

# WASHINGTON DEPARTMENT OF FISH AND WILDLIFE NACHES HATCHERY REARING POND

# INDEX

# SHEET TITLE

- 1 COVER SHEET
- 2 STATE & VICINICTY MAP
- 3 OVERALL SITE PLAN
- 4 EROSION CONTROL NOTES & DETAIL

YA:H113:2021-1

- 5 EXISTING & PROPOSED SITE PLAN
- 6 REARING POND PLAN & PROFILE
- 7 CONSTRUCTION DETAILS

NOT APPROVED

NOT FOR CTION

CONSTRUCTION

# <u>ABBREVIATIONS</u>

L - ANGLE

APPROX - APPROXIMATELY

BM - BENCH MARK

CL - CENTERLINE

CMP - CORRUGATED METAL PIPE

CLR - CLEARANCE

ALUMINUM

CLR - CLEARANCE CONC - CONCRETE

CSBC - CRUSHED SURFACE BASE COURSE
CSTC - CRUSHED SURFACE TOP COURSE
DIA - DIAMETER
ELEV - ELEVATION

FB - FLAT BAR
FTG - FOOTING
GALV - GALVANIZED
ID - INSIDE DIAMETER
IE - INVERT ELEVATION
MFG - MANUFACTURER'S
MISC - MISCELLANEOUS
OC - ON CENTER

OD – OUTSIDE DIAMETER
PL – PLATE
REQ'D – REQUIRED

SEC - SECTION

SPEC'S - PROJECT SPECIFICATIONS

SS - STAINLESS STEEL

TYP - TYPICAL

WS - WATER SURFACE

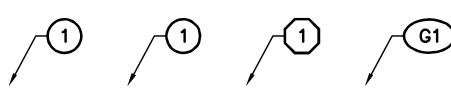
# SHEET SYMBOLS

SHEET CALLED FROM SHEET LOCATED ON

<u>DETAIL</u>

SHEET CALLED FROM SHEET LOCATED ON

<u>SECTION</u>



# NOTE REFERENCE

REFERENCE DESIGNATION TO A NOTE, A PART, OR MATERIAL IN A SCHEDULE/TABLE

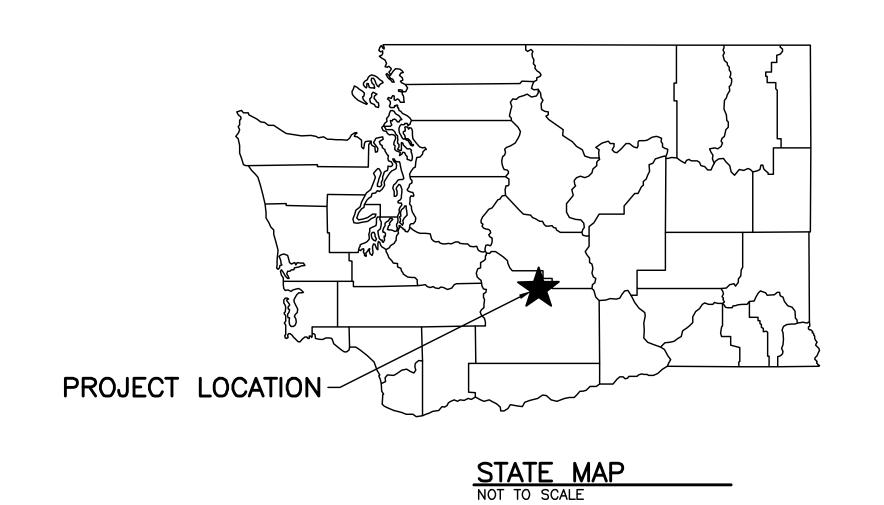
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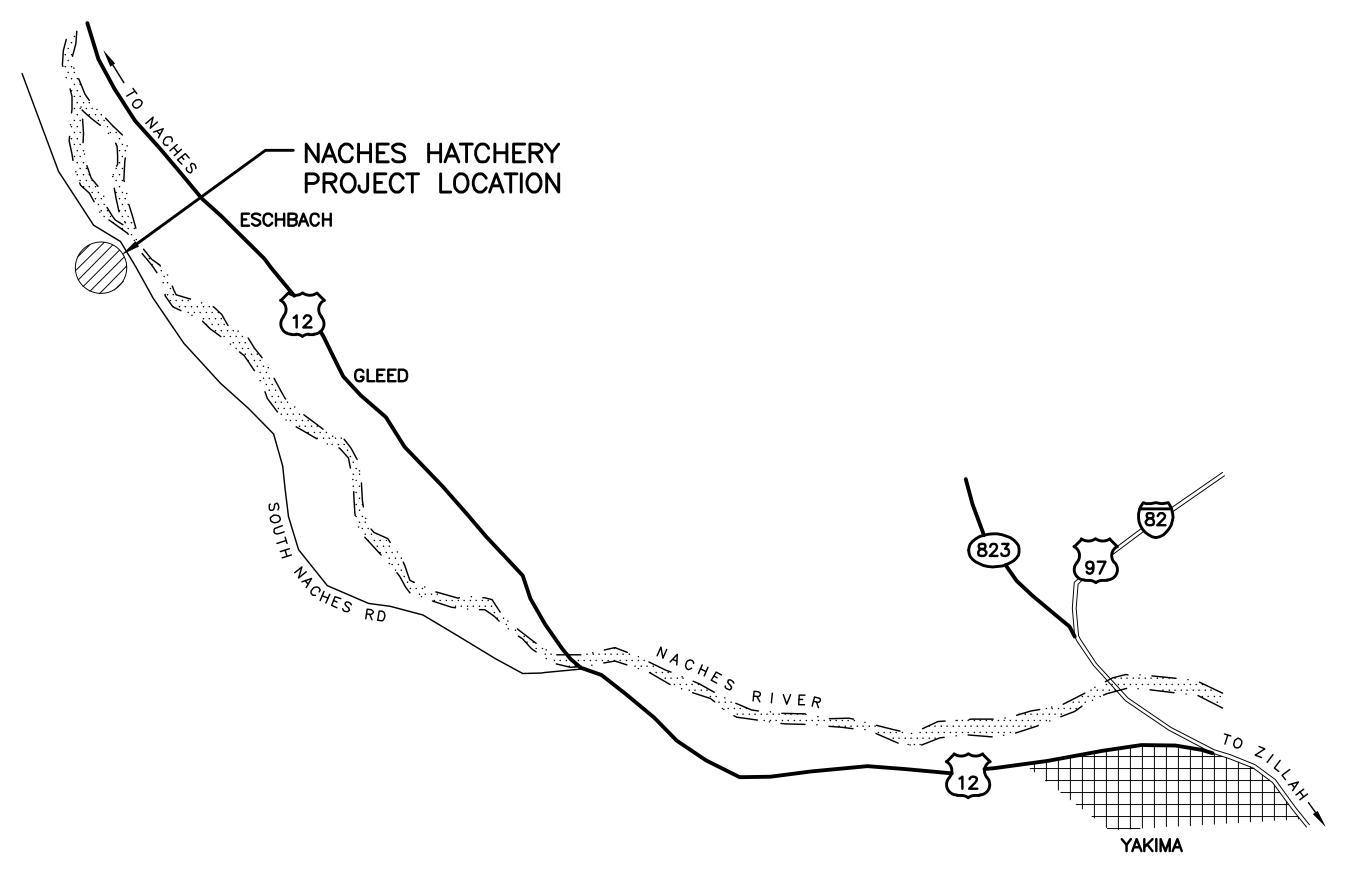
PROPOSED TEXT — EXISTING TEXT —

