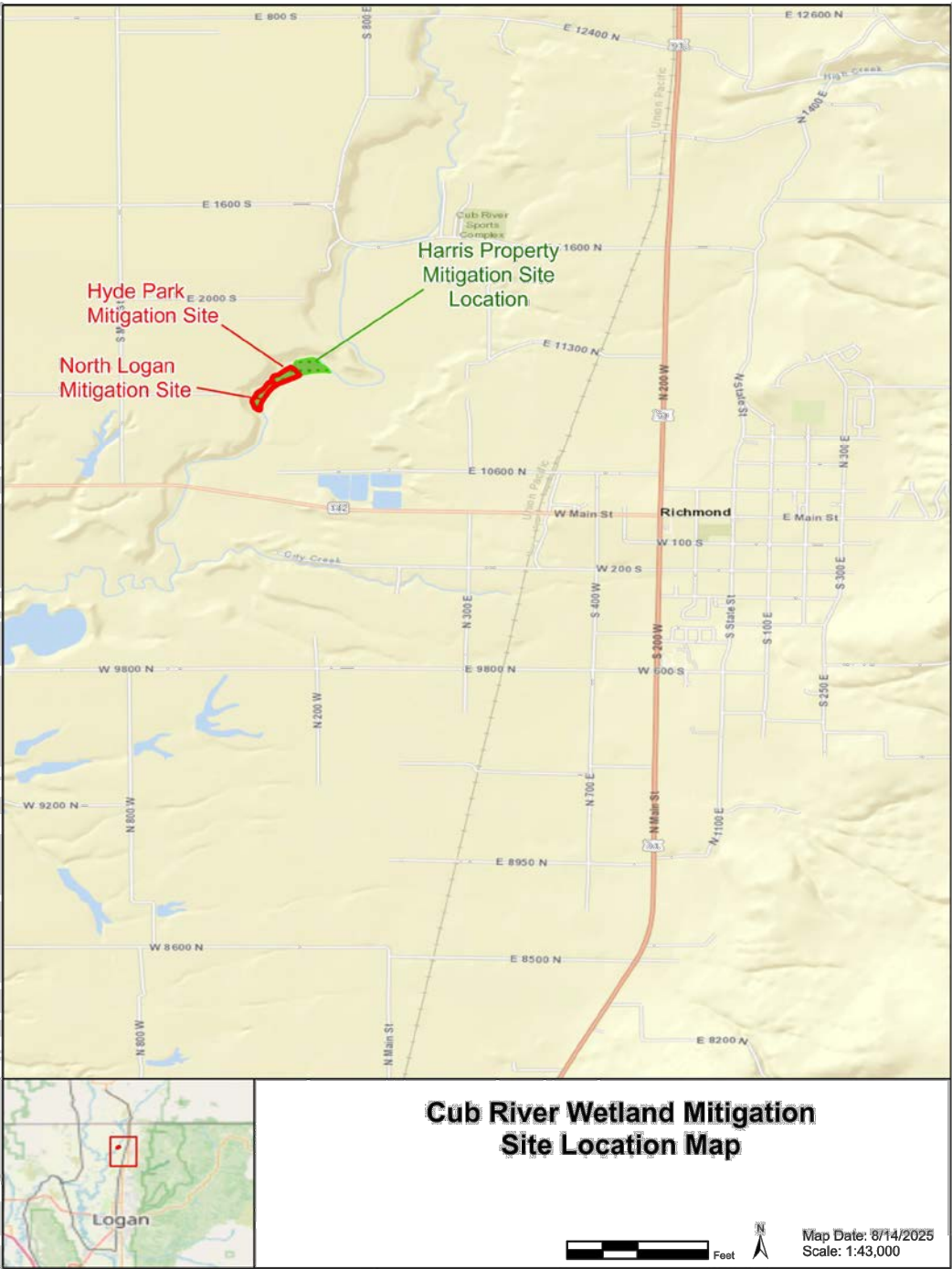


Cub River Wetland Mitigation Site

Cache County, Utah



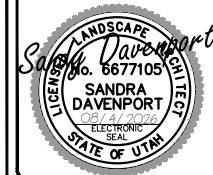
Utah State Plane; NAD83 datum, North Zone, US Foot

NOTE: PLANS ARE INTENDED TO BE PRINTED IN COLOR

SHEET ASSEMBLY ORDER

SHEET IDENTIFIER	BINDING ORDER	SHEET TITLE
G 001	01	COVER SHEET
G 002	02	GENERAL NOTES
G 002	03	GENERAL INFORMATION
LG 101	04	LANDSCAPE GRADING PLAN
LG 102	05	LANDSCAPE GRADING PLAN
LP 101	06	LANDSCAPE PLANTING PLAN
LP 102	07	LANDSCAPE PLANTING PLAN
LS 301	08	LANDSCAPE SECTIONS
LS 302	09	LANDSCAPE SECTIONS
LD 501	10	LANDSCAPE DETAILS
LD 502	11	LANDSCAPE DETAILS
LD 503	12	LANDSCAPE DETAILS
LD 504	13	LANDSCAPE DETAILS
LD 505	14	LANDSCAPE DETAILS
SUM 101	15	SUMMARY SHEET

PREPARER:



Cub River Wetland Mitigation Site

Cache County, Utah

PROJECT OWNER:

REV.	DATE	DESCRIPTION

CONTRACT NO.:
PROJECT NO.: BW#3394
DRAWN BY: SD
CHECKED BY: AM
DATE: AUGUST 2026

SHEET TITLE:
COVER SHEET

SHEET IDENTIFIER:
G 001
BINDING ORDER: 01

GENERAL INFORMATION NOTES

Project Limits

All construction activity shall be confined to the project limit of disturbance including any staging/stockpile areas. Do not disturb, excavate or work beyond project limits of disturbance without written permission from the Owners Representative.

Site Mapping

Basis of bearing is Utah State Plane; NAD83 datum, North Zone, US Foot. Verification of survey mapping is the responsibility of the Contractor.

Survey Staking

Survey staking is the responsibility of the Contractor. The Contractor may obtain CAD files from the Preparer for staking and layout purposes. The Contractor is responsible to set the baseline survey control grade and confirm it with the Owner's Representative.

Permits

The Contractor is required to comply with all construction related requirements in each permit issued for the project. This includes the Floodplain Development Permit and the State of Utah Stream Alteration Permit.

Utilities

Utility locations have not been surveyed. It is the responsibility of the Contractor to perform all utility locations at least 48 hours prior to excavation, call 1(800) 662-4111. It is the responsibility of the Contractor to protect all existing sewer, water, gas and electric utilities encountered in the work. Any relocation or improvements of utilities shall be accurately noted on as-built drawings and issued to the Owners Representative at the completion of the project.

Temporary Construction Facilities

All temporary utilities and facilities will be the responsibility of the Contractor. A construction trailer is not required. Potable water is not available on site and shall be provided by the Contractor. The Contractor is responsible for job site conditions and the safety for human life during the course of construction. This requirement shall apply continuously during the period of construction and is not limited to normal working hours.

Construction Spoils and Waste Handling

Items encountered below grade and not shown on the drawings shall be brought to the attention of the Owners Representative. All construction spoils and waste are the responsibility of the Contractor and shall be disposed of at an approved landfill facility.

Clearing and Grubbing

Existing on-site materials shall be carefully removed and stored for re-use. All existing vegetation not in designated excavation areas and not designated for removal is to be protected in place. Completely remove stumps, roots, shrubs, weeds, and other debris protruding from the ground in areas to be excavated. Vegetation damaged outside of the limits of disturbance will be replaced by the Contractor at their own expense.

Demolition

Locate and verify all utility line locations prior to demolition and report any conflicts to the Owners Representative.

Construction sites must be in compliance with the Utah Pollution Discharge Elimination System (UPDES) Storm Water General Permit for Construction Activities (UTR300000). A copy of the permit's Storm Water Pollution Prevention Plan must be submitted to the local storm water jurisdiction for review and approval. Additional water quality and erosion control measures may be required.

Site Earthwork and Grading

The Contractor is responsible for all site earthwork and grading activities to meet designs identified in plans and details, which are intended to show final result of design. Modifications may be required to suit job site conditions encountered during construction.

Backfill and embankment material shall be composed of suitable excavated and/or imported soils.

Existing topsoil shall be excavated and salvaged by Contractor for use in landscaping and grading activities.

Site Construction Notes

All tree removal activities and site disturbance activities scheduled between April 1 and August 30 shall occur only after a Nesting Bird Survey has been conducted within the construction site footprint and all protocols and protective measures are followed.

All planting and seeding activities shall occur during the designated seeding and planting window from September 15 to December 1, unless in areas with irrigation or as otherwise authorized by the Owners Representative.

Where ground conditions are damp and equipment traffic would result in excessive ground compaction and rutting, use construction mats to access active work areas.

Use a water truck or other suitable watering device as needed to control dust.

Inspect paved roads adjacent to the project site regularly for mud tracking; sweep roadways as needed and ensure roads are left clean at the end of each shift.

The Contractor shall keep job site area clean, hazard free and dispose of all debris, rubbish and construction waste, and remove all abandoned materials from the site. All disturbed staging and access areas are to be restored to pre-construction condition. The Contractor is responsible to clean up and reclaim (regrade, seed and mulch) construction areas at the completion of the project.

Storm Water Pollution Prevention Plan Notes

No earth shall be disturbed until erosion control measures are in place. Erosion control measures will be maintained and remain in place until re-vegetation success measures as identified by the Owner's Representative have been achieved.

