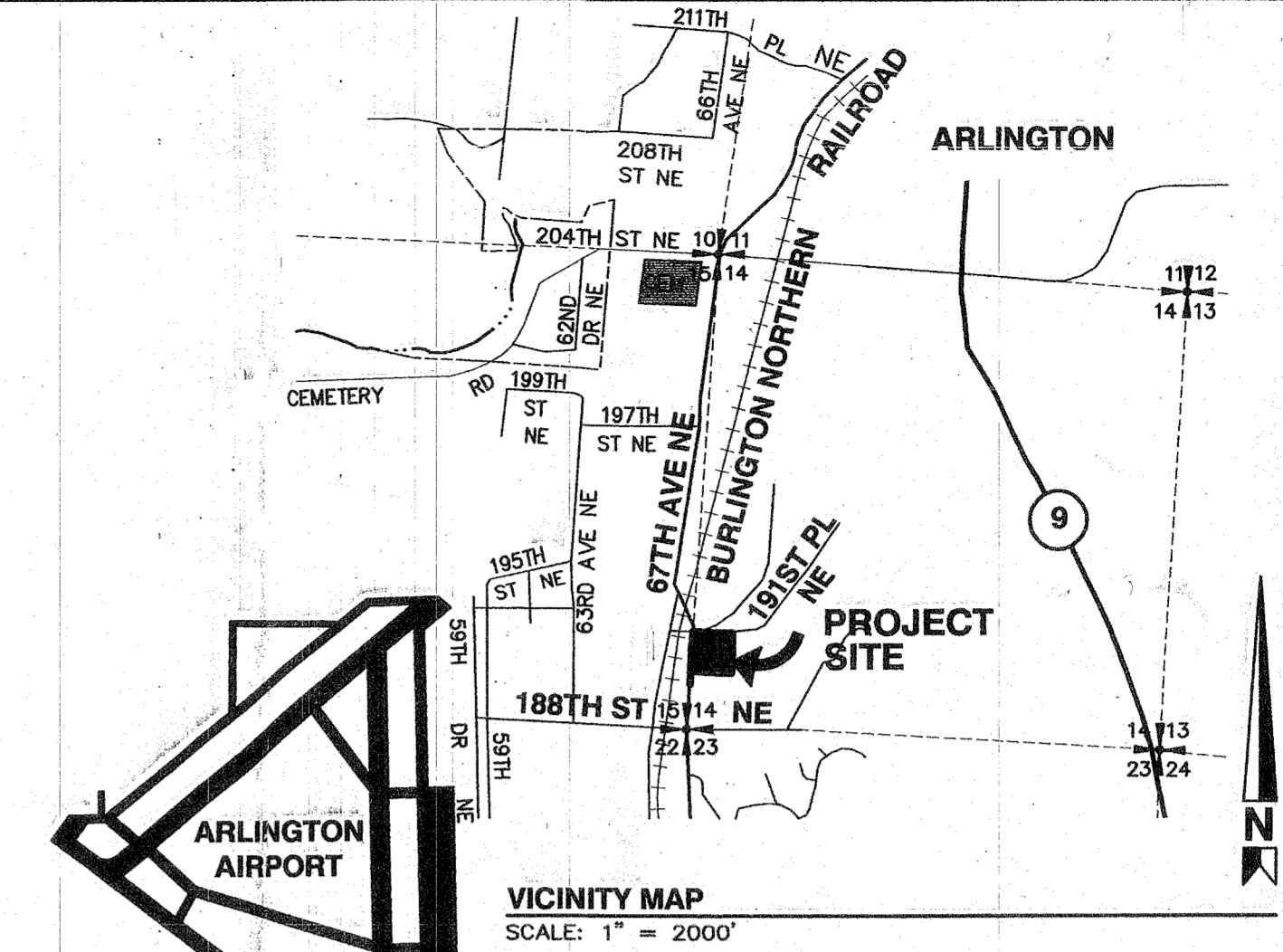


ABW TECHNOLOGIES, INC. SITE CIVIL PLANS



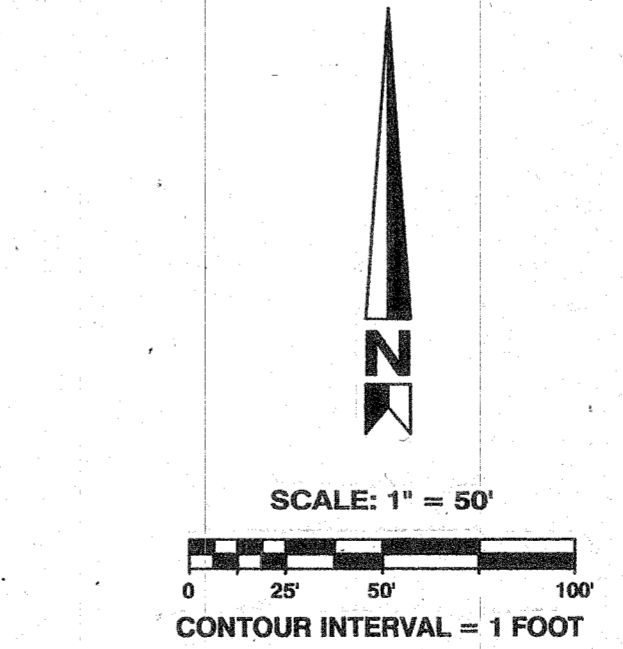
OWNER/APPLICANT	SITE ADDRESS	TAX ACCOUNT NUMBER
ABW TECHNOLOGIES, INC. 6720 191ST PLACE N.E. ARLINGTON, WA 98223-4666 (425) 259-0834	6720 191ST PL NE ARLINGTON, WA 98233	310514-003-028-00
PROJECT ENGINEER	PROJECT ARCHITECT	PROJECT SURVEY
HBA DESIGN GROUP, L.L.C. 1721 HEWITT AVENUE, SUITE 401 EVERETT, WA 98201 (425) 252-2826	GARY PARKINSON ARCHITECTS 2812 COLBY AVENUE EVERETT, WA 98201 (425) 252-2153	METRON & ASSOCIATES 307 N OLYMPIC AVENUE ARLINGTON, WA 98223 (360) 435-3777

