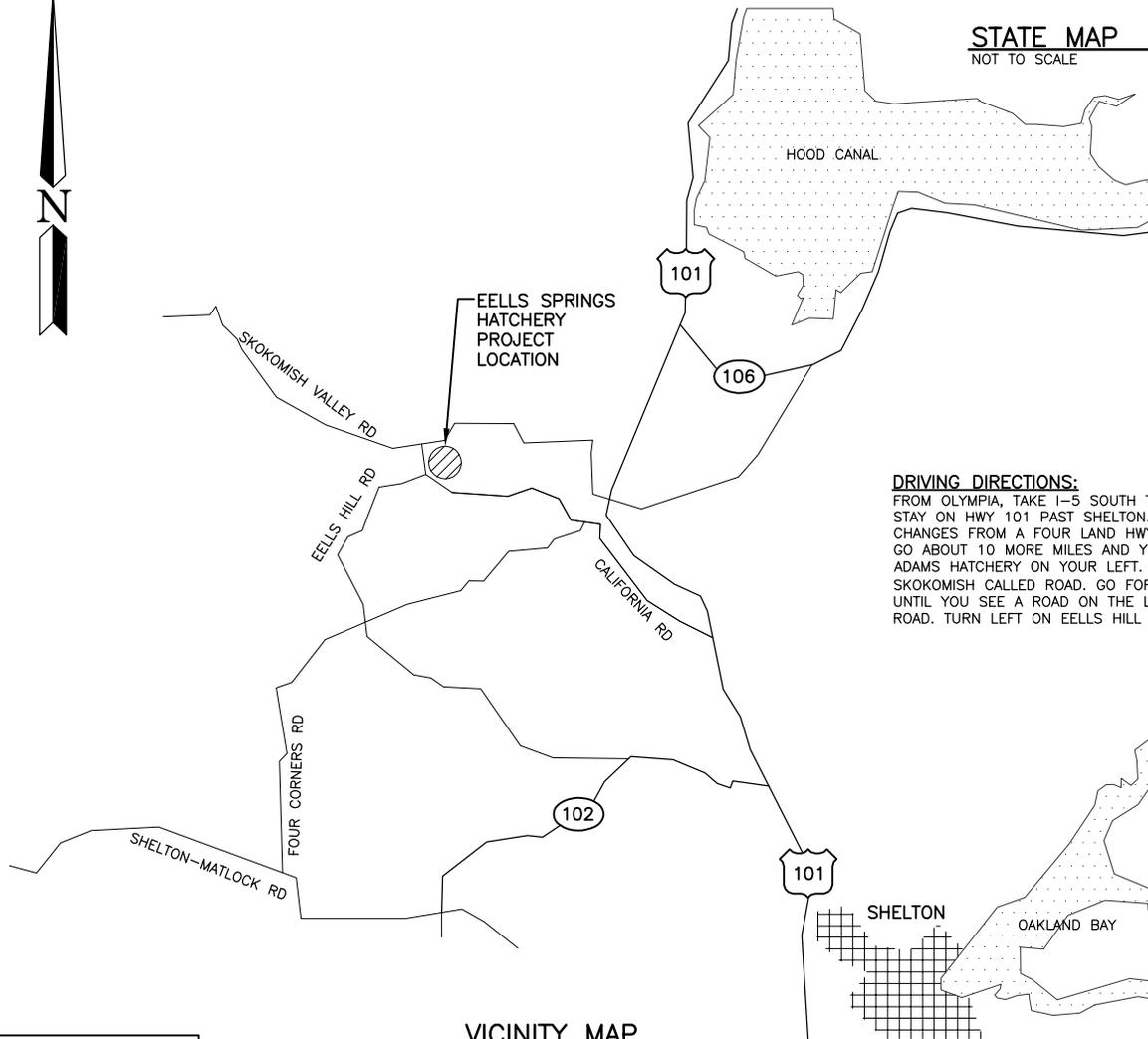




PROJECT LOCATION

STATE MAP
NOT TO SCALE



DRIVING DIRECTIONS:

FROM OLYMPIA, TAKE I-5 SOUTH TO EXIT 104 TO HWY 101. STAY ON HWY 101 PAST SHELTON. WHEN THE HWY CHANGES FROM A FOUR LANE HWY TO A TWO LANE HWY, GO ABOUT 10 MORE MILES AND YOU WILL SEE THE GEORGE ADAMS HATCHERY ON YOUR LEFT. TURN LEFT ON THE SKOKOMISH CALLED ROAD. GO FOR ABOUT 3 1/2 MILES UNTIL YOU SEE A ROAD ON THE LEFT CALLED EELLS HILL ROAD. TURN LEFT ON EELLS HILL ROAD TO THE HATCHERY.

VICINITY MAP
NOT TO SCALE

PARCEL #: 421181360230
421181360161
421184260000

ENG. PROJECT NO. **MN:H107:15-3**

PORTION OF: **SECT. 12, T 21 N, R 4 W**

REFERENCE NUMBER:
APPLICANT:
WASHINGTON DEPT. of FISH & WILDLIFE
600 CAPITOL WAY N.
OLYMPIA, WA 98501-1091

PROJECT LOCATION (ADDRESS):
EELLS SPRINGS HATCHERY
7570 EELLS HILLS ROAD
SHELTON, WA 98528

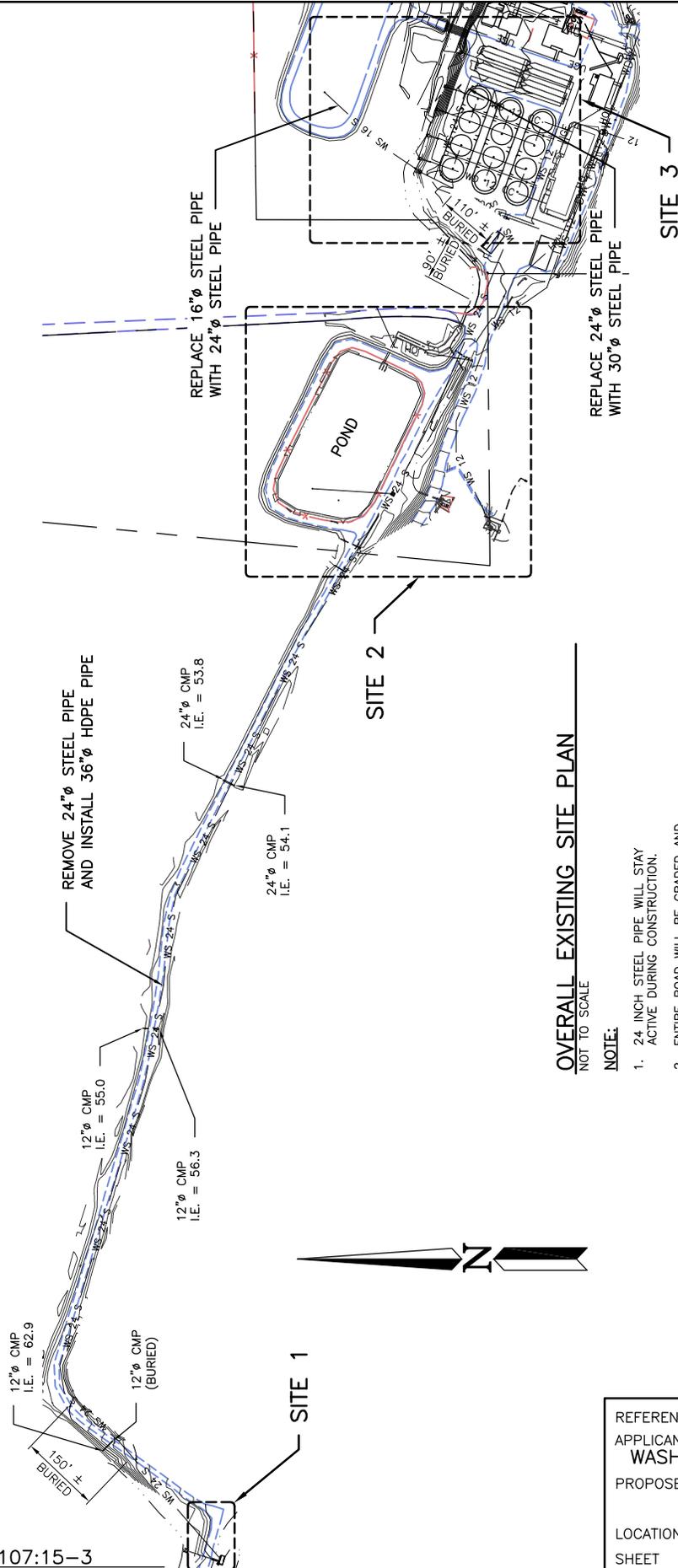
PROPOSED PROJECT:
INTAKE PIPE REPLACEMENT

ADJACENT PROPERTY OWNER:

LAT/LONG: **47.3094/-123.2392**
DATUM: **NGVD 29**
SHEET **1** OF **12** DATE: **1/14/2016**

IN: **EELLS SPRINGS**
NEAR/AT: **SHELTON**
COUNTY: **MASON**
STATE: **WA**

1.
2.



