

TITLE CLIENT



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DATE SEALED <u>07-23-2024</u>



PROJECT MANAGER PAM JONES, PLS DESIGN

DRAWN S.JOHNSON CHECKED \_ SEC 16 T 27 R 4E

DATE <u>07/19/24</u> SHEET 1 OF 2

FILE NO 37111 © APEX ENGINEERING LLC 2024

HELD SOUTH 88° 33' 52" EAST, BETWEEN MONUMENTS FOUND AT THE NORTH QUARTER AND NORTHEAST CORNER OF SECTION 16, TOWNSHIP 27 NORTH, RANGE 4 EAST, WILLAMETTE MERIDIAN.

HORIZONTAL DATUM

BASIS OF BEARINGS

VICINITY MAP

PROJECT DESCRIPTION:

SHEET INDEX:

LEGAL DESCRIPTION

PER STEWART TITLE GUARANTY COMPANY
GUARANTEE NO. G-6329-000015292
DATED JUNE 26, 2024

2 DAMAGE REPAIR PLAN

1 COVER SHEET

THERE ARE TWO CULVERTS IN THE PROJECT SITE. THE SOUTHERLY CULVERT CONSISTS OF A SEGMENT OF 36" RCP FOLLOWED BY 42" METAL PIPE. THE

PURPOSE OF THIS PROJECT IS TO REPLACE THE DETERIORATED 42" METAL PIPE WITH 36" ID HDPE PIPE. THE NORTHERLY CULVERT IS ENTIRELY 42" RCP AND IS PARALLEL TO AND HIGHER THAN THE SOUTHERLY CULVERT. THE NORTHERLY CULVERT IS TO REMAIN AS IS. EXISTING TREES ARE TO REMAIN.

WASHINGTON STATE PLANE COORDINATE SYSTEM, NORTH ZONE (NAD 83/2011) BASED ON RTK GPS MEASUREMENTS CONSTRAINED TO THE WASHINGTON STATE REFERENCE NETWORK.

LOTS 1, 2, AND 3 OF CITY OF LYNNWOOD SHORT PLAT NO. S88-0010 RECORDED UNDER RECORDING NO. 8905160395, BEING A PORTION OF TRACTS 6 AND 7, BLOCK 3, ALDERWOOD MANOR NO. 18, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 10 OF PLATS, PAGE 79, RECORDS OF SNOHOMISH COUNTY, WASHINGTON.

VERTICAL DATUM

NAVD 88 BASED ON RTK GPS MEASUREMENTS CONSTRAINED TO THE WASHINGTON STATE REFERENCE NETWORK.

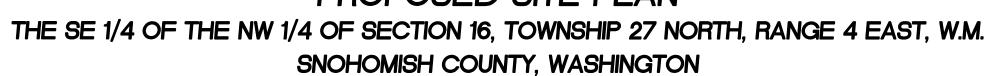
**DEVELOPMENT SUMMARY** 

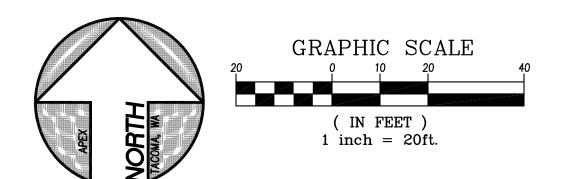
EXISTING ZONING: CG (GENERAL COMMERCIAL)

