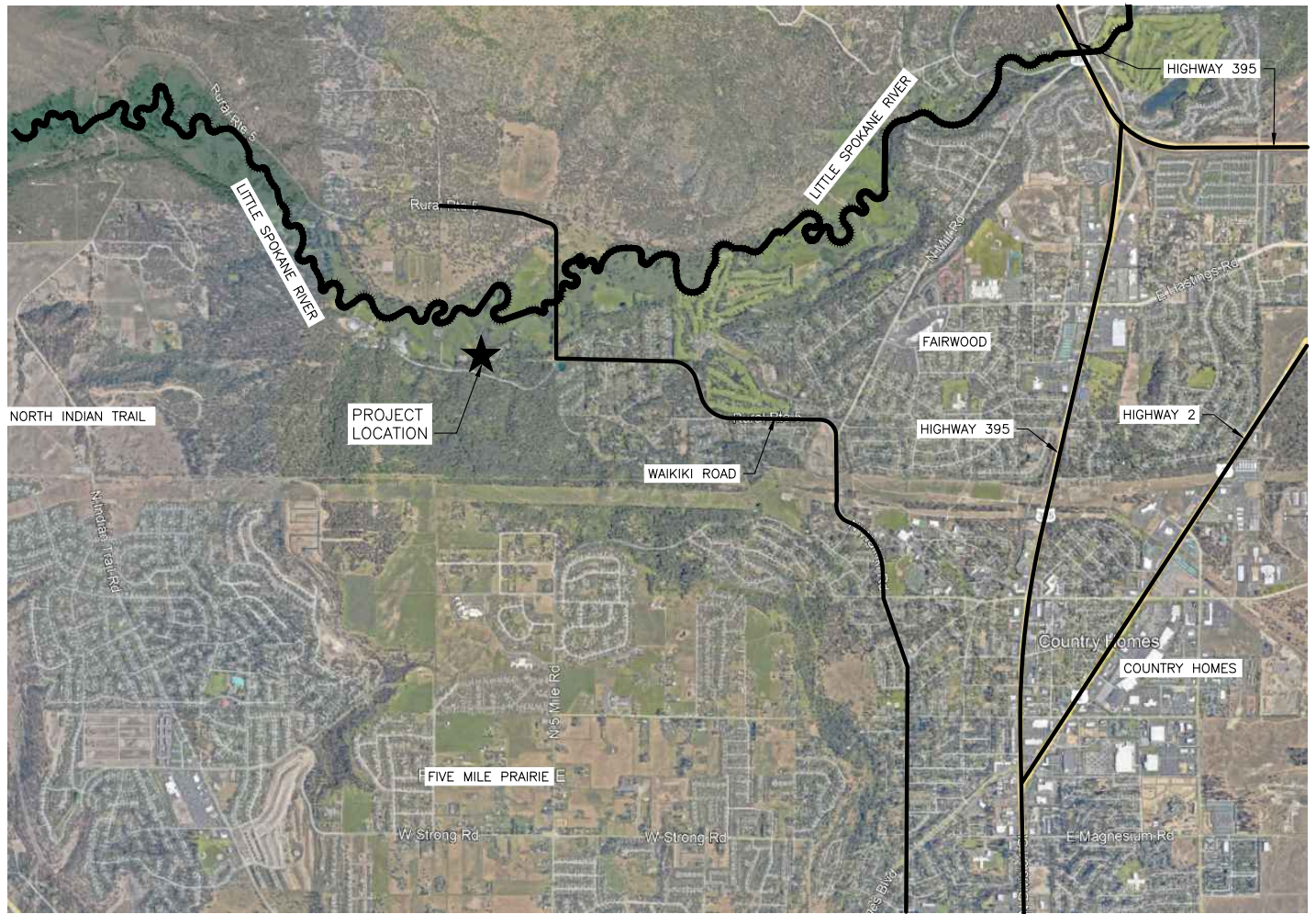


STATE MAP
NOT TO SCALE



VICINITY MAP
NOT TO SCALE

SPOKANE

ENG. PROJECT NO. 21-19393

PORTION OF: _____

DRAWN BY: C. DOKKEN

REFERENCE NUMBER: _____

PROJECT LOCATION (ADDRESS):

