

suite 320
denver, co 80209
p 303.561.3333
waremalcomb.com

AND ON BEHALF
OF WARE MALCOM

STAFFORD LOGISTICS CENTER

MASTER DRAINAGE PLAN AMENDMENT 11

PROPOSED CONDITIONS

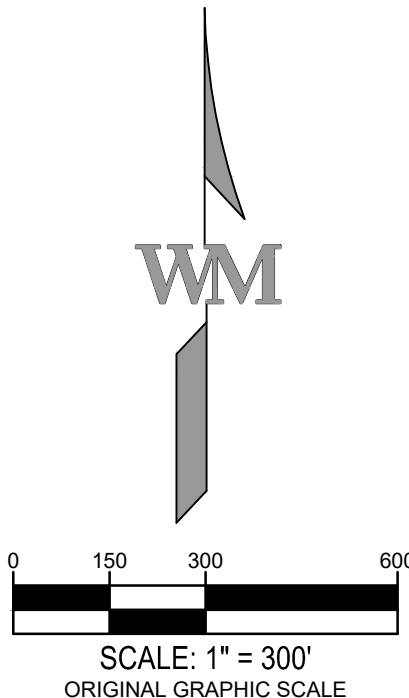
NO	DATE	REMARKS
1	1/11/2020	MDR AMENDMENT 1
2	2/12/2021	MDR AMENDMENT 1 RESUBMITTAL
3	4/01/2021	MDR AMENDMENT 1 RESUBMITTAL
4	5/26/2021	MDR AMENDMENT 2

3 NO.:	DCS20-4039
/ PM:	J. CARANO
AWN BY:	I. HULIN
TE:	05.24.2021
OT DATE:	4/1/2021

















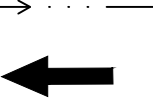
SHEET
P-DR1
6 of 10

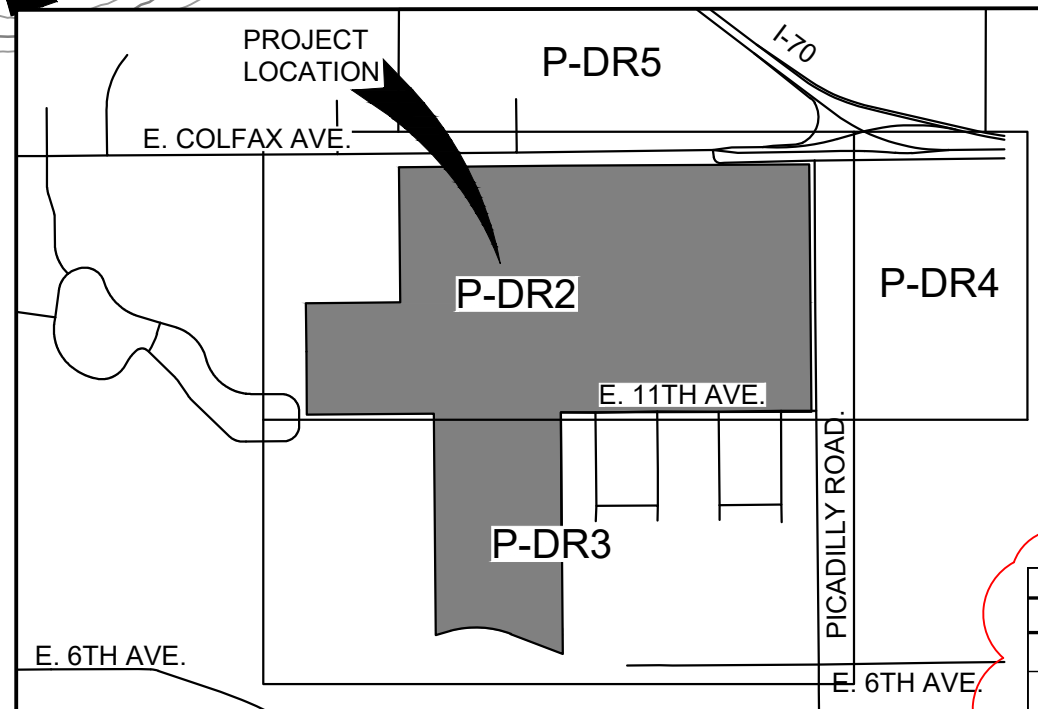
NOTES:

1. ALL PLANNING AREAS ASSUMED TO HAVE 90% IMPERVIOUSNESS FOR PRELIMINARY REGIONAL POND CALCULATIONS.
2. CITY OF AURORA PLAN REVIEW IS ONLY FOR GENERAL CONFORMANCE WITH CITY OF AURORA DESIGN CRITERIA AND THE CITY CODE. THE CITY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, OF DIMENSIONS AND ELEVATIONS WHICH SHALL BE CONFIRMED AND CORRELATED AT THE JOB SITE. THE CITY OF AURORA, THROUGH THE APPROVAL OF THIS DOCUMENT, ASSUMES NO RESPONSIBILITY FOR THE COMPLETENESS AND/OR ACCURACY OF THIS DOCUMENT.
3. ALL STORM SEWER IS PRIVATE AND IS SHOWN FOR THE CITY OF AURORA STORM EVENT, UNLESS OTHERWISE NOTED. PRIVATE STORM SEWER TO BE MAINTAINED BY THE METRO DISTRICT.
4. REGIONAL POND A IS PUBLIC & MAINTENANCE ELIGIBLE.



LEGEND

- | | |
|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
|  | PROPERTY LINE |
|  | EXISTING MINOR CONTOUR |
|  | EXISTING MAJOR CONTOUR |
|  | EXISTING DRAINAGE ARROW |
|  | EXISTING EASEMENT |
|  | EXISTING ROW |
|  | EXISTING LOT LINE |
|  | EXISTING FENCE |
|  | EXISTING CHANNEL |
|  | EXISTING DIRT ROAD |
|  | APPROXIMATE LOCATION OF SAND CREEK |
|  | PROPOSED CHANNEL |
|  | PROPOSED DRAINAGE ARROW |
|  | MAJOR BASIN BOUNDARY |
|  | MINOR BASIN BOUNDARY |
|  | DESIGN POINT |
|  | DRAINAGE BASIN |
| | A=BASIN DELINEATION
C=2YR RUNOFF COEFFICIENT
D=100YR RUNOFF COEFFICIENT |



VICINITY MAP
1" = 2000'

