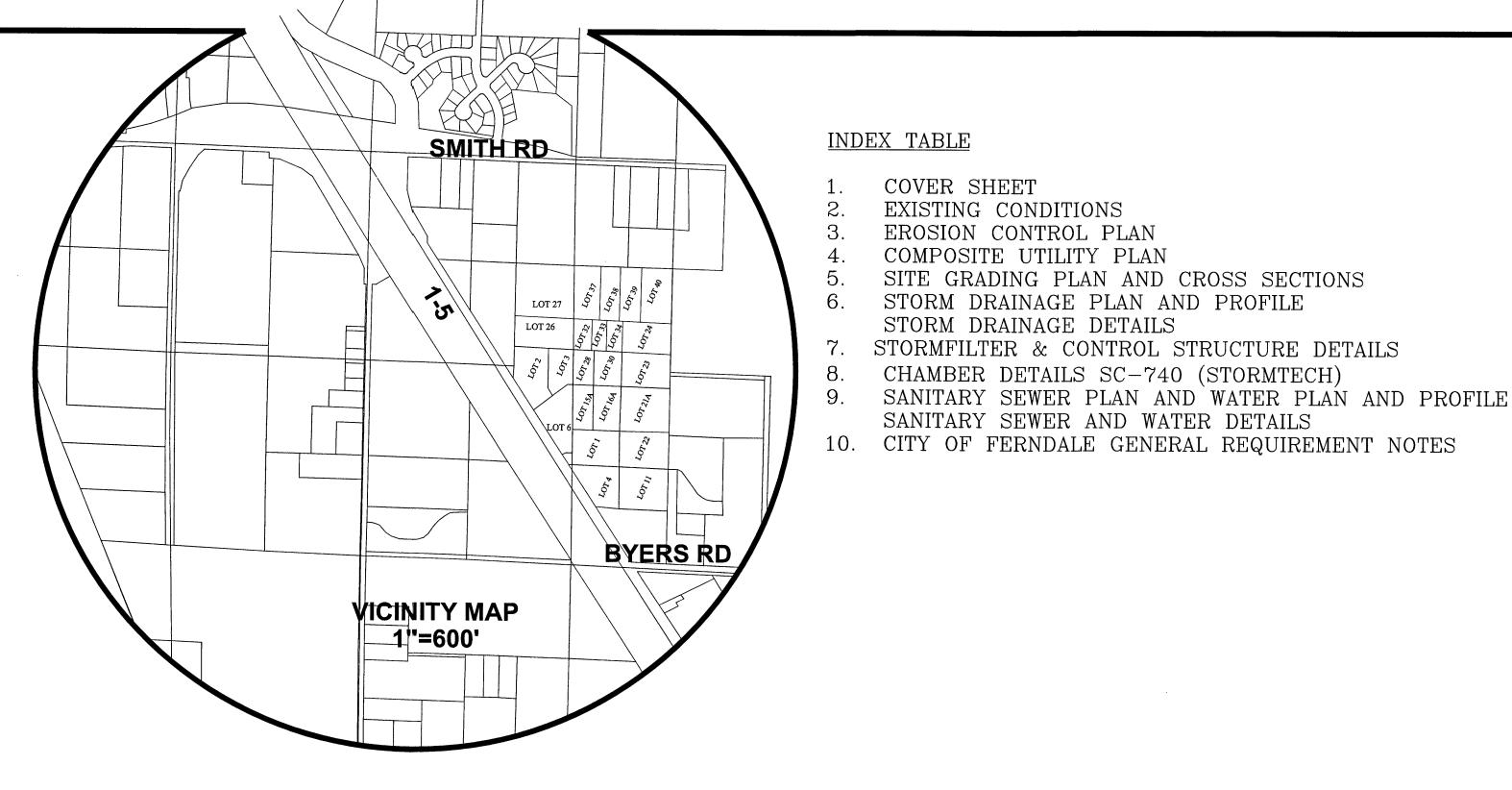


Record Drawings



- 10. CITY OF FERNDALE GENERAL REQUIREMENT NOTES

OWNER/APPLICANT SAM BOULOS P.O. BOX 189

FERNDALE, WA 98248

ENGINEER LDES, INC.

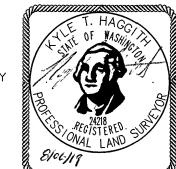
5160 INDUSTIRAL PL., SUITE 108 FERNDALE, WA 98248 CONTACT: RAMON LLANOS, PE. (360) 383-0620

<u>SURVEYOR</u>

5160 INDUSTIRAL PL., SUITE 108 FERNDALE, WA 98248 CONTACT: KYLE HAGGITH, PLS. (360) 383-0620

SURVEYOR'S CERTIFICATION
I CERTIFY THAT THE LOCATIONS, ELEVATIONS, DEPTHS, AND AS-BUILT COMMENTS REFLECTING MATERIALS ACTUALLY USED DURING CONSTRUCTION ACCURATELY REFLECT EXISTING FIELD CONDITIONS AS DETERMINED BY ME OR UNDER MY DIRECT SUPERVISION ON THIS AUG. 6 2219

KYLE HAGGITH, P.L.S.



LEGEND: = PROPERTY CORNER = EXIST SD CATCH BASIN (TYPE I) = EXIST SD CATCH BASIN (TYPE 2) ---UT----UT---- = EXIST UNDERGROUND PHONE T ---- T ---- = EXIST UNDERGROUND TV CABLE = EXIST SANITARY SEWER MANHOLE = EXIST SANITARY SEWER CLEANOUT ----WL ----WL = EXIST WATER LINE = EXIST SANITARY SEWER SERVICE = PROPOSED SANITARY SEWER SERVICE = PROPOSED SEWER CLEANOUT = PROPOSED SEWER MANHOLE = EXISTING WATER METER BOX = EXIST POWER/AND OR UTILITY POLE = EXIST GUY POLE = PROPOSED WATER LINE = PROPOSED WATER VALVE = EXIST POWER METER/STRUCTURE = PROPOSED TEE CONNECTION = EXIST POWER VAULT = PROPOSED TEE CONNECTION = EXIST POWER JBOX/HANDHOLD = EXIST LIGHT POLE = PROPOSED REDUCER -O- = EXIST UTILITY POLE = PROPOSED THRUST BLOCK = PROPOSED WATER METER = EXIST TELEPHONE PEDESTAL = PROPOSED FIRE HYDRANT EXIST TELEPHONE MANHOLE □ MB(1) = EXIST MAIL BOX = PROPOSED 11.25° BEND (MJ) = PROPOSED 45° BEND (MJ) __ = EXIST SIGN = PROPOSED 90° BEND (FL) ABBREVIATIONS: = AS-BUILT = BACK OF WALK = PROPOSED PARKING ASPHALT BOW CO = BACK OF WALK CLEAN OUT = CITY OF FERNDALE = CENTERLINE = EXIST ASPHALT = CONCRETE = CORRUGATED PLASTIC DRAIN PIPE = CRUSHED SURFACING TOP COURSE = DUCTILE IRON = DEPARTMENT OF ECOLOGY PROPOSED UNDERGROUND STORM DRAIN SYSTEM = EXISTING GROUND = ELEVATION = PROPOSED CONTOUR (INDEX) = PROPOSED CONTOUR (NORMAL) = FINISH FLOOR = FINISH GROUND = FORCE MAIN = PROPOSED ECO-BLOCK WALL = GATE VALVE PWR = PROPOSED POWER = FIRE HYDRANT = INVERT ELEVATION = LINEAR FEET = LEFT = MINIMUM = ORDINARY HIGH WATER MARK = PERFORATED PIPE = PERMANENT = PROPOSED = POLYVINYL CHLORIDE PIPE = RIGHT = ROOF AND YARD = STORM DRAIN = SANITARY SEWER CLEAN OUT = SQUARE FEET = SANITARY SEWER MANHOLE

DRAWN BY SR DATE 10/11/2011 CHCKD BY RL DATE 10/11/2011

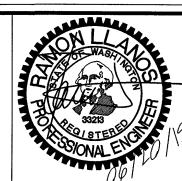
JOB # 9019

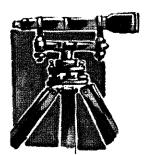
PACIFIC INDUSTRIAL PARK LOT 3

SAM BOULOS FOR: PO BOX 189 FERNDALE WA 98248

APPROVED AUG 0 6 2019 CITY OF FERNDALE

PUBLIC WORKS DEPARTMENT





LDES, INC. **5160 INDUSTRIAL PL #108** FERNDALE, WA 98248 PHONE 360-383-0620 FAX 360-383-0639

COVER SHEET

TEMP.

