

ABBREVIATIONS

AC	ASPHALTIC CONCRETE	MAX	MAXIMUM
AGGR	AGGREGATE	MH	MANHOLE
APPROX	APPROXIMATELY	MIM	MINIMUM
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	MON	MONUMENT
AVG	AVERAGE	N	NORTH
BC	BEGIN CURVE	NIC	NOT IN CONTRACT
BDY	BOUNDARY	NTS	NOT TO SCALE
BLDG	BUILDING	OC	ON CENTER
BM	BENCH MARK	OD	OUTSIDE DIAMETER
BOP	BOTTOM OF PIPE	PC	POINT OF CURVE
BPG	BEARING	PCT, %	PERCENT
BVC	BEGIN VERTICAL CURVE	PI	POINT OF INTERSECTION
CB	CATCH BASIN	PIV	POST INDICATOR VALVE
CC	COMMUNICATION	PIVC	POINT OF INTERSECTION, VERTICAL CURVE
C TO C	CENTER TO CENTER	POC	POINT OF CONNECTION
CF	CURB FACE	POVC	POINT ON VERTICAL CURVE
CJ	CONSTRUCTION JOINT	PSI	POUND-FORCE PER SQUARE INCH
CL	CENTERLINE	PT	POINT OF TANGENCY
CL#	CLEAR	PVC	POLYVINYL CHLORIDE
CMP	CORRUGATED METAL PIPE	PWT	POTABLE WATER
CO	CLEANOUT	R	RADIUS
CONC	CONCRETE	RAD	RIDGE
CONSTR	CONSTRUCTION	RCP	RADIAL
CONT	CONTINUATION	RCR	REINFORCED-CONCRETE PIPE
CP	CONCRETE PIPE	RD	ROAD
CPB	COMMUNICATIONS PULLBOX	RDCR	REDUCER
CS	CARBON STEEL	REF	REFERENCE
CU FT	CUBIC FEET	REF	REINFORCEMENT
CULV	CULVERT	REQD	REQUIRED
CWR	CHILLED WATER RETURN	REV	REVISION
CWS	CHILLED WATER SUPPLY	RG	ROUGH GRADE
CT	CUBIC YARD	R/W	RIGHT-OF-WAY
DELTA	DELTA = ANGLE	S	SLOPE
D	DUCT	SCH, SCHED	SCHEDULE
DEG	DEGREE	SD	STORM DRAIN
DET	DETAIL	SG	SUBGRADE
DI	DUCTILE IRON	SHT	SHEET
DIA, Ø	DIAMETER	SM	SIMILAR
DL	DRAIN LINE	SO FT, SF	SQUARE FOOT
DWG	DRAWING	SS	SANITARY SEWER
E	EAST	STA	STATION
EA	ELECTRICAL	STD	STANDARD
EC	EACH	STL	STEEL
ECC	END CURVE	SW	SIDEWALK
EDB	ELECTRICAL DUCT BANK	T	TANGENT
EJ	EXPANSION JOINT	TC	TELEPHONE
ELEV	ELEVATION (HEIGHT)	TEL	TOP OF CURB
ELEC	ELECTRICAL	TEL	TELEPHONE
ELL	ELBOW	TG	TOP OF GRATE
EMH	ELECTRICAL MANHOLE	TOC	TOP OF CONCRETE
EPB	ELECTRICAL PULLBOX	TOP	TOP OF PIPE
EY	ELECTRICAL VAULT	TOPO	TOPOGRAPHY
EVC	END VERTICAL CURVE	TW	TOP OF WALL
EW	EACH WAY	TYP	TYPICAL
EXIST, EX	EXISTING	UG	UNDERGROUND
FH	FIRE HYDRANT	UN	UNLESS OTHERWISE NOTED
FIN	FINISH	VC	VERTICAL CURVE
FIN FL	FINISH FLOOR	VCP	VITRIFIED CLAY PIPE
FG	FINISH GRADE	VERT	VERTICAL
FL	FLOOR	VOL	VOLUME
FLG	FLOW LINE	W	WEST
FF	FACE OF FLANGE	W/	WITH
FS	FINISH SURFACE	W/O	WITHOUT
FT	FOOT, FEET	WSDOT	WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
FTG	FOOTING	WW	WASTE WATER
FW	FIRE WATER	WWF	WELDED WIRE FABRIC
GALV	GALVANIZED	XFMR	TRANSFORMER
GA	GAGE	YD	YARD
GB	GRADE BREAK		
GPM	GALLONS PER MINUTE		
GR	GRADE		
GVL	GRAVEL		
HORIZ	HORIZONTAL		
HP	HIGH POINT		
ID	INSIDE DIAMETER		
IN	INCH		
INCL	INCLUDE		
INTSECT	INTERSECTION		
INV	INVERT		
JB	JUNCTION BOX		
JT	JOINT		
L	LENGTH		
LB	FOUND		

