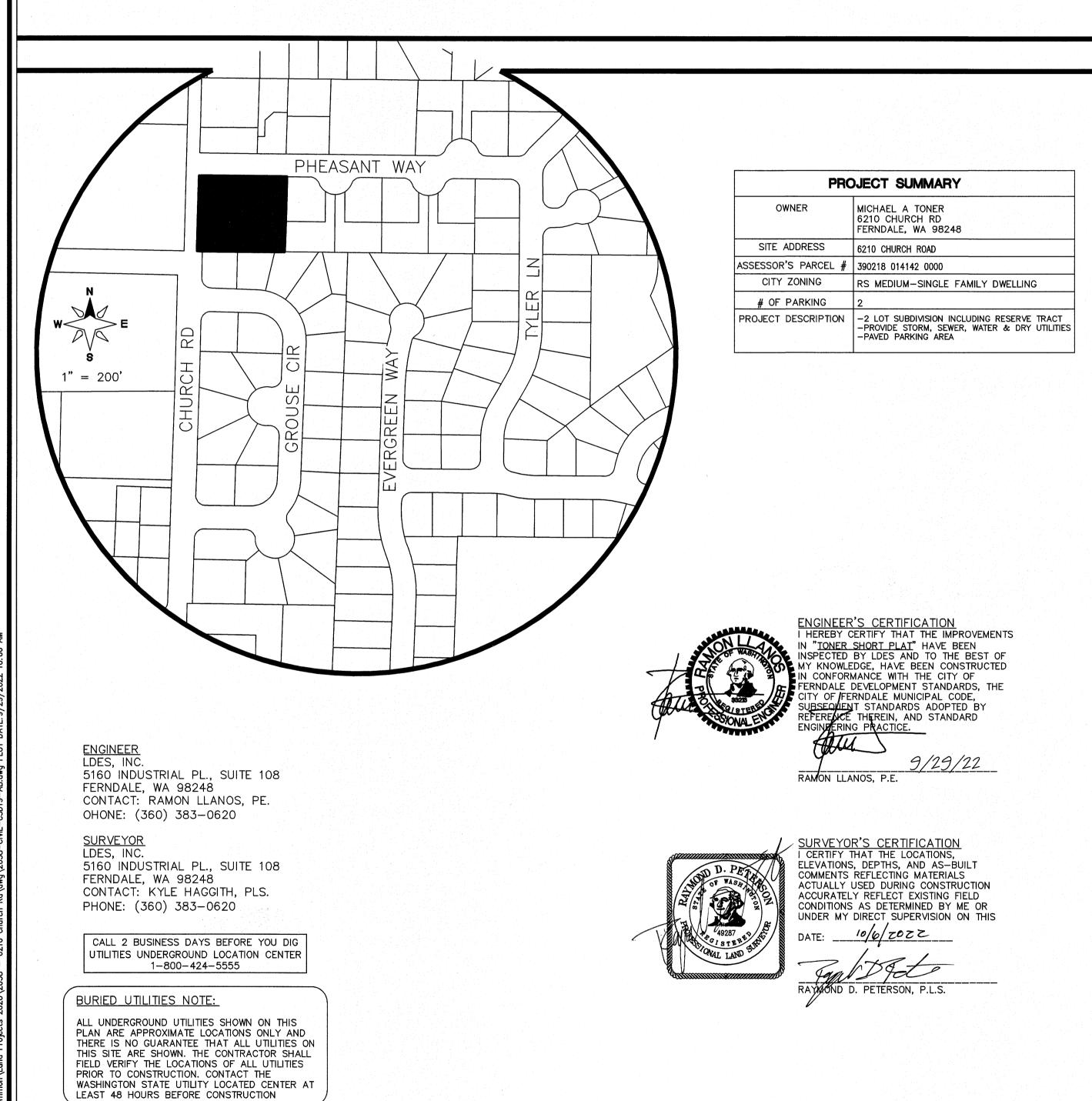
A PORTION OF THE NW 1/4 OF THE SW 1/4 OF SECTION 18, T.39N., R.2E., W.M. CITY OF FERNDALE, WHATCOM COUNTY, WASHINGTON

TONER SHORT PLAT RECORD DRAWINGS



SHEET INDEX

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- TEMPORARY EROSION CONTROL PLAN, NOTES & DETAILS
- COMPOSITE SITE PLAN
- COMPOSITE UTILITY PLAN
- UTILITY TYPICAL DETAILS

EXISTING LEGEND

ISTING LEGEND	
\Q	FOUND BRASS DISK
Ŏ	FOUND REBAR & CAP
•	SET REBAR & CAP, LS "49287"
<u>S</u>	SANITARY SEWER MANHOLE
	CATCH BASIN
	STORM CLEANOUT
amo	YARD DRAIN
	WATER VALVE
	WATER METER
-6-	FIRE HYDRANT
ф <u></u>	STREET LIGHT
=	COMMUNICATION RISER BOX
, -	UTILITY POLE
	STREET SIGN
S .	SANITARY SEWER LINE
	STORM LINE
	WATER LINE
	WATER SERVICE LINE
G	GAS LINE

BTV BTV UNDERGROUND CABLE LINE

PROPOSED SEWER MANHOLE PROPOSED SEWER STUB PROPOSED WATER METER PROPOSED FIRE HYDRANT PROPOSED STREET TREE PROPOSED STREET LIGHT

PROPOSED LEGEND

PROPOSED MAILBOX LOCATION PROPOSED POWER PROPOSED ASPHALT/PAVEMENT

PROPOSED STORM DRAIN CB TYPE 1

PROPOSED CONCRETE SIDEWALK

SURVEYOR'S NOTES:

- 1. DATA FOR THIS SURVEY WAS GATHERED BY FIELD TRAVERSE UTILIZING ELECTRONIC DATA COLLECTION ON FEBRUARY 24, 2021.
- 2. EQUIPMENT USED: LEICA MS 60 00'01" PPM.
- 3. RELATIVE ACCURACY AND FIELD TRAVERSE CLOSURE EXCEEDS THE REQUIREMENTS OF WAC 332-130-085 AND WAC 332-130-090.
- 4. HORIZONTAL DATUM: CITY OF FERNDALE MONUMENT NETWORK WASHINGTON STATE NORTH ZONE NAD 83/91
- VERTICAL DATUM: NGVD29 (COF MON# 309, ELEV=301.09')
- 5. PURPOSE OF SURVEY: TOPOGRAPHIC AS-BUILT SURVEY.
- 6. CONTOUR INTERVALS ARE 1 FOOT AND ARE COMPUTER GENERATED FROM GROUND FIELD TOPOGRAPHY GATHERED FOR THIS SURVEY UTILIZING ELECTRONIC DATA COLLECTION.
- 7. ELEVATION ACCURACY OF SURVEYED POINTS AND DIGITAL TERRAIN MODELS EXCEEDS THE STANDARDS PUT FORTH BY THE US ARMY CORPS OF ENGINEERS FOR CONSTRUCTION LAYOUT: 0.10 FEET IN ELEVATION MULTIPLIED BY THE DISTANCE FROM BENCHMARK TRAVERSED IN MILES, SQUARE-ROOTED, AND FOR WELL-DEFINED POINTS IN THE DIGITAL TERRAIN MODEL, PLUS OR MINUS HALF THE CONTOUR INTERVAL (0.5 FEET).

LEGAL DESCRIPTION:

LOT 3, AS DELINEATED ON UNRUH-IRWIN SHORT PLAT, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 16 OF SHORT PLATS, PAGE 52, UNDER AUDITOR'S FILE NO.

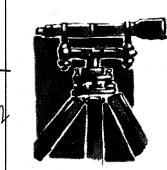
SITUATE IN WHATCOM COUNTY, WASHINGTON.

PRELIMINARY SUBMITTAL 2

BY DATE

REVISION





LDES, INC.
5160 INDUSTRIAL PL. #1082
FERNDALE, WA 98248

DWG. NAME:

DESIGNED BY:

RL PHONE 360-383-0620 FAX 360-383-0639

2058 DRAWN BY: CHECKED BY:

MICHAEL A TONER 6210 CHURCH RD FERNDALE, WA 98248





COVER SHEET

SHEET

TONER SHORT PLAT FERNDALE, WHATCOM COUNTY, WASHINGTON SITUATE IN A PORTION OF THE NW 1/4, SW 1/4 OF SECTION 18, T. 39 N., R. 2E., W.M.

GENERAL REQUIREMENTS:

PLANS AND THE LOCATION OF ANY EXISTING UTILITIES.