PROPOSED PROJECT:
SPOKANE HATCHERY RENOVATION

APPLICANT NAME:
WASHINGTON DEPT. OF FISH & WILDLIFE
600 CAPITOL WAY N.
OLYMPIA, WA 98501-1091

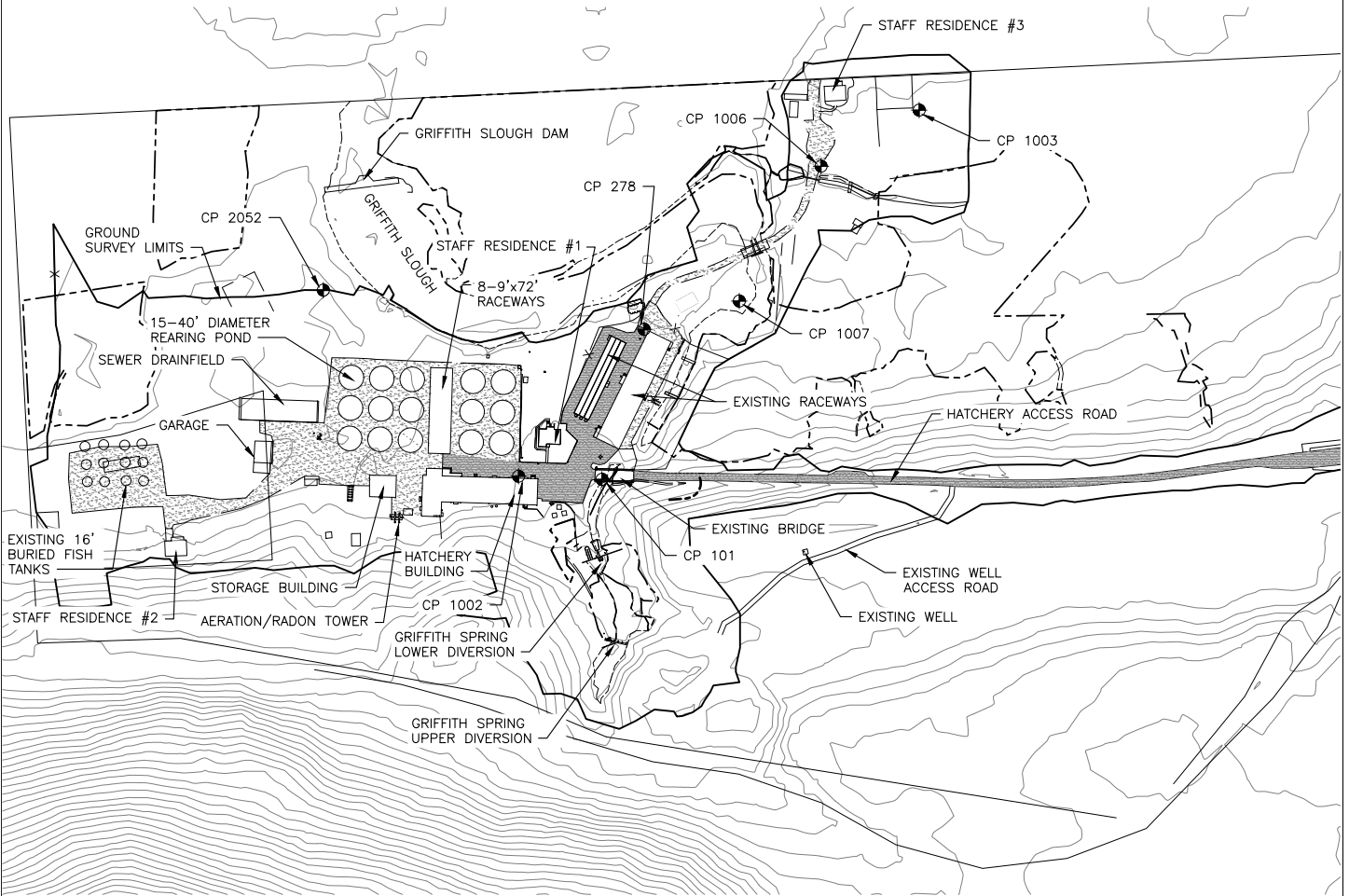
2927 W. WAIKIKI ROAD
SPOKANE, WA 99208

IN: SPOKANE RIVER
NEAR/IN: CITY OF SPOKANE
COUNTY: SPOKANE
STATE: WA

ADJACENT PROPERTY OWNER:
1. SPOKANE COUNTY PARKS 26114.9016
2. INLAND NW LAND TRUST 26114.9011
3. INLAND NW LAND TRUST 26114.9003

LAT/LONG: 47.765925, -117.459289
DATUM: NAD 83

SHEET 1 OF 15 DATE: 05-16-2024



EXISTING FACILITY SITE PLAN

SCALE: 1" = 300'-0"

LEGEND

- WETLANDS
- ORDINARY HIGH WATER MARK
- CONTROL POINT
- GROUND SURVEY LIMITS

**PROPERTY LOCATION INFORMATION:
SPOKANE HATCHERY**

ADDRESS: 2927 W. WAIKIKI ROAD
SPOKANE, WA 99208

COUNTY: SPOKANE
PARCEL #: 26111.9004, 26111.9005
LAT: 47.765925
LONG: 117.459289
TOWNSHIP: 26N
RANGE: 42E
SECTION: 11

REFERENCE NUMBER: 21-19393
APPLICANT NAME:
WASHINGTON DEPART. OF FISH & WILDLIFE
PROPOSED PROJECT:
SPOKANE HATCHERY RENOVATION
LOCATION: SPOKANE HATCHERY
SHEET 2 OF 15 DATE: 05-16-2024



DEMOLITION PHASING

SCALE: 1" = 300'-0"

1.X PHASE 1 – DEMOLITION

- 1.1 DEMOLISH AND REMOVE 9 – 30' DIAMETER CONCRETE ROUND PONDS INCLUDING ANY BURIED PIPING OR STRUCTURES ASSOCIATED WITH THE PONDS OR ENCOUNTERED DURING DEMOLITION.
- 1.2 DISPOSE OF CONTAMINATED SOIL AND DEMOLISH ANY BURIED PIPE FROM THE EXISTING SEPTIC FIELD.
- 1.3 DEMOLISH AND REMOVE 12 – 16' DIAMETER EXISTING BURIED CONCRETE ROUND PONDS.

2.X PHASE 2 – DEMOLITION

- 2.1 DEMOLISH AND REMOVE 6 – 30' DIAMETER CONCRETE ROUND PONDS INCLUDING ANY BURIED PIPING OR STRUCTURES ASSOCIATED WITH THE PONDS OR ENCOUNTERED DURING DEMOLITION.
- 2.2 DEMOLISH AND REMOVE 8 – 70' LONG BY 9' WIDE CONCRETE RACEWAYS INCLUDING ANY BURIED PIPING OR STRUCTURES ASSOCIATED WITH THE PONDS OR ENCOUNTERED DURING DEMOLITION.
- 2.3 DEMOLISH AND REMOVE EXISTING ASPHALT ACCESS ROAD.

3.X PHASE 3 – DEMOLITION

- 3.1 DEMOLISH AND REMOVE GRIFFITH SPRING UPPER AND LOWER CONCRETE DAMS AND ASSOCIATED STRUCTURES.
- 3.2 DEMOLISH AND REMOVE 3 70' LONG BY 9' WIDE CONCRETE RACEWAYS INCLUDING ANY BURIED PIPING OR STRUCTURES ASSOCIATED WITH THE RACEWAYS OR ENCOUNTERED DURING DEMOLITION.
- 3.3 DEMOLISH AND REMOVE 4 – 100' LONG BY 20' WIDE CONCRETE RACEWAYS INCLUDING ANY BURIED PIPING OR STRUCTURES ASSOCIATED WITH THE RACEWAYS OR ENCOUNTERED DURING DEMOLITION.
- 3.4 REHABILITATE HATCHERY BUILDING – DEMOLISH AND REMOVE EXISTING ROOF SEALING SYSTEM, INTERIOR WALL, AND SAWCUT FLOOR FOR ADDITIONAL DRAIN.
- 3.5 DEMOLISH AND REMOVE EXISTING WOODEN GARAGE.
- 3.6 DEMOLISH AND REMOVE TWO EXISTING STAFF HOUSES.
- 3.7 RENOVATE STAFF HOUSE #1
- 3.8 DEMOLISH AND REMOVE EXISTING HATCHERY OUTFALLS.
- 3.9 DEMOLISH AND REMOVE EXISTING CONCRETE DAM AND ASSOCIATED STRUCTURES IN GRIFFITH SLOUGH.