PROJECT NO.
YA:H113:2021-1

PERMIT DRAWINGS

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ADDRESS: NACHES FISH HATCHERY 3410 SOUTH NACHES ROAD NACHES, WA 98937

### **DIRECTIONS:**

FROM DOWNTOWN YAKIMA HEAD NORTH TO US-12 THEN HEAD WEST FOR (3.5 MI) TURN LEFT ONTO ACKLEY RD (400 FT)
TURN RIGHT ONTO W POWERHOUSE RD HEAD WEST FOR (0.2 MI)
TURN LEFT ONTO S NACHES RD

DESTINATION WILL BE ON THE LEFT IN (3.5 MI)

# PERMIT DRAWINGS

WASHINGTON DEPARTMENT OF FISH & WILDLIFE

NOT AND PROVED FOR

REVISION DESCRIPTION ON BY
D.

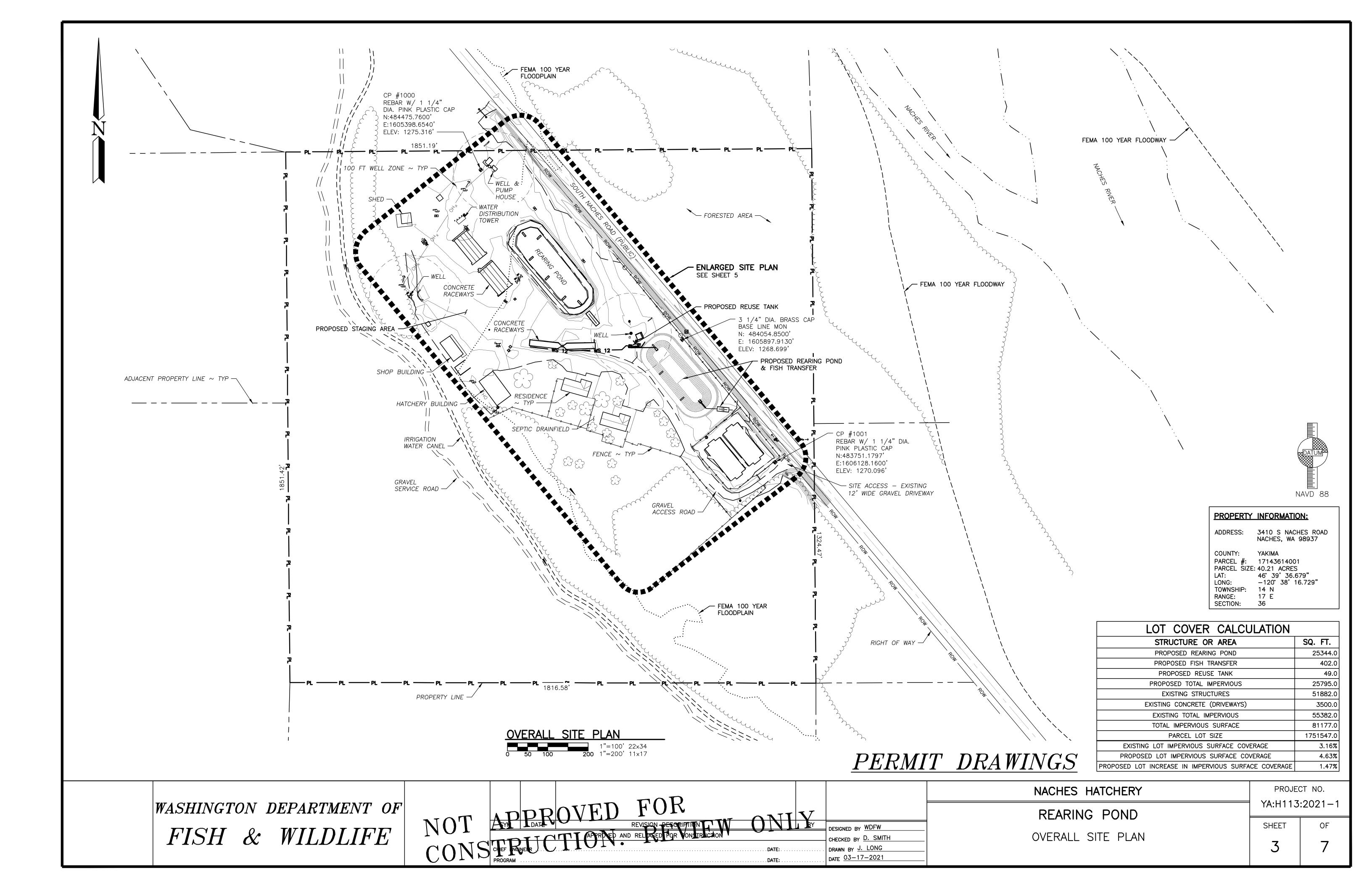
CONS CHEF NAMER CTI APPROVED AND RELEASED PGR VON TRACTION
PROGRAM

CHECKED BY D. SMITH DRAWN BY J. LONG DATE 03-17-2021

NACHES HATCHERY REARING POND STATE & VICINICTY MAP

PROJECT NO. YA:H113:2021-1

SHEET OF



### **EROSION CONTROL GENERAL NOTES:**

- 1. THE IMPLEMENTATION OF THE EROSION AND SEDIMENT CONTROL PLAN AND CONSTRUCTION, MAINTENANCE, REPLACEMENT AND UPGRADING OF THE EROSION AND SEDIMENT CONTROL MEASURES IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED BY THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE UNTIL FINAL ACCEPTANCE BY THE OWNER AND ALL PERMITS RELATED TO TEMPORARY EROSION AND SEDIMENT CONTROL ARE TERMINATED.
- 2. THE MEASURES SHOWN ON THESE PLANS ARE THE MINIMUM THAT ARE REQUIRED FOR THE ANTICIPATED SITE CONDITIONS. THE CONTRACTOR SHALL PROVIDE ADDITIONAL MEASURES AS NEEDED DUE TO WEATHER, AND/OR FIELD CONDITIONS, AND/OR CONSTRUCTION ACTIVITIES, AND/ OR AS DIRECTED BY THE ENGINEER.
- THE CONTRACTOR SHALL SUBMIT AND HAVE A DETAILED STORM WATER POLLUTION PREVENTION PLAN. STAMPED AND SIGNED BY A CIVIL ENGINEER REGISTERED IN THE STATE OF WASHINGTON ACCEPTED BY THE ENGINEER AND SHALL INSTALL ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES (TESC's) PRIOR TO PERFORMING ANY CLEARING OR OTHER EARTH DISTURBING ACTIVITIES AT THE PROJECT SITE.
- THE CONTRACTOR SHALL USE ALL REASONABLE MEASURES TO MINIMIZE THE IMPACTS OF CONSTRUCTION ACTIVITY ON WATERS OF THE STATE. WATER QUALITY CONSTITUENTS OF PARTICULAR CONCERN ARE TURBIDITY, SUSPENDED SEDIMENTS, SETTLEABLE SOLIDS.
- THE CONTRACTOR SHALL USE PROPER EROSION AND SEDIMENT CONTROL PRACTICES ON THE CONSTRUCTION SITE AND ADJACENT CONSTRUCTION STAGING AREAS TO PREVENT EROSION IN AND DOWNHILL OF DISTURBED AREAS, AND TO PREVENT THE DISCHARGE OF UPLAND SEDIMENTS OR SEDIMENT-LADEN WATER INTO THE WETLANDS, WATER BODIES, AND LOCAL DRAINAGE DITCHES. EXCEPT FOR TEMPORARILY SIDECAST OR TRENCH EXCAVATION, ALL STOCKPILES SHALL NOT BE PLACED IN ANY UNDISTURBED AREA.
- THE CONTRACTOR SHALL FOLLOW AND IMPLEMENT ALL SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL SPECIFIED IN THE CONTRACT DOCUMENTS. ADJUSTMENTS TO PLANNED EROSION AND SEDIMENT CONTROL MAY BE NECESSARY TO SUCCESSFULLY CONTROL SILTATION FROM THE SITE WHICH IS NOT COVERED UNDER THIS TEMPORARY EROSION AND SEDIMENT CONTROL PLAN.
