

DUNKIN FOUNDERS

Lot 5 Block 2 of Founders Market Place, Filing No. 1
2-94 Founders Parkway, Castle Rock, CO 80104

Phase 3 Drainage Report

Prepared By:
WC Civil, Inc.
7220 W Jefferson Avenue, Suite 204
Lakewood, CO 80235
Contact: Eric McKnight, P.E.
303-390-0172

Prepared For:
CD Founders-Castle Rock
106 S Kyrene Road
Chandler, AZ 85226
Contact: Bert Hayenga

Submitted To:
Town of Castle Rock

WCC Project No.: 322002
City Project No.: CD24-0003

June 28, 2024

Certification Statement:

I affirm that this report and plan for the Phase III drainage design of Dunkin Founders was prepared by me (or under my direct supervision) in accordance with the provisions of the Town of Castle Rock Drainage Design and Technical Criteria for the owners thereof. I understand that the Town of Castle Rock does not and will not assume liability for drainage facilities designed by others.

Eric McKnight, PE, QSD
Project Manager
Registered Professional Engineer State of Colorado No. 55261

Developer's Statement:

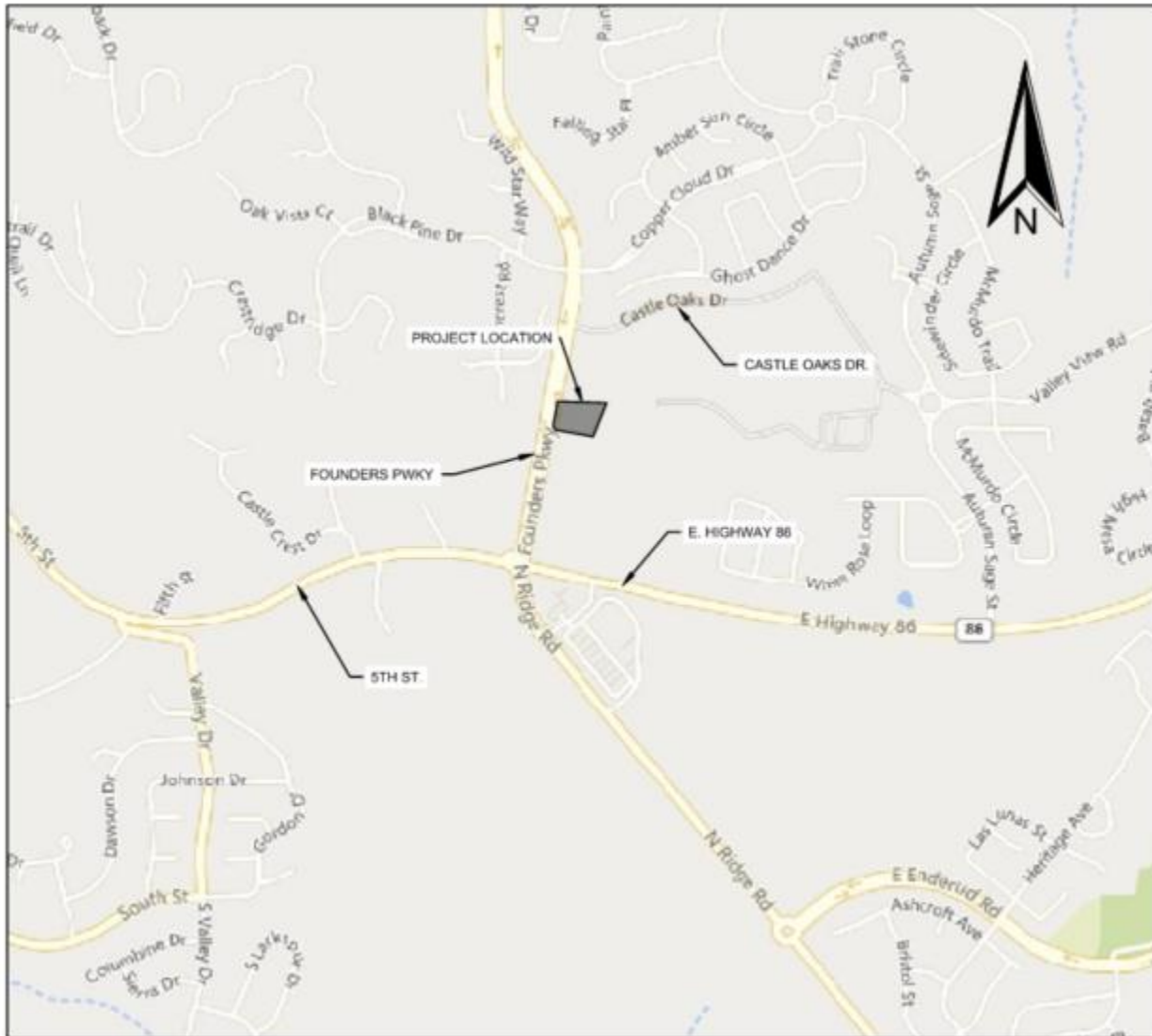
CD Founders-Castle Rock hereby certifies that the drainage facilities for Dunkin Founders shall be constructed according to the design presented in this report. I understand that the Town of Castle Rock does not and will not assume liability for the drainage facilities designed and/or certified by my engineer and that the Town of Castle Rock reviews drainage plans pursuant to the Municipal Code; but cannot, on behalf of Dunkin Founders, guarantee that final drainage design review will absolve CD Founders-Castle Rock and/or their successors and/or assigns of future liability for improper design.