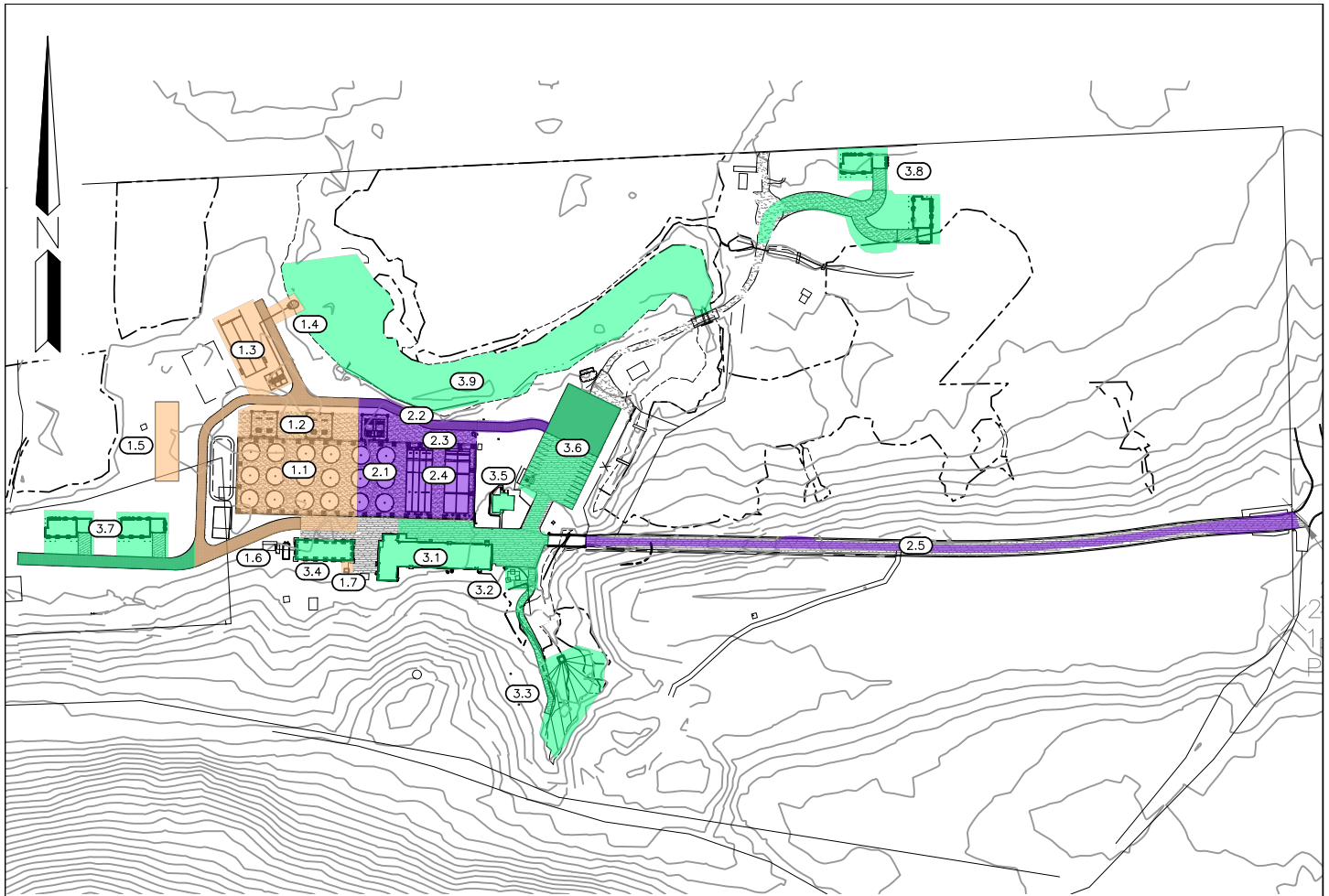
LEGEND

- WETLANDS
- ORDINARY HIGH WATER MARK

PHASING LEGEND

- PHASE 1
- PHASE 2
- PHASE 3

REFERENCE NUMBER: 21-19393
 APPLICANT NAME:
 WASHINGTON DEPART. OF FISH & WILDLIFE
 PROPOSED PROJECT:
 SPOKANE HATCHERY RENOVATION
 LOCATION: SPOKANE HATCHERY
 SHEET 3 OF 15 DATE: 05-16-2024



PROPOSED FACILITY PHASING

SCALE: 1" = 300'-0"

(1.X) PHASE 1 – WORK ITEMS

- 1.1 12 – 30' DIAMETER CORNELL TYPE DUAL-DRAIN FIBERGLASS AQUACULTURE TANKS.
- 1.2 TWO – PARTIAL RECIRCULATING AQUACULTURE SYSTEMS (PRAS) FACILITIES EACH CONTAINING TWO SYSTEMS INCLUDING DRUM SCREEN FILTER, AERATION BASIN, LOW HEAD OXYGENATOR, PUMPS, AND REQUIRED PIPING AND CONTROL SYSTEMS.
- 1.3 TWO ATTACHED POLLUTION ABATEMENT PONDS.
- 1.4 COMBINED HATCHERY OUTFALL.
- 1.5 SEPTIC FIELD SIZED FOR BUILDOUT.
- 1.6 GRAVEL ACCESS ROADS.
- 1.7 ELECTRICAL CONTROL ROOM.

(2.X) PHASE 2 – WORK ITEMS

- 2.1 6 – 30' DIAMETER CORNELL TYPE DUAL-DRAIN FIBERGLASS AQUACULTURE TANKS.
- 2.2 ONE – PRAS FACILITY INCLUDING DRUM SCREEN FILTER, AERATION BASIN, LOW HEAD OXYGENATOR, PUMPS AND REQUIRED PIPING AND CONTROL SYSTEM.
- 2.3 FOUR 10'X 100' CONCRETE RACEWAYS AND TWO 20' X 100' CONCRETE RACEWAYS INCLUDING DRUM SCREEN FILTERS.
- 2.4 SHEET METAL ROOF AND PREDATION PROTECTION OVER ALL CIRCULAR AND RACEWAY REARING VESSELS.
- 2.5 REDEVELOPED AND WIDENED ACCESS ROAD.

(3.X) PHASE 3 – WORK ITEMS

- 3.1 RENOVATED HATCHERY INCLUDING REMOVAL OF WALL, UPDATED HEAT/VENTILATION, EXPANDED DRAIN, NEW PIPING AND REPLACED ROOF INSULATION.
- 3.2 LOW HEAD OXYGENATOR FOR SUPPLY WATER FROM SPRING.
- 3.3 REDEVELOP GRIFFITH SPRING
- 3.4 NEW OFFICE/SHOP BUILDING
- 3.5 RENOVATE EXISTING HOUSE
- 3.6 ASPHALT PARKING LOT
- 3.7 TWO STAFF HOUSES
- 3.8 TWO STAFF HOUSES
- 3.9 DREDGE MATERIAL FROM GRIFFITH SLOUGH.

