



# DEN BUSINESS EDUCATION COURSES

## New AIM Processes and How They Relate to Strategic Objectives

Dave Mashburn  
Facilities Supervisor  
December 11, 2019

# AGENDA



This discussion will include an overview of:

- 7 Strategic Objectives and the Strategic Planning Cycle
- The Design Review Committee (DRC)
- The Project Life Cycle
- Design Standard Manuals
- The Permitting Process



DENVER INTERNATIONAL AIRPORT

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# DENVER INTERNATIONAL AIRPORT Strategic Objectives

Today's Vision, Tomorrow's Reality

Shawn Smith & Tom Lisi  
DEN Culture & Strategy  
December 11, 2019

# DEN STRATEGIC OBJECTIVES



- **Shawn Smith**

- Sr Director of Strategy & Innovation
- City & County of Denver:
  - Denver International Airport
  - Department of Public Safety
- United States Navy



- **Tom Lisi**

- Sr Manager Continuous Improvement
- City & County of Denver:
  - Denver International Airport
- United Airlines



# DEN STRATEGIC OBJECTIVES



## DEN Facts:

- World ranking: 20th busiest by passengers
- U.S. ranking: 5th busiest by passengers
- Annual passenger traffic: 64.5 million in 2018
- Annual economic impact: \$26.3 billion
- Current investments include:
  - Great Hall
  - Concourse Expansion
  - Pena Blvd project

# DEN STRATEGIC OBJECTIVES



- DEN Strategic Objectives:
  - Putting DEN on the World Map
  - Winning the Hearts of Our Customers
  - Inspiring Employees
  - Excelling in Financial Performance
  - Operational Excellence
  - DEN Real Estate
  - Investing for Sustainability
    - Environmental
    - Social
    - Economic





# DEN ACCOMPLISHMENTS

- International flights added
- Increase in overall flights and destinations
- Concourse Expansion
- Concessions RFP's
- Passenger Flow Value Stream maps
- DEN Awards:
  - America's Second-best Large Airport in 2019 – Wall Street Journal
  - 2019 Best Regional Airport in North America – Skytrax
  - 2019 Airport Food Hall of the Year (Denver Central Market) – Airport FAB





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# DRC DESIGN REVIEW COMMITTEE

Audrey Voorhies, AIA, NCARB  
Architect Associate  
December 11, 2019

# DESIGN INTENT



*The goal of the design review committee is to uphold the design intent and maintain compatibility with the DEN aesthetic. This process organizes, coordinates and problem solves the design planning to enhance the quality and design performance.*

# DESIGN CRITERIA



The Design Review Committee will evaluate each design criteria to determine if the design is in line with the DEN Design Principles and other airport guidelines and standards which are posted on [www.flydenver.com](http://www.flydenver.com).

- Overall Design Aesthetic
- Passenger Facing Elements
- Materials
- Signage and Wayfinding
- Circulation
- Lighting
- Landscape
- Constructability

# SUBMISSION REQUIREMENTS



## **Design Submittal Process**

Applicants are required to provide a complete submission application as well as an electronic version (PDF) of the submittal package for the DEN City Liaison to review prior to the final submission to the DRC Coordinator.

## **City Liaison Review**

The DEN City Liaison will verify the submission is complete before final submission to the DRC Coordinator. If items are required that were not submitted by the submittal deadline, the item may not make it onto the agenda for the following week.

## **Submittal Package**

Submittals shall be electronic, 11x 17 format, except for material boards which are limited to a maximum of 24" x 36" in size. Smaller size material boards are preferred. Submittal components are listed on the following pages.



# APPLICATION FORM



## DRC Submission Application

Before any presentation is submitted to the Design Review Committee Coordinator for agenda consideration, this form is to be completed and all required materials must be submitted to the DRC City Liaison. The information below is to be filled out in conjunction with the DRC City Liaison.



<b>Project</b>	
<b>Tenant Point of Contact</b>	
<b>Designer of Record</b>	
<b>DRC City Liaison</b>	
<b>Design Requirements In Business Agreement/ RFP language</b>	
<b>Company Brand Elements</b>	
<b>Previous DRC Comments</b>	
<b>Other</b>	

Drawing Package Requirements are due to the DRC Coordinator in PDF format unless noted otherwise no later than Friday (End of Business) before the presentation:

Elevations including adequate portion of adjacent space to show context

Location Plan

Floor Plan



Denver International Airport | 8500 Peña Boulevard | Denver, CO 80249-6340 | (303) 342-7000 | www.flydenver.com

Reflected Ceiling Plan

Finish Floor Plan

Millwork/Casework

Lighting Fixtures

High Quality Renderings (minimum of 2)

Material Board (24"x36" physical board with materials)

Signage Package

Design Criteria:

The following items are criteria in which the DRC will provide feedback. It is encouraged that the DOR fill out how these items are accomplished referencing DEN Design Principles as well as Design Guidelines when applicable.



Criteria	DOR Comments	DRC Comments
Overall Design Aesthetic		
Passenger Facing Elements		
Materials		
Signage		
Circulation		
Lighting		
Landscaping		



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## The DRC Submission Application

This application is required to be completed for every submittal every time and given to the City Liaison for delivery to the DRC Coordinator. This form is important to track the history of DRC reviews. We will know better where to go when we know where we have been!

# PRESENTATION

## High Quality Renderings

A minimum of two renderings in electronic format (PDF) are required to show the design intent from at least two vantage points and identify, at a minimum, the following:

- Storefront with materials indicated shown in context of surrounding area
- Show 6'-0" on either side of lease space to show transition to adjacent existing storefronts
- Floor, ceiling, fixture and other store components and materials indicated

## Floor and Reflected Ceiling Plan

- One floor plan and
- One reflected ceiling plan
- Dimensions
- Key plan
- Graphic scale
- North arrow, with north up
- Finish floor pattern (half tone)
- Casework, millwork, moveable fixtures, and other store components
- Ceiling and soffit heights
- Lighting fixtures with cut sheets and ceiling types

## Interior Elevations

- Dimensions
- Casework, millwork, moveable fixtures, and other store components
- Ceiling and soffit heights
- Lighting fixtures



# MATERIALS

## Materials Board

One board will be required to show an applicant's proposed palette of materials. The materials board shall include:

- Physical material samples indicating color, form and texture – material samples shall be securely affixed and applied adhesive shall not affect the material appearance.
- Material key plan that clearly relates to the material application in renderings for visual understanding.