- ALL WORK AND MATERIALS SHALL CONFORM TO THESE PLANS AND TO THE REQUIREMENTS OF THE CURRENT EDITION OF THE "STATE OF WASHINGTON, DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD. BRIDGE AND MUNICIPAL CONSTRUCTION" (WSDOT SPECS.), THE CITY OF FERNDALE DEVELOPMENT STANDARDS (COFDS) AND THE 2014 VERSION OF THE DEPARTMENT OF ECOLOGY STORM WATER MANAGEMENT MANUAL FOR WESTERN WASHINGTON (DOE MANUAL). IN CASE OF A CONFLICT BETWEEN PLANS, REGULATORY STANDARDS OR SPECIFICATIONS, THE MORE STRINGENT REQUIREMENT WILL PREVAIL.
- PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND OTHER CONSTRUCTION DOCUMENTS APPROVED BY ALL OF THE PERMITTING AUTHORITIES. THROUGHOUT THE PERIOD OF CONSTRUCTION, CONTRACTOR SHALL COMPLY WITH THE TERMS OF ALL PERMITS.
- THE CONTRACTOR MUST HAVE A FULL SET OF CITY CONTRACT DOCUMENTS ON THE SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
- CONSTRUCTION NOISE SHALL BE LIMITED TO BETWEEN 7 a.m. TO 8 p.m., MONDAY THROUGH SATURDAY. THE CONTRACTOR SHALL CONTACT THE UTILITIES UNDERGROUND LOCATION CENTER AT LEAST 72 HOURS PRIOR TO STARTING CONSTRUCTION. PHONE: 1-800-424-5555. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT ALL OF THE VARIOUS UTILITY COMPANIES TO ARRANGE FOR FIELD LOCATIONS OF ALL EXISTING UTILITY FACILITIES. NO EXTRA COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR COSTS INCURRED BECAUSE OF DAMAGE DONE TO EXISTING FACILITIES BY THE CONTRACTOR'S WORK FORCE, INCLUDING COSTS FOR REPAIRS, WHICH WILL BE CONTRACTOR'S SOLE RESPONSIBILITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE INTEGRITY OF ALL EXISTING UTILITIES AND TO NOTIFY THE ENGINEER PROMPTLY OF ANY CONFLICT BETWEEN THE APPROVED
- THE CONTRACTOR SHALL PROTECT ALL PRIVATE AND PUBLIC UTILITIES FROM DAMAGE RESULTING FROM THE WORK. CONTRACTOR SHALL RESTORE ALL PRIVATE AND PUBLIC PROPERTY DISRUPTED BY THE PROJECT IMMEDIATELY AFTER CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EROSION CONTROL MEASURES THROUGHOUT THE DURATION OF THE PROJECT. EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY CLEARING OR GRADING IN CONFORMANCE WITH THE EROSION & SEDIMENTATION CONTROL PLAN AND THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP). THE SWPPP SHALL BE ONSITE AT ALL TIMES DURING CONSTRUCTION
- SITE CLEARING SHALL INCLUDE THE LOCATION AND REMOVAL OF ALL ABOVE GROUND AND BURIED DEBRIS AND WASTE THAT MAY BE PRESENT.
- THE CONTRACTOR SHALL OBTAIN REVOCABLE ENCROACHMENT PERMITS FROM THE CITY OF FERNDALE AND/OR WHATCOM COUNTY PRIOR TO COMMENCING WORK WITHIN THE PUBLIC RIGHT-OF-WAY. THE CONTRACTOR SHALL ATTEND A PRE-CONSTRUCTION MEETING WITH REPRESENTATIVES OF THE CITY OF
- FERNDALE PUBLIC WORKS DEPARTMENT AND THE PROJECT ENGINEER A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION. THE CITY WILL SCHEDULE THE MEETING. ALL WORK AND MATERIALS SHALL BE SUBJECT TO APPROVAL BY THE CITY OF FERNDALE PUBLIC WORKS
- DEPARTMENT, REPRESENTATIVES FROM THE CITY OF FERNDALE PUBLIC WORKS DEPARTMENT MUST INSPECT ALL WORK IDENTIFIED ON THE PLANS, BOTH PUBLIC AND PRIVATE. THE CONTRACTOR SHALL CALL AT LEAST 24 HOURS IN ADVANCE TO SCHEDULE INSPECTIONS AS FOLLOW:
 - A. PLACEMENT OF TEMPORARY EROSION CONTROL MEASURES. B. CONSTRUCTION OF STORMWATER MANAGEMENT FACILITIES.
 - C. PLACEMENT OF WATER MAIN AND BACKFILLING OF WATER MAIN TRENCH WITHIN ROAD RIGHTS OF WAY OR IN WATERLINE EASEMENT TO BE DEDICATED TO THE CITY OF FERNDALE. D. PLACING OR BACKFILLING OF UNDERGROUND UTILITIES, STORM SEWER AND SANITARY SEWER WITHIN ROAD RIGHTS-OF-WAY, IN EASEMENTS TO BE DEDICATED TO THE CITY OF FERNDALE, OR OTHER
 - PUBLICLY SHARED FACILITIES. E. GRADING OF PUBLIC OR PRIVATE ROADWAY AT:
 - 1. COMPLETION OF EXCAVATION TO SUBGRADE. 2. COMPLETION OF BALLAST COURSE PLACEMENT
 - COMPLETION OF CRUSHED SURFACING COURSE PLACEMENT
 - F. POURING OF CURB AND GUTTER AND SIDEWALK IN PUBLIC ROADWAY. G. ASPHALT PAVING IN PROGRESS IN PUBLIC ROADWAY.
 - H. OVERALL INSPECTION FOR FINISHED SHOULDERS, DITCHES, PERMANENT SEEDING AND MONUMENT PLACEMENT
- I. END OF MAINTENANCE PERIOD
- 12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE SAFEGUARDS, SAFETY DEVICES, PROTECTIVE EQUIPMENT FLAGGERS, AND ANY OTHER NEEDED ACTIONS TO PROTECT THE LIFE, HEALTH AND SAFETY OF THE PUBLIC, AND TO PROTECT PRIVATE & PUBLIC PROPERTY IN CONNECTION WITH THE PERFORMANCE AND WORK BY THE CONTRACTOR. ANY WORK WITHIN THE TRAVELED RIGHT-OF-WAY THAT MAY INTERRUPT NORMAL TRAFFIC FLOW SHALL REQUIRE AT LEAST ONE FLAGGER FOR EACH LANE OF TRAFFIC AFFECTED. A TRAFFIC CONTROL PLAN SHALL BE SUBMITTED TO THE CITY FOR APPROVAL PRIOR TO PERFORMING THE WORK. ALL SECTIONS OF THE WSDOT STANDARD SPECIFICATIONS 1-07.23- TRAFFIC CONTROL SHALL APPLY
- THE CONTRACTOR SHALL INFORM THE ENGINEER AND OBTAIN APPROVAL FROM THE CITY OF FERNDALE PUBLIC WORKS DIRECTOR OF ANY PROPOSED DEVIATION FROM THE APPROVED PLANS PRIOR TO CONSTRUCTION OF THE REVISED IMPROVEMENTS. THE CONTRACTOR SHALL KEEP RECORDS OF ALL DEVIATIONS AND SHALL FORWARD THEM TO THE ENGINEER AND TO THE CITY OF FERNDALE PUBLIC WORKS DEPARTMENT. AS-BUILT DATA SHALL BE PROVIDED TO THE CITY OF FERNDALE UPON COMPLETION OF CONSTRUCTION AND
- PROVIDED IN CITY OF FERNDALE DATUM VERTICAL (NGVD 29) AND HORIZONTAL (NAD 83/91). CONTACT THE CITY FOR MORE INFORMATION ON SUBMITTAL REQUIREMENTS.
- POTHOLING ALL EXISTING UTILITIES IS REQUIRED PRIOR TO CONSTRUCTION TO VERIFY DESIGN FEASIBILITY. THE CITY DOES NOT GUARANTEE AS-BUILT INFORMATION IN THE CITY DATABASE IS ACCURATE AND WILL NOT BE HELD RESPONSIBLE IF FIELD MODIFICATIONS ARE REQUIRED BECAUSE POTHOLING WAS NOT DONE PRIOR TO DESIGN.
- ALL STRUCTURES AND WATERMAIN CONVEYANCE WILL BE STAKED AND LOCATED BY A LICENSED LAND SURVEYOR PROVIDING OFFSET LOCATION AND ELEVATIONS PRIOR TO CONSTRUCTION AND INSPECTION. FAILURE TO DO SO WILL RESULT IN POTENTIAL RE-INSPECTION AND OR PROJECT DELAYS.

UNDERGROUND UTILITIES CONSTRUCTION:

- A. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ENGINEER TO ASSURE ACCURATE AND TIMELY COLLECTION OF ALL REQUIRED AS-BUILT DATA. THIS DATA MUST ACCURATELY REFLECT THE LOCATIONS OF ALL UNDERGROUND UTILITIES, BOTTOM OF PIPE ELEVATIONS, INVERT ELEVATIONS, MANHOLE LOCATIONS. WATER SERVICE TAPS. BLOW-OFF LOCATIONS AND INVERTS OF SERVICE CONNECTIONS (BOTH AT PIPE AND AT PROPERTY LINE), VERTICAL AND HORIZONTAL BENDS, SERVICE BOXES AND METERS, VALVES AND HYDRANTS. CALL THE PROJECT ENGINEER AT LEAST 48-HOURS BEFORE BURYING UNDERGROUND PIPE TO ASSURE AND FACILITATE REQUIRED
- B. THE CONSTRUCTION OF UNDERGROUND UTILITY LINES SHALL BE SUBJECT TO THE FOLLOWING CRITERIA: i. NO MORE THAN 500 FEET OF TRENCH SHALL BE OPENED AT ONE TIME.
- ii. WHERE CONSISTENT WITH SAFETY AND SPACE CONSIDERATIONS, EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF DITCHES.
- iii. TRENCH DEWATERING DEVICES SHALL DISCHARGE INTO SEDIMENT TRAPS OR SEDIMENT PONDS. iv. Where practical, install gravity pipe utilities prior to installation of other utilities. UTILITY CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF FERNDALE
- ALL UTILITY TRENCHES IN THE RIGHT OF WAY SHALL BE BACKFILLED IN CONFORMANCE WITH CITY STANDARDS. TESTING OF NEW WATER LINES, STORM SEWER SYSTEMS SHALL NOT BE PERFORMED UNTIL ALL OTHER ADJACENT
- ALL UTILITY TRENCHES SHALL BE BACKFILLED AND COMPACTED TO 95% DENSITY IN LIFTS NOT TO EXCEED 24 INCHES WITH A "HOE PACK, OR 8 INCHES WITH HAND-OPERATED COMPACTION." G. OPEN CUTTING OF EXISTING ROADWAYS IS ONLY ALLOWED AS APPROVED AND NOTED ON THESE APPROVED PLANS. ANY OPEN CUT SHALL BE RESTORED IN ACCORDANCE WITH THE FERNDALE STANDARD TRENCH DETAIL(S). ALL
- UTILITY TRENCHES UNDERNEATH AN EXISTING ROADWAY SHALL BE BACKFILLED WITH 150 PSI CONTROLLED DENSITY H. NO PART OF THE DRAINAGE SYSTEM MAY BE COVERED, CONCEALED, OR PUT INTO USE UNTIL IT HAS BEEN
- INSPECTED, TESTED, AND ACCEPTED BY THE CITY INSPECTOR. A MINIMUM OF 5-FOOT SEPARATION IS REQUIRED BETWEEN THE WET UTILITIES (WATER, SEWER, STORM) SHOWN ON THE PLANS AND THE DRY UTILITIES (GAS, POWER, CABLE AND POWER) THAT MAY OR MAY NOT BE SHOWN ON THE

STORM DRAINGAGE:

UTILITIES HAVE BEEN INSTALLED.

- THE FOLLOWING STANDARD DETAILS SHALL BE USED FOR CONSTRUCTION OF STORM DRAIN IMPROVEMENTS: CATCH BASINS TYPE 1, 1L OR 2 WSDOT STD. DETAILS B-5.20, B-5.40 OR B-10.20 COFSD ST-7 (CITY OF FERNDALE STD DETAIL) "RESIDENTIAL SERVICE LINE" CATCH BASINS COFSD ST-16 (CITY OF FERNDALE STD DETAIL)
- 2. STORM SEWER PIPE HAVING DIAMETERS GREATER THAN 8" SHALL BE CORRUGATED POLYETHYLENE PIPE (CPEP); ALL OTHER STORM SEWER PIPE SHALL BE PVC.
- ALL CATCH BASIN GRATES SHALL INCLUDE THE STAMPING "OUTFALL TO STREAM, DUMP NO POLLUTANTS". CONTROL DENSITY FILL SHALL BE USED IN AREAS WHERE LESS THAN 18" OF COVER IS MAINTAINED OVER THE PROPOSED STORM PIPES (PIPE IS IN ROAD BASE SECTION), AS SHOWN IN THE PLANS. DUCTILE IRON PIPE MAY
- BE USED FOR STORM PIPES WITH LESS THAN 18" OF COVER IF APPROVED BY THE CITY. COVER OVER PIPES SHALL BE MAINTAINED DURING CONSTRUCTION. DEPTH OF COVER REQUIRED SHALL CONFORM TO THE MANUFACTURER'S RECOMMENDATIONS AND WILL VARY WITH THE VEHICLE LOADS TRAVELING OVER THE PIPE. NO ADDITIONAL COMPENSATION SHALL BE PROVIDED FOR DAMAGE TO PIPE DURING CONSTRUCTION
- AT THE END OF ALL SITE CONSTRUCTION, THE CONTRACTOR SHALL CLEAN ALL DEBRIS FROM CATCH BASINS AND STORMWATER CONVEYANCES. DEBRIS SHALL NOT BE ALLOWED TO ENTER STREAMS OR OFF-SITE STORMWATER
- 7. POSITIVE LOT DRAINS PER STANDARD DETAIL ST-16.