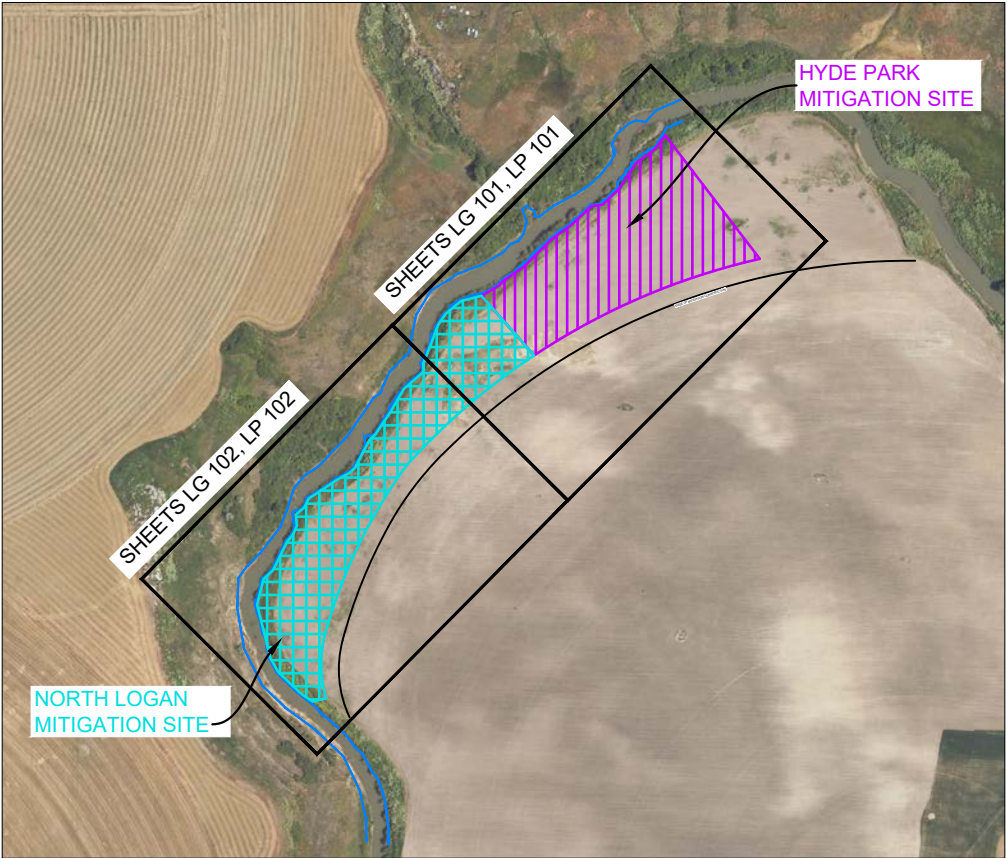
Monitor, inspect, and maintain all erosion control measures as needed to prevent erosion and sediment discharge into the river. Adjust locations of measures and install additional measures as construction phasing requires. Disturbed areas where construction activity has ceased will be stabilized in accordance with State UPDES requirements. Submittal of NOI and acquisition of UPDES Storm Water General Permit for Construction Activities (UTR300000) is the responsibility of the Contractor.

The Contractor is responsible for implementing and utilizing Best Management Practices (BMPs) to prevent storm water runoff and water pollution during construction activities. The Contractor is responsible for supplying equipment and plans that provide both dust and fire control during project construction. Use caution when working in and around wet areas. If potential hazardous materials are encountered, contact the Owners Representative immediately.

All construction, materials, and workmanship shall conform to the latest edition of the Utah Chapter APWA Manual of Standard Specifications and Standard Plans, along with all current supplements and local municipal amendments.

ABBREVIATIONS

APPROX	APPROXIMATE
AVG	AVERAGE
BM	BENCHMARK
CAL	CALIPER
CL	CENTERLINE
CY	CUBIC YARD
DIA	DIAMETER
EG	EXISTING GRADE
EL	ELEVATION
EXIST	EXISTING
FG	FINISH GRADE
GB	GRADE BREAK
HORIZ	HORIZONTAL
HP	HIGH POINT
IN	INCHES
LF	LINEAR FEET
LP	LOW POINT
MAX	MAXIMUM
MIN	MINIMUM
MISC	MISCELLANEOUS
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
OC	ON CENTER
REQ'D	REQUIRED
ROW	RIGHT OF WAY
SF	SQUARE FOOT
SHT	SHEET
STA	STATION
TYP	TYPICAL
VERT	VERTICAL



KEY PLAN (NTS)

PREPARER:



Cub River Wetland Mitigation Site
Cache County, Utah

PROJECT OWNER:

REV.	DATE	DESCRIPTION

CONTRACT NO.:
PROJECT NO.: BW#3394
DRAWN BY: SD
CHECKED BY: AM
DATE: AUGUST 2026

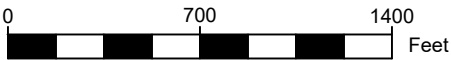
SHEET TITLE:

GENERAL
NOTES

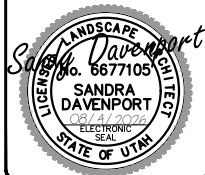
SHEET IDENTIFIER:

G 002

BINDING ORDER 02



PREPARER:



Cub River Wetland Mitigation Site
Cache County, Utah

PROJECT OWNER:

REV.	DATE	DESCRIPTION

CONTRACT NO.:
PROJECT NO.: BW#3394
DRAWN BY: SD
CHECKED BY: AM
DATE: AUGUST 2026

SHEET TITLE:
GENERAL
INFORMATION

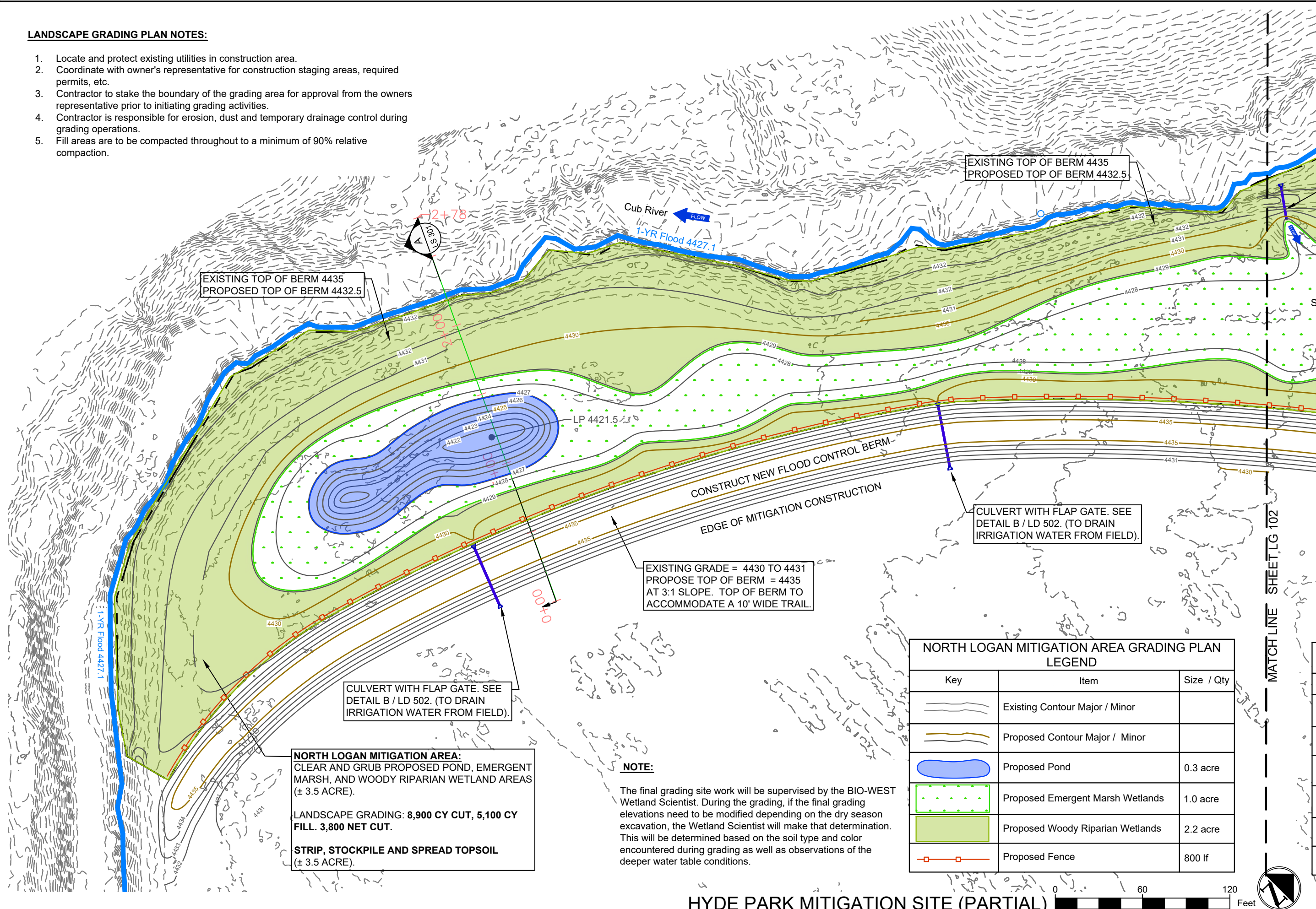
SHEET IDENTIFIER:

G 003

BINDING
ORDER 03

LANDSCAPE GRADING PLAN NOTES:

1. Locate and protect existing utilities in construction area.
2. Coordinate with owner's representative for construction staging areas, required permits, etc.
3. Contractor to stake the boundary of the grading area for approval from the owners representative prior to initiating grading activities.
4. Contractor is responsible for erosion, dust and temporary drainage control during grading operations.
5. Fill areas are to be compacted throughout to a minimum of 90% relative compaction.



EXISTING TOP OF BERM 4435
PROPOSED TOP OF BERM 4432.5

EXISTING TOP OF BERM 4435
PROPOSED TOP OF BERM 4432.5

Cub River
1-YR Flood 4427.1

LP 4421.5

CONSTRUCT NEW FLOOD CONTROL BERM
EDGE OF MITIGATION CONSTRUCTION

CULVERT WITH FLAP GATE. SEE
DETAIL B / LD 502. (TO DRAIN
IRRIGATION WATER FROM FIELD).

EXISTING GRADE = 4430 TO 4431
PROPOSE TOP OF BERM = 4435
AT 3:1 SLOPE. TOP OF BERM TO
ACCOMMODATE A 10' WIDE TRAIL.

CULVERT WITH FLAP GATE. SEE
DETAIL B / LD 502. (TO DRAIN
IRRIGATION WATER FROM FIELD).

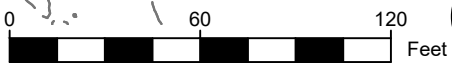
NORTH LOGAN MITIGATION AREA:
CLEAR AND GRUB PROPOSED POND, EMERGENT
MARSH, AND WOODY RIPARIAN WETLAND AREAS
(± 3.5 ACRE).

LANDSCAPE GRADING: 8,900 CY CUT, 5,100 CY
FILL. 3,800 NET CUT.

STRIP, STOCKPILE AND SPREAD TOPSOIL
(± 3.5 ACRE).

NOTE:
The final grading site work will be supervised by the BIO-WEST
Wetland Scientist. During the grading, if the final grading
elevations need to be modified depending on the dry season
excavation, the Wetland Scientist will make that determination.
This will be determined based on the soil type and color
encountered during grading as well as observations of the
deeper water table conditions.