OVERALL EXISTING SITE PLAN

NOT TO SCALE

NOTE:

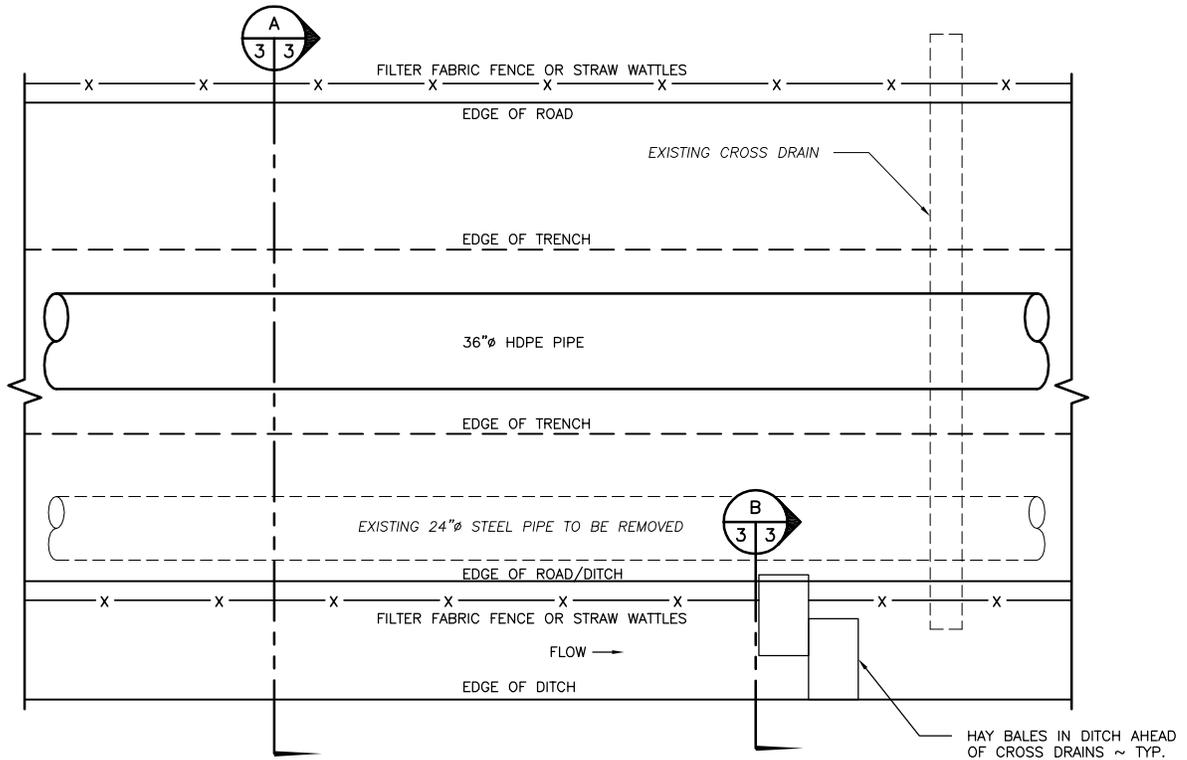
1. 24 INCH STEEL PIPE WILL STAY ACTIVE DURING CONSTRUCTION.
2. ENTIRE ROAD WILL BE GRADED AND COMPACTED PRIOR TO ROCKING.

LEGEND

CONCRETE STRUCTURE	— W —	WATER SUPPLY
CHAINLINK FENCE	— WS 12 —	12" HDPE SUPPLY
PROPERTY LINE	— WS 4 S —	4" STL. SUPPLY
GRAVEL ROADWAY	— WS 6 S —	6" STL. SUPPLY
PAVED ROADWAY	— WS 24 S —	24" STL. SUPPLY
UNDERGROUND ELECTRICAL	— WS 10 H —	10" HDPE SUPPLY
UNDERGROUND FIRE LINE	— WDR —	WATER DRAIN
OVERHEAD POWER	— WD 4 P —	4" PVC DRAIN
DOMESTIC WATER	— WD 12 CC —	12" CONC. DRAIN
SANITARY SEWER	— SS —	

QUANTITIES	
MATERIAL	FILL
36" HDPE PIPE	2950 LF
24" STEEL PIPE	230 LF
30" STEEL PIPE	440 LF
EXCAVATION	-4935 CY
NATIVE BACKFILL	1585 CY
GRAVEL BACKFILL	1470 CY
CSBC	670 CY
TOTAL	-4935 CY

REFERENCE NUMBER:
 APPLICANT NAME:
 WASHINGTON DEPT. of FISH & WILDLIFE
 PROPOSED PROJECT:
 INTAKE PIPE REPLACEMENT
 LOCATION: EELS SPRINGS HATCHERY
 SHEET 2 OF 12 DATE: 1/14/2016



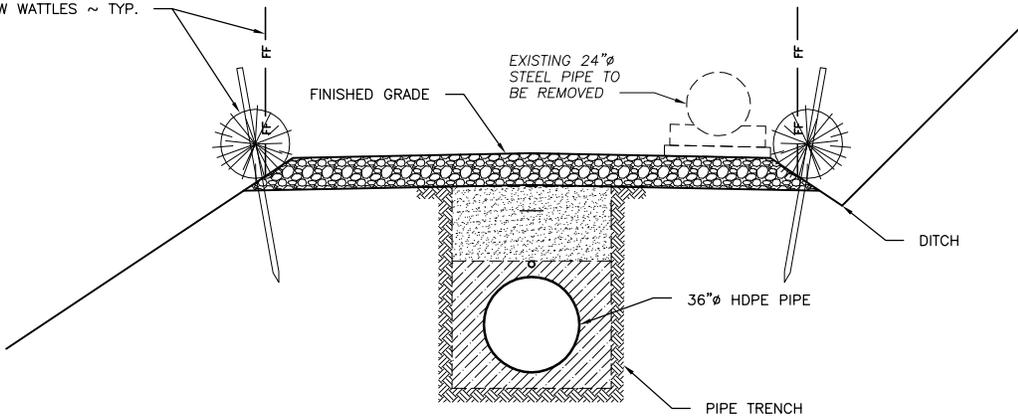
ERSOSION CONTROL PLAN

NOT TO SCALE

NOTES:

1. ALL EXPOSED SOILS SEEDED AND MULCHED.
2. ROAD REROCKED.

USE EITHER FILTER FABRIC FENCE OR STRAW WATTLES ~ TYP.