Business Name

Authorized Signature

General Location and Description

Site Location



The Dunkin Founders project (Site) is located in a parcel of land situated in the Southwest Quarter of the Southwest Quarter of Section 6, Township 8 South, Range 66 West of the Sixth Principal Meridian in Douglas County Colorado. The Site is more specifically located at the Northeast Intersection of Founders Parkway and Aloha Court, or approximately 1,000 feet north of the intersection of Founders Parkway and Highway 86.

Description of Property and Land Use

The Site includes Lot 5, Block 2 of Founders Marketplace Filing No. 1 and includes 1.13 total acres.

The site is currently undeveloped and covered with natural grasses. The topography of the site generally slopes from the southwest to the northeast, with slopes ranging from 1 percent to 25 percent. There is approximately 14 feet of relief across the site from southwest to northeast.

Drainage Basin and Sub-Basins

Major Drainage Basins

The site is part of a larger basin that drains to the east to McMurdo Gulch. McMurdo Gulch is a FEMA regulated floodplain shown on FEMA Map No. 08035C0189G (refer to **Appendix C** for FEMA Map). The entire site lies entirely within unshaded “Other Areas,” which is designated as outside the 500-year floodplain as determined by FEMA. Historic offsite flow paths and patterns will be generally maintained and no irrigation facilities will be impacted with the development of this site. The existing regional detention facility was sized for the buildout of this lot and no modifications are needed.

On-Site Existing Minor Drainage Basins

The site, in its existing condition, has been divided into sub-basins and design points as described below:

- Basin EX1 is composed of the northern half of the existing site and ground cover consists entirely of open space. Runoff will travel via surface flows to the northeast corner of the property and leaves the site uncaptured by stormwater infrastructure. Storm water capture runoff from this portion of the site is not practical to drain to a control measure due to the significant slopes and a 20’ elevation change on this portion of the project site causing water to flow into a ditch and drainage easement.
- Basin EX2 is composed of the southern half of the existing site and ground cover consists of mostly open space but also includes the existing driveways. Runoff will travel via surface flows to the eastern end of the site before entering the Aloha Street flowline and into an existing inlet.

A summary of the existing flows can be found in the table below:

Basin	Total Area (sf)	% Impervious	C ₅	C ₁₀₀	Q ₅ (cfs)	Q ₁₀₀ (cfs)
EX1	23,404	2.0%	0.01	0.13	0.01	0.18
EX2	12,744	6.4%	0.02	0.15	0.01	0.11
Total/Overall	36,148	3.6%	0.02	0.15	0.02	0.30

An Existing Drainage Plan (**Appendix D**) and runoff calculations (**Appendix E**) have been included with this report to better illustrate the pre-development hydrologic conditions.

On-Site Proposed Minor Drainage Basins

The site, in its proposed condition, has been divided into sub-basins and design points as described below:

- Basin A1 is composed of the area to the west of the proposed building. Ground cover consists of concrete walks and open space. Runoff will travel via surface flows to an area drain in a depressed area in the grassed area to the west of the building.

- Basin A2 is composed of the southern portion of the proposed building as well as the asphalt drive thru aisle. Ground cover consists of roof area, asphalt pavement, concrete walks, and the grassed area to the east of the building. Runoff will travel via surface flows and concentrated curb and gutter flows before entering a proposed inlet at the eastern end of the basin.
- Basin A3 is composed of a majority of the site including the northern portion of the proposed building and the asphalt parking lot. Ground cover consists of roof area, asphalt pavement, concrete walks, and the grassed area to the east of the building. Runoff will travel via surface flows and concentrated curb and gutter flows before entering a proposed inlet at the eastern end of the basin.
- Basin U1 is composed of the southeastern corner of the site and the ground cover consists entirely of open space. Runoff will travel via surface flows to the southeastern end of the site before entering the Aloha Street flowline and into an existing inlet.
- Basin U2 is composed of the northeastern corner of the site and is entirely consists of open space. Runoff will travel via surface flows to the northeast corner and leave the site uncaptured by proposed stormwater infrastructure.

A summary of the proposed flows can be found in the table below:

Basin	Total Area (sf)	% Impervious	C ₅	C ₁₀₀	Q ₅ (cfs)	Q ₁₀₀ (cfs)
A1	2,089	16.6%	0.15	0.30	0.01	0.04
A2	4,639	78.1%	0.65	0.73	0.10	0.20
A3	25,065	69.8%	0.55	0.65	0.45	0.97
U1	993	23.9%	0.15	0.30	0.00	0.02
U2	3,362	2.0%	0.01	0.13	0.00	0.03
Total/Overall	36,148	60.2%	0.50	0.62	0.57	1.26

A Proposed Drainage Plan (**Appendix D**) and runoff calculations (**Appendix E**) have been included with this report to better illustrate the post-development hydrologic conditions.

A summary of the development's disturbed area and increase in overall runoff can be found in the table below:

	Total Area (sf)	% Impervious	Q ₅ (cfs)	Q ₁₀₀ (cfs)
Existing	36,148	3.6%	0.02	0.30
Proposed	36,148	61.9%	0.58	1.27
Change	-	+58.3%	+0.56	+0.97

With this increase in runoff and impervious area, detention and water quality treatment are required to mitigate these impacts.

Detention Facility Capacity Analysis

The storage and water quality treatment have been provided for the site (and several others in the Founders Crossing development) in their developed conditions in the existing detention facility located to the southwest of the site. As outlined in the Founders Crossing Phase 3 Drainage Report by Atwell, the detention facility to the northeast of the site collects tributary flows from the surrounding sites before storing, treating, and discharging them via controlled release into the existing channel to the east of the site.