LEGAL DESCRIPTION
THAT PORTION OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 14, TOWNSHIP 31 NORTH, RANGE 5 EAST, W.M., SNOHOMISH COUNTY, WASHINGTON, DESCRIBED AS FOLLOWS:
COMMENCING AT THE SOUTHWEST SECTION CORNER OF SAID SECTION 14;
THENCE NORTH 00°36'32" WEST, ALONG THE WEST LINE OF SAID SECTION 14, A DISTANCE OF 23.76 FEET;
THENCE NORTH 89°23'28" EAST, A DISTANCE OF 40.00 FEET TO A POINT ON THE EASTERLY RIGHT OF WAY OF 67TH AVENUE N.E.;
THENCE NORTH 00°36'32" WEST, ALONG THE EASTERLY RIGHT OF WAY OF 67TH AVENUE N.E., A DISTANCE OF 564.85 FEET TO THE TRUE POINT OF BEGINNING;
THENCE CONTINUING NORTH 00°36'32" WEST, ALONG THE EASTERLY RIGHT OF WAY OF 67TH AVENUE N.E., A DISTANCE OF 433.91 FEET TO THE BEGINNING OF A CURVE TO THE RIGHT, WHOSE RADIUS CENTER BEARS NORTH 89°23'28" EAST, A DISTANCE OF 35.00 FEET;
THENCE ALONG THE ARC OF SAID CURVE, A DISTANCE OF 56.06 FEET THROUGH A CENTRAL ANGLE OF 91°45'51";
THENCE SOUTH 88°50'41" EAST, A DISTANCE OF 431.31 FEET;
THENCE SOUTH 00°36'32" EAST, A DISTANCE OF 470.00 FEET TO A POINT THAT BEARS SOUTH 88°50'41" EAST FROM THE TRUE POINT OF BEGINNING;
THENCE NORTH 88°50'41" WEST, A DISTANCE OF 467.41 FEET TO THE TRUE POINT OF BEGINNING.
(ALSO KNOWN AS A PORTION OF LOT 2 OF THAT RECORD OF SURVEY AS FILED IN VOLUME 9 OF SURVEYS, PAGE 275, UNDER AUDITOR'S FILE NO. 7905290175 RECORDS OF SAID COUNTY).
SITUATE IN THE COUNTY OF SNOHOMISH, STATE OF WASHINGTON.

SHEET INDEX	DESCRIPTION	STATUS
SHEET C1.0	SITE PLAN	
SHEET C2.0	EXISTING CONDITIONS, DEMOLITION PLAN, AND T.E.S.C. PLAN	NOT INCLUDED
SHEET C2.1	T.E.S.C. NOTES AND DETAILS	NOT INCLUDED
SHEET C3.0	PAVEMENT AND DRAINAGE REVISION PLAN	
SHEET WS1.0	WATER AND SEWER PLAN	
SHEET WS1.1	WATER AND SEWER NOTES	NOT INCLUDED
SHEET WS1.2	OFFY STANDARD DETAILS	NOT INCLUDED

NOTE
ORIGINAL SURVEY COMPLETED IN 2003 HAS NOT BEEN UPDATED FOR THIS PROJECT.

DATUM VERTICAL DATUM: ASSUMED
BENCHMARK PROJECT BENCHMARK - FIRE HYDRANT TOP NUT ELEVATION=145.17



AS-BUILT

AS-BUILT CONSTRUCTION DRAWING REVIEW ACKNOWLEDGEMENT

THIS AS-BUILT PLAN SHEET HAS BEEN REVIEWED AND ACCEPTED AS A RECORD DRAWING. THE LICENSED DESIGN ENGINEER WHOSE STAMP AND SIGNATURE APPEAR ON THIS SHEET ASSUMES FULL AND COMPLETE RESPONSIBILITY FOR THE ACCURACY THEREIN.

BY: *Joe X Kelly*
CITY ENGINEER, CITY OF ARLINGTON

DATE: 03/12/2010

ARLINGTON FILE # PWD200801416

GENERAL NOTES

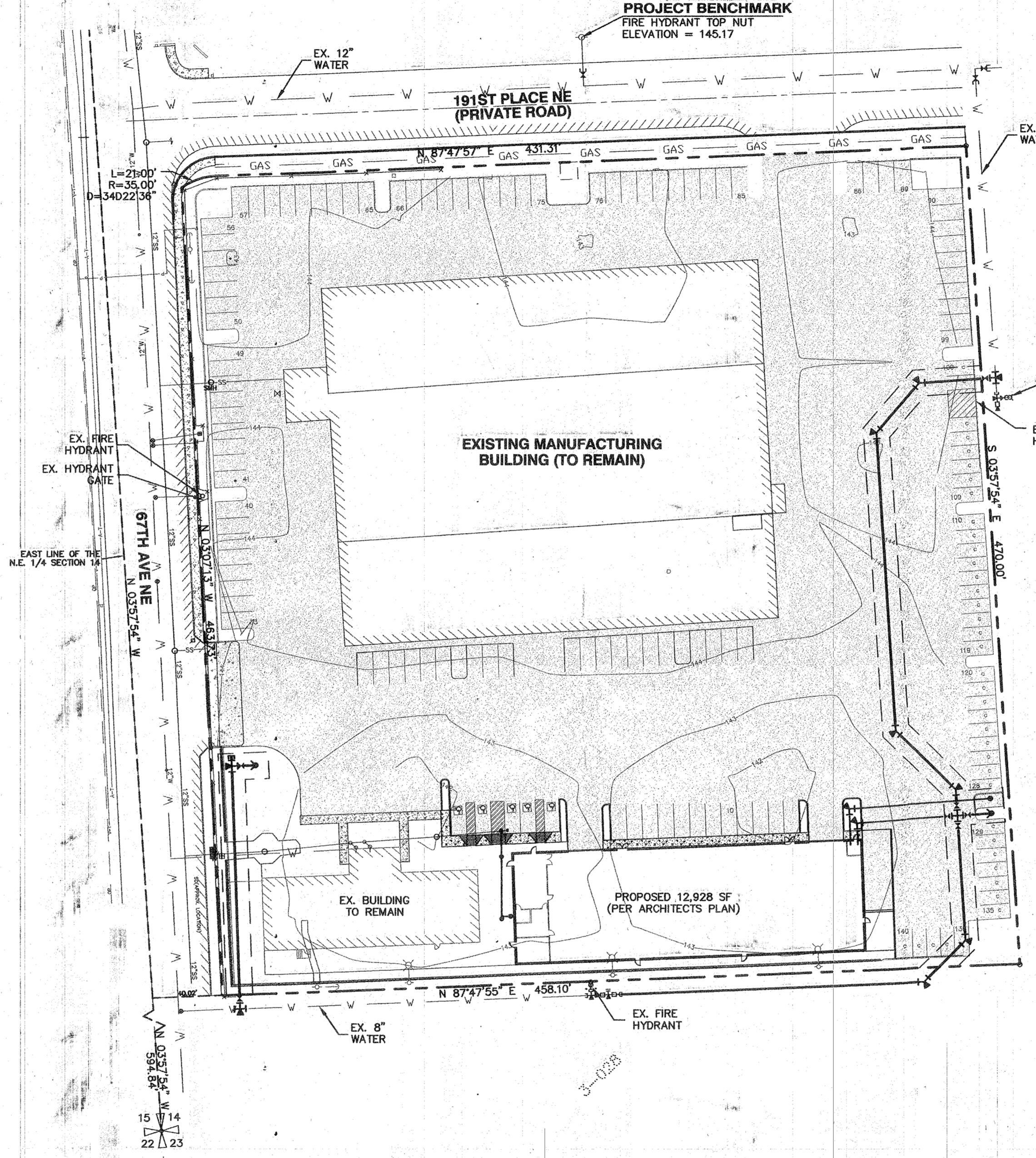
- ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION, WASHINGTON STATE DEPARTMENT OF TRANSPORTATION AND AMERICAN PUBLIC WORKS ASSOCIATION, WASHINGTON STATE CHAPTER, MOST RECENT EDITION, EXCEPT WHERE MODIFIED BY THE LATEST EDITION OF THE CITY OF ARLINGTON CONSTRUCTION STANDARDS AND SPECIFICATIONS.
- AN APPROVED COPY OF CONSTRUCTION PLANS MUST BE ON SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
- IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN STREET USE AND ANY OTHER RELATED PERMITS PRIOR TO ANY CONSTRUCTION ACTIVITY IN THE CITY RIGHT-OF-WAY.
- PRIOR TO ANY CONSTRUCTION ACTIVITY, THE CITY OF ARLINGTON PUBLIC WORKS DEPARTMENT, (360)403-3500, MUST BE CONTACTED FOR A PRECONSTRUCTION MEETING.
- ALL LOCATIONS OF EXISTING UTILITIES HAVE BEEN ESTABLISHED BY FIELD SURVEY OR OBTAINED FROM AVAILABLE RECORDS AND SHOULD THEREFORE BE CONSIDERED APPROXIMATE ONLY AND NOT NECESSARILY COMPLETE. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO INDEPENDENTLY VERIFY THE ACCURACY OF ALL UTILITY LOCATIONS, AND TO FURTHER DISCOVER AND AVOID ANY OTHER UTILITIES WHICH MAY BE AFFECTED BY THIS WORK. THE CONTRACTOR SHALL CONTACT THE UTILITIES UNDERGROUND LOCATION SERVICE (1-800-424-5555) PRIOR TO CONSTRUCTION. THE OWNER OR THEIR REPRESENTATIVE SHALL BE IMMEDIATELY CONTACTED IF A UTILITY CONFLICT EXISTS.
- ALL MATERIALS SHALL BE NEW AND UNDAMAGED, OF AN APPROVED BRAND, WITH REPLACEMENT AND REPAIR PARTS READILY AVAILABLE FROM THE ARLINGTON/EVERETT/SEATTLE AREA.
- ALL MATERIALS SHALL BE APPROVED BY THE CITY PRIOR TO INSTALLATION.
- ALL PUBLIC WATER, SEWER, AND STORM DRAINAGE PIPING NOT IN PUBLIC RIGHT-OF-WAY REQUIRES 10 FOOT WIDE PAVEMENT EASEMENTS GRANTED TO THE CITY OF ARLINGTON.
- AS-BUILT PLANS SHALL BE SUBMITTED FOR ALL DEVELOPMENTS, SHORT PLATS, SUBDIVISIONS, AND ANY OTHER CONSTRUCTION RELATING TO THE CITY OF ARLINGTON STREETS, DRAINAGE, AND UTILITY SYSTEMS.
- STANDARD PLAN REFERENCES ARE FOR CITY OF ARLINGTON CONSTRUCTION STANDARDS. CONTRACTOR SHALL MAINTAIN A COPY OF THE STANDARDS ON SITE WHILE CONSTRUCTION IS IN PROGRESS.

