

BENCHMARK ENGINEERING CONTACT: BROCK D. LOOMIS, P.E.

COVER

1 OF 8

BONNEVILE SHORELINE

TREE LINE EDGE

PROPOSED ASPHALT

PROPOSED CONCRETE

**^** 



## CAUTION NOTICE TO CONTRACTORS

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THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS ARE BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED MPROVEMENTS SHOWN ON THE PLANS.

THE CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY: THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO THE NORMAL WORKING HOURS; AND THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AN HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.

### SYMBOLS:

NEW	<u>EXISTING</u>	
<b>♦</b>	<b>♦</b>	SECTION CORNER (FOUND)
•	<b>♦</b> •	SECTION CORNER (NOT FOUND)
\$	•	STREET MONUMENT (FOUND)
<del>\$</del>		STREET MONUMENT (NOT FOUND)
0	0	BRASS CAP MONUMENT
-0-	-0-	POWER POLE & OVERHEAD POWER
ф	ф	LIGHT POLE
-0	-•	GUY WIRE
$\bigcirc$		TELEPHONE MANHOLE
S	S	SANITARY SEWER MANHOLE
<b>(D)</b>		STORM DRAIN MANHOLE
		CATCH BASIN
$\Rightarrow$	$\Rightarrow$	DIRECTION OF DRAINAGE
W	W	WATER MANHOLE
$\bowtie$	$\bowtie$	WATER VALVE & WATER METER
$\ddot{\mathcal{R}}$	***	FIRE HYDRANT
$\bowtie$	$\bowtie$	IRRIGATION VALVE
(G)	G AND	GAS MANHOLE
		TREE

ВС	BAR & CAP	R	RADIUS OF CURVE
COR.	SECTION CORNER	RR	RAILROAD
СВ	CATCH BASIN	ROW	RIGHT-OF-WAY
D	DELTA ANGLE	R/W	RIGHT-OF-WAY
EOA	EDGE OF ASPHALT	SMH	SEWER MANHOLE
EOC	EDGE OF CONCRETE	SD	STORM DRAIN
FFE	FINISH FLOOR ELEVATION	TBC	TOP BACK OF CURB
FH	FIRE HYDRANT	TMH	TELEPHONE MANHOLE
FL	FLOW LINE	TOA	TOP OF ASPHALT
GB	GRADE BREAK	TOC	TOP OF CURB
GW	GUY WIRE	TOF	TOP OF FOOTING
HW	HEAD WALL	TOE	TOE OF SLOPE
I.E.	INVERT ELEVATION	TOG	TOP OF GRATE
L <b>I</b> P	LENGTH OF CURVE	TOP	TOP OF SLOPE
L	LIP OF CURB	TOW	TOP OF WALL
LP	LOW POINT	TR	TELEPHONE RISER
M-M	MONUMENT TO MONUMENT	UGP	UNDERGROUND POWER
MH	MANHOLE	VPC	VERTICAL POINT OF
MON.	SURVEY MONUMENT		CURVATURE
OHP	OVERHEAD POWER	VPI	VERTICAL POINT
PC	POINT OF CURVATURE		INTERSECTION
PI	POINT OF INTERSECTION	VPT	VERTICAL POINT OF TANGENCY
PP	POWER POLE	WM	WATER METER
PT	POINT OF TANGENCY	WV	WATER VALVE

## **CONSTRUCTION NOTES**

 $\underline{\text{RESPONSIBLE DISTRICTS OR AGENCIES AND APPLICABLE STANDARDS}}$ CITY OR COUNTY-WEBER COUNTY WATER UTILITY COMPANY-UINTAH HIGHLANDS IMPROVEMENT DISTRICT SEWER UTILITY COMPANY-UINTAH HIGHLANDS IMPROVEMENT DISTRICT STORM DRAIN/GROUNDWATER-WEBER COUNTY ELECTRICAL-ROCKY MOUNTAIN POWER

PUE PUBLIC UTILITY EASEMENT

TELEPHONE-CENTURY LINK NATURAL GAS-QUESTAR

PRESSURIZED IRRIGATION - WEBER BASIN CONSERVANCY DISTRICT

APPLICABLE STANDARDS APWA 2012 STANDARDS

1. ALL MATERIALS AND CONSTRUCTION IN THE PUBLIC RIGHT OF WAY SHALL BE IN ACCORDANCE WITH RESPONSIBLE DISTRICT OR AGENCY.

2. CONTRACTOR AND APPLICABLE SUBCONTRACTORS SHALL ATTEND ALL PRE-CONSTRUCTION CONFERENCES AND PERIODIC PROGRESS MEETINGS. PRIOR TO ANY WORK BEING PERFORMED. THE CONTRACTOR SHALL CONTACT RESPONSIBLE DISTRICT OR AGENCY FOR A PRE-CONSTRUCTION CONFERENCE. CONTRACTOR SHALL ALSO NOTIFY THE APPROPRIATE PROJECT CONTACTS (48) HOURS IN ADVANCE OF SAID MEETING.

3. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PUBLIC SAFETY AND OSHA STANDARDS.

4. THE CONTRACTOR SHALL FAMILIARIZE HIM/HER SELF WITH THE PLANS, THE GEOLOGY REPORTS AND THE SITE CONDITIONS PRIOR TO COMMENCING WORK. CONTRACTOR SHALL INSPECT THE SITE OF WORK PRIOR TO BIDDING TO SATISFY THEMSELVES BY PERSONAL EXAMINATION OR BY SUCH OTHER MEANS AS THEY MAY PREFER, OF THE LOCATION OF THE PROPOSED WORK, AND OF THE ACTUAL CONDITIONS OF AND AT THE SITE OF WORK.

CONDITIONS WHICH APPEAR TO THEM TO BE IN CONFLICT WITH THE LETTER OR SPIRIT OF THE PROJECT PLANS AND SPECIFICATIONS, THEY SHALL CONTACT THE ENGINEER FOR ADDITIONAL INFORMATION AND EXPLANATION BEFORE SUBMITTING THEIR BID.

SUBMISSION OF A BID BY THE CONTRACTOR SHALL CONSTITUTE ACKNOWLEDGMENT THAT, IF AWARDED THE CONTRACT, THEY HAVE RELIED AND ARE RELYING ON THEIR OWN EXAMINATION OF (1) THE SITE OF THE WORK, (2) ACCESS TO THE SITE, AND (3) ALL OTHER DATA AND MATTERS REQUISITE TO THE FULFILLMENT OF THE WORK AND ON THEIR OWN KNOWLEDGE OF EXISTING FACILITIES ON AND IN THE VICINITY OF THE SITE OF THE WORK TO BE CONSTRUCTED UNDER THIS CONTRACT.

THE INFORMATION PROVIDED BY THE OWNER OR THE ENGINEER IS NOT INTENDED TO BE A SUBSTITUTE FOR, OR A SUPPLEMENT TO, THE INDEPENDENT VERIFICATION BY THE CONTRACTOR TO THE EXTENT SUCH INDEPENDENT INVESTIGATION OF SITE CONDITIONS IS DEEMED NECESSARY OR DESIRABLE BY THE CONTRACTOR. CONTRACTOR SHALL ACKNOWLEDGE THAT THEY HAVE NOT RELIED SOLELY UPON OWNER OR ENGINEER FURNISHED INFORMATION REGARDING SITE CONDITIONS IN PREPARING AND SUBMITTING THEIR BID.

5. ALL WORK SHALL COMPLY WITH THE AMERICAN PUBLIC WORKS ASSOCIATION UTAH CHAPTER (APWA) MANUAL OF STANDARD SPECIFICATIONS 2012 EDITION AND THE MANUAL OF STANDARD PLANS 2012 EDITION. SAID STANDARD SPECIFICATIONS AND PLANS SHALL BE SUBSIDIARY TO MORE STRINGENT REQUIREMENTS BY APPLICABLE LOCAL JURISDICTION.

6. THE CONTRACTOR SHALL BE SKILLED AND REGULATORY ENGAGED IN THE GENERAL CLASS AND TYPE OF WORK CALLED FOR IN THE PROJECT PLANS AND SPECIFICATIONS. THEREFORE, THE OWNER IS RELYING UPON THE EXPERIENCE AND EXPERTISE OF THE CONTRACTOR, IT SHALL BE EXPECTED THAT THE PRICES PROVIDED WITHIN THE CONTRACT DOCUMENTS SHALL INCLUDE ALL LABOR AND MATERIALS NECESSARY AND PROPER FOR THE WORK CONTEMPLATED AND THAT THE WORK BE COMPLETED IN ACCORDANCE WITH THEIR TRUE INTENT AND

THE CONTRACTOR SHALL BE COMPETENT, KNOWLEDGEABLE AND HAVE SPECIAL SKILLS ON THE NATURE, EXTENT AND INHERENT CONDITIONS OF THE WORK TO BE PERFORMED. CONTRACTOR SHALL ALSO ACKNOWLEDGE THAT THERE ARE CERTAIN REGULAR AND INHERENT CONDITIONS EXISTENT IN THE CONSTRUCTION OF THE PARTICULAR FACILITIES WHICH MAY CREATE, DURING THE CONSTRUCTION PROGRAM, UNUSUAL OR PECULIAR UNSAFE

CONDITIONS HAZARDOUS TO PERSONS, PROPERTY AND THE ENVIRONMENT. CONTRACTOR SHALL BE AWARE OF SUCH PECULIAR RISKS AND HAVE THE SKILL AND EXPERIENCE TO FORESEE AND TO ADOPT PROTECTIVE MEASURES TO ADEQUATELY AND SAFELY PERFORM THE CONSTRUCTION WORK WITH RESPECT TO SUCH

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PERMITS AND LICENSES REQUIRED FOR THE CONSTRUCTION AND COMPLETION OF THE PROJECT, AND SHALL PERFORM ALL WORK IN ACCORDANCE WITH THE REQUIREMENTS AND CONDITIONS OF ALL PERMITS AND APPROVALS APPLICABLE TO THIS PROJECT. THE CONTRACTOR SHALL ENSURE THAT THE NECESSARY RIGHT-OF-WAY FASEMENTS AND/OR PERMITS ARE SECURED PRIOR TO CONSTRUCTION. CONTRACTOR SHALL OBTAIN APPROPRIATE PERMITS WHERE APPLICABLE FOR ANY WORK DONE WITHIN RIGHT-OF-WAY OR EASEMENTS FROM WEBER COUNTY AND/OR UDOT CONTRACTOR SHALL NOTIFY CITY, COUNTY, AND/OR STATE, 24 HOURS IN ADVANCE OF COMMUNICATING THE WORK, OR AS REQUIRED BY SAID PERMITS.