## Renderings

The renderings in conjunction with the materials board shall be of such a high quality as to accurately and clearly depict the design intent of the tenant's proposal.

Note: It is recommended that physical material samples be attached to the board by Velcro.





# DESIGN REVIEW MEETINGS: PROTOCOLS



## Design Review Committee Action

The DRC will discuss the presentation with the applicant during the meeting. The verdict will be determined by the DRC with a motion being made and seconded during the meeting, and it shall fall in one of the following categories.

- Approved
- Approved as Noted
- Revise and Resubmit
- Rejected
- Review Deferred

In the week following the meeting, meeting minutes will be sent out to DRC members and to the City Liaisons for distribution to the applicant.



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# AIM DEVELOPMENT PROJECT LIFECYCLE

TRAVIS VAZANSKY, P.E.

DECEMBER 11, 2019

# AIM Development Project Lifecycle



Throughout the project, continuously:

- Reassess
  - Risk
  - Schedule
  - Budget/Cost
- Engage Stakeholders
- Review Charter

Related Documents:

- AIM PMG Terminology
- Unifier User Guide

AIM – Airport Infrastructure Management  
 DDS – Denver Development Services  
 LEED – Leadership in Energy and Environmental Design  
 O&M – Operations and Maintenance  
 PMIS – Project Management Information Systems  
 PRRB – Project Request Review Board

Last Updated: 6/11/2018







# DESIGN STANDARDS MANUALS & SPECIFICATIONS

JAMES T. GLAVIN, PE, PMP, LEED AP BD+C  
MANAGER OF SYSTEMS  
DECEMBER 11, 2019



# AGENDA

- Design Standards Manuals (DSMs) – What & Where
- Working with DEN Specifications
- The DEN update process
- 2019 DSM Updates
- Upcoming changes
- Q & A

# DSM AVAILABILITY



- <http://business.flydenver.com/bizops/bizRequirements.asp>

The screenshot shows the DEN Business Services website. The navigation bar includes 'Travelers', 'Business', 'About DEN', 'Westin Hotel', and 'DEN Real Estate'. Below the navigation bar is a dark blue banner with links: 'ARFF Academy', 'Business Services', 'Commerce Hub', 'Concessions', 'Contracts', and 'Future Opportunities'. The main content area is titled 'Business Requirements — Business Services' and features a sub-section 'Operating Your Business at DEN'. Under this, there are several categories of requirements, including 'Construction Contract Requirements', 'Professional Services Contract Requirements', and 'Employee Identification/Badging Requirements'. A prominent section is 'AIRPORT GUIDELINES & POLICIES', which contains a list of documents. A red box highlights the 'Design Standards Manuals' section, which includes links to 'Standards and Criteria', 'Architectural', 'Communications & Electronic Systems', 'Digital Facilities & Infrastructure/BIM', 'Electrical', 'Life-Safety', 'Mechanical', 'Structural', and 'DEN Fueling Systems'. A red arrow points from this box to the right-hand callout.

- Design Standards Manuals
  - [Standards and Criteria](#) (Adobe PDF)
  - [Architectural](#) (Adobe PDF)
  - [Communications & Electronic Systems](#) (Adobe PDF)
  - [Digital Facilities & Infrastructure/BIM](#) (Adobe PDF)
  - [Electrical](#) (Adobe PDF)
  - [Life-Safety](#) (Adobe PDF)
  - [Mechanical](#) (Adobe PDF)
  - [Structural](#) (Adobe PDF)
  - [DEN Fueling Systems](#) (Adobe PDF)



# USE AND REFERENCES

- DSMs are not to be referenced in construction docs

The Design Standards shall not be quoted, copied, or referenced in any bidding or construction contract documents. All information contained in these standards must be fully explained and shown in all bidding and contract documents.

- DEN standard specifications intended to compliment
  - See hidden editing instructions in each specification section
- DSM Updates identified with **Green** or **Blue** text. Example:

This document lists the **Digital Facilities and Infrastructure (DFI)** requirements for any DEN project or operation whether created in-house or by external consultants. The DEN **DFI Design Standards Manual (DFI DSM)** is both a stand-alone document for staff and consultants to understand the DEN DFI specific requirements for starting projects, as well as a resource used to inform a project execution plan.

**DFI encompasses the use of Building Information Modeling (BIM) and Civil Information modeling (CIM) tools and processes and their integration with Asset Management (AM) through the delivery and operational phases of the lifecycle of DEN assets and/or properties.**

# SPECIFICATION AVAILABILITY

- Editable format for use in design projects (.rtf)
- Request copies from the DEN Project Manager
- Must obtain new copies for every project
- Sections may be updated frequently
- **Use tracked changes** on all projects

# UPDATE PROCESS AND SCHEDULE

- DSMs: Quarterly updates
  - Internal stakeholder review
  - Review and publication
- Specifications: Updated as needed
  - Always request new specifications at project start

# DSM UPDATES IN 2019



- More hyperlinks
- Improved section numbering
- New DSM volumes
- Summary of Revisions (with links)

## Summary of Revisions

The following tables list revisions to the Standards and Criteria DSM.