- 7. THE CONTRACTOR SHALL NOT DISCHARGE TURBID WATER GENERATED FROM CONSTRUCTION ACTIVITIES. INCLUDING TURBID DEWATERING WATER, DIRECTLY TO NACHES RIVER AND / OR TO ANY OF THE DRAINAGE DITCHES, PIPES THAT DRAIN TO THE RIVER BEFORE THE SOLIDS HAVE SETTLED OUT OF THE WATERS. ALL SURFACE WATER FLOWS IN DITCHES, OR CULVERTS SHALL BE MAINTAINED, SUCH THAT FLOW IS NOT DISRUPTED DURING OR AFTER CONSTRUCTION.
- RESTORE, PLANT AND HYDROSEED ALL DISTURBED WETLAND, WETLAND BUFFER. STREAM, AND STREAM BUFFER AREAS AS SHOWN ON THE DRAWINGS AND PER SPECIFICATIONS SECTION 02270. WHERE NO SPECIFIC SEED MIX IS INDICATED, HYDROSEED DISTURBED AREA WITH EROSION CONTROL SEED MIX.
- 9. THE TESC'S SHALL REMAIN IN PLACE THROUGHOUT THE WORK. INSTALLED EROSION AND SEDIMENT CONTROL MEASURES SHALL ONLY BE REMOVED UPON STABILIZATION OF DISTURBED AREAS AND WITH THE APPROVAL OF THE ENGINEER.
- 10. THE CONTRACTOR SHALL SEED, PLANT, COVER WITH PLASTIC, MULCH, OR PROVIDE SOME OTHER EQUIVALENT TYPE OF PROTECTION AGAINST EROSION TO ALL EARTHEN AREAS DISTURBED OR NEWLY CREATED BY THE PROJECT CONSTRUCTION.
- 11. THE CONTRACTOR SHALL PROVIDE INSPECTION AND MAINTENANCE OF ALL SEDIMENT CONTROL STRUCTURES PER KING COUNTY STORMWATER WATER DESIGN MANUAL APPENDIX D. SEDIMENT CONTROL MEASURES SHALL BE IN WORKING CONDITION AT ALL TIMES. THE CONTRACTOR SHALL REPAIR, REPLACE, AND INSTALL ADDITIONAL MEASURES SO THAT THEY ARE EFFECTIVE IN PREVENTING EROSION AND SEDIMENTATION.
- 12. AFTER ANY SIGNIFICANT RAINFALL, THE CONTRACTOR SHALL INSPECT SEDIMENT CONTROL STRUCTURES FOR INTEGRITY. ANY DAMAGED DEVICES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND REPAIRED IMMEDIATELY.
- 13. FOLLOWING CONSTRUCTION, THE CONTRACTOR SHALL RESTORE TO ORIGINAL CONDITION, THE DISTURBED AREAS, AND ACHIEVE AN ADEQUATE VEGETATIVE COVER BEFORE REMOVING ANY SEDIMENT TRAPS OR SETTLING BASINS AND THEIR ASSOCIATED TEMPORARY DIVERSION DITCHES. THE CONTRACTOR SHALL CLEAN OUT TEMPORARY SETTLING BASINS (SEDIMENT TRAPS) AND REMOVE THE SETTLED SEDIMENTS OR HYDROSEED THE AREA (IF IN BARE PASTURE LAND) BEFORE REMOVING THE SETTLING BASINS. SETTLED SEDIMENTS SHALL NOT BE ALLOWED TO ENTER ANY STREAM OR DITCH AS A RESULT OF RUNOFF THAT MAY OCCUR AFTER CONSTRUCTION IS COMPLETED.
- 14. THE IMPLEMENTATION OF THESE EROSION AND SEDIMENT CONTROL PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE APPLICANT/CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED AND VEGETATION/LANDSCAPING IS
- 15. THE BOUNDARIES OF THE CLEARING LIMITS SHOWN ON THIS PLAN SHALL BE CLEARLY FLAGGED IN THE FIELD PRIOR TO CONSTRUCTION, DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE FLAGGED CLEARING LIMITS SHALL BE PERMITTED. THE FLAGGING SHALL BE MAINTAINED BY THE APPLICANT/CONTRACTOR FOR THE DURATION OF CONSTRUCTION.
- 16. THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED IN CONJUNCTION WITH ALL CLEARING AND GRADING ACTIVITIES, AND IN SUCH A MANNER AS TO ENSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DO NOT ENTER THE DRAINAGE SYSTEM, ROADWAYS, OR VIOLATE APPLICABLE WATER STANDARDS.
- 17. THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND TO ENSURE THAT SEDIMENT AND SEDIMENT-LADEN WATER DO NOT LEAVE THE SITE.

