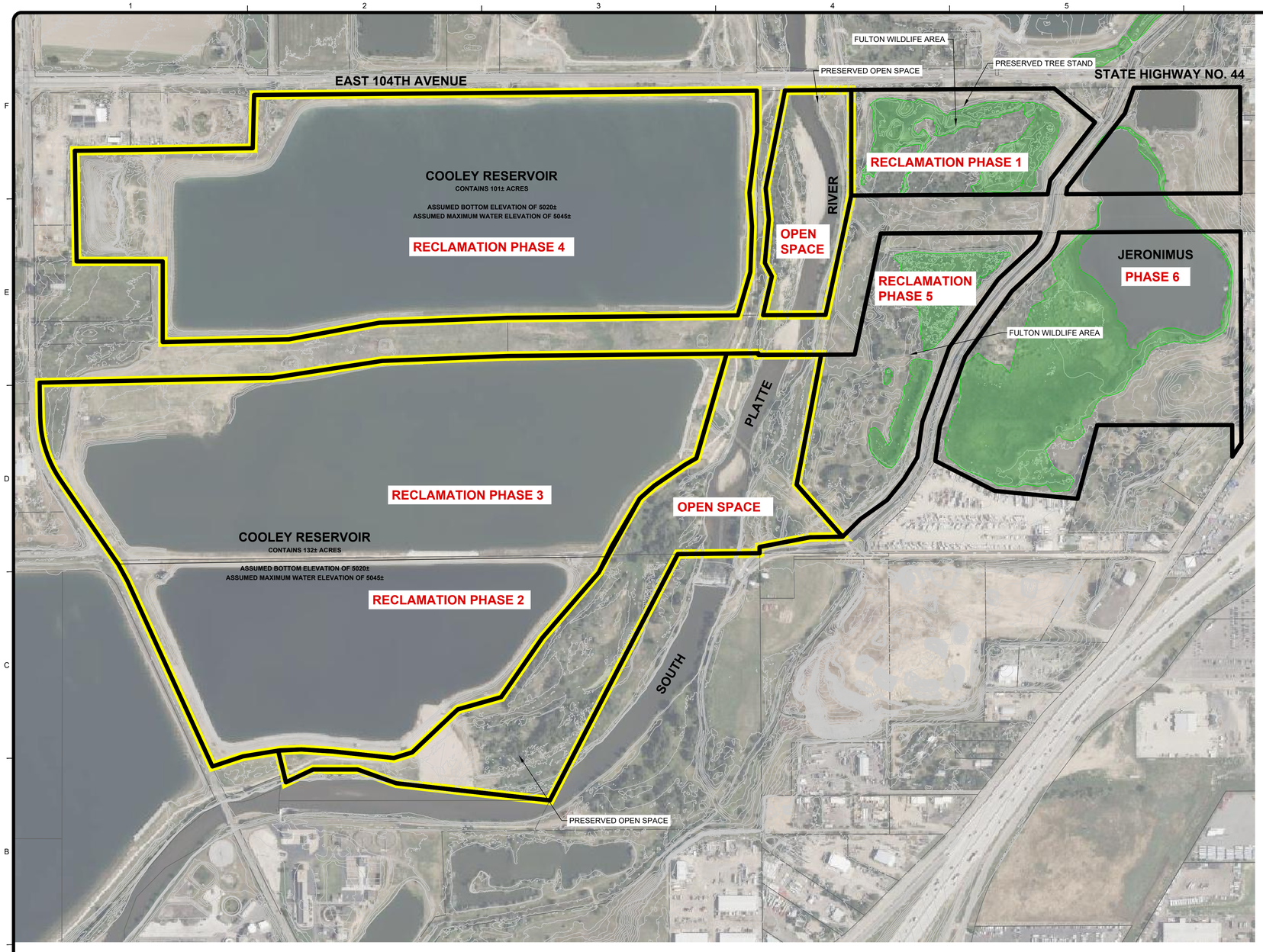

LEGEND

- UPDATED PERMIT BOUNDARY OF AFFECTED LAND
- APPROX. 2020 WETLAND DELINEATION
- EXISTING CONTOURS (MAJ/MNR)
- RELEASE REQUEST - SEPTEMBER 2024

0 150' 300' 600'
SCALE: 1" = 300'