NORTH LOGAN MITIGATION AREA GRADING PLAN LEGEND		
Key	Item	Size / Qty
	Existing Contour Major / Minor	
	Proposed Contour Major / Minor	
	Proposed Pond	0.3 acre
	Proposed Emergent Marsh Wetlands	1.0 acre
	Proposed Woody Riparian Wetlands	2.2 acre
	Proposed Fence	800 lf



PREPARER:

1063 West 1400 North • Logan, Utah 84321 • 435-732-4292

Cub River Wetland Mitigation Site
Cache County, Utah

PROJECT OWNER:

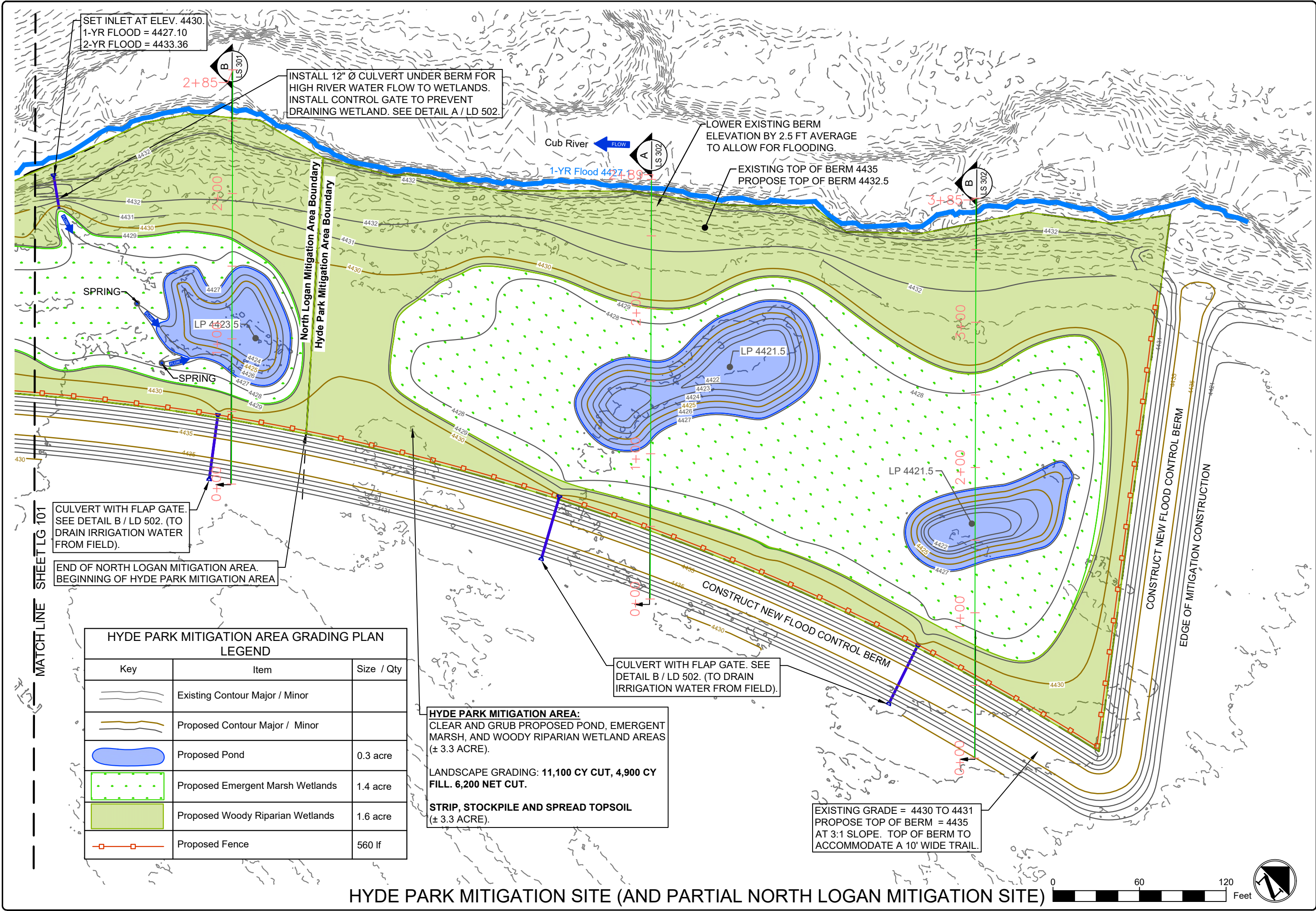
REV.	DATE	DESCRIPTION

CONTRACT NO.:
PROJECT NO.: BW#3394
DRAWN BY: SD
CHECKED BY: AM
DATE: AUGUST 2026

SHEET TITLE:
LANDSCAPE
GRADING
PLAN

SHEET IDENTIFIER:
LG 101

BINDING
ORDER 04



PREPARED BY:

1063 West 1400 North • Logan, Utah 84321 • 435-732-4202

Cub River Wetland Mitigation Site
Cache County, Utah

PROJECT OWNER:

REV.	DATE	DESCRIPTION

CONTRACT NO.:
PROJECT NO.: BW#3394
DRAWN BY: SD
CHECKED BY: AM
DATE: AUGUST 2026

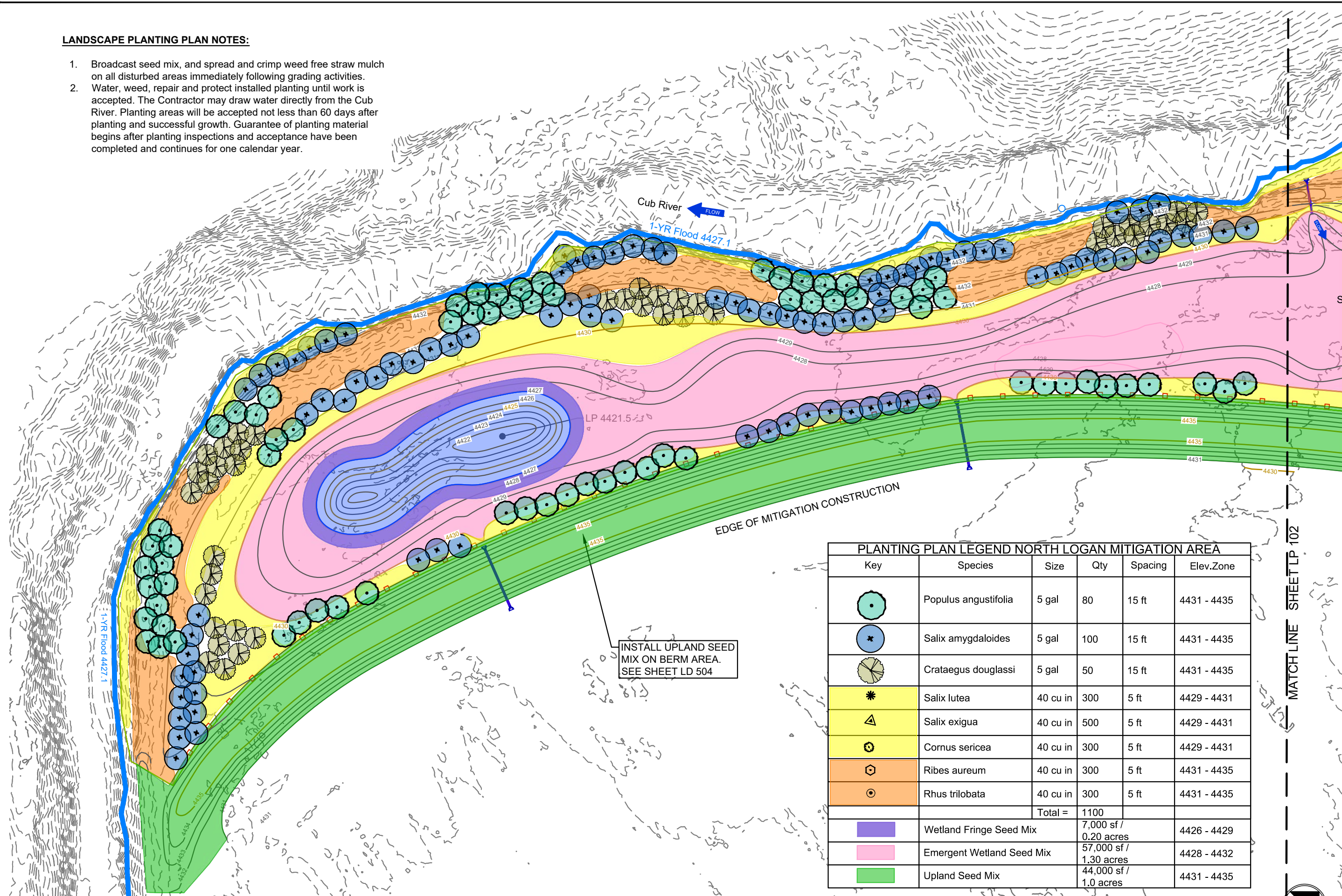
SHEET TITLE:
LANDSCAPE GRADING PLAN

SHEET IDENTIFIER:
LG 102

BINDING ORDER
05

LANDSCAPE PLANTING PLAN NOTES:

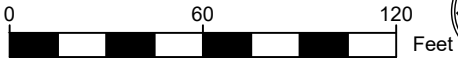
- 1. Broadcast seed mix, and spread and crimp weed free straw mulch on all disturbed areas immediately following grading activities.
- 2. Water, weed, repair and protect installed planting until work is accepted. The Contractor may draw water directly from the Cub River. Planting areas will be accepted not less than 60 days after planting and successful growth. Guarantee of planting material begins after planting inspections and acceptance have been completed and continues for one calendar year.