= STATION

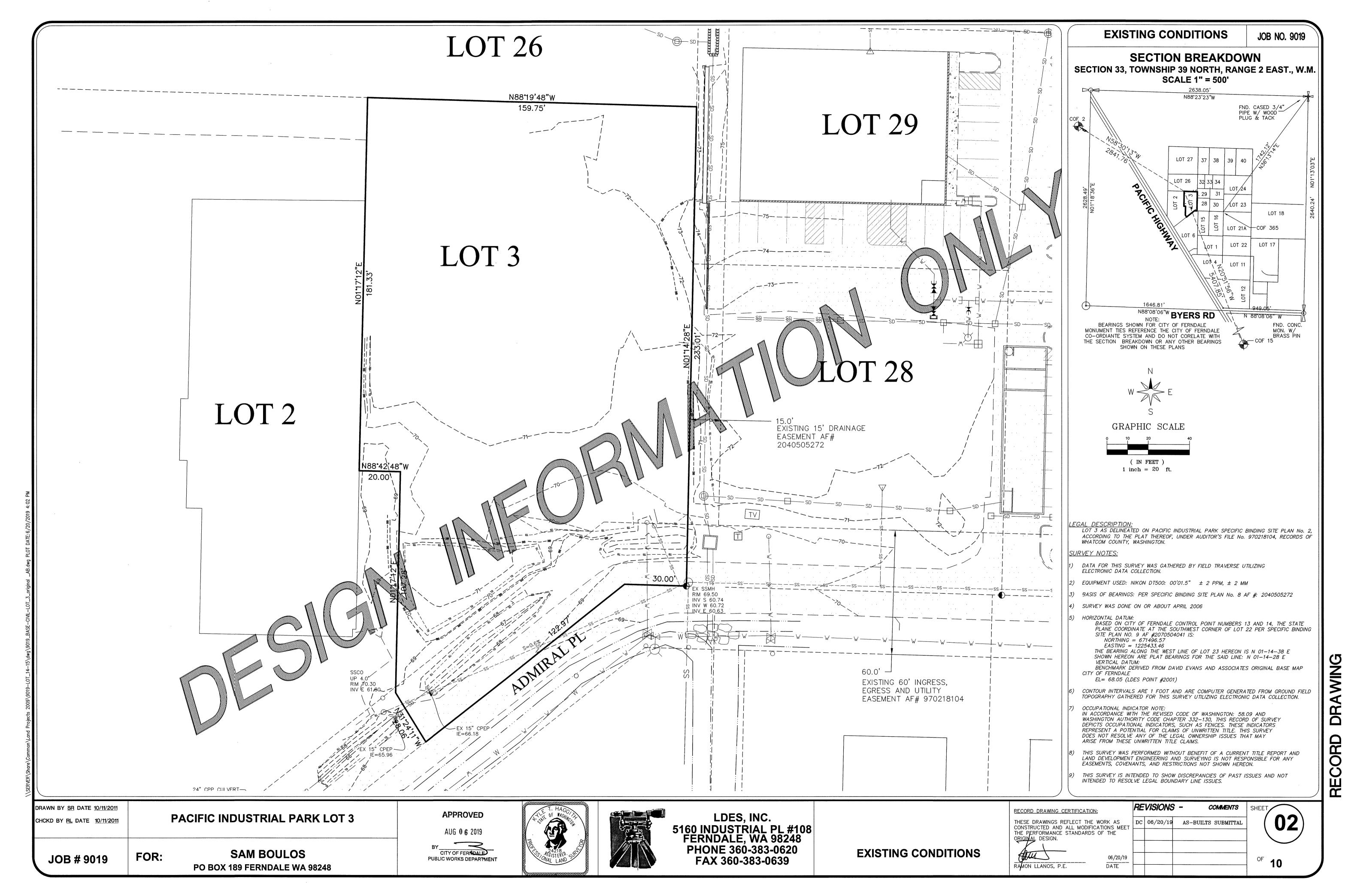
= TEMPORARY

= TOP OF WALL = WATER

= TOP OF ASPHALT = TOP OF CONCRETE

RECORD DRAWING CERTIFICATION:	RE	VISIONS	_	COMMENTS	SHEET
THESE DRAWINGS REFLECT THE WORK AS CONSTRUCTED AND ALL MODIFICATIONS MEEN THE PERFORMANCE STANDARDS OF THE	T DC	06/20/19	AS-BUIL	TS SUBMITTAL	(01
DRIGINAL DESIGN.					
06/20/19 RAMON LLANOS, P.E. DATE					^{OF} 10

[AB] = AS-BUILT INFORMATION



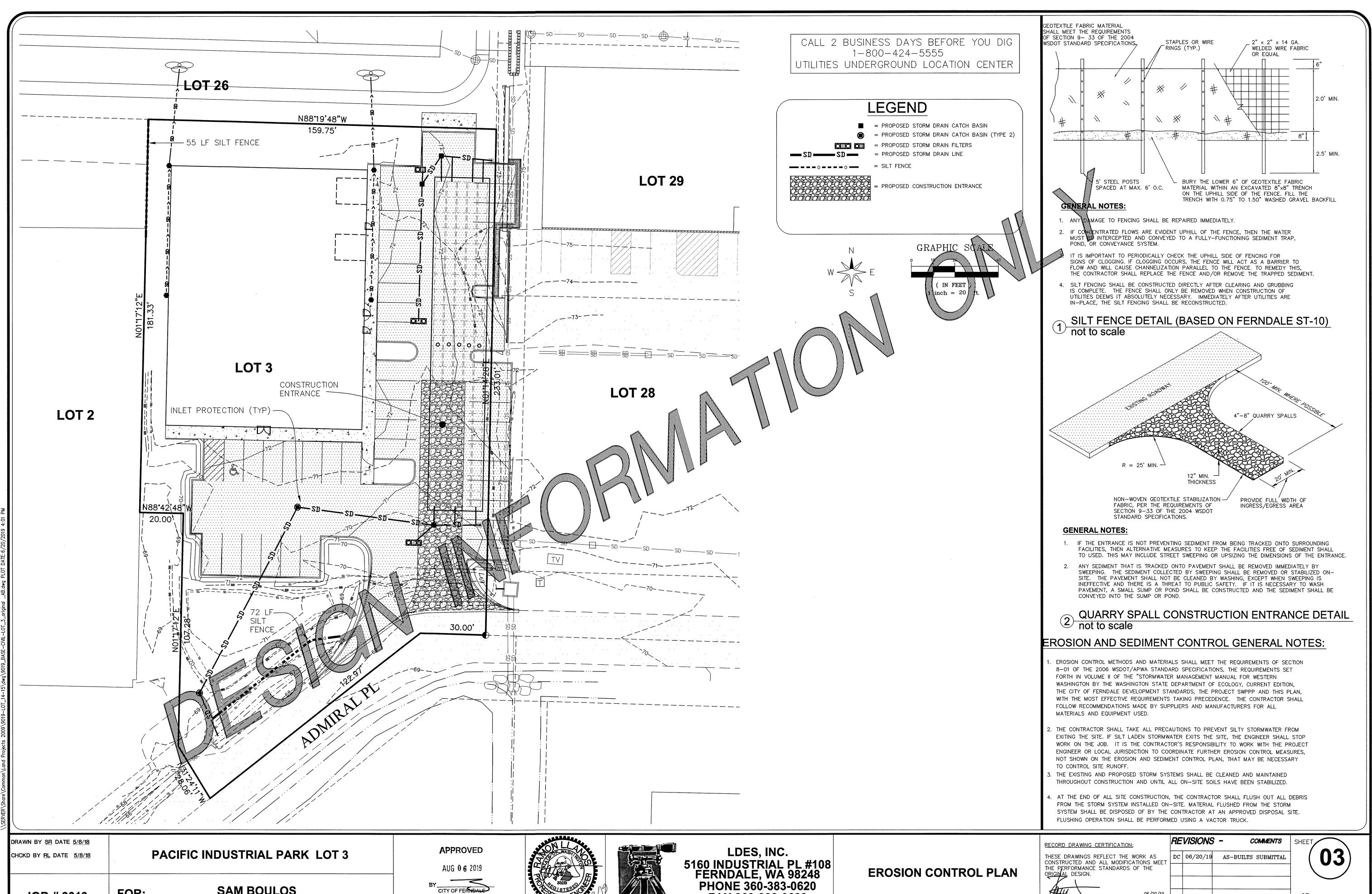


10

06/20/19

DATE

RAMON LLANOS, P.E.