- 18. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE APPLICANT/CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING.
- 19. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN THE 24 HOURS FOLLOWING A STORM EVENT.
- 20. AT NO TIME SHALL MORE THAN 1 FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A TRAPPED CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT LADEN WATER INTO THE DOWNSTREAM SYSTEM.
- 21. STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT, ADDITIONAL MEASURES MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
- 22. ON-SITE EROSION CONTROL MEASURES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. ANY PROBLEMS OCCURRING BEFORE FINAL ACCEPTANCE OF THE STORM SYSTEM BY THE ENGINEER SHALL BE CORRECTED BY THE CONTRACTOR.
- 23. IN CASE EROSION OR SEDIMENTATION OCCURS TO ADJACENT PROPERTY, ALL CONSTRUCTION WORK WITHIN THE DEVELOPMENT THAT WILL AGGRAVATE THE SITUATION MUST CEASE AND THE CONTRACTOR SHALL IMMEDIATELY COMMENCE RESTORATION OR MITIGATION MEASURES. RESTORATION ACTIVITY SHALL CONTINUE UNTIL SUCH TIME AS THE PROBLEM IS RECTIFIED.
- 24. ALL EROSION AND SEDIMENTATION CONTROL DEVICES SHOWN ON THIS DRAWING SHALL BE INSTALLED PRIOR TO OR AS THE FIRST STAGE OF SITE PREPARATION.
- 25. SHOULD THE TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES AS SHOWN ON THIS DRAWING NOT PROVE ADEQUATE TO CONTROL EROSION AND SEDIMENTATION, THE CONTRACTOR SHALL INSTALL ADDITIONAL FACILITIES AS NECESSARY TO PROTECT ADJACENT PROPERTIES, SENSITIVE AREAS, NATURAL WATER COURSES, AND/OR STORM DRAINAGE SYSTEMS.
- 26. IN ANY AREA WHICH HAS BEEN STRIPPED OF VEGETATION OR EXPERIENCED LAND DISTURBING ACTIVITIES AND WHERE NO FURTHER WORK IS ANTICIPATED FOR A PERIOD EXCEEDING FIVE DAYS, ALL DISTURBED AREAS MUST BE IMMEDIATELY STABILIZED WITH MULCHING, GRASS PLANTING, OR OTHER APPROVED EROSION CONTROL TREATMENT APPLICABLE TO THE TIME OF YEAR IN QUESTION. GRASS SEEDING ALONE WILL BE ACCEPTABLE ONLY DURING THE MONTHS OF APRIL THROUGH SEPTEMBER, INCLUSIVE. SEEDING MAY PROCEED, HOWEVER, WHENEVER IT IS IN THE INTEREST OF THE CONTRACTOR, BUT MUST BE AUGMENTED WITH MULCHING, NETTING, OR OTHER TREATMENT.
- 27. ALL WORK ASSOCIATED WITH STABILIZING THE DISTURBED AREAS SHALL BE IN ACCORDANCE WITH THE KING COUNTY STORMWATER MANAGEMENT MANUAL.
- 28. ALL NECESSARY FACILITIES SHALL BE MAINTAINED ON SITE TO PREVENT DEBRIS. DUST, AND MUD FROM ACCUMULATING ON THE PUBLIC RIGHT-OF-WAY.
- 29. GRADING VOLUMES ARE FROM EXISTING GRADE TO FINISHED GRADE AND MAKE NO ALLOWANCE FOR STRIPPINGS, GRAVEL, OR ROAD SECTION MATERIALS.
- 30. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING HIS OWN QUANTITIES FOR BIDDING PURPOSES AND SHALL NOT HOLD THE ENGINEER OR OWNER/DEVELOPER RESPONSIBLE FOR ANY ERRORS IN HIS BID QUANTITIES FOR EXCAVATION.
- 31. THE CONTRACTOR SHALL HAVE SUFFICIENT MATERIALS, EQUIPMENT, AND LABOR AVAILABLE TO STABILIZE AND PREVENT EROSION FROM ALL CLEARED AREAS WITHIN 12HRS AS SITE AND WEATHER DICTATE

### **INSPECTION SEQUENCE:**

TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES REQUIRING INSPECTION FOR THIS PROJECT:

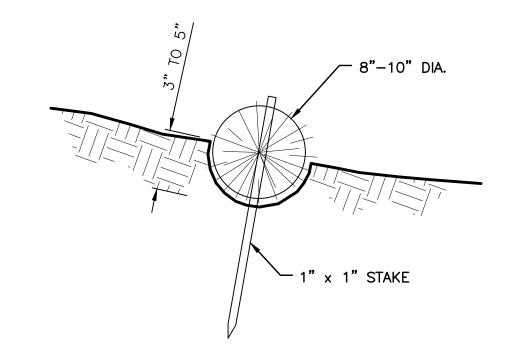
- 1. CLEARING AND GRADING LIMITS
- 2. TEMPORARY CONSTRUCTION ENTRANCE
- 3. TEMPORARY SILTATION FENCING 4. VEGETATION AND STABILIZATION OF EXPOSED SURFACES
- 5. STOCKPILE PLASTIC SHEETING
- 6. INTERCEPTOR DIKE AND SWALES
- SEDIMENT TRAP 8. CATCH BASIN PROTECTION
- 9. DITCHES

### PERMANENT EROSION AND SEDIMENT CONTROL MEASURES REQUIRED FOR THIS PROJECT:

- 1. STABILIZE ALL EXPOSED AREAS WITH SOIL AMENDMENTS SEE NOTES
- 2. SEEDING AND/OR LANDSCAPING OF NON-IMPERVIOUS SURFACES
- 3. PAVING (ASPHALT, CONCRETE, OR GRAVEL) 4. SEDIMENT CONTROL AS NOTED IN PLANS

### **INSPECTION SCHEDULE:**

- 1. SILT FENCE INSPECT: PRIOR TO CLEARING, AFTER MAJOR STORM EVENTS, MONTHLY
- 2. TEMPORARY CONSTRUCTION ENTRANCE INSPECT: PRIOR TO CLEARING, AFTER MAJOR STORM EVENTS, MONTHLY
- 3. STOCKPILES INSPECT: MONTHLY AND AFTER MAJOR STORM EVENTS FOR RIPPING AND LOOSE SEAMS
- 4. CATCH BASINS AND STORM DRAINAGE PIPES INSPECT: MONTHLY AND AFTER MAJOR STORM EVENTS
- 5. INSPECTIONS SHALL CONTINUE UNTIL SITE HAS STABILIZED.
- THE ESC LEAD FOR THIS PROJECT WILL BE DECIDED BY THE CONTRACTOR.
- (A "MAJOR STORM EVENT" IS DESCRIBED AS 0.5 OR MORE INCHES OF RAINFALL IN A PERIOD OF 24 HOURS OR LESS.)