### Third Quarter Revisions

Reference	Revision Description
<a href="#">202.4. Contract Documents Phase, 501.4. Systems Drawings</a>	Submittal requirements added
<a href="#">3208.3. Minimum Submittal Requirements and Quantities</a>	
<a href="#">3209.3. Minimum Submittal Requirements and Quantities</a>	
<a href="#">3209.4. Construction Documents 60% Submittal</a>	
<a href="#">3210.4. Construction Documents 90% Submittal</a>	
<a href="#">3211.4. Final Construction Documents</a>	
<a href="#">303.2.20 DEN Environmental Review</a>	Environmental form updated
<a href="#">501.1. Plans</a>	Item Z added to list
<a href="#">1100.5. Coversheet, Index and Certification Page</a>	Coversheet requirement added
<a href="#">1600.3. Sequence</a>	Sequence numbering requirements added
<a href="#">Section 1807. Mechanical Design Submittal Requirements</a>	New Section
<a href="#">Section 1907. Plumbing Design Submittal Requirements</a>	New Section
<a href="#">Section 2002. Flow Diagrams</a>	Flow Diagram requirements updated
<a href="#">Section 2112. Electrical Design Submittal Requirements</a>	New Section
<a href="#">Section 2200. Communications/Electronic Systems</a>	Communications/Electronic system added
<a href="#">2201.17. Drawing Delineation Types</a>	Types added
<a href="#">3208.2. 30% Submittal</a>	Contract submittal requirement added
<a href="#">3208.4. Construction Documents 30% Submittal</a>	Construction submittal requirements added

- **New in 2019**
- Electronic systems
  - Networks
  - Radio
  - Distributed antenna systems
  - FIDS, BIDS, GIDS
  - CCTV/Security
  - EMCS



# DSM FUELING



- **New in 2019**
- Aviation Fueling systems
  - Tank Farm
  - Pipelines
  - Hydrants
  - Corrosion Protection
  - Leak Detection
  - Emergency Fuel Shutoff
  - Inspection, Testing & Flushing



LIVE LIFE. TRAVEL WELL.

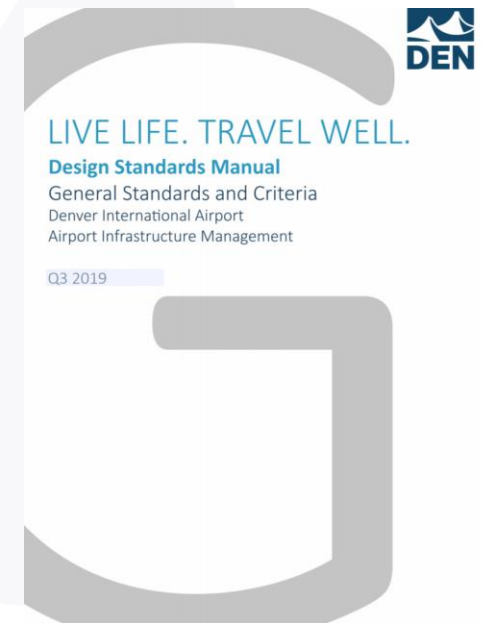
**Design Standards Manual**  
Fueling Systems  
Denver International Airport  
Airport Infrastructure Management

Q3 2019

# DSM GENERAL STANDARDS & CRITERIA



- Covers all projects
  - Requirements for Drawings, Specifications, and Design Analysis Report
  - Requirements for different design phases
  - Bid proposal and evaluation requirements
  - Record document requirements
  - Design contract/task closeout requirements
  - Quality control plan
- 2019 Updates:
  - Explicit design submittal MEP requirements
  - Required sheets and diagrams for every discipline
  - Contract administration requirements



- 2019 Updates:

- Updated definitions and added information (e.g. DRC, Art Program)
- Roof type and cool roof requirements added

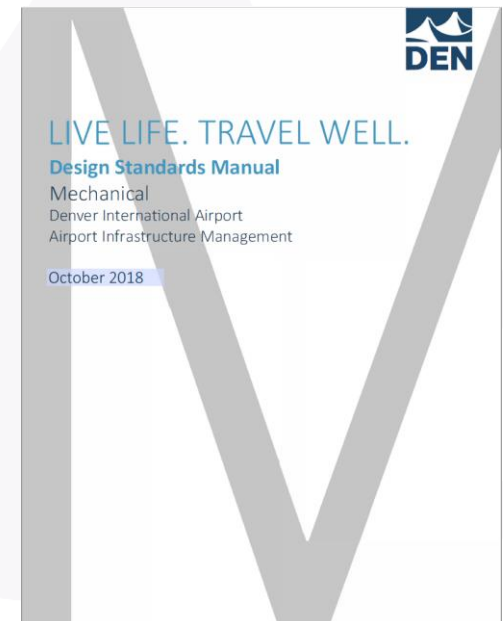
- Added Sections:

- Openings, Vinyl Overhead Doors, Exterior Walls
- Bird Control
- Sustainability, Passive Strategies
- Accessibility, Vertical Circulation, Life Safety Design
- Interior Partitions, Design Requirements
- Accommodations for Service Dogs in the Public Areas



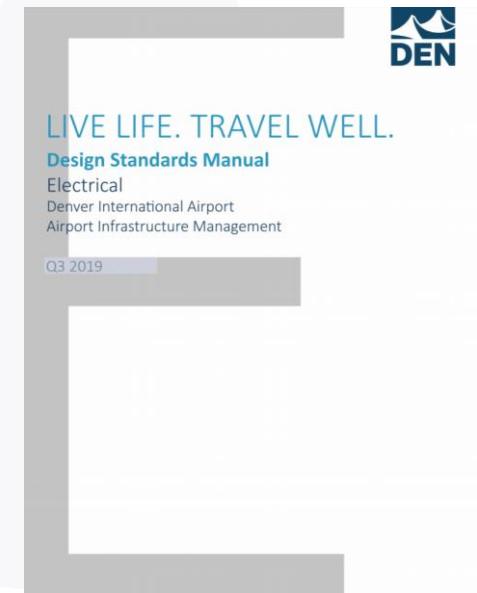


- 2019 Updates:
  - Equipment and Controls Locations and Access
  - Updated requirement for Mechanical Systems Routing
  - Controls Systems Manufacturers and Naming
  - Building Expansion Requirements
  - Option for Heat Pump Water Heaters added
  - Clarification on direction of use for the Basis of Design