In the Founders Crossing Drainage Report, the site is entirely analyzed as Basin B9, which was analyzed as a commercial development with an assumed imperviousness of 75% in its developed condition. A comparison of the planned flows against the proposed flows in the Dunkin Founders design can be found below:

Basin	Total Area (ac)	% Impervious	C ₅	C ₁₀₀	Q ₅ (cfs)	Q ₁₀₀ (cfs)
Planned	0.83	75.0%	0.71	0.85	2.46	5.35
Proposed	0.83	61.9%	0.50	0.62	0.58	1.27
Change	-	(-13.1%)	(-0.21)	(-0.23)	(-1.88)	(-4.08)

The overall flow being routed to the detention facility for the proposed development is less than the planned value for the site in the master drainage plan, and thus no on-site storage or treatment is required.

Drainage Design Criteria

Regulations

This drainage report was performed in accordance to the 2012 Town of Castle Rock Storm Drainage Design and Technical Criteria Manual as well as the Urban Drainage and Flood Controls District Urban Storm Drainage Criteria Manual.

Drainage Studies, Master Plans, Site Constraints

The Dunkin Founders site lies within the previously approved Founders Crossing Phase III Drainage Report, prepared by Atwell (revised April 10, 2018). The report was referenced for historic drainage flows and information on the existing, adjacent water quality pond and existing McMurdo Gulch Regional Pond. No master drainage plans from the Town affect the drainage for the site.

Water Quality Enhancement

Best management practices (BMPs) for water quality will be implemented for this site per the Town of Castle Rock and Mile High Flood District Drainage Criteria Manuals.

Stormwater Management Facility Design

Stormwater Conveyance & Storage Facilities

The proposed drainage of the site will be conveyed in a manner similar to historic flows for the site. Flows from the developed portion of the site will be collected through a series of inlets and conveyed through proposed and existing storm sewer infrastructure before discharging into the existing regional detention facility.

Water Quality Enhancement Best Management Practices

Best management practices (BMPs) for water quality will be implemented for this site per the Town of Castle Rock and Mile High Flood District Drainage Criteria Manuals.

Floodplain Modification

There are no anticipated floodplain modifications at this time. Comparing the floodway and floodplain for McMurdo Gulch from the Flood Insurance Rate Map to the proposed development does not show any overlap.

Additional Permitting Requirements

No special permitting requirements are anticipated at this time.

Conclusions

Compliance with Standards

The site's drainage design follows and complies with the Town of Castle Rock Drainage Manual and the Mile High Flood District Drainage Criteria Manual. Runoff values were calculated using the rational method (see Appendix A). These values and Town of Castle Rock rainfall data was used to calculate the runoff from the sub-basins. Surrounding and downstream facilities are not planned to incur any negative effects as a result of this drainage design.

Variances

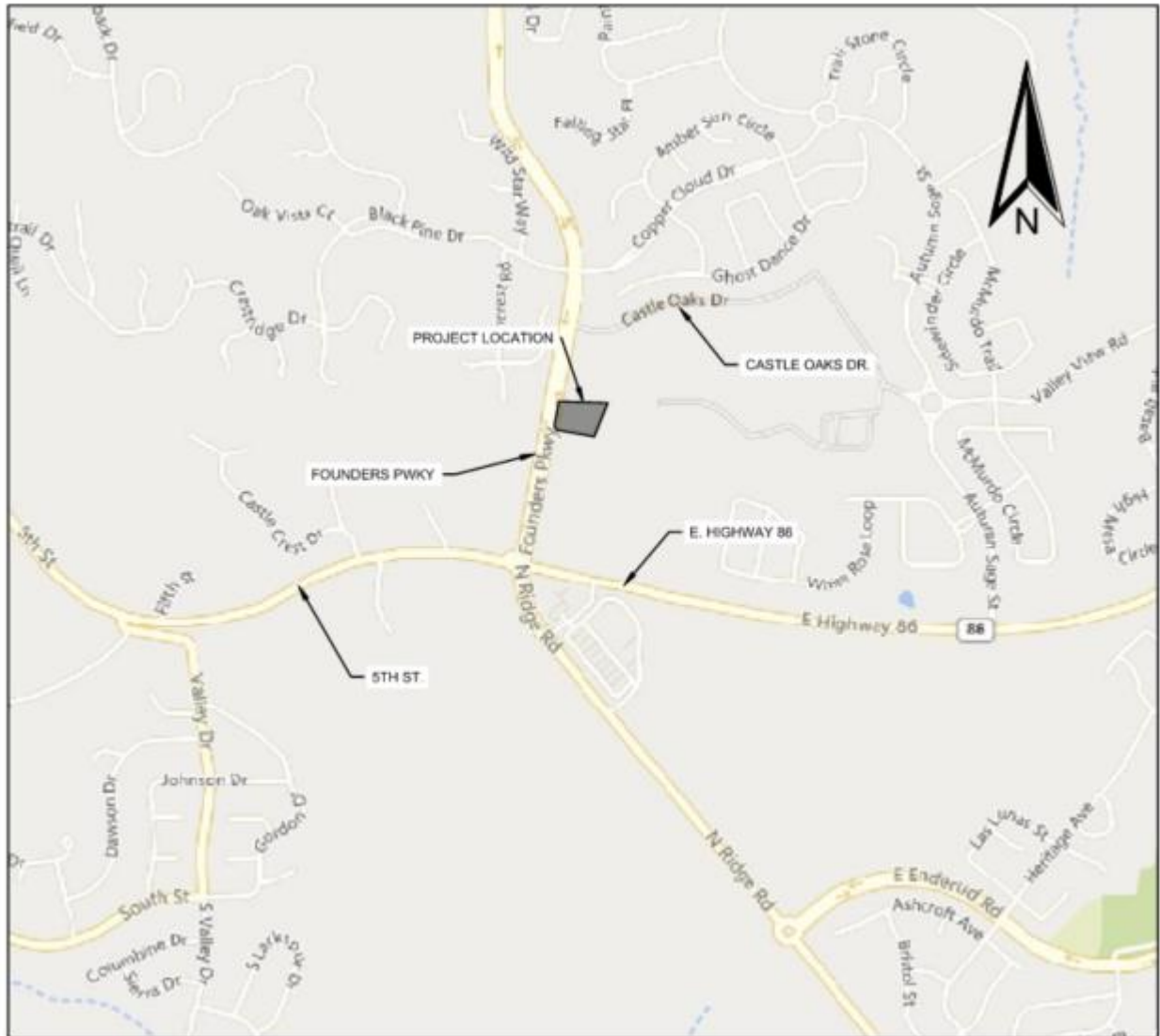
No variance requests are anticipated at this time.