WATER:

- 1. THE FOLLOWING STANDARD DETAILS SHALL BE USED IN CONSTRUCTING WATER SUPPLY SYSTEM IMPROVEMENTS: PIPE BEDDING COFSD W-11 TRENCH BACKFILL COFSD W-11
 - FIRE HYDRANT ASSEMBLY COFSD W-1 THRUST BLOCKING COFSD W-2, W-3 & W-4 COFSD W-5
- ALL WORK AND MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF THE CITY OF FERNDALE DEVELOPMENT STANDARDS, SECTIONS 702 AND 705 AND THE MOST RECENT VERSION OF WSDOT STANDARD SPECIFICATIONS. ALL WATER MAIN PIPE SHALL BE DUCTILE IRON, MINIMUM THICKNESS CLASS 50, PER AWWA STANDARDS H3-71 AND C151-71, WITH CEMENT
- LINING PER AWWA STANDARD C104-71 MATERIAL FOR FITTINGS SUCH AS CROSSES, TEES, BENDS, REDUCERS AND SLEEVES SHALL BE DUCTILE IRON. JOINTS SHALL BE M.J., FLANGED
- OR PUSH-ON JOINTS AND SHALL CONFORM TO AWWA SPECIFICATIONS C-110-71 AND C-104-71. CONCRETE BLOCKING SHALL BE AS SPECIFIED IN CITY OF FERNDALE STANDARD DETAILS W-2, W-3 AND W-4, OR AS DIRECTED BY THE PROJECT ENGINEER. BLOCKS SHALL BE INSTALLED AS SPECIFIED IN SECTION 7-09.3(21) OF THE WASHINGTON STATE DEPARTMENT OF
- TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD, BRIDGE OR MUNICIPAL CONSTRUCTION. NO PRE-CAST BLOCKS ARE ALLOWED. CONNECTIONS TO EXISTING WATER MAINS — THE CONTRACTOR MUST NOTIFY THE CITY OF FERNDALE PUBLIC WORKS DIRECTOR OF A PROPOSED CONNECTION AT LEAST FOUR WORKING DAYS IN ADVANCE.
- ALL HYDROSTATIC TESTING AND DISINFECTION OF WATER MAINS SHALL CONFORM TO SECTION 7-09.3(23) AND SECTION 7-09.3(24)OF THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD, BRIDGE OR MUNICIPAL CONSTRUCTION - CURRENT EDITION. HYDROSTATIC TEST PRESSURE FOR WATER MAIN ACCEPTANCE SHALL BE 225 PSI AND SHALL BE DONE ACCORDING TO CITY OF FERNDALE REQUIREMENTS. THE CITY OF FERNDALE LABORATORY SHALL CONDUCT ALL DISINFECTION TESTS AND BACTERIOLOGICAL TESTS. THE PIPE WILL NOT PASS TESTING UNLESS A ZERO BACTERIAL COUNT IS MEASURED ON TWO CONSECUTIVE TESTS, CONDUCTED 24 HOURS APART.
- BACKFILL SHALL BE GRAVEL BASE, CLASS B, IN ALL STREET RIGHTS-OF-WAY, COMPACTED TO MINIMUM 95% OPTIMUM DENSITY. IN UNIMPROVED AREAS, MINIMUM COMPACTION SHALL BE 90% OF OPTIMUM DENSITY.
- ALL PIPES SHALL HAVE A MINIMUM COVER OF 36". ALL VALVES SHALL BE GATE VALVES AND SHALL BE INSTALLED WITH SLIP TYPE CAST IRON VALVE BOXES. GATE VALVES SHALL BE USED FOR LINES 2 INCHES THROUGH 10 INCHES IN DIAMETER. SHORT-BODY VALVES SUITABLE FOR A NON-SHOCK SHUT-OFF PRESSURE OF 130 PSI AND SUITABLE FOR DIRECT BURIAL ARE SPECIFIED. GATE VALVES SHALL BE RESILIENT SEATED IRON-BODY, FULL-BRONZE MOUNTED VALVES CONFORMING TO AWWA C509 AND SUITABLE FOR SERVICE WITH THE TYPE AND CLASS OF PIPE USED. ALL VALVES SHALL HAVE NON-RISING STEMS AND SHALL OPEN COUNTERCLOCKWISE AND SHALL BE EQUIPPED WITH A 2 INCH SQUARE OPERATING NUT. VALVES WILL BE FLANGE OR
- M.J. JOINTS. VALVE MARKERS SHALL BE LOCATED OUTSIDE OF PAVEMENT SECTIONS. WATER SERVICE TAP INSTALLATIONS SHALL MEET THE REQUIREMENTS OF THE COFDS W-5.
- 12. FIRE HYDRANTS AND FIRE MAINS MUST CONFORM TO COFDS- SD W-1 (WSDOT B-19) AND THE FOLLOWING STANDARDS: A. FIRE HYDRANTS SHALL HAVE TWO INDIVIDUALLY VALVED 2-1/2" PORTS AND ONE 5-1/4" MAIN VALVE OPENING. A 4-1/2" NST PUMPER NOZZLE AND A 5" STORZ PORT WITH CAP AND AIRCRAFT CABLE SHALL BE SUPPLIED. HYDRANTS SHALL BE M.H. 929T B. FIRE HYDRANTS SHALL HAVE THE STORZ PORT FACING THE REQUIRED ACCESS AND THE BASE FLANGE OF THE HYD NOT VARY MORE THAN 1 FOOT IN ELEVATION FROM THE GRADE LEVEL OF THE REQUIRED ACCESS. THE LOWEST STEM SAMEL BE A MINIMUM OF 14" ABOVE THE GROUND. C. IF THE PUBLIC WORKS DIRECTOR DETERMINES THAT FIRE HYDRANTS ARE VULNERABLE TO VEHICULAR DAMAGE,
 - POSTS SHALL BE PROVIDED. NO OBSTRUCTIONS SHALL EXIST WITHIN A 3-FOOT WORKING AREA OF EACH REQUIRED AND POSTS SHALL BE 6" CEMENT-FILLED PIPE A MIN. OF 3' IN HEIGHT WITH A MIN. OF 2' OF PIPE BELOW GRADE. HYDRA VALVES SHALL BE LOCATED BETWEEN 5' AND 20' FROM THE HYDRANT. D. UNDERGROUND SUPPLIES TO FIRE HYDRANTS MUST BE INSPECTED. SUCH INSPECTION SHALL INCLUDE VISUAL INSPECTION OF PIPING AND HYDROSTATIC PRESSURE TESTING TO A MIN. OF 225 PSI. A FLOW TEST WILL BE REQUIRED WHEN INSTALLAND IS
 - E. FIRE HYDRANTS MUST BE MAINTAINED IN AN OPERABLE CONDITION AT ALL THATS AND MUST BE REPAIRED OR REPLACED WHEN DEFECTIVE. HYDRANTS SHALL BE FULLY OPERABLE BEFORE CONSTRUCTION COMMENTS BY AROUE LEVEL.

SANITARY SEWER SYSTEMS

- ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH TYPY OF FERNDALE STANDARD SPECIFICATIONS, AND DETAILS, A.P.W.A. STANDARD SPECIFICATIONS, AND WSDOT STANDARD SPECIFICATIONS, MOST RECEIVE EDITIONS. SANITARY SEWER SYSTEM INSTALLATION, BOTH PUBLIC AND PRIVATE, IS SUBJECT TO THE REVEW AND APPROVAL.

 ALL WORK MUST BE INSPECTED TO THE SUPERFACTION OF THE CITY OF FERNDALE 24 HOUR NOTICE MUST BE GIVEN PRIOR TO STARTING WORK. TESTING OF THE SUPERVISION OF SYSTEM AND ALL CONNECTIONS TO AMOUNT THE SUPERVISION OF THE PROVISIONS OF ASTM D 3034 AND INSTALLED TRACKLY SPECIFICATIONS.
- AND INSTALLED TO CITY SPECIFICATIONS.

 SANITARY SEWER BY BEDDING SHALL BY REA GRAVEL FOR COFSD SS—1. ALL TRENCHES SHALL BE BACKFILLED WITH CLASS B BANK RUN GRAVEL WITH CLASS BY TRAVELED WITH SOUTSIDE OF RIGHT OF WAY (ACCESS EASEMENTS) AND SHALL BE COMPACTED TO A WINNEY DENSITY OF 95% CODIFIED PROCTOR. USE OF SUITABLE NATIVE BACKFILL OUTSIDE OF TRAVELED WAY SHALL BE STANDARD DETAILS AND SHALL BE PRE—CHANNELED MANHOLE COMES.
- ALL WANHOLES SHALL BE WATALLED PER CONTOF FERNDALE STANDARD DETAILS AND SHALL BE PRE-CHANNELED. MANHOLE CONES ARE WITH BE OFFER SHALL BE WERE ALLED PER CITY OF FERNDALE STANDARD DETAILS SS-6, SS-8 OR SS-13, EXCEPT THAT SINGLE SIDE STANDARD DETAILS HALL HAVE A MINIMUM DAMETER OF 4".
 - EXTEND SEWER STUBS 5 FT BEYOND UTILITY CORRIDOR OR 15 FEET BEYOND RIGHT-OF-WAY LINE. SINTENDE SHALL BE CAPPED WITH A WATERTIGHT PLUG. EACH STUB SHALL BE MARKED FOR LOCATION WITH A 2" DIA. ROWEDULE 40) WITH THE TOP 18" PAINTED GREEN AND STENCILED WITH THE WORD "SEWER" AND THE PIPE INVERT LOCATION MARKER SHALL BE CONNECTED TO THE SERVICE STUB BY A #12 COPPER WIRE.

ROAD:

- 1. THE FOLLOWING STANDARD DETAILS SHALL BE USED FOR CONSTRUCTION OF THE STANDARD STREET SECTION: TYPICAL STREET SECTION PER THESE PLANS
- PCC CURB AND GUTTER COFSD R-9 COFSD R-12 (SEE CONSTRUCTION DOCUMENTS TYPICAL SECTION) PCC SIDEWALKS PCC CURB RAMPS WSDOT STD. DETAIL F-40.
- ROADWAY EXCAVATION WITHIN THE ROADWAY PRISM SHALL BE CUT TO A UNIFORM GRADE. THE COMPLETED SUBGRADE SURFACE SHALL NOT VARY MORE THAN 0.10-FOOT FROM THE LOWER EDGE OF A 15-FOOT STRAIGHTEDGE PLACED ON THE
- SUBGRADE PARALLEL TO THE CENTERLINE UNLESS APPROVED BY THE ENGINEER. THE OWNER SHALL PROVIDE TO THE ENGINEER A REPORT FROM A QUALIFIED GEOTECHNICAL FIRM CERTIFYING THE COMPACTION OF THE GRAVEL BASE UNDER ALL PAVING AREAS.
- ASPHALT CONCRETE PAVEMENT SHALL BE CLASS "B" MATERIALS AND CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS, SECTION 5-04, EXCEPT AS MODIFIED HEREIN. CONNECTION TO EXISTING PAVEMENT
- SHALL BE TO A STRAIGHT NEATLY—TRIMMED LINE. 5. CRUSHED ROCK SURFACING FOR PAVEMENT SHALL BE IN ACCORDANCE WITH WSDOT STANDARD SPECIFICATION, SECTION 9-03.9(3); BALLAST PER SECTION 9-03.9(1).
- CEMENT CONCRETE SHALL BE CLASS 3000 (WITH AIR ENTRAINMENT) IN ACCORDANCE WITH WSDOT STANDARD SPECIFICATION, SECTION 6-02.3(2)B.
- CEMENT CONCRETÉ SIDEWALK SHALL BE CONSTRUCTED AS SHOWN ON THE PLANS OR AS DESIGNATED BY THE ENGINEER IN ACCORDANCE WITH CITY STANDARDS, DRAWING NO. R-12. CEMENT CONCRETE DRIVEWAYS SHALL BE 6 INCHES THICK AND CONSTRUCTED WHERE SHOWN ON THE PLANS OR DESIGNATED
- BY THE ENGINEER IN ACCORDANCE WITHOUTHE CITY STANDARDS, DRAWING NO. R-15. A 2- INCH LATER OF 3/4 INCH DRAIN ROCK SHALL BE USED FOR DRIVEWAY AND DING. CEMENT CONCRETE CURB AND GUTTERNIN HALL BE CONSTRUCTED WHERE SHOWN ON THE PLANS OR AS DESIGNED BY THE ENGINEER, IN ACCORDANCE WITH WINDOWN STANDARDS SPECIFICATIONS, SECTION 8-04 AND CITY OF FERNDALE STANDARDS.
- DRAWING R-8 AND R-WILL HANDICAN KAMPS SHALL BE CONSTRUCTED PER WSDOT STANDARD PLANS F-40. WHERE NEW CEMENT CONCRETE CURB WILL CUTTANIS CONNECT TO EXISTING CURB AND GUTTER, ASSURE THAT NO ABRUPT OFFSETS IN LINE OR GRADE SHALL BE CONSTRUCTED WHICH WILL BE UNSIGHTLY OR IMPEDE FLOW IN THE GUTTER LINE.
- - SOIL RESIDUAL HERBICIDE HALL BE PLACED WITHIN 24 HOURS OF PAVING.