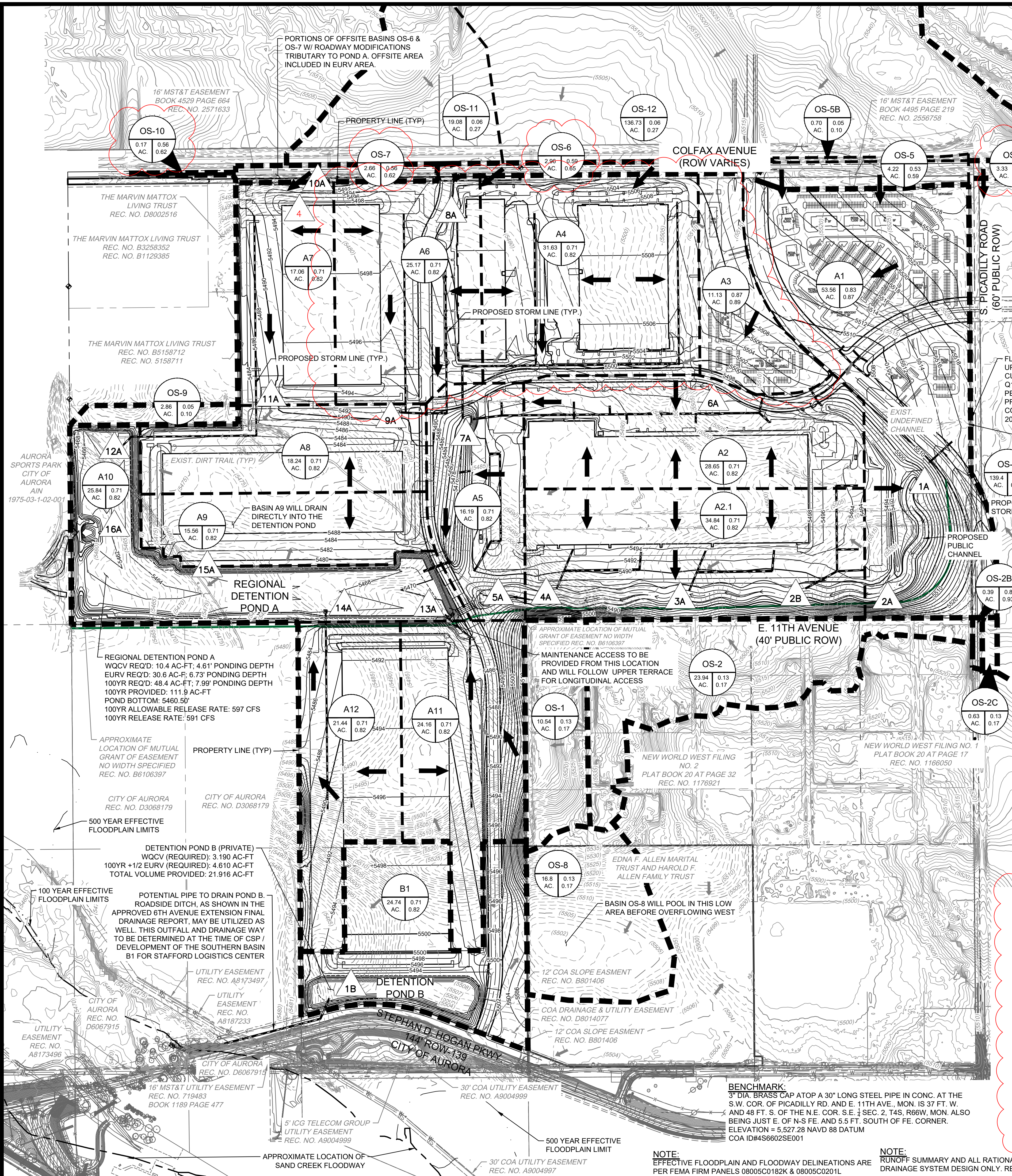
RUNOFF SUMMARY				
DESIGN POINT	BASIN	AREA	TOTAL (CFS)	
			Q ₂	Q ₁₀₀
1A	OS3 + OS4	142.7	63.9	605.0
2A	A1+OS2B+OS2C+OS3+OS4+OS5+OS5B	291.4	153.0	778.7
2B	A1+1/3A2.1+OS2B+OS2C+OS3+OS4+OS5+OS5B	303.0	168.8	823.0
3A	A1+2/3A2.1+OS2+OS2B+OS2C+OS3+OS4+OS5+OS5B	326.2	184.2	902.0
4A	A1+A2.1+OS2+OS2B+OS2C+OS3+OS4+OS5+OS5B	361.1	200.6	964.0
5A	A1+A2.1+OS2+OS2B+OS2C+OS3+OS4+OS5+OS5B	361.1	200.6	966.0
6A	A2+A3	39.8	66.5	204.8
7A	A2+A3+A4+OS12	208.1	126.1	412.2
8A	OS6	3.0	3.8	11.5
9A	OS6+A6	28.1	36.6	117.1
10A	OS7+OS11	21.7	5.3	37.7
11A	OS7+A7+OS11	38.8	27.5	109.2
12A	A6+A7+A8+OS6+OS7+OS11	85.2	89.7	308.3
13A	A11+OS1	34.7	40.8	132.3
14A	A12	21.4	33.6	108.1
15A	A9	15.6	28.5	91.6
16A	A1+A2+A2.1+A3+A4+A5+A6+A7+A8+A9+A10+A11+A12+OS1+OS2+OS2B+OS2C+OS3+OS4+OS5+OS5B+OS6+OS7+OS9+OS11+OS12	671.0	585.5	2181.0
1B	B1+OS8	41.5	44.2	144.1
	OS10	0.17	0.27	0.85

* = 100 year flows are derived from the WWE memo dated April 1, 2021 which uses the required flow per the Sand Creek OSP at design points 1A and 5A.

NOTE: per the Sand Creek USP at design points 1A and 5A.

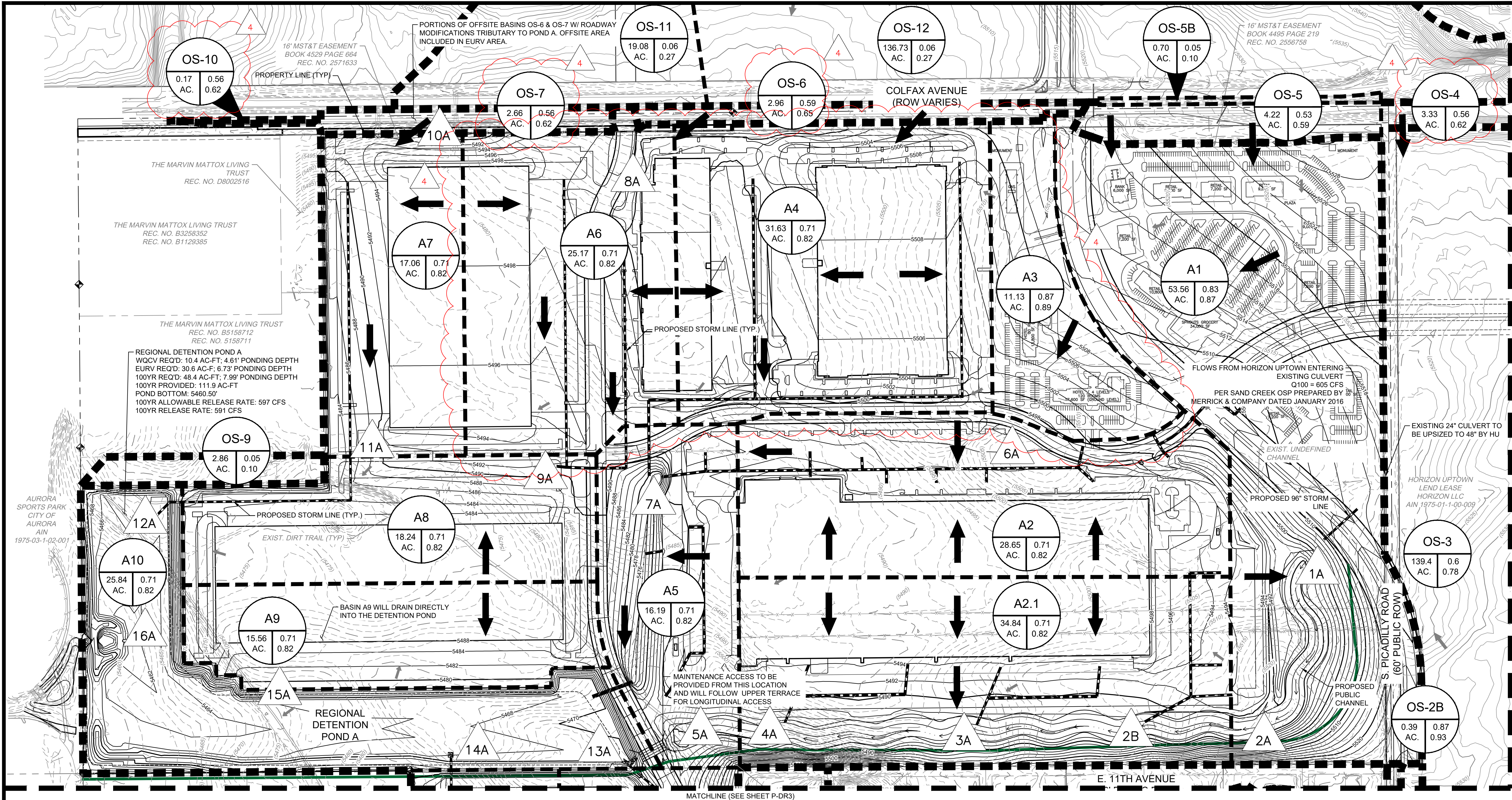
~~RUNOFF SUMMARY AND ALL RATIONAL CALCULATIONS ASSOCIATED WITH THIS MASTER DRAINAGE PLAN ARE FOR LOCAL STORM DRAINAGE SYSTEM DESIGN ONLY. REGIONAL DETENTION POND AND ENGINEERED CHANNEL TO BE SIZED PER THE SAND CREEK USP~~