SECTION

NOT TO SCALE



EXISTING 24"Ø STEEL PIPE TO BE REMOVED

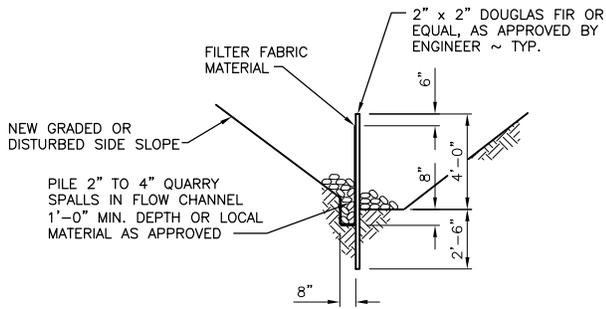
HAY BALES IN DITCH AHEAD OF CROSS DRAINS ~ TYP.

SECTION

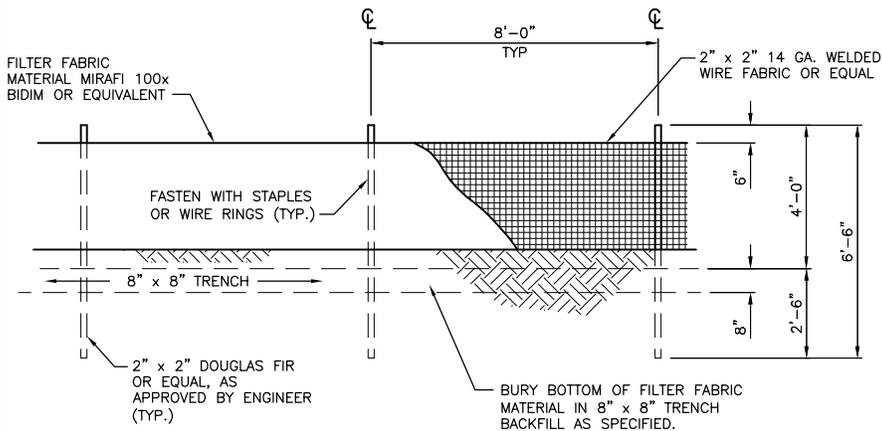
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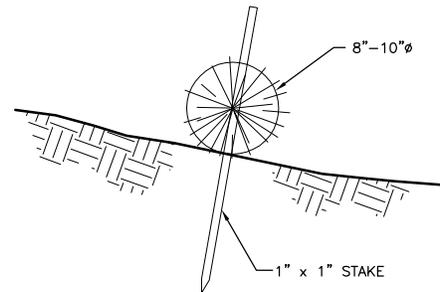
REFERENCE NUMBER:
 APPLICANT NAME:
WASHINGTON DEPT. of FISH & WILDLIFE
 PROPOSED PROJECT:
INTAKE PIPE REPLACEMENT
 LOCATION: EELS SPRINGS HATCHERY
 SHEET 3 OF 12 DATE: 1/14/2016



SECTION



ELEVATION



STRAW WATTLE DETAIL

NOT TO SCALE

FILTER FABRIC FENCE

NOT TO SCALE

FILTER FABRIC NOTES:

1. FILTER FABRIC SHALL BE PURCHASED CONTINUOUS ROLL CUT TO LENGTH OF BARRIER AS NEEDED. IF JOINTS ARE NECESSARY FABRIC SHALL BE SPLICED TOGETHER ONLY AT SUPPORT POSTS WITH A MINIMUM OF (6) INCH OVERLAP. BOTH ENDS SHALL BE SECURED AS REQUIRED.
2. FILTER FABRIC SHALL BE INSTALLED TO FOLLOW CONTOURS. FENCE POSTS SHALL BE SPACED A MAXIMUM OF EIGHT (8) FEET APART UNLESS OTHERWISE SHOWN HEREIN. ALL POSTS SHALL BE DRIVEN INTO THE GROUND A MINIMUM OF 30 INCHES.
3. A TRENCH SHALL BE EXCAVATED, ROUGHLY EIGHT (8) INCHES WIDE BY EIGHT (8) INCHES DEEP UP SLOPE AND ADJACENT TO THE POST TO ALLOW THE FILTER FABRIC TO BE BURIED.
4. WHEN STANDARD STRENGTH FILTER FABRIC IS UTILIZED, A WIRE SINGLE SPACE MESH SUPPORT FENCE SHALL BE FASTENED TO THE UPSLOPE (OR UPSTREAM) SIDE OF THE POSTS USING ONE (1) INCH MINIMUM LENGTH WIRE STAPLES, TIE WIRE OR APPROVED HOG RINGS. ALL WIRE SUPPORT SHALL EXTEND INTO THE TRENCH A MINIMUM OF FOUR (4) INCHES AND SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE ORIGINAL GRADE.
5. ALL FILTER FABRIC SHALL BE STAPLED OR WIRED TO SUPPORT FENCING AND A MINIMUM OF 20 INCHES OF FABRIC SHALL BE EXTENDED INTO THE TRENCH. FILTER FABRIC SHALL NOT BE STAPLED OR FASTENED TO EXISTING TREES OR STRUCTURES UNLESS OTHERWISE APPROVED BY THE ENGINEER.
6. IF HIGH STRENGTH FILTER FABRIC AND CLOSER SPACING ARE USED, THE WIRE SUPPORT FENCING MAY BE ELIMINATED. HIGH STRENGTH FABRIC SHALL BE STAPLED OR WIRED DIRECTLY TO POSTS AS REQUIRED BY THE ENGINEER.
7. CUTOFF TRENCH SHALL BE BACKFILLED WITH 3/4 INCH MINIMUM DIAMETER WASHED GRAVEL OR OTHER SIMILAR SOURCE AS APPROVED BY THE ENGINEER.
8. FILTER FENCING SHALL BE INSTALLED WHERE SHOWN ON THE PLAN, OR AS MARKED IN THE FIELD BY THE ENGINEER, PRIOR TO COMMENCEMENT OF WORK. ALL FENCING SHALL BE INSPECTED DAILY DURING CONSTRUCTION AND AFTER EACH SIGNIFICANT RAINFALL EVENT UNTIL SITE HAS BEEN PERMANENTLY STABILIZED. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
9. REMOVAL OF TRAPPED SEDIMENT SHALL BE PERFORMED WHEN AMOUNTS REACH APPROXIMATELY 1/3 HEIGHT OF THE FENCE.
10. FILTER FENCING SHALL REMAIN IN-PLACE UNTIL SITE HAS BEEN REVEGETATED TO ORIGINAL CONDITION OR DIRECTED BY THE ENGINEER.

CONSTRUCTION SPECIFICATIONS:

1. PREPARE THE SLOPE BEFORE THE WATTLING PROCEDURE IS STARTED.
2. SHALLOW GULLIES SHOULD BE SMOOTHED AS WORK PROGRESSES.
3. IT IS CRITICAL THAT ROLLS ARE INSTALLED PERPENDICULAR TO WATER MOVEMENT, PARALLEL TO THE SLOPE CONTOUR.
4. LAY THE ROLL ON THE GROUND SNUGLY AGAINST THE SOIL. MAKE SURE NO GAPS EXIST BETWEEN THE SOIL AND THE STRAW WATTLE.
5. DRIVE THE STAKE THROUGH THE WATTLE INTO SOIL. LEAVE ONLY 1 OR 2 INCHES OF STAKE EXPOSED.
6. INSTALL STAKES AT MOST EVERY 4 FEET APART THROUGH THE WATTLE.
7. INSPECT THE STRAW ROLLS AND THE SLOPES AFTER SIGNIFICANT STORMS. MAKE SURE THE ROLLS ARE IN CONTACT WITH THE SOIL.
8. REPAIR ANY RILLS OR GULLYS PROMPTLY.
9. RESEED OR REPLANT VEGETATION IF NECESSARY UNTIL THE SLOPE IS STABILIZED.