Drainage Concept

The proposed Dunkin Founders site will consist of a new Dunkin restaurant, parking lot, drive thru-aisle, and associated walks and landscaped areas. All runoff is proposed to leave the site via surface flows (e.g.: sheet flow, curb and gutter), as well as several inlets and associated piping which connect to an existing stub provided as part of the Founders Crossing development. Existing drainage patterns (i.e.: the flow will make its way into the existing detention facility to the northeast of the site) will be maintained with this development. Detention and water quality are not proposed as part of this development, as the detention facility was constructed to serve several lots in the Founders Crossing Development (including residential subdivisions and other commercial properties) in their developed conditions.

Appendix A

Vicinity Map

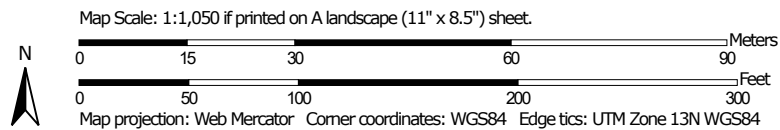


Appendix A – Vicinity Map

Appendix B

NRCS Soils Info

Hydrologic Soil Group—Castle Rock Area, Colorado



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

 A
 A/D
 B
 B/D
 C
 C/D
 D
 Not rated or not available

Soil Rating Lines

 A
 A/D
 B
 B/D
 C
 C/D
 D
 Not rated or not available

Soil Rating Points

 A
 A/D
 B
 B/D

 C
 C/D
 D
 Not rated or not available

Water Features

 Streams and Canals

Transportation

 Rails
 Interstate Highways
 US Routes
 Major Roads
 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Castle Rock Area, Colorado
 Survey Area Data: Version 14, Aug 31, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 9, 2021—Jun 12, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Fu	Fondis-Kutch association	C	4.1	100.0%
Totals for Area of Interest			4.1	100.0%

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

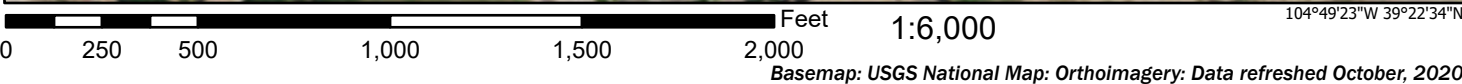
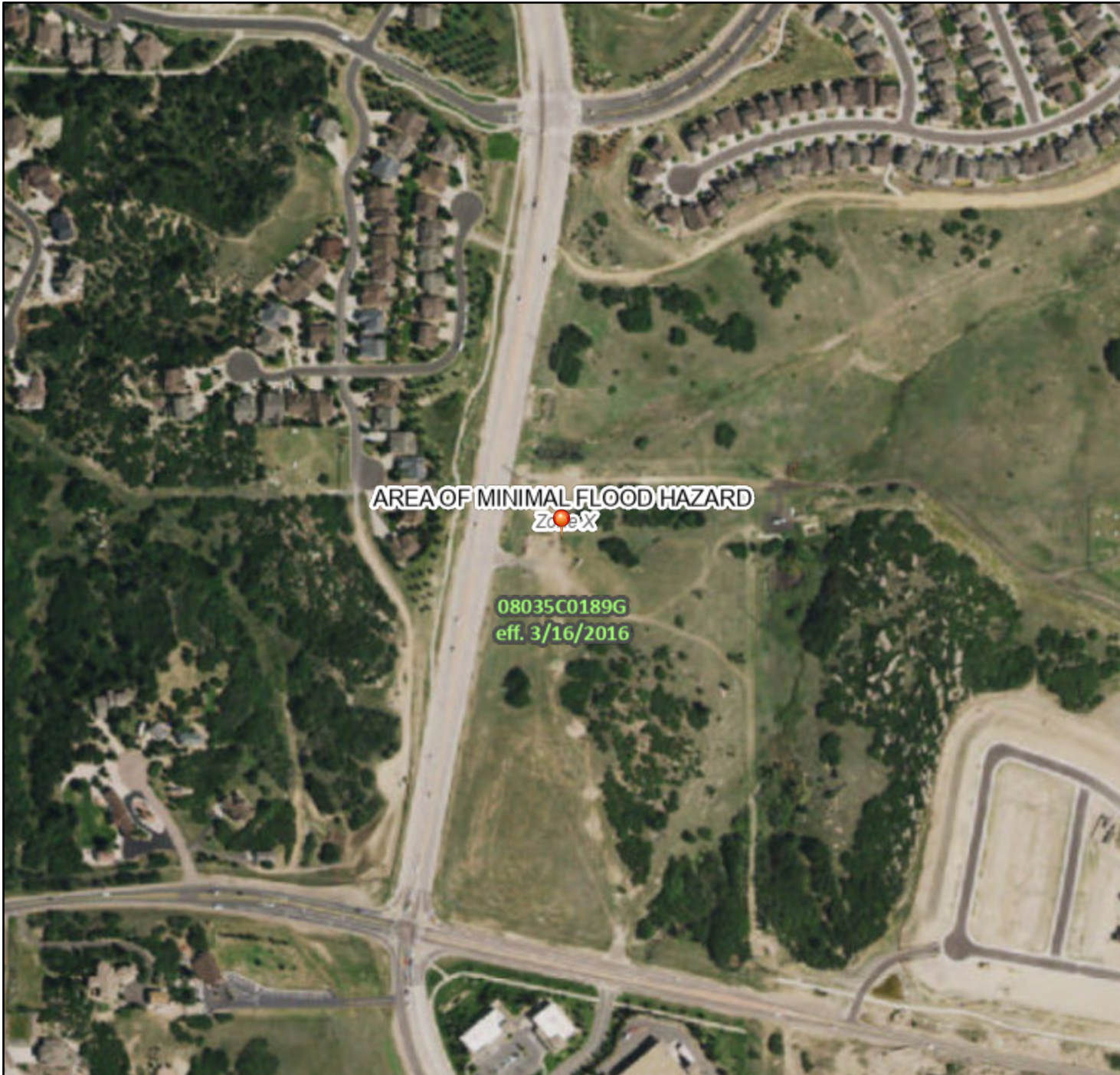
Appendix C