CONSTRUCTION SEQUENCE

- SCHEDULE PRE-CONSTRUCTION CONFERENCE WITH CITY OF ARLINGTON ENGINEERING AT (360) 403-3500.
- INSTALL TEMPORARY EROSION CONTROL FACILITIES.
- REMOVE PAVEMENT AND ROUGH GRADE SITE.
- INSTALL STORM DRAINS AND UTILITIES.
- FINISH GRADE PARKING AREAS.
- INSTALL PAVEMENT.
- INSTALL LANDSCAPING.
- AFTER SITE HAS STABILIZED, REMOVE ACCUMULATED SEDIMENT FROM CATCH BASINS AND CULVERTS. REMOVE REMAINING TEMPORARY EROSION CONTROL FACILITIES.

UTILITY EASEMENTS

THESE UTILITY EASEMENTS HAVE BEEN RESERVED FOR AND GRANTED TO ALL UTILITIES SERVING THE SUBJECT PROPERTY AND THEIR RESPECTIVE SUCCESSORS AND ASSIGNS, UNDER AND UPON THE FRONT TEN FEET PARALLEL WITH AND ADJOINING THE STREET FRONTAGE OF ALL LOTS AND TRACTS IN WHICH TO INSTALL, LAY, CONSTRUCT, RENEW, OPERATE AND MAINTAIN UNDERGROUND CONDUITS, CABLES, PIPES, AND WIRES, TOGETHER WITH THE OTHER NECESSARY FACILITIES AND EQUIPMENT, FOR THE PURPOSE OF SERVING THIS AND OTHER PROPERTY WITH UTILITY SERVICE TOGETHER WITH THE RIGHT TO ENTER UPON THE PROPERTY AT ALL TIMES FOR THE PURPOSES HEREIN STATED. ALL UTILITY LINES SHALL BE PLACED UNDERGROUND. THESE EASEMENTS ENTERED UPON FOR THESE PURPOSES SHALL BE RESTORED AS NEAR AS POSSIBLE TO THEIR ORIGINAL CONDITION. THESE EASEMENTS SHALL PRECLUDE GRADING OR ANY RECONTOURING OF THE LAND; PLACEMENT OF STRUCTURES, WELLS, LEACH FIELDS, AND ANY OTHER THING, EXCEPT UTILITY FACILITIES.



CALL TWO BUSINESS DAYS BEFORE YOU DIG 1-800-424-5555

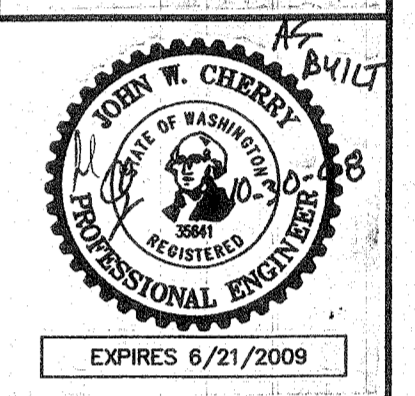


WASHINGTON
425.252.2826 phone
425.252.9551 fax

1721 Hewitt Avenue
Fourth Floor
Everett, WA 98201

OREGON
541.988.1862 phone
541.988.1863 fax

150 North 7th Street
Springfield, OR 97477



ISSUE DATE:	DESIGNED BY:	DATE	REVISIONS	BY	A/B
APRIL 27, 2007	JMS, JWC				
	DRAWN BY:				
	PLAN CHECK BY:				
		11/29/07	PER CITY COMMENTS	AB	AB
		1/23/08	PER CITY COMMENTS	AB	AB
		2/25/08	REVISED WATER PLAN	AB	AB
			PER CLIENT REQUEST	AB	AB
		10/30/08	PER AS-BUILT	AB	AB

