DESIGN FILE: I:\ligo\site\\ce\wac002.dgz LEGEND GENERAL NOTES **ABBREVIATIONS EXISTING DESCRIPTION** NEW ASPHALTIC CONCRETE MAXIMUM I. THE TOPOGRAPHY WITHIN THE PROPERTY LINES, WAS GENERATED BY COMPUTER METHODS FROM A SURVEY PERFORMED BY *AGGR* **AGGREGATE** MANHOLE J-U-B ENGINEERS, INC., KENNEWICK, WASHINGTON, DATED SEPTEMBER 23, 1993. **APPROX APPROXIMATELY** MIN MINIMUM - — – — – — – — – CENTERLINE, & 2. HORIZONTAL AND VERTICAL DATUMS ARE ALSO FROM THE J-U-B- ENGINEERS, INC. SURVEY, AND ARE AS FOLLOWS: ASTM AMERICAN SOCIETY FOR TESTING MON MONUMENT AND MATERIALS BUILDING OR STRUCTURE **AVERAGE** THE COORDINATE GRID SYSTEM ORIGINATES AT THE VERTEX POINT (N 410990. 1636, AVG HORIZONTAL DATUM: NORTH E 1915712.5766) AND IS CONSIDERED COINCIDENT WITH STATE PLANE COORDINATES AT THAT NOT IN CONTRACT POINT AND ALSO INDICATED AS STATION 0+00.00 FOR EITHER BEAM TUBE ARM. FENCE LINE NOT TO SCALE $- - \times - - \times - - \times -$ ----×----×----×--REFERENCE STATE PLANE IS WASHINGTON STATE PLANE LAMBERT SOUTH ZONE NAD 83/91 BEGIN CURVE NTS BOUNDARY -====== ____ **BUILDING** VERTICAL DATUM: NAVD 88 BENCH MARK "McKINLEY" ASPHALT CONCRETE PAVING ON CENTER BENCH MARK BOTTOM OF PIPE OUTSIDE DIAMETER $\Gamma - - - - 1$ (AVG LAT. 46°27'25.68") GRID FACTOR 0.999917130 MULTIPLE BITUMINOUS SURFACE BEARING (AVG ELEV. 532.80) SEA LEVEL FACTOR 0.999974515 BEGIN VERTICAL CURVE POINT OF CURVE COMBINED PROJECT SCALE FACTOR = 0,999891645 r — — — 1 CONCRETE PERCENT L __ _ _ J CATCH BASIN POINT OF INTERSECTION STATE PLANE 999.891645' = 1000.000'MEASURED GROUND. COMMUNICATION POST INDICATOR VALVE PIVC POC POVC PSI CENTER TO CENTER POINT OF INTERSECTION, VERTICAL CURVE VERTEX O ELEVATION = 537.29' PROJECT DATUM DIRECTION OF SHEET FLOW **-** - -**—** POINT OF CONNECTION CURB FACE 3. STRAIGHT GRADE BETWEEN SPOT ELEVATIONS. UNLESS OTHERWISE SHOWN ON PLANS. CONSTRUCTION JOINT POINT ON VERTICAL CURVE **FLOWLINE** __ - - - _ - - - - - - - -POUND-FORCE PER SQUARE INCH CENTERLINE ____CO CLEANOUT 4. NOTES RELATING TO A SPECIFIC DRAWING WILL BE FOUND ON THE DRAWING FOR WHICH THEY ARE APPLICABLE. POINT OF TANGENCY CORRUGATED METAL PIPE POLYVINYL CHLORIDE DRAIN LINE ----DL----_____DL____ PVM7 CLEANOUT. PAVEMENT 5. DIMENSIONS, ELEVATIONS AND LOCATION OF EXISTING UTILITIES, STRUCTURES, OR GRADING ARE TO BE VERIFIED PRIOR CONDUIT ONLY, TO START OF CONSTRUCTION BY CONTRACTOR. ANY DISCREPANCY WITH THE DRAWINGS SHALL BE BROUGHT IMMEDIATELY TO POTABLE WATER POTABLE WATER ___PW___ ----PW----THE ATTENTION OF THE CONSTRUCTION MANAGER. ANY ADDITIONAL WORK PERFORMED BY THE CONTRACTOR DUE TO HIS CONTRACTION JOINT **ELECTRICAL** FAILURE TO VERIFY AND SO ADVISE. SHALL BE COMPLETELY AT HIS OWN COST