- 2019 Updates:

- Information moved to Life Safety DSM & Comm/Electronic Systems DSM
- Service separation requirements
- Equipment naming – PV, transformers, panelboards
- Lighting fixtures & levels – terminal, airside
- UPS runtime requirements



# DSM LIFE SAFETY



- 2019 Updates:
  - Deferred design constraints and requirements
  - Design parameters & device locations
  - Interim systems during construction
  - Shop drawing details
  - Added systems
    - Radio enhancement
    - 2-way communications
    - Clean agent systems
    - Kitchen hoods
    - Other miscellaneous



LIVE LIFE. TRAVEL WELL.  
**Design Standards Manual**  
Life Safety Systems  
Denver International Airport  
Airport Infrastructure Management

2017

EXIT >

# DSM STRUCTURAL



- 2019 Updates:
  - Updated standards
  - Reporting requirements
  - Capacities
  - Load calculations are mandatory, Static & Live
  - Geotechnical Data



LIVE LIFE. TRAVEL WELL.

**Design Standards Manual**

Structural  
Denver International Airport  
Airport Infrastructure Management

Q2 2019

# DSM DIGITAL FACILITIES & INFRASTRUCTURE

- 2019 Updates:
  - Aligned to UNIFORMAT standards
  - New Introduction and Overview
  - Revised EDCI Policy and BPXP instructions
  - Re-organized chapters
  - Added/deleted appendices





# UPCOMING CHANGES IN 2020

- New DSMs:
  - DSM Civil
  - DSM Certification, Validation & High-Performance Buildings
- Improvements for consultants
  - Checklists
  - More updates, incorporating new technology



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# PERMITTING PROCEDURES AT DENVER INTERNATIONAL AIRPORT





# WHY ARE WE HERE?

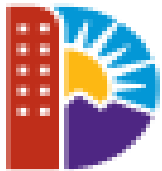
- Summary of permitting procedures for projects at DEN
  - City and County of Denver (CCD) Community Planning and Development (CPD)
  - Denver Fire Department (DFD)
  - Colorado Department of Public Health and Environment (CDPHE)
  - Federal Aviation Administration (FAA)
  - US Army Corps of Engineers
- Roles and Responsibilities
- Submittal Process and Permit Fees
- Inspections
- Permit Close-out



# ROLES AND RESPONSIBILITIES



- **DEN Project Manager** – ultimately responsible for permitting coordination.
- **Project Management Team (PMT)** – represents DEN on larger projects as extension of staff for the DEN Project Manager.



- **CCD Community Planning and Development (CPD) DEN**

**Coordinator** – located downtown in the Webb Building and coordinates all project reviews and permits for DEN projects.

- **CCD Public Works / Wastewater Management Division (WMD)** – issues sewer use and drainage permits (SUDP), storm sewer project reviews (SSPR), erosion control (EC) permits.
- **Denver Fire Department (DFD)** – issues fire protection, conveyance, hot works, and other types of permits to contractors, conducts inspections.



# ROLES AND RESPONSIBILITIES

- **Architects and Engineers of Record** – responsible for stamping and signing submittals for CPD and DFD review, attending CPD/DFD meetings.
- **Licensed (with the City) Construction Contractors and Subcontractors** – responsible for pulling permits and closing permits out when completed.
- **Colorado Department of Public Health and Environment (CDPHE)** – issues permits to contractors for air quality and general stormwater permits.
- **Federal Aviation Administration (FAA)** – reviews projects under NEPA and issues 7460 permits for DEN projects.
- **U.S. Army Corps of Engineers** – issues Section 404 permits for waters of the U.S. and wetland impacts on DEN property.



US Army Corps of Engineers

# DEN PROCEDURES

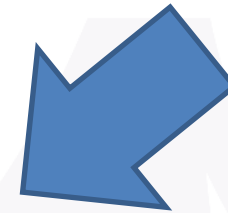


- Coordinate with DEN Project Manager and/or PMT on permitting process.
- Resource: DEN Environmental Management System  
[http://www.flydenver.com/about/administration/environmental\\_management](http://www.flydenver.com/about/administration/environmental_management)
- Permitting process can start in the design phase or after the contractor has been selected.
- Have a designated permitting coordinator on your team.
- Need a **Letter of Authorization (LOA)** for the project from the DEN Project Manager that will designate the type of project, type of review at CPD, and how permit fees will be collected.
- For larger projects, CPD permitting fees may be paid by DEN directly, so early coordination is critical to identify requirements. All other permit fees are the responsibility of the contractor or designers.

# CPD PERMITS



- Coordinate with CPD DEN Coordinator to set up a pre-submittal meeting with CPD, WMD, and DFD reviewers
  - Can be at the design phase with architects and engineers or record
  - Include general contractor if they are on board
  - Have a preliminary schedule of phasing, submittals, and construction dates
- Submittal Requirements:
  - Letter of Authorization from DEN Project Manager
  - **Confirm project address (one of the biggest mistakes)**
  - Projects will be subject to 2019 Denver Building and Fire Code (DBC)
  - If hardcopies are submitted: 2 original sets of architectural or engineering stamped and signed drawings, 1 set of stamped and signed specifications, 1 set of stamped and signed calculations, and 1 set of product and material sheets
  - If electronic submitted: plans have to be electronically signed by each discipline.
- No zoning permits are required at DEN. DEN is exempt from the Green Roof Initiative and Affordable Housing fees for most projects.