8. CONSTRUCTION STAKING FOR GRADING, CURB, GUTTER, SIDEWALK, SANITARY SEWER, STORM DRAIN, WATER, AND ELECTROLIERS SHALL BE DONE BY THE OWNER'S SURVEYOR. THE CONTRACTOR SHALL NOTIFY THE SURVEYOR FORTY-EIGHT (48) HOURS IN ADVANCE OF THE NEED FOR STAKING. ANY STAKING REQUESTED BY THE CONTRACTOR OR THEIR SUBCONTRACTORS THAT IS ABOVE AND BEYOND STANDARD STAKING NEEDS, WILL BE SUBJECT TO AN EXTRA WORK BACK CHARGE TO THE CONTRACTOR. THE CONTRACTOR SHALL EXERCISE DUE CAUTION AND SHALL CAREFULLY PRESERVE BENCH MARKS, CONTROL POINTS, REFERENCE POINTS AND ALL SURVEY STAKES, AND SHALL BEAR ALL EXPENSES FOR REPLACEMENT AND/OR ERRORS CAUSED BY THEIR UNNECESSARY LOSS OR DISTURBANCE

9. IT IS INTENDED THAT THESE PLANS AND SPECIFICATIONS REQUIRE ALL LABOR AND MATERIALS NECESSARY AND PROPER FOR THE WORK CONTEMPLATED AND THAT THE WORK BE COMPLETED IN ACCORDANCE WITH THEIR TRUE INTENT AND PURPOSE. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY REGARDING ANY DISCREPANCIES OR AMBIGUITIES WHICH MAY EXIST IN THE PLANS OR SPECIFICATIONS. THE ENGINEER'S NTERPRETATION THEREOF SHALL BE CONCLUSIVE. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY FIELD CHANGES MADE WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE OWNER AND/OR ENGINEER.

10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATELY SCHEDULING INSPECTION AND TESTING OF ALL FACILITIES CONSTRUCTED UNDER THIS CONTRACT. ALL TESTING SHALL CONFORM TO THE REGULATORY AGENCY'S STANDARD SPECIFICATIONS. ALL TESTING AND INSPECTION SHALL BE PAID FOR BY THE OWNER; ALL RE-TESTING AND/OR REINSPECTION SHALL BE PAID FOR BY THE CONTRACTOR.

11. IF EXISTING IMPROVEMENTS NEED TO BE DISTURBED AND/OR REMOVED FOR THE PROPER PLACEMENT OF IMPROVEMENTS TO BE CONSTRUCTED BY THESE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXISTING IMPROVEMENTS FROM DAMAGE. COST OF REPLACING OR REPAIRING EXISTING IMPROVEMENTS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEMS REQUIRING REMOVAL AND/OR REPLACEMENT OF EXISTING IMPROVEMENTS AND ANYTHING THAT HAS ALREADY BEEN CONSTRUCTED. THERE WILL BE NO EXTRA COST DUE THE CONTRACTOR FOR REPLACING OR REPAIRING EXISTING IMPROVEMENTS. WHENEVER EXISTING FACILITIES ARE REMOVED, DAMAGED, BROKEN, OR CUT IN THE INSTALLATION OF THE WORK COVERED BY THESE PLANS OR SPECIFICATIONS, SAID FACILITIES SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE, AFTER PROPER BACKFILLING AND/OR CONSTRUCTION, WITH MATERIALS EQUAL TO OR BETTER THAN THE MATERIALS USED IN THE ORIGINAL EXISTING FACILITIES. THE FINISHED PRODUCT SHALL BE SUBJECT TO THE APPROVAL OF THE OWNER, THE ENGINEER, AND THE RESPECTIVE REGULATORY AGENCY

12 THE CONTRACTOR SHALL MAINTAIN A NEATLY MARKED SET OF FULL-SIZE AS-BUILT RECORD DRAWINGS. SHOWING THE FINAL LOCATION AND LAYOUT OF ALL MECHANICAL: ELECTRICAL AND INSTRUMENTATION EQUIPMENT; PIPING AND CONDUITS; STRUCTURES AND OTHER FACILITIES. THE AS-BUILTS OF THE ELECTRICAL SYSTEM SHALL INCLUDE THE STREET LIGHT LAYOUT PLAN SHOWING LOCATION OF LIGHTS, CONDUITS, CONDUCTORS, POINTS OF CONNECTIONS TO SERVICES, PULLBOXES, AND WIRE SIZES. AS-BUILT RECORD DRAWINGS SHALL REFLECT CHANGE ORDERS, ACCOMMODATIONS, AND ADJUSTMENTS TO ALL IMPROVEMENTS CONSTRUCTED. WHERE NECESSARY, SUPPLEMENTAL DRAWINGS SHALL BE PREPARED AND SUBMITTED BY THE

13. PRIOR TO ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL DELIVER TO ENGINEER. ONE SET OF NEATLY MARKED AS-BUILT RECORD DRAWINGS SHOWING THE INFORMATION REQUIRED ABOVE AS-BUILT RECORD DRAWINGS SHALL BE REVIEWED AND THE COMPLETE AS-BUILT RECORD DRAWING SET SHALL BE

14. CONTRACTOR TO SPACE UTILITIES TO PROVIDE MINIMUM DISTANCES AS REQUIRED BY LOCAL, COUNTY, STATE, AND INDIVIDUAL UTILITY CODES.

15. ALL UTILITES INSTALLED IN ACCORDANCE WITH THE RESPONSIBLE DISTRICTS OR AGENCEIS STANDARDS AND SPECIFICATIONS.

16. COORDINATE ALL SERVICE LATERAL AND BUILDING CONNECTIONS WITH CORRESPONDING ARCHITECTURAL, MECHANICAL OR ELECTRICAL DRAWING FOR LOCATION AND ELEVATION. NOTIFY ENGINEER IMMEDIATELY IF ANY DISCREPANCIES ARE ENCOUNTERED.

17. ALL STORM DRAIN MANHOLES AND CATCH BASINS ARE TO BE PRECAST CONCRETE FROM APPROVED LOCAL MANUFACTURER UNLESS OTHERWISE NOTED. AND COMPLY WITH CITY/COUNTY STANDARD

18. ALL STORM WATER CONVEYANCE PIPING TO BE RCP - CLASS 3 OR EQUAL UNLESS OTHERWISE NOTED.

19. ALL ELECTRICAL CONDUITS/LINES TO BE PVC SCH 40 OR BETTER.

20. ALL GAS LINES TO BE HDPE WITH COPPER TRACER WIRE AND DETECTA TAPE. TERMINATE TRACER WIRE AT

21. ALL GAS LINE TAPS, VALVES AND CAPS TO BE FUSED USING ELECTRO - FUSION TECHNOLOGY.

22. ALL PHONE AND TV CONDUITS TO BE PVC SCH 40 OR BETTER.

23. NO GROUNDWATER OR DEBRIS TO BE ALLOWED TO ENTER THE NEW PIPE DURING CONSTRUCTION. THE OPEN END OF ALL PIPES IS TO BE COVERED AND EFFECTIVELY SEALED AT THE END OF EACH DAYS WORK

24. THE CONTRACTOR SHALL PROVIDE ALL SHORING, BRACING, SLOPING OR OTHER PROVISIONS NECESSARY TO PROTECT WORKMEN FOR ALL AREAS TO BE EXCAVATED TO A DEPTH OF 4' OR MORE AND SHALL COMPLY WITH INDUSTRIAL COMMISSION OF UTAH SAFETY ORDERS SECTION 68 - EXCAVATIONS, AND SECTION 69 - TRENCHES, ALONG WITH ANY LOCAL CODES OR ORDINANCES.

25. PRIOR TO OPENING AN EXCAVATION, EFFORT SHALL BE MADE TO DETERMINE WHETHER UNDERGROUND INSTALLATIONS; I.E. SEWER, WATER, FUEL, ELECTRIC LINES, ETC., WILL BE ENCOUNTERED AND IF SO, WHERE SUCH UNDERGROUND INSTALLATIONS ARE LOCATED. WHEN THE EXCAVATION APPROACHES THE APPROXIMATE LOCATION OF SUCH AN INSTALLATION, THE EXACT LOCATION SHALL BE DETERMINED BY CAREFUL PROBING OR HAND DIGGING; AND, WHEN IT IS UNCOVERED, ADEQUATE PROTECTION SHALL BE PROVIDED FOR THE EXISTING INSTALLATION. ALL KNOWN OWNERS OF UNDERGROUND FACILITIES IN THE AREA CONCERNED SHALL BE ADVISED OF PROPOSED WORK AT LEAST 48 HOURS PRIOR TO THE START OF ACTUAL EXCAVATION.

26. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO INSTALL PIPE OF ADEQUATE CLASSIFICATION WITH SUFFICIENT BEDDING TO MEET ALL REQUIREMENTS AND RECOMMENDATIONS FOR H-20 LOAD REQUIREMENTS.

27. ACTUAL CONNECTIONS TO EXISTING WATER LINES WILL NOT BE PERMITTED PRIOR TO THE COMPLETION OF STERILIZATION AND TESTING OF NEW WATER MAINS. ALL EXISTING WATER VALVES TO BE OPERATED UNDER THE DIRECTION OF THE CITY/COUNTY PUBLIC WORKS DEPARTMENT PERSONNEL ONLY.