NOTE:
EFFECTIVE FLOODPLAIN AND FLOODWAY DELINEATIONS ARE
PER FEMA FIRM PANELS 08005C0182K & 08005C0201I



NO.	DATE	REMARKS
1	11/11/2020	MDR AMENDMENT 1
2	2/12/2021	MDR AMENDMENT 1 RESUBMITTAL
3	4/01/2021	MDR AMENDMENT 1 RESUBMITTAL
4	5/26/2021	MDR AMENDMENT 2

JOB NO.:	DCS20-4039
PA / PM:	J. CARANO
DRAWN BY:	I. HULIN
DATE:	05.24.2021
PLOT DATE:	4/11/2021



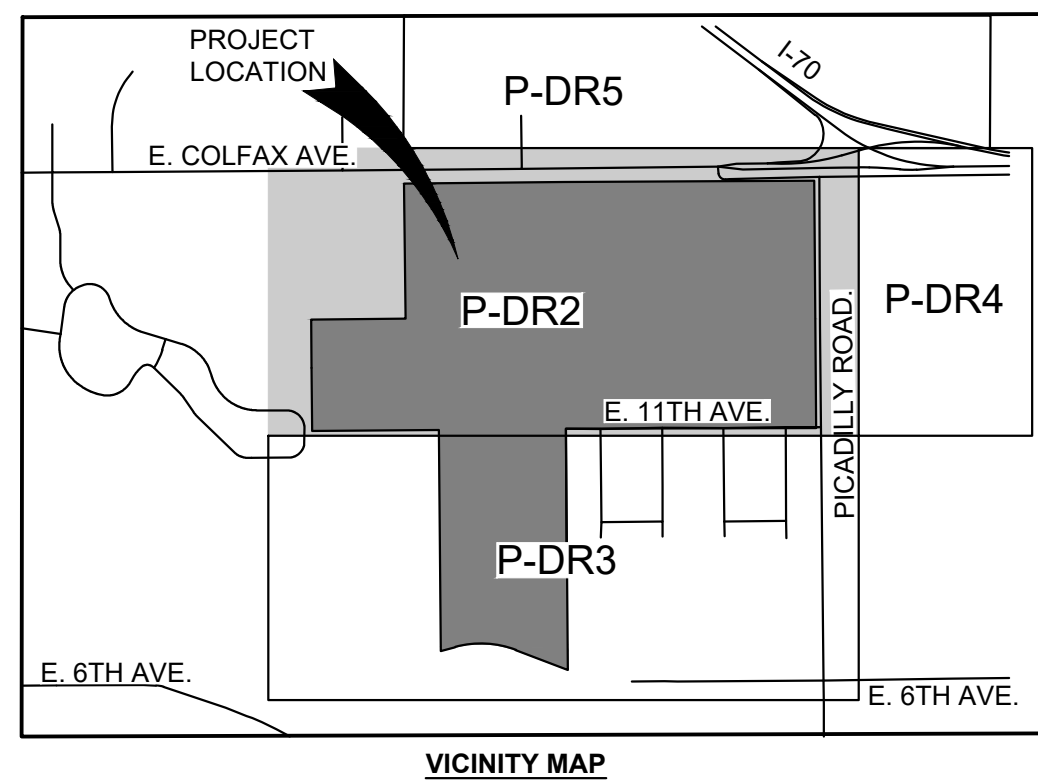
LEGEND

- PROPERTY LINE
- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- EXISTING DRAINAGE ARROW
- EXISTING EASEMENT
- EXISTING ROW
- EXISTING LOT LINE
- EXISTING FENCE
- EXISTING CHANNEL
- EXISTING DIRT ROAD
- APPROXIMATE LOCATION OF SAND CREEK
- PROPOSED CHANNEL
- PROPOSED DRAINAGE ARROW

- MAJOR BASIN BOUNDARY
- MINOR BASIN BOUNDARY
- DESIGN POINT
- DRAINAGE BASIN
- A=BASIN DELINEATION
- C=2YR RUNOFF COEFFICIENT
- D=100YR RUNOFF COEFFICIENT

NOTES:

- INDUSTRIAL PLANNING AREAS ASSUMED TO HAVE 80% IMPERVIOUSNESS AND COMMERCIAL AREAS ASSUMED TO HAVE 95% IMPERVIOUSNESS FOR PRELIMINARY REGIONAL POND CALCULATIONS.
- CITY OF AURORA PLAN REVIEW IS ONLY FOR GENERAL CONFORMANCE WITH CITY OF AURORA DESIGN CRITERIA AND THE CITY CODE. THE CITY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, OF DIMENSIONS AND ELEVATIONS WHICH SHALL BE CONFIRMED AND CORRELATED AT THE JOB SITE. THE CITY OF AURORA, THROUGH THE APPROVAL OF THIS DOCUMENT, ASSUMES NO RESPONSIBILITY FOR THE COMPLETENESS AND/OR ACCURACY OF THIS DOCUMENT.
- ALL STORM SEWER IS PRIVATE AND IS SIZED FOR THE 100 YR STORM EVENT, UNLESS OTHERWISE NOTED. PRIVATE STORM SEWER TO BE MAINTAINED BY THE METRO DISTRICT.
- REGIONAL POND A IS PUBLIC & MAINTENANCE ELIGIBLE.