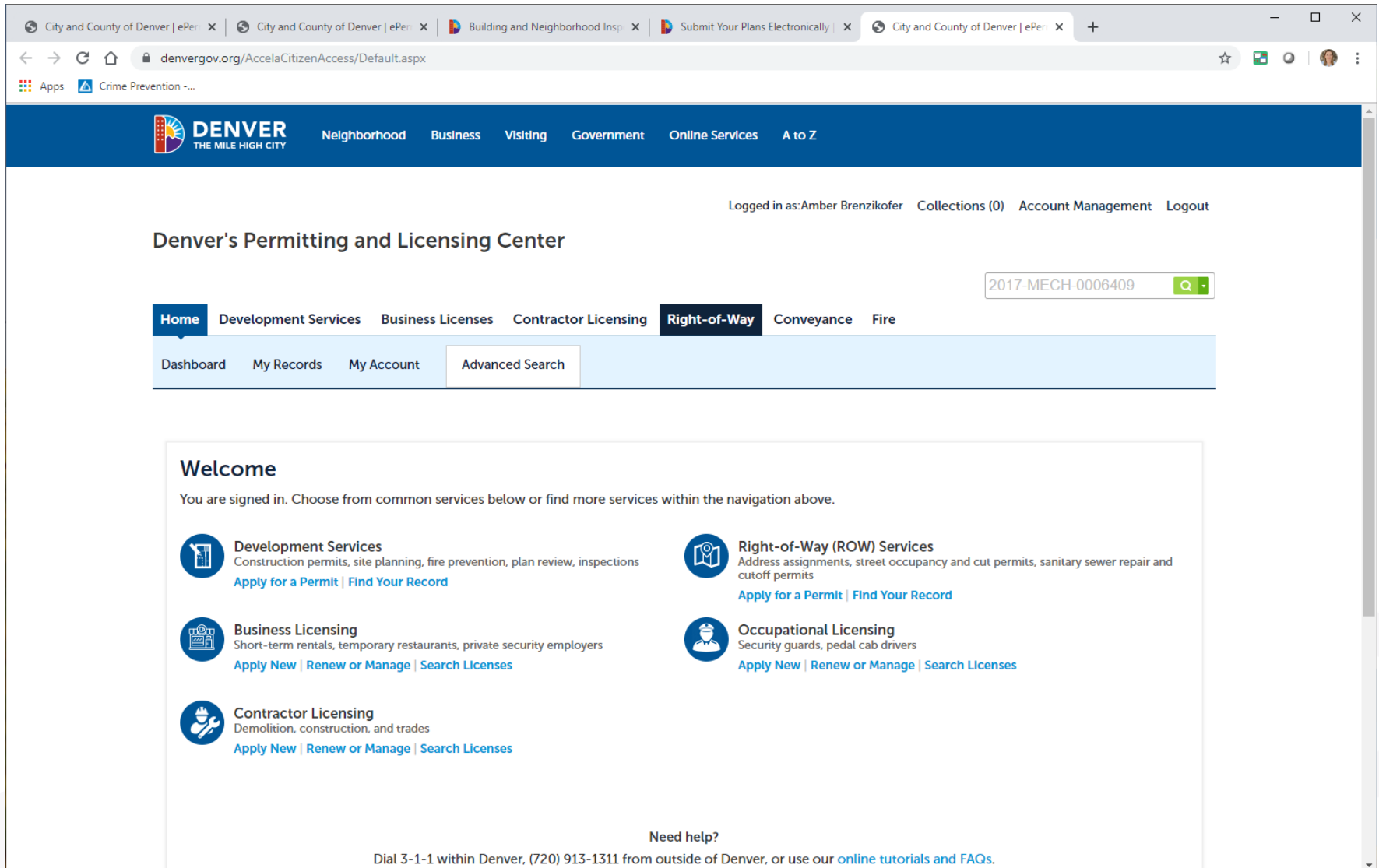


# CPD PERMIT SUBMITTALS



- Forms:
  - Forms located in Commercial Permitting Handbook at:
    - [https://www.denvergov.org/content/dam/denvergov/Portals/696/documents/Other\\_forms\\_and\\_guides/Commercial\\_Permitting\\_Handbook.pdf](https://www.denvergov.org/content/dam/denvergov/Portals/696/documents/Other_forms_and_guides/Commercial_Permitting_Handbook.pdf)
      - Plan Review Contact List
      - Valuation Statement
      - Asbestos Inspection Acknowledgement Form
      - Affordable Housing Fee Application
    - Deferred submittals, if needed (e.g., fire protection shop drawings)
  - All plan submittals, permit fee payments, and permit issuances are done online at the following e-Permit link:  
<https://www.denvergov.org/AccelaCitizenAccess/Default.aspx>
  - Each company will need to set up an account under Accela Citizen Access.

# CCD Accela Citizens Access Website



The screenshot shows a web browser window with the URL `denvergov.org/AccelaCitizenAccess/Default.aspx`. The page header includes the Denver logo and navigation links: Neighborhood, Business, Visiting, Government, Online Services, and A to Z. A user is logged in as Amber Brenzikofer, with links for Collections (0), Account Management, and Logout. The main heading is "Denver's Permitting and Licensing Center". A search bar contains the text "2017-MECH-0006409". Below the search bar is a navigation menu with tabs: Home, Development Services, Business Licenses, Contractor Licensing, Right-of-Way, Conveyance, and Fire. Under the "Right-of-Way" tab, there is a sub-menu with "Dashboard", "My Records", "My Account", and "Advanced Search". The main content area features a "Welcome" message and six service categories, each with an icon, a title, a description, and links to "Apply for a Permit" and "Find Your Record":

- Development Services**: Construction permits, site planning, fire prevention, plan review, inspections. [Apply for a Permit](#) | [Find Your Record](#)
- Business Licensing**: Short-term rentals, temporary restaurants, private security employers. [Apply New](#) | [Renew or Manage](#) | [Search Licenses](#)
- Contractor Licensing**: Demolition, construction, and trades. [Apply New](#) | [Renew or Manage](#) | [Search Licenses](#)
- Right-of-Way (ROW) Services**: Address assignments, street occupancy and cut permits, sanitary sewer repair and cutoff permits. [Apply for a Permit](#) | [Find Your Record](#)
- Occupational Licensing**: Security guards, pedal cab drivers. [Apply New](#) | [Renew or Manage](#) | [Search Licenses](#)

At the bottom, there is a "Need help?" section with the text: "Dial 3-1-1 within Denver, (720) 913-1311 from outside of Denver, or use our [online tutorials and FAQs](#)."