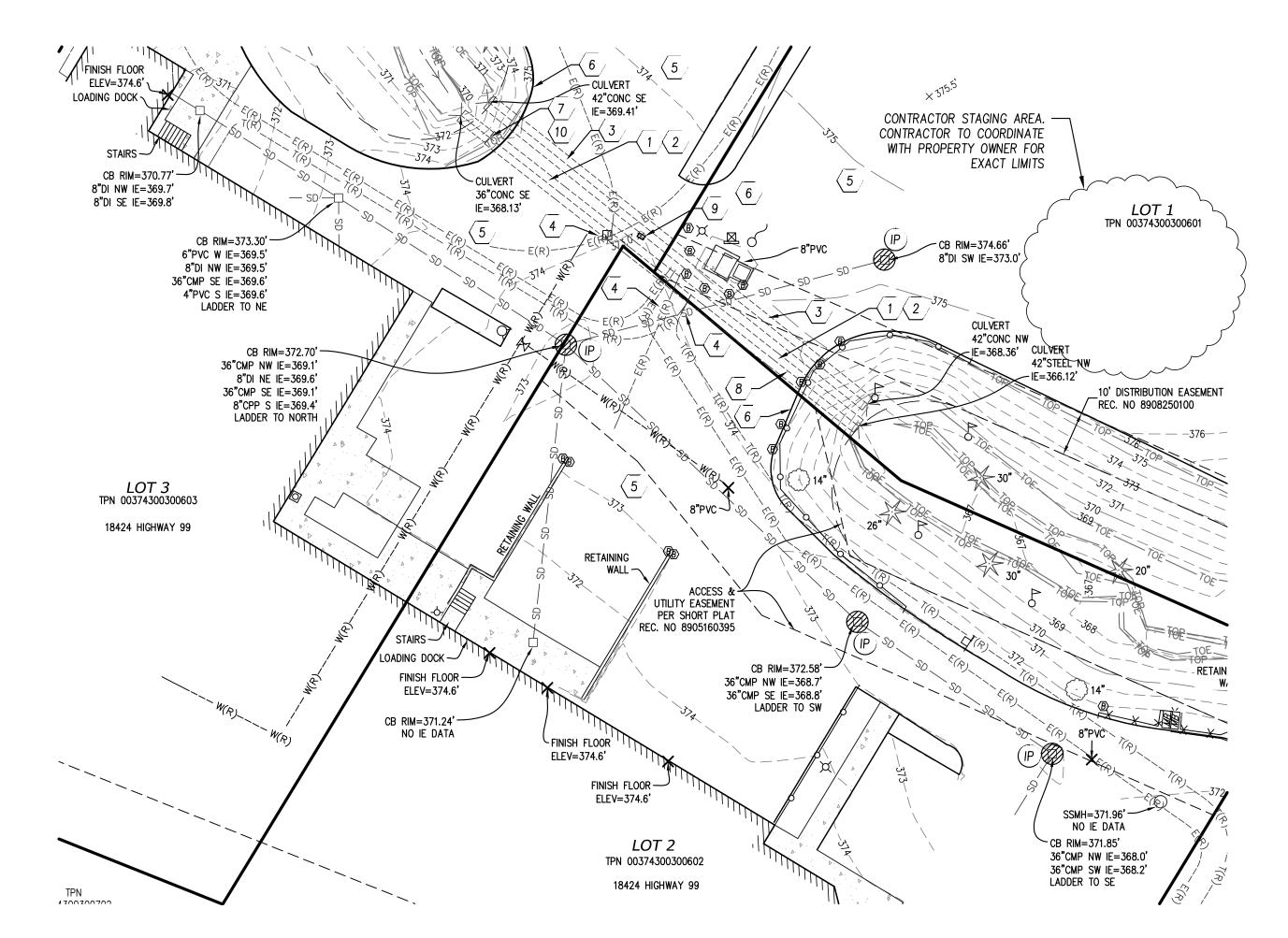
TOTAL LAND AREA: LOT 1: 0.78 AC LOT 2: 0.62 AC LOT 3: <u>0.87 AC</u> 2.27 AC