LEGEND

- WETLANDS
- ORDINARY HIGH WATER MARK

PHASING LEGEND

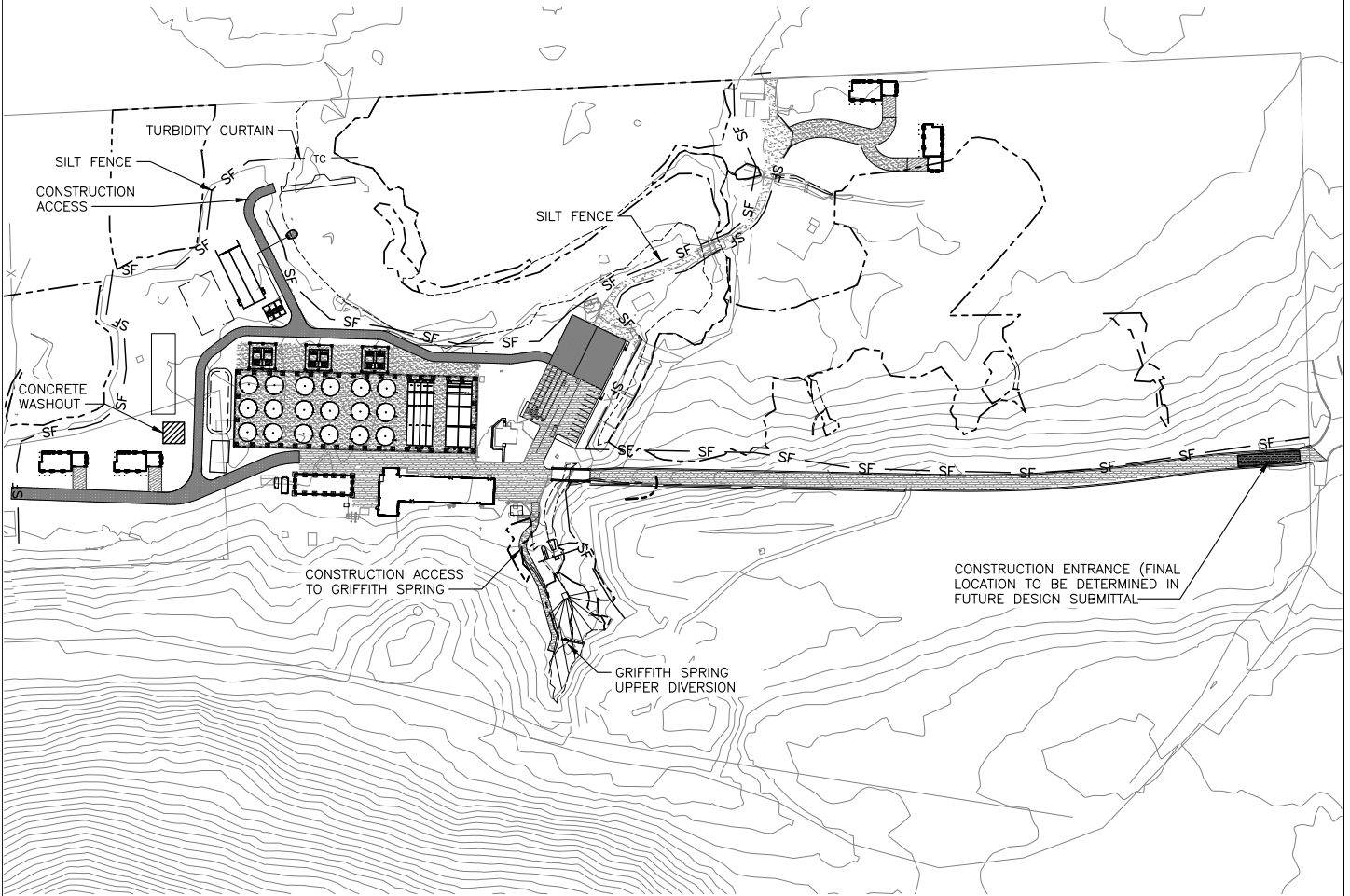
- PHASE 1
- PHASE 2
- PHASE 3

REFERENCE NUMBER: 21-19393
 APPLICANT NAME:
 WASHINGTON DEPART. OF FISH & WILDLIFE
 PROPOSED PROJECT:
 SPOKANE HATCHERY RENOVATION
 LOCATION: SPOKANE HATCHERY
 SHEET 4 OF 15 DATE: 05-16-2024



NOTES


1. FOLLOW ALL PERMIT REQUIREMENTS AND RESTRICTIONS FOR IN-WATER WORK.
2. USE TURBIDITY CURTAINS AROUND IN-WATER WORK AREAS AS NEEDED TO PREVENT DISCHARGE OF SILT LADEN WATER FROM THE CONSTRUCTION SITE.
3. PUMP SILT LADEN DEWATERING DISCHARGE TO DESIGNATED APPROVED OVERBANK AREA FOR SETTLING AND/OR INFILTRATION PRIOR TO DISCHARGE FROM THE SITE.



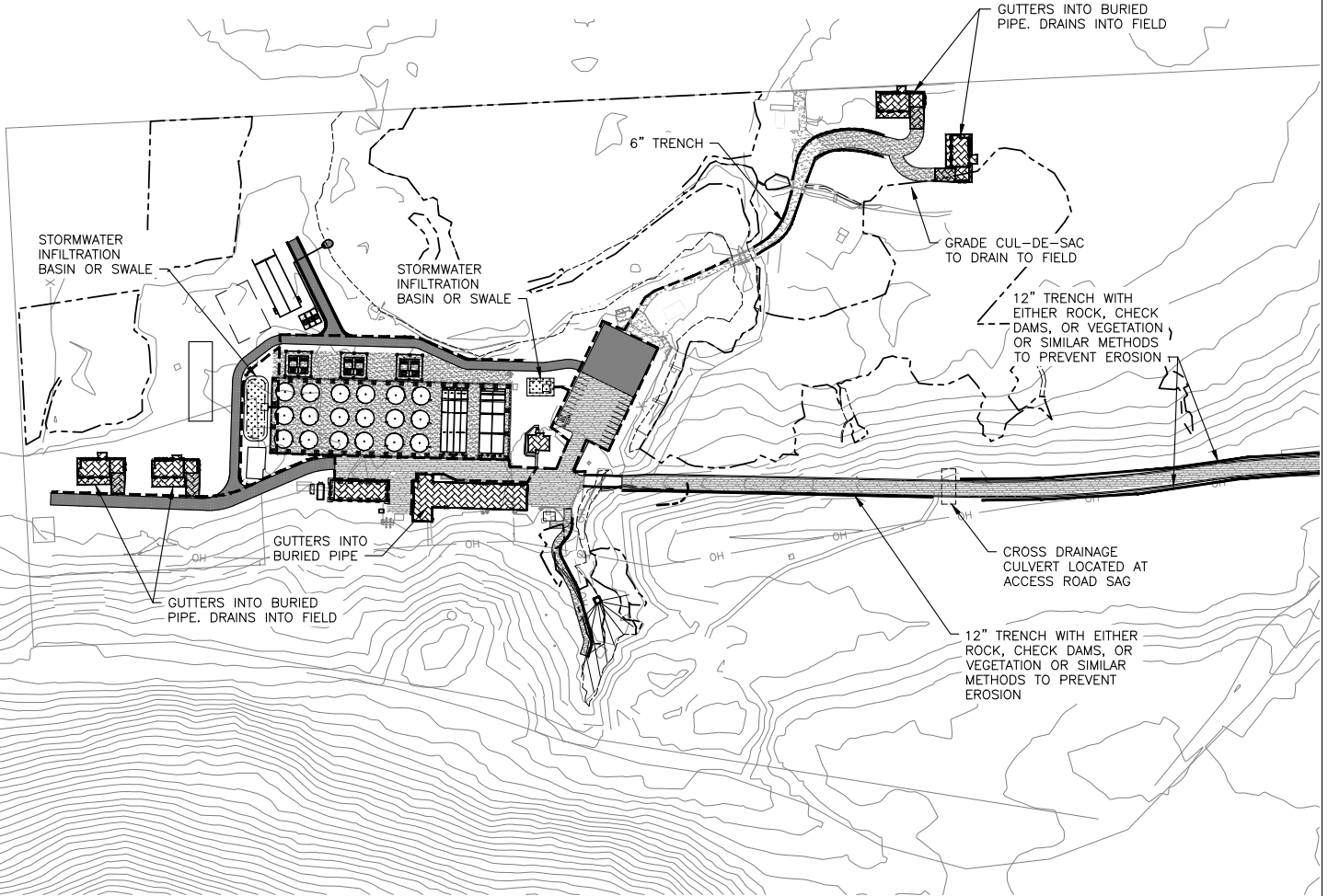
EROSION CONTROL PLAN

SCALE: 1" = 300'-0"








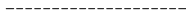
LEGEND

- — — — — WORK LIMITS
- TC — TC — — — — — TURBIDITY CURTAIN
- SF — SF — — — — — FILTER FABRIC FENCE
-  CONCRETE WASHOUT
- - - - - WETLANDS
- - - - - ORDINARY HIGH WATER MARK

REFERENCE NUMBER: 21-19393
APPLICANT NAME:
WASHINGTON DEPART. OF FISH & WILDLIFE
PROPOSED PROJECT:
SPOKANE HATCHERY RENOVATION
LOCATION: SPOKANE HATCHERY
SHEET 5 OF 15 DATE: 05-16-2024