REFERENCE NUMBER:

APPLICANT NAME:

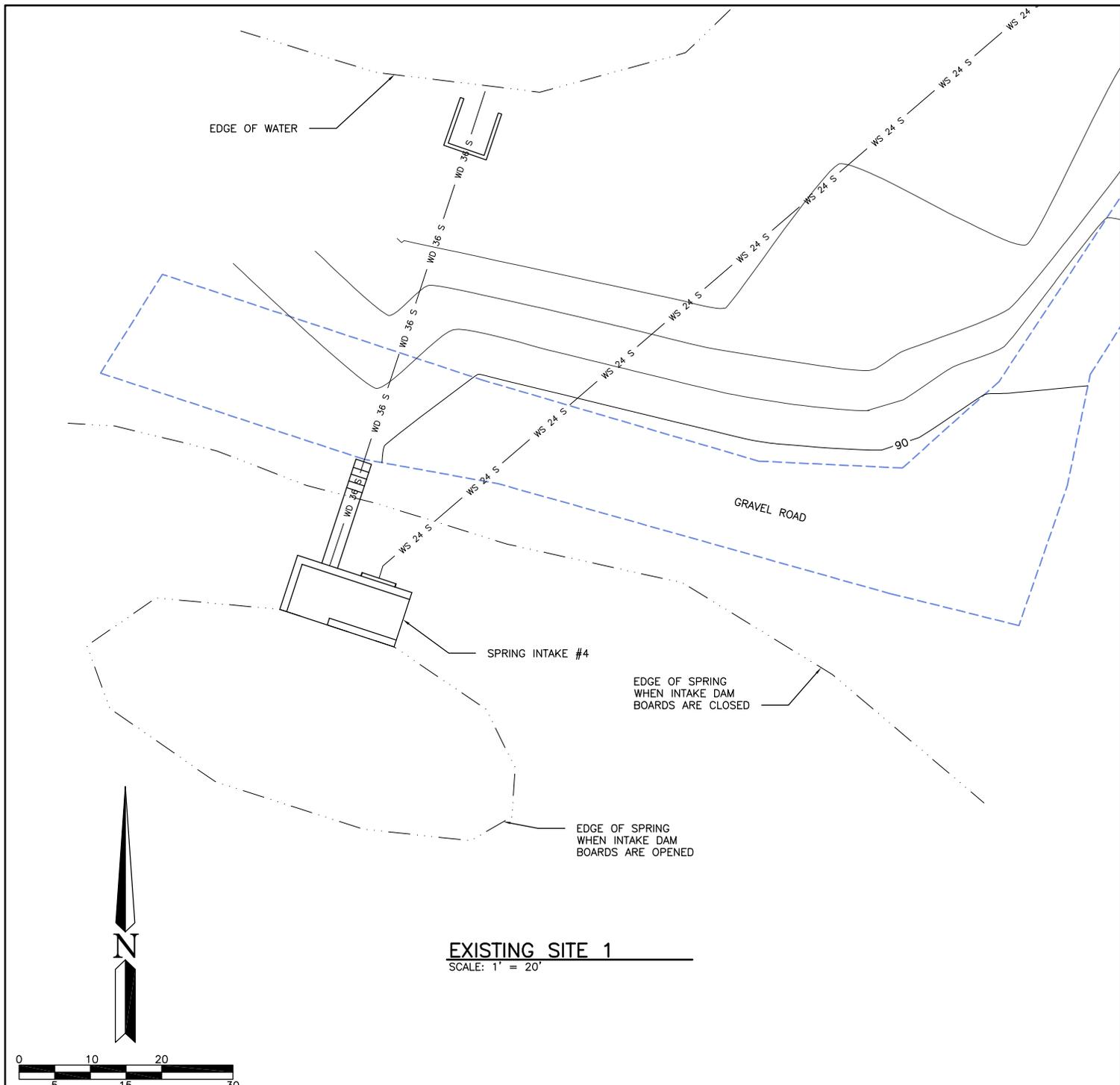
WASHINGTON DEPT. of FISH & WILDLIFE

PROPOSED PROJECT:

INTAKE PIPE REPLACEMENT

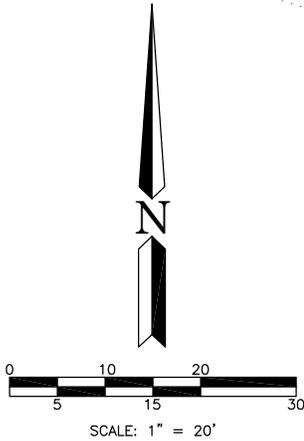
LOCATION: EELS SPRINGS HATCHERY

SHEET 4 OF 12 DATE: 1/14/2016



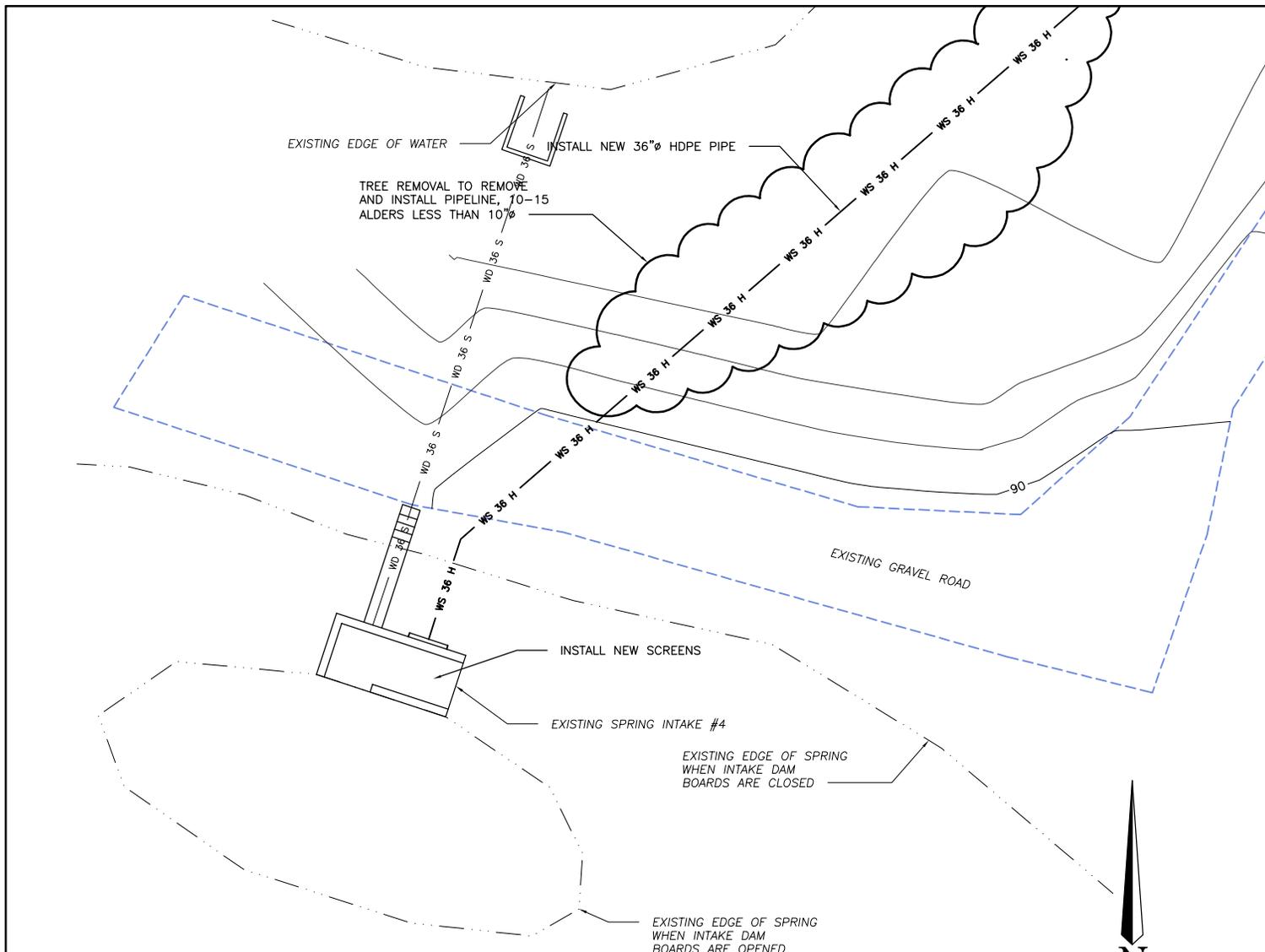
EXISTING SITE 1

SCALE: 1" = 20'