# STRAW WATTLE DETAIL

### **CONSTRUCTION SPECIFICATIONS:**

- 1. PREPARE THE SLOPE BEFORE THE WATTLING PROCEDURE IS STARTED.
- SMOOTH SHALLOW GULLIES AS WORK PROGRESSES.
- 3. DIG SMALL TRENCHES ACROSS THE SLOPE ON CONTOUR. TO PLACE ROLLS IN. THE TRENCH SHOULD BE DEEP ENOUGH TO ACCOMMODATE HALF THE THICKNESS OF THE ROLL. WHEN THE SOIL IS LOOSE AND UNCOMPACTED, THE TRENCH SHOULD BE DEEP ENOUGH TO BURY THE ROLL 2/3 OF ITS THICKNESS BECAUSE THE GROUND WILL SETTLE.
- 4. ROLLS SHALL BE INSTALLED PERPENDICULAR TO WATER MOVEMENT, PARALLEL TO THE SLOPE CONTOUR.
- 5. BUILD TRENCHES AND INSTALL ROLLS FROM THE BOTTOM OF THE SLOPE AND WORK UP.
- 6. CONSTRUCT TRENCHES AT CONTOUR INTERVALS 3-12 FEET APART DEPENDING ON STEEPNESS OF SLOPE. THE STEEPER THE SLOPE, THE CLOSER TOGETHER THE TRENCHES. 1:1=10' 2:1=20' 3:1=30' 4:1=40'
- 7. LAY THE ROLL ALONG THE TRENCHES FITTING IT SNUGLY AGAINST THE SOIL. MAKE SURE NO GAPS EXIST BETWEEN THE SOIL AND THE STRAW WATTLE.
- 8. USE A STRAIGHT BAR TO DRIVE HOLES THROUGH THE WATTLE AND INTO THE SOIL FOR THE WILLOW OR WOODEN STAKES.
- 9. DRIVE THE STAKE THROUGH PREPARED HOLE INTO SOIL. LEAVE ONLY 1 OR 2 INCHES OF STAKE EXPOSED ABOVE ROLL.
- 10. IF USING WILLOW STAKES REFER TO LIVE STAKING BEST MANAGEMENT PRACTICES.
- 11. INSTALL STAKES AT LEAST EVERY 4 FEET APART THROUGH THE WATTLE. ADDITIONAL STAKES MAY BE DRIVEN ON THE DOWNSLOPE SIDE OF THE TRENCHES ON HIGHLY EROSIVE OR VERY STEEP SLOPES.
- 12. INSPECT THE STRAW ROLLS AND THE SLOPES AFTER SIGNIFICANT STORMS. MAKE SURE THE ROLLS ARE IN CONTACT WITH THE SOIL.
- 13. REPAIR ANY RILLS OR GULLIES PROMPTLY.
- 14. RESEED OR REPLANT VEGETATION IF NECESSARY UNTIL SLOPES ARE STABILIZED.