FAX 360-383-0639

CITY OF FERNDALE

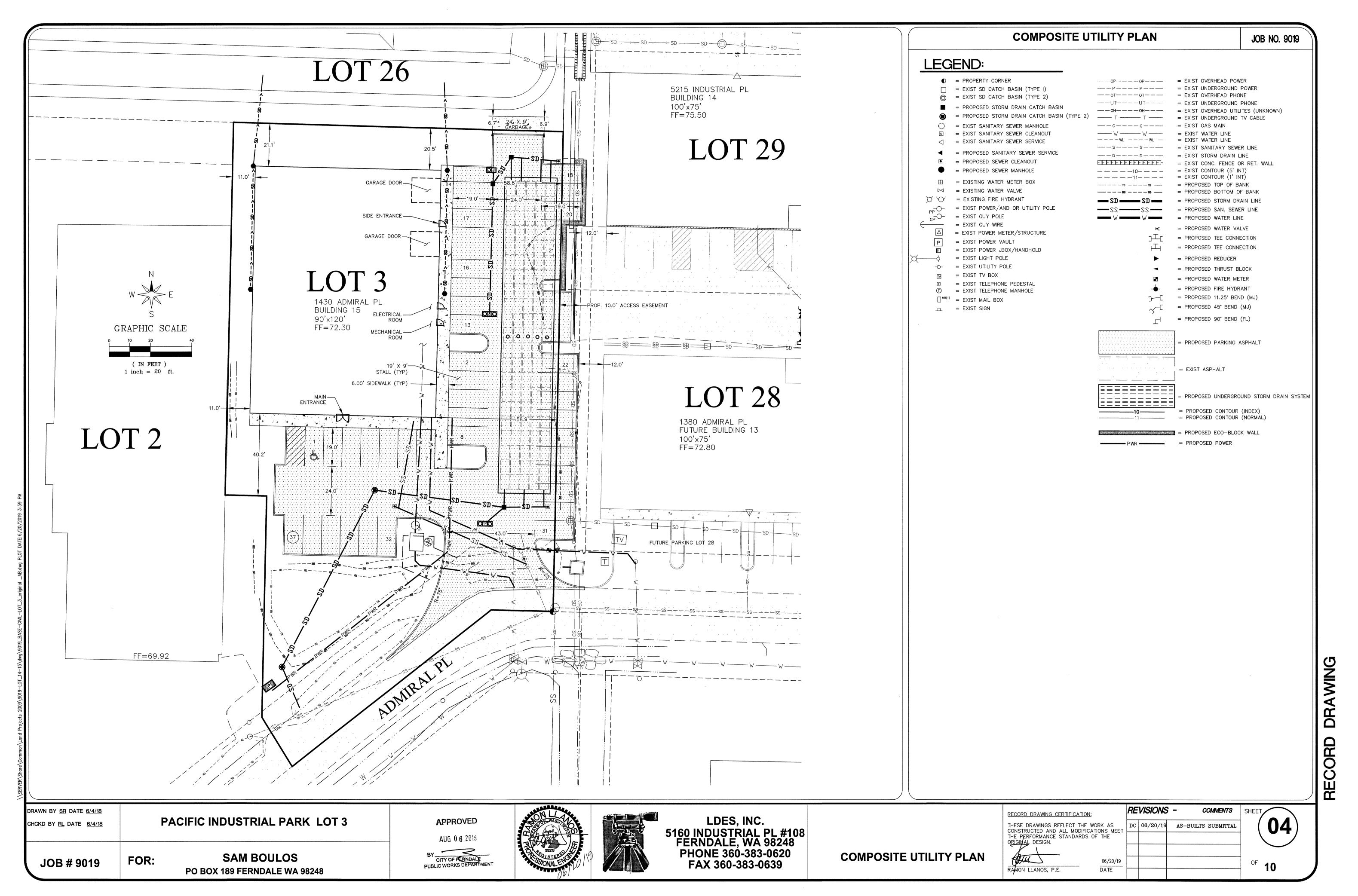
PUBLIC WORKS DEPARTMENT

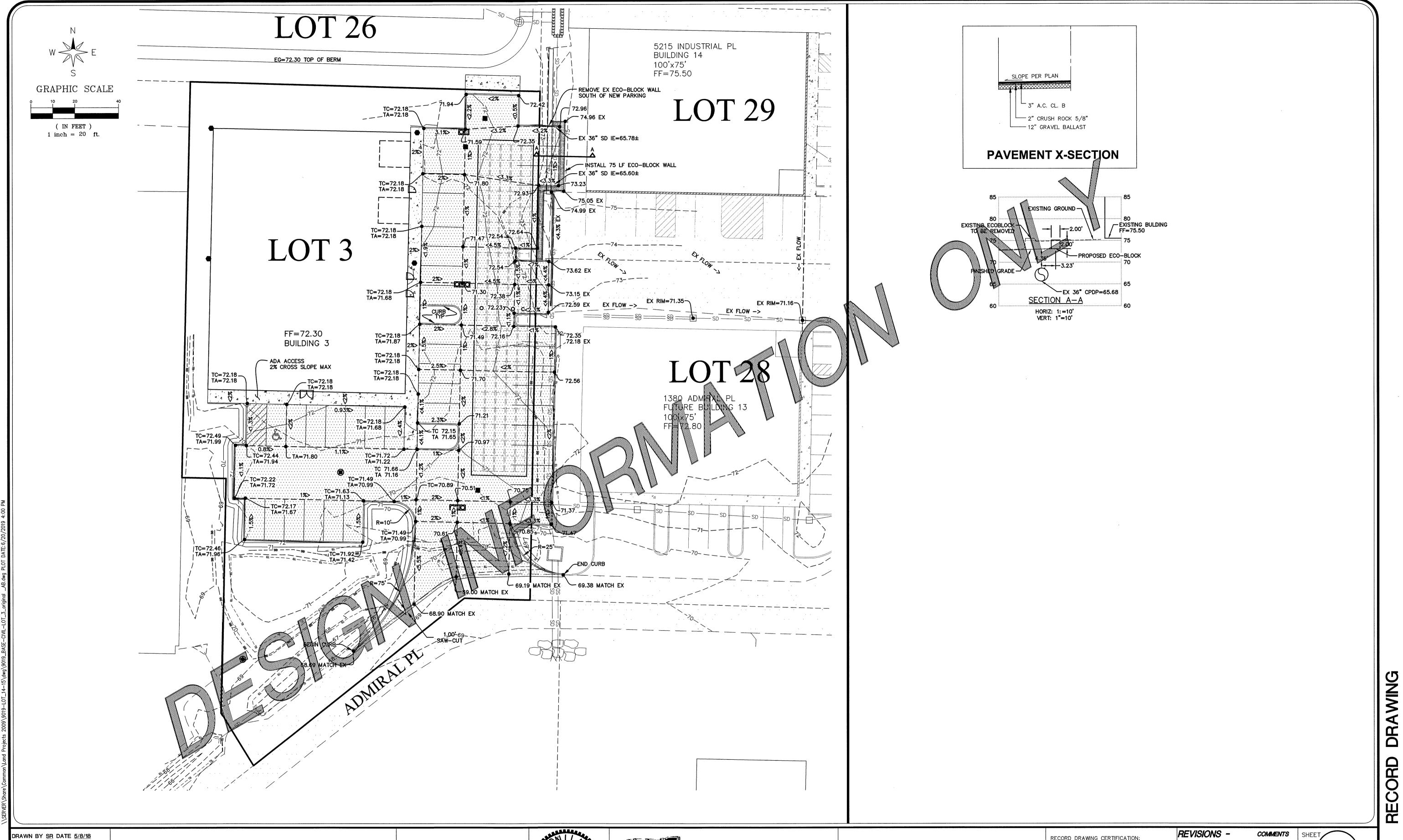
SAM BOULOS

PO BOX 189 FERNDALE WA 98248

FOR:

JOB # 9019



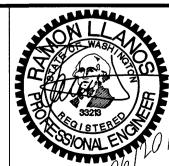


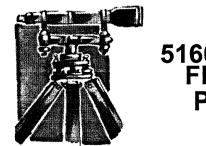
JOB # 9019 FOR:

CHCKD BY RL DATE 5/8/18

SAM BOULOS
PO BOX 189 FERNDALE WA 98248

PACIFIC INDUSTRIAL PARK LOT 3





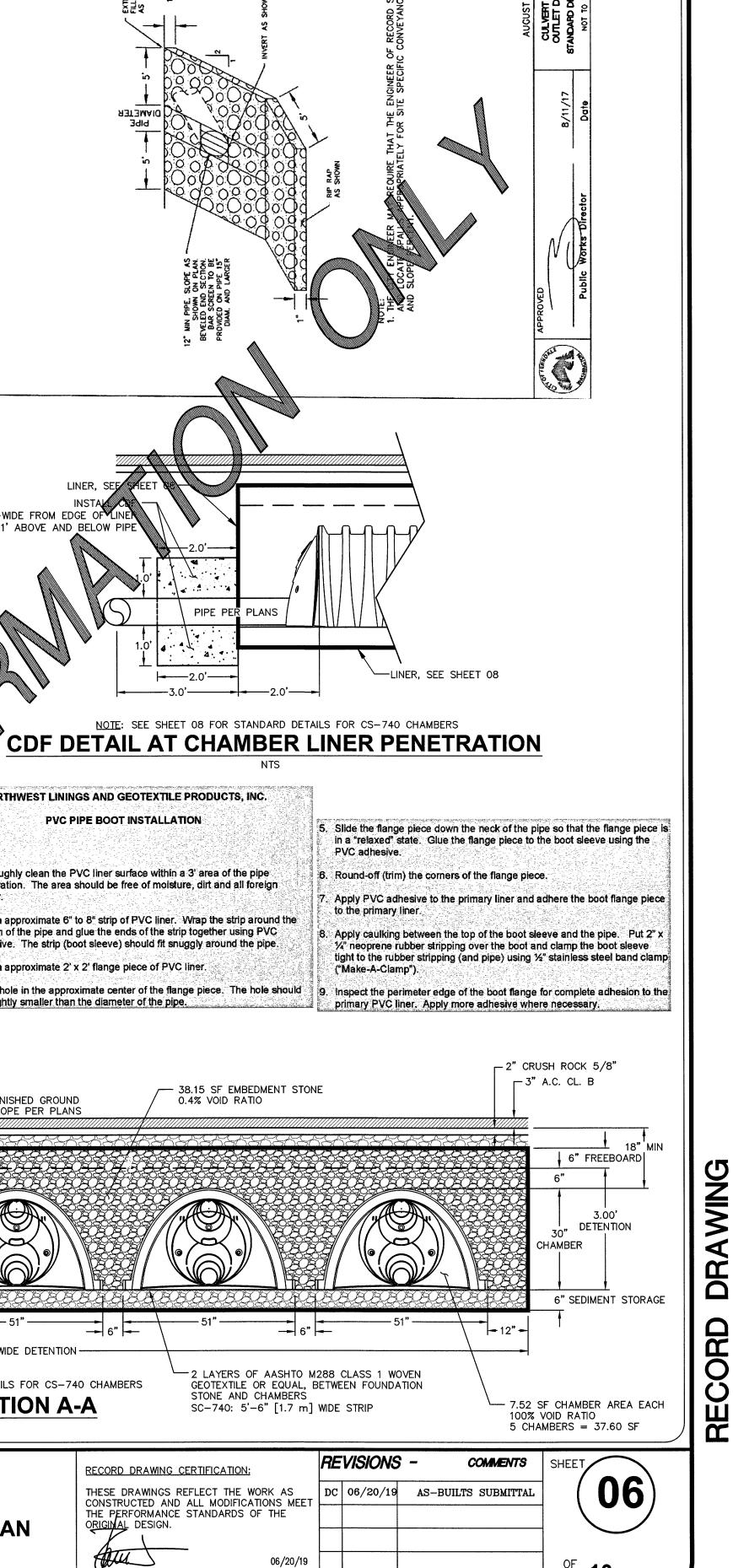
LDES, INC. 5160 INDUSTRIAL PL #108 FERNDALE, WA 98248 PHONE 360-383-0620 FAX 360-383-0639

SITE GRADING PLAN

THESE DRAWINGS REFLECT THE W CONSTRUCTED AND ALL MODIFICATION THE PERFORMANCE STANDARDS CONGINAL DESIGN.

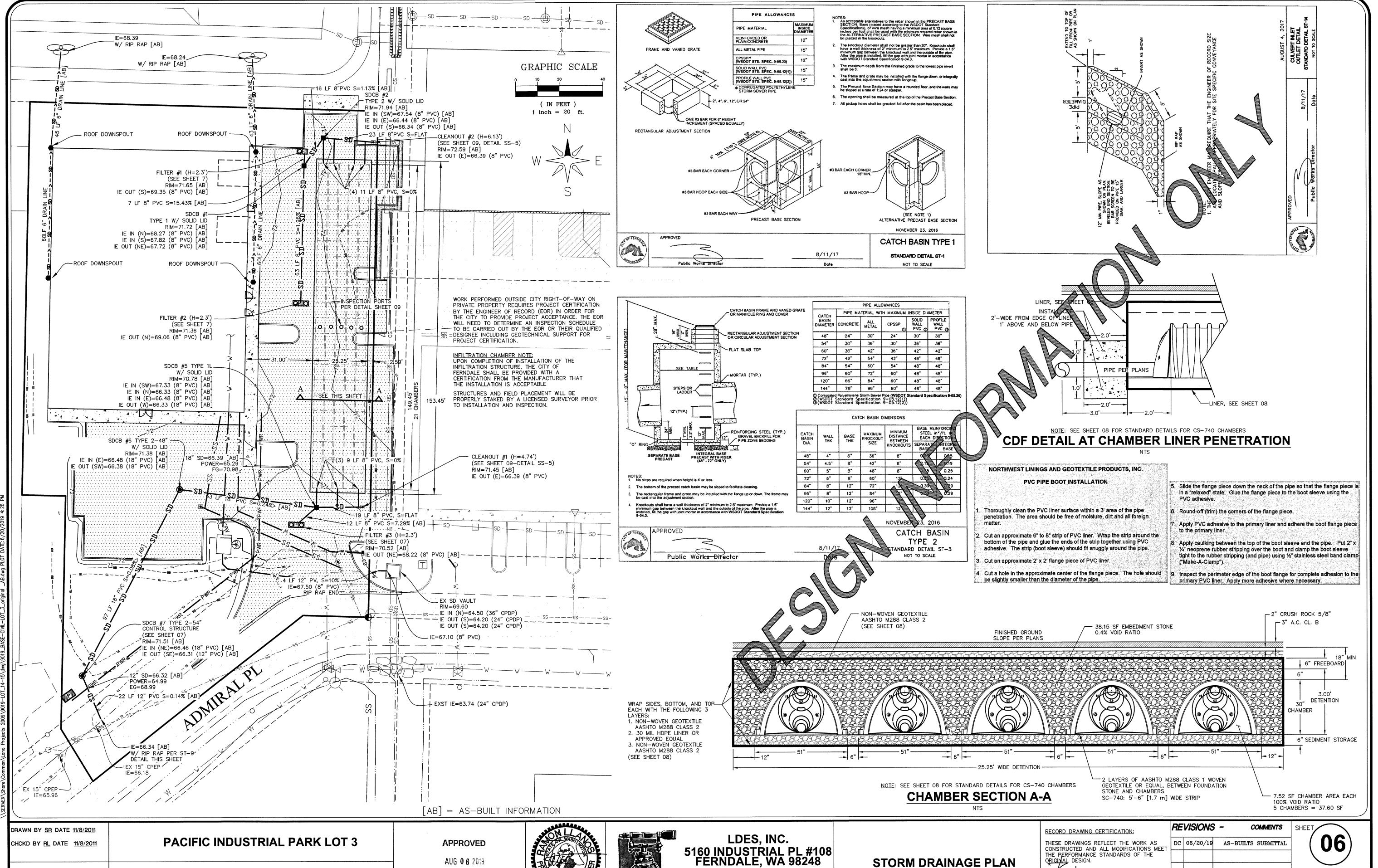
	RECORD DRAWING CERTIFICATION:			
	THESE DRAWINGS REFLECT THE WORK AS CONSTRUCTED AND ALL MODIFICATIONS MEET	DC	06/20/19	AS-BUILTS SUBMITTAL
	THE PERFORMANCE STANDARDS OF THE ORIGINAL DESIGN.			
	06/20/19			
	RAMON L'ANOS, P.E. DATE			
•••				

SHEET 05



DATE

RAMON LLANOS, P.E.