FEMA Maps

National Flood Hazard Layer FIRMette



104°50'1"W 39°23'2"N



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
		Profile Baseline
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

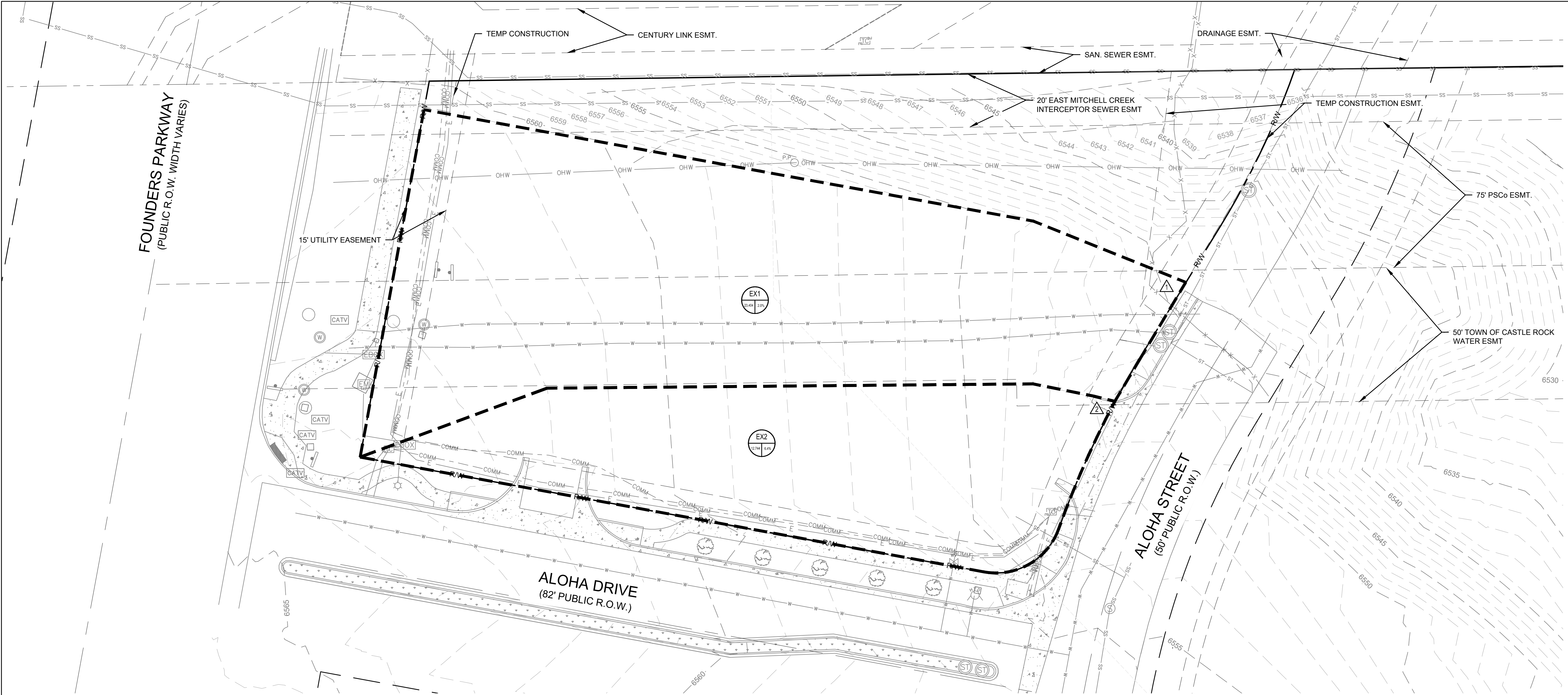
This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 2/11/2022 at 12:17 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