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RECLAMATION PLAN NOTES

1. ANY HARDPACKED AREAS SHALL BE SCARIFIED PRIOR TO REPLACEMENT OF TOPSOIL AND SEEDING. AFTER BACKFILLING, GRADING OF ANY AREA TO FINAL SLOPES AND PLACEMENT OF TOPSOIL, SEEDING WILL BE INITIATED AS SOON AS POSSIBLE.
2. EXCEPT FOR WETLAND ESTABLISHMENT AREAS, THE BELOW GRASS DRILL SEED MIX BELOW SHALL BE USED FOR RE-SEEDING OF SLOPES AND DISTURBED AREAS. FOR BROADCAST SEEDING, THE RATE SHALL BE DOUBLED. MULCH SHALL CONSIST OF 4,000 LBS./ACRE WEED FREE NATIVE GRASS CRIMPED INTO THE SOIL SURFACES. PLANTING SHALL OCCUR BETWEEN NOVEMBER 1 AND APRIL 30 WHEN THE GROUND IS FROZEN AND BE PLANTED ¼ TO ¾ INCHES DEEP IN 7" TO 12" ROWS. NON-IRRIGATED GRASS PLANTING OF THE NON-WETLAND AREAS SHALL CONSIST OF THE FOLLOWING:

SPECIES	VARIETY	PLS#	%	PLS#/AC
WESTERN WHEATGRASS	"ARRIBA OR BARTON"	8.0	30	2.4
PUBESCENT WHEATGRASS	"LUNA"	9.0	20	1.8
SIDEOATS GRAMA	"VAUGHN OR BUTTE"	4.5	30	1.4
BLUE GRAMA	"HACHITA OR LOVINGTON"	1.5	10	0.2

3. FOR WETLANDS CREATION, PARTIAL RECLAMATION WILL BEGIN WITH THE BACKFILLING OF SEDIMENTS CREATED DURING THE PROCESSING OF THE MINED SAND AND GRAVEL. AT THE TERMINATION OF MINING, AT LEAST 50% OF THE PRESENTLY EXPOSED LAKE AREA IS EXPECTED TO BEEN BACKFILLED TO A LEVEL TO SUPPORT WETLAND VEGETATION AT THE CONCLUSION OF ALL MINING. INTERIM PLANTING OF WETLANDS VEGETATION SHALL BE UNDERTAKEN, WHENEVER A MINIMUM OF 5 ACRES HAS BEEN FILLED TO 6" ABOVE THE ORIGINAL LAKE SURFACE. WETLAND PLANTING SHALL FIRST CONSIST OF BROADCAST SEEDING OF THE BELOW OR SIMILAR GRASS SEED MIX AT AN APPLICATION RATE OF 20 LBS./ACRE DURING THE GROWING SEASON (MAY THROUGH AUGUST):

%	SPECIES	COMMON NAME	% PURE	% VIABLE
12.00	BECKMANNIA SYZGACHNE	AMERICAN SLOUGHGRASS	89.28	82.00
4.00	CARAX NEBRASCENCIA	NEBRASKA SEDGE	98.69	84.00
1.00	CARAX LANUGINOSA	WOOLY SEDGE	97.54	46.00
10.00	ELEOCHARIS PALUSTRIS	CREEPING SPIKERUSH	99.51	88.00
15.00	ELYMUS CANDENSIS	CANADA WILDRYE	99.33	99.00
1.00	JUNOUS BALTICUS	BALTIC RUSH	93.21	96.00
1.00	JUNOUS TORREYL	TORREY'S RUSH	66.02	97.00
12.00	PANICUM VIRGATUM	SWITCHGRASS	99.47	70.00
10.00	SCIRPUS ACUTUS	HARDSTEM BULRUSH	97.77	64.00
1.00	SCIRPUS PALLIDUS	PALE BULRUSH	95.01	92.00
10.00	SCIRPUS PALUDOSUS	ALKALAI BULRUSH	99.04	97.00
4.00	SCIRPUS PUNGENS	THREE SQUARE BULRUSH	87.20	77.00
10.00	SCIRPUS VALIDUS	SOFT STEM BULRUSH	99.26	91.00
4.00	SPARGANIUM EURYCARPUM	GIANT BUR REED	98.73	90.00
5.00	SPARTINA PACTINATA	PRAIRIE CORDGRASS	77.82	92.00

4. PER THE NOXIOUS WEED CONTROL PLAN IN EXHIBIT D -MINING PLAN, NOXIOUS WEEDS WILL BE CONTROLLED, PARTICULARLY DIFFUSE KNAPWEED, SCOTCH THISTLE, AND CANADA THISTLE, WHICH HAVE BEEN OBSERVED WITHIN THE PERMIT AREA AND ON ADJACENT PROPERTY. ALL AREAS ADJACENT TO ROADWAYS AND WATERWAYS WILL BE ASSESSED EVERY SPRING TO DETERMINE THE BEST MANAGEMENT PRACTICE FOR WEED CONTROL. AT A MINIMUM, ALL NOXIOUS WEED AREAS WILL BE MOWED AS NEEDED. IN HEAVILY INVESTED AREAS, APPROVED HERBICIDES WILL BE APPLIED AS NEEDED TO INCLUDE, BUT NOT LIMITED TO, TORDON 22K APPLIED AT 1PT/AC AT 20 GPA OR 2,4-D 4# AMINE AT 1 QT/AC AT 20 GPA. CONSULTATION WITH QUALIFIED VEGETATION MANAGERS AND/OR COUNTY WEED CONTROL COORDINATORS WILL BE ON-GOING TO ASSIST IN THE MANAGEMENT OF NOXIOUS WEEDS.
5. COTTONWOOD TREES (IN CLUSTERS OF 3 TO 5) AND WILLOW SHRUBS (IN CLUSTERS OF 5 TO 10) PLANTED IN SEVERAL LOCATIONS WHERE CREATED WETLANDS ABUT UPLAND NON-IRRIGATED REPLANTING AREAS.