 A TACK COAT OF ASPHALT SHALL BE APPLIED BETWEEN ALL COURSES OF ASPHALT.

 ALL PAVEMENT REPAIR SHALL BE SAW—CUT BEFORE REMOVAL. AR—4000W SHALL BE APPLIED TO ALL EDGES OF EXISTING PAVEMENT. WHITE NEWLY CONSTRUCTED PAVING MEETS EXISTING PAVING, THE APPLICANT SHALL PROVIDE A SMOOTH TRANSHOOD FROM EXISTING TO PROPOSED PAVING. CONTRACTOR SHALL COLD PLANE PER MDIMENSIONS SPECIFIED ON THE PLANS, AND INSTALL A MINIMUM 2-FOOT WIDE PETROTAC PAVING FABRIC, OR
- EQUIVALENT OVER JOINT BETWEEN PAVING LIFTS.

 HRU-CURB INLETS CONFORMING TO THE WSDOT STANDARD SPECIFICATIONS, SECTION 7-05 SHALL

 HE LOW POINT OF THE CURB FLOW LINES AND TO THE LOCATIONS, DIMENSIONS, AND DETAILS AS ON THE TANS OR DESIGNATED BY THE ENGINEER AND CITY STANDARDS, DRAWING NO. R-8.
- EXCAVATIONS, BEDDING AND PIPE FOR STORMWATER PIPE LAYING SHALL BE IN ACCORDANCE WITH THE WSDOT STANDARD SPECIFICATIONS, SECTION 7-08.
- STORM SEWER PIPE CONSTRUCTION REQUIREMENTS SHALL BE IN ACCORDANCE WITH WSDOT STANDARD SPECIFICATION, SECTION 7-04. MATERIAL SHALL BE HANCOR SURE-LOK F477 PIPE OR CITY APPROVED EQUAL. LOTS' STORM DRAIN SERVICE LINE SHALL BE 6" PVC PER WSDOT STANDARD SPECIFICATION, SECTION 9-05.1(5)
- PERFORATED UNDERDRAIN PIPE SHALL MEET THE WSDOT STANDARD SPECIFICATION 7-01.3(2)

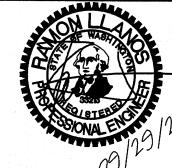
EARTHWORK

- A. THE CONTRACTOR SHALL REMOVE AND REPLACE ALL EXISTING UN-COMPACTED OR POORLY COMPACTED FILL SOILS WITHIN
- THE ROAD PRISM AT THE DIRECTION OF THE ENGINEER. THE CONTRACTOR SHALL EXCAVATE AND GRADE TO THE ALIGNMENT, GRADE AND CROSS-SECTIONS SHOWN IN THE PLANS
- OR ESTABLISHED BY THE ENGINEER. UNSUITABLE MATERIAL FOUND AND NOT FIT FOR USE AS A SUB-GRADE SHALL BE EXCAVATED TO THE BOUNDARIES SET BY
- THE ENGINEER AND REPLACED WITH A SUITABLE BACKFILL MATERIAL. THE ENGINEER IS REQUIRED TO CERTIFY SUBGRADE, IN WRITING, PRIOR TO PAVING.

BASE COURSES AND SURFACING:

- GRAVEL BASES AND BALLAST MATERIAL GRADATION SHALL MEET WSDOT STANDARD SPECIFICATIONS.
- BALLAST, GRAVEL BASE AND CRUSHED SURFACING SHALL BE COMPACTED TO AT LEAST 95% OF MAXIMUM DRY DENSITY. THE GRADED AND COMPACTED SURFACE OF THE CRUSHED SURFACING TOP COURSE SHALL BE WITHIN 1/2 INCH OF FINISHED
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MATERIAL AND COMPACTION TESTING. PRIOR TO IMPORTING OF MATERIAL FOR BASE AND CRUSHED SURFACING TOP COURSE THE CONTRACTOR SHALL PROVIDE EVIDENCE OF SATISFACTORY PASSING GRADING AND DEGRADATION TEST RESULTS TO THE ENGINEER.

PRELIMINARY SUBMITTAL 1 SUBMITTAL 2 REVISION BY DATE





LDES, INC.
5160 INDUSTRIAL PL. #1082
FERNDALE, WA 98248

DWG. NAME:

058-CIVIL-C3D19-AB.dwg
DESIGNED BY: PHONE 360-383-0620 FAX 360-383-0639

2058 DRAWN BY: CHECKED BY:

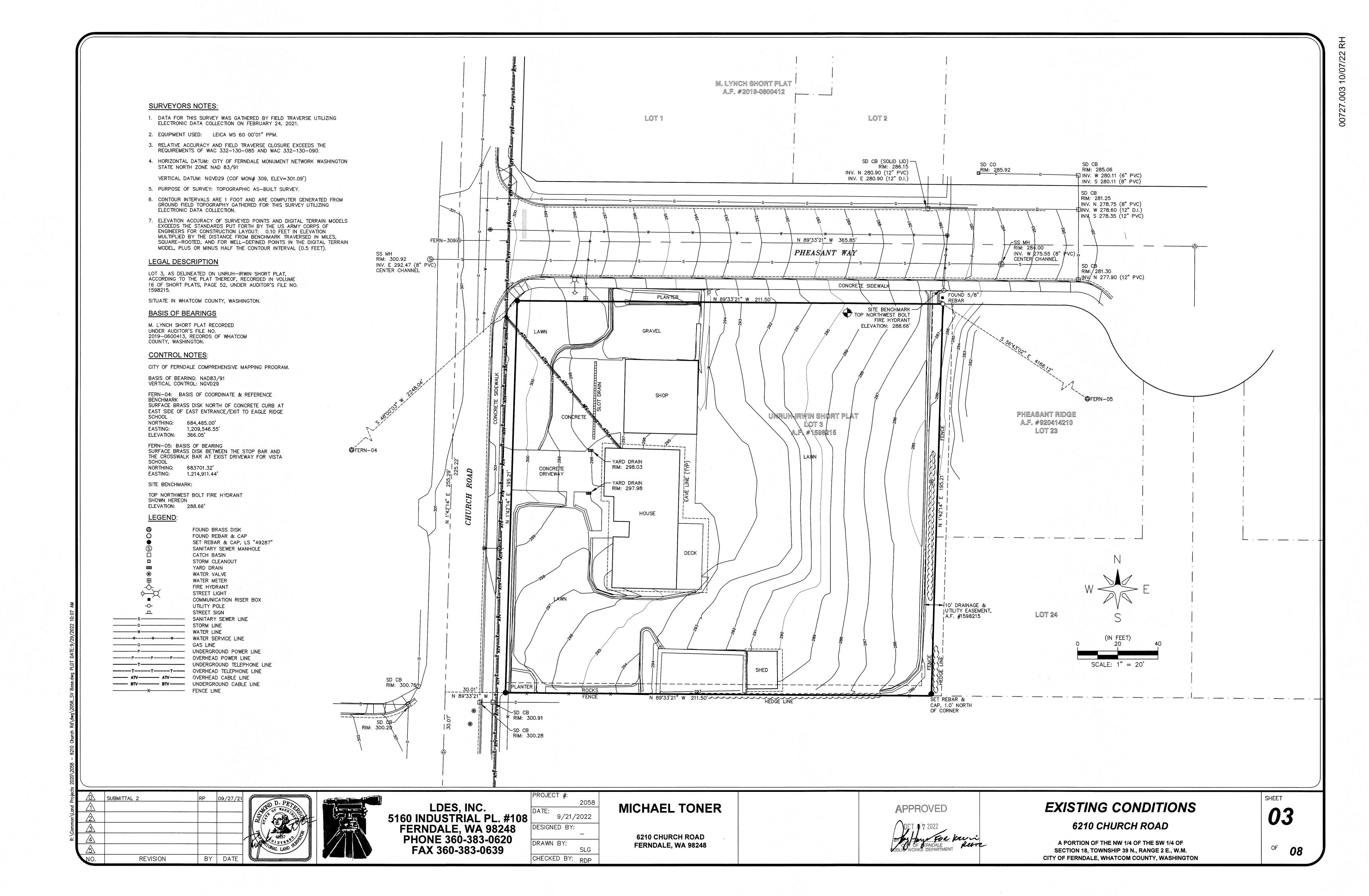
6210 CHURCH RD

MICHAEL A TONER FERNDALE, WA 98248



CITY OF FERNDALE GENERAL NOTES

TONER SHORT PLAT FERNDALE, WHATCOM COUNTY, WASHINGTON SITUATE IN A PORTION OF THE NW 1/4, SW 1/4 OF SECTION 18, T. 39 N., R. 2E., W.M.



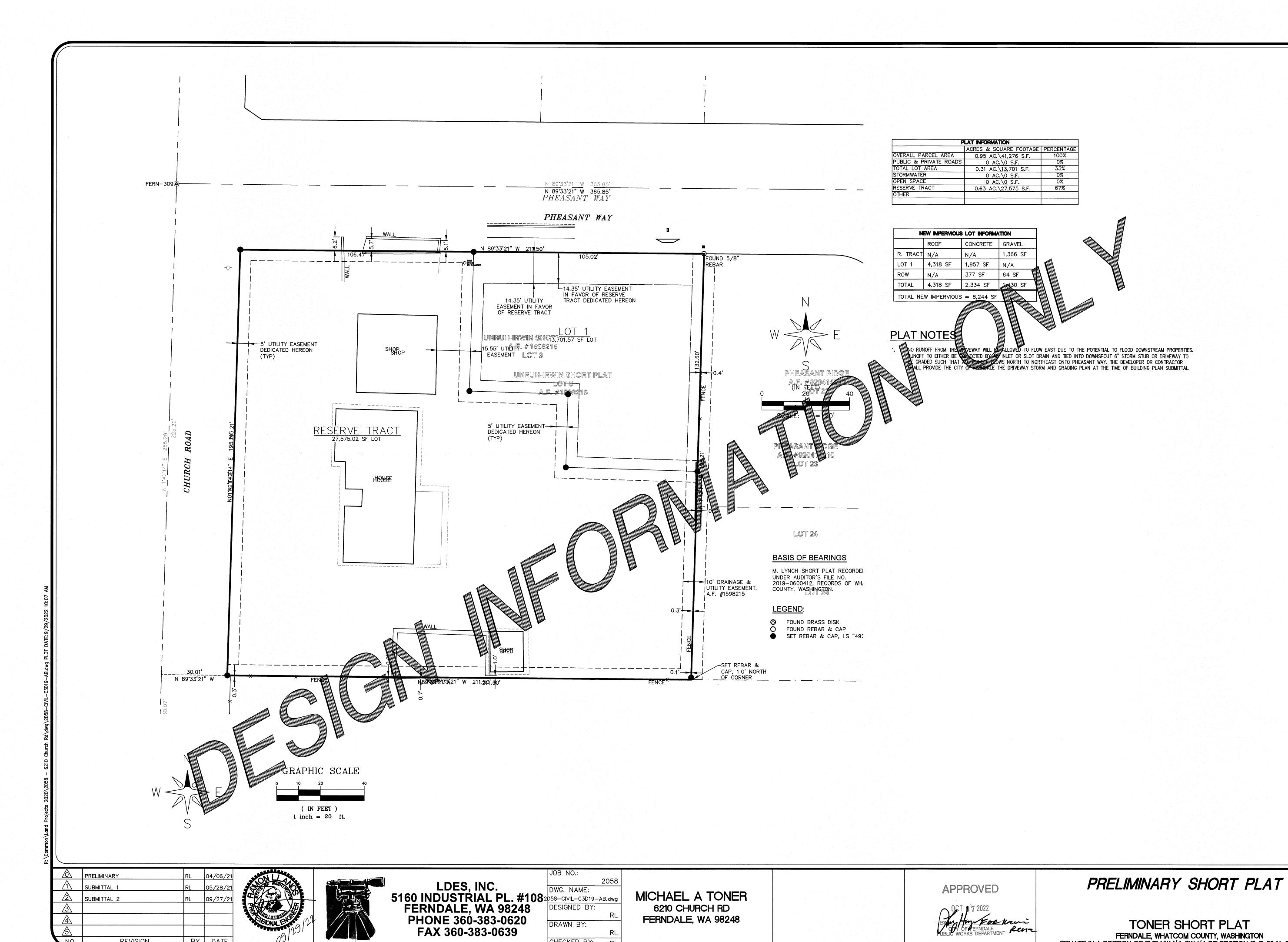




SHEET

TONER SHORT PLAT

FERNDALE, WHATCOM COUNTY, WASHINGTON SITUATE IN A PORTION OF THE NW 1/4, SW 1/4 OF SECTION 18, T. 39 N., R. 2E., W.M.