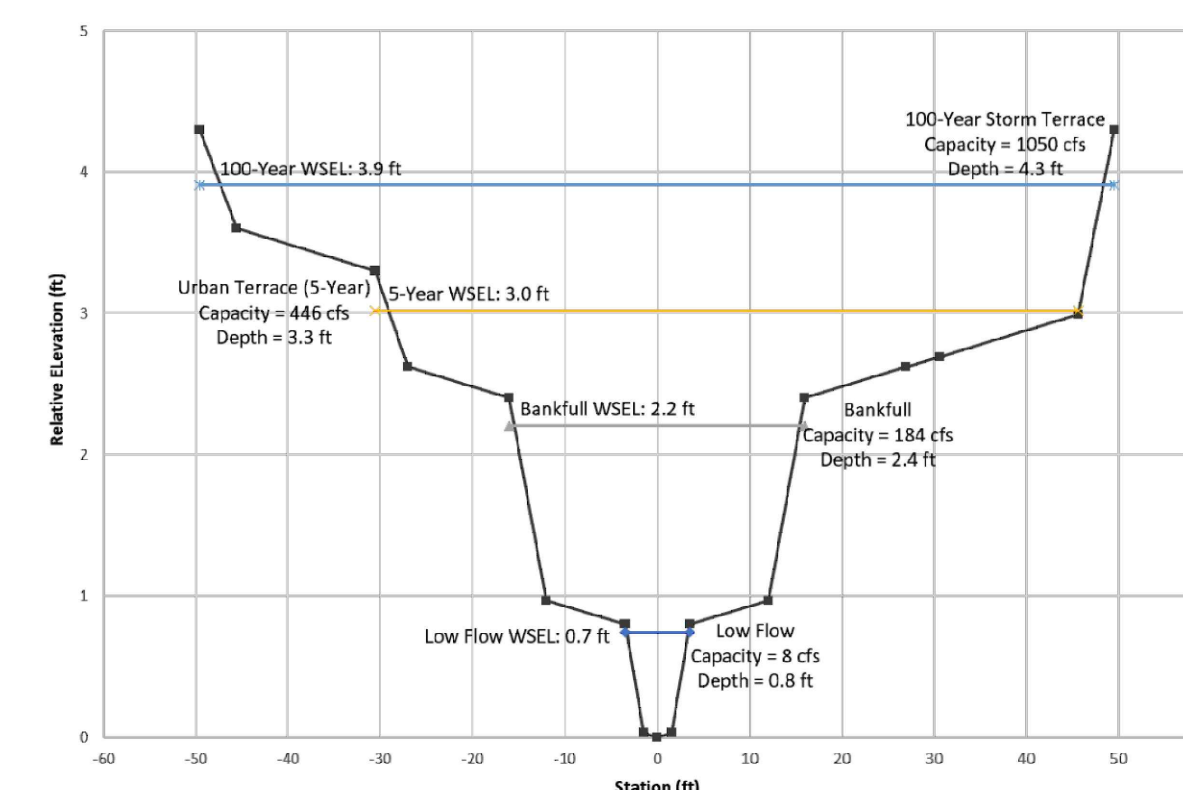
BENCHMARK:

3" DIA. BRASS CAP ATOP A 30" LONG STEEL PIPE IN CONC. AT THE S.W. COR. OF PICADILLY RD. AND E. 11TH AVE., MON. IS 37 FT. W. AND 48 FT. S. OF THE N.E. COR. S.E. 1/4 SEC. 2, T4S, R68W, MON. ALSO BEING E. OF N-S FE. AND 5.5 FT. SOUTH OF FE. CORNER. ELEVATION = 5,527.28 NAVD 88 DATUM COA ID#4S6602SE001

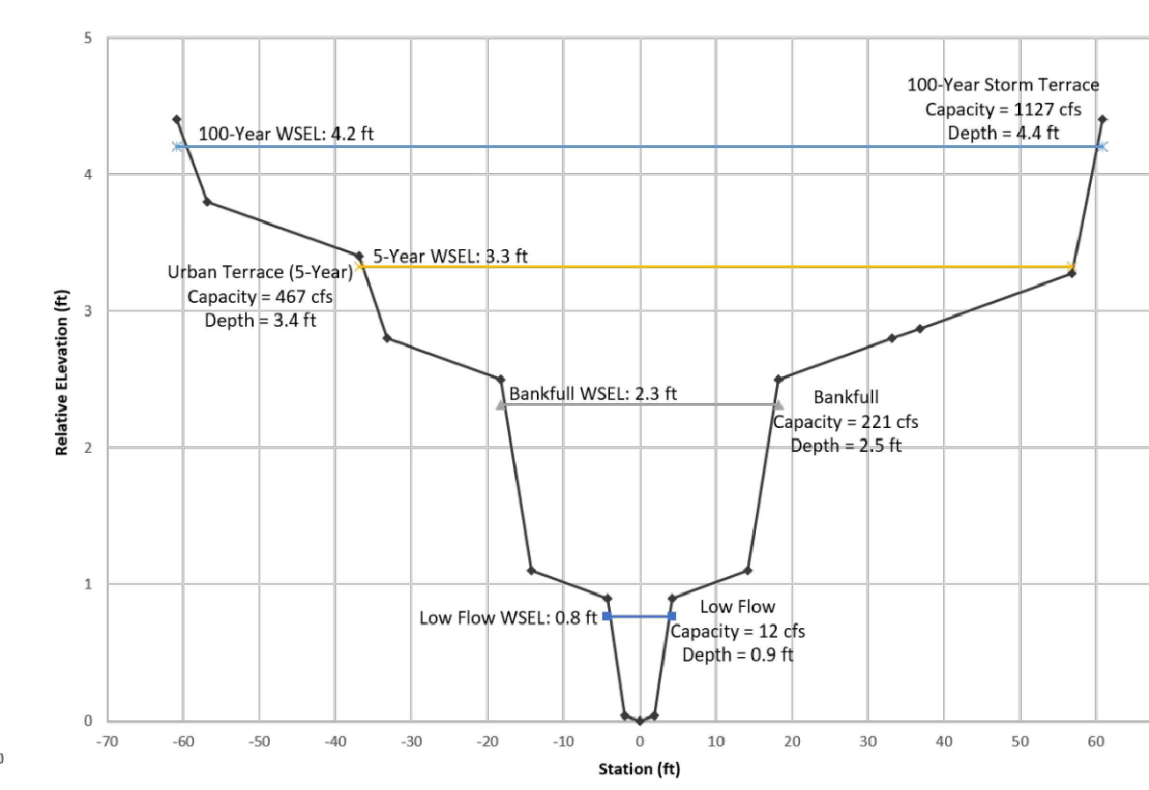
TYPICAL SECTION NOTES:

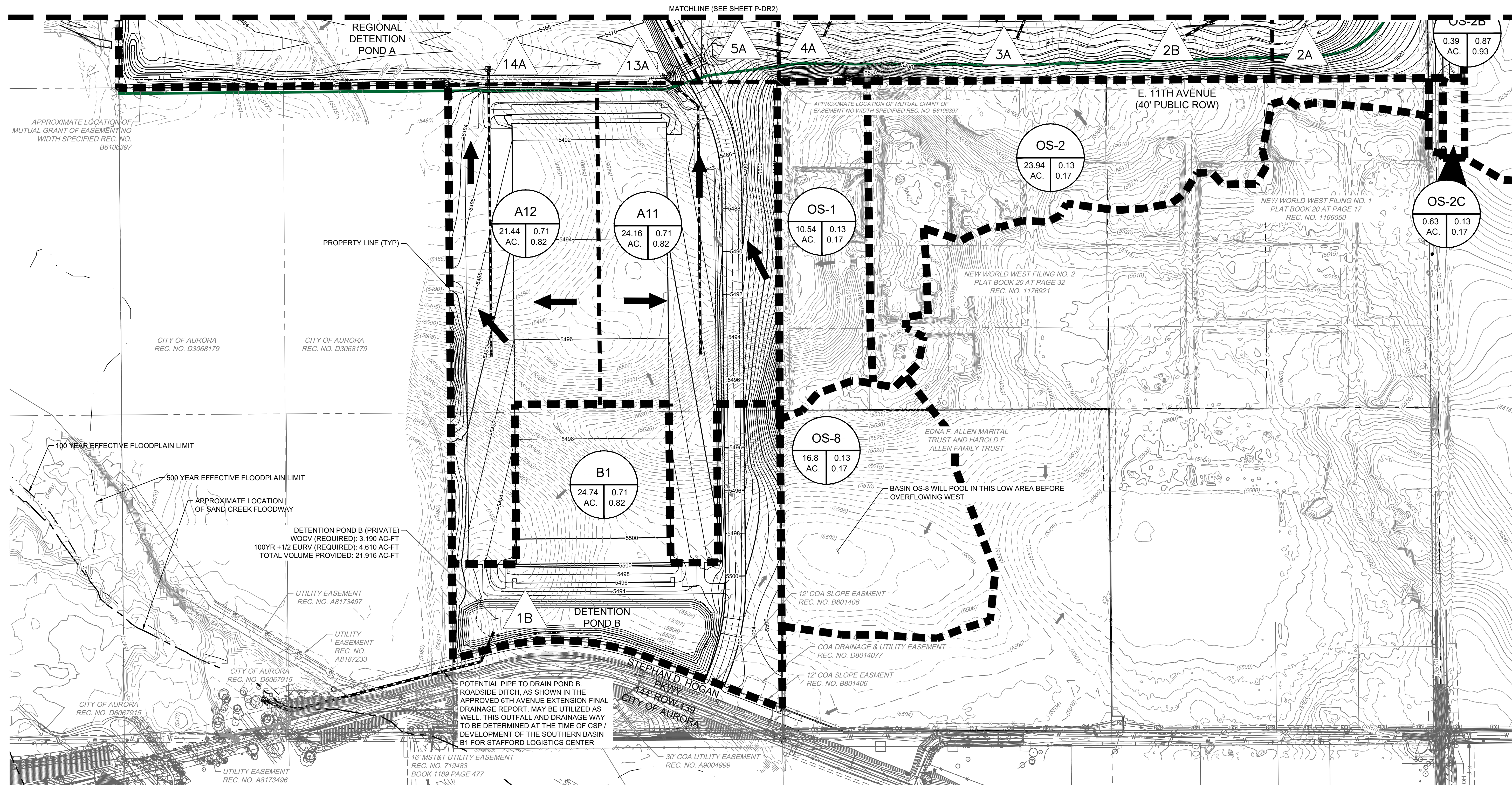
- TWO DIFFERENT TYPICAL SECTIONS
- ALL BOTTOM/TERRACE SLOPES AT 2% (NOTHING IS FLAT)
- SIDE SLOPES 2.5H:1V - LOW FLOW AND BANK FULL
- SIDE SLOPE 4H:1V - URBAN TERRACE AND FLOODPLAIN
- CHANNEL SECTION: PROFILE SLOPE = 0.28%