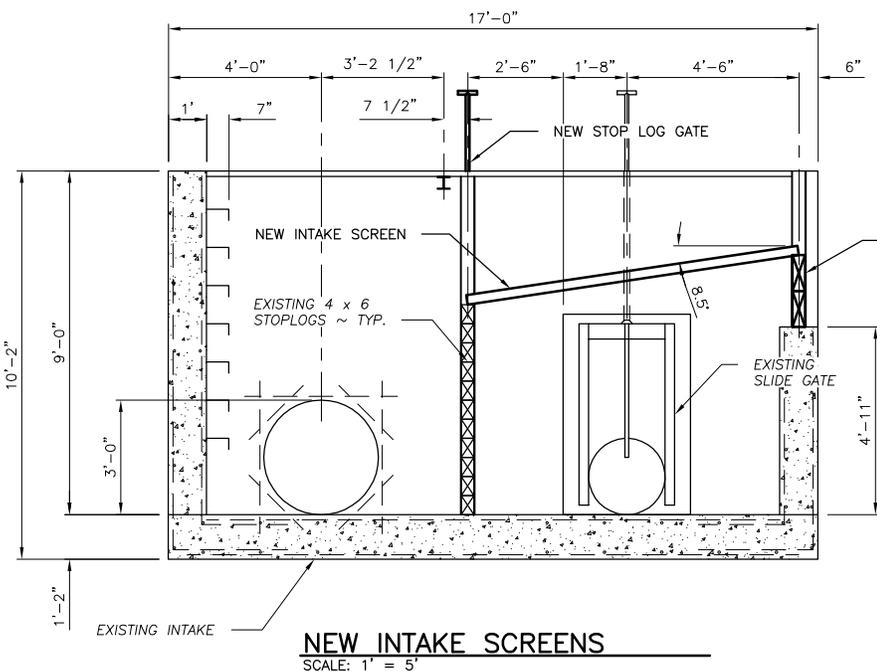
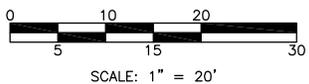


LEGEND	
CONCRETE STRUCTURE	
GRAVEL ROADWAY	
24"Ø STL. SUPPLY	
36"Ø STL. WATER DRAIN	

REFERENCE NUMBER:
 APPLICANT NAME:
WASHINGTON DEPT. of FISH & WILDLIFE
 PROPOSED PROJECT:
INTAKE PIPE REPLACEMENT
 LOCATION: **EELS SPRINGS HATCHERY**
 SHEET **5** OF **12** DATE: **1/14/2016**

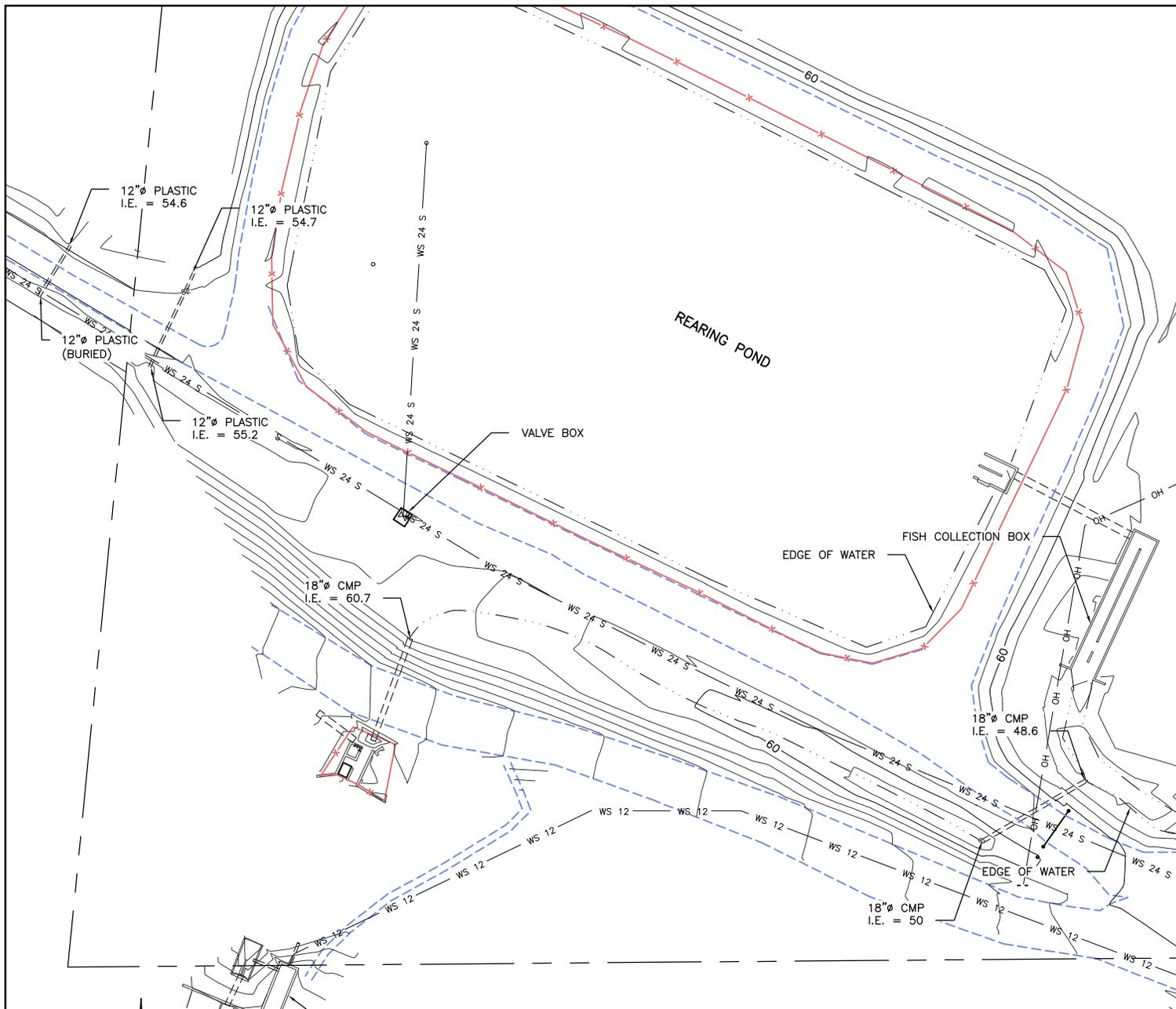


PROPOSED SITE 1
SCALE: 1" = 20'

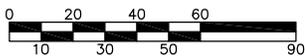


LEGEND	
CONCRETE STRUCTURE	
GRAVEL ROADWAY	
36"Ø HDPE SUPPLY	
36"Ø STL. WATER DRAIN	

REFERENCE NUMBER:
 APPLICANT NAME:
WASHINGTON DEPT. of FISH & WILDLIFE
 PROPOSED PROJECT:
INTAKE PIPE REPLACEMENT
 LOCATION: **EELS SPRINGS HATCHERY**
 SHEET **6** OF **12** DATE: **1/14/2016**