28. ALL UNDERGROUND UTILITIES SHALL BE IN PLACE PRIOR TO INSTALLATION OF CURB, GUTTER, SIDEWALK, AND

29. ALL SEWER LINE TO BE FLUSHED, PRESSURE TESTED TO 5 PSI VIDEO INSPECTED AND OTHERWISE TESTED IN ACCORDANCE WITH DISTRICT STANDARDS PRIOR TO PLACING IN SERVICE.

30. ALL SEWER LINES SHOULD BE PVC C-900 SDR-18 AND LATERALS ARE TO BE SDR-35 PVC PIPE.

31. SEWER MANHOLES, LATERALS AND CLEANOUTS TO BE INSTALLED PER RESPONSIBLE DISTRICT OR AGENCY STANDARDS. THE UNIT COST OF THE SEWER LATERAL INCLUDES CONNECTION TO THE SEWER MAIN. THE

CLEANOUT RISER FOR EACH SERVICE SHALL BE INSTALLED BY THE CONTRACTOR.

32. DURING CONSTRUCTION OF THE SEWERLINE, WYES NEED TO BE INSTALLED FOR THE LATERALS. LATERALS ARE 4" AND NEED TO COME IN AT THE TOP OF THE PIPE WITH A WYE. (SEE RESPONSIBLE DISTRICT OR AGENCY

33. WATERLINES TO BE PVC C-900. WATER LINES SHALL BE A MINIMUM OF 10' HORIZONTALLY FROM SEWER MAINS. CROSSINGS SHALL MEET STATE HEALTH STANDARDS. (MECHANICAL JOINTS REQUIRED WHEN LESS THAN 18" VERTICAL OR TEN FEET HORIZONTAL SEPARATION FROM SEWERLINE)

34. ALL WATERLINES SHALL BE 8" MINIMUM SIZE AND SERVICE LATERALS SHALL BE 1-1/2" MINIMUM UNLESS

35. WATER SERVICE LATERALS TO INCLUDE ALL BRASS SADDLE; CORP. STOP LATERAL, DOUBLE CHECK VALVE AND BACKFLOW PREVENTION DEVICE, AND SHUTOFF VALVE IN BOX NEAR BUILDING EDGE.

36. ALL WATERLINES SHALL BE MINIMUM 48" BELOW FINISH GROUND TO TOP OF PIPE. ALL VALVE BOXES AND MANHOLES SHALL BE RAISED OR LOWERED TO FINISH GRADE AND SHALL INCLUDE A CONCRETE COLLAR IN PAVED AREAS. ALL WATER LINES SHALL BE LOOPED AROUND GRAVITY LINES OR TO PROVIDE MINIMUM COVER

37. CONTRACTOR TO NOTIFY PUBLIC WORKS FOR CHLORINE TEST PRIOR TO FLUSHING LINES, CHLORINE LEFT IN PIPE 24 HRS. MINIMUM WITH 25 PPM RESIDUAL. ALL TURNING OF MAINLINE VALVES, CHLORINATION, FLUSHING, PRESSURE TESTING, BACTERIA TESTING, ETC. TO BE COORDINATED WITH RESPONSIBLE DISTRICT OR AGENCY. ALL TESTS TO BE IN ACCORDANCE WITH APWA STANDARDS.

38. BOTTOM FLANGE OF FIRE HYDRANTS TO BE SET TO APPROXIMATELY 4 INCHES ABOVE BACK OF CURB ELEVATION. HYDRANTS TO INCLUDE TEE, 6" LINE VALVE, AND HYDRANT COMPLETE TO MEET RESPONSIBLE DISTRICT OR AGENCY STANDARDS.

## EXISTING UTILITIES

39. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UTILITIES SHOWN OR NOT SHOWN. THE INFORMATION SHOWN ON THE PLANS WITH REGARDS TO THE EXISTING UTILITIES AND/OR IMPROVEMENTS WAS DERIVED FROM FIELD INVESTIGATION AND/OR RECORD INFORMATION. NO REPRESENTATION IS MADE AS TO THE ACCURACY OR COMPLETENESS OF SAID UTILITY INFORMATION. THE CONTRACTOR SHALL TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE FACILITIES SHOWN AND ANY OTHER FACILITIES NOT OF RECORD OR NOT SHOWN ON THESE PLANS. PRIOR TO CONSTRUCTION, IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO VERIFY ALL EXISTING IMPROVEMENTS AND TO EXPOSE ALL EXISTING UNDERGROUND UTILITIES RELATED TO THE PROJECT NCLUDING BUT NOT LIMITED TO, SEWER, STORM DRAIN, WATER IRRIGATION, GAS, ELECTRICAL, ETC. AND SHALL NOTIFY THE ENGINEER IN WRITING FORTY-EIGHT (48) HOURS IN ADVANCE OF EXPOSING THE UTILITIES SO, THAT THE EXACT LOCATION AND ELEVATION CAN BE VERIFIED AND DOCUMENTED. THE COST ASSOCIATED TO PERFORM THIS WORK SHALL BE INCLUDED IN EITHER THE LUMP SUMP CLEARING COST OR IN THE VARIOUS ITEMS OF WORK. IF LOCATION AND/OR ELEVATION DIFFERS FROM THAT SHOWN ON THE DESIGN PLANS, PROVISIONS TO ACCOMMODATE NEW LOCATION BE MADE PRIOR TO CONSTRUCTION

40. PRIOR TO COMMENCING ANY WORK, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO HAVE EACH UTILITY COMPANY LOCATE, IN THE FIELD, THEIR MAIN AND SERVICE LINES. THE CONTRACTOR SHALL NOTIFY BLUE STAKES 48 HOURS IN ADVANCE OF PERFORMING ANY EXCAVATION WORK THE CONTRACTOR SHALL RECORD THE BLUE STAKES ORDER NUMBER AND FURNISH ORDER NUMBER TO OWNER AND ENGINEER PRIOR TO ANY EXCAVATION. IT WILL BE THE CONTRACTORS SOLE RESPONSIBILITY TO DIRECTLY CONTACT ANY OTHER UTILITY COMPANIES THAT ARE NOT MEMBERS OF BLUE STAKES. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO PROTECT ALL EXISTING UTILITIES SO THAT NO DAMAGE RESULTS TO THEM DURING THE PERFORMANCE OF THIS CONTRACT. ANY REPAIRS NECESSARY TO DAMAGED UTILITIES SHALL BE PAID FOR BY THE CONTRACTORS AND UTILITY COMPANIES INSTALLING NEW STRUCTURES, UTILITIES AND SERVICE TO THE PROJECT.

41. ALL UTILITY MANHOLE RIMS, CATCH BASIN GRATES AND VALVE BOX COVERS ARE TO BE ADJUSTED TO FIT THE FINISHED GRADE OF THE SITE.

42. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ASSURE THAT ALL PIPES, WALLS, ETC. ARE ADEQUATELY BRACED DURING CONSTRUCTION.

## CLEARING AND GRADING

43. CONTRACTOR SHALL PERFORM EARTHWORK IN ACCORDANCE WITH APWA 2012 STANDARD DRAWINGS AND STANDARD SPECIFICATIONS AND THE RECOMMENDED EARTHWORK SPECIFICATION FOUND IN THE PROFESSIONALLY PREPARED REPORT OF GEOTECHNICAL INVESTIGATION.

44. THE CONTRACTOR SHALL REMOVE ALL VEGETATION AND DELETERIOUS MATERIALS FROM THE SITE UNLESS NOTED OTHERWISE; ALL EXISTING WELLS AND SEPTIC TANKS SHALL BE REMOVED AND/OR ABANDONED PER THE REQUIREMENTS OF ALL LOCAL, STATE AND FEDERAL REGULATIONS. THE COST TO PERFORM THIS WORK SHALL BE INCLUDED IN THE LUMP SUM CLEARING COST.

45. SUBSOIL INVESTIGATIONS HAVE BEEN CONDUCTED AT THE SITE OF THE WORK. BEFORE FOOTING, FOUNDATION OR STRUCTURAL WALL CONSTRUCTION CAN COMMENCE, A REVIEW OF THE PROFESSIONALLY PREPARED REPORT OF THESE INVESTIGATIONS. MUST BE REVIEWED.

SOIL INVESTIGATIONS WERE CONDUCTED FOR DESIGN PURPOSES ONLY, AND THE DATA SHOWN IN THE REPORTS ARE FOR SUBSURFACE CONDITIONS FOUND AT THE TIME OF THE INVESTIGATION. THE OWNER AND ENGINEER DISCLAIM RESPONSIBILITY FOR THE INTERPRETATION BY THE CONTRACTOR OF DATA, SUCH PROJECTION OR EXTRAPOLATION, FROM THE TEST HOLES TO OTHER LOCATIONS ON THE SITE OF THE WORK, SOIL BEARING VALUES AND PROFILES, SOIL STABILITY AND THE PRESENCE, LEVEL AND EXTENT OF UNDERGROUND WATER FOR SUBSURFACE CONDITIONS DURING CONSTRUCTION OPERATIONS

46. ALL PROPOSED ELEVATIONS SHOWN ON THE GRADING PLAN ARE TO FINISHED SURFACE, THE CONTRACTOR IS RESPONSIBLE TO DEDUCT THE THICKNESS OF THE PAVEMENT STRUCTURAL SECTION FOR TOP OF SUB GRADE

47. IF AT ANY TIME DURING CONSTRUCTION ANY UNFAVORABLE GEOLOGICAL CONDITIONS ARE ENCOUNTERED, WORK IN THAT AREA WILL STOP UNTIL APPROVED CORRECTIVE MEASURES ARE OBTAINED FROM THE ENGINEER.

48. UNSUITABLE MATERIAL, SUCH AS TOP SOIL, WEATHERED BED ROCK, ETC., SHALL BE REMOVED AS REQUIRED BY THE SOILS ENGINEER (AND/OR ENGINEERING GEOLOGIST, WHERE EMPLOYED) FROM ALL AREAS TO RECEIVE COMPACTED FILL OR DRAINAGE STRUCTURES.