CONCEPTUAL CHANNEL GEOMETRY
TYPICAL SECTION 1
SEE WVE MEMO DATED APRIL 1, 2021 FOR FURTHER
INFORMATION ON CHANNEL TYPICAL SECTIONS



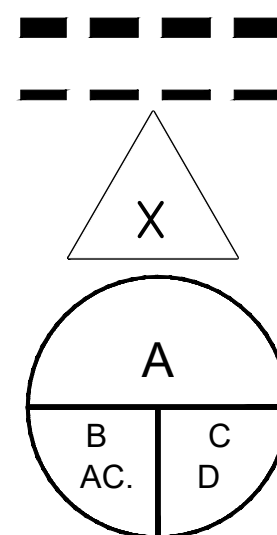
CONCEPTUAL CHANNEL GEOMETRY
TYPICAL SECTION 2
SEE WVE MEMO DATED APRIL 1, 2021 FOR FURTHER
INFORMATION ON CHANNEL TYPICAL SECTIONS



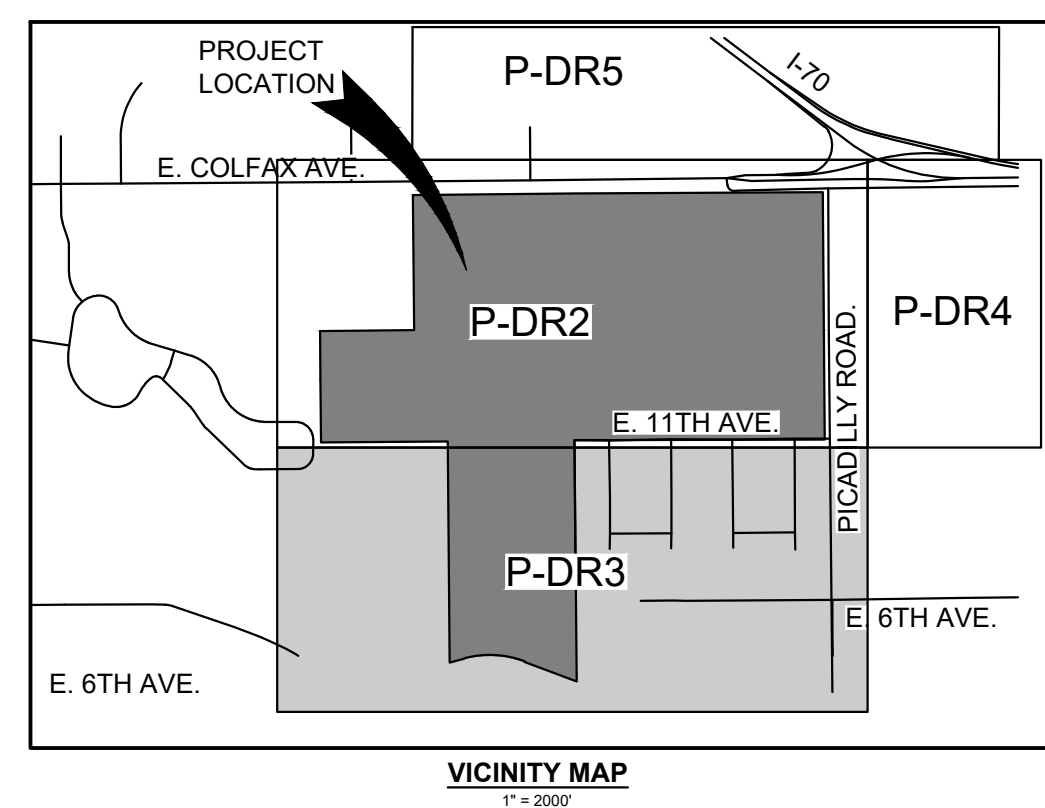


LEGEND

- — — — — PROPERTY LINE
- — — — — 5500 EXISTING MINOR CONTOUR
- — — — — 5525 EXISTING MAJOR CONTOUR
- ← EXISTING DRAINAGE ARROW
- — — — — EXISTING EASEMENT
- — — — — EXISTING ROW
- — — — — EXISTING LOT LINE
- X — X — EXISTING FENCE
- — — — — EXISTING CHANNEL
- — — — — EXISTING DIRT ROAD
- — — — — APPROXIMATE LOCATION OF SAND CREEK
- — — — — PROPOSED CHANNEL
- ← PROPOSED DRAINAGE ARROW



- — — — — MAJOR BASIN BOUNDARY
- — — — — MINOR BASIN BOUNDARY
- △ X DESIGN POINT
- A DRAINAGE BASIN
- B AC.
- C
- D
- A=BASIN DELINATION
- C=2YR RUNOFF COEFFICIENT
- D=100YR RUNOFF COEFFICIENT



WM

0 100 200 400

SCALE: 1" = 200'

ORIGINAL GRAPHIC SCALE

NOTES:

- INDUSTRIAL PLANNING AREAS ASSUMED TO HAVE 80% IMPERVIOUSNESS AND COMMERCIAL AREAS ASSUMED TO HAVE 95% IMPERVIOUSNESS FOR PRELIMINARY REGIONAL POND CALCULATIONS
- CITY OF AURORA PLAN REVIEW IS ONLY FOR GENERAL CONFORMANCE WITH CITY OF AURORA DESIGN CRITERIA AND THE CITY CODE. THE CITY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, OF DIMENSIONS AND ELEVATIONS WHICH SHALL BE CONFIRMED AND CORRELATED AT THE JOB SITE. THE CITY OF AURORA, THROUGH THE APPROVAL OF THIS DOCUMENT, ASSUMES NO RESPONSIBILITY FOR THE COMPLETENESS AND/OR ACCURACY OF THIS DOCUMENT.
- ALL STORM SEWER IS PRIVATE AND IS SIZED FOR THE 100 YR STORM EVENT, UNLESS OTHERWISE NOTED. PRIVATE STORM SEWER TO BE MAINTAINED BY THE METRO DISTRICT.
- REGIONAL POND A IS PUBLIC & MAINTENANCE ELIGIBLE.