LEGEND

EXISTING	NEW	DESCRIPTION
		CENTERLINE, E BUILDING OR STRUCTURE
		FENCE LINE
		ROAD
		ASPHALT CONCRETE PAVING
		MULTIPLE BITUMINOUS SURFACE
		CONCRETE
		DIRECTION OF SHEET FLOW
		FLOWLINE
		CLEANOUT
		DRAIN LINE
		POTABLE WATER
		ELECTRICAL
		ELECTRICAL DUCT BANK
		STORM DRAIN
		SANITARY SEWER
		TELEPHONE
		WATER
		FIRE WATER
		CHILLED WATER SUPPLY
		CHILLED WATER RETURN
		COMMUNICATIONS
		FIRE HYDRANT
		GATE VALVE
		MANHOLE
		STORM DRAIN CATCH BASIN
		CULVERT
		POWER POLE
		GUARD POST
		PLUG OR CAP
		INDEX CONTOUR LINE
		INTERMEDIATE CONTOUR LINE
		CUT/FILL SLOPE
		FINISH GRADE ELEVATION
		FINISH SURFACE ELEVATION
		FLOW LINE ELEVATION
		TOP OF CURB
		TOP OF WALL
		INVERT ELEVATION
		ROUGH GRADE ELEVATION
		SECTION CUT
		DETAIL INDICATION
		DETAIL TITLE
		PROFILE
		REVISION CLOUD

GENERAL NOTES

- THE TOPOGRAPHY WITHIN THE PROPERTY LINES, WAS GENERATED BY COMPUTER METHODS FROM A SURVEY PERFORMED BY J-U-B ENGINEERS, INC., KENNEWICK, WASHINGTON, DATED SEPTEMBER 23, 1993.
- HORIZONTAL AND VERTICAL DATUMS ARE ALSO FROM THE J-U-B ENGINEERS, INC. SURVEY, AND ARE AS FOLLOWS:
HORIZONTAL DATUM: THE COORDINATE GRID SYSTEM ORIGINATES AT THE VERTEX POINT (N 410990.1636, E 1915712.5766) AND IS CONSIDERED COINCIDENT WITH STATE PLANE COORDINATES AT THAT POINT AND ALSO INDICATED AS STATION 0+00.00 FOR EITHER BEAM TUBE ARM. REFERENCE STATE PLANE IS WASHINGTON STATE PLANE LAMBERT SOUTH ZONE NAD 83/91
VERTICAL DATUM: NAVD 88 BENCH MARK "MCKINLEY"
(ANG. LAT. 46°27'25.68") GRID FACTOR 0.999917130
(ANG. ELEV. 532.801) SEA LEVEL FACTOR 0.999974515
COMBINED PROJECT SCALE FACTOR = 0.999891645
STATE PLANE 999,891645' = 1000,000 MEASURED GROUND.
- STRAIGHT GRADE BETWEEN SPOT ELEVATIONS, UNLESS OTHERWISE SHOWN ON PLANS.
- NOTES RELATING TO A SPECIFIC DRAWING WILL BE FOUND ON THE DRAWING FOR WHICH THEY ARE APPLICABLE.
- DIMENSIONS, ELEVATIONS AND LOCATION OF EXISTING UTILITIES ARE TO BE VERIFIED PRIOR TO START OF CONSTRUCTION BY CONTRACTOR.
- AN EXISTING 6" WATERLINE IS LOCATED ALONG THE WEST SIDE OF THE SOUTHWEST ARM, WHICH BEGINS AT A WELL PUMP POINT NEAR THE SOUTHWEST END STATION AND TERMINATES AT A POND LOCATED ADJACENT TO THE CORNER STATION PAD ON THE SOUTHWEST SIDE. EXACT LOCATION AND ALIGNMENT SHALL BE VERIFIED IN THE FIELD. APPROXIMATE ALIGNMENT OF WATERLINE IS SHOWN ON SHEETS WA-C-031 THRU WA-C-040. SEE DETAIL 7, SHEET WA-C-055.
- FINISHED SURFACES SHALL BE SLOPED UNIFORMLY FROM HIGH POINTS, RIDGE LINES, AND AROUND FOUNDATIONS TO FLOW LINES AND AREA DRAINS UNLESS INDICATED OTHERWISE.
- STORM DRAIN, SANITARY SEWER, AND UTILITY LINES SHALL BE SLOPED AT A UNIFORM GRADE BETWEEN INVERT ELEVATIONS.
- BORING SUMMARIES ARE FROM A FOUNDATIONS INVESTIGATION CONDUCTED BY DAMES AND MOORE. A COPY OF THE REPORT IS ON FILE WITH THE CLIENT.
- ALL UNDERGROUND PIPES SHALL BE PROPERLY PROTECTED DURING CONSTRUCTION FROM HEAVY MOVING EQUIPMENT.
- WELL PUMP AT SOUTHWEST END STATION SHALL BE ENCLOSED WITH A 7'-9" HIGH PREFABRICATED SHELTER WITH STANDARD DOOR, ANCHORED TO CONCRETE SLAB.