49. NO TREES SHALL BE REMOVED OR DAMAGED WITHOUT SPECIFIC WRITTEN AUTHORIZATION FROM PROPERTY

50. THE EXISTING TOPOGRAPHY ON THESE PLANS IS BASED ON A TOPOGRAPHIC SURVEY PERFORMED BY BENCHMARK ENGINEERING AND LAND SURVEYING AND MAY HAVE BEEN MODIFIED SINCE THIS SURVEY WAS

51. FILLS IN EXCESS OF 4 FEET IN THICKNESS AND BENEATH ALL FOUNDATIONS OR PAVEMENT SECTIONS SHALL BE COMPACTED TO 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE ASTM D-1557 COMPACTION CRITERIA. ALL OTHER STRUCTURAL FILL LESS THAN 4 FEET IN THICKNESS SHOULD BE COMPACTED TO AT LEAST 90 PERCENT OF THE ABOVE CRITERIA.

52. COMPACTION TESTING WILL BE ACCOMPLISHED BY THE CONTRACTOR, OR THE CONTRACTOR WILL HAVE SUCH TESTING ACCOMPLISHED BY A SEPARATE CONTRACTOR. TEST RESULTS WILL BE SUBMITTED FOR REVIEW WITHIN 24 HOURS AFTER TEST.

53. CONTRACTOR TO SUBMIT PROCTOR AND/OR MARSHALL TEST DATA 24 HOURS PRIOR TO TEST.

54. STRAIGHT GRADE SHALL BE MAINTAINED BETWEEN CONTOUR LINES AND SPOT ELEVATIONS UNLESS OTHERWISE SHOWN ON PLANS.

55. ALL SLOPES IN ADJOINING STREETS, DRAINAGE CHANNELS, OR OTHER FACILITIES SHALL BE GRADED NO STEEPER THAN 2 TO 1 FOR CUT AND FILL.

56. GRADES WITHIN ASPHALT PARKING AREAS SHALL BE CONSTRUCTED TO WITHIN 0.10 FEET OF THE DESIGN GRADE. HOWEVER, THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE IN ALL PAVEMENT AREAS AND ALONG ALL CURBS. ALL CURBS SHALL BE BUILT IN ACCORDANCE TO THE PLAN. CURBS AND PAVEMENT AREAS WHICH DO NOT PROVIDE PROPER DRAINAGE MUST BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

## 57. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING HIS OWN ESTIMATE OF EARTHWORK QUANTITIES.

58. WHERE NEW CURB AND GUTTER IS BEING CONSTRUCTED ADJACENT TO EXISTING ASPHALT OR CONCRETE PAVEMENT, THE FOLLOWING SHALL APPLY; PRIOR TO PLACEMENT OF ANY CONCRETE THE CONTRACTOR SHALL HAVE A LICENSE SURVEYOR VERIFY THE GRADE AND CROSS SLOPE OF THE CURB AND GUTTER FORMS, THE CONTRACTOR SHALL SUBMIT THE SLOPE AND GRADES TO THE ENGINEER FOR APPROVAL PRIOR TO PLACEMENT OF CONCRETE. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY SECTION WHICH DOES NOT CONFORM TO THE DESIGN OR TYPICAL CROSS SECTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CURB AND GUTTER POURS WITHOUT THE APPROVAL OF THE ENGINEER.

59. SITE WORK SHALL MEET OR EXCEED OWNER'S SITE SPECIFICATIONS.

60. ALL CONCRETE TO HAVE A MINIMUM OF 28 DAY COMPRESSION STRENGTH OF 4000 PSI.

61. CUT SLOPES SHALL BE NO STEEPER THAN 2 HORIZONTAL TO 1 VERTICAL

62. FILL SLOPES SHALL BE NO STEEPER THAN 2 HORIZONTAL TO 1 VERTICAL

63. APPROVED PROTECTIVE MEASURES AND TEMPORARY DRAINAGE PROVISIONS MUST BE USED TO PROTECT ADJOINING PROPERTIES DURING THE GRADING PROJECT.

64. THE CONTRACTOR SHALL FURNISH, INSTALL, OPERATE AND MAINTAIN ALL MACHINERY, APPLIANCES AND EQUIPMENT TO MAINTAIN ALL EXCAVATIONS FREE FROM WATER DURING CONSTRUCTION. THE CONTRACTOR SHALL DISPOSE OF THE WATER SO AS NOT TO CAUSE DAMAGE TO PUBLIC OR PRIVATE PROPERTY, OR TO CAUSE A NUISANCE OR MENACE TO THE PUBLIC OR VIOLATE THE LAW. THE DEWATERING SYSTEM SHALL BE INSTALLED AND OPERATED SO THAT THE GROUND LEVEL OUTSIDE THE EXCAVATION IS NOT REDUCED TO THE EXTENT WHICH WOULD CAUSE DAMAGE OR ENDANGER ADJACENT STRUCTURES OR PROPERTY. ALL COST FOR DEWATERING SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ALL PIPE CONSTRUCTION. THE STATIC WATER LEVEL SHALL BE DRAWN DOWN A MINIMUM OF 1 FOOT BELOW THE BOTTOM OF EXCAVATIONS TO MAINTAIN THE UNDISTURBED STATE OF NATURAL SOILS AND ALLOW THE PLACEMENT OF ANY FILL TO THE SPECIFIED DENSITY. THE CONTRACTOR SHALL HAVE ON HAND, PUMPING EQUIPMENT AND MACHINERY IN GOOD CONDITION FOR EMERGENCIES AND SHALL HAVE WORKMEN AVAILABLE FOR ITS OPERATION: DEWATERING SYSTEM SHALL OPERATE CONTINUOUSLY UNTIL BACKFILL HAS BEEN COMPLETED TO 1 FOOT ABOVE THE NORMAL STATIC GROUNDWATER LEVEL.

65. THE CONTRACTOR SHALL CONTROL SURFACE WATER TO PREVENT ENTRY INTO EXCAVATIONS. AT EACH EXCAVATION, A SUFFICIENT NUMBER OF TEMPORARY OBSERVATION WELLS TO CONTINUOUSLY CHECK THE GROUNDWATER LEVEL SHALL BE PROVIDED.

66. SUMPS SHALL BE NO DEEPER THAN 5 FEET AND SHALL BE AT THE LOW POINT OF EXCAVATION. EXCAVATION SHALL BE GRADED TO DRAIN TO THE SUMPS.

67. THE CONTROL OF GROUNDWATER SHALL BE SUCH THAT SOFTENING OF THE BOTTOM OF EXCAVATIONS, OR FORMATION OF "QUICK" CONDITIONS OR "BOILS", DOES NOT OCCUR. DEWATERING SYSTEMS SHALL BE DESIGNED AND OPERATED SO AS TO PREVENT REMOVAL OF NATURAL SOILS. THE RELEASE OF GROUNDWATER AT ITS STATIC LEVEL SHALL BE PERFORMED IN SUCH A MANNER AS TO MAINTAIN THE UNDISTURBED STATE OF NATURAL FOUNDATION SOILS, PREVENT DISTURBANCE OF COMPACTED BACKFILL, AND PREVENT FLOTATION OR MOVEMENT OF STRUCTURES, PIPELINES AND SEWERS. IF A UPDES (UTAH POLLUTANT DISCHARGE ELIMINATION SYSTEM) PERMIT IS REQUIRED FOR CONSTRUCTION DEWATERING ACTIVITIES, IT SHALL BE OBTAINED BY THE CONTR ? PRIOR TO ANY DEWATERING ACTIVITIES

68. ONE HUNDRED PERCENT STANDBY PUMPING CAPACITY SHALL BE AVAILABLE ON SITE AT ALL TIMES AND SHALL BE CONNECTED TO THE DEWATERING SYSTEM PIPING AS TO PERMIT IMMEDIATE USE. IN ADDITION STANDBY EQUIPMENT AND APPLIANCES FOR ALL ORDINARY EMERGENCIES. AND COMPETENT WORKMEN FOR OPERATION AND MAINTENANCE OF ALL DEWATERING EQUIPMENT SHALL BE ON SITE AT ALL TIMES. STANDBY EQUIPMENT SHALL INCLUDE EMERGENCY POWER GENERATION AND AUTOMATIC

SWITCH OVER TO THE EMERGENCY GENERATOR WHEN NORMAL POWER FAILS. DEWATERING SYSTEMS SHALL NOT BE SHUT DOWN BETWEEN SHIFTS, ON HOLIDAYS, ON WEEKENDS, OR DURING WORK STOPPAGES.

### SITE SAFETY AND MAINTENANCE

69. THE CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY, AND SHALL NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH PERFORMANCE OF WORK ON THIS PROJECT.

70. CONTRACTOR SHALL INSTALL EROSION CONTROLS (SILT FENCES, STRAW BALES, ETC) AS REQUIRED BY REGULATORY AGENCIES. SAID CONTROLS SHALL BE INSTALLED IN ACCORDANCE WITH AGENCY STANDARDS AND FOLLOWING BEST MANAGEMENT PRACTICES FOR ACTUAL PLACEMENT ON SITE. STRAW BALES SHOWN ON THESE DRAWINGS ARE INTENDED AS A MINIMUM REQUIREMENT. ADDITIONAL CONTROLS REQUESTED BY AGENCY INSPECTORS SHALL BE REQUIRED. DUST CONTROL SHALL BE PROVIDED AT ALL TIMES. AT THE CONTRACTOR'S EXPENSE. TO MINIMIZE ANY DUST NUISANCE AND SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY.

71. THE CONTRACTOR AGREES THAT:

A. THEY SHALL BE RESPONSIBLE TO CLEAN THE JOB SITE AT THE END OF EACH PHASE OF WORK.

B. THEY SHALL BE RESPONSIBLE TO REMOVE AND DISPOSE OF ALL TRASH, SCRAP AND UNUSED MATERIAL AT THEIR OWN EXPENSE IN A TIMELY MANNER.

C. THEY SHALL BE RESPONSIBLE TO MAINTAIN THE SITE IN A NEAT, SAFE AND ORDERLY MANNER AT ALL TIMES.

D. THEY SHALL BE RESPONSIBLE TO KEEP MATERIALS, EQUIPMENT, AND TRASH OUT OF THE WAY OF OTHER CONTRACTORS SO AS NOT TO DELAY THE JOB. FAILURE TO DO SO WILL RESULT IN A

E. THEY SHALL RESPONSIBLE FOR THEIR OWN SAFETY, TRAFFIC CONTROL, PERMITS, RETESTING AND

DEDUCTION FOR THE COST OF CLEAN UP FROM THE FINAL PAYMENT.