INSTALL UPLAND SEED MIX ON BERM AREA. SEE SHEET LD 504

PLANTING PLAN LEGEND NORTH LOGAN MITIGATION AREA					
Key	Species	Size	Qty	Spacing	Elev.Zone
	Populus angustifolia	5 gal	80	15 ft	4431 - 4435
	Salix amygdaloides	5 gal	100	15 ft	4431 - 4435
	Crataegus douglassi	5 gal	50	15 ft	4431 - 4435
	Salix lutea	40 cu in	300	5 ft	4429 - 4431
	Salix exigua	40 cu in	500	5 ft	4429 - 4431
	Cornus sericea	40 cu in	300	5 ft	4429 - 4431
	Ribes aureum	40 cu in	300	5 ft	4431 - 4435
	Rhus trilobata	40 cu in	300	5 ft	4431 - 4435
Total =			1100		
	Wetland Fringe Seed Mix	7,000 sf / 0.20 acres			4426 - 4429
	Emergent Wetland Seed Mix	57,000 sf / 1.30 acres			4428 - 4432
	Upland Seed Mix	44,000 sf / 1.0 acres			4431 - 4435

NORTH LOGAN MITIGATION SITE (PARTIAL)



PREPARER:

1003 West 1400 North • Logan, Utah 84321 • 435-732-4292

Cub River Wetland Mitigation Site
Cache County, Utah

PROJECT OWNER:

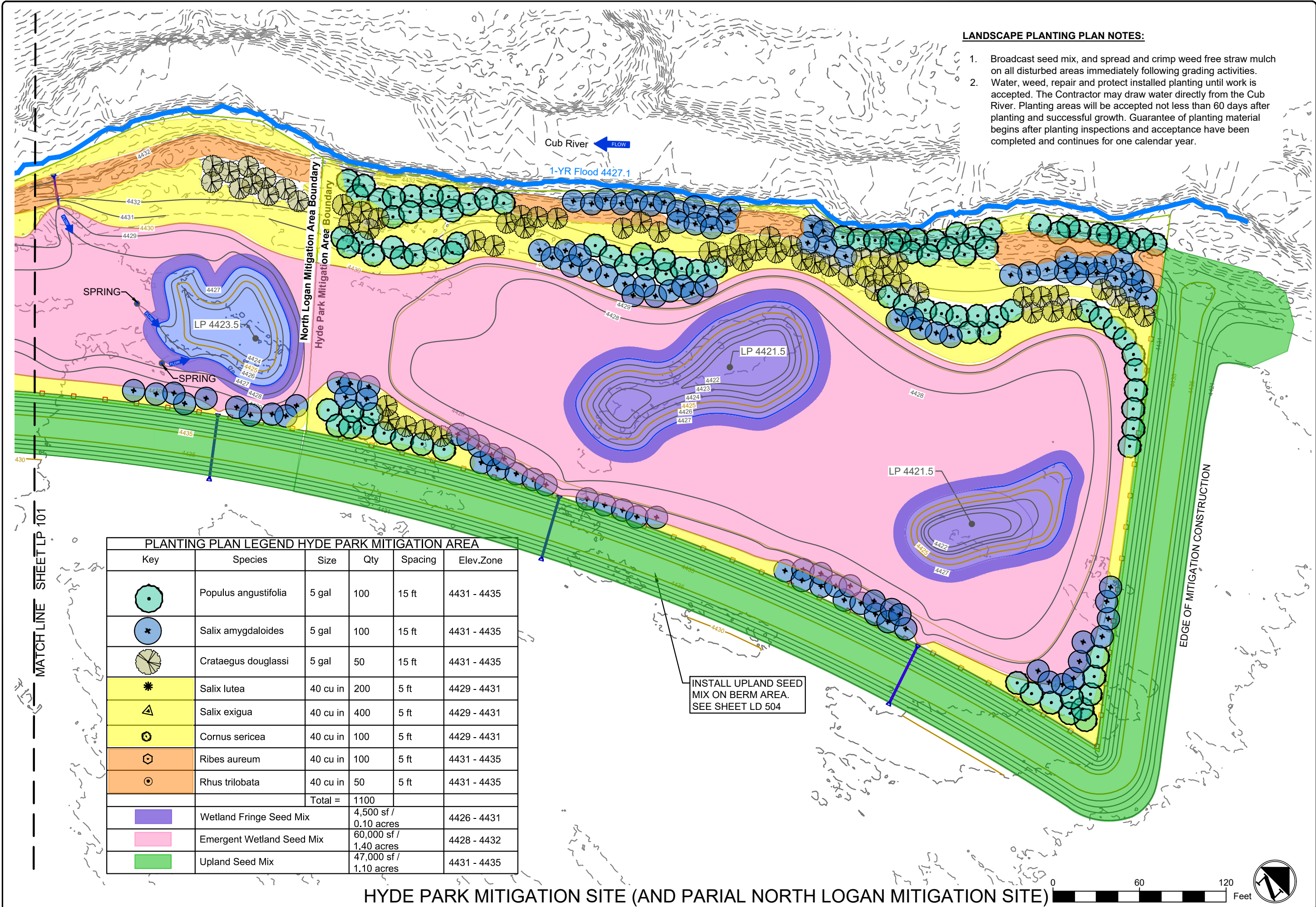
REV.	DATE	DESCRIPTION

CONTRACT NO.:
PROJECT NO.: BW#3394
DRAWN BY: SD
CHECKED BY: AM
DATE: AUGUST 2026

SHEET TITLE:
LANDSCAPE
PLANTING
PLAN

SHEET IDENTIFIER:
LP 101

BINDING
ORDER 06



LANDSCAPE PLANTING PLAN NOTES:

1. Broadcast seed mix, and spread and crimp weed free straw mulch on all disturbed areas immediately following grading activities.
2. Water, weed, repair and protect installed planting until work is accepted. The Contractor may draw water directly from the Cub River. Planting areas will be accepted not less than 60 days after planting and successful growth. Guarantee of planting material begins after planting inspections and acceptance have been completed and continues for one calendar year.

PREPARER:



BIO-WEST
1063 West 1400 North • Logan, Utah 84321 • 435-732-4292



LANDSCAPE ARCHITECT
No. 6677105
SANDRA DAVENPORT
ELECTRONIC SEAL
STATE OF UTAH

Cub River Wetland Mitigation Site
Cache County, Utah

PROJECT OWNER:

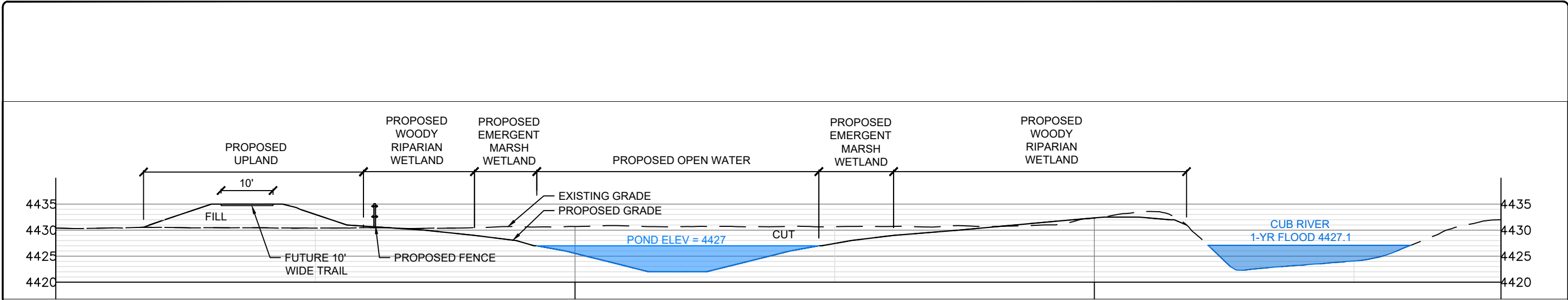
REV.	DATE	DESCRIPTION

CONTRACT NO.:
PROJECT NO.: BW#3394
DRAWN BY: SD
CHECKED BY: AM
DATE: AUGUST 2026

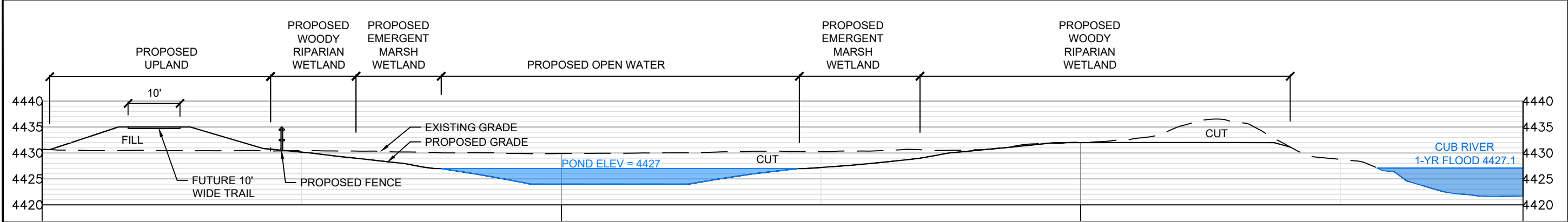
SHEET TITLE:
LANDSCAPE
PLANTING
PLAN

SHEET IDENTIFIER:
LP 102

BINDING
ORDER 07



A CROSS SECTION A-A
1" = 20'



B CROSS SECTION B-B
1" = 20'

NORTH LOGAN MITIGATION SITE

PREPARER:



1063 West 1400 North • Logan, Utah 84321 • 435-732-4202



Cub River Wetland Mitigation Site
Cache County, Utah

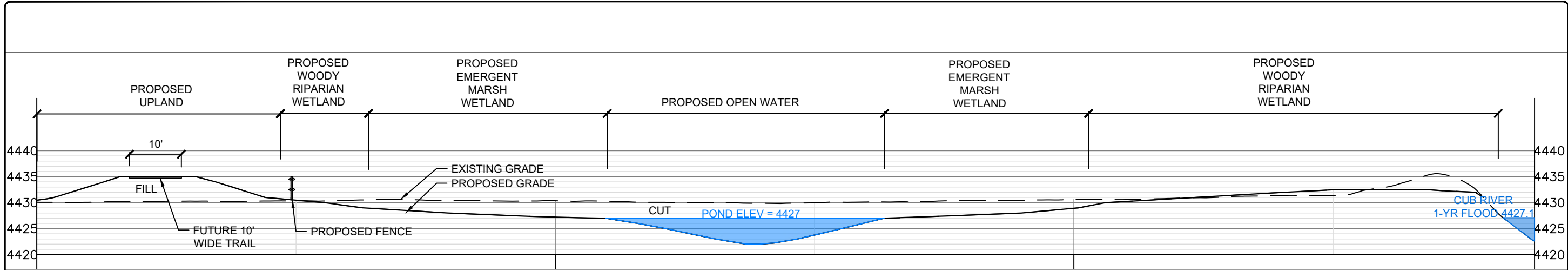
PROJECT OWNER:

REV.	DATE	DESCRIPTION

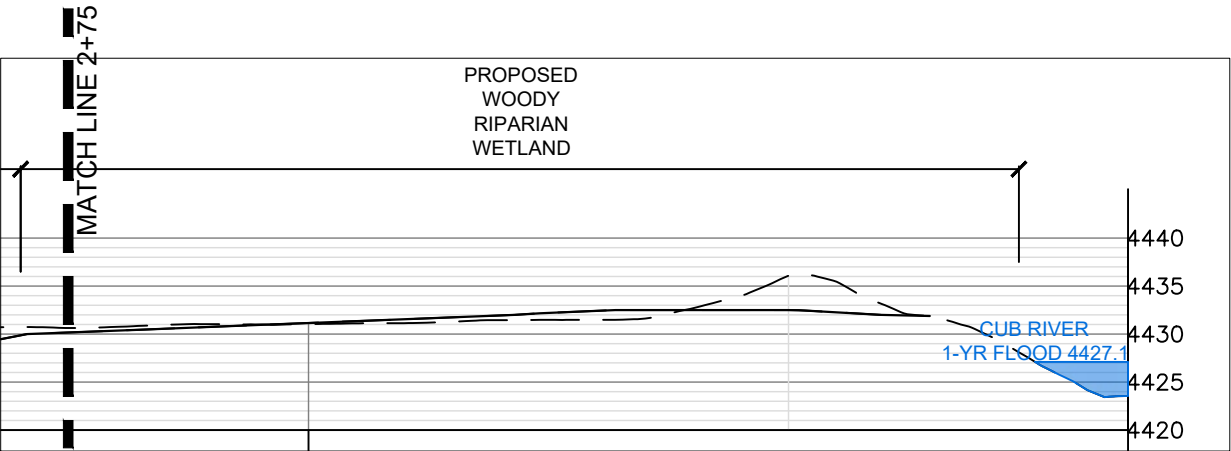
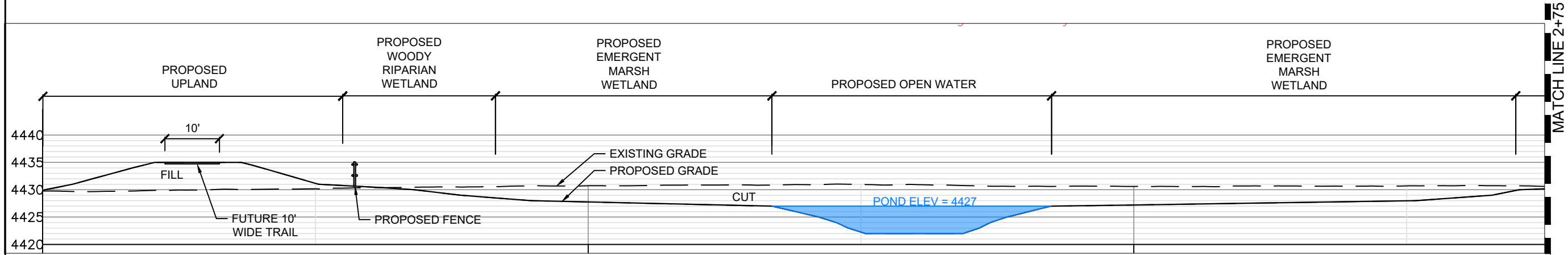
CONTRACT NO.:
PROJECT NO.: BW#3394
DRAWN BY: SD
CHECKED BY: AM
DATE: AUGUST 2026

SHEET TITLE:
LANDSCAPE SECTIONS

SHEET IDENTIFIER:
LS 301
BINDING ORDER 08



A CROSS SECTION A-A



B CROSS SECTION B-B

HYDE PARK MITIGATION SITE

PREPARER:

BIO-WEST
1063 West 1400 North • Logan, Utah 84321 • 435-752-4202

LANDSCAPE ARCHITECT
Sandra Davenport
No. 6677105
SANDRA DAVENPORT
APR 24 2024
ELECTRONIC SEAL
STATE OF UTAH

Cub River Wetland Mitigation Site
Cache County, Utah

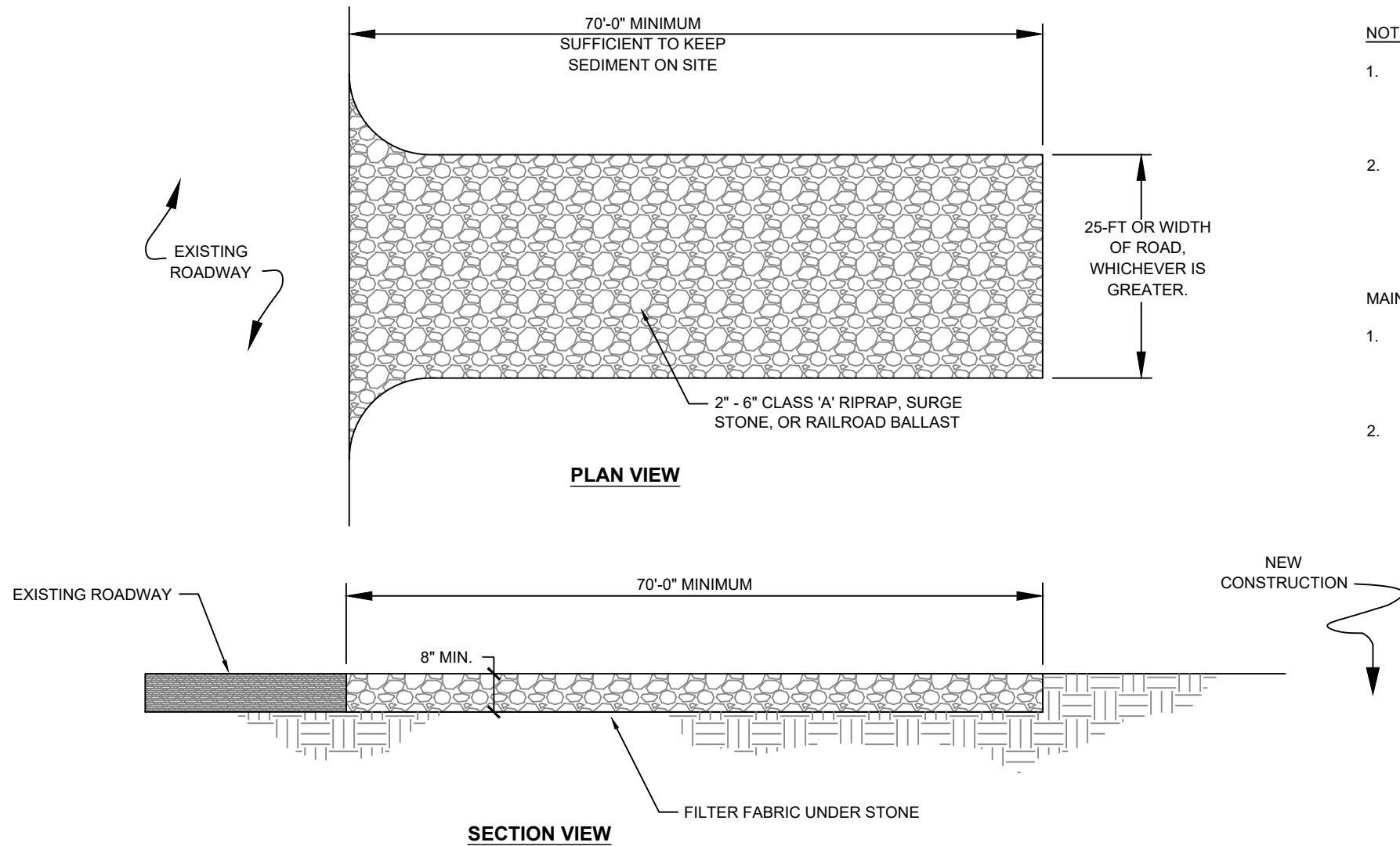
PROJECT OWNER:

REV.	DATE	DESCRIPTION

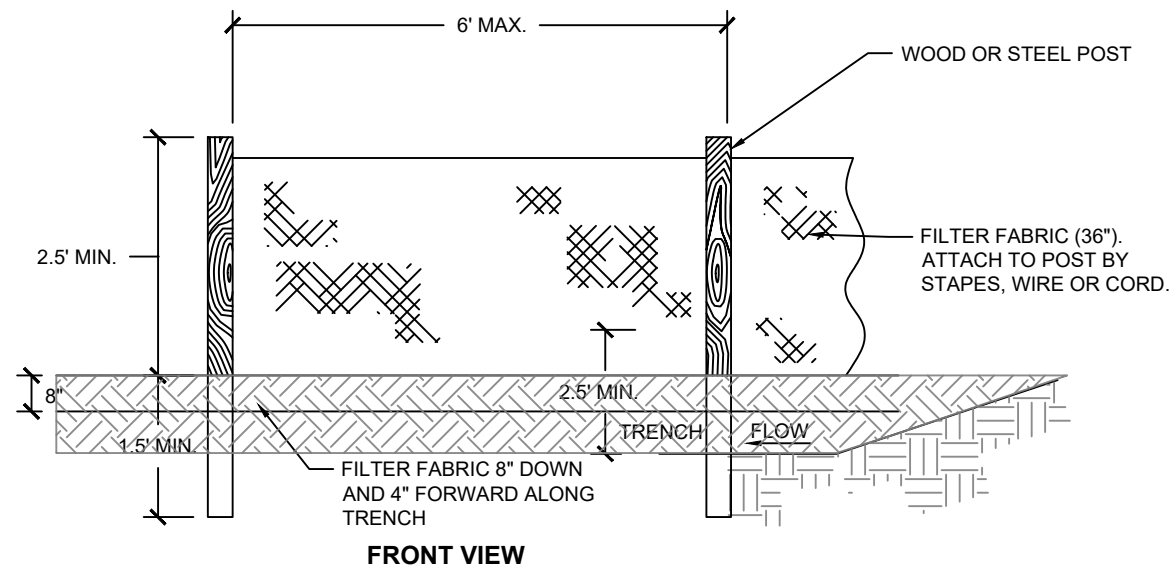
CONTRACT NO.:
PROJECT NO.: BW#3394
DRAWN BY: SD
CHECKED BY: AM
DATE: AUGUST 2026

SHEET TITLE:
LANDSCAPE SECTIONS

SHEET IDENTIFIER:
LS 302
BINDING ORDER 09



A STABILIZED CONSTRUCTION ENTRANCE
N.T.S.



B SILT FENCE
N.T.S.

NOTES:

1. CONTRACTOR SHALL INSTALL CONTINUOUS SILT FENCE OR HEAVY-DUTY TEMPORARY CONSTRUCTION ENCLOSURE FENCING ALONG THE PERIMETER OF THE ACCESS CORRIDOR TO DIRECT ALL VEHICULAR TRAFFIC THROUGH THE STABILIZED CONSTRUCTION ENTRANCE AND PREVENT BYPASSING INTO FARM FIELD.
2. IF THE STABILIZED STONE PAD DOES NOT EFFECTIVELY REMOVE MUD AND SEDIMENT FROM VEHICLE TIRES, CONTRACTOR SHALL ESTABLISH A DEDICATED TIRE WASH AREA PRIOR TO VEHICLES EXITING ONTO PUBLIC RIGHTS-OF-WAY. WASHOUT WATER SHALL BE CONTAINED IN AN APPROVED ON-SITE SEDIMENT RETENTION BASIN AND IS STRICTLY PROHIBITED FROM DISCHARGING DIRECTLY INTO THE CUB RIVER, ADJACENT WETLANDS, OR ADJACENT FARM PROPERTY.

