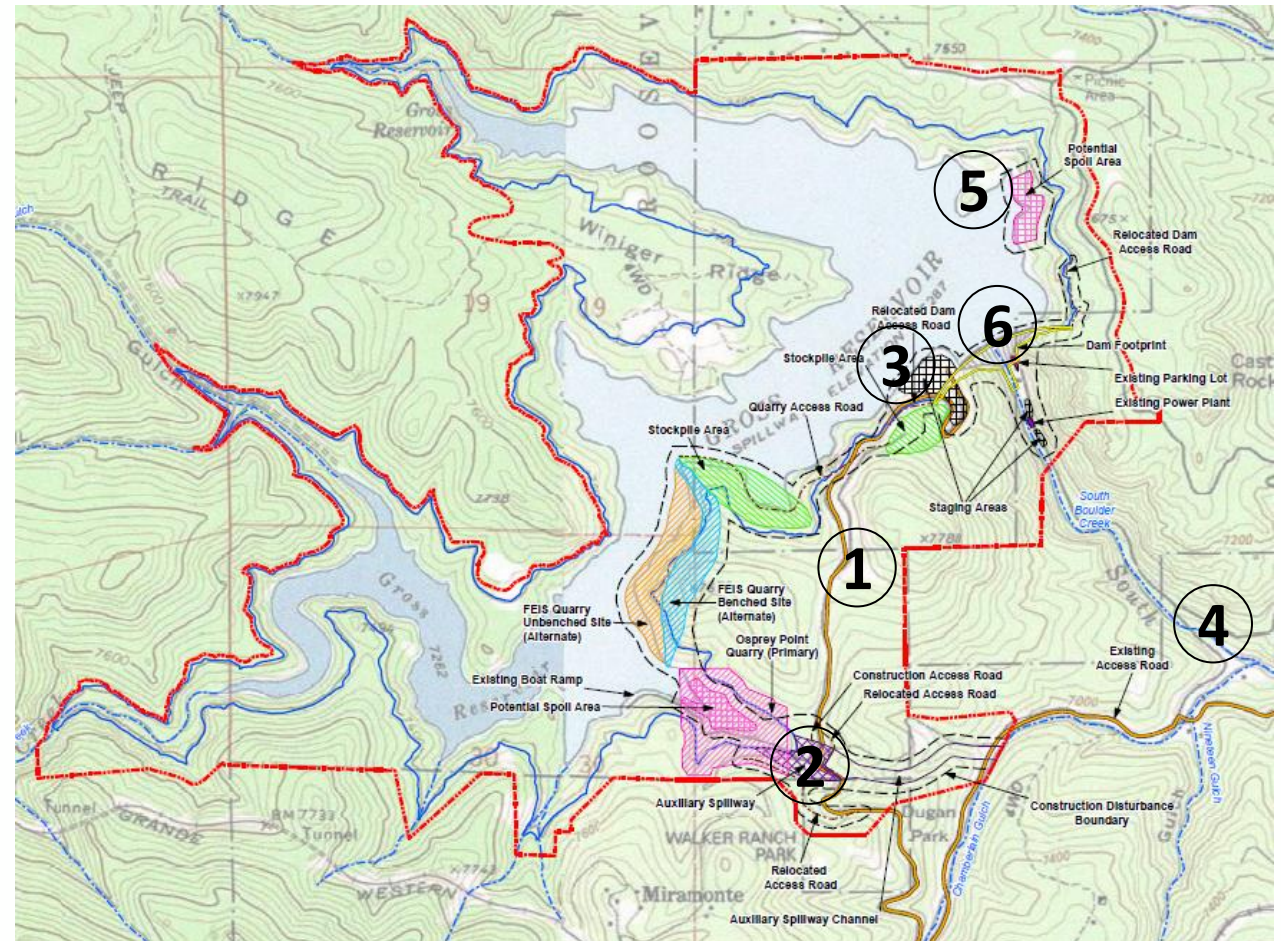
A large blue rounded rectangle with rounded corners, containing the text 'HELLO my name is' in white. Below it is a solid blue horizontal bar with rounded ends.

HELLO
my name is

Gross Reservoir Expansion Site

Facilities

1. Temporary Offices
2. Crushing plant
3. Batch Plants
4. Materials Lab
5. North Shore Recreation
6. Dam Control Building
7. Multiple field trailers for operations and inspection personnel around the site