STANDARD PLANS

TO THE EXTENT REFERENCED, THE FOLLOWING WASHINGTON STATE DEPARTMENT OF TRANSPORTATION STANDARD PLANS FOR ROAD, BRIDGES AND MUNICIPAL CONSTRUCTION SHALL BE CONSIDERED PART OF THE CONSTRUCTION DOCUMENTS:

PLAN	TITLE	LAST DATE
B-11	PIPE COMPACTION DESIGNS AND BACKFILL	1/25/80
B-18c	PIPE BEDDING FOR SANITARY SEWERS IN TRENCHES ONLY	2/21/91
B-19	HYDRANT SETTING TYPE A & B	10/ 3/83
C-1	BEAM GUARDRAIL (W BEAM), SHEET 1 OF 2	6/ 4/93
C-1	BEAM GUARDRAIL (W BEAM), SHEET 2 OF 2	6/ 4/93
C-2p	GUARDRAIL PLACEMENT	8/19/92
C-7	BEAM GUARDRAIL TERMINAL SECTION (DESIGN G)	1/21/85
F-1	CEMENT CONCRETE CURBS AND GUTTERS	3/13/92
F-2b	EXTRUDED CURB	2/21/91
G-4a	ROADSIDE SIGN STRUCTURES ON TIMBER POSTS	10/11/93
G-9	SIGN MOUNTING DETAILS, SHEET 2 OF 3	11/18/90
H-5c	PAVEMENT MARKINGS	7/17/81
H-6	SURVEY MONUMENTS	7/17/81
H-13	TYPE 1 BOLLARD (GUARD POST)	3/15/91
H-13a	TYPE 2 BOLLARD (GUARD POST)	3/15/91
I-1	REST AREA BUILDING DETAILS SEPTIC TANK	11/28/79
I-1a	REST AREA BUILDING DETAILS DRAIN FIELD	11/28/79
J-10	ELECTRICAL CONDUIT PLACEMENT	3/ 7/88
L-2	CHAIN LINK FENCE, SHEET 1 OF 2	5/24/91
L-2	CHAIN LINK FENCE, SHEET 2 OF 2	5/24/91
L-7	CHAIN LINK GATES	1/21/85
L-8	ACCESS CONTROL GATE	1/21/85

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NO.	DATE	BY	CHKD	ENGR	PROJ	DESCRIPTION
B	4/19/96	WRB				FINAL DESIGN REVIEW & BID
A	10/31/95	WRB				PRELIMINARY DESIGN REVIEW

DRAWN	WRB
CHECKED	
ENGINEER	
PROJ	

PARSONS
100 WEST WALNUT STREET
PASADENA, CALIFORNIA

LIGO
CALIFORNIA INSTITUTE OF TECHNOLOGY
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

LASER INTERFEROMETER
GRAVITATIONAL-WAVE OBSERVATORY
SITE NO. 1 - HANFORD, WASHINGTON

CIVIL
GENERAL NOTES, LEGEND
& ABBREVIATIONS

SCALE: NONE
CONTRACT NUMBER: PP150969
PROJECT NUMBER: 8094

SHEET NUMBER: **WA-C-002**

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