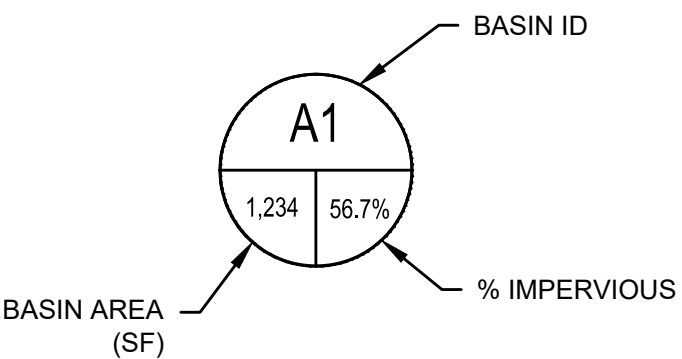
This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Appendix D

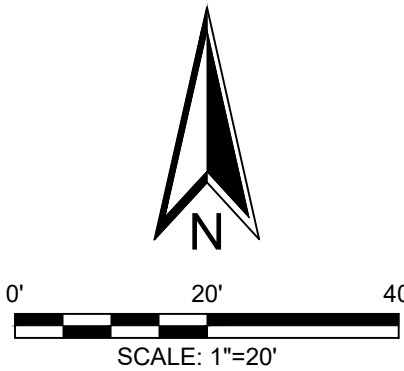
Drainage Maps



HYDROLOGIC LEGEND



- DESIGN POINT #
- BASIN BOUNDARY
- PROPERTY LINE



Sub-Basin ID	Total Area (SF)	Drives and Walks Area	Roofs Area	Lawns Area	% imp	C _s	C ₁₀₀	Q _s (cfs)	Q ₁₀₀ (cfs)
EX1	23404	0	0	23404	2.0%	0.01	0.13	0.01	0.18
EX2	12744	576	0	12168	6.4%	0.02	0.15	0.01	0.11
Composite	36148	576	0	35572	3.6%	0.02	0.15	0.02	0.30

PERMIT NO.: CD24-0003

Client

CD FOUNDERS LLC

106 S. KYRENE RD.

CHANDLER, AZ 85226

PHONE:

ATTN: B. HAYENGA

W.C. CIVIL

7220 W. JEFFERSON AVE

STE. 204

LAKEWOOD, CO 80235

PHONE: (303) 390-0172

EXISTING DRAINAGE PLAN

DUNKIN FOUNDERS

SITE DEVELOPMENT PLAN

LOT 5, FOUNDERS MARKETPLACE FILING NO. 1

AMENDMENT NO. 2

LOCATED IN TOWN OF CASTLE ROCK

COUNTY OF DOUGLAS, STATE OF COLORADO

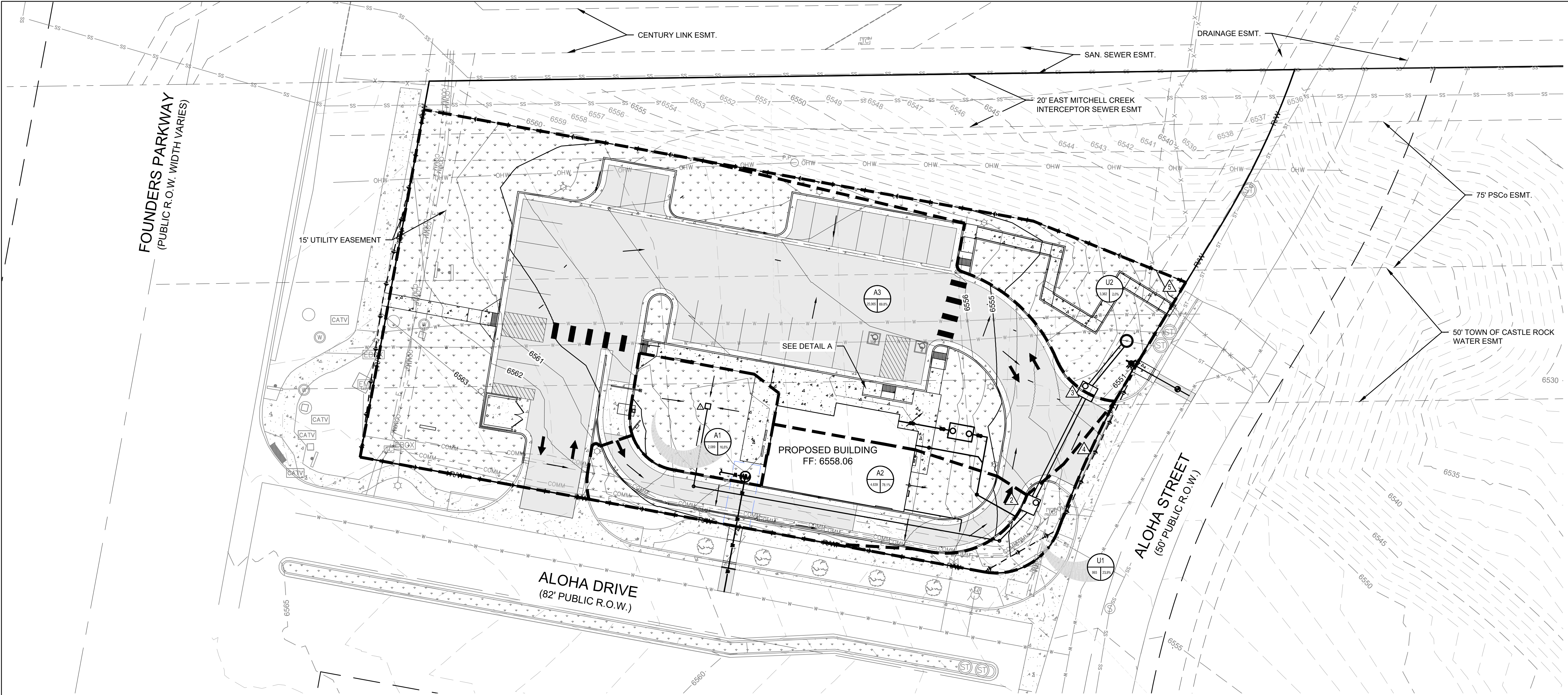
WC CIVIL

TS, LP

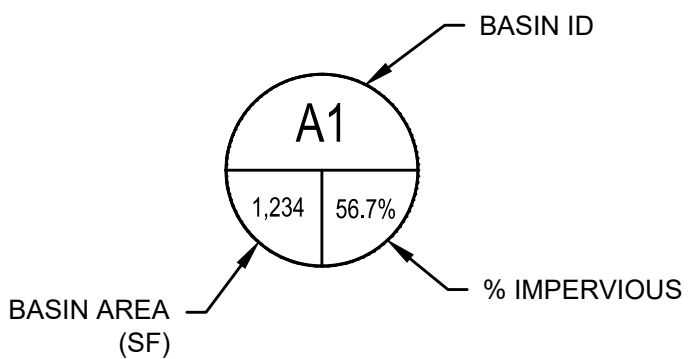
2022/03/04

AS NOTED

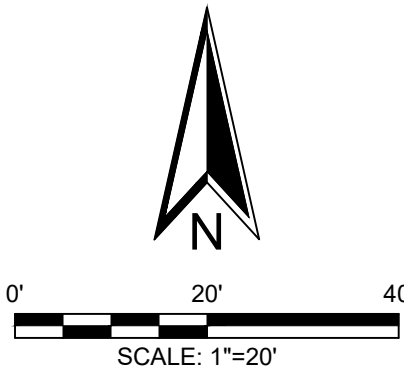
D1



HYDROLOGIC LEGEND



- DESIGN POINT #
- BASIN BOUNDARY
- PROPERTY LINE



Sub-Basin ID	Total Area (SF)	Drives and Walks Area	Roofs Area	Lawns Area	% imp	C _s	C ₁₀₀	Q _s (cfs)	Q ₁₀₀ (cfs)
A1	2089	312	0	1777	16.6%	0.15	0.30	0.01	0.04
A2	4639	2315	1287	1037	78.1%	0.65	0.73	0.10	0.20
A3	25065	16838	511	7716	69.8%	0.55	0.65	0.45	0.97
U1	993	222	0	771	23.9%	0.15	0.30	0.00	0.02
U2	3362	0	0	3362	2.0%	0.01	0.13	0.00	0.03
Composite	36148	19687	1798	14663	60.2%	0.50	0.62	0.57	1.26

PERMIT NO.: CD24-0003

Client

CD FOUNDERS LLC

106 S. KYRENE RD.

CHANDLER, AZ 85226

PHONE:

ATTN: B. HAYENGA

W.C. CIVIL

7220 W. JEFFERSON AVE

STE. 204

LAKEWOOD, CO 80235

PHONE: (303) 390-0172

PROPOSED DRAINAGE PLAN

DUNKIN FOUNDERS

SITE DEVELOPMENT PLAN

LOT 5, FOUNDERS MARKETPLACE FILING NO. 1

AMENDMENT NO. 2

LOCATED IN TOWN OF CASTLE ROCK

COUNTY OF DOUGLAS, STATE OF COLORADO

WC CIVIL

TS, LP

2022/03/04

AS NOTED

Sheet No.:

D2

Appendix E

Hydrologic Calculations

Dunkin Founders
Hydrology Calcs

NRCS Soil Group C

C-values	C ₅	C ₁₀₀
2% Impervious	0.01	0.13
5% Impervious	0.02	0.15
25% Impervious	0.15	0.30
65% Impervious	0.50	0.62
70% Impervious	0.55	0.65
80% Impervious	0.65	0.73

Runoff coefficients per Table 6-5, Mile High Flood District Drainage Criteria Manual

Rainfall (in/hr)	i ₅	i ₁₀₀
	1.43	2.60

Rainfall values per Table 6-1 in Town of Castle Rock Stormwater Criteria Manual

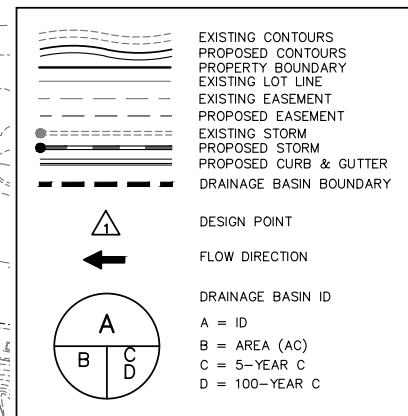
Sub-Basin ID	Total Area (SF)	Drives and Walks Area	Roofs Area	Lawns Area	% imp	C ₅	C ₁₀₀	Q ₅ (cfs)	Q ₁₀₀ (cfs)
EX1	23404	0	0	23404	2.0%	0.01	0.13	0.01	0.18
EX2	12744	576	0	12168	6.4%	0.02	0.15	0.01	0.11
Composite	36148	576	0	35572	3.6%	0.02	0.15	0.02	0.30