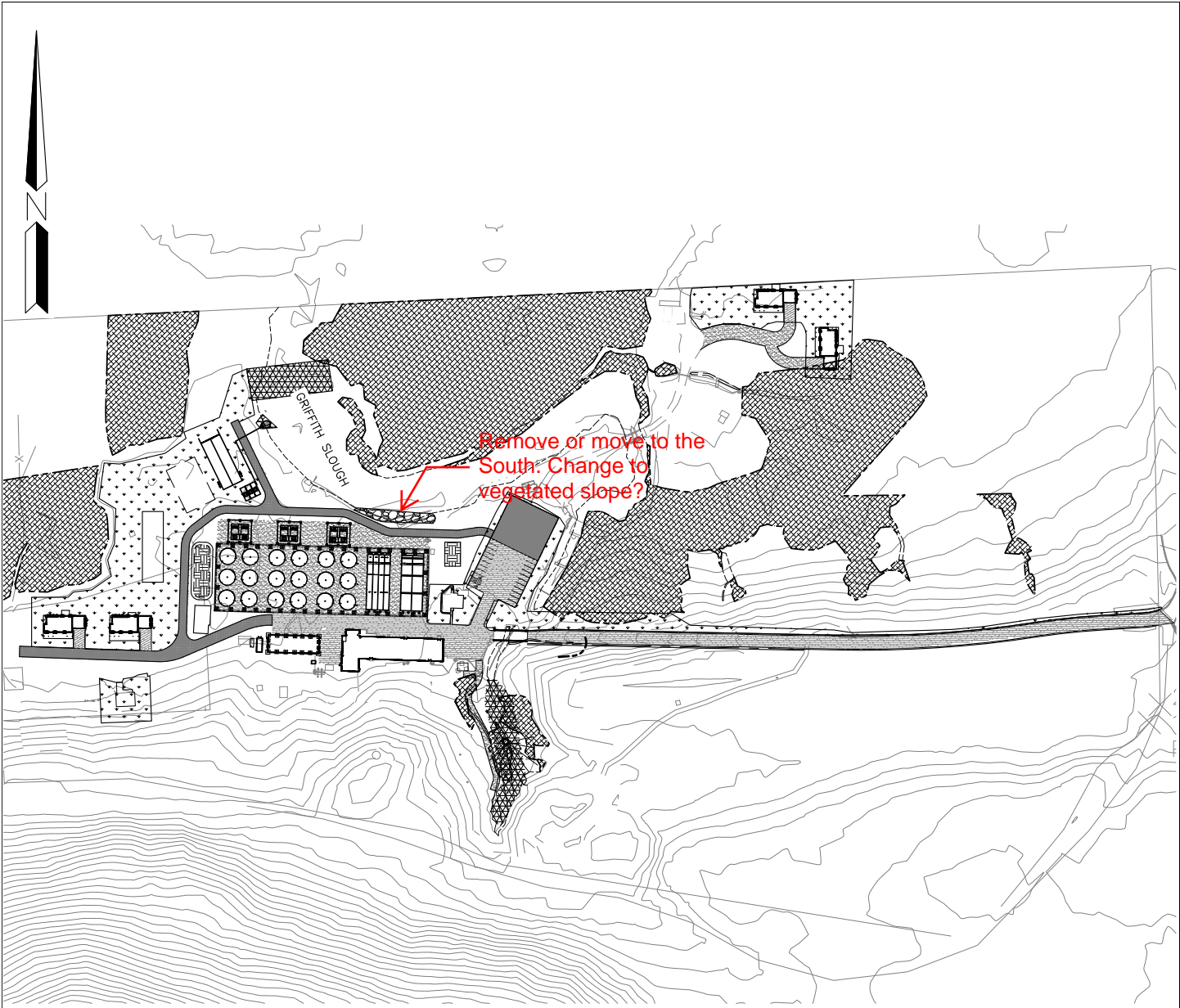
LEGEND

-  CONVEYANCE TRENCH
-  STORMWATER BIORETENTION BASIN OR SWALE
-  BURIED 12" STORM DRAIN LINE
-  CATCH BASIN
-  ROOF AND GUTTER DRAINAGE
-  CULVERT
-  WETLANDS
-  ORDINARY HIGH WATER MARK

STORM DRAIN PLAN

SCALE: 1" = 300'-0"


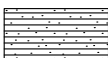
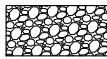
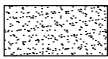
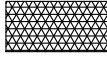
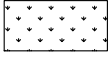

REFERENCE NUMBER: 21-19393
APPLICANT NAME:
WASHINGTON DEPART. OF FISH & WILDLIFE
PROPOSED PROJECT:
SPOKANE HATCHERY RENOVATION
LOCATION: SPOKANE HATCHERY
SHEET 6 OF 15 DATE: 05-16-2024



POST-CONSTRUCTION SURFACE PLAN

SCALE: 1" = 300'-0"