CONSTRUCTION PLANS
ABW TECHNOLOGIES, INC.
SITE PLAN

SITE
JOB NO. 1702
C 1.0

XREF: ABW.DWG, ABW-SURV.DWG, ABW-TBK.DWG

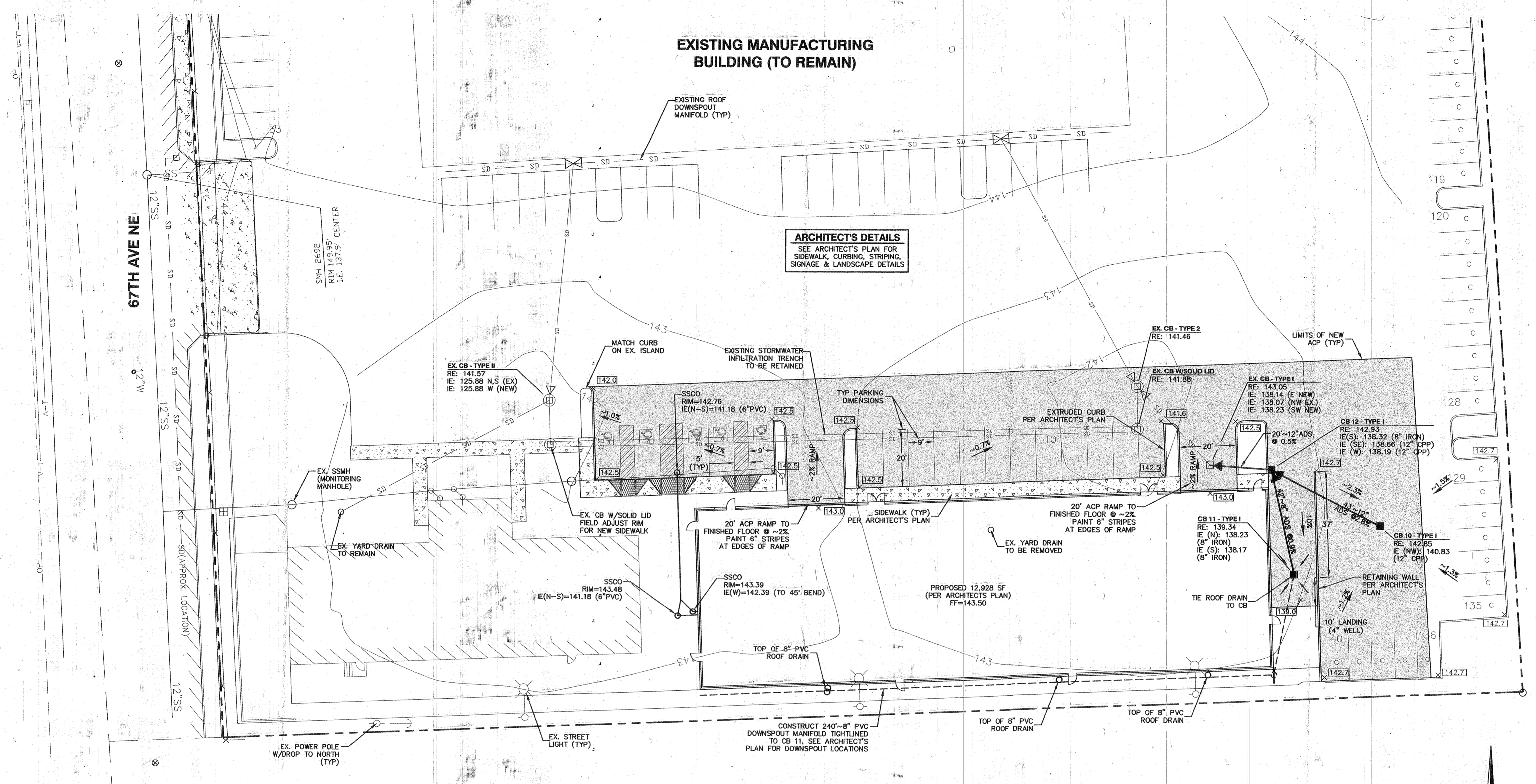
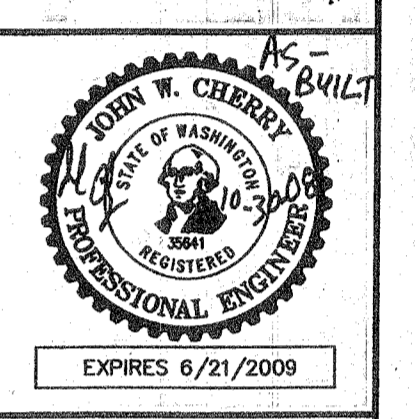


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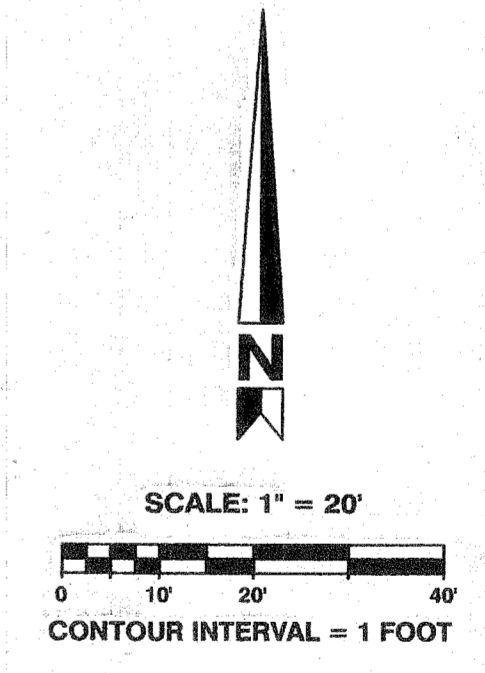
ARCHITECT'S DETAILS
SEE ARCHITECT'S PLAN FOR SIDEWALK, CURBING, STRIPING, SIGNAGE & LANDSCAPE DETAILS