Sub-Basin ID	Total Area (SF)	Drives and Walks Area	Roofs Area	Lawns Area	% imp	C ₅	C ₁₀₀	Q ₅ (cfs)	Q ₁₀₀ (cfs)
A1	2089	312	0	1777	16.6%	0.15	0.30	0.01	0.04
A2	4639	2315	1287	1037	78.1%	0.65	0.73	0.10	0.20
A3	25065	16838	511	7716	69.8%	0.55	0.65	0.45	0.97
U1	993	222	0	771	23.9%	0.15	0.30	0.00	0.02
U2	3362	0	0	3362	2.0%	0.01	0.13	0.00	0.03
Composite	36148	19687	1798	14663	60.2%	0.50	0.62	0.57	1.26

Appendix F

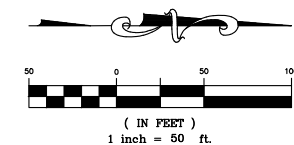
Drainage Map – Founders Cross Phase III Drainage Report Excerpt

SHEET 1 OF 4



NOTE:
BASIN INFORMATION SHOWN IS FOR FULL BUILDOUT OF
SUBDIVISION.

RUNOFF SUMMARY TABLE			
DESIGN POINT	BASIN	Q5 (CFS)	Q100 (CFS)
1	B-1	8.07	17.61
2	B-2	0.71	1.72
3	B-3	3.98	8.69
4	B-4	0.47	1.12
5	B-5	3.42	7.46
6	B-6	0.61	1.51
7	B-7	3.51	7.65
8	B-8	0.24	0.60
9	B-9	2.46	5.35
10	B-10	2.25	4.32
11	B-11	7.10	14.88
12	B-12	0.82	1.66



MATCHLINE SEE SHEET 2 OF 4

PROJECT NO.: 16000600
DATE: 04/09/2018



CAD FILE: 16000600-DRAINAGE PLAN.DWG

Appendix G

MS4 Permit – Summary of Water Quality Conformance to MS4 Permit



Summary of Water Quality Conformance to MS4 Permit

The purpose of this worksheet is to document conformance with the Town of Castle Rock's MS4 permit with regard to permanent water quality on land disturbance projects.

Project Name Dunkin Founders

Project Owner Natalie Ricci, Linden Partners, LLC, P.O. Box 621030 Littleton, CO 80162-1030

Project Location Lot 5, Founders Marketplace Filing No. 1

ToCR Project Number SDP22-0019

Total Site Area 1.13 acres

Total Size of Common Plan of Development 11.74 acres

Check all that apply:

- ☐ Project within Plum Creek Basin
- ☒ Project within Cherry Creek Basin

Estimated construction completion date May 2023

1. The water quality control measure(s) for applicable development sites shall meet one of the following base design standards as per the SDDTCM Section 14.4. Please select all design standards that were applied to meet conformance with the MS4 on this site.

- ☐ WQCV standard
- ☐ Pollutant removal standard
- ☐ Runoff reduction standard
- ☐ Applicable site draining to regional WQVC control measure (accepts drainage prior to discharging to WOTS)
- ☐ Applicable site draining to regional WQVC control facility (with receiving pervious area control measure upstream of WOTS)
- ☐ Constrained redevelopment sites standard
- Imperviousness of existing site _____ / _____ (Imp. Ac/Site Ac) = ____%
 - Variance required TCV No. _____
- ☒ Existing control measure with WQCV per previous criteria standards
- Reference Construction Permit No. CD20-0016
- ☒ Cherry Creek Basin only, choose one: ☐ Tier 1 ☐ Tier 2 ☐ Tier 3
- ☐ No control measures provided (See Permanent WQ Worksheet for applicability)

Summary of Water Quality Conformance to MS4 Permit

2. Was an exclusion to water quality applied as per SDDTCM Section 13.1.5? ☐ Yes ☐ No

i. If yes, please select all that apply, provide total excluded impervious area(s) and submit variance, as applicable: TCV No. _____

- ☐ Pavement management site
Excluded impervious area: _____ acres
- ☐ Excluded roadway redevelopment
Excluded impervious area: _____ acres
- ☐ Excluded existing roadway areas
Excluded impervious area: _____ acres
- ☐ Above ground and below ground utilities
- ☐ Large lot single family home
- ☐ Non-residential and non-commercial infiltration
Excluded impervious area: _____ acres
- ☐ Land disturbance for land to remain undeveloped
Excluded impervious area: _____ acres
- ☐ Stream Stabilization Sites
Excluded impervious area: _____ acres
- ☐ Trails
Excluded impervious area: _____ acres
- ☐ Oil and Gas Exploration

3. For Development and Redevelopment sites, following any exclusions claimed above, was any portion of the site excluded up to 20% of the site and not to exceed one acre? ☐ Yes ☐ No

If yes, complete the following:

Excluded area: _____ acres
Total Site area: _____ acres, _____ % site excluded

4. For Constrained sites, was any portion of the site excluded up to 50% of the site and not to exceed 50% of the impervious area? ☐ Yes ☐ No

If yes, complete the following:

Excluded area: _____ acres
Excluded impervious area: _____ acres
Total Site area: _____ acres, _____ % site excluded
Total Impervious area: _____ acres, _____ % impervious excluded