# PERMIT DRAWINGS

WASHINGTON DEPARTMENT OF FISH & WILDLIFE

NOT APPROVED FOR

REVISION DESCRIPTION ONLY

CONSTRUCTION

CHEF NOWER CTI APPROVED AND RELEASED FOR VONSTRUCTION

PROCEDAM

ESIGNED BY WDFW CHECKED BY D. SMITH DRAWN BY J. LONG DATE <u>03-17-2021</u>

REARING POND

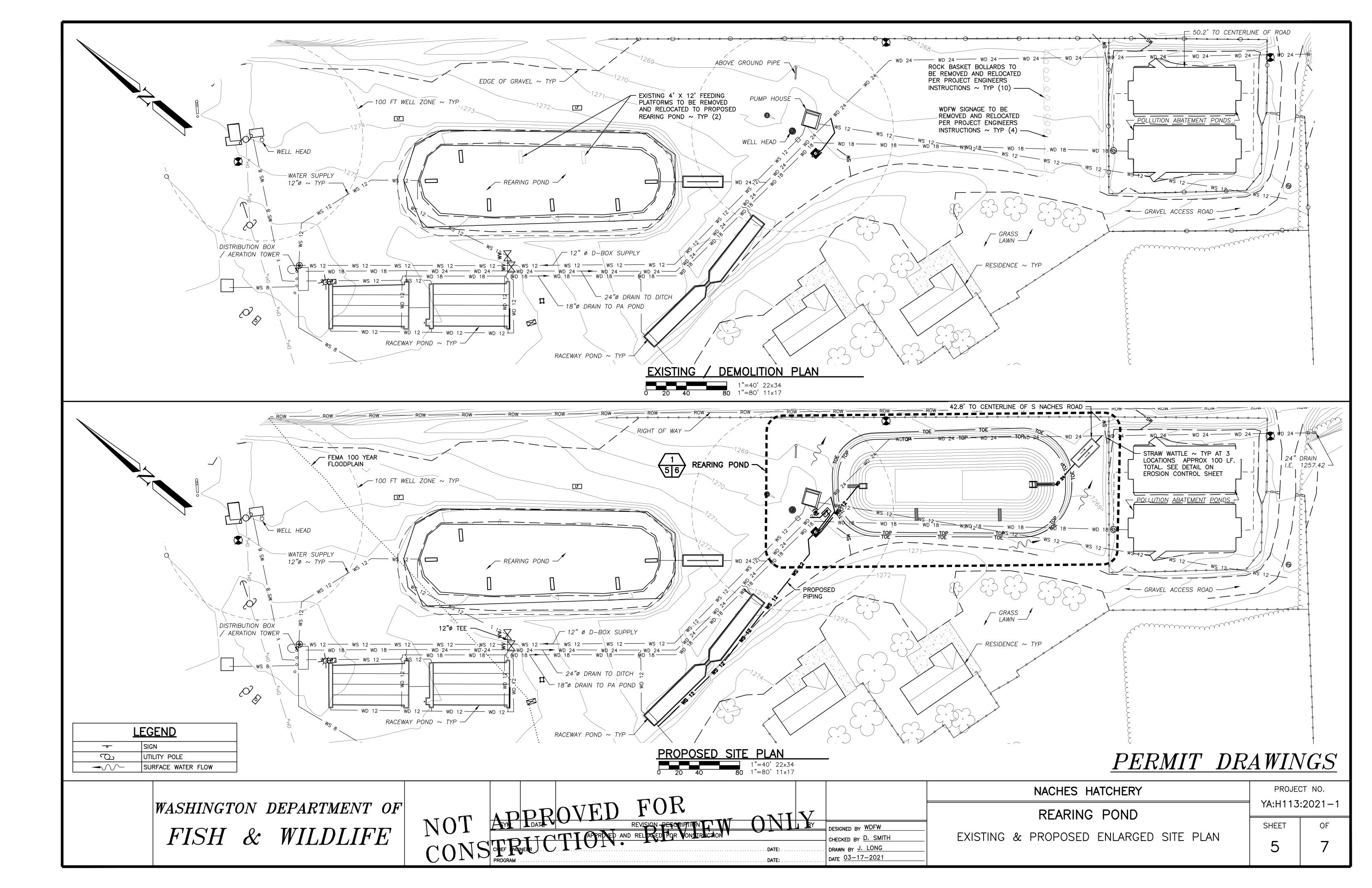