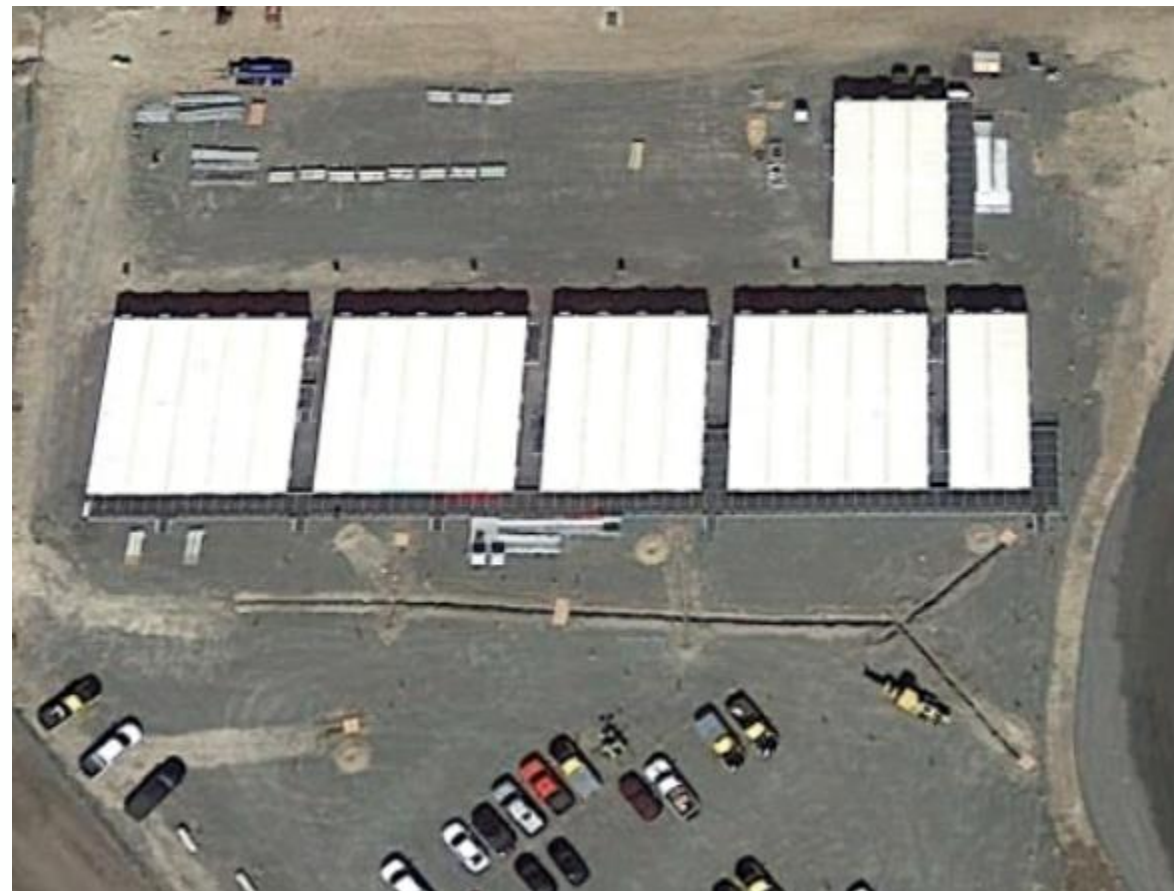


Temporary Field Offices for Construction

Central Field Office for Staff located $\frac{1}{2}$ mile from dam:

- ADA access provided.
- Wind and snow load.
- Foundation requirements.
- Ignition resistant covering.
- OWTS requirements.
- Fire protection requirements.
- Defensible space.

Any feedback on the plan above?



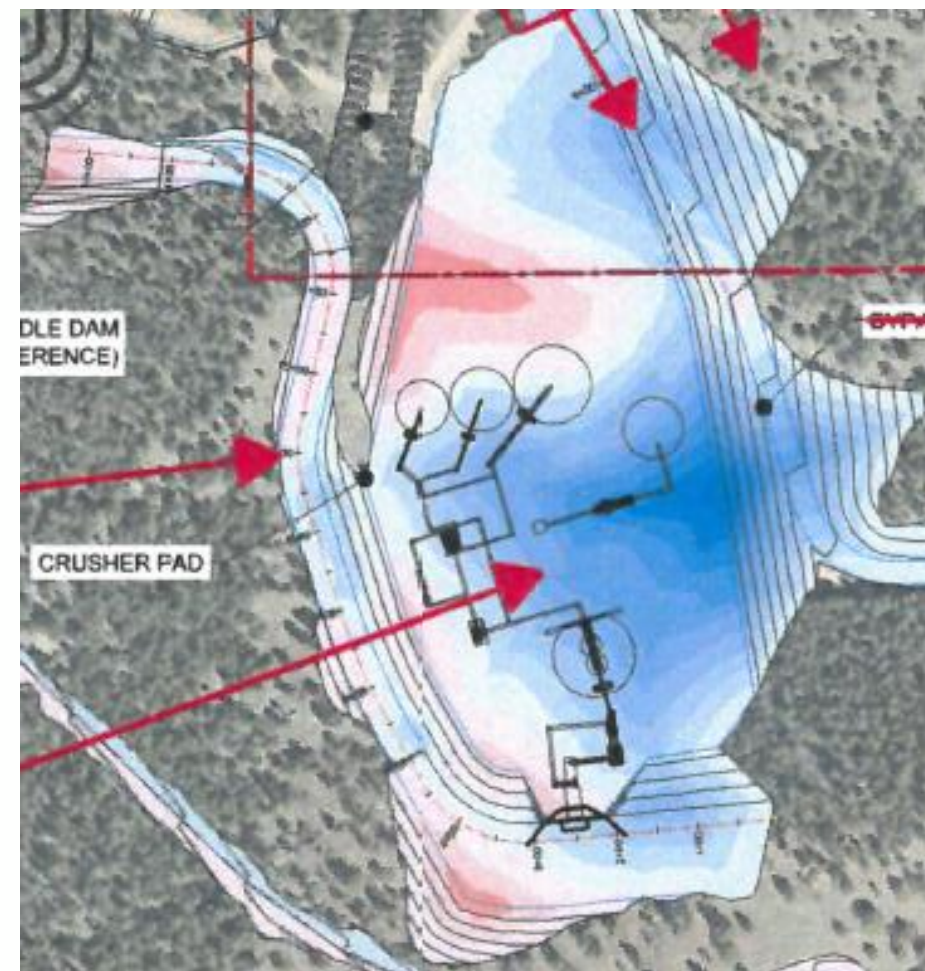
Example of field offices: Denver Water Northwater Treatment Plant Construction Field Office Complex.

Aggregate Crushing Plant

Crushing Plant for production of concrete sand and aggregates:

- Erosion controls for disturbed ground.
- Temporary foundations.
- Dust suppression equipment.
- On site power generation.
- Portable control room.
- Field office for staff.
- Field lab for material testing.
- Portable restrooms.

Any feedback on the plan above?