SURFACE LEGEND

	EXISTING WETLAND		HMA PAVING
	RIPRAP		GRAVEL SURFACING
	MITIGATION		NATIVE/SEED RESTORATION
			BIO-RETENTION SWALE

LEGEND

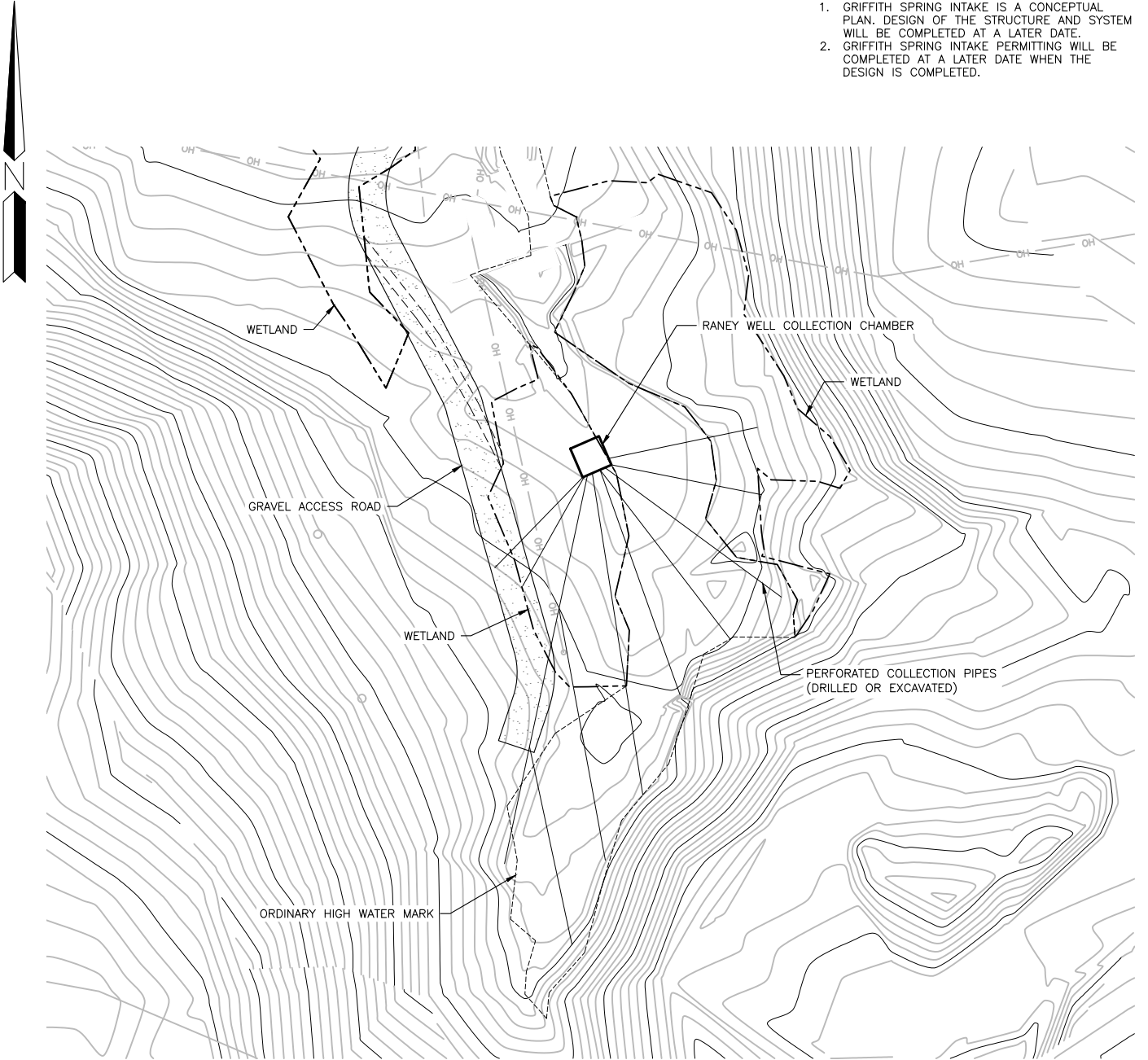
	WETLANDS
	ORDINARY HIGH WATER MARK

DESCRIPTION	SUBTOTAL (SF)		TOTAL (SF)
	BELOW OHW	ABOVE OHW	
TOTAL PROJECT AREA			2,355,862
TOTAL IMPERVIOUS AREAS	3,172	276,979	280,150
BUILDINGS AND CONCRETE STRUCTURES	100	86,647	
ASPHALT SURFACING	-	78,287	
GRAVEL SURFACING	3,072	112,045	
INCREASED IMPERVIOUS AREAS	450	100,967	101,417
BUILDINGS AND CONCRETE STRUCTURES	100	46,967	
ASPHALT SURFACING	-	34,917	
GRAVEL SURFACING	350	19,083	
REMOVED IMPERVIOUS AREAS	-3,006	-56,685	-59,691
BUILDINGS AND CONCRETE STRUCTURES	-3,006	-38,008	
ASPHALT DEMOLITION	-	-18,677	
GRAVEL REMOVAL	-	-	
TOTAL INCREASED IMPERVIOUS AREAS	-2,556	44,282	41,726

REFERENCE NUMBER: 21-19393
 APPLICANT NAME:
 WASHINGTON DEPART. OF FISH & WILDLIFE
 PROPOSED PROJECT:
 SPOKANE HATCHERY RENOVATION
 LOCATION: SPOKANE HATCHERY
 SHEET 7 OF 15 DATE: 05-16-2024

NOTES

1. GRIFFITH SPRING INTAKE IS A CONCEPTUAL PLAN. DESIGN OF THE STRUCTURE AND SYSTEM WILL BE COMPLETED AT A LATER DATE.
2. GRIFFITH SPRING INTAKE PERMITTING WILL BE COMPLETED AT A LATER DATE WHEN THE DESIGN IS COMPLETED.



GRIFFITH SPRING GRADING PLAN

SCALE: 1" = 50'-0"

ACCESS ROADWAY REMOVAL / FILL QUANTITIES (CY)			
DESCRIPTION	BELOW OHW	ABOVE OHW	TOTAL
TOTAL REMOVAL (CUT)	-	-	-
GRAVEL FILL	1	206	207
TOTAL FILL	1	206	207

GRIFFITH SPRING REMOVAL / FILL QUANTITIES (CY)	
DESCRIPTION	BELOW OHW
CONCRETE REMOVAL	19
SOIL EXCAVATION	21
TOTAL REMOVAL (CUT)	40
SOIL FILL	44
CONCRETE FILL	4
TOTAL FILL	47

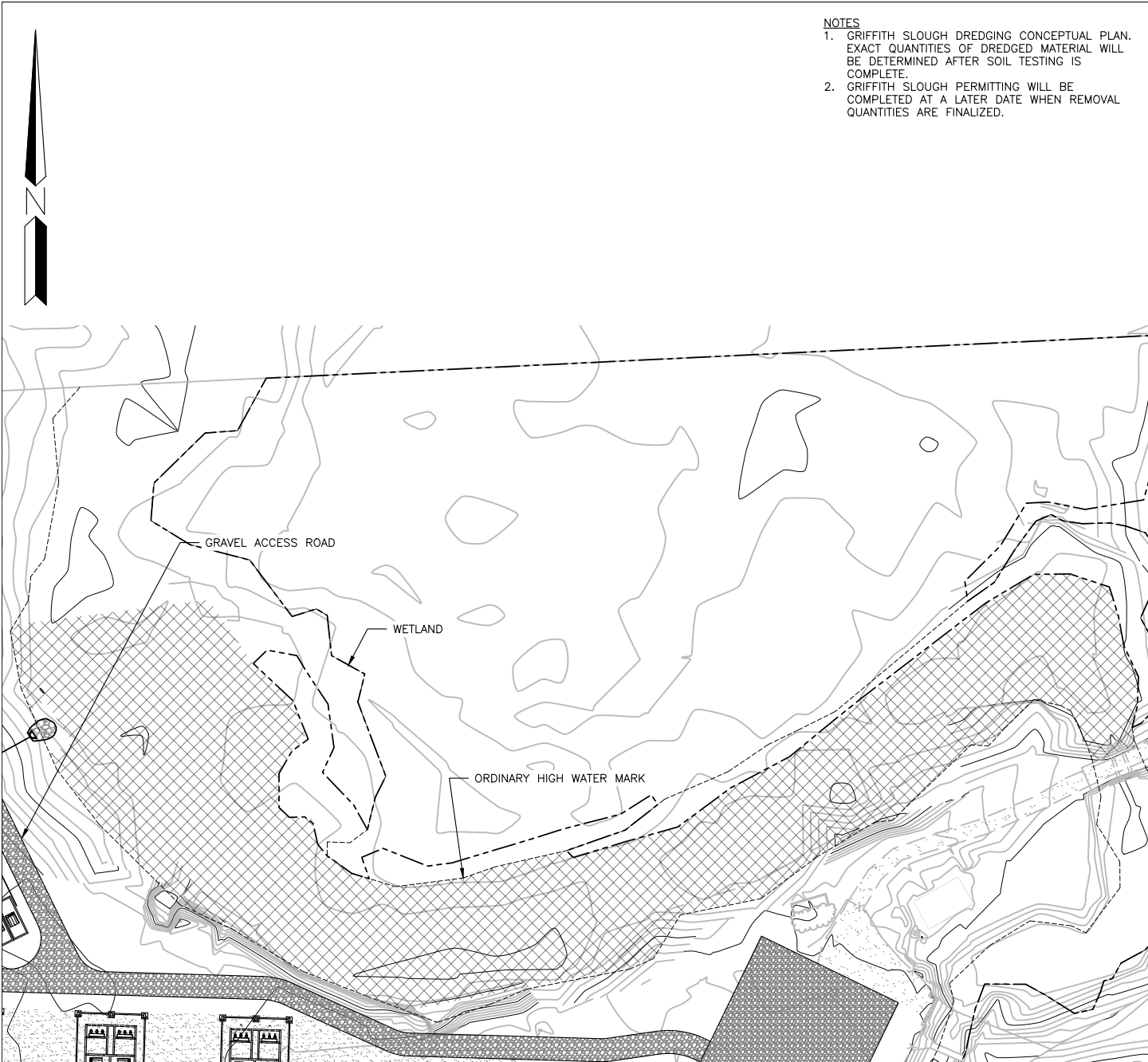
LEGEND

- WETLANDS
- ORDINARY HIGH WATER MARK

REFERENCE NUMBER: 21-19393
 APPLICANT NAME:
 WASHINGTON DEPART. OF FISH & WILDLIFE
 PROPOSED PROJECT:
 SPOKANE HATCHERY RENOVATION
 LOCATION: SPOKANE HATCHERY
 SHEET 8 OF 15 DATE: 05-16-2024

