DATE: 07/03/96 TIME: 06:36:38
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ABBREVIATIONS

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

LEGEND

EXISTING	NEW	DESCRIPTION
		CENTERLINE, ℄
		BUILDING OR STRUCTURE
		FENCE LINE
		ROAD
		ASPHALT CONCRETE PAVING
		MULTIPLE BITUMINOUS SURFACE
		CONCRETE
		DIRECTION OF SHEET FLOW
		FLOWLINE
CO	CO	CLEANOUT
DL	DL	DRAIN LINE
PW	PW	POTABLE WATER
E	E	ELECTRICAL
E	EDB	ELECTRICAL DUCT BANK
SD	SD	STORM DRAIN
SS	SS	SANITARY SEWER
T	T	TELEPHONE
W	W	WATER
	FW	FIRE WATER
	CWS	CHILLED WATER SUPPLY
	CWR	CHILLED WATER RETURN
	C	COMMUNICATIONS
		FIRE HYDRANT
		GATE VALVE
		MANHOLE
		STORM DRAIN CATCH BASIN
		CULVERT
PP	PP	POWER POLE
GP	GP	GUARD POST
		PLUG OR CAP
(530)	530	INDEX CONTOUR LINE
		INTERMEDIATE CONTOUR LINE
TOP / TOE	TOP / TOE	CUT/FILL SLOPE
(531.00) FG	531.00 FG	FINISH GRADE ELEVATION
(532.50) FS	532.50 FS	FINISH SURFACE ELEVATION
(533.65) FL	533.65 FL	FLOW LINE ELEVATION
(531.50) TC	531.50 TC	TOP OF CURB
(537.00) TW	537.00 TW	TOP OF WALL
(531.00) INV	531.00 INV	INVERT ELEVATION
(531.00) RG	531.00 RG	ROUGH GRADE ELEVATION

SECTION LETTER
DRAWING ON WHICH SECTION IS SHOWN — SECTION CUT

DETAIL OR ASSEMBLY NUMBER
DRAWING ON WHICH DETAIL IS SHOWN — DETAIL INDICATION

DETAIL OR ASSEMBLY NUMBER
REF
DRAWINGS FROM WHICH DETAIL IS SHOWN
DRAWING ON WHICH DETAIL IS DRAWN — DETAIL TITLE

PROFILE NUMBER
DRAWING ON WHICH PROFILE IS SHOWN — PROFILE

REVISION TRIANGLE & NUMBER ON FACE OF DRAWING — REVISION CLOUD

GENERAL NOTES

1. 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.
2. 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"

   (AVG LAT. 46°27'25.68") GRID FACTOR 0.999917130
   (AVG ELEV. 532.80) SEA LEVEL FACTOR 0.999974515

   COMBINED PROJECT SCALE FACTOR = 0.999891645

   STATE PLANE 999.891645' = 1000.000' MEASURED GROUND.

   VERTEX 0 ELEVATION = 537.29' PROJECT DATUM
3. STRAIGHT GRADE BETWEEN SPOT ELEVATIONS, UNLESS OTHERWISE SHOWN ON PLANS.
4. NOTES RELATING TO A SPECIFIC DRAWING WILL BE FOUND ON THE DRAWING FOR WHICH THEY ARE APPLICABLE.
5. DIMENSIONS, ELEVATIONS AND LOCATION OF EXISTING UTILITIES, STRUCTURES, OR GRADING ARE TO BE VERIFIED PRIOR TO START OF CONSTRUCTION BY CONTRACTOR. ANY DISCREPANCY WITH THE DRAWINGS SHALL BE BROUGHT IMMEDIATELY TO THE ATTENTION OF THE CONSTRUCTION MANAGER. ANY ADDITIONAL WORK PERFORMED BY THE CONTRACTOR DUE TO HIS FAILURE TO VERIFY AND SO ADVISE, SHALL BE COMPLETELY AT HIS OWN COST AND AT NO COST TO THE INSTITUTE.
6. 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.
7. FINISHED SURFACES SHALL BE SLOPED UNIFORMLY FROM HIGH POINTS, RIDGE LINES, AND AROUND FOUNDATIONS TO FLOW LINES AND AREA DRAINS UNLESS INDICATED OTHERWISE.
8. STORM DRAIN, SANITARY SEWER, AND UTILITY LINES SHALL BE SLOPED AT A UNIFORM GRADE BETWEEN INVERT ELEVATIONS.
9. BORING SUMMARIES ARE FROM A FOUNDATIONS INVESTIGATION CONDUCTED BY DAMES AND MOORE. A COPY OF THE REPORT IS ON FILE WITH THE CLIENT.
10. ALL UNDERGROUND PIPES SHALL BE PROPERLY PROTECTED DURING CONSTRUCTION FROM HEAVY MOVING EQUIPMENT.
11. WELL PUMP AT SOUTHWEST END STATION SHALL BE ENCLOSED WITH A 7'x9'x8' HIGH PREFABRICATED SHELTER WITH STANDARD DOOR, ANCHORED TO A NEW 6" THICK CONCRETE SLAB. PER CONTRACTOR DESIGN.
12. ALL NEW SIDE SLOPES 3 (HORIZONTAL) : 1 (VERTICAL) OR STEEPER SHALL HAVE A MINIMUM 3 INCHES OF SLOPE PROTECTION MATERIAL.
13. ALL UNPAVED FLAT SURFACES, ROADS OR FUTURE PAVED AREAS SHALL CONTINUALLY HAVE DUST CONTROL DURING THE COMPLETE CONTRUCTION PERIOD, UNTIL PAVED OR BITUMINOUS SURFACE TREATED.
14. THE LIGO VERTEX POINT IS DEFINED AS THE INTERSECTION OF THE BEAM TUBE CENTERLINES OR THE (0,0,0) POINT EQUIVALENT TO (NORTH, EAST, ELEVATION) PROJECT COORDINATES DEFINED IN NOTE 2 ABOVE.

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-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-2a	GUARDRAIL PLACEMENT	6/19/92
C-7	BEAM GUARDRAIL TERMINAL SECTION (DESIGN G)	1/21/85
H-5c	PAVEMENT MARKINGS	7/17/81
H-6	SURVEY MONUMENTS	7/17/81
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-3	CHAIN LINK GATES	1/21/85
L-6	ACCESS CONTROL GATE	1/21/85

REFERENCES		REVISIONS						
DRAWING NO.	DESCRIPTION	NO.	DATE	BY	CHKD	ENGR	PROJ	DESCRIPTION

FOR CONSTRUCTION

DRAWN	WRB	9/28/95
CHECKED		7/9/96
ENGINEER		7/9/96
PROJ		7/9/96

STATE OF WASHINGTON — JOHN JAMES BURKHART — 16031 — REGISTERED PROFESSIONAL ENGINEER — EXPIRES 2/19/98

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

TITLE: CIVIL GENERAL NOTES, LEGEND & ABBREVIATIONS

SCALE	CONTRACT NUMBER	PROJECT NUMBER
NONE	PP150969	8094

SHEET NUMBER: WA-C-002 — REVISIONS: 0

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