CHECKED BY:

REVISION

BY DATE

STORMWATER POLLUNTION PREVENTION PLAN (SWPPP) ELEMENTS:

ELEMENT 1: MARK CLEARING LIMITS

CLEARING LIMITS AREA WILL BE CLEARLY MARKED PRIOR TO BEGINNING LAND DISTURBING ACTIVITIES, WHICH INCLUDES CLEARING AND GRADING. THESE AREAS WILL BE CLEARLY MARKED BOTH IN THE FIELD AND ON-SITE PLANS. TO PREVENT DAMAGE AND OFFSITE IMPACTS.

WASHINGTON STATE DEPARTMENT OF ECOLOGY BMP'S CONSIDERED FOR ELEMENT #1 INCLUDE: BMP C103: HIGH VISIBILITY PLASTIC OR METAL FENCE

ELEMENT 2: ESTABLISH CONSTRUCTION ACCESS

ONE CONSTRUCTION ENTRANCE PER BMP C105 USING QUARRY SPALLS SHALL BE INSTALLED AT THE NEW ACCESS FOR LOT 1 ALONG PHEASANT WAY, THE INTENT OF THE CONSTRUCTION ACCESS IS TO MINIMIZE THE TRACKING OF SEDIMENT ONTO PUBLIC ROADS. SEDIMENT TRANSPORTED TO ROADS FROM THE SITE WILL BE SWEPT AND DISPOSED OF AT A CONTROLLED SEDIMENT DISPOSAL AREA ON SITE. IF STREET WASHING IS NEEDED, IT WILL ONLY OCCUR AFTER SEDIMENT HAS BEEN REMOVED AS DESCRIBED. THE RESULTING WASH WASTEWATER WOULD THEN BE DISPOSED OF AT AN APPROVED SITE.

ALL CONSTRUCTION ACCESS POINTS WILL BE RESTORED TO PRE-CONSTRUCTION CONDITION.

BMP C107: CONSTRUCTION ROAD/PARKING AREA STABILIZATION

WASHINGTON STATE DEPARTMENT OF ECOLOGY BMP'S CONSIDERED FOR ELEMENT #2 INCLUDE: BMP C105: STABILIZED CONSTRUCTION ENTRANCE

ELEMENT 3: CONTROL FLOW RATES

STORMWATER BMP'S WILL BE INSTALLED AS A FIRST STEP IN CONSTRUCTION AND WILL BE FUNCTIONAL PRIOR TO CONSTRUCTION OF SITE IMPROVEMENTS (E.G. IMPERVIOUS SURFACES). IF FLOW RATED NEED TO BE CONTROLLED. THE CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD TO AMEND THE SWPPP AND IDENTIFY APPROPRIATE BMP'S TO CONTROL FLOW RATES.

ELEMENT 4: INSTALL SEDIMENT CONTROLS

SILT FENCING (BMP C233) WILL BE INSTALLED ALONG THE DOWNGRADIENT OF THE PROJECT AREA OF SEDIMENT CONTROL.

- OTHER SEDIMENT CONTROL MEASURES THAT MAY BE IMPLEMENTED ON SITE INCLUDE:
 - CONSTRUCTION OF GRAVEL FILTER BERMS (BMP C232) TO RETAIN SEDIMENT FROM RIGHTS-OF-WAYS OR
 - CONSTRUCTION TRAFFIC AREAS, IF APPLICABLE. VEGETATED STRIPS WILL BE USED WHERE APPROPRIATE. IF VEGETATED STRIPS ARE USED AS AN EROSION
 - CONTROL MEASURE, THEY WILL BE IMPLEMENTED AS OUTLINED IN BMP C234.
 - STRAW WATTLES MAY ALSO BE CONSIDERED AS PART OF THE EROSION CONTROL MEASURES FOR THIS SITE. IF STRAW WATTLES ARE INSTALLED, THEY WILL BE DONE AS OUTLINED IN BMP C235.

A COMBINATION OF THESE BMPS WILL NEED TO BE IN PLACE TO EFFECTIVELY MANAGE THE SITE FOR EROSION CONTROL. EVALUATION OF BMP EFFECTIVENESS AND MAINTENANCE OF THE INSTALLED BMPS WILL CONTINUE THROUGHOUT CONSTRUCTION. MODIFICATIONS TO THE COMBINATIONS OF BMPS MAY OCCUR AS A RESULT OF ONGOING SITE EVALUATION.

WASHINGTON STATE DEPARTMENT OF ECOLOGY BMPS CONSIDERED FOR ELEMENT #4 INCLUDE:

- BMP C232: GRAVEL FILTER BERM
- BMP C233: SILT FENCE
- BMP C234: VEGETATED STRIP
- BMP C235: STRAW WATTLES

ELEMENT 5: STABILIZE SOILS

IF CONSTRUCTION OCCURS IN THE WET SEASON (10/1 THROUGH 4/30) SOILS WILL NOT REMAIN EXPOSED AND UNWORKED FOR MORE THAN 2 DAYS. IF IT OCCURS IN THE DRY SEASON (5/1 THROUGH 9/30) SOILS WILL NOT REMAIN EXPOSED AND UNWORKED FOR THAN 7 DAYS. WHEN ACTIVE GRADING IS IN PROGRESS. THE DEADLINE FOR SOIL STABILIZATION MAY BE EXTENDED UPON DETERMINING THAT THE LIKELIHOOD OF EROSION IMPACTS IS LOW BASED ON THE TYPE AND AMOUNT OF SOIL EXPOSED, SITE TOPOGRAPHY, TO POTENTIAL FOR DISCHARGE TO CRITICAL AREAS AND LAKES, AND OTHER FACTORS. IN ADDITION, WEATHER CONDITIONS WILL CONTINUALLY BE MONITORED INCLUDING BEFORE HOLIDAYS AND WEEKENDS FOR PURPOSES OF PREPARING THE SITE FOR PREDICTED WEATHER CONDITIONS, IMMEDIATELY FOLLOWING GRADATING ACTIVITIES, THE SITE SOILS SHALL BE STABILIZED BY SEEDING AND STRAW MULCHING TO PROTECT SOIL FROM EROSIVE FORCES OF RAINFALL, RUNOFF, AND WIND. PLASTIC COVERING SHALL COVER ALL SOIL STOCKPILES.

BMPS THAT ARE EFFECTIVE IN STABILIZING SOILS AND PROTECTING THEM FROM EXPOSURE TO RAIN AND WIND OR OTHER CLIMATIC CONDITIONS WILL BE IMPLEMENTED THROUGHOUT THE PROJECT. EVALUATION AND MONITORING OF BMP EFFECTIVENESS WILL OCCUR ON A DAILY BASIS BY THE CONTRACTOR AND AS DESCRIBED IN SECTION 6.2.12 BY THE CESCL. IN ADDITION, IN THE EVENT OF FORECASTED PRECIPITATION EVENTS, ADDITIONAL MEASURES TO STABILIZE SOILS

BMPS THAT WILL BE CONSIDERED THROUGHOUT CONSTRUCTION INCLUDE BUT ARE NOT LIMITED TO TEMPORARY AND PERMANENT SEEDING, SODDING, MULCHING, PLASTIC COVERING, EROSION CONTROL FABRICS AND MATTING. THE EARLY APPLICATION OF GRAVEL BASE ON AREAS TO BE PAVED, AND DUST CONTROL.

WASHINGTON STATE DEPARTMENT OF ECOLOGY BMPS CONSIDERED FOR ELEMENT #5 INCLUDE:

- BMP C120: TEMPORARY AND PERMANENT SEEDING BMP C121: MULCHING
- BMP C122: NETS AND BLANKETS
- BMP C123: PLASTIC COVERING
- BMP C124: SODDING BMP C125: TOP SOILING
- BMP C130: SURFACE ROUGHENING
- BMP C131: GRADIENT TERRACES BMP C140: DUST CONTROL

ELEMENT 6: PROTECT SLOPES

DISTURBED OR FILLED SLOPES ON SITE BE MULCHED OR HYDRO-SEEDED IMMEDIATELY FOLLOWING CONSTRUCTION. SLOPES SHALL ALSO BE ROUGHENED (TRACK WALKING) BEFORE HYDROO-SEEDING OR MULCHING.

ELEMENT 7: PROTECT DRAIN INLETS

NEW DRAIN INLETS WILL BE CONSTRUCTED AS PART OF THIS PROJECT. NEW DRAIN INLETS WILL RECEIVE BMP 220. EXISTING DRAIN INLETS IMMEDIATELY DOWNGRADE OF THE PROJECT SITE WILL ALSO RECEIVE BMP 220. PLEASE REFER THE TESC PLAN IN APPENDIX II FOR INLET PROTECTION LOCATIONS.

APPLICABLE BMP'S:

BMP C220 - STORM DRAIN INLET PROTECTION

BMP C209: OUTLET PROTECTION

ELEMENT 8: STABILIZE CHANNELS AND OUTLETS

WHILE NOTE ENVISIONED FOR THE PROJECT, IF TEMPORARY ON-SITE CONVEYANCE CHANNELS ARE NECESSARY. THEY WILL BE DESIGNED, CONSTRUCTED, AND STABILIZED TO PREVENT EROSION FROM THE EXPECTED FLOW RATE FROM A TYPE1A. 10 YEAR, 24-HOUR FREQUENCY STORM EVENT. BMP C202: CHANNEL LINING WILL BE USED TO DETERMINE THE MOST EFFECTIVE CHANNEL DESIGN FOR THE SITE (I.E. BLANKETS VERSUS RIPRAP). THE DESIGN, CONSTRUCTION WAY STABILIZATION OF THE CONVEYANCE CHANNELS WILL BE CONSISTENT WITH THE METHODS OUTLINED IN BMP

WASHINGTON STATE DEPARTMENT OF ECOLOGY BMPS CONSIDERED FOR ELEMENT #8 INCL BMP C202: CHANNEL LINING

ELEMENT 9: CONTROL POLLUTANTS

WASTE MATERIALS GENERATED ON SITE WILL BE HANDLED AND DISPOSED OF IN A MANNER THAT DOES NOT CAUSE CONTAMINATION OF STORMWATER; INCLUDING COVERING DUMPSTERS AND STOCKPILES. ROUTINE INSPECTIONS OF THE WASTE MATERIAL STORAGE AREAS WILL BE CONDUCTED TO MAKE SURE THAT LEAKS OR SPILLS DO NOT OCCUR. ANY LEAKAGE OR SPILLS WILL BE CLEANED UP IMMEDIATELY. A SPILL RESPONSE KIT THAT INCLUDES ABSORBENT MATERIAL WILL BE AVAILABLE ON SITE. USED ABSORBENT MATERIAL WILL BE DISPOSED OF PROPERLY.