# WASTEWATER PERMITS



- Sewer Use and Drainage Permits (SUDP)
  - Required for almost all DEN projects. Guidelines located at: [https://www.denvergov.org/content/dam/denvergov/Portals/696/documents/SUDP/Commercial Multi-Residential General Guidelines.pdf](https://www.denvergov.org/content/dam/denvergov/Portals/696/documents/SUDP/Commercial%20Multi-Residential%20General%20Guidelines.pdf)
  - Metropolitan Wastewater Reclamation District (METRO) Fee and Sanitary Sewer Services Availability (SAFE) Fee paid to CCD by contractor or DEN
  - Water tap fees paid directly to Denver Water by contractor
- Storm Sewer Project Reviews (SSPR)
  - WMD reviews storm sewer plans at DEN, but not sanitary sewers
  - DEN required to do own storm and sanitary sewer inspections
- Construction Activities Stormwater Discharge Permit (CASDP) or Erosion Control Permits
  - Required if soil disturbance is greater than 1 acre and/or construction staging areas
  - Requires SWMP stamped and signed by a drainage engineer
  - All deliverables are submitted electronically to WMD (same as above)





# WASTEWATER PERMIT SUBMITTALS



- WMD submittals are required to be submitted on the same e-Permit link for other types of submittal (no longer using EFT site):

<https://www.denvergov.org/AccelaCitizenAccess/Default.aspx>

- New! The SUDP application process has been combined with electronic building permit applications for a more streamlined submittal process and faster review times for many SUDP customers.
- All SUDP reviews will now start automatically when a building permit application is received. At a minimum, please include a utility site plan showing the size, type, and location of water, storm sewer, and sanitary sewer lines (and any other [SUDP plans/documents](#) specific to your project) with your building plans to ensure a timely review. **Do not submit separately to SUDP.**
- Resubmittals, SUDP-only reviews for projects that do not need building permits, and SUDP plans submitted after logging in paper plans at the counter can continue to be emailed to [wastewaterpermits@denvergov.org](mailto:wastewaterpermits@denvergov.org).

# TYPES OF CPD PERMITS AND VALUATIONS

- Commercial Construction General Permits COMMCON:
  - Usually pulled by general contractor, need a CCD construction license
  - Fees should include labor, materials, profit, overhead, and equipment
- MEP Permits
  - Mechanical valuation needs to be split out by equipment type:
    - Steam/hot water boilers, water heaters, heating systems, commercial AC/refrig
    - Air handling units, ventilation, ducts, gas piping, range hoods
- Fire Permits (fire alarm, fire sprinklers, emergency communication system[ECS])
- Access Control Permits
- **Contact CPD DEN Coordinator or DEN Reviewers with questions**

# CPD CONTACTS FOR DEN PROJECTS



- CPD DEN Coordinator:

Brad Emerick

[Brad.Emerick@denvergov.org](mailto:Brad.Emerick@denvergov.org)

720-865-2964

- Alternate CPD DEN Coordinator, DEN Architectural and Structural Reviewer:

Keith Morgan

[Keith.Morgan@denvergov.org](mailto:Keith.Morgan@denvergov.org)

720-865-2914

- CPD DEN Mechanical and Plumbing Reviewer:

David Kahn

[David.Kahn@denvergov.org](mailto:David.Kahn@denvergov.org)

720-865-3077

- CPD DEN Electrical Reviewer:

Nancy White

[Nancy.White@denvergov.org](mailto:Nancy.White@denvergov.org)

720-865-3095

- DFD DEN Coordinator:

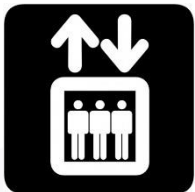
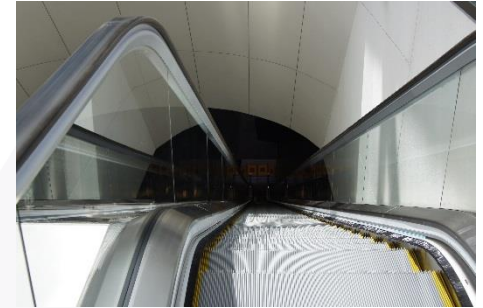
JD Lanz

[James.Lanz@denvergov.org](mailto:James.Lanz@denvergov.org)

720-865-2952

# CONVEYANCES AT DEN

- State of Colorado Division of Oil and Public Safety (OPS) Conveyance Registration and Inspections
  - All elevators, escalators, APM (i.e., the train at DEN), and other regulated conveyances located in Colorado be registered with OPS.
  - Registration fees for each conveyance is required to be paid to OPS by contractor.
  - All conveyance contractors, mechanics, and inspectors must maintain a current license issued by OPS to ensure that the installation, alteration and maintenance of conveyances are completed by qualified personnel.
- DFD Permits and Inspections
  - In the City and County of Denver, DFD permits conveyances for the State, conducts inspections, and issues Certificates of Operation for each device.
    - Conveyances must be registered with OPS before plans are submitted to DFD for review.
    - The contractor will be responsible for paying for the first Certificate of Operation permit fees for each conveyance. DEN will pay for the annual permit fees after that.



# CONSTRUCTION PERMITS AND APPROVALS



- DEN approves contractor hazardous materials management plans and stormwater management plans.
- CPD and WMD permits **will** be needed for temporary onsite construction trailers and staging areas:
  - Permits are needed if connecting trailers to power, water, and sanitary sewer.
  - SUDP permits include staging areas with port-o-lets. Need a letter from the port-o-let company indicating how many units and how often the units will be serviced.
  - Stormwater permits for staging areas with concrete wash-out areas, drum and chemical storage, soil disturbance, BMPs.
  - Trailer complexes may require fire hydrants to be installed if not nearby.
  - Temporary guard shacks need permits.
  - DFD permits for gas-powered temporary generators and electrical plants.
- Construction water use from DEN fire hydrants
  - Requires construction water meter from Denver Water to track water usage
- Xcel temporary electrical meters – need transformer address to get meter



# CPD/WMD EXP. OF PERMIT APPLICATIONS



- If no permit is issued within 180 days following the date of drawing submittal for review (opening of an application), the application will expire and plans and other data submitted will be destroyed.
- The Building Official may extend the timeframe upon written request showing that circumstances beyond the applicant's control.
- The CPD DEN Coordinator will notify DEN Project Manager if time is about to expire and the DEN Project Manager needs to provide written justification to extend the application.