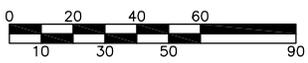
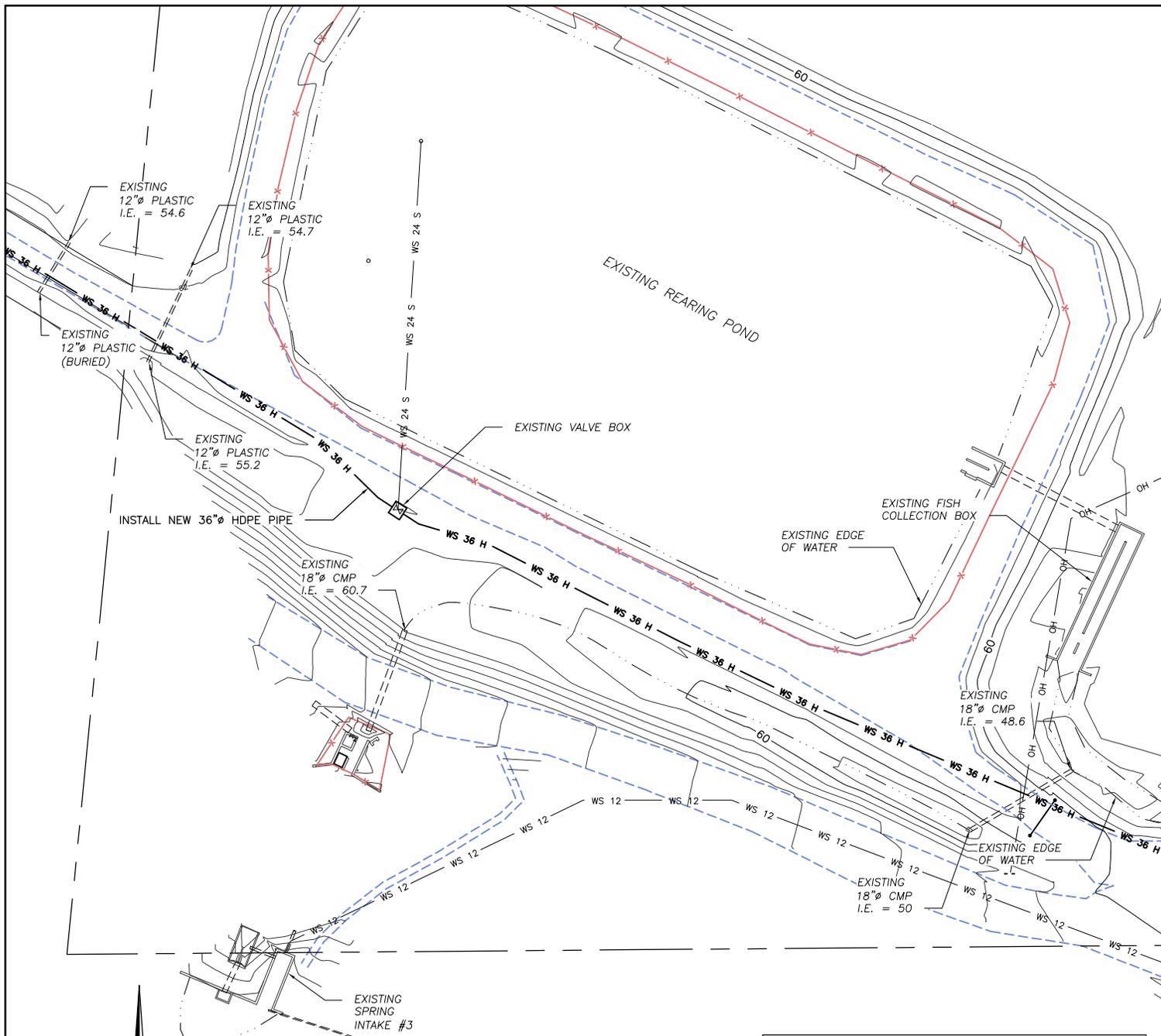
EXISTING SITE 2
SCALE: 1" = 60'



SCALE: 1" = 60'

LEGEND	
CONCRETE STRUCTURE	—
CHAINLINK FENCE	— x — x — x —
PROPERTY LINE	- - - - -
GRAVEL ROADWAY	- - - - -
PAVED ROADWAY	- - - - -
OVERHEAD POWER	— OH — OH —
12"Ø SUPPLY	— WS 12 —
24"Ø STL. SUPPLY	— WS 24 S —

REFERENCE NUMBER:
 APPLICANT NAME:
WASHINGTON DEPT. of FISH & WILDLIFE
 PROPOSED PROJECT:
INTAKE PIPE REPLACEMENT
 LOCATION: **EELS SPRINGS HATCHERY**
 SHEET **7** OF **12** DATE: **1/14/2016**



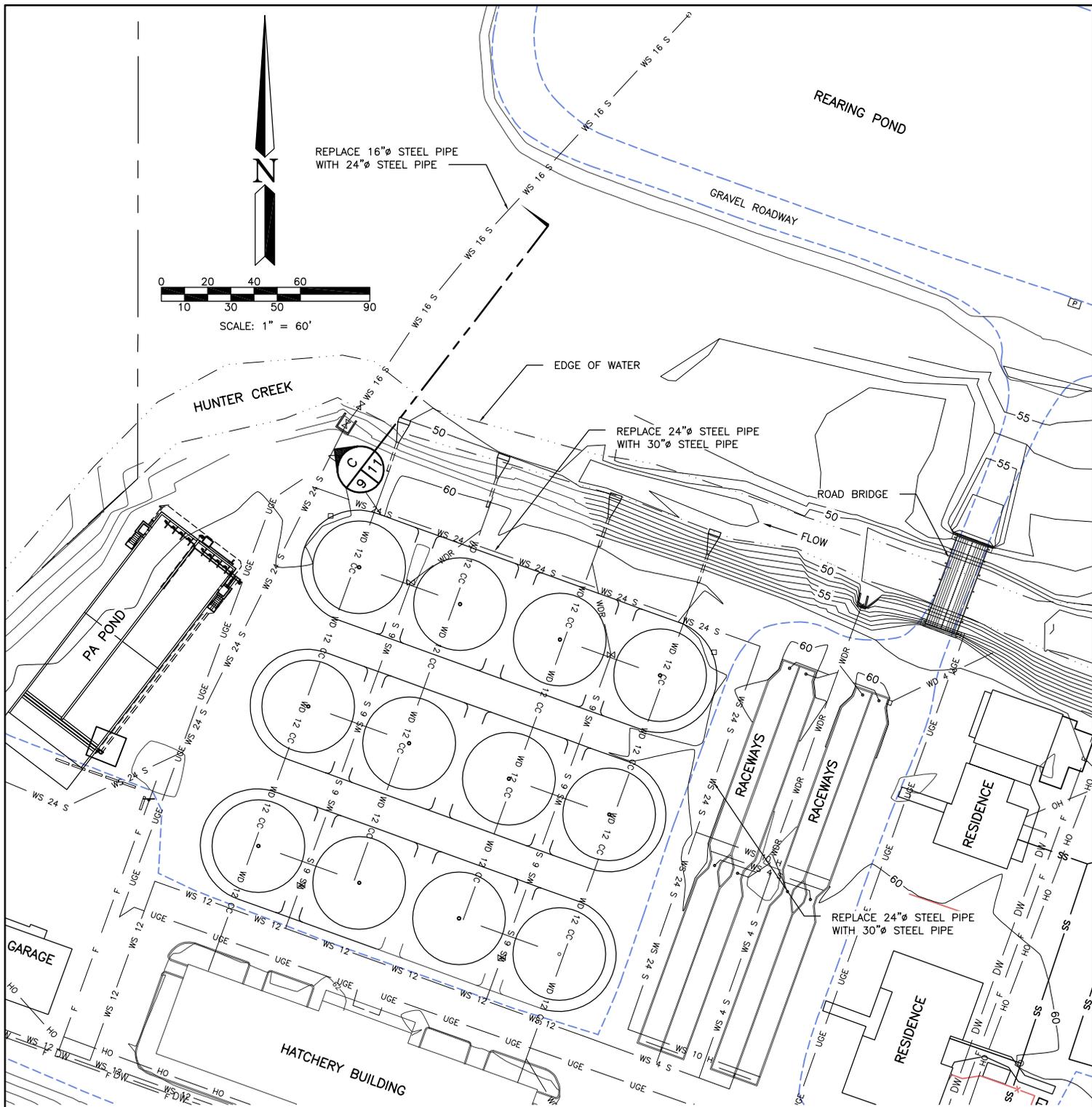
SCALE: 1" = 60'

PROPOSED SITE 2

SCALE: 1" = 60'