PHONE 360-383-0620

FAX 360-383-0639

CITY OF FERNDALS
PUBLIC WORKS DEPARTMENT

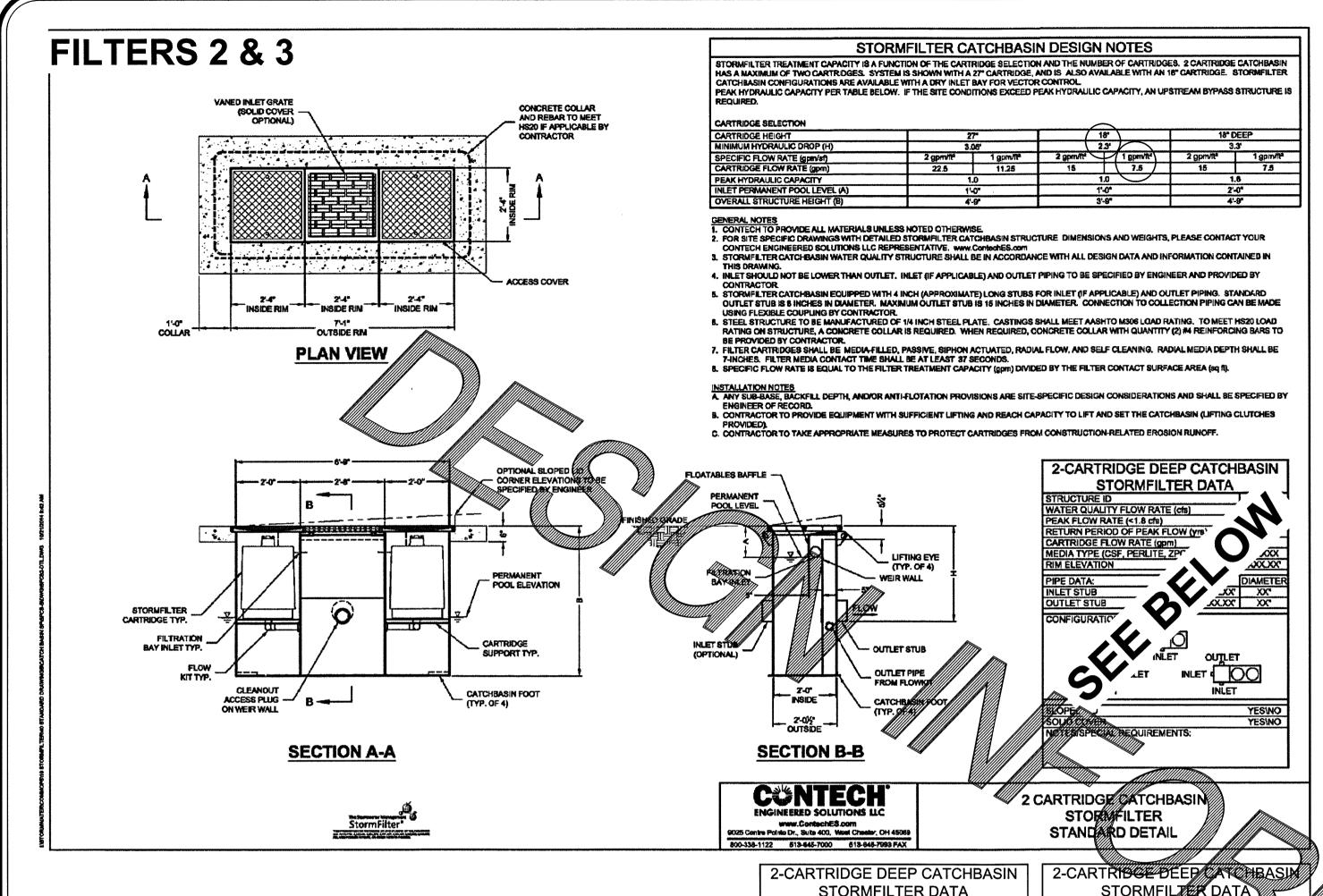
SAM BOULOS

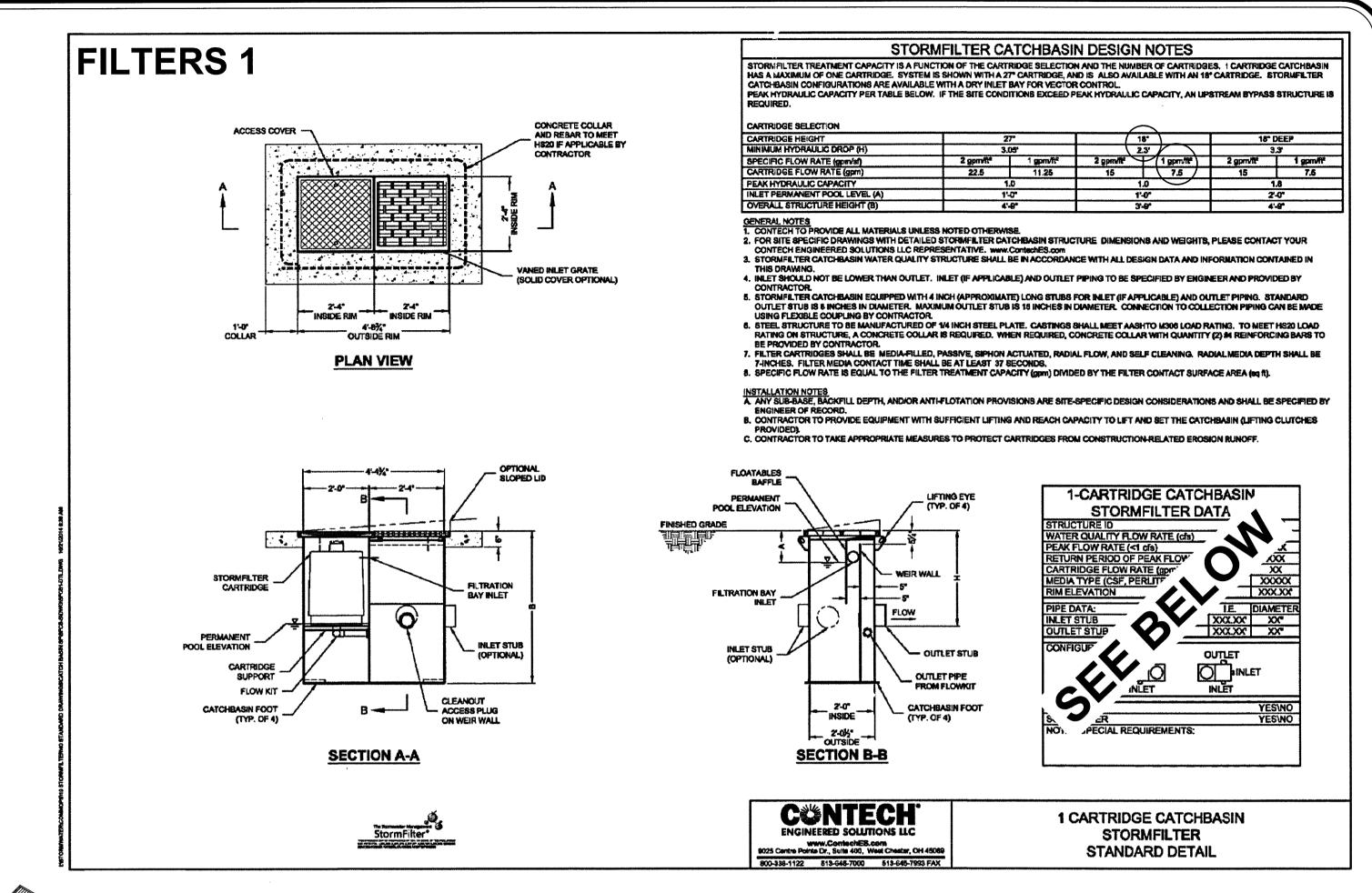
PO BOX 189 FERNDALE WA 98248

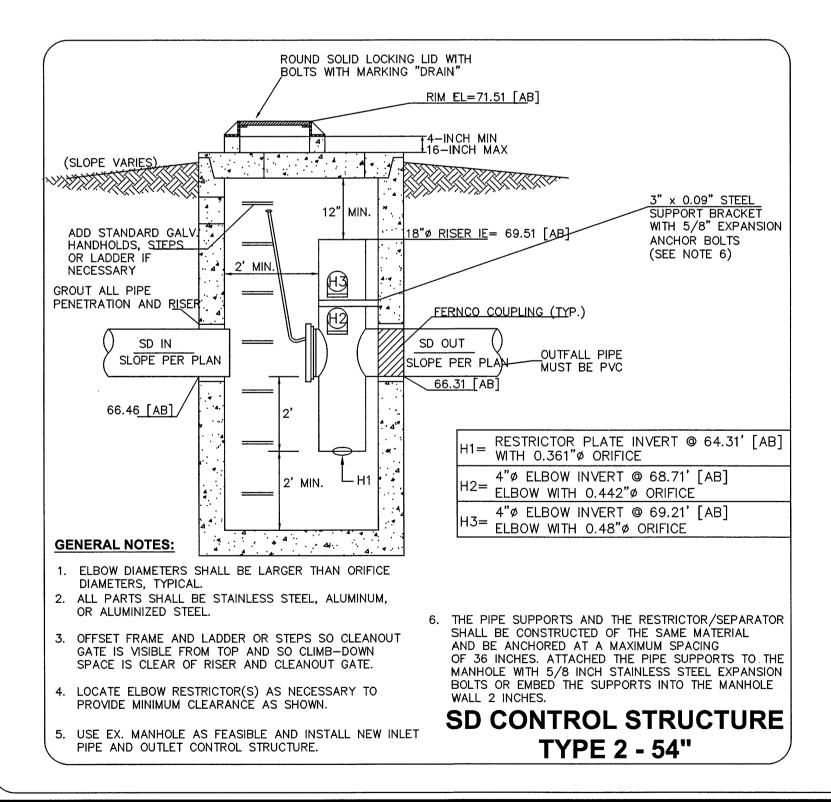
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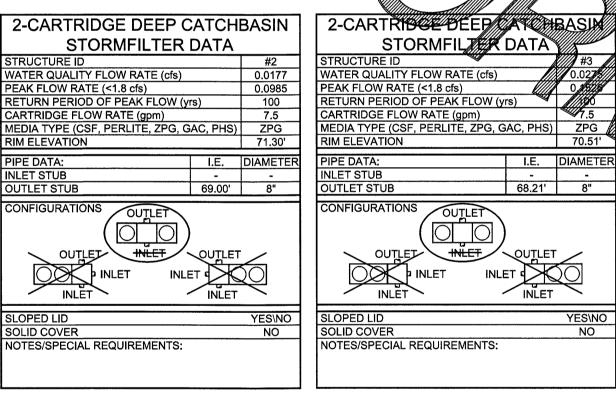
JOB # 9019