# MARTIN CULVERT REPAIR

### PROPOSED SITE PLAN

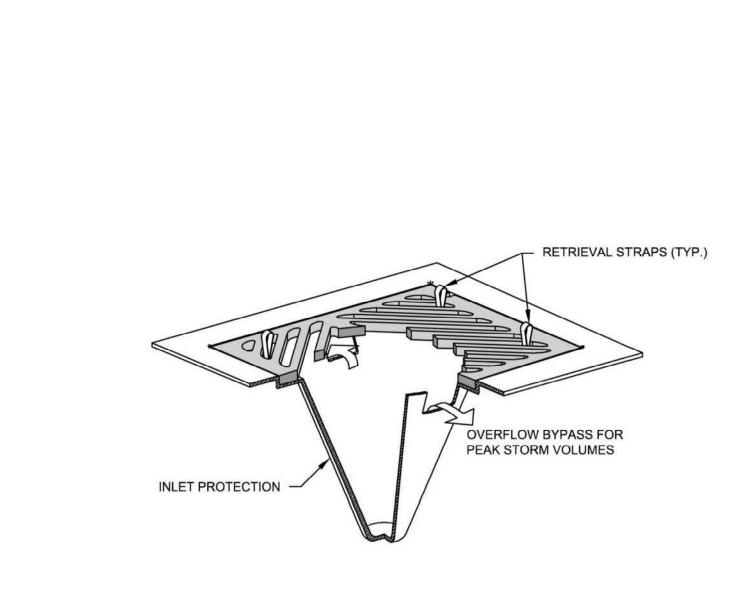






#### CONSTRUCTION NOTES:

- ANY EXCAVATION NEEDED IN EXISTING PAVEMENT/CURB AREAS FOR THE STORM PIPE REPAIR SHALL BE SAWCUT TO PROVIDE A CLEAN STRAIGHT EDGE FOR PAVEMENT/CURB
- PAVEMENT SECTION FOR RESTORATION EXCAVATION LIMITS TO BE 3"HMA OVER 2"
- EXISTING STORM TO REMAIN. DO NOT DISTURB.
- PROTECT EXISTING UTILITIES DURING CONSTRUCTION.
- CONTRACTOR TO COORDINATE WITH OWNER TO MAINTAIN ACCESS DURING CONSTRUCTION.
- EXISTING IMPROVEMENTS (CURB, BOLLARDS, FENCING, ETC.) REMOVED / DAMAGED DURING CONSTRUCTION TO BE REPLACED AT THE END
- CONTRACTOR TO CONFIRM THE EXISTING RCP AT THE CONNECTION POINT IS A BELL END.
- APPROXIMATE LOCATION OF METAL PIPE ANGLE POINT. CONTRACTOR TO CONFIRM
- AFTER THE HDPE PIPE IS INSTALLED, BACKFILL THE SINKHOLE VOIDS WITHOUT DAMAGING EXISTING UTILITIES OR THE NEW HDPE PIPE.
- CONNECT NEW HDPE TO EX RCP WITH A WATER TIGHT CONNECTION.



- INSERT SHALL BE INSTALLED PRIOR TO CONSTRUCTION ACTIVITY, OR UPON PLACEMENT OF A NEW CATCH BASIN
- SEDIMENT SHALL BE REMOVED FROM THE UNIT WHEN IT BECOMES ONE-THIRD FULL. DISPOSE OF ACCUMUALTED SEDIMENT ACCORDING TO LOCAL, STATE AND FEDERAL REGULATIONS.
- 3. SEDIMENT REMOVAL SHALL BE ACCOMPLISHED BY REMOVING THE INSERT, EMPTYING, AND RE-INSERTING IT INTO THE CATCH BASIN.
- BELOW INLET GRATE DEVICES SHALL BE PREFABRICATED UNITS SPECIFICALLY DESIGNED FOR INLET PROTECTION AND SHALL REMAIN SECURELY ATTACHED TO THE DRAINAGE STRUCTURE WHEN LOADED WITH SEDIMENT AND DEBRIS TO ONE-THIRD TOTAL CAPACITY.



**INLET PROTECTION** 

DRAWING NUMBER ES-TESC-4 NONE REVISION DATE 06/22 DEPARTMENT PW

## CONSTRUCTION SCOPE:

- 1. INSTALL TEMPORARY SANDBAG COFFER DAM TO BYPASS FLOW FROM THE LOWER PIPE TO THE UPPER PIPE.
- 2. PROVIDE "FISH EXCLUSION" MEASURES UPSTREAM OF THE COFFER DAM TO CAPTURE AND RELOCATE FISH TRAPPED IN THE COFFER DAM POOL. RELOCATE CAPTURED FISH DOWNSTREAM OF THE WORK AREA.
- 3. INSTALL TEMPORARY PUMP SYSTEM TO CONVEY FLOW FROM BEHIND
- 4. THE UPPER PIPE TO REMAIN IN-PLACE AND NOT BE ALTERED.
- 5. INSTALL 36" ID HDPE INSIDE THE EXISTING 42" ID METAL PIPE USING SLIPLINE METHODS.
- 6. THE SLIPLINE PIPE OPERATION TO START AT THE DOWNSTREAM END OF THE EXISTING 42" METAL PIPE.
- 7. THE EXISTING 36" ID RCP SEGMENT OF THE LOWER PIPE IS TO REMAIN IN-PLACE AND NOT BE ALTERED.
- 8. PROVIDE A WATERTIGHT CONNECTION BETWEEN THE NEW 36" ID HDPE AND THE EXISTING 36" ID RCP.
- 9. AFTER COMPLETION OF THE SLIPLINE PROCESS. REPAIR SINKHOLES WITHOUT DAMAGING THE NEWLY INSTALLED 36" HDPE.

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PROJECT MANAGER PAM JONES, PLS F.JACOBS, P.E.

S.JOHNSON DRAWN CHECKED SEC <u>16</u> T <u>27</u> R <u>4E</u>

DATE <u>07/19/24</u> SHEET 2 OF 2 FILE NO 37111

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TYPICAL CROSS SECTION (LOOKING UPSTREAM)

EXISTING ASPHALT

APPROXIMATE OHWM

EXISTING 42" I.D

INSTALL 36" I.D. HDPE

USING SLIPLINING\_

METAL PIPE

SURFACE

EXISTING 42" I.D. RCP.

- APPROXIMATE OHWM

DO NOT DISTURB.