LEGEND	
CONCRETE STRUCTURE	—
CHAINLINK FENCE	— x — x — x —
PROPERTY LINE	- - - - -
GRAVEL ROADWAY	- - - - -
PAVED ROADWAY	—
OVERHEAD POWER	— OH — OH —
12" SUPPLY	— WS 12 —
24" STL. SUPPLY	— WS 24 S —
36" HDPE SUPPLY	— WS 36 H —

REFERENCE NUMBER:
 APPLICANT NAME:
WASHINGTON DEPT. of FISH & WILDLIFE
 PROPOSED PROJECT:
INTAKE PIPE REPLACEMENT
 LOCATION: **EELS SPRINGS HATCHERY**
 SHEET **8** OF **12** DATE: **1/14/2016**



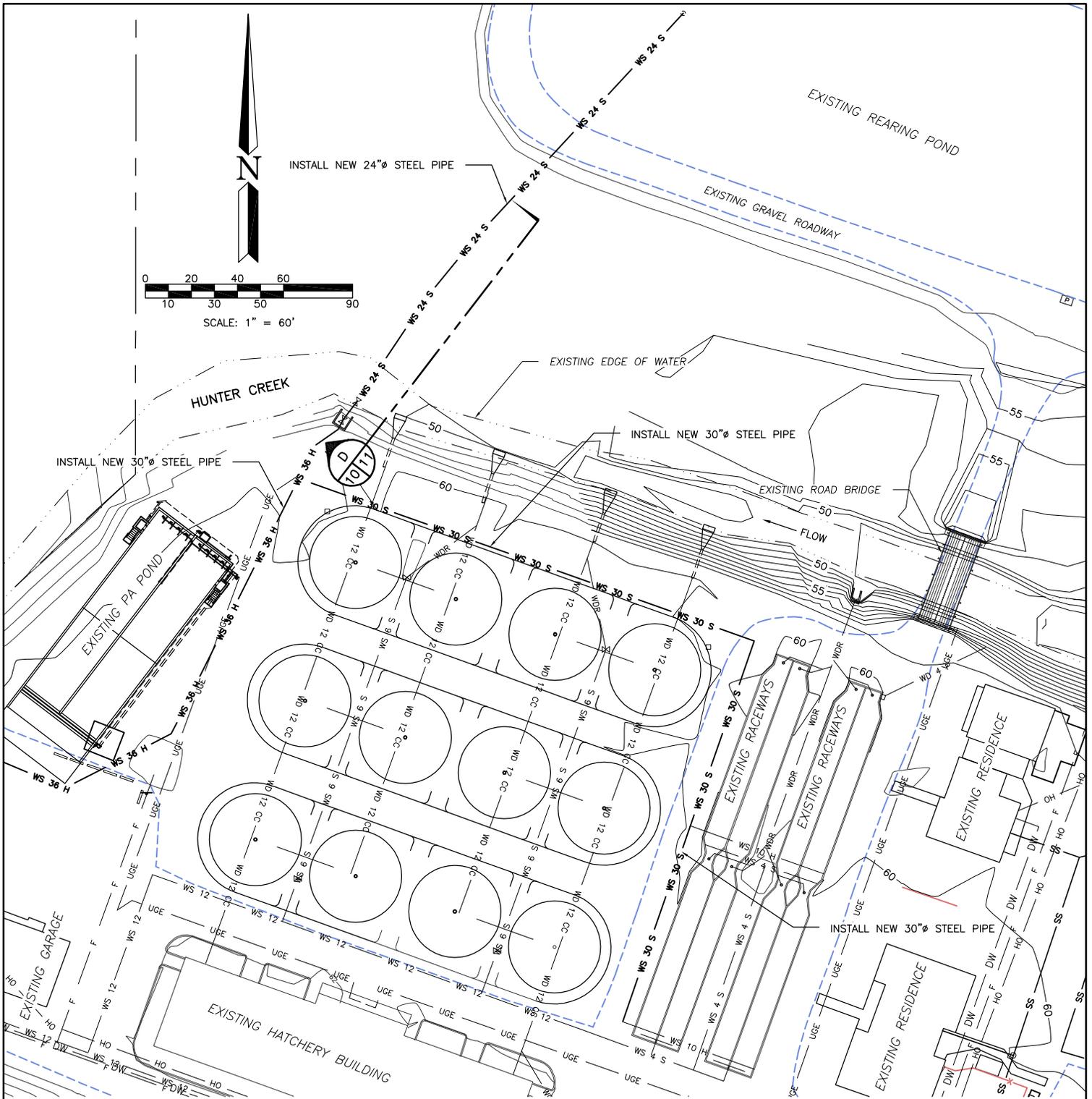
LEGEND

CONCRETE STRUCTURE	—————	6"Ø STL. SUPPLY	————— WS 6 S
PROPERTY LINE	- - - - -	16"Ø STL. SUPPLY	————— WS 16 S
GRAVEL ROADWAY	— · — · —	24"Ø STL. SUPPLY	————— WS 24 S
UNDERGROUND ELECTRICAL	— UGE — UGE —	10"Ø HDPE SUPPLY	————— WS 10 H
UNDERGROUND FIRE LINE	— F — F —	WATER DRAIN	————— WDR — WDR
OVERHEAD POWER	— OH — OH —	4"Ø PVC DRAIN	————— WD 4 P
DOMESTIC WATER	— DW — DW —	12"Ø CONC. DRAIN	————— WD 12 CC
SANITARY SEWER	————— SS		
12"Ø SUPPLY	————— WS 12		
4"Ø STL. SUPPLY	————— WS 4 S		

EXISTING SITE 3

SCALE: 1" = 60'

REFERENCE NUMBER:
 APPLICANT NAME:
WASHINGTON DEPT. of FISH & WILDLIFE
 PROPOSED PROJECT:
INTAKE PIPE REPLACEMENT
 LOCATION: **EELS SPRINGS HATCHERY**
 SHEET **9** OF **12** DATE: **1/14/2016**



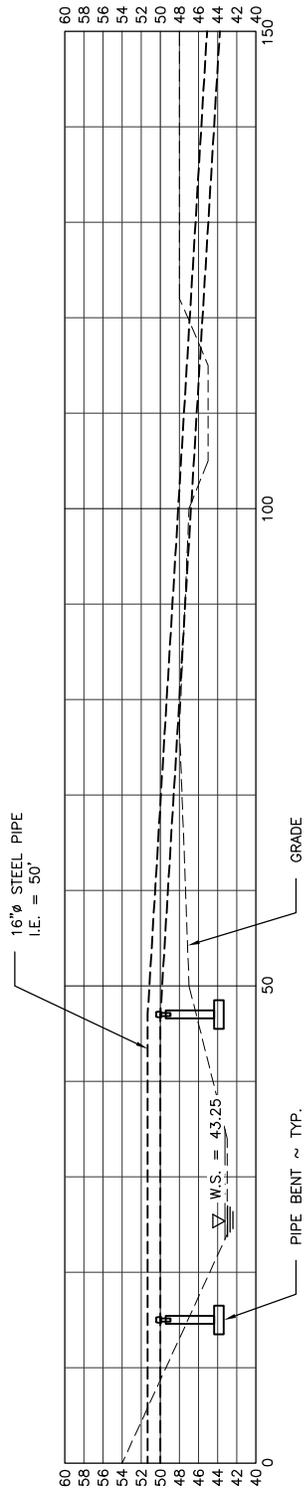
LEGEND

CONCRETE STRUCTURE	—————	6"Ø STL. SUPPLY	————— WS 6 S
PROPERTY LINE	- - - - -	24"Ø STL. SUPPLY	————— WS 24 S
GRAVEL ROADWAY	- - - - -	30"Ø STL. SUPPLY	————— WS 30 S
UNDERGROUND ELECTRICAL	— UGE — UGE —	10"Ø HDPE SUPPLY	————— WS 10 H
UNDERGROUND FIRE LINE	— F — F —	36"Ø HDPE SUPPLY	————— WS 36 H
OVERHEAD POWER	— OH — OH —	WATER DRAIN	————— WDR — WDR —
DOMESTIC WATER	— DW — DW —	4"Ø PVC DRAIN	————— WD 4 P
SANITARY SEWER	— SS —	12"Ø CONC. DRAIN	————— WD 12 CC
12"Ø SUPPLY	————— WS 12		
4"Ø STL. SUPPLY	————— WS 4 S		