ACRES REQUESTED FOR RELEASE:

RESERVOIR AREA = 233 ACRES

PHASE 2 = 49 ACRES
PHASE 3 = 83 ACRES
PHASE 4 = 101 ACRES

OPEN SPACE = 43.15 ACRES

TOTAL RELEASE REQUEST = 276.15 ACRES

REMAINING ACRES:

PHASE 1 = 16 ACRES
PHASE 5 = 23 ACRES
PHASE 6A = 10 ACRES
PHASE 6B = 40 ACRES

TOTAL REMAINING ACRES = 89 ACRES

CERTIFICATION:

THIS MAP WAS PREPARED BY TETRA TECH IN COOPERATION WITH HOLCIM - WCR, INC. BASED ON THE BEST AVAILABLE INFORMATION.

FREDERICK LEE CHARLES, PE DATE

AREAS BY FINAL USE - ORIGINAL PERMIT

LAKE (WATER SURFACE AREA)	231± ACRES 205± ACRES
OPEN SPACE/WILDLIFE	60± ACRES
CREATED WETLANDS	11 TO 31± ACRES
CREATED LAKE	20 TO 0± ACRES
INDUSTRIAL	27± ACRES
TOTAL	349± ACRES

AREAS BY FINAL USE - AMENDMENT NO. 1

PRESERVED WETLANDS	10± ACRES
DRYLAND/OPEN SPACE (UNDISTURBED)	10± ACRES
DRYLAND/OPENSPACE (DISTURBED)	10± ACRES
CREATED WETLANDS	15± ACRES
LAKE	5± ACRES
TOTAL	50± ACRES

FULTON WILDLIFE REVEGETATION PHASES

1. PHASE 1A - WETLANDS
   REVEGETATION 6± ACRES
2. PHASE 1B - WETLANDS
   TOPSOIL REPLACEMENT 5 TO 25± ACRES
   REVEGETATION 5 TO 25± ACRES
3. PHASE 5 - CONVEYOR AND PLANT SITE EQUIPMENT REMOVAL

COOLEY RESERVOIR REVEGETATION PHASES

4. REVEGETATION
   PHASE 2 - 6472± LINEAL FEET x 50* / 43560 SQ.FT. = 7.5± ACRES TO BE REVEGETATED
   PHASE 3 - 8730± LINEAL FEET x 50* / 43560 SQ.FT. = 10.0± ACRES TO BE REVEGETATED
   PHASE 4 - 9652± LINEAL FEET x 50* / 43560 SQ.FT. = 11.0± ACRES TO BE REVEGETATED

* - 35' SETBACK + 15' TO WATER LINE x 1 = 50

JERONIMUS (AMENDMENT NO. 1) PROPERTY, PHASE 6

PHASE 6A - GRASSLAND TOPSOIL REPLACEMENT & REVEGETATION	10± ACRES
PHASE 6B - CREATED WETLANDS REVEGETATION	15± ACRES

NOTES:

1. ALL REVEGETATION AREAS HAVE MIN. 6" TOPSOIL REPLACEMENT, FINAL GRADING, SEEDING, FERTILIZING, AND MULCHING EXCEPT FOR WETLAND REVEGETATION WHICH DOES NOT INCLUDE TOPSOIL REPLACEMENT.
2. FINAL GRADING IS SHOWN BY THE TOPOGRAPHIC DATA ON THIS PLAN MAP. SOURCE OF TOPOGRAPHIC DATA IS FROM "LIDAR ACQUISITION FOR THE FLOODING IN CENTRAL AND NORTHERN COLORADO", BY PHOTO SCIENCE FOR USGS (2014).

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MARK	DATE	DESCRIPTION	BY

HOLCIM
RECLAMATION PLAN MAP
RELEASE REQUEST - SEPTEMBER 2024
COOLEY RESERVOIR AND
FULTON WILDLIFE AREA PIT
AMENDMENT NO. 1 - JERONIMUS PROPERTY

PROJ: 117-023252-24001
DESN: SCH
DRWN: GH
CHKD: FLC

F-2a

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Bar Measures 1 inch, otherwise drawing not to scale