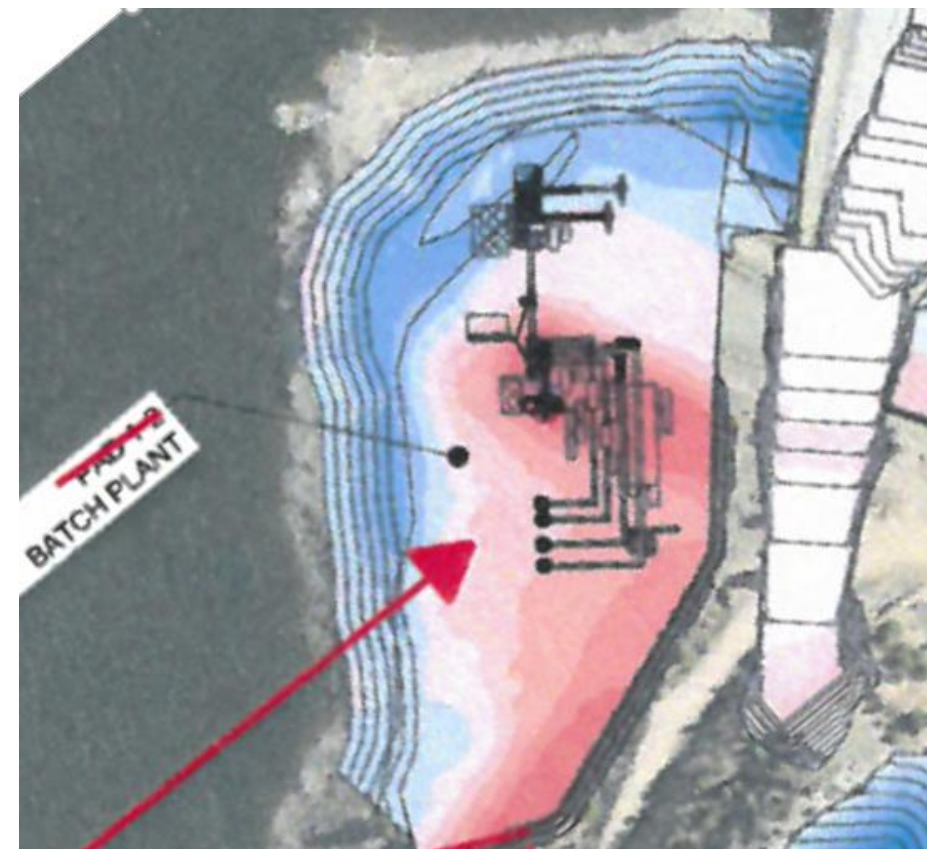
Crushing Plant Schematic Arrangement

Concrete Batch Plants

Concrete batch plants (2) for production of on-site batched concrete:

- Erosion controls for disturbed ground.
- Roller compacted concrete batch plant.
- Conventional concrete batch plant.
- Dust suppression equipment.
- Portable control room.
- Ice plant, chiller and aggregate cooling plant.
- Electrical power supply with backup generator.
- Area lighting.
- Portable restrooms.

Any feedback on the plan above?

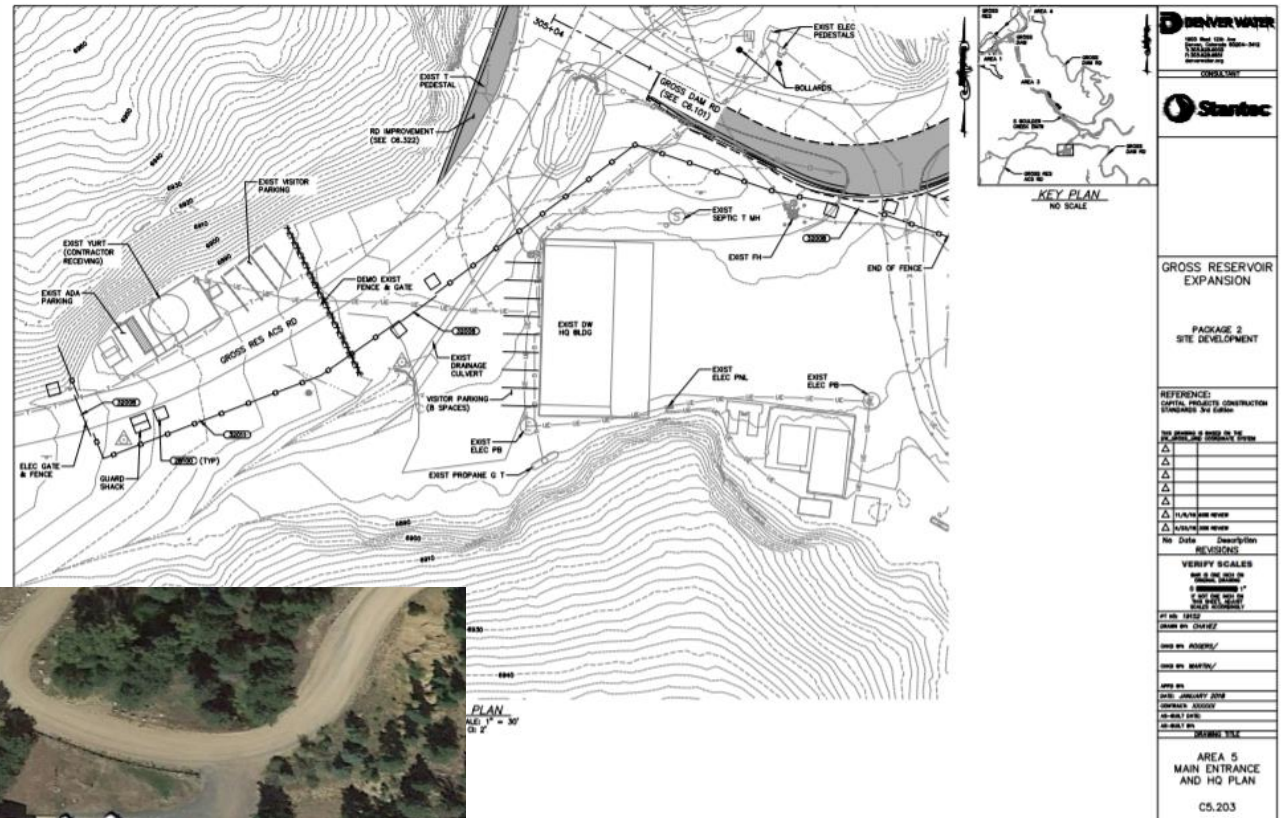


Concrete Batch Plant Schematic Arrangement

Gross Reservoir Headquarters Improvements

Security Improvements:

- New perimeter fencing.
- New motorized gates (3).
- Electrical and communications modifications.