PROPOSED SITE 3

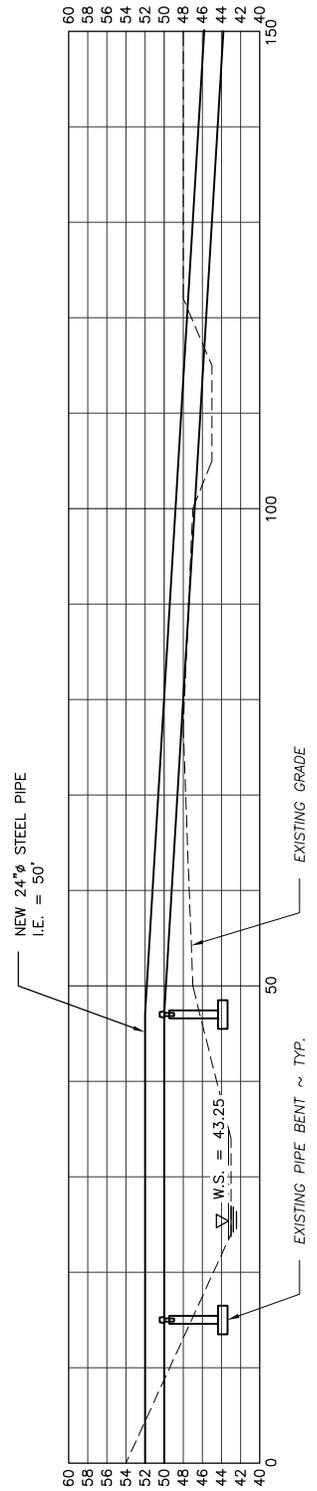
SCALE: 1" = 60'

REFERENCE NUMBER:
 APPLICANT NAME:
WASHINGTON DEPT. of FISH & WILDLIFE
 PROPOSED PROJECT:
INTAKE PIPE REPLACEMENT
 LOCATION: **EELS SPRINGS HATCHERY**
 SHEET 10 OF 12 DATE: 1/14/2016



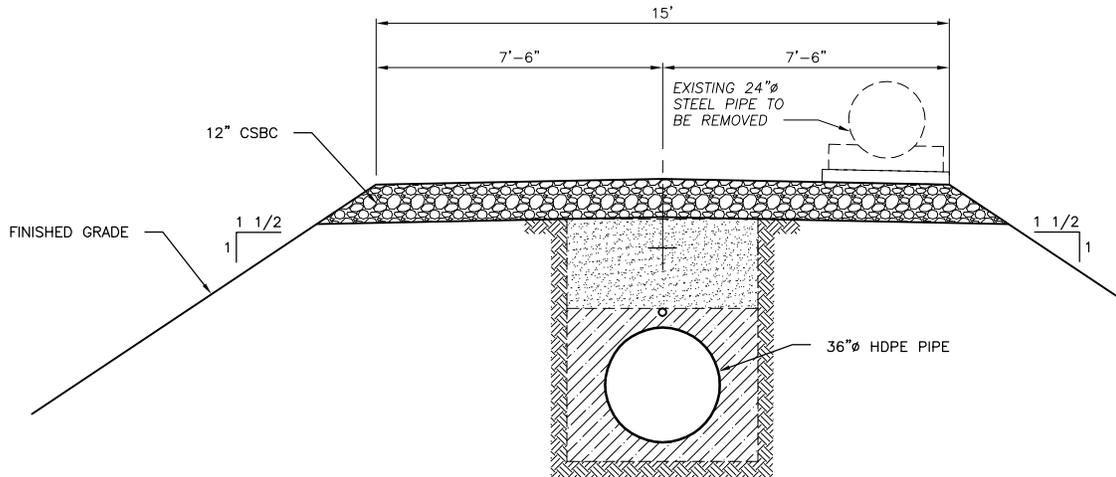
C
9|11

EXISTING 16" ϕ STEEL PIPE SECTION
SCALE: 1" = 20'



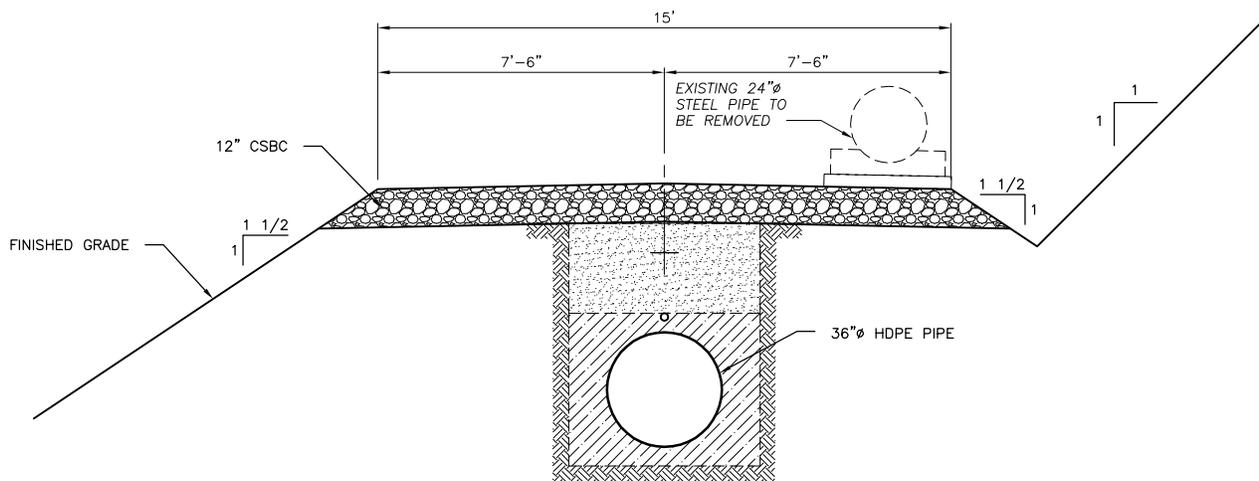
D
10|11

NEW 24" ϕ STEEL PIPE SECTION
SCALE: 1" = 20'



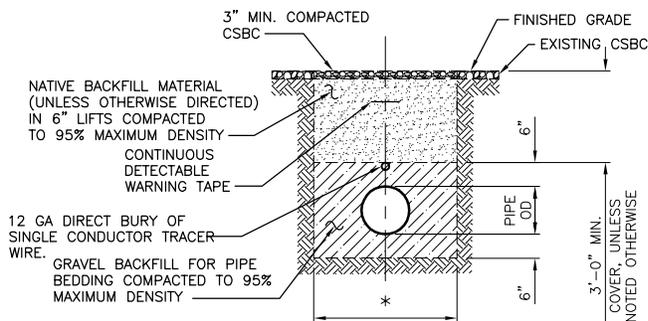
ROAD SECTION FILL

SCALE: 1" = 5'



ROAD SECTION SIDEWALL CUT

SCALE: 1" = 5'



**TYPICAL PIPE TRENCH
EXISTING GRAVEL SITE AREAS**

NOT TO SCALE

- * TRENCH WIDTH DIMENSIONS FOR PIPES LESS THAN 18 INCHES ARE OUTSIDE DIAMETER (OD) PLUS 12" AND FOR PIPES GREATER THAN OR EQUAL TO 18 INCHES ARE OUTSIDE DIAMETER (OD) PLUS 24"

REFERENCE NUMBER:

APPLICANT NAME:

WASHINGTON DEPT. of FISH & WILDLIFE

PROPOSED PROJECT:

INTAKE PIPE REPLACEMENT

LOCATION: EELS SPRINGS HATCHERY

SHEET 12 OF 12 DATE: 1/14/2016