NACHES HATCHERY

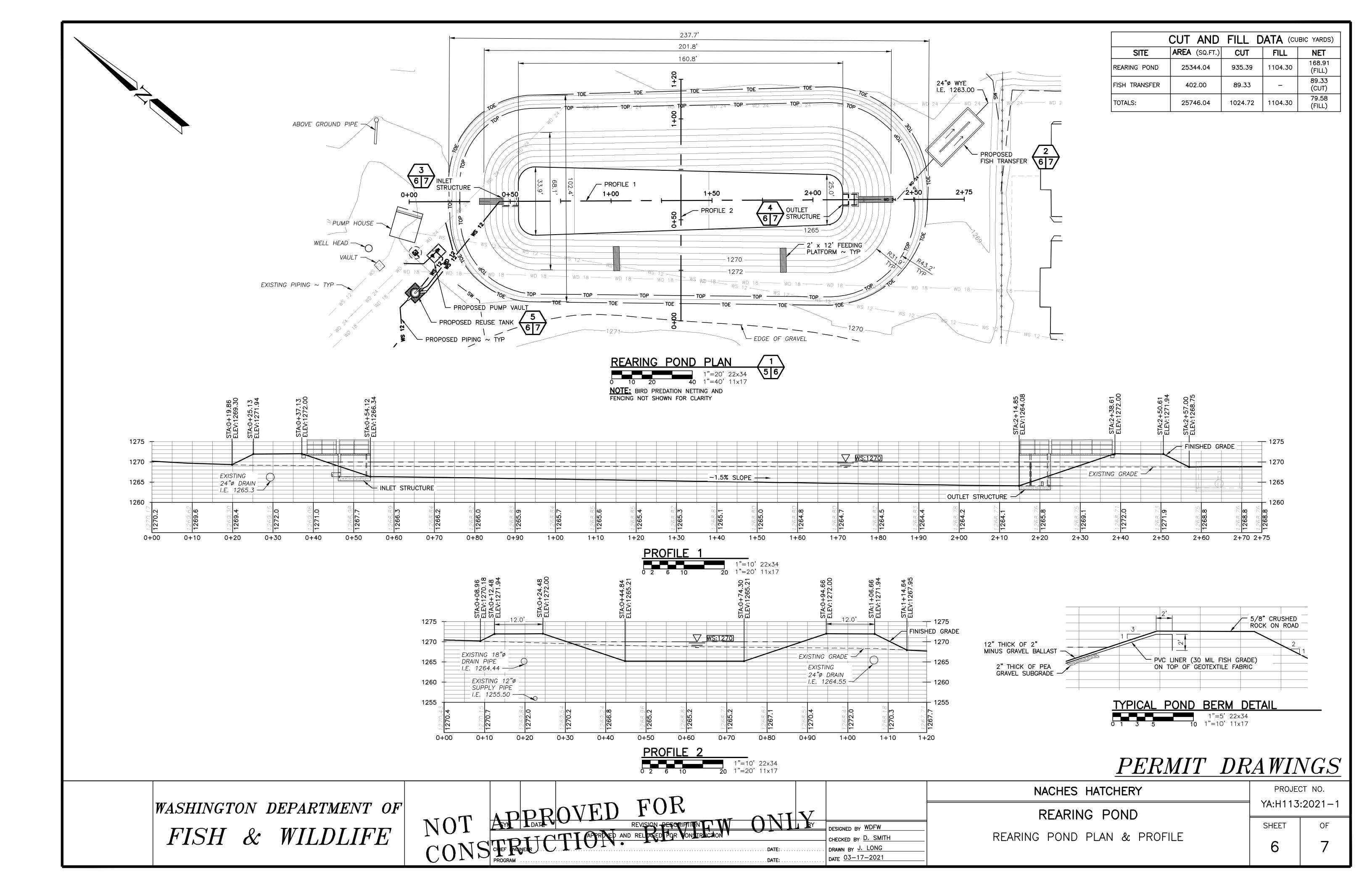
EROSION CONTROL NOTES & DETAIL

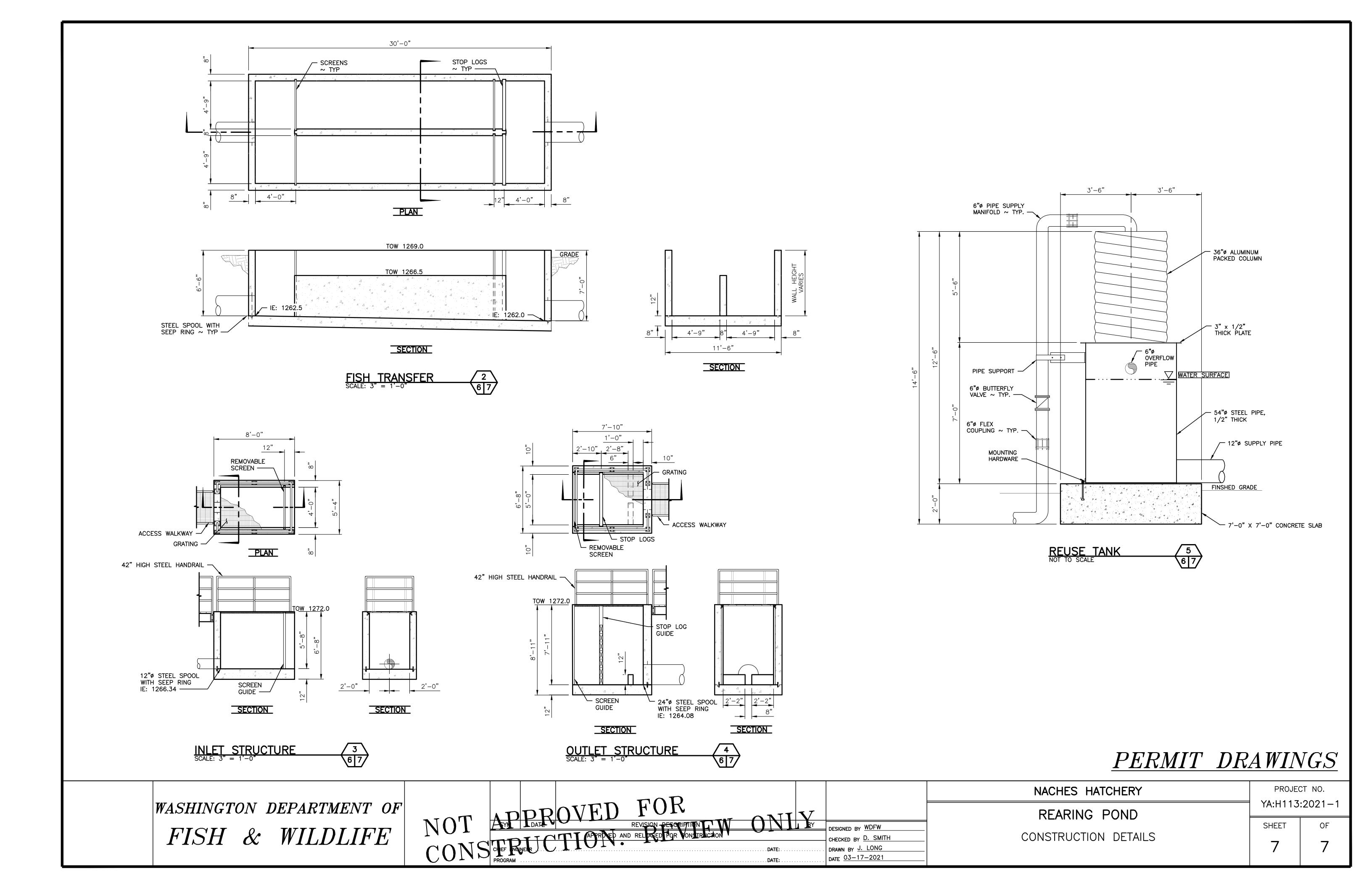
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SHEET

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Current Pond Used as Example



Proposed Pond