Gross Reservoir Caretakers Quarters

- No structural changes.
- SI-20-0003 Building Safety & Inspection Services Team (Boulder County) comment posted 10/19/20: “Wildfire mitigation in the area surrounding all structures will be required”.
- Thinning within 30-ft of roadway required.
- Thinning within 150-ft of roadway recommended.



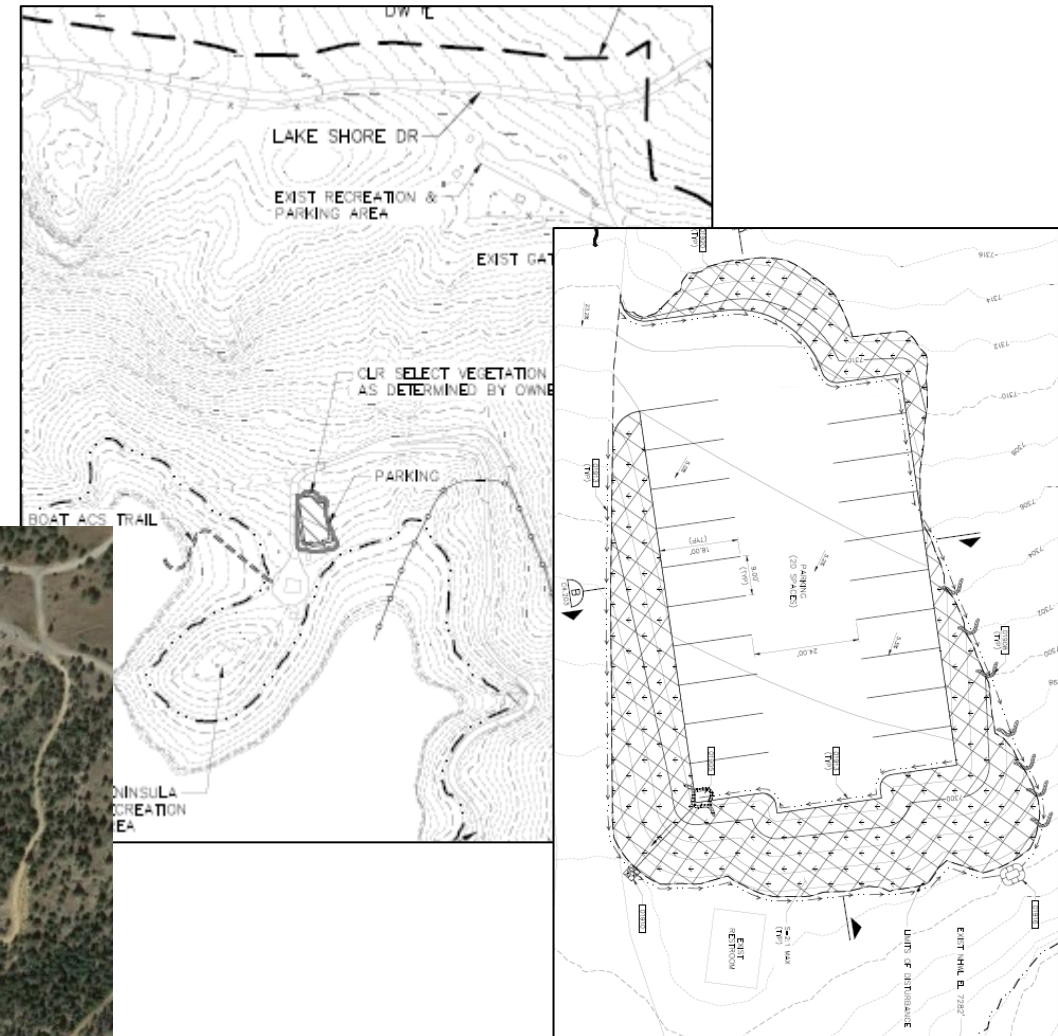
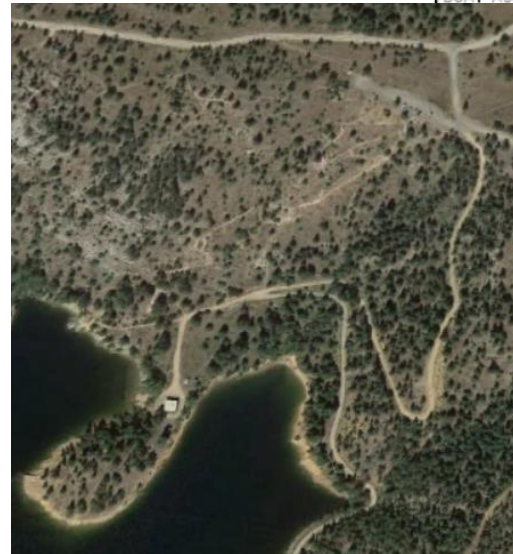
Denver Water Headquarters and Caretaker Housing

Temporary North Shore Recreation

Osprey Point Boat Ramp closes during dam construction:

- New parking area on North Shore peninsula prior to closure Q1/2 2022.
- Existing vault toilet facility.
- Access allowed for watercraft drop off and pickup.
- Boat house remains until inundation.

Any feedback on the plan above?