MAINTENANCE OF HEAVY EQUIPMENT INVOLVING OIL CHANGES, HYDRAULIC SYSTEM DRAIN DOWN, SOLVENT AND DE-GREASING CLEANING AND/OR OTHER ACTIVITIES THAT MAY RESULT IN DISCHARGE OR SPILLAGE OF POLLUTANTS TO THE GROUND OR INTO STORMWATER RUNOFF WILL BE CONDUCTED WITH SPILL PREVENTION MEASURES IN PLACE, INCLUDING CONDUCTING MAINTENANCE ON A TEMPORARY PAD THAT CAN BE USED TO CAPTURE LARGE SPILLS AND THE USE OF DRIP PANS. IN THE EVENT THAT EMERGENCY REPAIRS NEED TO BE PERFORMED AND CLIMATIC CONDITIONS MAY RESULT IN A PRECIPITATION EVENT PRIOR TO THE REPAIR BEING COMPLETED, THE REPAIR AREA, WHICH INCLUDES THE VEHICLE, WILL BE COVERED WITH TARPS OR OTHER

DISCHARGES, SPILLS, OR LEAKS WILL BE CLEANED IMMEDIATELY. THE NOTIFICATION PROCEDURE OUTLINED IN THE PERMANENT SITE SWPPP IS AS FOLLOWS:

- NOTIFY KEY PERSONNEL DURING CONSTRUCTION, THE PROJECT ENGINEER WILL BE PROVIDING PROJECT OVERSIGHT AND WILL BE CONTACTED IN THE EVENT OF A SPILL. THE PROJECT ENGINEER WILL CONTACT THE SITE OWNER AND THE DEPARTMENT OF ECOLOGY. ANY SPILLS WITH POTENTIAL TO DISCHARGE TO STORM DRAINS, SANITARY SEWER
- SYSTEM, OR SURFACE WATERS WILL BE REPORTED TO CITY OF FERNDALE. - ALL SPILLS WILL BE REPORTED TO THE DEPARTMENT OF ECOLOGY, SPILL RESPONSE PROGRAM (425) 649-7000.

WASHINGTON STATE DEPARTMENT OF ECOLOGY BMPS CONSIDERED FOR ELEMENT #9 INCLUDE: - SPILL CLEANUP AND RESPONSE PRACTICES

ELEMENT 10: CONTROL DE-WATERING

SITE DE-WATERING IS NOT ANTICIPATED FOR THIS PROJECT. IF DE-WATERING IS FOUND TO KNY NEEDED, DEPE CONSTRAINTS, MANAGEMENT OPTIONS MAY INCLUDE:

- TRANSPORT OFF SITE IN VEHICLE, SUCH AS A VACUUM FLUSH TRUCK, FOR LEGAL WAYPOSAL IN A MA DOES NOT POLLUTE STATE WATERS, - SANITARY SEWER DISCHARGE WITH LOCAL SEWER DISTRICT APPROVAL, OR
- USE OF A SEDIMENTATION BAG WITH OUTFALL TO CATCH BASH WHICH DISCHARGES THE ON-SITE STORMTECH CHAMBERS FOR SMALL VOLUMES LOCALITY DE-WANTRING, WITH ENGINEER OF AND CITY APPROVAL.

ELEMENT 11: MAINTAIN BMP

ALL TEMPORARY AND PERMINENT EROSIN AND SEDIMENT CONTROL BMPS WILL BE INSPECTED, MAINTAINED, AND REPAIRED TO ASSURE CONTINUED TRANSPORTED IN ACCORDANCE WAS RELEVANTED TO ACCORDANCE WAS THE RELEVANTED IN EXEMPLE OF THE PROPERTY OF THE PROPE

TEMPORARY EROSION THE SEDIMENTILL ON THE LIBERT BETTER ABOVE WILL BE INSPECTED DAILY DURING THE WET SEASON BY THE CONTRACTOR. NEEDED THE PAIRS AND MAINTENANTED THE LOCCUR AS SOON AS PRACTICABLE OR, IN THE EVENT OF A FORECAST WHICLEMENT WEATHER WEPAIRS AND MAINTENANCE WILL OCCUR PRIOR TO THE ANTICIPATED WEATHER EVENT.

PORTRY EROSION AND SEDIMENT CONTROL BMPS WILL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS HIEVEN OF AFTER THE WIMPORARY BMPS ARE NO LONGER NEEDED. TRAPPED SEDIMENT WILL BE REMOVED OR STABILIZED SITE OF STABILIZED SITE OF STABILIZED SOLVERS OF STABILIZED.

ELEMENT 12: MANAGE THE PROJECT

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

THIS PROJECT WILL NOT BE REQUIRED TO OBTAIN AN NPDES PERMIT AS THE PROJECT WILL DISTURB LESS THAN ONE ACRE OF LAND.

CERTIFIED EROSION AND SEDIMENT CONTROL LEAD (CESCL): IT IS RECOMMENDED, ALTHOUGH NOT REQUIRED, THAT THE PROJECT OWNER OR CONTRACTOR RETAIN A CESCL TO INSPECT ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES, ALL BMP'S, AND ANY STORMWATER DISCHARGE POINT (IF APPLICABLE) AT LEAST ONCE EVERY CALENDAR WEEK.

PHASING OF CONSTRUCTION

TO THE EXTENT PRACTICABLE, SITE DISTURBANCE AND CONSTRUCTION WILL BE PHASED WHERE FEASIBLE. REVEGETATION OF EXPOSED AREAS AND MAINTENANCE OF THAT VEGETATION WILL OCCUR AS PART OF THE CLEARING ACTIVITIES.

CLEARING AND GRADING ACTIVITIES WILL OCCUR AFTER THE APPLICABLE PERMITS HAVE BEEN OBTAINED. WHEN ESTABLISHING CLEARING ANALYGRADING AREAS, CONSIDERATION WILL BE GIVEN TO MINIMIZING REMOVAL OF EXISTING TREES AND MINIMIZING DISTURBANCANNAND COMPACTION OF NATIVE SOILS EXCEPT AS NEEDED FOR BUILDING PURPOSES. ELEMENT #1 OUTLINES BMPS ECTIVELY MINIMIZE REMOVAL AND DAMAGE TO NATIVE VEGETATION AND PROTECT THESE AREAS BY BEING CLEARLY

FROM OCTOWAR 1 THROUGH APRIL 30, SOILS WILL NOT REMAIN EXPOSED AND UNWORKED FOR MORE THAN 2 DAYS. FROM MAY 1 THROUGH STATEMBER 30 SOILS WILL NOT REMAIN EXPOSED AND UNWORKED FOR THAN 7 DAYS. IN ADDITION, WEATHER CONDITIONS WALL CONTINUALLY BE MONITORED INCLUDING BEFORE HOLIDAYS AND WEEKENDS FOR PURPOSES OF PREPARING THE SITE FOR PREDICTED WEATHER CONDITIONS. AS DISCUSSED IN ELEMENT #5, BMPS THAT ARE EFFECTIVE IN STABILIZING SOILS AND PROTECTING THEM FROM EXPOSURE TO RAIN AND WIND OR OTHER "CLIMATIC CONDITIONS WILL BE IMPLEMENTED MOROUGHOUT THE PROJECT. INSPECTION AND EVALUATION OF THE EFFECTIVENESS OF THE BMPS WILL OCCUR ON A DAILY BASIS THE CONTRACTOR, IN ADDITION, IN THE EVENT OF FORECASTED PRECIPITATION EVENTS, ADDITIONAL MEASURES TO STABILIZE

COORDINATION WITH UTILITIES AND OTHER CONTRACTORS THE STORMWATER MANAGEMENT REQUIREMENTS FOR ALL ASPECTS OF THE CONSTRUCTION PROJECT, INCLUDING UTILITIES, WERE CONSIDERED IN PREPARING THE CONSTRUCTION SWPPP. IT IS UP TO THE CONTRACTOR TO COORDINATE WITH SUB-CONTRACTORS AND OR UTILITY COMPANIES.

AS PREVIOUSLY MENTIONED, ALL BMPS WILL BE INSPECTED, MAINTAINED, AND REPAIRED AS NEEDED TO ASSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION.

IN THE EVENT THAT INSPECTION AND/OR MONITORING REVEALS THAT THE BMP'S IDENTIFIED IN THIS CONSTRUCTION SWPPP ARE INADEQUATE, DUE TO THE ACTUAL DISCHARGE OF OR POTENTIAL TO DISCHARGE A SIGNIFICANT AMOUNT OF ANY POLLUTANT. THIS SWPPP SHALL BE MODIFIED, AS APPROPRIATE, IN A TIMELY MANNER.

MAINTENANCE OF THE CONSTRUCTION SWPPP

THE CONSTRUCTION SWPPP WILL BE RETAINED ON-SITE AND WILL BE UPDATED ON A REGULAR BASIS BY EITHER THE OWNER OR A DESIGNATED REPRESENTATIVE. A LOG WILL BE ATTACHED TO THE CONSTRUCTION SWPPP TO FACILITATE REGULAR UPDATES. MODIFICATIONS TO THE CONSTRUCTION SWPPP WILL BE MADE WHENEVER THERE IS A SIGNIFICANT CHANGE IN THE DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE OF ANY BMP.

ELEMENT 13: PROTECT LOW IMPACT DEVELOPMENT BMP'S

NO LID BMP'S ARE PROPOSED AT THIS TIME.

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LDES, INC.

5160 INDUSTRIAL PL. #108
FERNDALE, WA 98248

DWG. NAME:

DDESIGNED BY:

DESIGNED BY: PHONE 360-383-0620 FAX 360-383-0639

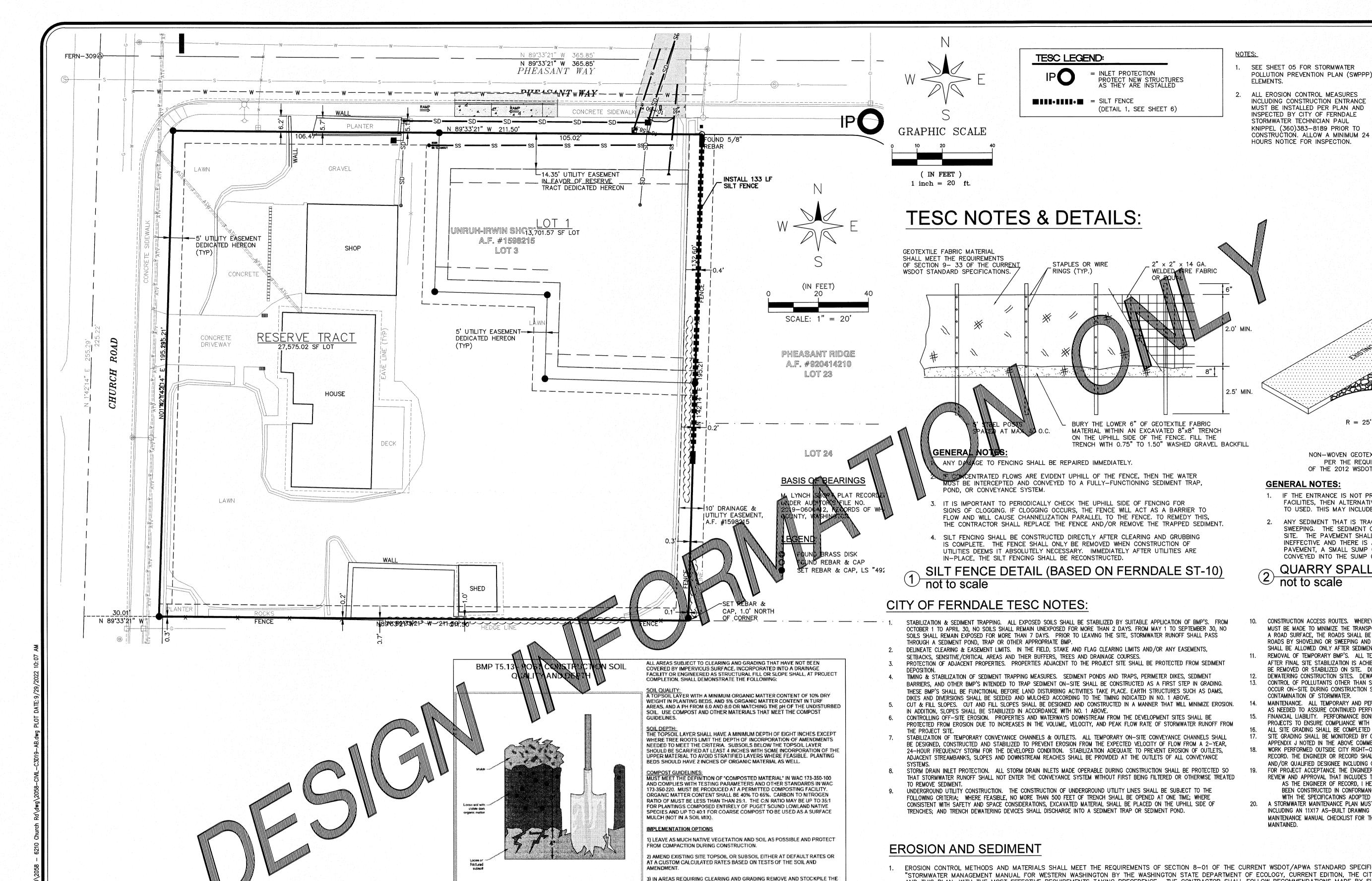
2058 DRAWN BY: CHECKED BY:

MICHAEL A TONER 6210 CHURCH RD FERNDALE, WA 98248

APPROVED

STORMWATER POLLUTION PREVENTION PLAN

TONER SHORT PLAT FERNDALE, WHATCOM COUNTY, WASHINGTON SITUATE IN A PORTION OF THE NW 1/4, SW 1/4 OF SECTION 18, T. 39 N., R. 2E., W.M.



- EROSION CONTROL METHODS AND MATERIALS SHALL MEET THE REQUIREMENTS OF SECTION 8-01 OF THE CURRENT WSDOT/APWA STANDARD SPECIFICATIONS, THE REQUIREMENTS SET FORTH IN VOLUME II OF THE STORMWATER MANAGEMENT MANUAL FOR WESTERN WASHINGTON BY THE WASHINGTON STATE DEPARTMENT OF ECOLOGY, CURRENT EDITION, THE CITY OF FERNDALE DEVELOPMENT STANDARDS, THE PROJECT SWPPP AND THIS PLAN, WITH THE MOST EFFECTIVE REQUIREMENTS TAKING PRECEDENCE. THE CONTRACTOR SHALL FOLLOW RECOMMENDATIONS MADE BY SUPPLIERS AND MANUFACTURERS FOR ALL MATERIALS AND EQUIPMENT
- THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS TO PREVENT SILTY STORMWATER FROM EXITING THE SITE. IF SILT LADEN STORMWATER EXITS THE SITE, THE ENGINEER SHALL STOP WORK ON THE JOB. IT IS THE CONTRACTOR'S RESPONSIBILITY TO WORK WITH THE PROJECT ENGINEER OR LOCAL JURISDICTION TO COORDINATE FURTHER EROSION CONTROL MEASURES, NOT SHOWN ON THE EROSION AND SEDIMENT CONTROL PLAN, THAT MAY BE NECESSARY TO CONTROL SITE RUNOFF.
- 3. THE EXISTING AND PROPOSED STORM SYSTEMS SHALL BE CLEANED AND MAINTAINED THROUGHOUT CONSTRUCTION AND UNTIL ALL ON—SITE SOILS HAVE BEEN STABILIZED.
- AT THE END OF ALL SITE CONSTRUCTION, THE CONTRACTOR SHALL FLUSH OUT ALL DEBRIS FROM THE STORM SYSTEM INSTALLED ON-SITE. MATERIAL FLUSHED FROM THE STORM SYSTEM SHALL BE DISPOSED OF BY

THE CONTRACTOR AT AN APPROVED DISPOSAL SITE.

PRELIMINARY SUBMITTAL ' SUBMITTAL 2

BY | DATE

REVISION

PHONE 360-383-0620 FAX 360-383-0639

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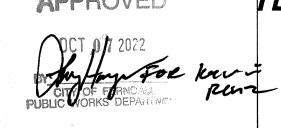
REQUIREMENTS.

MICHAEL A TONER 6210 CHURCH RD FERNDALE, WA 98248

DUFF LAYER AND TOPSOIL ON SITE IN A DESIGNATED, CONTROLLED AREA, NO ADJECT TO PUBLIC RESOURCES AND CRITICAL AREAS. REPLACE IT PRIOR TO PLANTING AND AMEND IF NEEDED TO MEET THE ORGANIC MATTER OR DEPTH

4) IMPORT TOPSOIL MIX OF SUFFICIENT ORGANIC CONTENT AND DEPTH TO MEET

MORE THAN ONE METHOD MAY BE USED ON DIFFERENT PORTIONS OF THE SAME



TEMPORARY EROSION & SEDIMENTATION CONTROL - PLANS & DETAILS

R = 25' MIN.

CONVEYED INTO THE SUMP OR POND.

SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER.

AS NEEDED TO ASSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION.

PROJECTS TO ENSURE COMPLIANCE WITH THE APPROVED TESC PLAN.

REVIEW AND APPROVAL THAT INCLUDES THE FOLLOWING STATEMENT:

WITH THE SPECIFICATIONS ADOPTED BY THE CITY OF FERNDALE.

GENERAL NOTES:

CONTAMINATION OF STORMWATER.

APPENDIX J NOTED IN THE ABOVE COMMENT.

NON-WOVEN GEOTEXTILE STABILIZATION FABRIC,

OF THE 2012 WSDOT STANDARD SPECIFICATIONS.

PER THE REQUIREMENTS OF SECTION 9-33-

THICKNESS

1. IF THE ENTRANCE IS NOT PREVENTING SEDIMENT FROM BEING TRACKED ONTO SURROUNDING

ANY SEDIMENT THAT IS TRACKED ONTO PAVEMENT SHALL BE REMOVED IMMEDIATELY BY

FACILITIES, THEN ALTERNATIVE MEASURES TO KEEP THE FACILITIES FREE OF SEDIMENT SHALL

SWEEPING. THE SEDIMENT COLLECTED BY SWEEPING SHALL BE REMOVED OR STABILIZED ON— SITE. THE PAVEMENT SHALL NOT BE CLEANED BY WASHING, EXCEPT WHEN SWEEPING IS

PAVEMENT, A SMALL SUMP OR POND SHALL BE CONSTRUCTED AND THE SEDIMENT SHALL BE

QUARRY SPALL CONSTRUCTION ENTRANCE DETAIL

INEFFECTIVE AND THERE IS A THREAT TO PUBLIC SAFETY. IF IT IS NECESSARY TO WASH

CONSTRUCTION ACCESS ROUTES. WHEREVER CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED ROADS, PROVISIONS

ROADS BY SHOVELING OR SWEEPING AND BE TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA. STREET WASHING

REMOVAL OF TEMPORARY BMP'S. ALL TEMPORARY EROSION AND SEDIMENT CONTROL BMP'S SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER TEMPORARY BMP'S ARE NO LONGER NEEDED. TRAPPED SEDIMENT SHALL

BE REMOVED OR STABILIZED ON SITE. DISTURBED SOIL AREAS RESULTING FROM REMOVAL SHALL BE PERMANENTLY STABILIZED.

MAINTENANCE. ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL BMP'S SHALL BE MAINTAINED AND REPAIRED

FINANCIAL LIABILITY. PERFORMANCE BONDING, OR OTHER APPROPRIATE FINANCIAL INSTRUMENTS, SHALL BE REQUIRED FOR ALL

WORK PERFORMED OUTSIDE CITY RIGHT-OF-WAY ON PRIVATE PROPERTY REQUIRES PROJECT CERTIFICATION BY THE ENGINEER OF

RECORD. THE ENGINEER OR RECORD SHALL DETERMINE AN INSPECTION SCHEDULE TO BE CARRIED OUT BY HIMSELF OR HERSELF

AS THE ENGINEER OF RECORD, I HEREBY CERTIFY THAT THE IMPROVEMENTS COMPLETED AT <u>5874 CEDAR STREET</u> HAVE

A STORMWATER MAINTENANCE PLAN MUST BE SUBMITTED TO THE CITY FOR REVIEW AND APPROVAL AT PROJECT COMPLETION

MAINTENANCE MANUAL CHECKLIST FOR THE CONVEYANCE SYSTEM LOCATED OUTSIDE CITY R/W THAT MUST BE PRIVATELY

INCLUDING AN 11X17 AS-BUILT DRAWING OF THE STORMWATER FACILITIES IN CONFORMANCE WITH THE ATTACHED STORMWATER

BEEN CONSTRUCTED IN CONFORMANCE WITH THE PLANS APPROVED BY THE PUBLIC WORKS DIRECTOR AND IN ACCORDANCE

ALL SITE GRADING SHALL BE COMPLETED IN ACCORDANCE WITH APPENDIX J OF THE 2012, INTERNATIONAL BUILDING CODE.

SITE GRADING SHALL BE MONITORED BY GEOTEST SERVICES TO ENSURE THE FILLS WERE PERFORMED AND RECORDED PER

FOR PROJECT ACCEPTANCE THE ENGINEER OF RECORD IS REQUIRED TO SUBMIT A FINAL AS-BUILT GRADING PLAN FOR CITY

AND /OR QUALIFIED DESIGNEE INCLUDING GEOTECHNICAL INSPECTIONS AND DOCUMENTATION SUPPORT.

DEWATERING CONSTRUCTION SITES. DEWATERING DEVICES SHALL DISCHARGE INTO A SEDIMENT TRAP OR SEDIMENT POND.

OCCUR ON-SITE DURING CONSTRUCTION SHALL BE HANDLED AND DISPOSED OF IN A MANNER THAT DOES NOT CAUSE

CONTROL OF POLLUTANTS OTHER THAN SEDIMENT ON CONSTRUCTION SITES. ALL POLLUTANTS OTHER THAN SEDIMENT THAT

MUST BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT (MUD) ONTO THE PAVED ROAD. IF SEDIMENT IS TRANSPORTED ONTO A ROAD SURFACE, THE ROADS SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM

TO USED. THIS MAY INCLUDE STREET SWEEPING OR UPSIZING THE DIMENSIONS OF THE ENTRANCE.

SHEET

4"-8" QUARRY SPALLS

INGRESS/EGRESS AREA

FERNDALE, WHATCOM COUNTY, WASHINGTON SITUATE IN A PORTION OF THE NW 1/4, SW 1/4 OF SECTION 18, T. 39 N., R. 2E., W.M.