AND AT NO COST TO THE INSTITUTE. COLUMN ----*F*--------*E*----CONCRETE RADIUS, ELECTRICAL DUCT BANK ——— *EDB* ——— ---- <u>E</u>----CONSTR **RIDGE** 6. AN EXISTING 6" WATERLINE IS LOCATED ALONG THE WEST SIDE OF THE SOUTHWEST ARM, WHICH BEGINS AT A WELL PUMP CONSTRUCTION POINT NEAR THE SOUTHWEST END STATION AND TERMINATES AT A POND LOCATED ADJACENT TO THE CORNER STATION PAD CONTINUATION RADIAL STORM DRAIN _____SD ____ ----*SD* ----CONCRETE PIPE REINFORCED-CONCRETE PIPE ON THE SOUTHWEST SIDE. EXACT LOCATION AND ALIGNMENT SHALL BE VERIFIED IN THE FIELD. SANITARY SEWER APPROXIMATE ALIGNMENT OF WATERLINE IS SHOWN ON SHEETS WA-C-031 THRU WA-C-040. SEE DETAIL 7, SHEET WA-C-055. COMMUNICATIONS PULLBOX ---*ss*---CARBON STFFI REDUCER TELEPHONE ----*T*----7. FINISHED SURFACES SHALL BE SLOPED UNIFORMLY FROM HIGH POINTS, RIDGE LINES, AND AROUND FOUNDATIONS TO FLOW CUBIC FEET REFERENCE CULVERT REINFORCEMENT LINES AND AREA DRAINS UNLESS INDICATED OTHERWISE. WATER ----*W*----____ REQD REV CWR CHILLED WATER RETURN REQUIRED 8. STORM DRAIN, SANITARY SEWER, AND UTILITY LINES SHALL BE SLOPED AT A UNIFORM GRADE BETWEEN REVISION FIRE WATER CHILLED WATER SUPPLY ---FW---CUBIC YARD ROUGH GRADE INVERT ELEVATIONS. CHILLED WATER SUPPLY ---cws---RIGHT-OF-WAY 9. BORING SUMMARIES ARE FROM A FOUNDATIONS INVESTIGATION CONDUCTED BY DAMES AND MOORE. A COPY OF THE CHILLED WATER RETURN ---- CWR ----DELTA = ANGLE REPORT IS ON FILE WITH THE CLIENT. DUCT COMMUNICATIONS ----*C* ----10. ALL UNDERGROUND PIPES SHALL BE PROPERLY PROTECTED DURING CONSTRUCTION FROM HEAVY MOVING EQUIPMENT. DEGREE DETAIL SCHEDULE II. WELL PUMP AT SOUTHWEST END STATION SHALL BE ENCLOSED WITH A 7'x9'x8'HIGH PREFABRICATED SHELTER WITH DUCTILE IRON STORM DRAIN FIRE HYDRANT _ _>_ _ STANDARD DOOR, ANCHORED TO A NEW 6" THICK CONCRETE SLAB, PER CONTRACTOR DESIGN. DIAMETER SUBGRADE DRAIN LINE GATE VALVE — →> -12. ALL NEW SIDE SLOPES 3 (HORIZONTAL) : I (VERTICAL) OR STEEPER SHALL HAVE A MINIMUM 3 INCHES OF SLOPE **DRAWING** SIMILAR MANHOLE 0 SQUARE FOOT PROTECTION MATERIAL. SANITARY SEWER STORM DRAIN CATCH BASIN STATION 13. ALL UNPAVED FLAT SURFACES, ROADS OR FUTURE PAVED AREAS SHALL CONTINUALLY HAVE DUST CONTROL DURING THE ELECTRICAL STANDARD COMPLETE CONTRUCTION PERIOD, UNTIL PAVED OR BITUMINOUS SURFACE TREATED. **CULVERT** FACH SW POWER POLE END CURVE SIDEWALK *−*○-*PP* 14. THE LIGO VERTEX POINT IS DEFINED AS THE INTERSECTION OF THE BEAM TUBE CENTERLINES OR THE (0,0,0) POINT ELECTRICAL DUCT BANK EQUIVALENT TO (NORTH, EAST, ELEVATION) PROJECT COORDINATES DEFINED IN NOTE 2 ABOVE. GUARD POST ⊙ GP ® GP EXPANSION JOINT ELEVATION (HEIGHT) TANGENT, PLUG OR CAP ---______ ELECTRICAL TELEPHONE TOP OF CURB FI BOW ELECTRICAL