STORM DRAINAGE NOTES

1. ALL STORM SEWER PIPE SHALL CONFORM WITH SECTION 5 OF ARLINGTON PUBLIC WORKS CONSTRUCTION STANDARDS AND SPECIFICATIONS.
2. ALL PIPE SHALL BE PLACED ON STABLE EARTH, OR IF IN THE OPINION OF THE INSPECTOR THE EXISTING FOUNDATION IS UNSATISFACTORY, THEN IT SHALL BE EXCAVATED BELOW GRADE AND BACK-FILLED WITH A GRAVEL MATERIAL TO SUPPORT THE PIPE.
3. THE BACK FILL SHALL BE PLACED EQUALLY ON BOTH SIDES OF THE PIPE IN LAYERS WITH A LOOSE AVERAGE DEPTH OF 6", MAXIMUM DEPTH 8"-9", THOROUGHLY STAMPING EACH LAYER. THESE COMPACTED LAYERS MUST EXTEND FOR ONE DIAMETER ON EACH SIDE OF THE PIPE OR TO THE SIDE OF THE TRENCH. MATERIALS TO COMPLETE THIS FILL OVER PIPE SHALL BE THE SAME AS DESCRIBED. (REFER TO WSDOT STANDARD SPECIFICATIONS 7-04.3 (3) AND 2-03.2(14)C, METHOD B & C).
4. CATCH BASIN OFFSETS ARE MEASURED TO CENTER OF GRATE.
5. ALL CATCH BASINS SHALL BE TYPE 1 PER SD 2, EXCEPT AS OTHERWISE NOTED.
6. ALL CATCH BASINS WITH A DEPTH OVER 5.0 FEET TO THE FLOW LINE SHALL BE A TYPE II CB OR LARGER (MANHOLE).
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING ALL MANHOLE, INLET AND CATCH BASIN FRAMES AND GRATES TO GRADE JUST PRIOR TO POURING CURBS AND PAVING.
8. CATCH BASIN FRAME AND GRATES SHALL BE OLYMPIC FOUNDRY MODEL 5435, LOCKING TYPE OR EQUAL.
9. UNLESS OTHERWISE NOTED, ALL STORM SEWER PIPE SHALL BE CORRUGATED POLYETHYLENE PIPE. THE MATERIAL SUPPLIED UNDER THIS SPECIFICATION SHALL BE HIGH-DENSITY CORRUGATED POLYETHYLENE SMOOTH INTERIOR PIPE AND SHALL BE MANUFACTURED IN CONFORMITY WITH THE LATEST AASHTO SPECIFICATIONS OR M 294 TYPE S AND THE MATERIAL COMPOUND SHALL CONFORM TO AASHTO M 294. COUPLERS SHALL COVER NOT LESS THAN ONE FULL CORRUGATION ON EACH ANNUAL SECTION OF PIPE AND PASS THE WSDOT STANDARD SPECIFICATION SECTION 7-04.3(4)D LOW PRESSURE AIR TEST FOR STORM SEWERS.
10. GALVANIZED STEEL PIPE SHALL HAVE TYPE 1 ASPHALT COATING. ALUMINIZED PIPE DOES NOT REQUIRE COATING.
11. STORM WATER RETENTION/DETENTION FACILITIES, STORM DRAINAGE PIPE AND CATCH BASINS SHALL BE FLUSHED AND CLEANED PRIOR TO ARLINGTON PUBLIC WORKS ACCEPTANCE.

PAVEMENT SPECIFICATIONS
SUBGRADE AND SURFACING MATERIALS SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY. ACP SHALL BE CLASS B.
PAVEMENT SECTION SHALL BE:
3" COMPACTED DEPTH ACP AND
6" CSTC ON STABLE SUBGRADE COMPACTED TO 95% MAX. DENSITY

CALL TWO BUSINESS DAYS BEFORE YOU DIG 1-800-424-5555



DATUM VERTICAL DATUM: ASSUMED
BENCHMARK PROJECT BENCHMARK - FIRE HYDRANT TOP NUT ELEVATION=145.17

AS-BUILT DRAWING APPROVAL ACKNOWLEDGMENT
THIS AS-BUILT PLAN SHEET HAS BEEN REVIEWED AND ACCEPTED AS A RECORD DRAWING. THE LICENSED DESIGN ENGINEER WHOSE STAMP AND SIGNATURE APPEAR ON THIS SHEET ASSUMES FULL AND COMPLETE RESPONSIBILITY FOR THE ACCURACY THEREIN.
BY: *John X. Kelly*
CITY ENGINEER, CITY OF ARLINGTON
DATE: 03-12-2010

AS-BUILT

ARLINGTON FILE # PWD200801416

ISSUE DATE:	DESIGNED BY:	DATE	REVISIONS	BY
APRIL 27, 2007	JWB, JWC	11/28/07	PER CITY COMMENTS	AJB
		1/23/08	PER CITY COMMENTS	AJB
		2/25/08	REVISED WATER PLAN	AJB
		10/30/08	PER CLIENT REQUEST	AJB
			PER AS-BUILT	AJB