REINSPECTIONS AT THEIR OWN EXPENSE. F. UNLESS OTHERWISE NOTED ALL EXCESS SOILS AND MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE LAWFULLY DISPOSED OF OFF SITE AT THE CONTRACTOR'S

G. THE CONTRACTOR SHALL PROVIDE ALL LIGHTS, BARRICADES, SIGNS, FLAGMEN OR OTHER DEVICES

H. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ALL WATER, POWER, SANITARY FACILITIES AND TELEPHONE SERVICES AS REQUIRED FOR THE CONTRACTORS USE DURING CONSTRUCTION.

I. ALL DEBRIS AND FOREIGN MATERIAL SHALL BE REMOVED FROM THE SITE AND DISPOSED OF AT APPROVED DISPOSAL SITES. THE CONTRACTOR SHALL OBTAIN NECESSARY PERMITS FOR THE

72. FOR ALL WORK WITHIN PUBLIC RIGHTS-OF-WAY OR EASEMENTS, THE CONTRACTOR SHALL PRESERVE THE INTEGRITY AND LOCATION OF ANY AND ALL PUBLIC UTILITIES AND PROVIDE THE NECESSARY CONSTRUCTION TRAFFIC CONTROL. CONTRACTOR SHALL, THROUGH THE ENCROACHMENT PERMIT PROCESS, VERIFY WITH THE NECESSARY REGULATORY AGENCIES, THE NEED FOR ANY TRAFFIC ROUTING PLAN. IF PLAN IS REQUIRED. CONTRACTOR SHALL PROVIDE PLAN AND RECEIVED PROPER APPROVALS PRIOR TO BEGINNING CONSTRUCTION. WORK IN EASEMENT AND/OR RIGHTS-OF-WAY IS SUBJECT TO THE APPROVAL AND ACCEPTANCE OF THE REGULATORY AGENCY RESPONSIBLE FOR OPERATION AND/OR MAINTENANCE OF SAID AND/OR RIGHT-OF-WAY. ALL CONSTRUCTION WORK IN UDOT RIGHT- OF -WAY SHALL BE SUBJECT TO INSPECTION BY THE STATE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE THAT INSPECTIONS TAKE PLACE WHERE AND WHEN REQUIRED AND TO INSURE THAT ALL WORK IS COMPLETED TO UDOT STANDARDS.

## SURFACE IMPROVEMENTS:

EXPENSE.

NECESSARY FOR PUBLIC SAFETY.

TRANSPORTATION OF MATERIAL TO AND FROM THE SITE.

73. SUBGRADE PREPARATION: SUBGRADE SHALL BE COMPACTED TO A 95% RELATIVE COMPACTION TO A MINIMUM DEPTH OF 6" FOR ALL ON-SITE DEVELOPMENT. ALL OFF-SITE IMPROVEMENTS ARE TO BE DONE PER APWA STANDARDS.

74. AGGREGATE SUB-BASE: AGGREGATE SUB-BASE SHALL BE GRANULAR BACKFILL BORROW. AGGREGATE SUB-BASE MATERIAL SHALL BE CLEAN AND FREE FROM VEGETABLE MATTER AND OTHER DELETERIOUS SUBSTANCE. AGGREGATE SHALL COMPLY WITH THE GUIDELINE REQUIREMENTS FOR PAVEMENTS FOUND IN THE PROFESSIONALLY PREPARED OF THE SOILS INVESTIGATIONS COMPLETED ON

75. AGGREGATE BASE: AGGREGATE BASE SHALL BE GRADE 3#4 UNTREATED BASE COURSE, AND COMPLY PREPARED REPORT OF THE SOILS INVESTIGATION PREPARED ON THIS SITE.

76. ALL MANHOLE RIMS, LAMPHOLES, VALVES AND MONUMENT BOXES, ETC. SHALL BE ADJUSTED TO FINISH GRADE AFTER STREET PAVING, UNLESS OTHERWISE NOTED. COST FOR THIS WORK SHALL BE INCLUDED IN THE UNIT PRICES FOR SAID FACILITIES.

77. ALL SIDEWALKS AND CROSSINGS TO MEET CURRENT ADA STANDARDS/ APWA STANDARDS.

78. PAYMENT FOR PAVEMENT WILL BE MADE ONLY FOR AREAS SHOWN ON PLANS. REPLACEMENT OF PAVEMENT WHICH IS BROKEN OR CUT DURING THE INSTALLATION OF THE WORK COVERED BY THESE SPECIFICATIONS, AND WHICH LIES OUTSIDE OF SAID AREAS, SHALL BE INCLUDED IN THE CONTRACTOR'S UNIT PRICE FOR PAVEMENT, AND NO ADDITIONAL PAYMENT SHALL BE MADE FOR SUCH WORK.

79. INSTALLATION OF STREET LIGHTS SHALL BE IN ACCORDANCE WITH CITY STANDARDS.

80. PRIOR TO FINAL ACCEPTANCE OF THE IMPROVEMENTS BUILT BY THESE PLANS AND SPECIFICATIONS THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH THE OWNER, CITY, AND POWER COMPANY TO HAVE THE ELECTRICAL SYSTEM AND ALL STREET LIGHTS ENERGIZED

81. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL STRIPING AND/OR PAVEMENT MARKINGS NECESSARY TO THE EXISTING STRIPING INTO FUTURE STRIPING. METHOD OF REMOVAL SHALL BE BY GRINDING OR SANDBLASTING.

82. STRIPING AND PAVEMENT MARKINGS SHALL BE IN CONFORMANCE WITH MUTCD & APWA 32 17 23.

83. DURING THE BIDDING PROCESS, CONTRACTOR TO REVIEW DESIGN SLOPES SHOWN FOR PAVEMENT AND WARRANTY THE PAVEMENT TO THE OWNER BASED UPON THE DESIGN SLOPES SHOWN HEREON. CONCERNS WITH SLOPES MUST BE BROUGHT DURING THE BIDDING PROCESS.

84. IT IS THE INTENT ON THESE PLANS THAT ALL PAVEMENT SLOPE TO A CATCH BASIN, INLET BOX OR OUT INTO A STREET.CONTRACTOR TO VERIFY FINISH SPOT ELEVATIONS AND NOTIFY ENGINEER IF THERE ARE DISCREPANCIES THAT WOULD CAUSE PUDDLING ON THE SITE.

IN THE EVENT THAT THE CONSTRUCTION NOTES CONFLICT WITH RESPONSIBLE DISTRICT OR AGENCY STANDARDS NOTES AND SPECIFICATIONS, THE DISTRICT OR AGENCY STANDARD NOTES AND SPECIFICATIONS GOVERN.

No. 9249169 BROCK D LOOMIS

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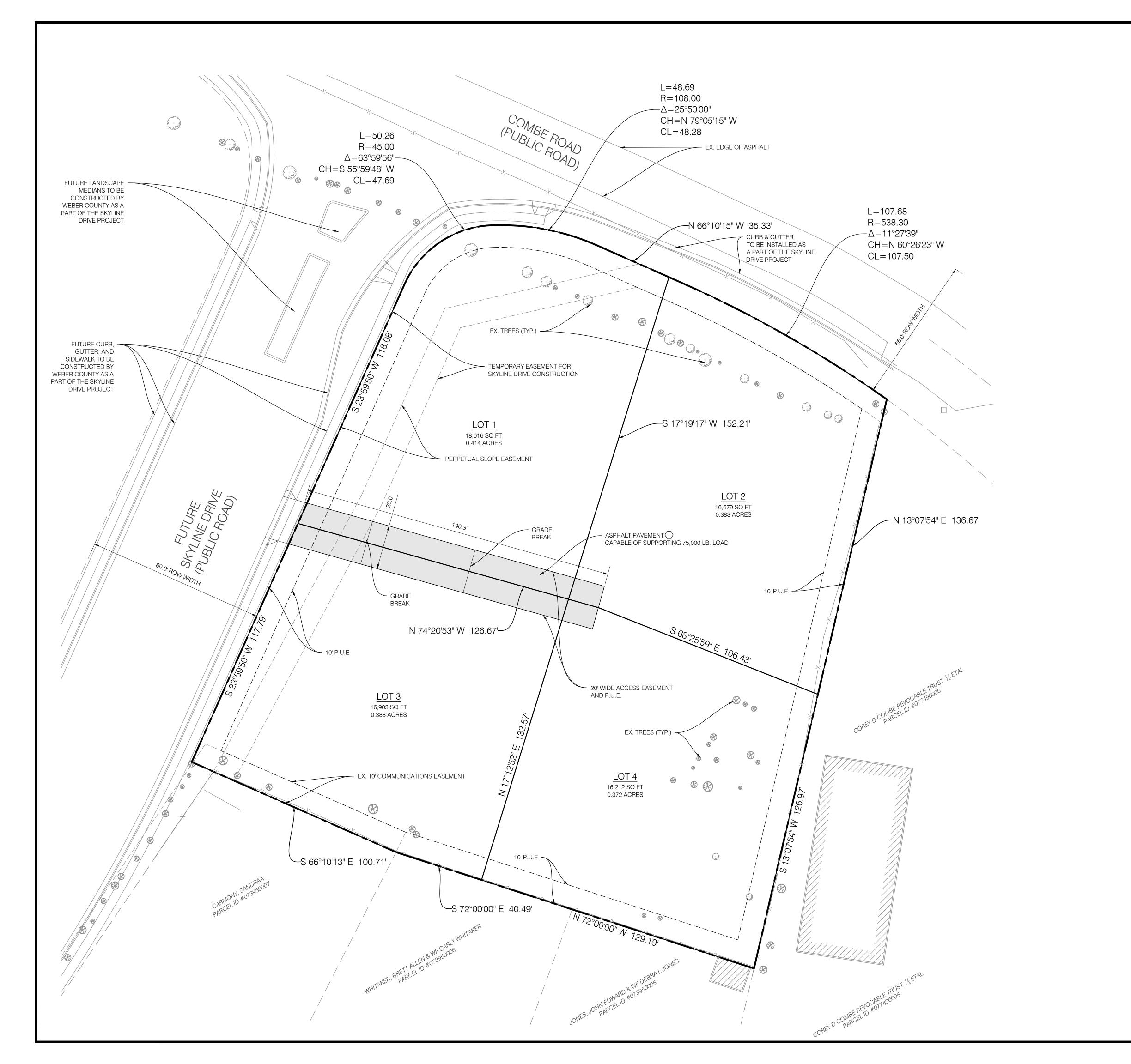
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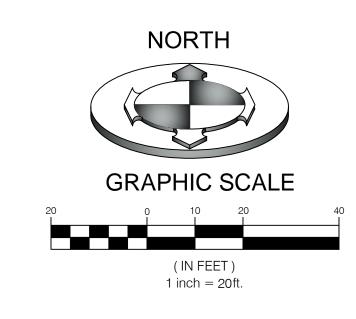
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1512209 LEGEND &