BENCHMARK:

3" DIA. BRASS CAP ATOP A 30" LONG STEEL PIPE IN CONC. AT THE S.W. COR. OF PICADILLY RD. AND E. 11TH AVE., MON. IS 37 FT. W. AND 48 FT. S. OF THE N.E. COR. S.E. 1/4 SEC. 2, T4S, R66W, MON. ALSO BEING JUST E. OF N-S FE. AND 5.5 FT. SOUTH OF FE. CORNER. ELEVATION = 5,527.28 NAVD 88 DATUM COA ID#4S6602SE001

NOTE:

EFFECTIVE FLOODPLAIN AND FLOODWAY DELINEATIONS ARE PER FEMA FIRM PANELS 08005C0182K & 08005C0201L

STAFFORD LOGISTICS CENTER

MASTER DRAINAGE PLAN AMENDMENT 1

PROPOSED CONDITIONS

NO.	DATE	REMARKS
1	11/11/2020	MDR AMENDMENT 1
2	2/12/2021	MDR AMENDMENT 1 RESUBMITTAL
3	4/01/2021	MDR AMENDMENT 1 RESUBMITTAL
4	5/26/2021	MDR AMENDMENT 2

JOB NO.:	DCS20-4039
PA / PM:	J. CARANO
DRAWN BY:	I. HULIN
DATE:	05.24.2021
PLOT DATE:	4/1/2021

SHEET

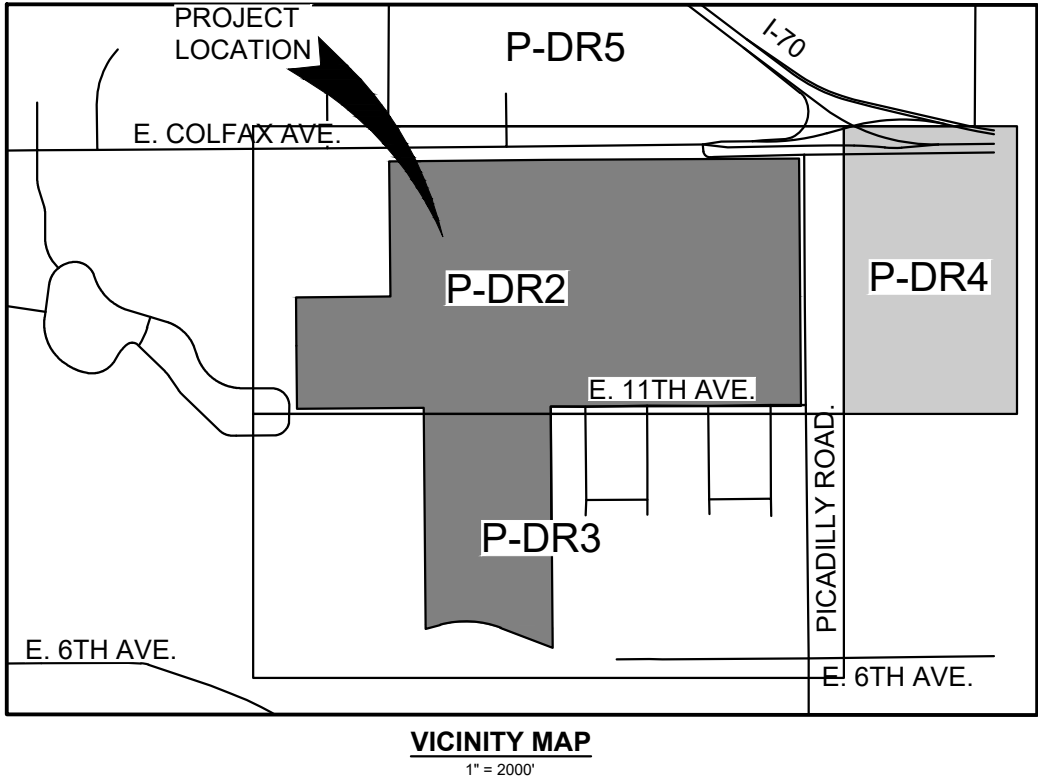
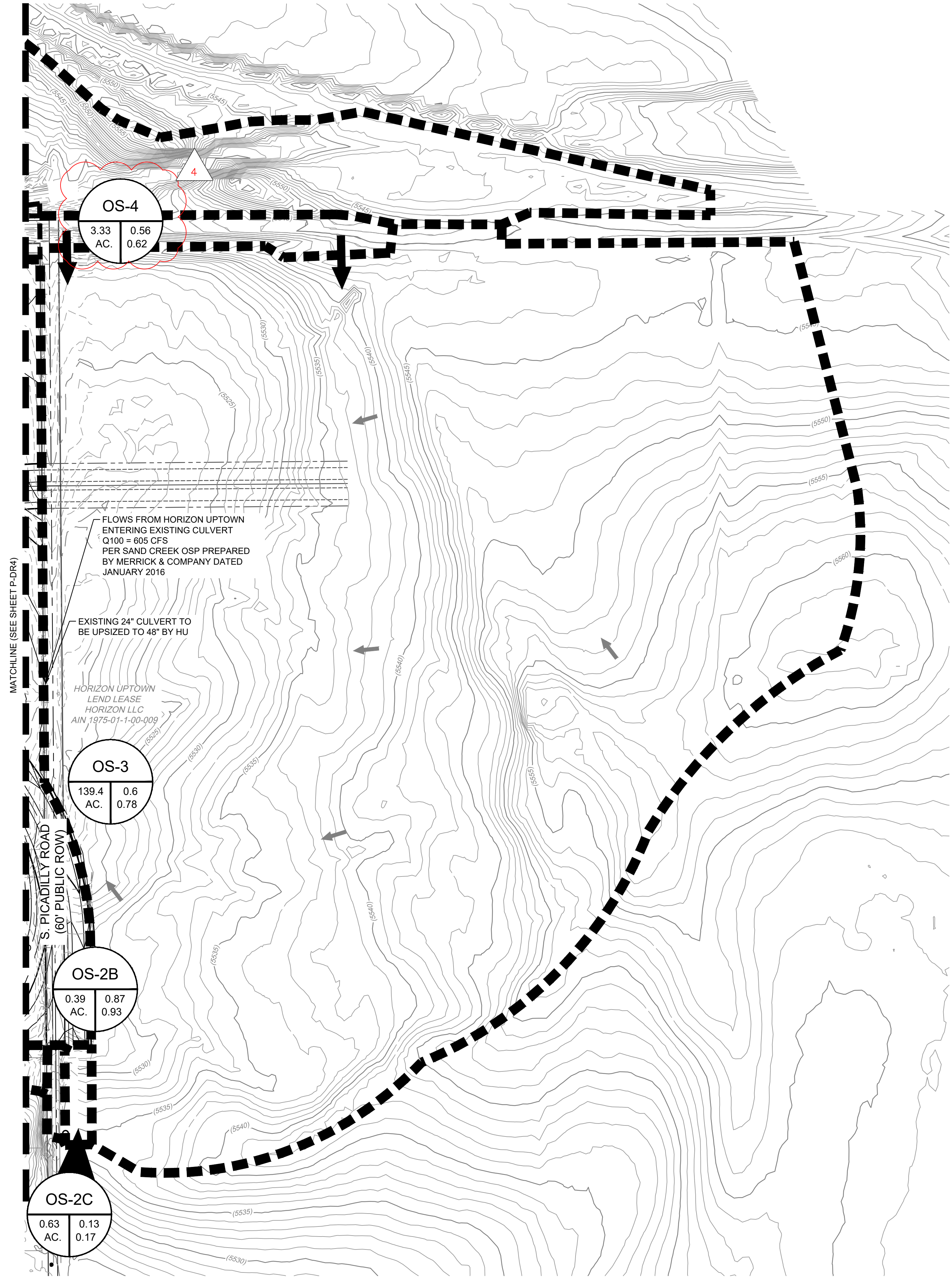
P-DR3