CONSTRUCTION PLANS
ABW TECHNOLOGIES, INC.
PAVEMENT AND DRAINAGE
REVISION PLAN

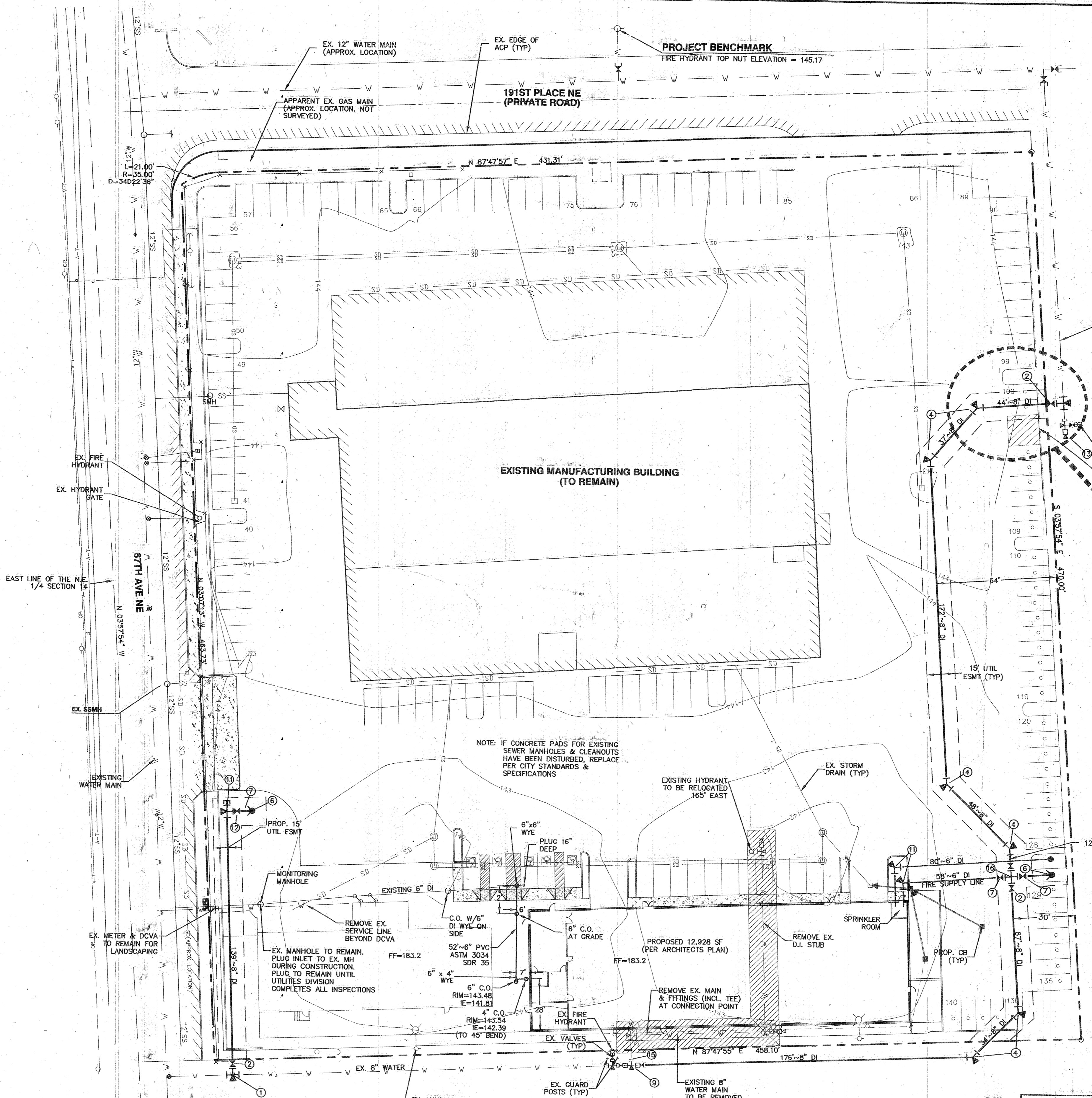
DRAINAGE
JOB NO. 1702
C 3.0

XREF: ABWDWG, ABW-SURV.DWG, ABW-BK.DWG

SECTION 14, TOWNSHIP 31 NORTH, RANGE 5 EAST, W.M.