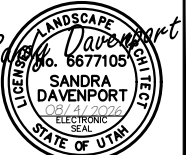
MAINTENANCE:

1. CONTRACTOR SHALL INSPECT THE STABILIZED STONE ENTRANCE DAILY. AGGREGATE SHALL BE CLEANED, SPADED, OR REFRESHED WITH ADDITIONAL 2"-3" WASHED ROCK AS NEEDED TO MAINTAIN A MINIMUM 6-INCH DEPTH AND PREVENT SEDIMENT ACCUMULATION OR OFF-SITE TRACKING.
2. ALL SEDIMENT, MUD, OR CONSTRUCTION DEBRIS TRACKED, SPILLED, OR WASHED ONTO PUBLIC ROADWAYS SHALL BE REMOVED IMMEDIATELY VIA DRY SWEEPING OR VACUUMING. FLUSHING ROADWAY SEDIMENT WITH WATER INTO STORM DRAINS OR NATURAL WATERWAYS IS STRICTLY PROHIBITED.

NOTES:

1. SILT FENCE FABRIC SHALL BE TRENCHED A MINIMUM OF 6 INCHES DEEP AND 6 INCHES WIDE, BACKFILLED, AND THOROUGHLY COMPACTED TO PREVENT UNDERMINING AND RUNOFF BYPASS.
2. WHEN SPLICING SECTIONS OF FABRIC, SPLICING SHALL OCCUR CONTINUOUSLY AT A SUPPORT POST. FABRIC ENDS SHALL BE OVERLAPPED A MINIMUM OF 6 INCHES, FOLDED/WRAPPED TWICE AROUND THE POST, AND SECURELY STAPLED OR FASTENED TO PREVENT SEPARATION UNDER SEDIMENT LOAD.
3. CONTRACTOR SHALL INSPECT SILT FENCE AT LEAST ONCE EVERY 7 CALENDAR DAYS AND WITHIN 24 HOURS OF ANY PRECIPITATION EVENT OF 0.25 INCHES OR GREATER (OR SIGNIFICANT WINTER/SPRING SNOWMELT EVENT).
4. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES ONE-THIRD (1/3) OF THE EXPOSED HEIGHT OF THE SILT FENCE (APPROXIMATELY 6 TO 8 INCHES) TO PREVENT SAGGING OR STRUCTURAL FAILURE.
5. SEDIMENT REMOVAL SHALL BE EXECUTED CAREFULLY TO AVOID UNDERMINING THE TRENCHED FABRIC OR LOOSENING SUPPORT POSTS. EXCAVATED SEDIMENT SHALL BE DISPOSED OF AND STABILIZED IN AN APPROVED UPLAND LOCATION AWAY FROM ADJACENT WETLANDS AND THE CUB RIVER MATRIX.
6. ANY DAMAGED, SAGGING, TORN, OR UNDERMINED SILT FENCE SHALL BE REPAIRED OR REPLACED IMMEDIATELY UPON DISCOVERY.

PREPARED BY:



Cub River Wetland Mitigation Site
Cache County, Utah

PROJECT OWNER:

REV.	DATE	DESCRIPTION

CONTRACT NO.:
PROJECT NO.: BW#3394
DRAWN BY: SD
CHECKED BY: AM
DATE: AUGUST 2026

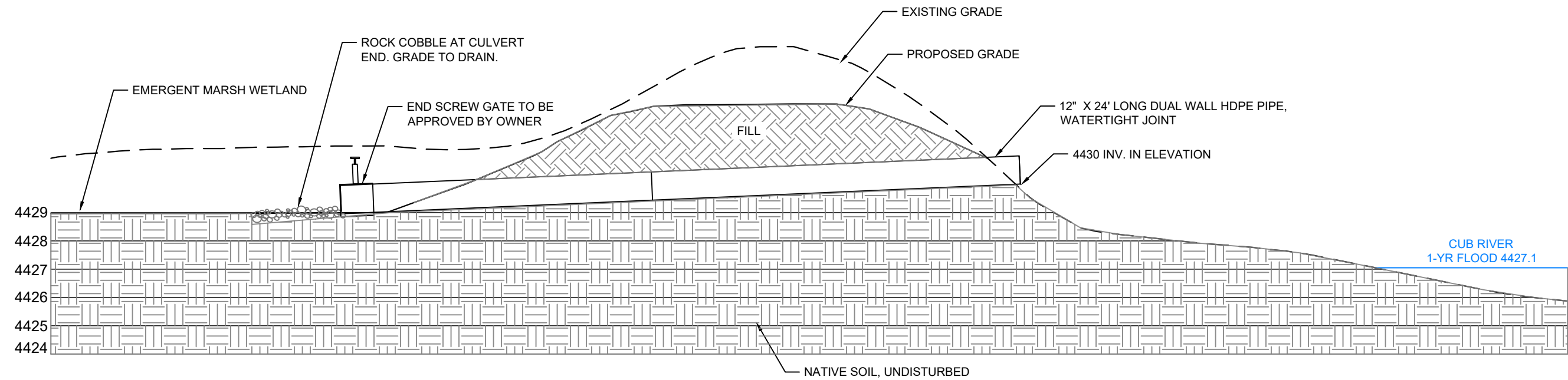
SHEET TITLE:

**LANDSCAPE
DETAILS**

SHEET IDENTIFIER:

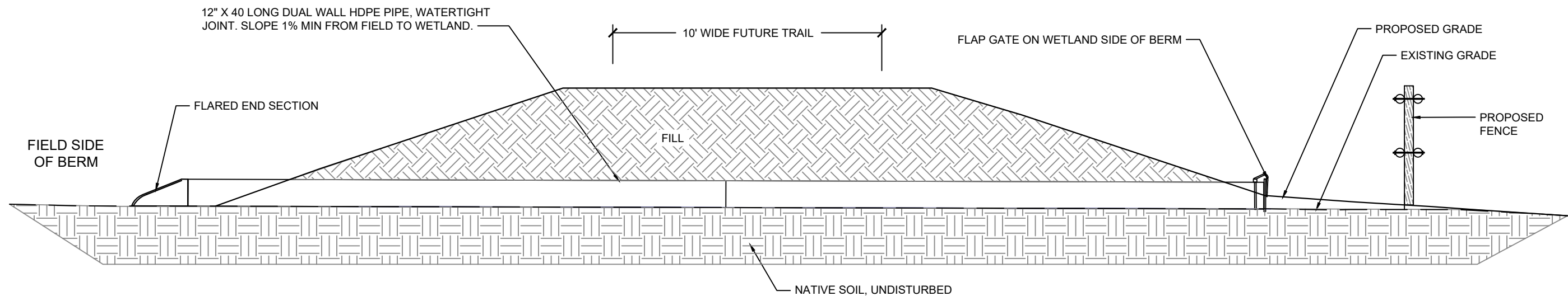
LD 501

BINDING
ORDER 10



SECTION VIEW

A CULVERT WITH CONTROL GATE
N.T.S.



SECTION VIEW

B CULVERT WITH FLAP GATE
N.T.S.

PREPARED BY:



Cub River Wetland Mitigation Site
Cache County, Utah

PROJECT OWNER:

REV.	DATE	DESCRIPTION

CONTRACT NO.:
PROJECT NO.: BW#3394
DRAWN BY: SD
CHECKED BY: AM
DATE: AUGUST 2026

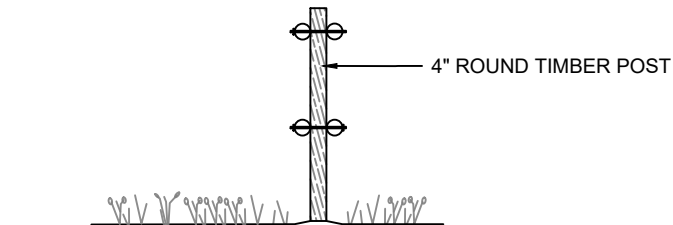
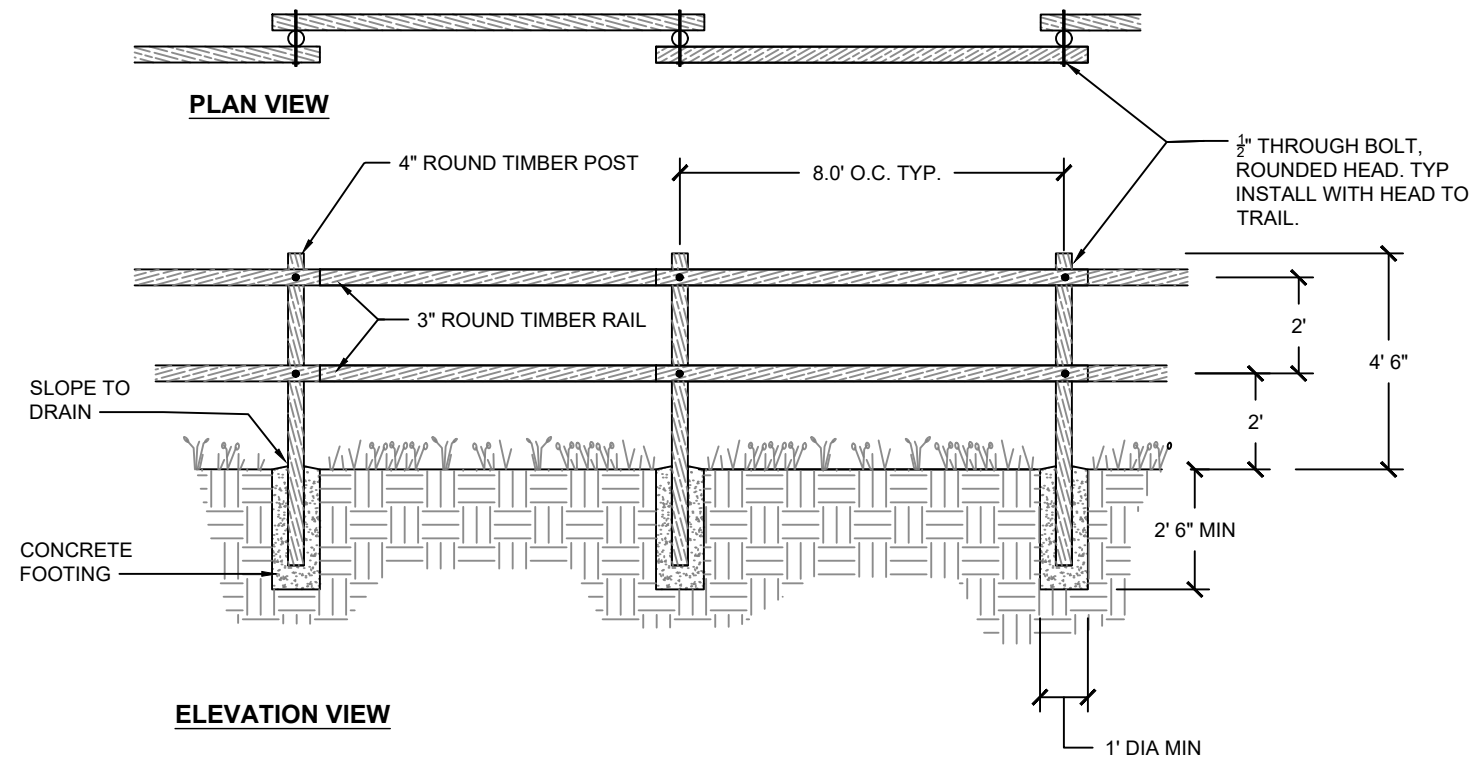
SHEET TITLE:

**LANDSCAPE
DETAILS**

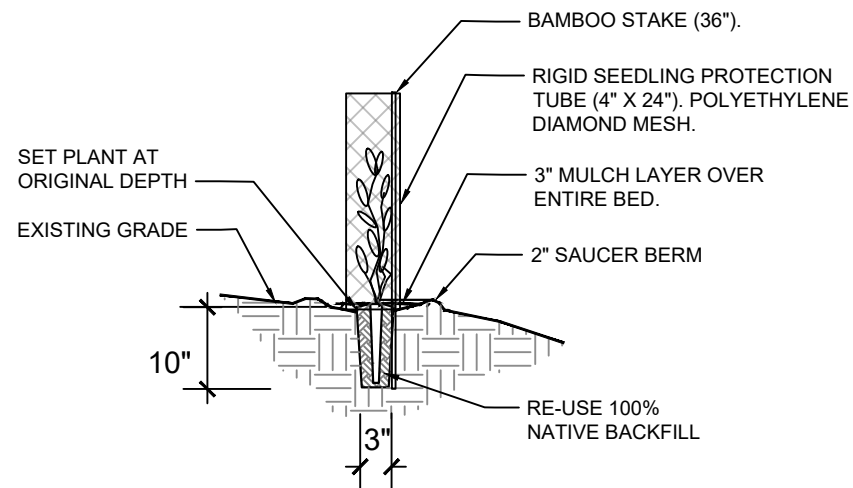
SHEET IDENTIFIER:

LD 502

BINDING
ORDER



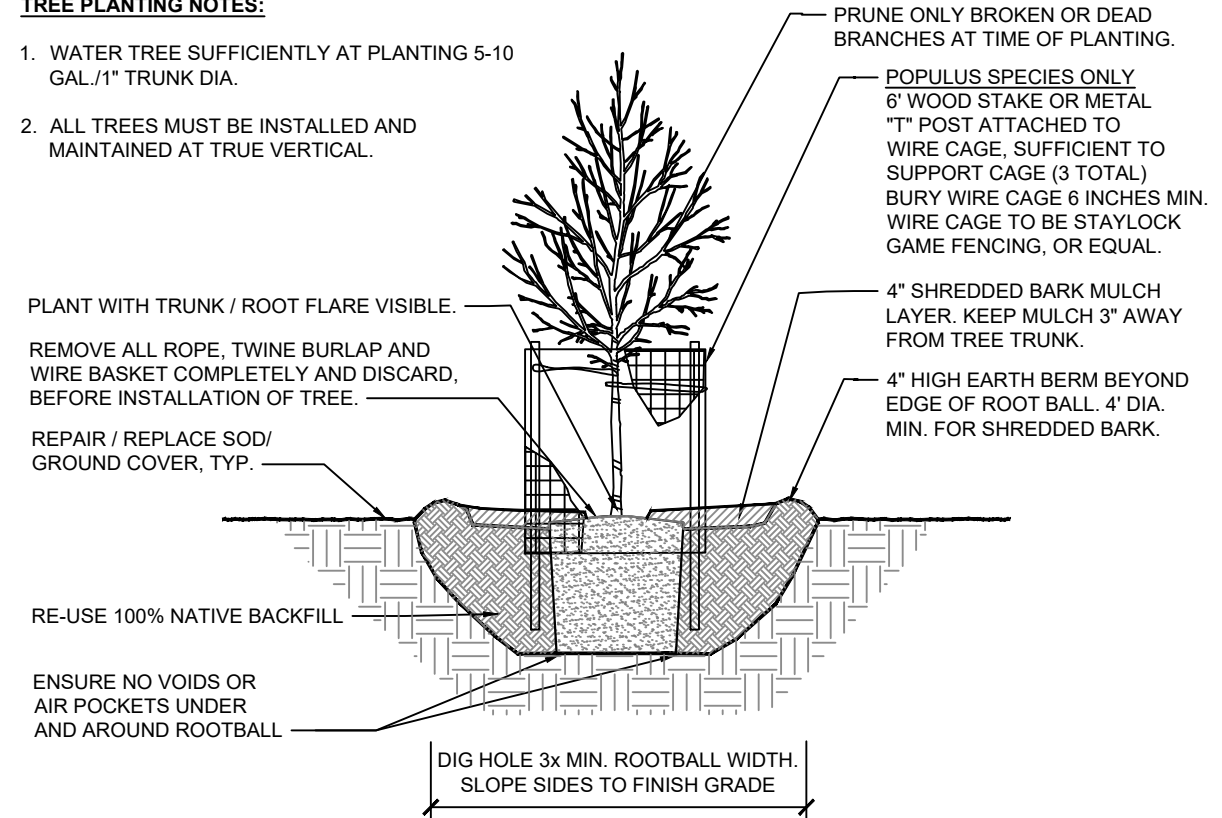
A RAIL FENCE
N.T.S.



B DEEPOT (D-40) PLANTING DETAIL
N.T.S.

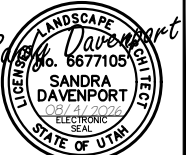
TREE PLANTING NOTES:

1. WATER TREE SUFFICIENTLY AT PLANTING 5-10 GAL./1" TRUNK DIA.
2. ALL TREES MUST BE INSTALLED AND MAINTAINED AT TRUE VERTICAL.



C TREE PLANTING DETAIL
N.T.S.

PREPARER:



Cub River Wetland Mitigation Site
Cache County, Utah

PROJECT OWNER:

REV.	DATE	DESCRIPTION

CONTRACT NO.:
PROJECT NO.: BW#3394
DRAWN BY: SD
CHECKED BY: AM
DATE: AUGUST 2026

SHEET TITLE:
**LANDSCAPE
DETAILS**

SHEET IDENTIFIER:

LD 503

BINDING ORDER 12

WETLAND FRINGE SEED MIX

SEED NO.	SPECIES NAME		BROADCAST SEED			
	BOTANICAL NAME	COMMON NAME	Number of seeds per pound	Pounds of pure live seed per acre	Percent of mix	Seeds per square foot
1	<i>Bolboshoenus maritimus</i>	Alkali bulrush	162,600	5.00	8.65%	19
2	<i>Bolboshoenus acutus</i>	hard stemmed bulrush	977,600	1.00	10.40%	22
3	<i>Bolboshoenus pungens</i>	Threesquare	900,000	2.00	19.14%	41
4	<i>Calamagrostis canadensis</i>	Bluejoint	2,270,000	1.00	24.14%	52
5	<i>Eleocharis palustris</i>	common spikerush	620,000	2.00	13.19%	28
6	<i>Carex utriculata</i>	Beaked sedge	444,000	3.00	14.17%	31
7	<i>Carex aquatilis</i>	Water sedge	485,000	2.00	10.32%	22
	TOTAL			16	100.00%	216

EMERGENT WETLAND SEED MIX

SEED NO.	SPECIES NAME		BROADCAST SEED			
	BOTANICAL NAME	COMMON NAME	Number of seeds per pound	Pounds of pure live seed per acre	Percent of mix	Seeds per square foot
1	<i>Carex praegracilis</i>	Meadow sedge	664,900	1.00	10.75%	15
2	<i>Calamagrostis canadensis</i>	Bluejoint	2,270,000	0.20	7.34%	10
3	<i>Juncus arcticus (balticus)</i>	Arctic (Baltic) rush	3,000,000	0.20	9.70%	14
4	<i>Juncus ensifolius</i>	Sword leaf rush	2,914,000	0.20	9.43%	13
5	<i>Beckmannia syzigachne</i>	Sloughgrass	1,150,000	0.50	9.30%	13
6	<i>Pascopyrum smithii</i>	Western wheatgrass	110,000	4.00	7.12%	10
7	<i>Spartina pectinata</i>	Prairie chordgrass	197,000	3.00	9.56%	14
8	<i>Elymus lanceolatus</i>	Streambank wheatgrass	154,000	3.00	7.47%	11
9	<i>Carex utriculata</i>	Beaked sedge	444,000	1.00	7.18%	10
10	<i>Carex aquatilis</i>	Water sedge	485,000	1.00	7.84%	11
11	<i>Asclepias speciosa</i>	Showy milkweed	52,000	4.00	3.36%	5
12	<i>Verbena hastata</i>	Blue vervain	1,792,900	0.20	5.80%	8
13	<i>Asclepias incarnata</i>	Swamp milkweed	159,000	2.00	5.14%	7
	TOTAL			20.3	100.00%	142

NATIVE UPLAND SEED MIX

SEED NO.	SPECIES NAME		BROADCAST SEED			
	BOTANICAL NAME	COMMON NAME	Number of seeds per pound	Pounds of pure live seed per acre	Percent of mix	Seeds per square foot
1	<i>Elymus lanceolatus</i>	Thickspike wheatgrass	154,000	5.00	14.52%	18
2	<i>Psuedoregnaria spicata</i>	Bluebunch wheatgrass	140,000	6.00	15.84%	19
3	<i>Helianthus annuus</i>	Annuual sunflower	46,919	3.00	2.65%	3
4	<i>Koeleria macrantha</i>	Prairie junegrass	2,315,400	0.50	21.83%	27
5	<i>Poa secunda</i>	Sandberg bluegrass	1,047,000	1.00	19.74%	24
6	<i>Achillea millefolium</i>	Western yarrow	2,770,000	0.20	10.44%	13
7	<i>Sphaeralcea coccinea</i>	Scarlet globemallow	500,000	1.00	9.43%	11
8	<i>Linum lewisii</i>	Lewis flax	295,000	1.00	5.56%	7
	TOTAL			17.70	100.00%	122