Sheet 8 of 10

900 south broadway
suite 320
denver, co 80209
p 303.561.3333
waremalcomb.com

FOR AND ON BEHALF
OF WARE MALCOMB

WARE MALCOMB
CIVIL ENGINEERING & SURVEYING



- LEGEND**
- PROPERTY LINE
 - EXISTING MINOR CONTOUR
 - EXISTING MAJOR CONTOUR
 - EXISTING DRAINAGE ARROW
 - EXISTING EASEMENT
 - EXISTING ROW
 - EXISTING LOT LINE
 - EXISTING FENCE
 - EXISTING CHANNEL
 - EXISTING DIRT ROAD
 - APPROXIMATE LOCATION OF SAND CREEK
 - PROPOSED CHANNEL
 - PROPOSED DRAINAGE ARROW
 - MAJOR BASIN BOUNDARY
 - MINOR BASIN BOUNDARY
 - DESIGN POINT
 - DRAINAGE BASIN
 - A=BASIN DELINEATION
 - C=2YR RUNOFF COEFFICIENT
 - D=100YR RUNOFF COEFFICIENT

- NOTES:**
- INDUSTRIAL PLANNING AREAS ASSUMED TO HAVE 80% IMPERVIOUSNESS AND COMMERCIAL AREAS ASSUMED TO HAVE 95% IMPERVIOUSNESS FOR PRELIMINARY REGIONAL POND CALCULATIONS
 - CITY OF AURORA PLAN REVIEW IS ONLY FOR GENERAL CONFORMANCE WITH CITY OF AURORA DESIGN CRITERIA ADN THE CITY CODE. THE CITY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, OF DIMENSIONS AND ELEVATIONS WHICH SHALL BE CONFIRMED AND CORRELATED AT THE JOB SITE. THE CITY OF AURORA, THROUGH THE APPROVAL OF THIS DOCUMENT, ASSUMES NO RESPONSIBILITY FOR THE COMPLETENESS AND/OR ACCURACY OF THIS DOCUMENT.
 - ALL STORM SEWER IS PRIVATE AND IS SIZED FOR THE 100 YR STORM EVENT, UNLESS OTHERWISE NOTED. PRIVATE STORM SEWER TO BE MAINTAINED BY THE METRO DISTRICT.
 - REGIONAL POND A IS PUBLIC & MAINTENANCE ELIGIBLE.

BENCHMARK:
3" DIA. BRASS CAP ATOP A 30" LONG STEEL PIPE IN CONC. AT THE S.W. COR. OF PICADILLY RD. AND E. 11TH AVE., MON. IS 37 FT. W. AND 48 FT. S. OF THE N.E. COR. S.E. 1/4 SEC. 2, T4S, R66W, MON. ALSO BEING JUST E. OF N-S FE. AND 5.5 FT. SOUTH OF FE. CORNER.
ELEVATION = 5,527.28 NAVD 88 DATUM
COA ID#4S6602SE001

WARE MALCOMB
CIVIL ENGINEERING & SURVEYING

900 south broadway
suite 320
denver, co 80209
p 303.561.3333
waremalcomb.com

FOR AND ON BEHALF
OF WARE MALCOMB

STAFFORD LOGISTICS CENTER
MASTER DRAINAGE PLAN AMENDMENT 1
PROPOSED CONDITIONS

NO.	DATE	REMARKS	
		MDR AMENDMENT 1	MDR AMENDMENT 1 RESUBMITTAL
1	11/11/2020	MDR AMENDMENT 1	MDR AMENDMENT 1 RESUBMITTAL
2	2/12/2021	MDR AMENDMENT 1	MDR AMENDMENT 1 RESUBMITTAL
3	4/01/2021	MDR AMENDMENT 1	MDR AMENDMENT 1 RESUBMITTAL
4	5/28/2021	MDR AMENDMENT 2	MDR AMENDMENT 2

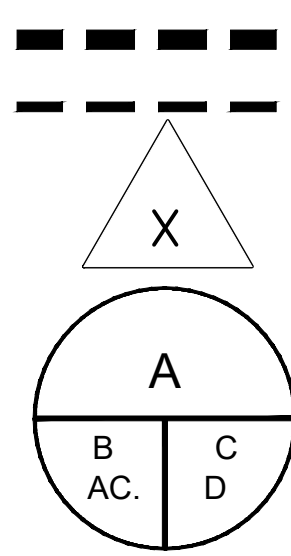
JOB NO.:	DCS20-4039
PA / PM:	J. CARANO
DRAWN BY:	I. HULIN
DATE:	05.24.2021
PLOT DATE:	4/1/2021

- NOTES:
1. INDUSTRIAL PLANNING AREAS ASSUMED TO HAVE 80% IMPERVIOUSNESS AND COMMERCIAL AREAS ASSUMED TO HAVE 95% IMPERVIOUSNESS FOR PRELIMINARY REGIONAL POND CALCULATIONS
 2. CITY OF AURORA PLAN REVIEW IS ONLY FOR GENERAL CONFORMANCE WITH CITY OF AURORA DESIGN CRITERIA AND THE CITY CODE. THE CITY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, OF DIMENSIONS AND ELEVATIONS WHICH SHALL BE CONFIRMED AND CORRELATED AT THE JOB SITE. THE CITY OF AURORA, THROUGH THE APPROVAL OF THIS DOCUMENT, ASSUMES NO RESPONSIBILITY FOR THE COMPLETENESS AND/OR ACCURACY OF THIS DOCUMENT.
 3. ALL STORM SEWER IS PRIVATE AND IS SIZED FOR THE 100 YR STORM EVENT, UNLESS OTHERWISE NOTED. PRIVATE STORM SEWER TO BE MAINTAINED BY THE METRO DISTRICT.
 4. REGIONAL POND A IS PUBLIC & MAINTENANCE ELIGIBLE.