NOTES

1. GRIFFITH SLOUGH DREDGING CONCEPTUAL PLAN. EXACT QUANTITIES OF DREDGED MATERIAL WILL BE DETERMINED AFTER SOIL TESTING IS COMPLETE.
2. GRIFFITH SLOUGH PERMITTING WILL BE COMPLETED AT A LATER DATE WHEN REMOVAL QUANTITIES ARE FINALIZED.



GRIFFITH SLOUGH DREDGING PLAN
SCALE: 1" = 100'-0"

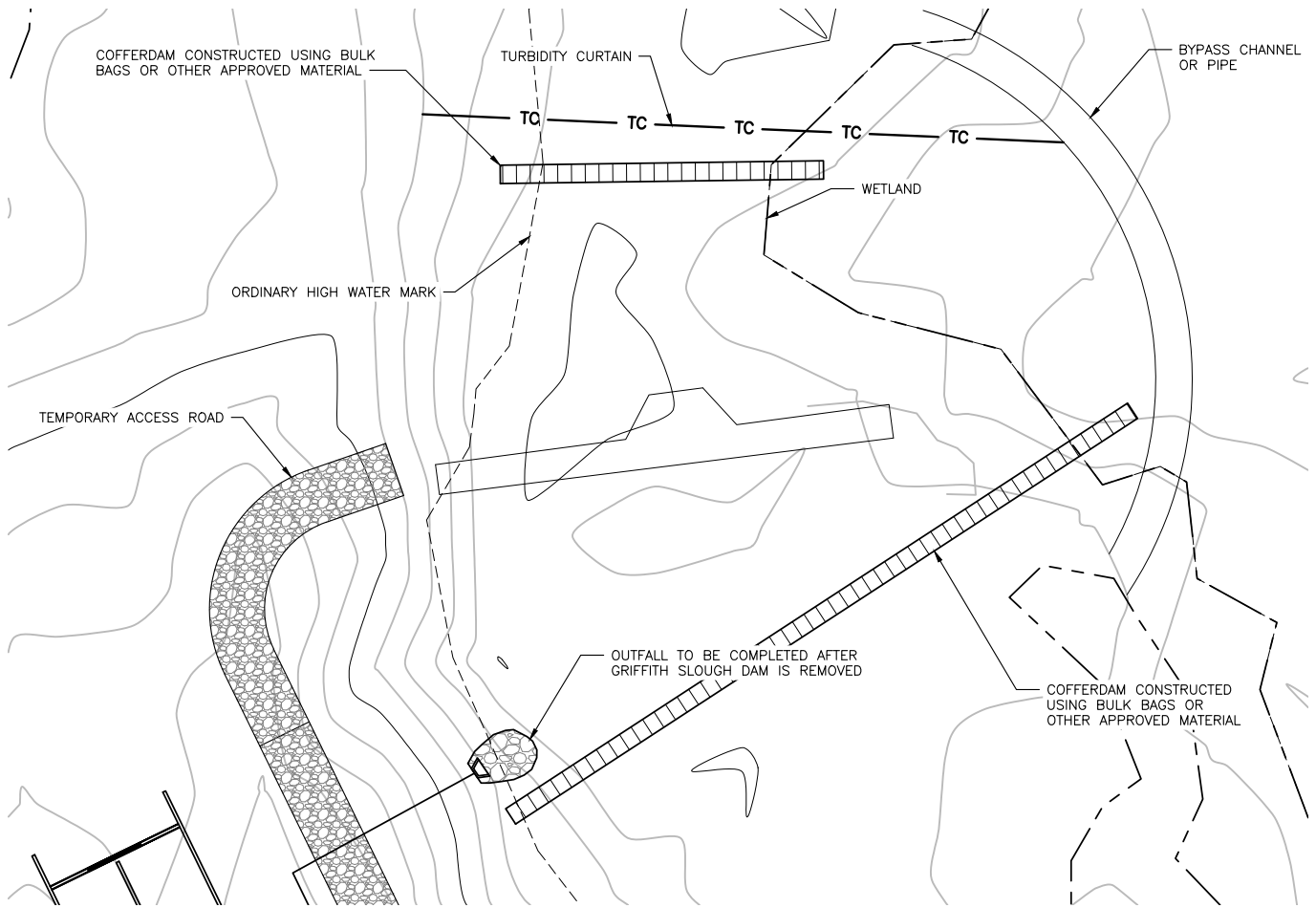
LEGEND

- WETLANDS
- ORDINARY HIGH WATER MARK
- DREDGING
- GRAVEL ACCESS ROAD

REFERENCE NUMBER: 21-19393
APPLICANT NAME:
WASHINGTON DEPART. OF FISH & WILDLIFE
PROPOSED PROJECT:
SPOKANE HATCHERY RENOVATION
LOCATION: SPOKANE HATCHERY
SHEET 9 OF 15 DATE: 05-16-2024

NOTES

1. INWATER WORK WINDOW - 6/16-8/31
2. THIS DEWATERING PLAN IS CONCEPTUAL IN NATURE AND IS INTENDED TO OUTLINE THE GENERAL WORK ACTIVITIES RELATED TO DEWATERING.
3. THE CONTRACTOR WILL BE RESPONSIBLE FOR SELECTING APPROPRIATE MEANS AND METHODS TO COMPLETE ALL WORK ELEMENT AND COMPLY WITH ALL PERMIT REQUIREMENTS AND CONSTRAINTS AS SHOWN IN THE CONTRACT DOCUMENTS.
4. THE CONTRACTOR WILL PREPARE AND SUBMIT A DETAILED SEQUENCING AND DEWATERING PLAN FOR REVIEW PRIOR TO COMMENCING ANY WORK BELOW THE ORDINARY HIGH WATER.
5. TURBIDITY CURTAINS WILL BE USED AROUND WORK AREA AS NEEDED TO PREVENT DISCHARGE OF SILT LADEN WATER.