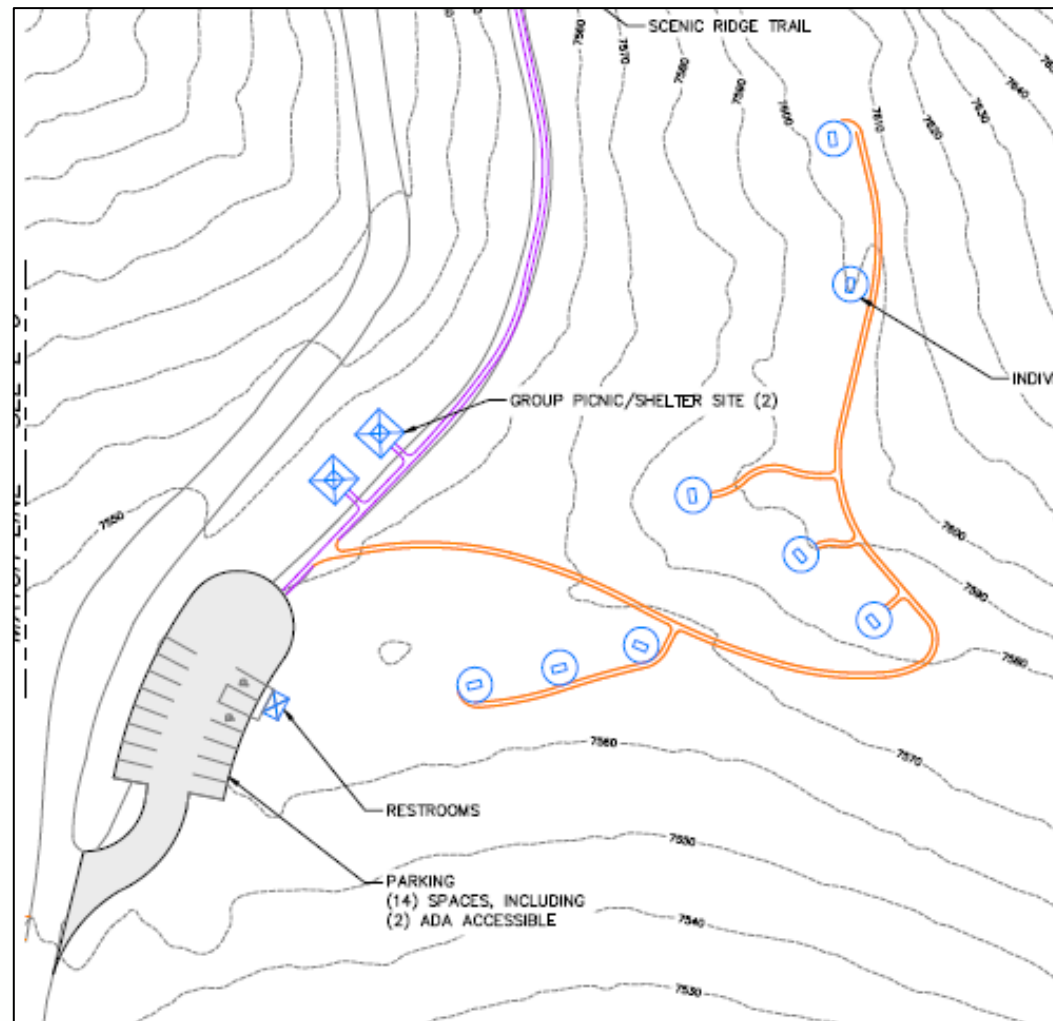


New Parking Area

Permanent Recreation Features

- Constructed after site reclamation.
- Restrooms – vault toilets.
- Picnic shelters.
- Parking.
- ADA design requirements.
- No increase in site capacity from current facility.
- Possible boat house/ranger station facility (future).

Any feedback on the plan above?

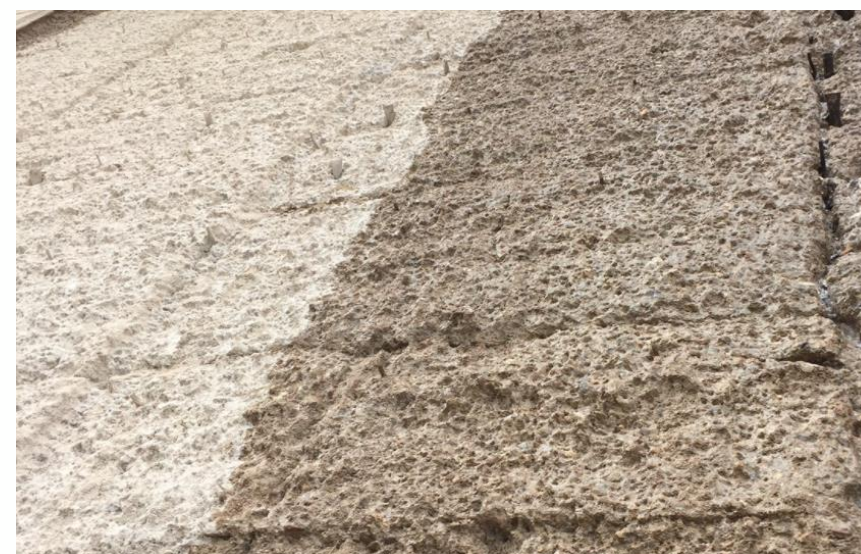
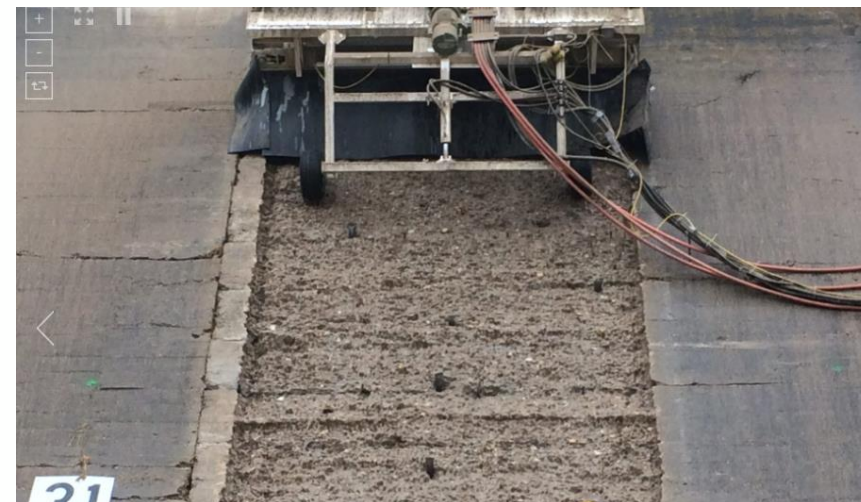


Concept Recreation Improvements (partial) – EIS Documents

Dam Surface Preparation - Hydro Blasting

Hydro blasting of dam face required early in dam construction process:

- Cuttings removed during blasting process.
- Process water recycled.