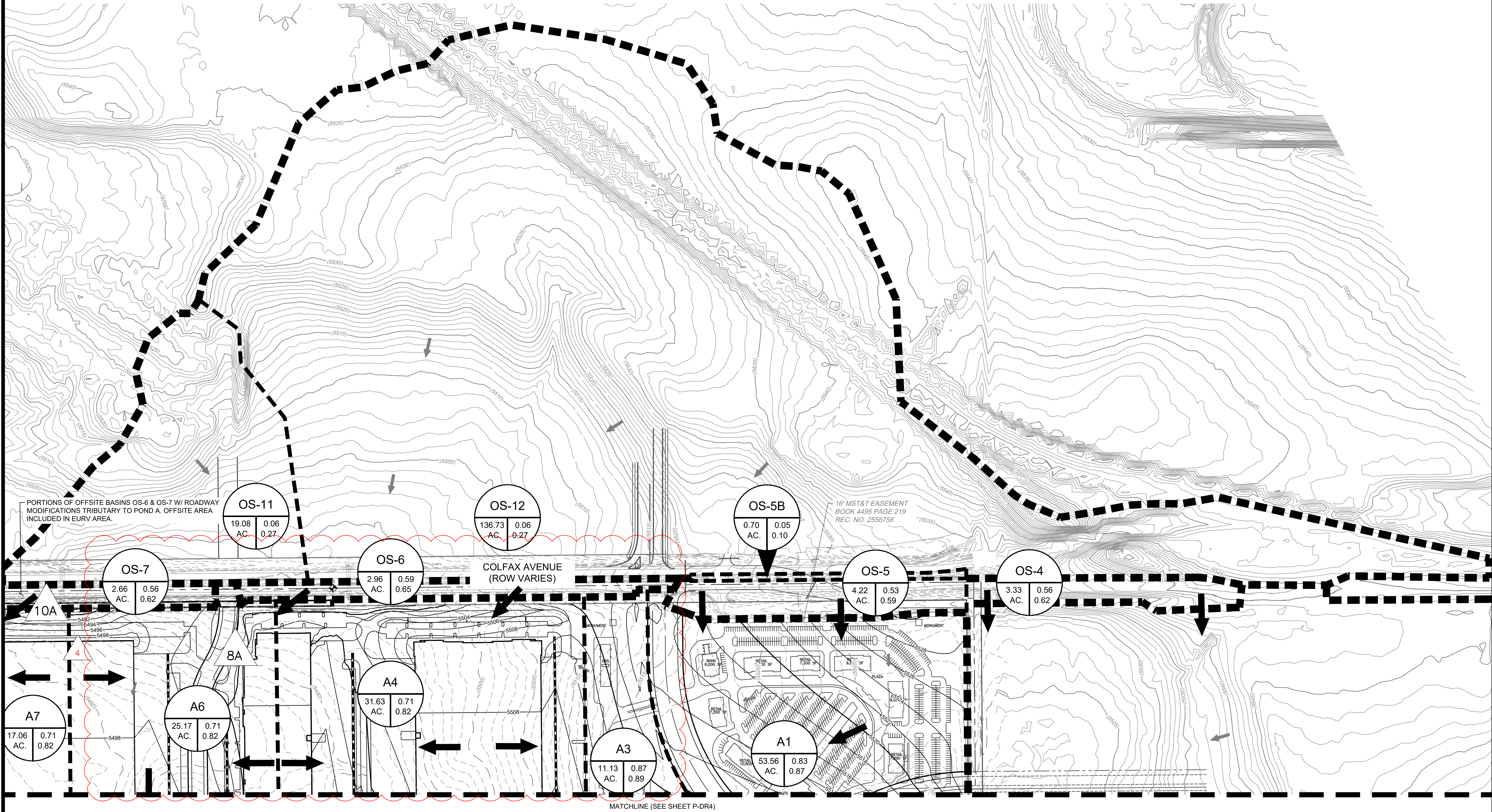
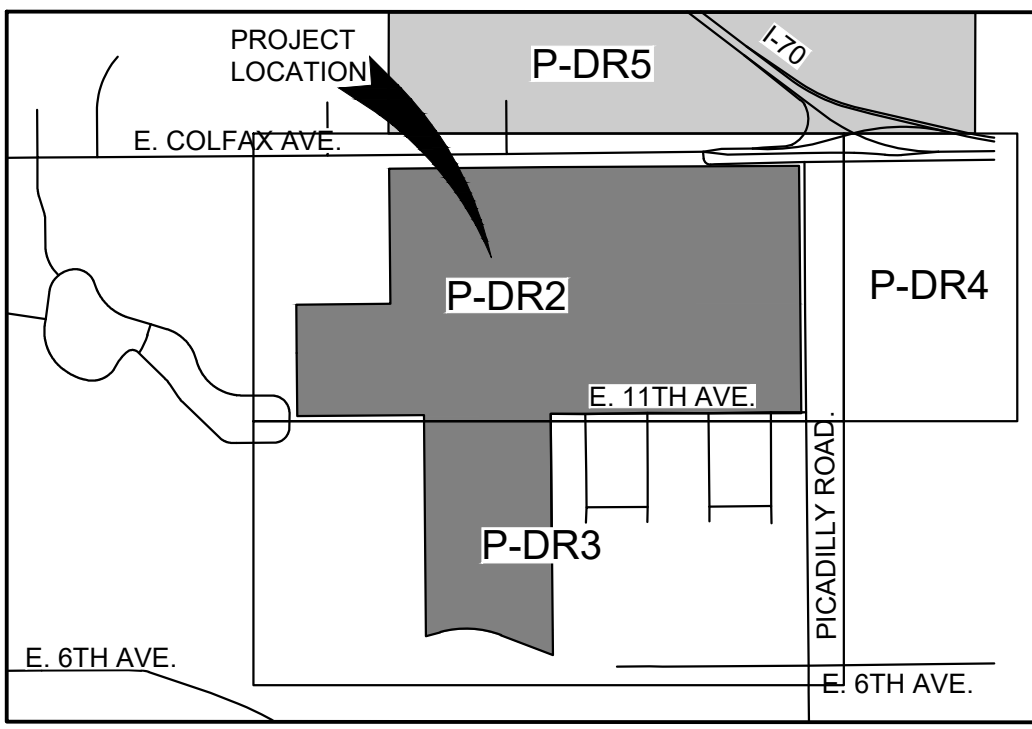
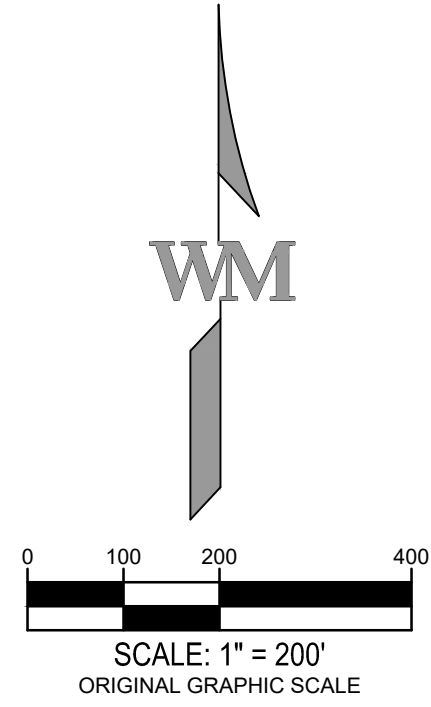
BENCHMARK:
3" DIA. BRASS CAP ATOP A 30" LONG STEEL PIPE IN CONC. AT THE S.W. COR. OF PICADILLY RD. AND E. 11TH AVE. MON. IS 37 FT. W. AND 48 FT. S. OF THE N.E. COR. S.E. 1/4 SEC. 2, T4S, R66W, MON. ALSO BEING JUST E. OF N-S FE. AND 5.5 FT. SOUTH OF FE. CORNER.
ELEVATION = 5,527.28 NAVD 88 DATUM
COA ID#4S6602SE001

LEGEND

- PROPERTY LINE
- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- EXISTING DRAINAGE ARROW
- EXISTING EASEMENT
- EXISTING ROW
- EXISTING LOT LINE
- EXISTING FENCE
- EXISTING CHANNEL
- EXISTING DIRT ROAD
- APPROXIMATE LOCATION OF SAND CREEK
- PROPOSED CHANNEL
- PROPOSED DRAINAGE ARROW



- MAJOR BASIN BOUNDARY
- MINOR BASIN BOUNDARY
- DESIGN POINT
- DRAINAGE BASIN
- A=BASIN DELINEATION
- C=2YR RUNOFF COEFFICIENT
- D=100YR RUNOFF COEFFICIENT



900 south broadway
suite 320
denver, co 80209
p 303.561.3333
waremalcomb.com

FOR AND ON BEHALF
OF WARE MALCOMB

STAFFORD LOGISTICS CENTER
MASTER DRAINAGE PLAN AMENDMENT 1
PROPOSED CONDITIONS

NO.	DATE	REMARKS	
		MDR AMENDMENT 1	RESUBMITTAL
1	11/11/2020	MDR AMENDMENT 1	RESUBMITTAL
2	2/12/2021	MDR AMENDMENT 1	RESUBMITTAL
3	4/01/2021	MDR AMENDMENT 1	RESUBMITTAL
4	5/28/2021	MDR AMENDMENT 2	

JOB NO.:	DCS20-4039
PA / PM:	J. CARANO
DRAWN BY:	I. HULIN
DATE:	05.24.2021
PLOT DATE:	4/1/2021