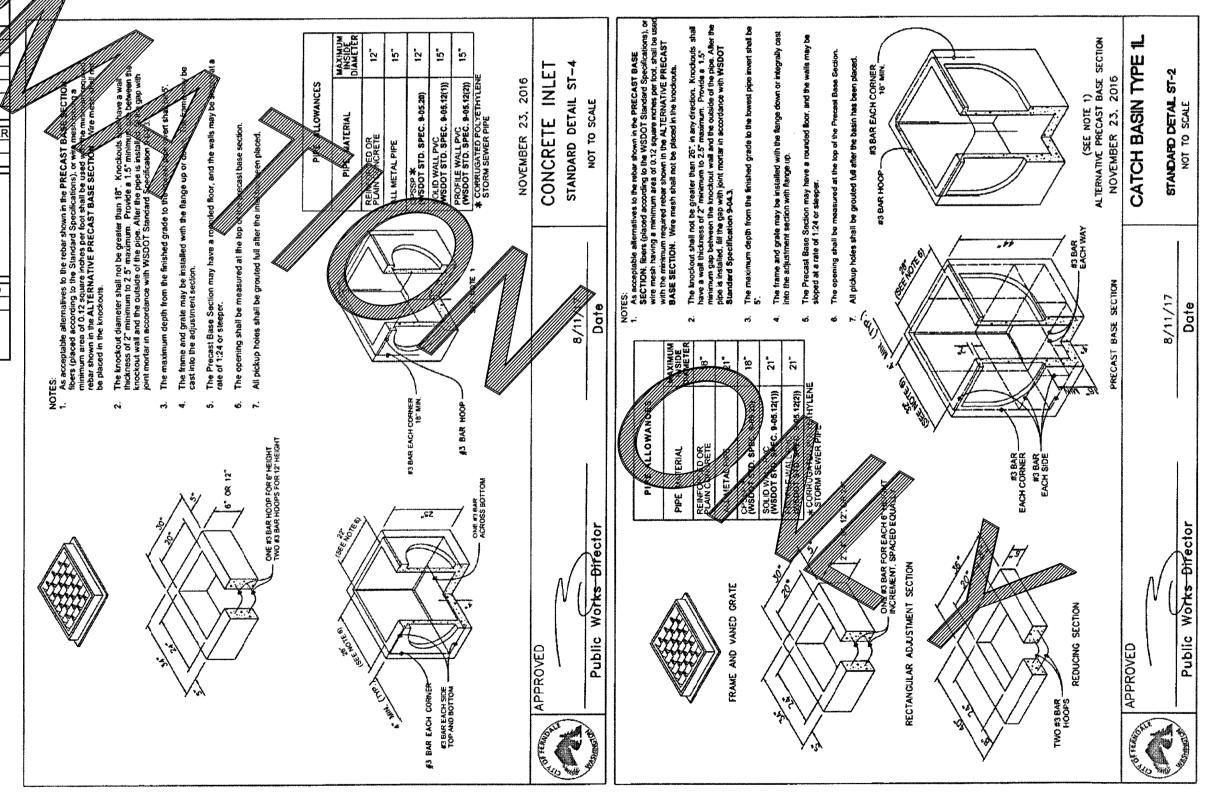
DETAILS











ſ	1-CARTRIDGE CATCHBASIN				
	STORMFILTER DATA				
- 1	STRUCTURE ID	#1			
	WATER QUALITY FLOW RATE (cfs)		0.0061		
- 1	PEAK FLOW RATE (<1 cfs)		0.0352		
- 1	RETURN PERIOD OF PEAK FLOW (yrs)	100			
- 1	CARTRIDGE FLOW RATE (gpm)	7.5			
- 1	MEDIA TYPE (CSF, PERLITE, ZPG, GA	ZPG			
	RIM ELEVATION		71.59'		
	PIPE DATA:	I.E.	DIAMETER		
	INLET STUB	•	-		
	OUTLET STUB	69.29'	8"		
	(INLET ()	DUTLET	ET \		
	SLOPED LID SOLID COVER		YES\NO YES\NO		
	NOTES/SPECIAL REQUIREMENTS:				

DRAWN BY <u>SR</u> DATE <u>10/11/2011</u>

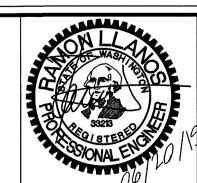
CHCKD BY <u>RL</u> DATE <u>10/11/2011</u>

JOB # 9019

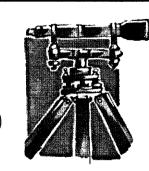
FOR:

PACIFIC INDUSTRIAL PARK LOT 3

SAM BOULOS
PO BOX 189 FERNDALE WA 98248



APPROVED



LDES, INC. 5160 INDUSTRIAL PL #108 FERNDALE, WA 98248 PHONE 360-383-0620 FAX 360-383-0639

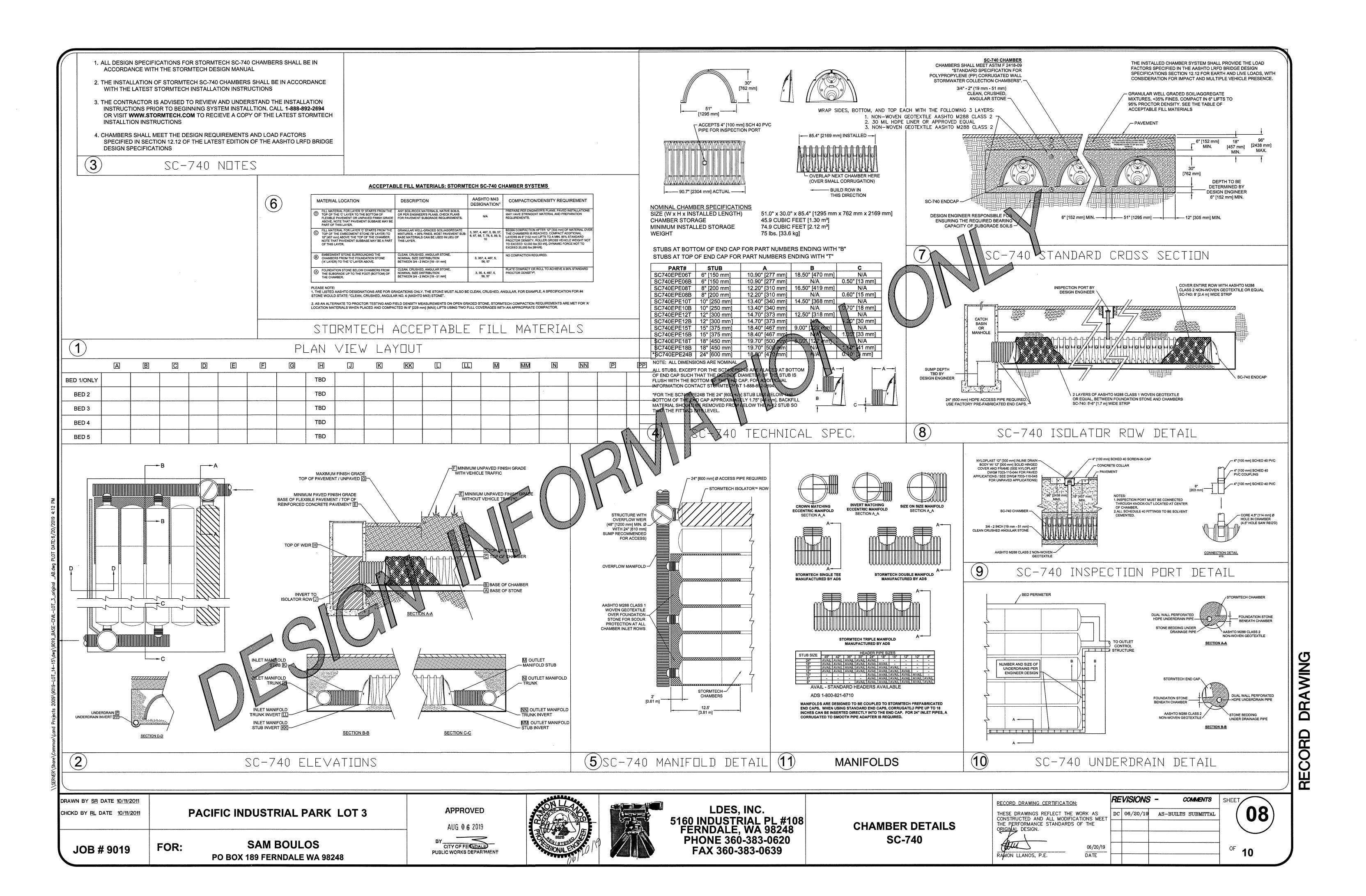
STORMFILTER & CONTROL STRUCTURE DETAILS

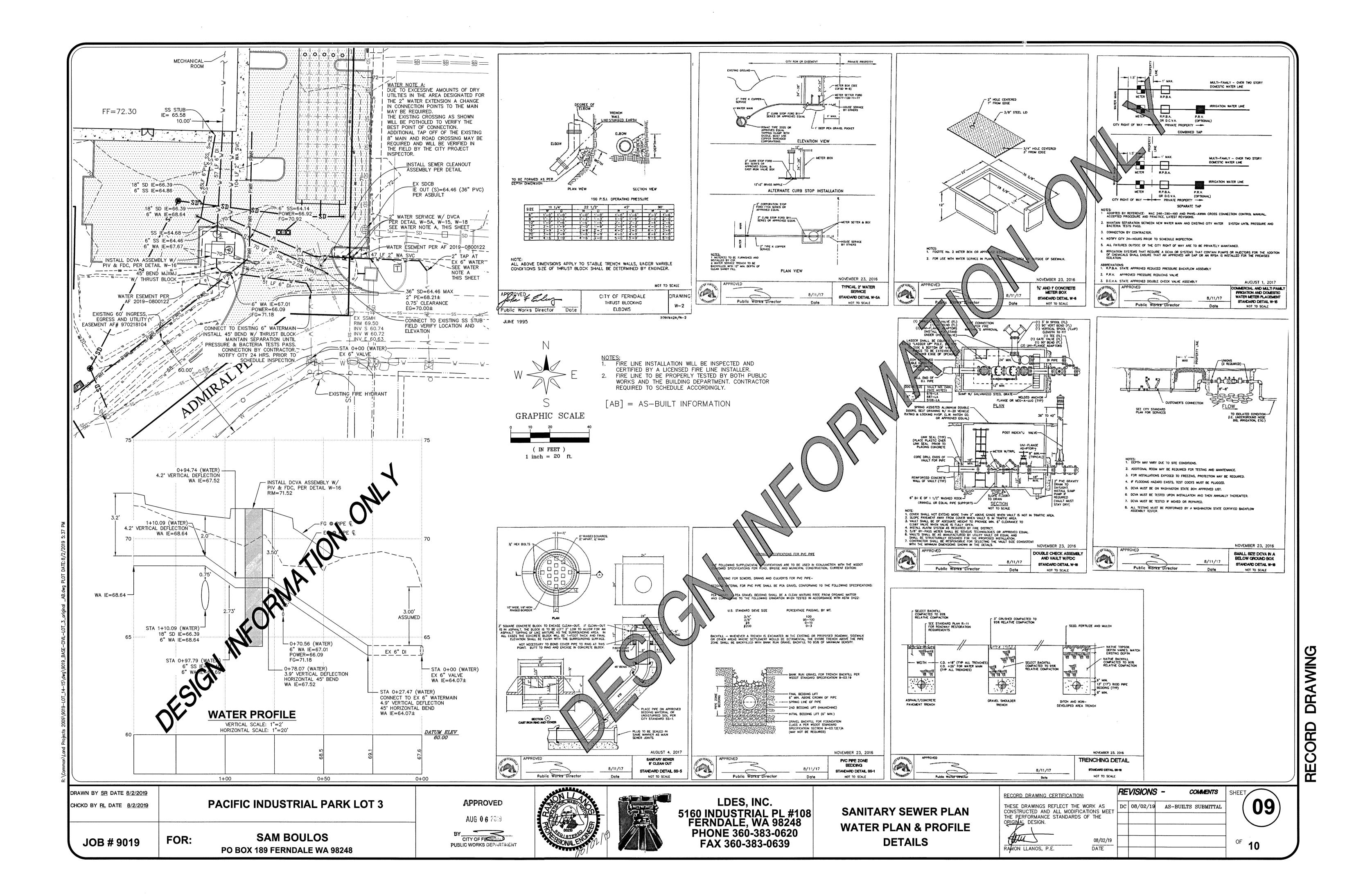
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	THE PERFORMANCE STANDARDS OF THE ORIGINAL DESIGN.			
	06/20/19			
	RAMON LLANOS, P.E. DATE			

O6/20/19 AS-BUILTS SUBMITTAL

OF 10

RECORD DRAWING





GENERAL REQUIREMENTS:

- 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 2005 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
- 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 PLANS AND THE LOCATION OF ANY EXISTING UTILITIES. 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 ACTIVITIES. 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. 10. 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
- 11. 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.
- . 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
- . COMPLETION OF BALLAST COURSE PLACEMENT
- 5. COMPLETION OF CRUSHED SURFACING COURSE PLACEMENT . 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.
- . 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 PROPERTY IN CONNECTION WITH THE PERFORMANCE OF WORK COVERED 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. 13. 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 14. 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
- POT HOLING PUBLIC UTILITIES IS REQUIRED PRIOR TO CONSTRUCTION TO INSURE CITY UTILITY REQUIREMENTS CAN BE MET. AS-BUILT INFORMATION ON THE CITY'S DATA BASE IS NOT ALWAYS ACCURATE. THE CITY WILL NOT BE HELD RESPONSIBLE FOR CONTRACTOR NEGLIGENCE IN THIS REGARD THAT MAY RESULT IN HIGHER CONSTRUCTION COSTS OR LIMITED OPTION FOR MODIFICATION.

UNDERGROUND UTILITIES CONSTRUCTION:

- 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
- 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
- DEVELOPMENT STANDARDS. ALL UTILITY TRENCHES IN THE RIGHT OF WAY SHALL BE BACKFILLED WITH BANK RUN GRAVEL CAPPED WITH
- 5/8-INCH MINUS WELL GRADED CRUSHED ROCK. TÉSTING OF NEW WATER LINES, STORM SEWER SYSTEMS SHALL NOT BE PERFORMED UNTIL ALL OTHER ADJACENT UTILITIES HAVE BEEN INSTALLED.
- 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." 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 FILL. 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

EARTHWORK:

FACILITATE REQUIRED AS-BUILT SURVEY.

- 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
- THE GRADED AND COMPACTED SURFACE OF THE CRUSHED SURFACING TOP COURSE SHALL BE WITHIN 1/2
- INCH OF FINISHED GRADE. 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

STORM DRAINGAGE:

- THE FOLLOWING STANDARD DETAILS SHALL BE USED FOR CONSTRUCTION OF STORM DRAIN IMPROVEMENT WSDOT STD. DETAILS B-5.20, B-5.40 OR WSDOT STD. DETAILS B-5.20, B-5.40 OR CATCH BASINS TYPE 1, 1L OR 2 "RESIDENTIAL SERVICE LINE" COFSD ST-7 (CITY OF FERNDALE SID DETA
- COFSD ST-16 (CITY OF FERNDALE STATEMENT CATCH BASINS
- (CPEP); ALL OTHER STORM SEWER PIPE SHALL BE PVC. 3. ALL CATCH BASIN GRATES SHALL INCLUDE THE STAMPING "OUTFALL TO STREAM, D
- 4. CONTROL DENSITY FILL SHALL BE USED IN AREAS WHERE LESS THAN 10 MAINTAIN MAINTAIN
- THE PROPOSED STORM PIPES (PIPE IS IN ROAD BASE SECTION), AS ALLOWN THE PIPE MAY BE USED FOR STORM PIPES WITH LESS THAN 24" OF COMPRETED BY THE CONFORM TO THE MANUFACTURER'S RECOMMENDATIONS TRAVELING OVER THE PIPE. NO ADDITIONAL COMPEN
- DURING CONSTRUCTION ACTIVITIES. AT THE END OF ALL SITE CONSTRUCTION, BASINS AND STORMWATER CONVEYANCES.
- OFF-SITE STORMWATER SYSTEMS. POSITIVE LOT DRAINS PER STAND

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 WATER SERVICE
- 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 250 PSI AND SHALL BE DONE ACCORDING TO CITY OF FERNDALE
- 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.

REQUIREMENTS. THE CITY OF FERNDALE LABORATORY SHALL CONDUCT ALL DISINFECTION TESTS AND

- ALL PIPES SHALL HAVE A MINIMUM COVER OF 36". ALL VALVES SHALL BE EITHER GATE OR BUTTERFLY TYPE VALVES AND SHALL BE INSTALLED WITH SLIP TYN 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 PSL AND SUITABLE FOR DIRECT BURIAL ARE SPECIFIED. GATE VALVES SHALL BE RESILIENT SEATED IRONANDE FULL-BRONZE MOUNTED VALVES CONFORMING TO AWWA C509 AND SUITABLE FOR SERVICE WITH WITH TAX PE AND CLASS OF PIPE USED. ALL VALVES SHALL HAVE NON-RISING STEMS AND SHALL AREA COUNTERCLOCKWISE AND SHALL BE EQUIPPED WITH A 2 INCH SQUARE OPERATING FLANGE OR M.J. JOINTS. VALVE MARKERS SHALL BE LOCATED OUTSIDE OF PAVENCINA
- WATER SERVICE TAP INSTALLATIONS SHALL MEET THE REQUIREMENTS OF THE CANDO 12. FIRE HYDRANTS AND FIRE MAINS MUST CONFORM TO COFDS- SD W-1 (WSDOT STANDARDS:
- A. FIRE HYDRANTS SHALL HAVE TWO INDIVIDUALLY VALVED 2-1/2" PORTS AND ONE 5-1/4" OPENING. A 4-1/2" NST PUMPER NOZZLE AND A 5" STORZ PORT WITH CAP AND ARTURAL SHALL BE SUPPLIED. HYDRANTS SHALL BE EITHER IOWA OR M.H. 929T HYDRANTS. FIRE HYDRANTS SHALL HAVE THE STORZ PORT FACING THE REQUIRED ACCESS AND THE PASE
- THE HYDRANT MUST BE SET A MAXIMUM 2" ABOVE GRANT LEVEL OF THE RECURSED AND ESS.
 IF THE PUBLIC WORKS DIRECTOR DETERMINATION FIRE HYDRANTS ARE VULNE TO VEHICULAR DAMAGE, APPROPRIATE CRASH POSTS SHALLING PROVIDENT NO OBSTRUCTIONS SHALL EXIST WITHIN A
- 3-FOOT WORKING AREA OF EACH PRINCIPLE HE MIDRANU CHADE. HYDRANT SHUTOFF VALVES SHAL