TONER SHORT PLAT

LDES, INC.
5160 INDUSTRIAL PL. #108
FERNDALE, WA 98248

DWG. NAME:

DOSS-CIVIL-C3D19-AB.dwg

DESIGNED BY:

RL

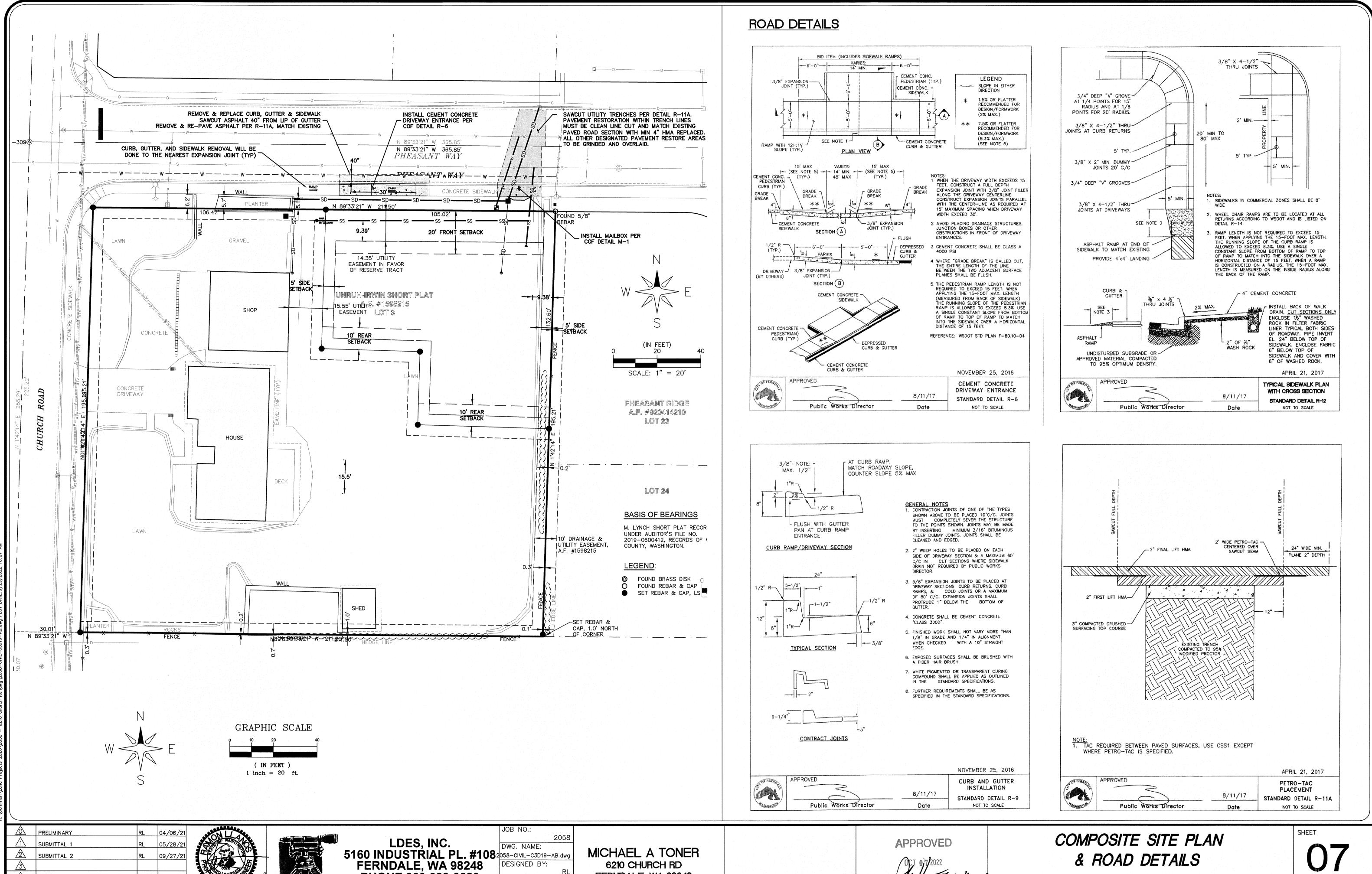
Figure V-5.3.3

Planting Bed Cross-Section



TONER SHORT PLAT

FERNDALE, WHATCOM COUNTY, WASHINGTON
SITUATE IN A PORTION OF THE NW 1/4, SW 1/4 OF SECTION 18, T. 39 N., R. 2E., W.M.



FERNDALE, WA 98248

PHONE 360-383-0620

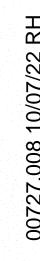
FAX 360-383-0639

BY DATE

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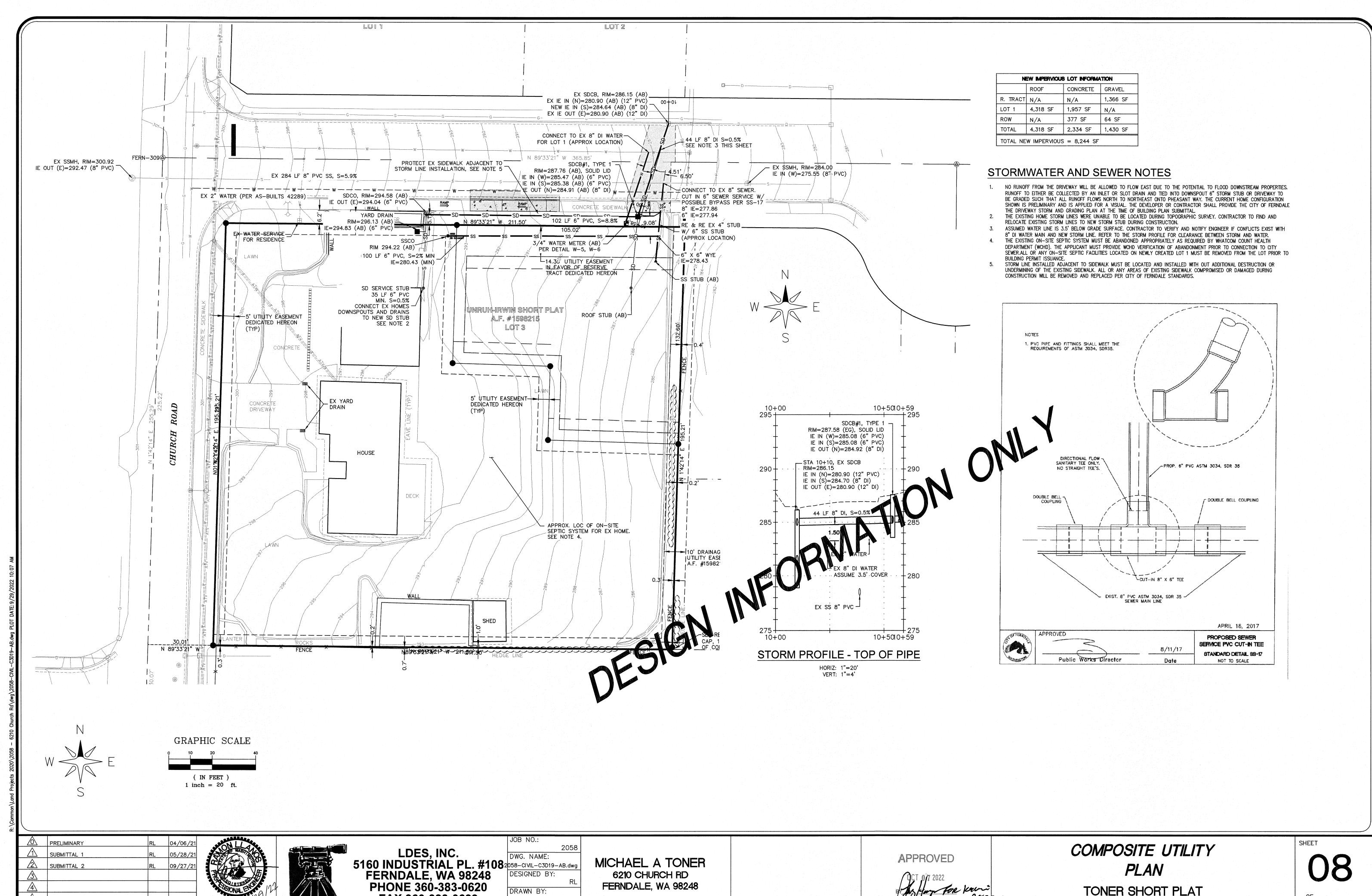
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TONER SHORT PLAT

FERNDALE, WHATCOM COUNTY, WASHINGTON SITUATE IN A PORTION OF THE NW 1/4, SW 1/4 OF SECTION 18, T. 39 N., R. 2E., W.M.



FERNDALE, WA 98248

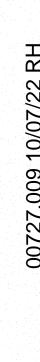
DRAWN BY:

CHECKED BY: RL

FAX 360-383-0639

REVISION

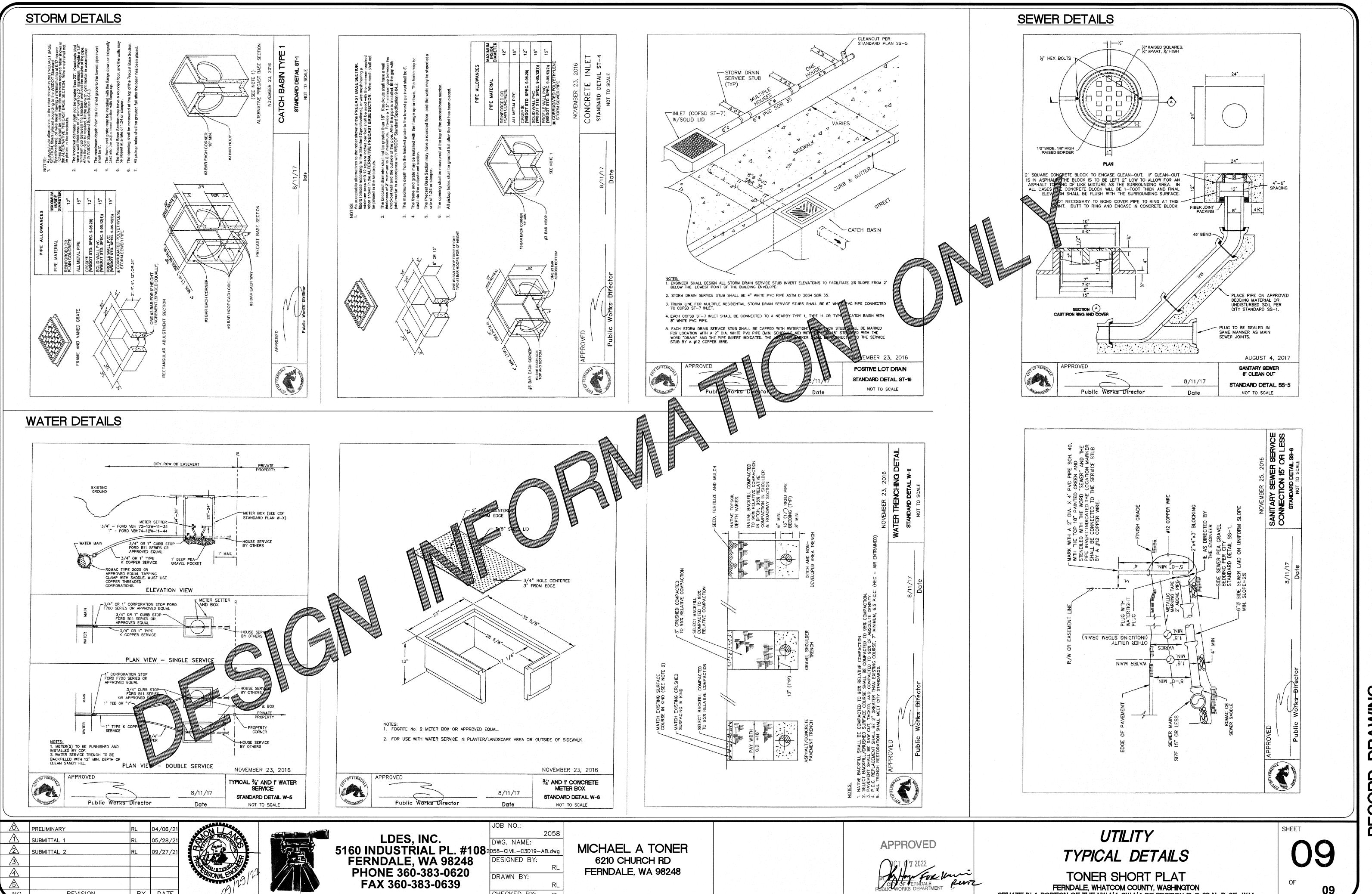
BY DATE





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FERNDALE, WHATCOM COUNTY, WASHINGTON SITUATE IN A PORTION OF THE NW 1/4, SW 1/4 OF SECTION 18, T. 39 N., R. 2E., W.M.



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REVISION

BY DATE