# CONTRACTOR LICENSING REQUIREMENTS



- All work done at DEN must be completed by a CCD-licensed contractor.
- CPD permits will only be issued to CCD-licensed contractors.
- Electrical and plumbing contractors must be licensed by the State of Colorado prior to applying for a CCD contractor's license.
- To pull a permit, contractor will need to show an ID, such as their original contractor license card, a company credit card, or a non-voided blank company check. **Important Note:** The contractors name on company credit card or check must match the name on the contractors license exactly when paying fees.

- Building Permits

- Most building inspections will be conducted the next business day after your request.
- Inspection can be scheduled by phone or online at the following link. Instruction and tutorials are on the site:
  - <https://www.denvergov.org/content/denvergov/en/denver-development-services/help-me-find-/inspections.html>
- If an inspection outside of our normal hours (7:30 a.m. - 3:30 p.m.) is needed, may request an after-hours inspection by filling out a special inspection request form and paid for online.
- Upon completing the inspection, the inspector will leave behind a card indicating whether the work was approved or denied. For failed inspections, the card will include instructions on what steps to take to pass re-inspection.



# CCD PERMIT CLOSEOUT

- Building Permits
  - All contractors need to ensure that their building permits are closed out after construction activities.
- Temporary Certificate of Occupancy (TCO)
  - If a TCO is needed, a TCO inspection card must be signed off by all building inspectors, DFD, wastewater, health department, CPD DEN Coordinator, etc.
- Certificate of Occupancy (CO)
  - If a CO is needed, all permits must be closed out and a CO inspection card must be signed off by all entities above.
- Erosion Control Permits
  - Disturbed sites must have a 70% vegetation coverage or other permanent stabilization measures (e.g., pavement, gravel, riprap) in place before permit can be closed. It can take multiple years to achieve successful vegetation coverage at DEN.

# CDPHE AIR QUALITY PERMITS

- Air Pollutant Emission Notice (APEN) and permits may be needed.
  - <https://www.colorado.gov/pacific/cdphe/air-permits>
- General Construction Permit - Land Development Projects
  - Land development activities that are more than 25 contiguous acres or more than 6 months in duration
  - Concerned with fugitive dust from the site
- Permit Exemptions:
  - A heater or boiler with a design capacity less than or equal to 5 MMBtu/hour that is fueled solely by natural gas or LPG
  - A heater or boiler with a design capacity less than or equal to 10 MMBtu/hour used solely for heating buildings for personal comfort that is fueled solely by natural gas or LPG
  - Storage tank(s) of capacity less than 40,000 gallons of (used or new) lubricating oils
  - Surface area disturbance for purposes of land development that are less than 25 acres AND less than 6 months in duration



# CDPHE GENERAL STORMWATER PERMITS



- Submit complete applications at least 10 days prior to construction
- Stormwater Management Plan (SWMP) must be completed prior to submittal
- CDPHE has 10 days to request additional information, after 10 days with no request, coverage is automatic.
- Certificate will be issued to contractor for authorization to discharge stormwater.
- Inactivation of the permit can occur after all ground surface disturbing activities have been completed, AND 100% of the disturbed area must have a uniform vegetative ground cover of at least 70% of the pre-disturbance density, OR 100% of the disturbed area is 100% stabilized using permanent, physical erosion reduction methods (e.g., rock, concrete, asphalt).



# FEDERAL AVIATION ADMINISTRATION



- NEPA - Environmental Assessment (EA) or Categorical Exclusion (CatEx)
- FAA 7460 Request Form needs to be submitted to DEN PM at least 90 days prior to construction. DEN PM will submit 7460 Form to FAA.

## 7460 REQUEST FORM

Please submit form to: [Planning@flydenver.com](mailto:Planning@flydenver.com)

**PROJECT DESCRIPTION**

Project Title: \_\_\_\_\_  
 Project Number: \_\_\_\_\_  
 Project Manager: \_\_\_\_\_  
 Project Description: (include project boundaries, all project sites, above and below ground structures, project duration, and all equipment and heights.)  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**LOCATIONS**

All information must be provided in DIA LDP or LAT / LONG.  
 Project boundaries and trending information should be provided as polygons.

**Description of Location:**  
 Include all work location details (relationship to nearest RWY). Complete 'Description' field information. Include locations (Temporary or Permanent), elevations (MSL and A.G.L.), and descriptions for each of the following: project boundaries (with max equipment height, tallest structure, crane locations, and trenching / digging locations with depth).  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Additional Crane Information:**

Crane Operation:  Day  Night  Both  
 Can be lowered at night:  Yes  No  
 Start Date: \_\_\_\_\_ End Date: \_\_\_\_\_  
 Max Height(s): \_\_\_\_\_ Swing Radius: \_\_\_\_\_  
 Days in Operation: \_\_\_\_\_

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TOGETHER WE SOAR

## 7460 REQUEST FORM

**SPONSOR**

Attention of (company name): \_\_\_\_\_  
 Name: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 City: \_\_\_\_\_  
 State: \_\_\_\_\_ Zip: \_\_\_\_\_  
 Phone Number: \_\_\_\_\_ Fac: \_\_\_\_\_  
 Email: \_\_\_\_\_

**WORK DETAILS**

Notice of: Fill in as many fields as needed for construction.