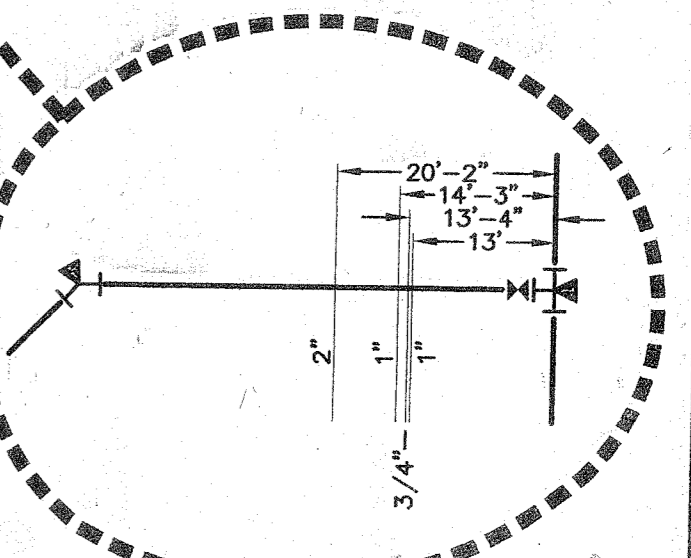
WATER AND SEWER NOTES

- ALL WORKMANSHIP AND MATERIAL SHALL BE IN ACCORDANCE WITH CITY OF ARLINGTON PUBLIC WORKS STANDARDS AND SPECIFICATIONS (PWSS), CURRENT EDITION, AND THE MOST CURRENT EDITION OF THE STATE OF WASHINGTON/APWA STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION.
- A PRECONSTRUCTION MEETING SHALL BE HELD WITH THE CITY PRIOR TO THE START OF CONSTRUCTION.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE, OR HAVE LOCATED BY THE APPROPRIATE COMPANIES, ALL UTILITIES PRIOR TO BEGINNING CONSTRUCTION.
- CALL UNDERGROUND LOCATE AT 1-800-424-5555 A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATION.
- WATER PIPE SHALL BE 8" DUCTILE IRON PIPE STANDARD THICKNESS CLASS 52 CEMENT-LINED UNLESS OTHERWISE SPECIFIED AND SHALL CONFORM TO ANS/AWWA C151/A21.51.
- UTILITY CROSSINGS OF 172ND ST. NE SHALL BE BY OPEN TRENCH UNLESS OTHERWISE SPECIFIED BY CITY OF ARLINGTON.
- SOUTH OF 172ND ST. NE, WATER MAIN IN 59TH AVE. NE SHALL BE INSTALLED 17' EAST OF CENTERLINE. FROM 172ND ST. NORTHWARD, MAIN SHALL BE INSTALLED ON SHOULDER 15' EAST OF CENTERLINE IN ALIGNMENT WITH EXISTING MAIN.
- MAINTAIN 10' HORIZONTAL SEPARATION FROM PROPOSED SANITARY SEWER GRAVITY AND FORCE MAINS. COVER: 36" MINIMUM, 48" MAXIMUM.
- PVC PIPE AND FITTINGS SHALL BE INTEGRAL WALL BELL AND SPIGOT, RUBBER GASKET JOINT, PVC CONFORMING TO ASTM 3034 SDR 35.
- ALL PVC SEWER PIPE AND FITTINGS MANUFACTURE AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE ASTM RECOMMENDED SPECIFICATIONS D3034-73, CURRENT REVISIONS, AND INSTALLATION SHALL BE IN STRICT COMPLIANCE WITH THE MANUFACTURER'S DIRECTIONS. ALL PIPE SHALL BE CLEARLY MARKED WITH DATE OF MANUFACTURE. THERE SHALL BE NO REDUCTION IN PIPE WALL THICKNESS AT THE BELL AS A RESULT OF BELL FORMATION. ALL PIPE SHALL BE PROVIDED WITH A REFERENCE MARK FOR PROPER SPIGOT INSERTION. JOINT GASKETS SHALL BE FABRICATED FROM A COMPOUND OF WHICH THE BASIC POLYMER SHALL BE A SYNTHETIC RUBBER CONSISTING OF STYRENE, BUTADIENE, POLYISOPRENE, OR ANY COMBINATION THEREOF AND SHALL MEET THE REQUIREMENTS OF ASTM F477, LATEST REVISIONS.
- CONNECTIONS FOR SIDE SEWER STUBS SHALL BE 6 INCHES INSIDE DIAMETER TEE FITTINGS FABRICATED IN THE MANUFACTURER'S PLANT. WYE BRANCHES SHALL BE USED WHERE MAIN SIZE IS LESS THAN 8 INCHES INSIDE DIAMETER, NO FIELD CUT-IN TEES OR WYES WILL BE ALLOWED UNDER THESE SPECIFICATIONS WITHOUT WRITTEN APPROVAL BY THE CITY OF ARLINGTON.
- MANHOLES SHALL BE OF THE OFFSET TYPE AND SHALL BE PRECAST CONCRETE SECTIONS WITH EITHER A CAST IN PLACE BASE OR A PRECAST BASE MADE FROM A 3,000-PSI STRUCTURAL CONCRETE. JOINTS BETWEEN PRECAST WALL SECTIONS SHALL BE CONFINED O-RING OR AS OTHERWISE SPECIFIED. THEY SHALL BE CONSTRUCTED IN FULL COMPLIANCE WITH ASTM C478 AND THE DETAILS SHOWN ON STANDARD SPECIFICATIONS PRECAST MANHOLE AND AS FURTHER SPECIFIED HEREIN.
- MANHOLE SECTIONS SHALL BE PLACED AND ALIGNED SO AS TO PROVIDE VERTICAL SIDES AND VERTICAL ALIGNMENT OF THE LADDER STEPS. THE COMPLETED MANHOLE SHALL BE RIGID, TRUE TO DIMENSION AND BE WATER TIGHT. ROUGH UNEVEN SURFACES WILL NOT BE PERMITTED. ALL MANHOLE AND CLEANOUT COVERS SHALL HAVE THE WORD SEWER CAST INTO THEM AND BE LOCKING.
- WHERE WORK IS LOCATED IN PUBLIC RIGHT-OF-WAY, NOT LESS THAN 14 INCHES NOR MORE THAN 26 INCHES SHALL BE PROVIDED BETWEEN THE TOP OF THE CONE OR SLAB AND THE TOP OF THE MANHOLE FRAME.
- CHANNELS SHALL BE MADE TO CONFORM ACCURATELY TO THE SEWER GRADE AND SHALL BE BROUGHT TOGETHER SMOOTHLY WITH WELL-ROUNDED JUNCTIONS, SATISFACTORY TO THE CITY ENGINEER.
- THE CHANNELS SHALL BE FIELD POURED AFTER THE INLET AND OUTLET PIPES HAVE BEEN INSTALLED AND FIRMLY GROUTED INTO PLACE AT THE PROPER ELEVATION. ALLOWANCES SHALL BE MADE FOR A MINIMUM OF 1/10 FOOT (0.1') DROP IN ELEVATION ACROSS THE MANHOLE IN THE DIRECTION OF FLOW.
- BACKFILLING AND SURFACE RESTORATION SHALL CLOSELY FOLLOW INSTALLATION AND TESTING OF THE PIPE SO THAT NO MORE THAN 100 FEET OF PIPE IS LEFT EXPOSED WITH OUT EXPRESS APPROVAL OF THE ENGINEER. CARE SHALL BE TAKEN TO ENSURE THAT THE PIPE AND ITS PROTECTIVE COATINGS ARE NOT DAMAGED. NO ROCKS, STONE OR DEBRIS SHALL BE PERMITTED WITHIN 12 INCHES OF THE PIPE.
- WHEN REQUIRED IN AREAS OF UNSUITABLE TRENCH BOTTOM, FOUNDATION GRAVEL SHALL CONSIST OF CLEAN, GRANULAR MATERIAL FREE FROM OBJECTIONABLE MATERIALS SUCH AS VEGETABLE MATTER OR OTHER DELETERIOUS SUBSTANCES WITH AT LEAST 90 PERCENT COARSE MATERIAL RANGING FROM 1/4 INCH IN DIAMETER TO 3 INCHES IN DIAMETER AND 100% 3 INCHES IN DIAMETER OR LESS.
- 3/8 INCH CLEAN MANUFACTURED PEA GRAVEL BEDDING SHALL BE REQUIRED.
- BEDDING MATERIAL SHALL BE CAREFULLY PLACED AND FIRMLY COMPACTED TO PROVIDE A FIRM, UNIFORM CRADLE FOR THE PIPE. THE MINIMUM THICKNESS OF THE LAYER OF BEDDING MATERIAL REQUIRED SHALL BE 4 INCHES UNDER THE BELL FOR ALL PIPE SIZES OF 27 INCHES DIAMETER AND SMALLER, 6 INCHES FOR ALL PIPE SIZES 30 INCHES DIAMETER AND LARGER. 6 INCHES IS REQUIRED UNDER THE BELL OF THE PIPE FOR ALL DIAMETER PIPES WHERE ROCK IS EXCAVATED, TO PROVIDE THIS FIRM, CONTINUOUS SUPPORT FOR THE PIPE. IF IT IS NECESSARY TO HAND TAMP OR "SLICE" BEDDING MATERIAL SOLIDLY UNDER THE PIPE.
- AFTER THE PIPE LAYING OPERATION, ADDITIONAL BEDDING MATERIAL SHALL BE PLACED AND COMPACTED BY HAND TOOLS FOR THE FULL WIDTH OF THE TRENCH TO A HEIGHT OF 12 INCHES ABOVE THE TOP OF THE SEWER PIPE.
- IT IS ASSUMED THAT EXCAVATED MATERIAL IS SUITABLE FOR TRENCH BACKFILL, WHERE EXCAVATED MATERIAL IS NOT APPROVED FOR BACKFILL, GRAVEL-BASE CLASS B CONFORMING TO THE REQUIREMENTS OF SECTION 9-03.10 OF THE STATE OF WASHINGTON STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION, OR GRANULAR MATERIAL COMMONLY KNOWN AS BANK RUN GRAVEL, SHALL BE USED AS DIRECTED BY THE ENGINEER.
- ALL JOINTS SHALL BE MADE UP IN STRICT COMPLIANCE WITH THE MANUFACTURER'S DIRECTIONS AND ALL SEWER PIPE MANUFACTURE AND HANDLING SHALL MEET OR EXCEED THE ASTM AND CPWV RECOMMENDED SPECIFICATIONS, CURRENT REVISIONS.
- FURTHER, ALL 8 INCH OR LARGER PVC PIPE LAID SHALL BE DEFLECTION TESTED IN ACCORDANCE WITH SECTION 7-17-3 OF THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION FOR ACCEPTANCE. PVC PIPE SHALL NOT HAVE ANY DIAMETER DECREASED BY 5 PERCENT OR MORE.
- THE SEWER PIPE, UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER, SHALL BE INSTALLED UPGRADE FROM POINT OF CONNECTION ON THE EXISTING SEWER OR FROM A DESIGNATED STARTING POINT TO LINE AND GRADE PER APPROVED PLANS. THE SEWER PIPE SHALL BE INSTALLED WITH THE BELL END FORWARD OR UPGRADE. WHEN PIPE LAYING IS NOT IN PROGRESS, THE FORWARD END OF THE PIPE SHALL BE KEPT TIGHTLY CLOSED WITH AN APPROVED TEMPORARY PLUG. WHERE MOBILE SHORING (STEEL BOX) IS USED IN THE DITCH, CARE SHALL BE TAKEN SO THAT THE PIPE AND JOINTS DO NOT MOVE WHEN THE SHORING OR BOX IS MOVED, ANY INDICATION THAT JOINTS ARE NOT BEING ADEQUATELY HELD SHALL BE SUFFICIENT REASON FOR THE CITY ENGINEER TO REQUIRE RESTRAINTS, WHETHER OR NOT MOVABLE SHORING IS BEING USED.
- AT THE TIME OF BUILDING PERMIT, INDIVIDUAL PROPERTY OWNERS MAY BE REQUIRED TO INSTALL MONITORING MANHOLES AS REQUIRED BY THE CITY.
- ALL MANHOLE STRUCTURES SHALL BE INSPECTED AND SIGNED OFF PRIOR TO BACKFILL BEING ADDED TO THE EXCAVATION.
- 3 INCHES OF GROUTING IS REQUIRED ABOVE AND BELOW ALL MANHOLE JOINTS INCLUDING THE ADJUSTMENT RISERS AND ALL RISERS SHALL BE WET STACKED.
- ALL GROUTING IS REQUIRED TO BE A MINIMUM OF 1/2 INCH THICK.
- GROUTING MATERIAL SHALL CONSIST OF 1 PART SAND WITH 2 PARTS CEMENT. CURING ADDITIVES ARE NOT ALLOWED WITHOUT PRIOR APPROVAL.
- ALL EXTERNAL GROUTING SHALL BE CURED PRIOR TO APPROVAL FOR BACKFILL.
- ADDITIONAL WATERPROOFING METHODS MAY BE REQUIRED FOR MANHOLE STRUCTURES AT THE TIME OF CONSTRUCTION SUCH AS EXTERNAL JOINT RUBBER GASKETS OR MASTIC.
- ACCESS SHALL BE PROVIDED TO THE CONSTRUCTION SITE AT ALL TIMES FOR INSPECTION PURPOSES.
- 2 INCH SEWER TRACER TAPE IS REQUIRED OVER ALL SEWER PIPE INSTALLATIONS AND SHALL BE PLACED 2 TO 4 FEET ABOVE THE PIPE BEDDING.
- INSTALL SIDE SEWER STUBS TO ONE SIDE OR THE OTHER OF CEMENT / ASPHALT DRIVEWAYS WHEN POSSIBLE.
- SIDE SEWER STUBS ARE TO BE CAPPED AND MARKED BY A 2 X 4 POST LABELED SANITARY SEWER. THE STUB MARKER MUST INCLUDE THE LOT NUMBER AND DEPTH OF THE STUB INVERT. ALL MARKERS SHALL BE ALIGNED AND UNIFORM. (SEE SERVICE CONNECTION DETAIL S-8)
- SEWER BACKFILL WITHIN THE CITY RIGHT-OF-WAY TO BE COMPACTED TO 95% WITH TESTING RESULTS TO THE CITY OR CDF BACKFILL REQUIRED.
- ALL SANITARY SEWER MANHOLES OUTSIDE OF PAVED OR CONCRETE AREAS MUST HAVE A 6' X 6' X 8" REINFORCED CONCRETE PAD SET TO FINISHED GRADE.
- ALL SANITARY SIDE SEWERS ARE TO BE DIMENSIONED FROM CENTER OF THE NEAREST DOWNSTREAM MANHOLE.
- WYES ARE NOT ALLOWED ON LINES 8 INCHES AND LARGER, TEES ARE REQUIRED.
- SIDE SEWER STUBS MUST EXTEND A MINIMUM OF 10 FEET BEYOND THE PROPERTY LINE AND A MINIMUM OF 5 FEET BEYOND THE EASEMENT.