**CGN.01** 





CONSTRUCTION KEY NOTES REFERENCE		
NO.	DESCRIPTION	DETAIL
1	ASPHALT PAVEMENT WITH GRANULAR BASE.	4/CDT.01

AREA TABLE				
PARTICULARS	S.F.	%		
BUILDING*	10,000	14.8		
HARDSCAPE**	4,414	6.5		
LANDSCAPE	53,396	78.7		
TOTAL	67,810	100		
*ASSLIMED 2 500	SO ET DER HOME			

\*ASSUMED 2,500 SQ. FT. PER HOME \*\*ASSUMED 400 SQ. FT. PER DRIVEWAY

No. 9249169 BROCK D. LOOMIS

BENCHMARK
ENGINEERING &
LAND SURVEYING
9130 SOUTH STATE STREET SUITE # 100

MOUNTAINS EDGE SUBDIVISION

2060 EAST RYAN CIRCLE WEBER COUNTY, UTAH

1512209

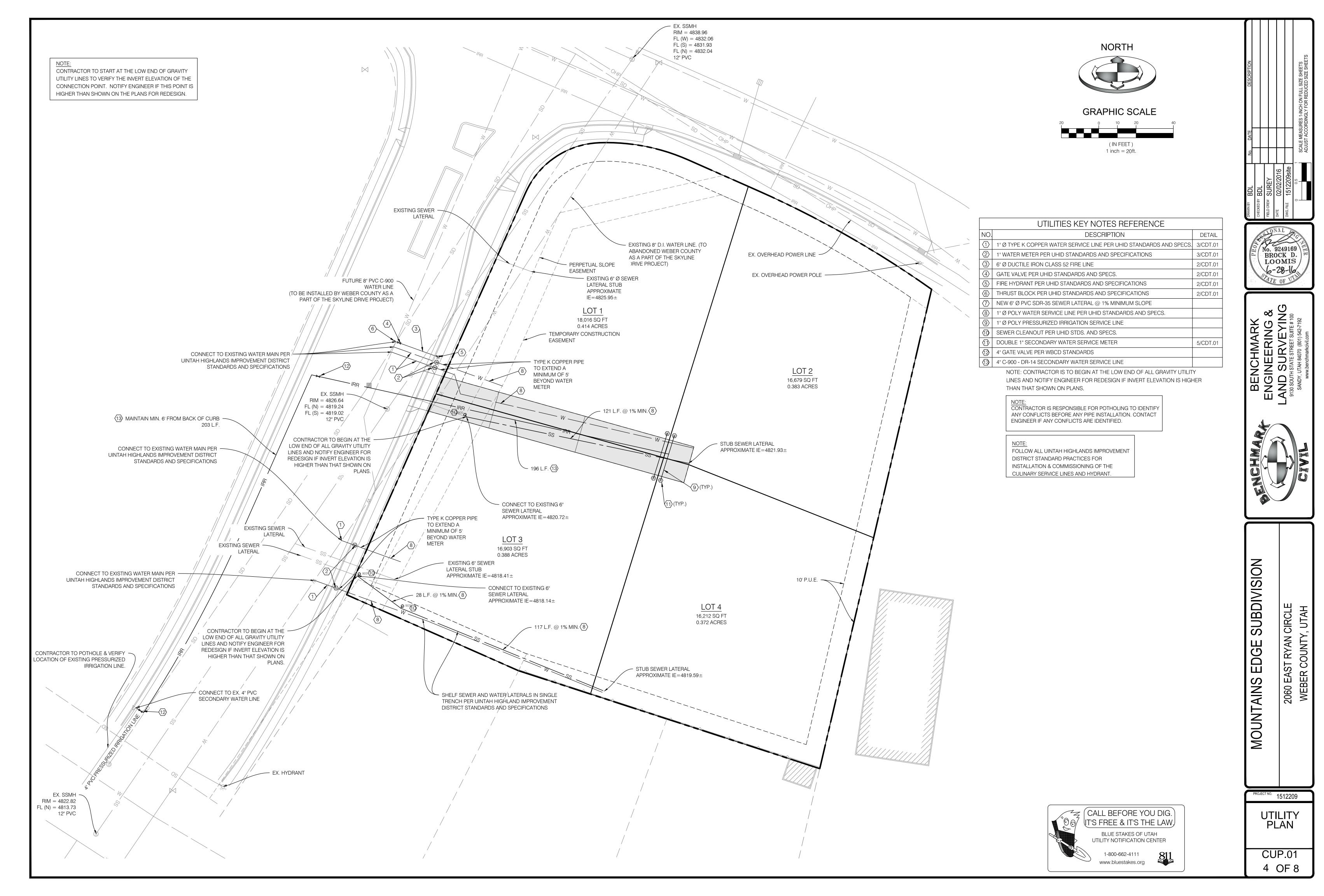
SITE PLAN

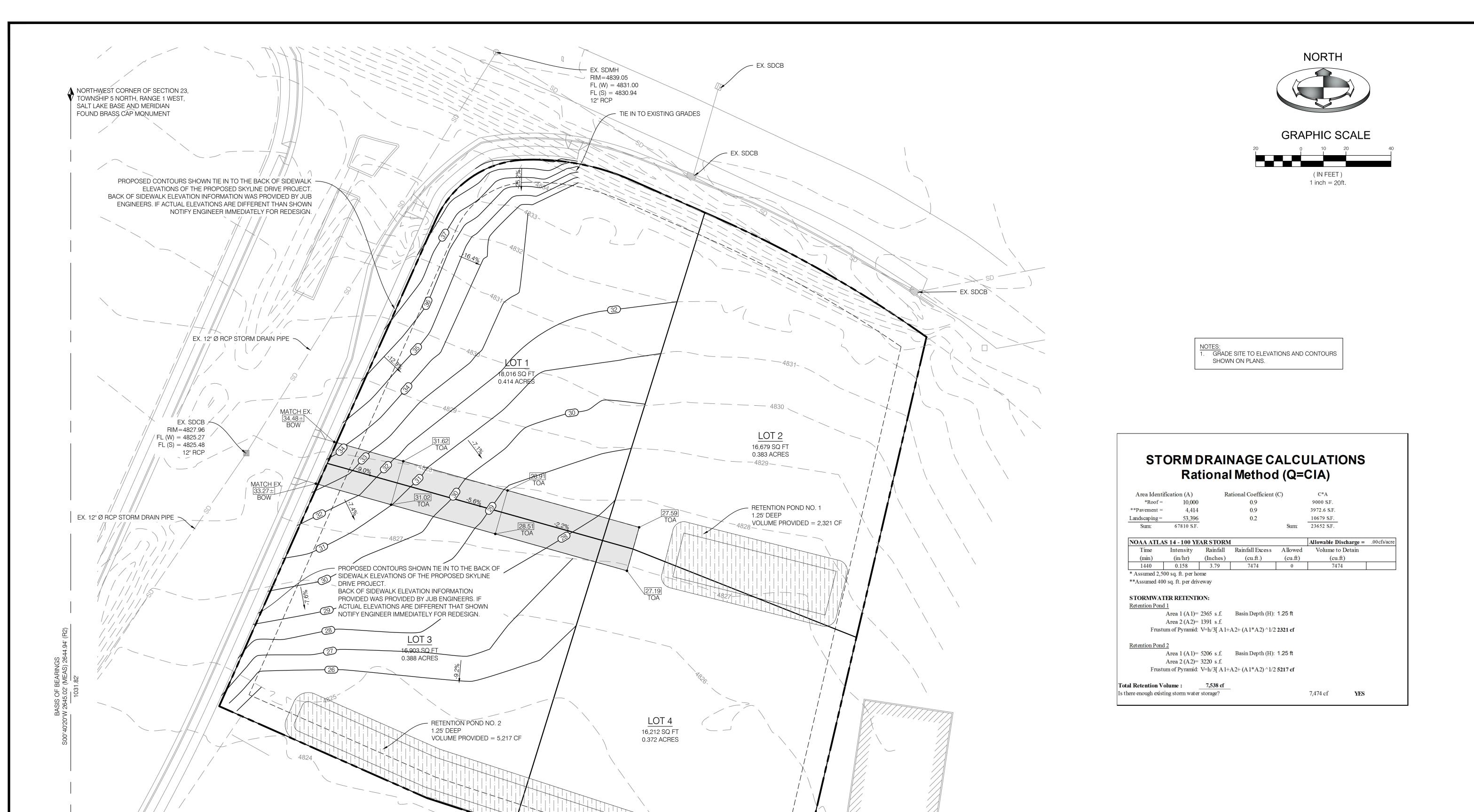
CSP.01 3 OF 8

NOTES:
ALL WORK WITHIN PUBLIC ROADS TO BE DONE IN
STRICT ACCORDANCE WITH WEBER COUNTY
STANDARDS AND SPECIFICATIONS CALL BEFORE YOU DIG. (IT'S FREE & IT'S THE LAW)