MANHOLE TELEPHONE --(530)---*—— 530 ——* INDEX CONTOUR LINE TG TOC TOP TOPO TOP OF GRATE **ELECTRICAL PULLBOX** ELECTRICAL VAULT TOP OF CONCRETE INTERMEDIATE CONTOUR LINE END VERTICAL CURVE TOP OF PIPE FACH WAY **TOPOGRAPHY** $- \neg \neg \neg \neg \neg \neg - TOP$ CUT/FILL SLOPE EXIST, EX **EXISTING** TOP OF WALL TYPICAL (531.00) FC 531.00 FIRE HYDRANT FINISH GRADE ELEVATION FINISH UNDERGROUND <u>(532.50)</u> FS FIN FL FINISH FLOOR UON UNLESS OTHERWISE NOTED FINISH SURFACE ELEVATION FINISH GRADE FLOOR, VERTICAL CURVE <u>(533. 65)</u> FLOW LINE ELEVATION FLOW LINE VCPVITRIFIED CLAY PIPE VERT FLANGE **VERTICAL** (531.50) TOP OF CURB FOF FACE OF FLANGE VOL VOLUME FINISH SURFACE (537.00) TW FOOT, FEET FOOTING TOP OF WALL STANDARD PLANS 531.00 WATÉR FIRE WATER INVERT ELEVATION WITH W/0 WITHOUT (531.00) 531.00 ROUGH GRADE ELEVATION TO THE EXTENT REFERENCED. THE FOLLOWING WASHINGTON STATE DEPARTMENT OF TRANSPORTATION STANDARD PLANS WASHINGTON STATE DEPARTMENT WSDOT GALV **GALVANIZED** FOR ROAD, BRIDGES AND MUNICIPAL CONSTRUCTION SHALL BE CONSIDERED PART OF THE CONSTRUCTION DOCUMENTS: GAGE OF TRANSPORTATION GRADE BREAK WW WASTE WATER PLAN LAST DATE **GPM** GALLONS PER MINUTE WWF WELDED WIRE FABRIC - SECTION LETTER B-19 HYDRANT SETTING TYPE A & B 10/3/83 **GRAVEL** SECTION CUT XFMR TRANSFORMER -DRAWING ON WHICH C-1 BEAM GUARDRAIL (W BEAM), SHEET I OF 2 6/4/93 SECTION IS SHOWN **HORIZ HORIZONTAL** BEAM GUARDRAIL (W BEAM), SHEET 2 OF 2 6/4/93 C-1 YARD HIGH POINT - DETAIL OR ASSEMBLY NUMBER GUARDRAIL PLACEMENT 6/19/92 C-2p DRAWING ON WHICH C-7 BEAM GUARDRAIL TERMINAL SECTION (DESIGN G) 1/21/85 DETAIL INDICATION DETAIL IS SHOWN INSIDE DIAMETER H−5c PAVEMENT MARKINGS 7/17/81 *H*−6 SURVEY MONUMENTS 7/17/81 INCL INTSCT - DETAIL OR ASSEMBLY NUMBER INCLUDE INTERSECTION RFFDETAIL TITLE L-2 CHAIN LINK FENCE, SHEET I OF 2 5/24/91 INVERT DRAWINGS FROM WHICH CHAIN LINK FENCE, SHEET 2 OF 2 5/24/91 L-2 DETAIL IS SHOWN CHAIN LINK GATES 1/21/85 L-3 DRAWING ON WHICH JUNCTION BOX ACCESS CONTROL GATE 1/21/85 L-6 DETAIL IS DRAWN JOINT - PROFILE NUMBER **PROFILE LENGTH** - DRAWING ON WHICH POUND PROFILE IS SHOWN REVISION CLOUD REVISION TRIANGLE & NUMBER ON FACE OF LIGO-D960197-01-O LASER INTERFEROMETER WRB 9/28/9 GRAVITATIONAL-WAVE OBSERVATORY ML 7/9/96 CHECKED SITE NO. I - HANFORD, WASHINGTON JB 7/9/96 JPARSONS MDW 7/9/96 |PP150969| 8094 AS-BUILT CALIFORNIA INSTITUTE OF TECHNOLOGY GENERAL NOTES, LEGEND 100 WEST WALNUT STREET **DRAWINGS** WA-C-002 MASSACHUSETTS INSTITUTE OF TECHNOLOGY ISSUED FOR AS-BUILT PASADENA, CALIFORNIA & ABBREVIATIONS | *5/15/98* | *WRB* BY CHKD ENGR PROJ DESCRIPTION DESCRIPTION DATE DRAWING NO.

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