- KEY**
- INSTALL 8" x 8" x 8" TAPPING TEE
 - INSTALL 8" MJ x FL GATE VALVE
 - INSTALL 8" MJ PLUG
 - INSTALL 8" MJ 45BEND W/ MEGALUGS
 - INSTALL 8" x 8" x 6" FL TEE
 - INSTALL 5 1/4" M.V.O. HYDRANT ASSEMBLY
 - INSTALL 6" MJ x FL GATE VALVE
 - INSTALL 1" METER
 - REMOVE EX BLOCKING, TEE & VALVES, CONNECT NEW 8" DI MAIN W/MEGALUG
 - INSTALL 8" MJ GATE VALVE
 - INSTALL 8" 90° BEND W/BLOCKING
 - INSTALL 8" x 8" REDUCER
 - REMOVE EX. PLUG, CONNECT NEW 8" DI MAIN
 - INSTALL 8" x 8" x 8" FL TEE
 - INSTALL 8" BLIND FLANGE
 - INSTALL 8" x 8" x 6" x 6" CROSS

- BACKFLOW ASSEMBLIES**
- ALL BACKFLOW ASSEMBLIES (DOUBLE CHECK VALVE ASSEMBLY-DCVA) SHALL APPEAR ON THE STATE OF WASHINGTON DEPT. OF HEALTH LIST OF APPROVED ASSEMBLIES.
 - ALL ASSEMBLIES SHALL BE TESTED BY A STATE OF WASHINGTON CERTIFIED BACKFLOW ASSEMBLY TESTER AT THE OWNER'S EXPENSE.
 - THE CITY OF ARLINGTON UTILITIES DIVISION WILL INSPECT DCVA'S AFTER TESTING. COPY OF TEST REPORT SHALL BE PROVIDED TO THE CITY BEFORE CALLING FOR INSPECTION.



hba
DESIGN GROUP
land use planning + civil engineering

WASHINGTON
425.252.2826 phone
425.252.9551 fax

1721 Hewitt Avenue
Fourth Floor
Everett, WA 98201

OREGON
541.988.1862 phone
541.988.1863 fax

150 North 7th Street
Springfield, OR 97477

APRIL 27, 2007
ISSUE DATE: JMB, JWC
DRAWN BY: A/B
PLAN CHECK BY: JWC

REVISIONS	BY	DATE	PER CITY COMMENTS	AB	AB	AB
1	JMB	10/30/07	PER CITY WATER ROUTE			
2	JMB	2/25/08	PER CLIENT REQUEST			
3	JMB	10-30-08	PER AS-BUILT			

EXPIRES 6/21/2009

CONSTRUCTION PLANS
ABW TECHNOLOGIES, INC.
WATER AND SEWER PLANS

SCALE: 1" = 30'
CONTOUR INTERVAL = 1 FOOT

CALL TWO BUSINESS DAYS BEFORE YOU DIG 1-800-424-5555

AS-BUILT

DATUM VERTICAL DATUM: ASSUMED
BENCHMARK PROJECT BENCHMARK - FIRE HYDRANT TOP NUT ELEVATION=145.17

AS-BUILT DRAWING APPROVAL ACKNOWLEDGMENT

THIS AS-BUILT PLAN SHEET HAS BEEN REVIEWED AND ACCEPTED AS A RECORD DRAWING. THE LICENSED DESIGN ENGINEER WHOSE STAMP AND SIGNATURE APPEAR ON THIS SHEET ASSUMES FULL AND COMPLETE RESPONSIBILITY FOR THE ACCURACY THEREIN.

BY: *Jax Kelly*
CITY ENGINEER, CITY OF ARLINGTON

DATE: 05-12-2010

ARLINGTON FILE # PWD200801416

WTR/SWR
JOB NO. 1702
WS1.0