PREPARER:


1063 West 1400 North • Logan, Utah 84321 • 435-732-4202



Cub River Wetland Mitigation Site
Cache County, Utah

PROJECT OWNER:

REV.	DATE	DESCRIPTION

CONTRACT NO.:

PROJECT NO.: BW#3394

DRAWN BY: SD

CHECKED BY: AM

DATE: AUGUST 2026

SHEET TITLE:

LANDSCAPE
DETAILS

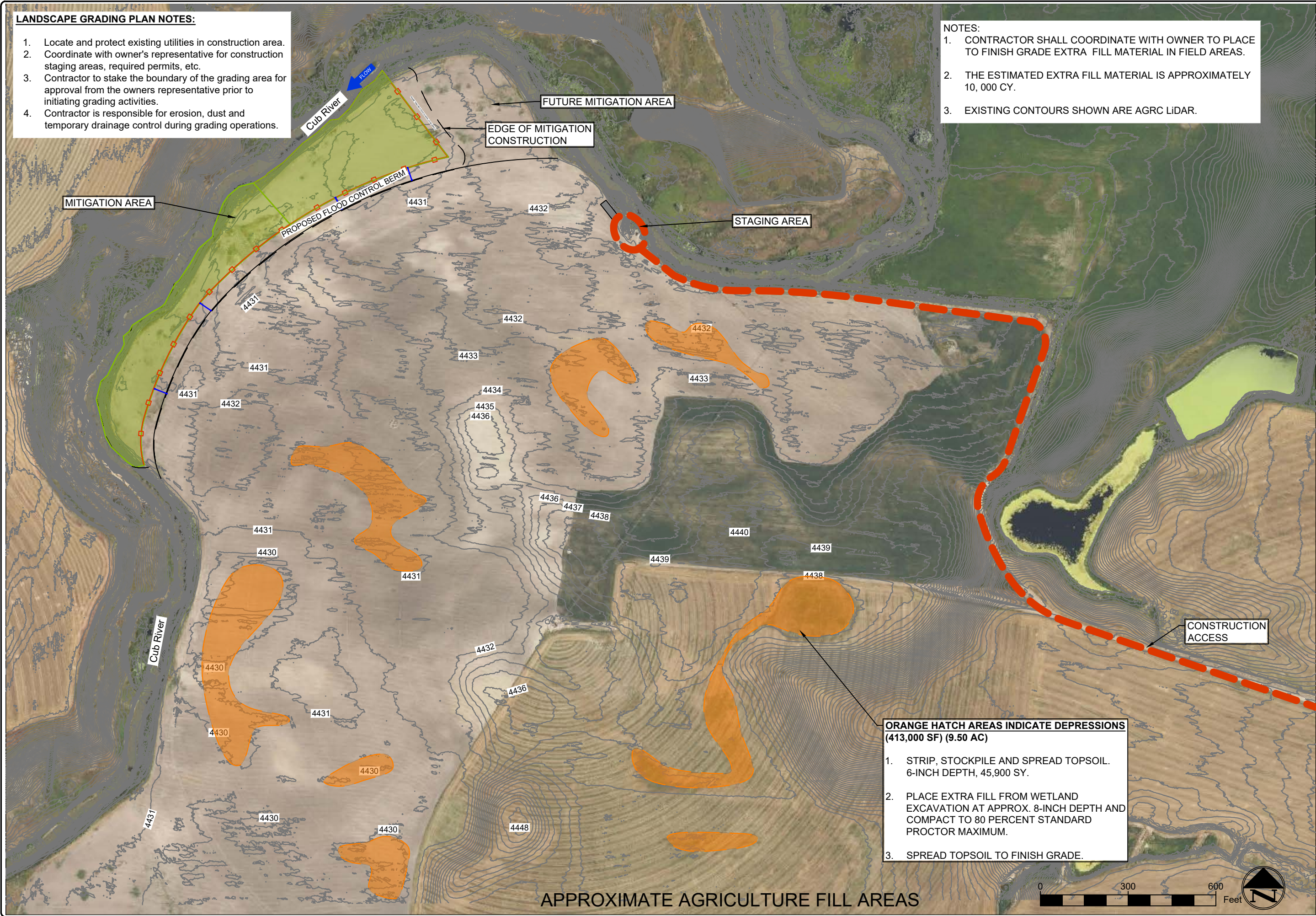
SHEET IDENTIFIER:

LD 504

BINDING ORDER 13

- LANDSCAPE GRADING PLAN NOTES:**
1. Locate and protect existing utilities in construction area.
 2. Coordinate with owner's representative for construction staging areas, required permits, etc.
 3. Contractor to stake the boundary of the grading area for approval from the owners representative prior to initiating grading activities.
 4. Contractor is responsible for erosion, dust and temporary drainage control during grading operations.

- NOTES:**
1. CONTRACTOR SHALL COORDINATE WITH OWNER TO PLACE TO FINISH GRADE EXTRA FILL MATERIAL IN FIELD AREAS.
 2. THE ESTIMATED EXTRA FILL MATERIAL IS APPROXIMATELY 10, 000 CY.
 3. EXISTING CONTOURS SHOWN ARE AGRC LIDAR.



PREPARED BY:

BIO-WEST
1063 West 1400 North • Logan, Utah 84321 • 437-732-4202

Sandra Davenport
LANDSCAPE ARCHITECT
No. 6677105
SANDRA DAVENPORT
ELECTRONIC SEAL
STATE OF UTAH

Cub River Wetland Mitigation Site
Cache County, Utah

PROJECT OWNER:

REV.	DATE	DESCRIPTION

CONTRACT NO.:
PROJECT NO.: BW#3394
DRAWN BY: SD
CHECKED BY: AM
DATE: AUGUST 2026

SHEET TITLE:
LANDSCAPE DETAILS

SHEET IDENTIFIER:
LD 505

BINDING ORDER 14

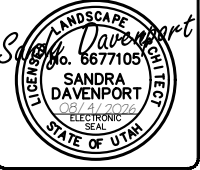
North Logan Wetland Mitigation Area				
Item No.	APWA Spec. Reference No.	Classification of Work	QTY	Unit
1	01 57 00	Temporary Controls Create and Implement Storm Water Pollution Prevention Plan (SWPPP)	1	Lump Sum
2	01 71 13	Mobilization and Demobilization (10%)	1	Lump Sum
3	01 71 23	Construction Layout	1	Lump Sum
4	01 57 00	Stabilized Construction Entrance.	1,000	Square Feet
5	01 57 00	Silt Fence	1,500	Linear Feet
6	06 61 00	Rail Fence	1,020	Linear Feet
7	31 05 13	Common Fill. Includes borrow from on-site excavation	5,100	Cubic Yard
8	31 11 00	Site Clearing. Clear and Grub.	17,000	Square Yard
9	31 23 16	Strip, Stockpile and Spread Topsoil	17,000	Square Yard
10	31 23 16	Strip, Stockpile and Spread Topsoil in farm field Landscape Grading areas.	18,360	Square Yard
11	31 23 16	Excavation. Cut (Cut 8900 CY minus Fill 5100 = CY)	3,800	Cubic Yard
12	32 91 19	Landscape Grading. Includes placing backfill material on farm field.	3,800	Cubic Yard
13	32 92 00	Turf and Grass. Supply and install WETLAND FRINGE SEED MIX and hydro mulch.	0.2	Acre
14	32 92 00	Turf and Grass. Supply and install EMERGENT WETLAND SEED MIX and hydro mulch.	1.3	Acre
15	32 92 00	Turf and Grass. Supply and install UPLAND SEED MIX and hydro mulch.	1.0	Acre
16	32 93 13	Ground Cover. Supply and install shrubs (40 cu in).	1,700	Each
17	32 93 43	Tree. Supply and Install trees (5 gal).	230	Each
18	32 93 43	Supply and Install Wire Cage at Populus tree species	80	Each
19	32 01 90	Maintenance of Planting. Includes water, weed, repair and protect installed plantings until work is accepted.	1	Lump Sum
20	33 05 06	Culvert with Flap Gate	3	Each
21	33 05 06	Culvert with Control Gate	1	Each

Hyde Park Wetland Mitigation Area				
Item No.	APWA Spec. Reference No.	Classification of Work	QTY	Unit
1	01 57 00	Temporary Controls Create and Implement Storm Water Pollution Prevention Plan (SWPPP)	1	Lump Sum
2	01 71 13	Mobilization and Demobilization (10%)	1	Lump Sum
3	01 71 23	Construction Layout	1	Lump Sum
4	01 57 00	Stabilized Construction Entrance.	1,000	Square Feet
5	01 57 00	Silt Fence	800	Linear Feet
6	06 61 00	Rail Fence	920	Linear Feet
7	31 05 13	Common Fill. Includes borrow from on-site excavation	4,900	Cubic Yard
8	31 11 00	Site Clearing. Clear and Grub.	16,000	Square Yard
9	31 23 16	Strip, Stockpile and Spread Topsoil	16,000	Square Yard
10	31 23 16	Strip, Stockpile and Spread Topsoil in farm field Landscape Grading areas.	27,540	Square Yard
11	31 23 16	Excavation. Cut (Cut 11100 CY minus Fill 4900 = CY)	6,200	Cubic Yard
12	32 91 19	Landscape Grading. Includes placing backfill material on farm field.	6,200	Cubic Yard
13	32 92 00	Turf and Grass. Supply and install WETLAND FRINGE SEED MIX and hydro mulch.	0.1	Acre
14	32 92 00	Turf and Grass. Supply and install EMERGENT WETLAND SEED MIX and hydro mulch.	1.4	Acre
15	32 92 00	Turf and Grass. Supply and install UPLAND SEED MIX and hydro mulch.	1.1	Acre
16	32 93 13	Ground Cover. Supply and install shrubs (40 cu in).	850	Each
17	32 93 43	Tree. Supply and Install trees (5 gal).	250	Each
18	32 93 43	Supply and Install Wire Cage at Populus tree species	100	Each
19	32 01 90	Maintenance of Planting. Includes water, weed, repair and protect installed plantings until work is accepted.	1	Lump Sum
20	33 05 06	Culvert with Flap Gate	2	Each

PREPARER:



1063 West 1400 North • Logan, Utah 84321 • 435-732-4202



Cub River Wetland Mitigation Site
Cache County, Utah

PROJECT OWNER:

REV.	DATE	DESCRIPTION

CONTRACT NO.:
PROJECT NO.: BW#3394
DRAWN BY: SD
CHECKED BY: AM
DATE: AUGUST 2026

SHEET TITLE:
SUMMARY SHEET

SHEET IDENTIFIER:
SUM 601

BINDING ORDER15