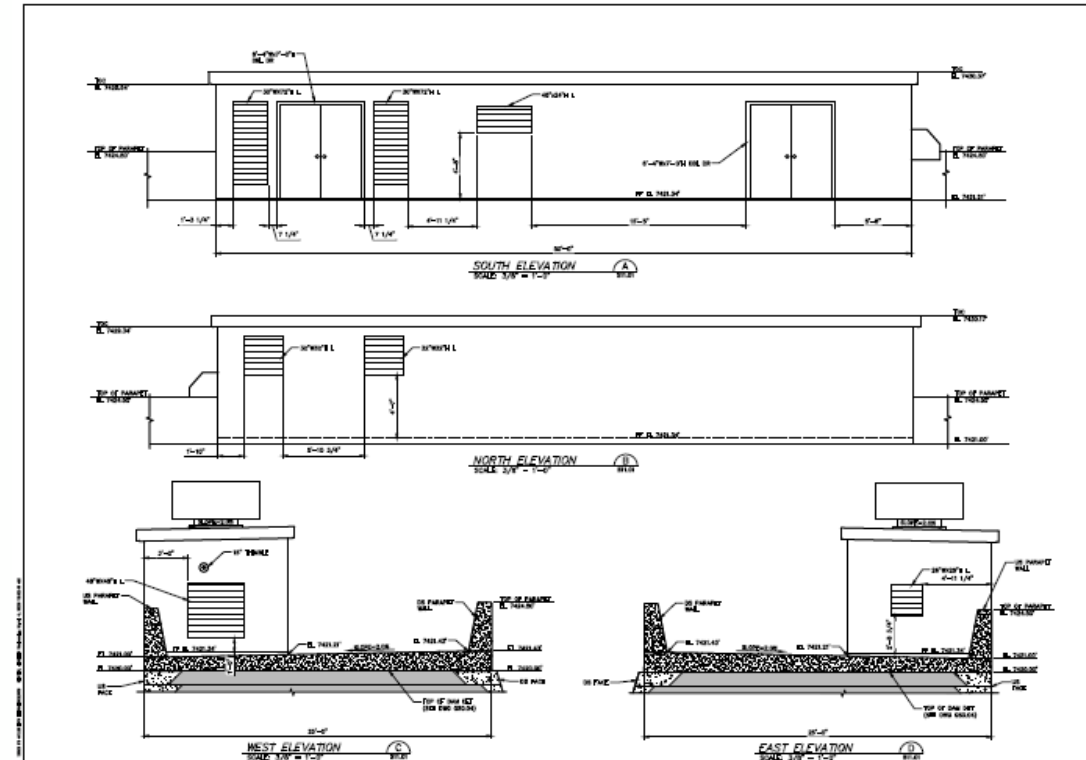


Dam Control (HPU) Building Replacement

Machinery and Controls for Dam Operations:

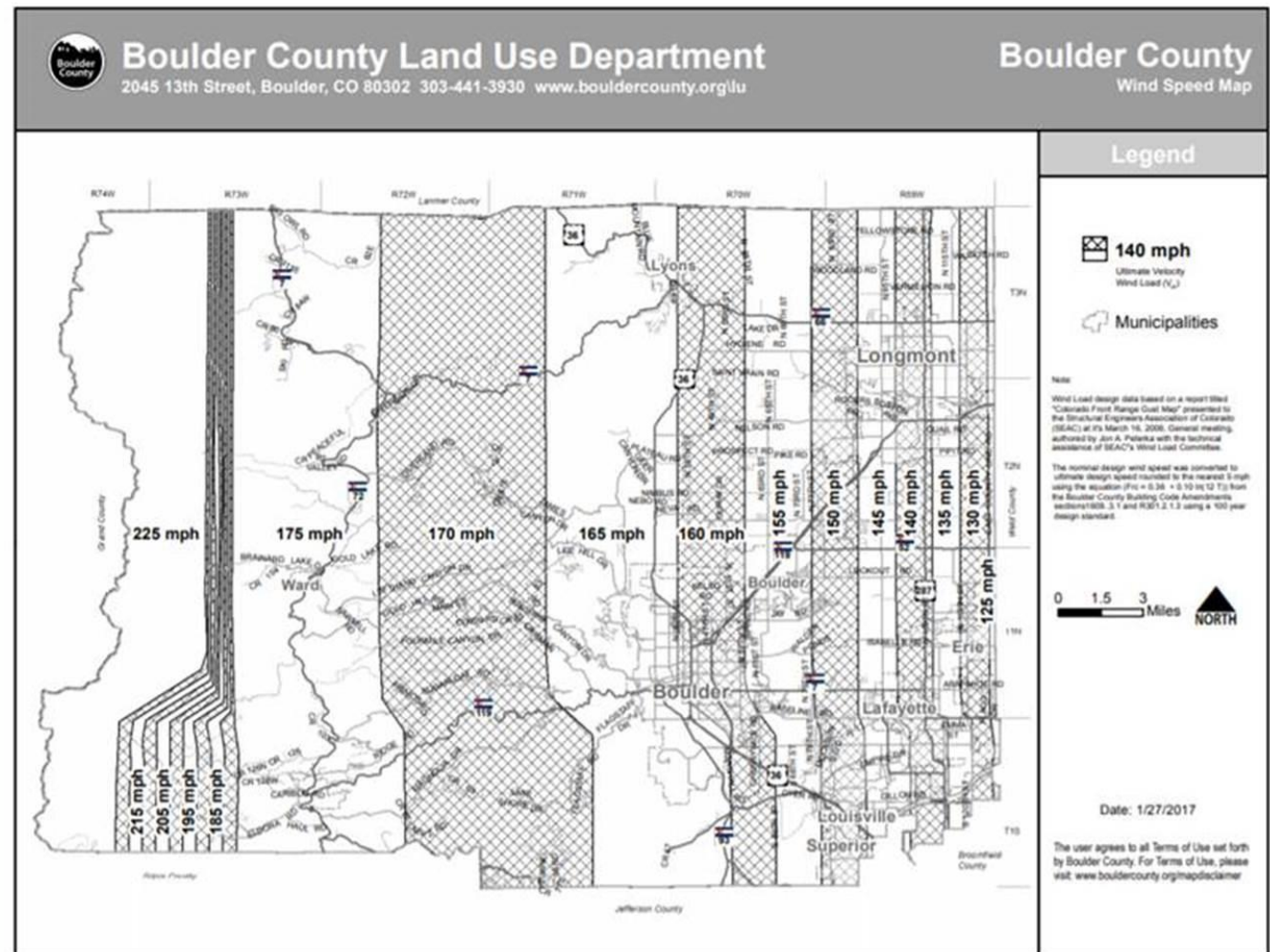
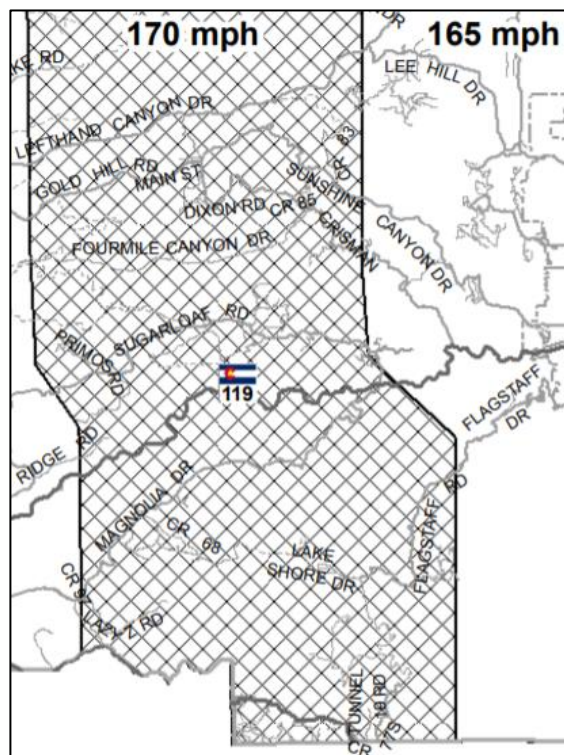
- Located on top of raised dam.
- Diesel powered generator.
- Hydraulic system controls.
- Heating and ventilation equipment.
- Electrical power distribution equipment.
- Restricted access, hardened for security, surveillance systems.