GRIFFITH SLOUGH DEWATERING PLAN

SCALE: 1" = 50'-0"

GRIFFITH SLOUGH DAM REMOVAL / FILL QUANTITIES	
DESCRIPTION	BELOW OHW
SOIL EXCAVATION (CY)	269
RIVERBANK EXCAVATION (CY)	96
CONCRETE REMOVAL (CY)	60
PLUNGE POOL EXCAVATION (CY)	12
DREDGING AREA (SQUARE FEET)	73,693
TOTAL REMOVAL (CUT) (CY)	437
RIVER FILL (CY)	100
RIP RAP (CY)	8
COFFERDAMS (TEMPORARY) (CY)	82
TOTAL FILL (FILL) (CY)	190

REFERENCE NUMBER: 21-19393
 APPLICANT NAME:
 WASHINGTON DEPART. OF FISH & WILDLIFE
 PROPOSED PROJECT:
 SPOKANE HATCHERY RENOVATION
 LOCATION: SPOKANE HATCHERY
 SHEET 10 OF 15 DATE: 05-16-2024


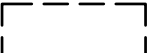






WETLAND BUFFER IMPACTS

SCALE: 1" = 300'-0"

Wetland Buffer Impacts (Outside of Wetland Boundary and Above OHW only. See Note.)			
Description (location/feature)	Permanent Impact (SF)	Temporary Impact (SF)	Mitigation
Areas by Type			
PHASE 1	34,757	77,118	
PHASE 2	40,806	77,118	
PHASE 3	43,263	70,118	
SEE SHEET 7 FOR IMPACTED AREAS BELOW OHW.			
SEE SHEET 8 AND 10 FOR REMOVAL/FILL VOLUMES BELOW OHW.			
SEE SHEET 13 FOR WETLAND IMPACTS.			
SEE SHEET 15 FOR STREAM IMPACTS.			

LEGEND

-  WETLAND OUTLINE
-  WETLAND BUFFER
-  WETLAND BUFFER IMPACT
-  50YR CHANNEL MIGRATION LINE
-  100YR CHANNEL MIGRATION LINE
-  ORDINARY HIGH WATER MARK


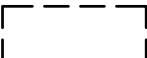




REFERENCE NUMBER: 21-19393
 APPLICANT NAME:
 WASHINGTON DEPART. OF FISH & WILDLIFE
 PROPOSED PROJECT:
 SPOKANE HATCHERY RENOVATION
 LOCATION: SPOKANE HATCHERY
 SHEET 11 OF 15 DATE: 05-16-2024



WETLAND AND WATERS IMPACT

SCALE: 1" = 300'-0"

LEGEND

-  WETLAND OUTLINE
-  WETLAND BUFFER
-  WETLAND IMPACT
-  50YR CHANNEL MIGRATION LINE
-  100YR CHANNEL MIGRATION LINE
-  ORDINARY HIGH WATER MARK

REFERENCE NUMBER: 21-19393
 APPLICANT NAME:
 WASHINGTON DEPART. OF FISH & WILDLIFE
 PROPOSED PROJECT:
 SPOKANE HATCHERY RENOVATION
 LOCATION: SPOKANE HATCHERY
 SHEET 12 OF 15 DATE: 05-16-2024

Wetland and Waters Impacts				
Description (location/feature)	Impacted Area (sf)	Permanent Impact (sf)	Temporary Impact (sf)	Mitigation
WATER BODY - GRIFFITH SLOUGH	219			
RIP RAP		119	100	
PHASE 2	5,415			
WETLAND C	3,039			
ROADWAY GRADING		2,763	276	
WATER BODY - GRIFFITH SLOUGH	2,376			
ROADWAY GRADING		2,160	216	
PHASE 3	123,001			
WETLAND A	8,979			
GRAVEL FILL		566	-	
CONCRETE STRUCTURE		100	-	
SPRING DEVELOPMENT		7,477	-	
DAM REMOVAL		237	600	
WETLAND B	803			
GRAVEL FILL		803	-	
WETLAND C	12,909			
GRAVEL ROADWAY		872	968	
HOUSE		592	1,353	
BYPASS CHANNEL		-	1,860	
WETLAND DEWATERING		-	6,897	
COFFERDAM		-	368	
WATER BODY - GRIFFITH SLOUGH	92,637			
DAM REMOVAL		4,443	-	
DREDGING AREA		73,693	-	
COFFERDAM		-	2,384	
DEWATER SECTION		-	12,117	
WATER BODY - GRIFFITH SPRING	7,673			
DAM REMOVAL		1,190	-	
SPRING DEVELOPMENT		6,483	-	
Totals	128,635	-	-	

NOTE: REMOVAL/FILL VOLUMES BELOW OHW ARE TALLIED ON SHEET 8 AND 10.
SEE SHEET 15 FOR STREAM IMPACTS.



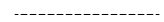
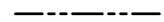


REFERENCE NUMBER: 21-19393
 APPLICANT NAME:
 WASHINGTON DEPART. OF FISH & WILDLIFE
 PROPOSED PROJECT:
 SPOKANE HATCHERY RENOVATION
 LOCATION: SPOKANE HATCHERY
 SHEET 13 OF 15 DATE: 05-16-2024



STREAM IMPACTS

SCALE: 1" = 300'-0"

LEGEND

-  50YR CHANNEL MIGRATION LINE
-  100YR CHANNEL MIGRATION LINE
-  ORDINARY HIGH WATER MARK
-  STREAM BUFFER
-  STREAM BUFFER IMPACTS
-  STREAM IMPACTS

REFERENCE NUMBER: 21-19393
 APPLICANT NAME:
 WASHINGTON DEPART. OF FISH & WILDLIFE
 PROPOSED PROJECT:
 SPOKANE HATCHERY RENOVATION
 LOCATION: SPOKANE HATCHERY
 SHEET 14 OF 15 DATE: 05-16-2024

Stream and Stream Buffer Impacts				
Description (location/feature)				Mitigation
	Impacted Area (sf)	Permanent Impact (sf)	Temporary Impact (sf)	
PHASE 1	24,894			
IN STREAM	200			
EFFLUENT OUTFALL		200	-	
OUTSIDE STREAM, INSIDE BUFFER	24,694			
POLLUTION ABATEMENT POND		1,554	-	
CONSTRUCTION ACCESS AND LAYDOWN		-	13,321	
PERMENANT ACCESS ROAD		7,018	-	
PRAS STRUCTURE AND ACCESS		2,800	-	
PHASE 2	31,221			
IN STREAM	-	-	-	
OUTSIDE STREAM, INSIDE BUFFER	31,221			
CONSTRUCTION ACCESS AND LAYDOWN		-	13,321	
PRAS STRUCTURE AND ACCESS		12,194	-	
HATCHERY ACCESS ROAD GRADING		5,706		
PHASE 3	132,750			
IN STREAM	89,842			
GRIFFTH SPRING INTAKE INFILTRATION SYSTEM		7,914	-	
GRIFFTH SLOUGH DREDGING		78,388	-	
GRIFFTH SLOUGH DAM REMOVAL		-	3,541	
OUTSIDE STREAM, INSIDE BUFFER	42,908			
CONSTRUCTION ACCESS AND LAYDOWN		-	13,321	
COFFERDAM AND BYPASS		-	8,811	
GRIFFTH SPRING ACCESS ROAD		3,832	-	
GRIFFTH SPRING INTAKE INFILTRATION SYSTEM		6,003	-	
PARKING AREA REGRADING		10,145	-	
HOUSE REGRADING		796	-	
Totals	188,865	-	-	

REFERENCE NUMBER: 21-19393
 APPLICANT NAME:
 WASHINGTON DEPART. OF FISH & WILDLIFE
 PROPOSED PROJECT:
 SPOKANE HATCHERY RENOVATION
 LOCATION: SPOKANE HATCHERY
 SHEET 15 OF 15 DATE: 05-16-2024