BLUE STAKES OF UTAH UTILITY NOTIFICATION CENTER

www.bluestakes.org





WEST QUARTER OF SECTION 23, TOWNSHIP 5 NORTH, RANGE 1 WEST,

SALT LAKE BASE AND MERIDIAN

FOUND BRASS CAP MONUMENT



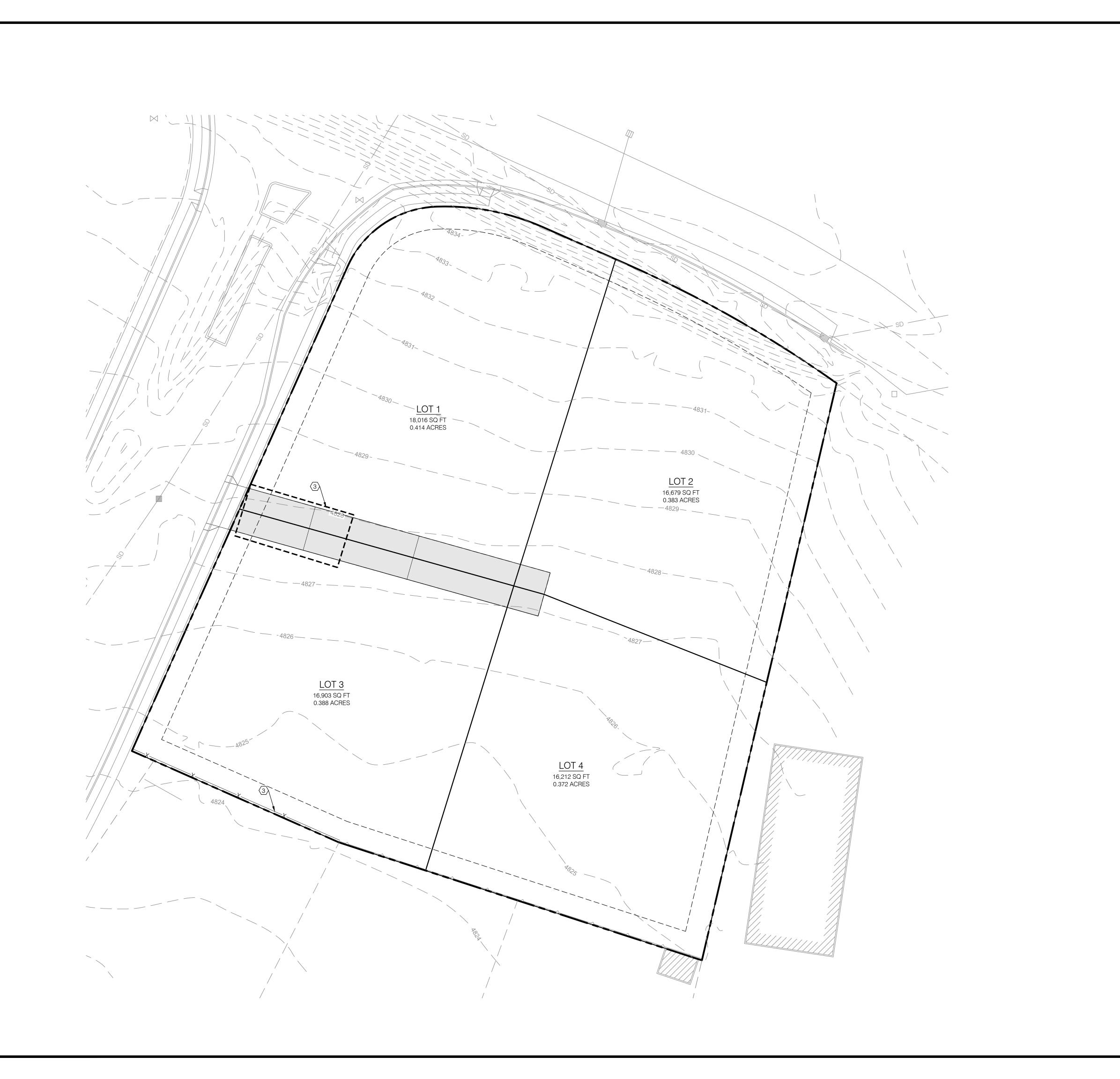
MOUNTAINS EDGE SUBDIVISION

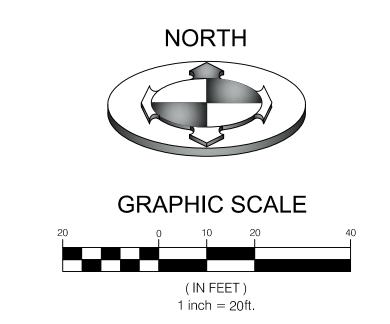
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GRADING & DRAINAGE PLAN

CGD.01 5 OF 8



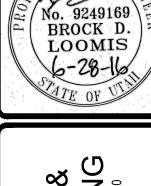


	SWPP KEY NOTES REFERENCE		
GIV	PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATION GIVEN OR REFERENCED AND THE DETAILS NOTED AND AS SHOWN ON THE CONSTRUCTION DRAWINGS.		
NO.	DESCRIPTION	DETAIL	
1	SEDIMENT BARRIER	3/CDT.03	
2	TEMPORARY CONSTRUCTION ENTRANCE	2/CDT.03	
3	SILT FENCE	1/CDT.03	

CALL BEFORE YOU DIG. IT'S FREE & IT'S THE LAW

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MOUNTAINS EDGE SUBDIVISION

2060 EAST RYAN CIRCLE WEBER COUNTY, UTAH

PROJECT NO. 1512209

EROSION CONTROL PLAN

CEP.01 6 OF 8

# STORM WATER POLLUTION PREVENTION NOTES

### STORMWATER POLLUTION PREVENTION PLAN SPECIFIC NOTES:

- 1. THIS STORM WATER POLLUTION PREVENTION PLAN (SWPPP) WAS DEVELOPED AT THE REQUEST OF THE OWNER FOR THE CONSTRUCTION OF A FOUR LOT RESIDENTIAL SUBDIVISION. IN THE WEBER COUNTY, STATE OF UTAH. THIS PLAN IDENTIFIES POTENTIAL SOURCES OF POLLUTANTS OF STORM WATER, PRESENTS POLLUTION CONTROL MEASURES, AND ASSISTS IN INSURING IMPLEMENTATION AND MAINTENANCE OF THE BEST MANAGEMENT PRACTICES BMP'S INDICATED HEREIN.
- 2. A NOTICE OF INTENT HAS BEEN FILED WITH THE STATE OF UTAH DEQ WATER QUALITY DIVISION BY THE OWNER SO THAT THIS CONSTRUCTION PROJECT MAY COVERED UNDER THE STATE GENERAL PERMIT. THE PERMIT IS NATIONAL POLLUTION DISCHARGE DELINEATION SYSTEM (NPDES) GENERAL PERMIT (NO. ) FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY.
- 3. IN THE EVENT OF A CHANGE IN OWNERSHIP, A NEW NOTICE OF INTENT SHALL BE FILED WITH THE UTAH DEQ WATER QUALITY DIVISION.
- 4. IN THE EVENT OF A RELEASE OF A REPORTABLE QUANTITY OF A POLLUTANT, THE CONTRACTOR SHALL ADVISE THE OWNER TO NOTIFY THE NATIONAL RESPONSE CENTER AND WEBER COUNTY. THIS POLLUTION PREVENTION PLAN SHOULD BE REVISED TO REFLECT THE CHANGE IN CONDITIONS OF THE CONSTRUCTION ACTIVITY. A REPORTABLE QUANTITY IS ESTABLISHED BY 40 CODE OF FEDERAL REGULATIONS (CFR) 117.3 OR 40 CFR 302.4
- 5. ALL CONTRACTORS AND THEIR PERSONNEL WHOSE WORK CAN CONTRIBUTE TO OR CAUSE POLLUTION OF STORM WATER SHOULD BE MADE FAMILIAR WITH THIS POLLUTION PREVENTION PLAN. ADEQUATE TRAINING PROVIDED BY THE PERMITEE FOR IMPLEMENTATION OF THE MEASURES PRESENTED HEREIN SHALL BE PROVIDED TO THE CONTRACTORS AND THEIR PERSONNEL.
- 6. CHANGES IN CONSTRUCTION OR IN CONDITIONS WHICH ARE NOT COVERED BY THIS PLAN SHOULD BE BROUGHT TO THE ATTENTION OF THE OWNER. THIS POLLUTION PREVENTION PLAN WILL BE REVISED TO REFLECT THE CHANGE IN CONSTRUCTION OR IN CONDITIONS.
- 7. ALL PREVENTION AND CLEAN UP MEASURES SHOULD BE CONDUCTED IN ACCORDANCE WITH WEBER COUNTY ORDINANCES, AS WELL AS STATE AND FEDERAL REGULATIONS. WASTE MATERIALS SHOULD BE DISPOSED OF IN A LEGAL MANNER. ALL DISCHARGERS OF STORM WATER MUST COMPLY WITH THE LAWFUL REQUIREMENTS OF WEBER COUNTY AND OTHER LOCAL AGENCIES REGARDING THE DISCHARGERS OF
- 8. THIS PLAN DOES NOT COVER THE REMOVAL OF HAZARDOUS OR TOXIC WASTE. IN THE EVENT OF A DISCHARGE OR RELEASE OF A REPORTABLE QUANTITY OF TOXIC WASTE, WORK SHOULD BE STOPPED UNTIL THE SPILL CAN BE ASSESSED AND A MITIGATION REPORT PREPARED BY A QUALIFIED ENVIRONMENTAL CONSULTANT, AND IF NECESSARY, REVIEWED BY ROY CITY AND ANY OTHER AGENCY HAVING JURISDICTION.
- 9. THIS SWPPP SHALL BE MADE AVAILABLE TO THE PUBLIC UNDER SECTION 308(B) OF THE CLEAN WATER ACT, UPON REQUEST BY MEMBERS OF THE PUBLIC, THE DISCHARGER SHALL MAKE AVAILABLE FOR REVIEW A COPY OF THIS SWPPP EITHER TO DEQ OR DIRECTLY TO THE REQUESTER. THIS SWPPP MUST BE KEPT ON SITE DURING CONSTRUCTION ACTIVITY AND MADE AVAILABLE UPON REQUEST OF REPRESENTATIVE OF THE UTAH DEQ WATER QUALITY DIVISION/OR THE LOCAL AGENCY.