Any feedback on the plan above?



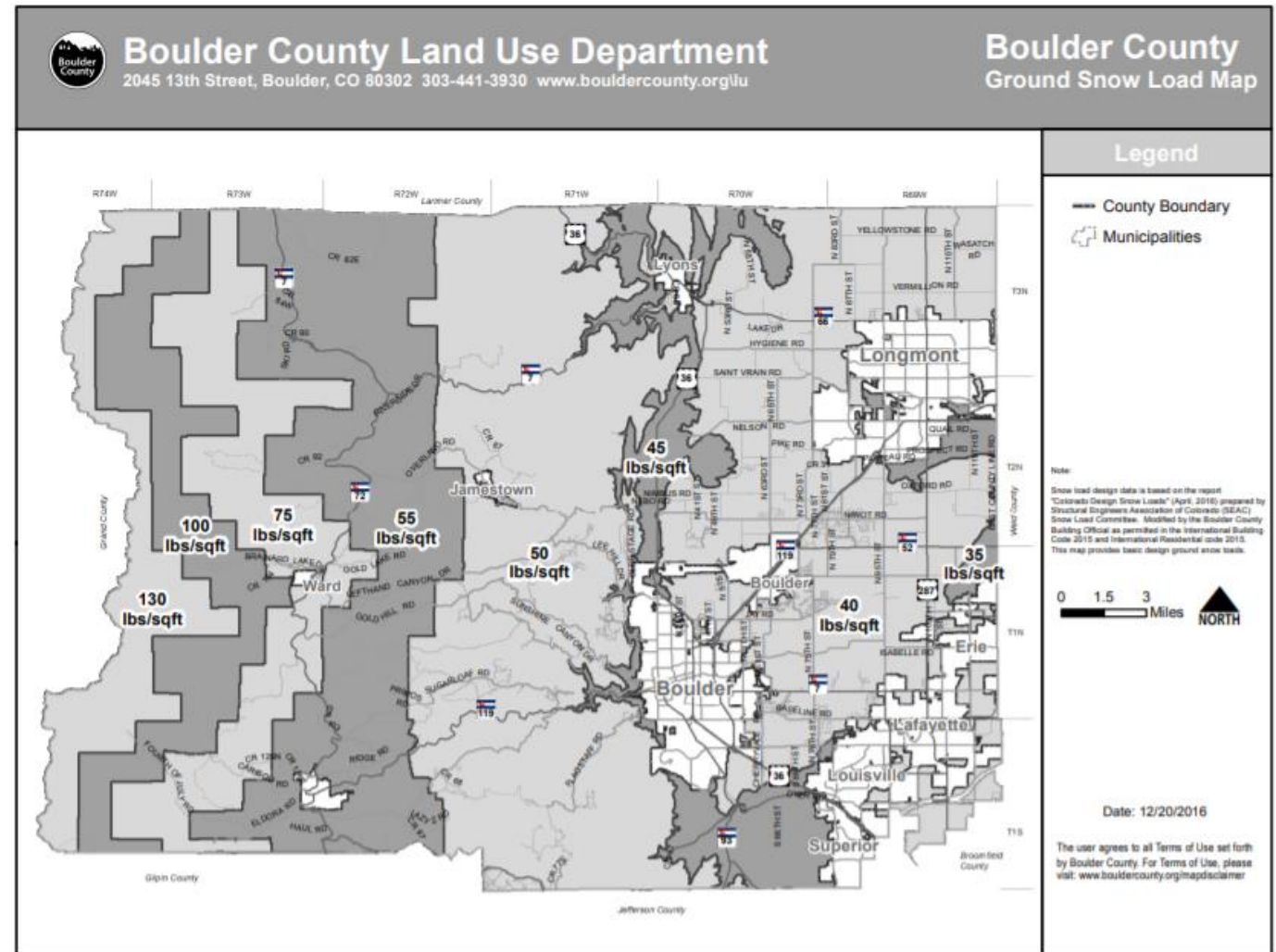
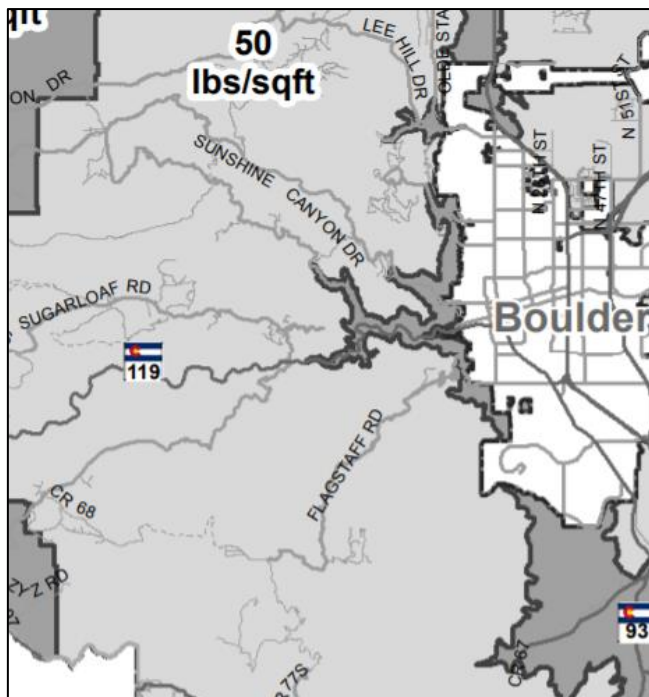
Gross Reservoir – Design Criteria