New Construction  Alteration  Existing

Construction Timeframe:  
 Permanent  Temporary  
 If temporary, \_\_\_\_\_ Months \_\_\_\_\_ Days

Work Schedule: First date must be at least 90 calendar days in future.  
 Start Date: \_\_\_\_\_  
 End Date: \_\_\_\_\_

**Equipment Type: Check all that apply. If other, please list all equipment for project.**  
 (Include attachment for additional equipment.)

Antenna Tower  Crane  Building  
 Power Line  Landfill  Water Tank  
 Other: \_\_\_\_\_

**Marking/Painting and / or Lighting Preferred (optional):**

Red Lights and Paint  Dual - Red and Medium Intensity  
 White - Medium Intensity  Dual - Red and High Intensity  
 White - High Intensity  Other: \_\_\_\_\_

FCC Antenna Structure Registration Number (optional): \_\_\_\_\_  
 Previous FAA Aeronautical Study Number (optional): \_\_\_\_\_

**ATTACH FILE(S)**

Include CAD drawings  
 Include point table of project boundaries, crane locations, etc. (CSV / Excel / CAD points)  
 Include list of all equipment required for project with AGL height(s)

**FAA 7460 REQUEST FORM**

Federal Aviation Regulation (FAR) Part 77 "Notice of Proposed Construction or Alteration" requires notice to the FAA of any permanent construction and/or erection of temporary structures, both off-airport by others and on-airport property. The FAA requires a minimum of 90 days notice (on average the length of approval is 90-120 days). In order to expedite your request to file a FAA Notice of Proposed Construction or Alteration, Form 7460, the following information is required. Depending on the nature of the project, a CAD drawing may also be requested. Please note - all requested information below must be filled out. Any information omitted, such as latitude/longitude (or LDP) and/or ground elevation, will delay filing until information is received.

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# FAA 7460 REQUESTS

- All temporary construction equipment or structures:
  - Cranes
  - Derricks
  - Earth Moving Equipment
  - Drilling Rigs
  - Haul Routes
  - Staging Areas
  - Stock Piles
  - Temporary lights
  - Fences (Construction or Permanent)
- Any new permanent structures/objects on airport property
- Communication antennas and equipment



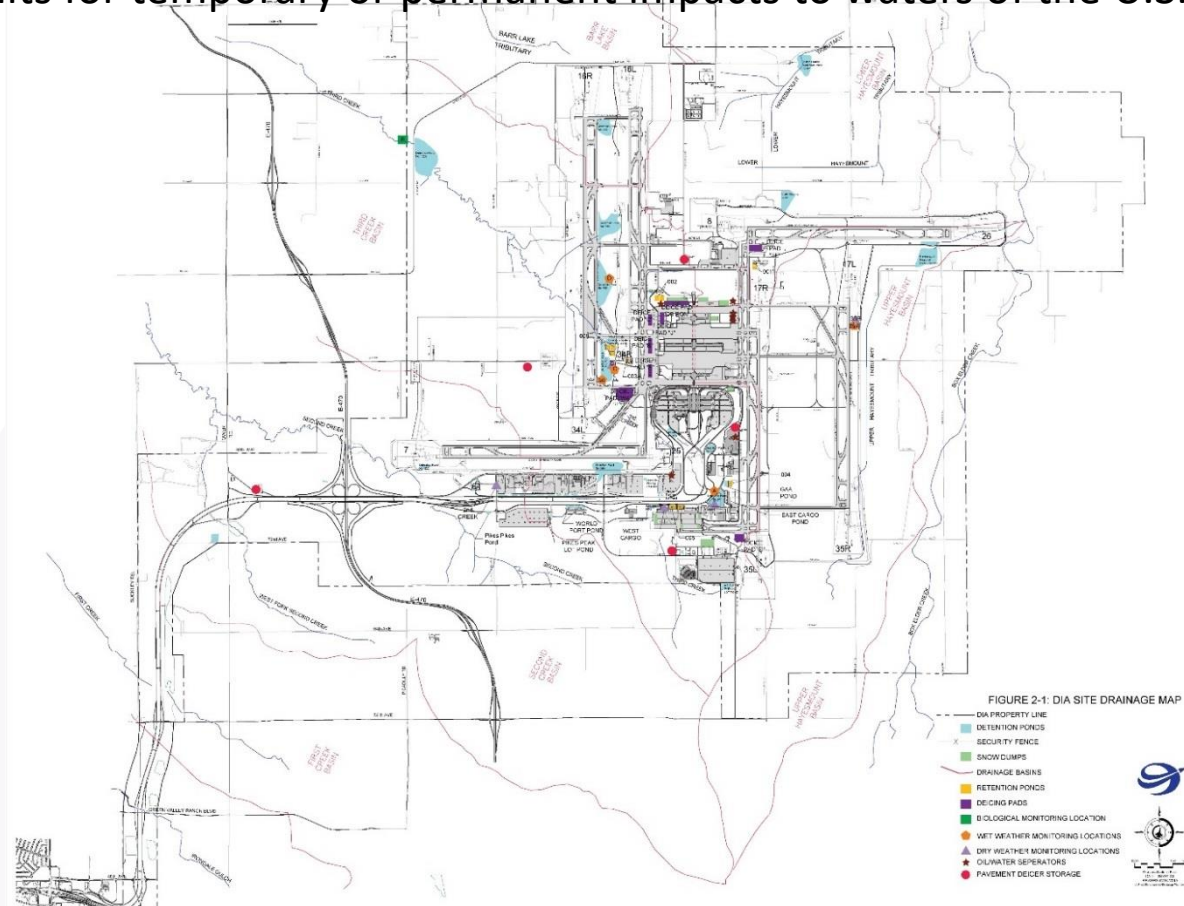
Notify DEN Ops 5 working days  
prior to erection of any  
construction equipment

# DEN SITE DRAINAGE MAP



-  **US Army Corps of Engineers**

✓ Section 404 permits for temporary or permanent impacts to waters of the U.S. and wetlands



# Questions?