 HE MIDRANU CHADE. HYDRANT SHUTOFF VALVES SHAL

 SALET BE INSTRUCTED. SUCH INSPECTION SHALL INCLUDE

 A TO PRESSURA TESTING TO A MIN. OF 250 PSI. A FLOW

 IS TO PROPERTY. A MIN. OF 3' IN HEIGHT WITH MIN. BE LOCATED BETWEEN 5' AND 20' FROM HE
- UNDERGROUND SUPPLIES VISUAL INSPECTION PI TRE HYDRANNING TEST WILL BE THOU FIRE HYDRANGE MUS N INSTALLATION
- OPTHABLE CONDITION AT ALL TIMES AND MUST BE REPAIRED SHALL BE FULLY OPERABLE BEFORE CONSTRUCTION MAINTAINED IN HYDRAN

ROAD:

- 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 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. 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 CONCRETE SIDEWALK SHALL BE CONSTRUCTED AS SHOWN ON THE PLANS OR AS DESIGNATED BY THE FNGINEER IN ACCORDANCE WITH CITY STANDARDS, DRAWING NO. R-12.
- CEMENT CONCREMENT DRIVEWAYS SHALL BE 6 INCHES THICK AND CONSTRUCTED WHERE SHOWN ON THE PLANS OR DESIGNATED THE ENGINEER IN ACCORDANCE WITH THE CITY STANDARDS, DRAWING NO. R-15. A 2-INCH LATER OF 14 INCH DRAIN ROCK SHALL BE USED FOR DRIVEWAY BEDDING. CEMENT CONCRETE CURB AND GUTTER SHALL BE CONSTRUCTED WHERE SHOWN ON THE PLANS OR AS BACTERIOLOGICAL TESTS. THE PIPE WILL NOT PASS TESTING UNLESS A ZERO BACTERIAL COUNT IS MEASURED
 - STANKED BY THE ENGINEER, IN ACCORDANCE WITH WSDOT STANDARDS SPECIFICATIONS, SECTION 8-04 AND LE STANDARDS, DRAWING R-8 AND R-9. HANDICAP RAMPS SHALL BE CONSTRUCTED PER AND PLANS F-40. WHERE NEW CEMENT CONCRETE CURB AND GUTTER IS CONNECT TO WSDOT
 - EXISTING CONTINUAND GUTTER, ASSURE THAT NO ABRUPT OFFSETS IN LINE OR GRADE SHALL BE CONSTRUCTED WHICH WILL BENUNSIGHTLY OR IMPEDE FLOW IN THE GUTTER LINE. PAVEMENT:
 - A. SOIL AMBIDUAL HERBICIDE SHALL BE PLACED WITHIN 24 HOURS OF PAVING.
 - B. A TACHICOAT 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. WHERE NEWLY CONSTRUCTED PAVING MEETS EXISTING PAVING, THE APPLICANT SHALL PROVIDE A SMOOTH TRANSITION FROM EXISTING TO PROPOSED PAVING. CONTRACTOR SHALL COLD PLANE PER DIMENSIONS SPECIFIED ON THE PLANS, AND INSTALL A MINIMUM 2-FOOT WIDE PETROTAC PAVING FABRIC, OR EQUIVALENT, OVER JOINT BETWEEN PAVING
 - THRU-CURB BASINS AND THRU-CURB INLETS CONFORMING TO THE WSDOT STANDARD SPECIFICATIONS, SECTION 7-05 SHALL BE CONSTRUCTED AT THE LOW POINT OF THE CURB FLOW LINES AND TO THE LOCATIONS, DIMENSIONS, AND DETAILS AS SHOWN ON THE PLANS OR DESIGNATED BY THE ENGINEER AND CITY
 - STANDARDS, DRAWING NO. R-8. TRENCH 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
 - 14. PERFORATED UNDERDRAIN PIPE SHALL MEET THE WSDOT STANDARD SPECIFICATION 7-01.3(2)

SANITARY SEWER SYSTEMS:

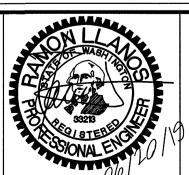
TO THE SERVICE STUB BY A #12 COPPER WIRE.

- 1. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH CITY OF FERNDALE STANDARD SPECIFICATIONS AND DETAILS, A.P.W.A. STANDARD SPECIFICATIONS, AND WSDOT STANDARD SPECIFICATIONS, MOST RECENT EDITIONS. SANITARY SEWER SYSTEM INSTALLATION, BOTH PUBLIC AND PRIVATE, IS SUBJECT TO CITY REVIEW
- AND APPROVAL ALL WORK MUST BE INSPECTED TO THE SATISFACTION OF THE CITY OF FERNDALE. 24 HOUR NOTICE MUST BE GIVEN PRIOR TO STARTING WORK. TESTING OF THE SEWER SYSTEM AND ALL CONNECTIONS TO EXISTING MAINS SHALL BE PERFORMED IN THE PRESENCE AND UNDER THE SUPERVISION OF A CITY OF FERNDALE REPRESENTATIVE
- SANITARY SEWER MAINS SHALL BE A MINIMUM 8 INCH DIAMETER PVC PIPE (SDR-35) CONFORMING TO THE PROVISIONS OF ASTM D 3034 AND INSTALLED TO CITY SPECIFICATIONS.
- SANITARY SEWER PIPE BEDDING SHALL BE PEA GRAVEL PER COFSD SS-1. ALL TRENCHES SHALL BE BACKFILLED WITH CLASS B BANK RUN GRAVEL WITHIN CITY RIGHT OF WAY AND TRAVELED WAYS OUTSIDE OF RIGHT OF WAY (ACCESS EASEMENTS) AND SHALL BE COMPACTED TO A MINIMUM DENSITY OF 95% MODIFIED PROCTOR. USE OF SUITABLE NATIVE BACKFILL OUTSIDE OF TRAVELED WAY SHALL BE SUBJECT TO
- ALL MANHOLES SHALL BE INSTALLED PER CITY OF FERNDALE STANDARD DETAILS AND SHALL BE PRE-CHANNELED. MANHOLE CONES ARE TO BE OFFSET SUCH THAT LADDER RUNGS ARE PARALLEL TO THE
- 6. ALL SIDE SEWERS SHALL BE INSTALLED PER CITY OF FERNDALE STANDARD DETAILS SS-6, SS-8 OR SS-13, EXCEPT THAT SINGLE SIDE SEWERS SHALL HAVE A MINIMUM DIAMETER OF 4".
- CONTRACTOR SHALL EXTEND SEWER STUBS 5 FT BEYOND UTILITY CORRIDOR OR 15 FEET BEYOND 8. EACH SIDE SEWER STUB SHALL BE CAPPED WITH A WATERTIGHT PLUG. EACH STUB SHALL BE MARKED FOR LOCATION WITH A 2" DIA. PVC PIPE (MIN. SCHEDULE 40) WITH THE TOP 18" PAINTED GREEN AND STENCILED WITH THE WORD "SEWER" AND THE PIPE INVERT INDICATED. THE LOCATION MARKER SHALL BE CONNECTED

CALL 2 BUSINESS DAYS BEFORE YOU DIC 1-800-424-5555 UTILITIES UNDERGROUND LOCATION CENTER

DRAWN BY <u>SR</u> DATE <u>10/11/2011</u> **PACIFIC INDUSTRIAL PARK LOT 3** CHCKD BY RL DATE 10/11/2011 SAM BOULOS FOR: PO BOX 189 FERNDALE WA 98248 **JOB # 9019**







LDES, INC. 5160 INDUSTRIAL PL #108 FERNDALE, WA 98248 PHONE 360-383-0620 FAX 360-383-0639

CITY OF FERNDALE GENERAL REQUIREMENT NOTES

	RECORD DRAWING CERTIFICATION:	RE	REVISIONS -		
	THESE DRAWINGS REFLECT THE WORK AS CONSTRUCTED AND ALL MODIFICATIONS MEET	DC	06/20/19	A	
	THE PERFORMANCE STANDARDS OF THE ORIGINAL DESIGN.				
•					
•	06/20/19				

RAMON LLANOS, P.E.

DC 06/20/19 AS-BUILTS SUBMITTAI

COMMENTS