- Ultimate Velocity Wind Load (V_{ult}) = 170 mph



Gross Reservoir – Design Criteria

Ground Snow Load at
Gross Reservoir 50 lbs./sf

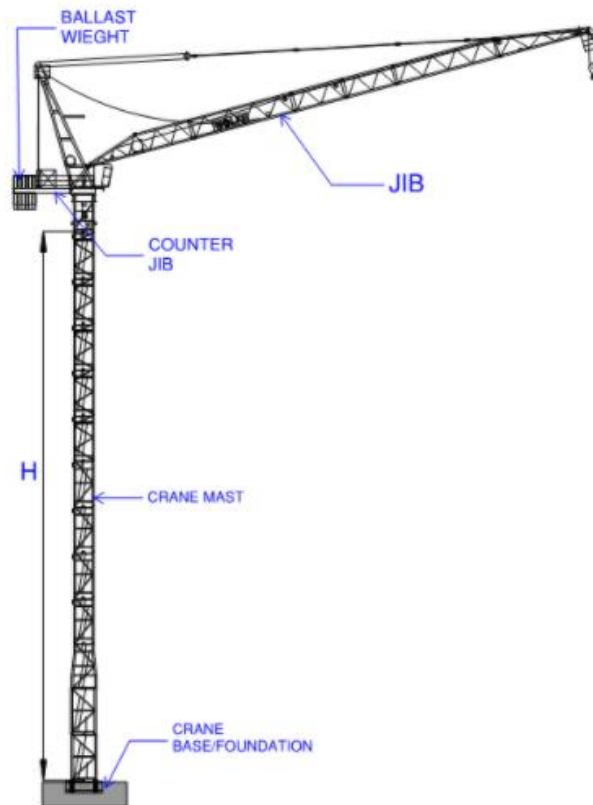


Tower Cranes

Tower Cranes (2) will be employed on the project for hoisting:

- Wind loading per local code.
- Foundation designed by PE.

Any feedback on the information above?



Boulder County Building Permit Requirements

- Boulder County has adopted the 2015 I-Codes with the Boulder County Building Code (BCBC) amendments (Updated October 10, 2017).
- Per International Building Code section 3103.1.1, temporary structures and uses shall conform to the structural strength, fire safety, means of egress, accessibility, light, ventilation and sanitary requirements of this code as necessary to ensure public health, safety and general welfare.
- Temporary structures must demonstrate compliance to Boulder County Building Code amendment section 108 and IBC section 3103.
- Separate structures, independently supported, require separate permits.
- Fire Protection District must provide documentation to Boulder County indicating approval of the plans and specifications of commercial projects before the building permit can be issued.

Boulder County Building Permit Requirements

- Use IBC Table 1604.5 Risk Category II for all occupied structures. Propose Risk category I for non-occupied storage facilities.
- Address required for each permit application.
- Soils report for foundation structures. Soil density will be required to be confirmed by a Colorado licensed engineer prior to concrete placement or structural anchor acceptance.
- Variance requests go to Head Building Official before Building Permit application.
- New building permit applications will be made through Boulder County's on-line portal.

Anticipated Schedule

2020	2021	2022	2022-2028
FERC Order received	FERC plans finalized and submitted	FERC Order mandates construction begin	<ul style="list-style-type: none"> • Site mobilization • Dam surface prep, Materials Lab, early site grading • Site development, road improvements, temp rec facilities • Quarrying operations • Dam foundation excavation, grouting, plant setup • Dam raise • Forestry activities/tree clearing • First fill
1041 application submitted to Boulder County	1041 application review and decision (anticipate Aug.)	Receive Boulder County building permits (prior to July 2022 FERC deadline)	
	Begin Boulder County building permit process (Anticipate Aug.)		

Discussion

- Did we answer the questions you had?
- Is there any other feedback you have for us?
- Based on the presentation today, is there anyone else we should talk with?

Future Discussion Topics:

- Floodplain Management - 2/8/21 at 11 a.m.
- Tree Removal and Haul Routes Planning - 2/10/21 at 2 p.m.