10. CONTACTS **BROCK LOOMIS** TELEPHONE: (801) 814-1914 BROCK LOOMISP.E BENCHMARK ENGINEERING AND LAND SURVEYING (801) 814-1914

9130 SOUTH STATE STREET SUITE# 100 SANDY, UTAH 84070

WEBER COUNTY ENGINEER JARED ANDERSEN (801) 399-8374 JANDERSEN@CO.WEBER.UT.US

DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF WATER QUALITY (801) 538-6951 288 NORTH 1460 WEST P.O. BOX 144870

SALT LAKE CITY, UTAH 84114-4870 U.S. EPA **REGION VIII** ENVIRONMENTAL PROTECTION AGENCY 800-759-4372

ENVIRONMENTAL PROTECTION AGENCY WASHINGTON D.C. 20460

11. REFERENCES:

DENVER, COLORADO

12. THE PROPOSED CONSTRUCTION ACTIVITY IS CONSTRUCTION OF A FOUR LOT SUBDIVISION.

13. LOCATION OF THE SITE: THE PROJECT IS LOCATED IN THE NORTHWEST QUARTER OF SECTION 23, TOWNSHIP 5 NORTH, RANGE 1 WEST, SALT LAKE BASE AND MERIDIAN. WEBER COUNTY, UTAH

14. STORM WATER WILL BE RETAINED IN THE YARDS OF THE LOTS.

15. THE PROPOSED SITE WILL CONSIST OF A FOUR LOT RESIDENTIAL SUBDIVISION. PRE CONSTRUCTION RUNOFF COEFFICIENT Cd- 0.2 AND POST CONSTRUCTION RUNOFF COEFFICIENT WILL BE IN THE RANGE OF

16. SEE IMPROVEMENT PLANS START DATE: AUGUST 2016 FINISH DATE: OCTOBER 2016 STORM WATER POLLUTION PREVENTION PLAN GENERAL NOTES A. PROHIBITION ON MOST NON-STORM WATER DISCHARGES

ONLY STORM WATER FROM THE PROJECT SITE SHALL BE ALLOWED TO FLOW INTO THE ON-SITE STORM DRAIN SYSTEM. CLEAN, NON-CHLORINATED WATER FROM THE FLUSHING OF FIRE HYDRANTS, WATER MAINS, AND STORM DRAINS MAY BE DISCHARGED TO THE STORM DRAIN IF IT IS NOT ALLOWED TO COLLECT DIRT, DEBRIS, AND TRASH WHILE FOLLOWING TO A STORM DRAIN INLET.

### B. SOURCES OF STORM WATER POLLUTANTS

STORM WATER POLLUTANTS INCLUDE SOIL SEDIMENT AND NUTRIENTS, OIL, GREASE, TOXIC POLLUTANTS, AND HEAVY METALS, SOURCES OF STORM WATER POLLUTANTS INCLUDE BUT ARE NOT LIMITED TO SOIL EROSION BY WATER AND/OR WIND; CLEARING OF VEGETATION; GRADING; VEHICLE AND EQUIPMENT; PAINTS, SOLVENTS AND ADHESIVES; AND LANDSCAPING WORK.

### C.EROSION AND SEDIMENT CONTROLS

1. COVER EXPOSED STOCKPILES OF SOILS, CONSTRUCTION AND LANDSCAPING MATERIAL WITH HEAVY PLASTIC SHEETING.

2. IN LANDSCAPING AREAS WHERE THE VEGETATION HAS NOT ESTABLISHED GROWTH AND TAKEN HOLD, CONSTRUCT SANDBAG OF DIRT BERMS AROUND THEIR PERIMETER TO INSURE THAT WATER WILL BE CONTAINED INSIDE THE LANDSCAPING AREA AND THAT IT WILL NOT BE CONVEYED TO A STORM DRAIN

3. RE-VEGETATE AREAS WHERE LANDSCAPING HAS DIED OF NOT TAKEN HOLD, 4. DIVERT STORM WATER RUNOFF AROUND DISTURBED SOILS WITH BERMS OF DIRT

## D. OTHER CONTROLS

4. SPILLS

- WASTE DISPOSAL
- A. KEEP WASTE DISPOSAL CONTAINERS COVERED.
- B. PROVIDE FOR THE WEEKLY (OR MORE FREQUENT, IF NECESSARY) DISPOSAL OF WASTE
- C.PROVIDE CONTAINERS AT CONVENIENT LOCATIONS AROUND THE SITE. 2. SWEEPING OF SITE
- A. PROVIDE DAILY SWEEPING BY HAND OF MECHANICAL MEANS (IF NEEDED) TO KEEP
- THE PAVED AREAS OF THE SITE FREE OF DUST, DIRT, AND DEBRIS. B. DISPOSE OF ACCUMULATED DIRT IN WASTE CONTAINERS, OR HAUL IT OFF THE SITE TO A LANDFILL.
- 3. SANITARY/SEPTIC DISPOSAL PORTABLE TOILETS AND OTHER SANITARY FACILITIES SHALL BE SERVICED WEEKLY AND PUMPED CLEAN BY A WASTE DISPOSAL COMPANY, NO TOXIC OR HAZARDOUS WASTE SHALL BE DISPOSED IN A PORTABLE TOILET OF IN THE ON-SITE SANITARY SEWER.
- A. STORE ADEQUATE ABSORBENT MATERIALS, RAGS, BROOMS, SHOVELS, AND WASTE CONTAINERS ON THE SITE TO CLEAN-UP SPILLS OF MATERIAL SUCH AS FUEL, PAINT, SOLVENTS, OR CLEANERS. CLEAN UP MINOR SPILLS IMMEDIATELY.
- B. FOR REPORTABLE QUANTITY OF HAZARDOUS OF TOXIC SUBSTANCE, SECURE THE SERVICES OF QUALIFIED PERSONNEL OF CLEAN-UP AND DISPOSAL. 5. VEHICLES AND EQUIPMENT
- A. FIX LEAKS OF FUEL, OIL AND OTHER SUBSTANCES IMMEDIATELY. B. PERFORM REFUELING AND SERVICE OF VEHICLE OR EQUIPMENT OFF-SITE WHEN
- POSSIBLE. IF REFUELING OR SERVICE OF EQUIPMENT IS PERFORMED ON-SITE. THEN PROVIDE AN IMPERVIOUS, CONTAINED AREA WHERE ANY SPILLS CAN BE CONTAINED WITHOUT FLOWING TO A STORM WATER THE GROUND.
- C.USE DRIP PANS TO CATCH LEAKS AND SMALL SPILLS 6. CONCRETE TRUCKS, MIXERS AND HANDLING EQUIPMENT
- A. DO NOT DISPOSE OF WASHOUT FROM THE WASHING OF CONCRETE TRUCKS, MIXERS, AND HANDLING EQUIPMENT WHERE IT WILL FLOW INTO A STORM WATER INLET OR INTO A PUBLIC STREET.
- B. PROVIDE A HOLDING TANK TO RECEIVE ANY WASHOUT FROM CONCRETE EQUIPMENT. DISPOSAL OF TANK CONTENTS SHOULD BE CONDUCTED BY A WASTE HANDLING FIRM. C.PROVIDE A DESIGNATED AREA FOR WASHING ANY VEHICLES OR EQUIPMENT, DRAINED
- FROM THIS AREA SHOULD FLOW TO THE HOLDING TANK. 7. LANDSCAPING OPERATIONS
- A. USE ONLY THE MINIMUM AMOUNT OF LANDSCAPE AREAS. MINIMIZE RUNOFF OF IRRIGATION WATER FROM LANDSCAPING.
- B. DO NOT OVER WATER FERTILIZED OF TREATED LANDSCAPE AREAS. MINIMIZE RUNOFF OF IRRIGATION WATER FROM LANDSCAPING.
- 8. STORM WATER INLETS KEEP ALL ON-SITE STORM WATER INLETS CLEAN AND FREE OF DIRT AND DEBRIS. IN THE EVENT THAT SEDIMENT AND DEBRIS MAY FLOW TO AN INLET, PROVIDE AN 18-INCH (MINIMUM) STRAIN BARRIER AROUND THE INLET TO TRAP THE DIRT AND DEBRIS AND ALLOW ONLY CLEAN STORM WATER TO ENTER THE INLET.

- I. REGULAR INTERVAL INSPECTION AND INSPECTION BEFORE AND AFTER STORMS
  - A. VISUALLY INSPECT THE SITE WEEKLY TO INSURE THAT STORM WATER INLETS ARE FREE OF DIRT
  - B. BEFORE A STORM, INSPECT THE SITE TO INSURE THAT STORM WATER POLLUTION CONTROL MEASURES ARE IN PLACE
  - C. AFTER A STORM, INSPECT ALL STORM WATER INLETS TO INSURE THAT THEY ARE CLEAR OF DIRT AND DEBRIS. CLEAN THOSE STORM WATER INLETS THAT ARE NOT CLEAR AND FREE OF DEBRIS. D. THE UTAH DEQ WATER QUALITY DIVISION MAY REQUIRE THE DISCHARGER TO CONDUCT ADDITIONAL SITE INSPECTIONS, SUBMIT REPORTS AND CERTIFICATIONS, OR TO PERFORM
- 2. ALL DISCHARGERS ARE REQUIRED TO CONDUCT INSPECTIONS OF THE CONSTRUCTION SITE PRIOR TO ANTICIPATED STORM EVENTS AND AFTER ACTUAL STORM EVENTS, TO IDENTIFY AREAS CONTRIBUTING TO A STORM TO A STORM WATER DISCHARGE, TO EVALUATE WHETHER MEASURES TO REDUCE POLLUTANT LOADINGS IDENTIFIED IN THIS SWPP ARE ADEQUATE. TO PROPERLY IMPLEMENT IN ACCORDANCE WITH THE TERMS OF THE GENERAL PERMIT. AND T DETERMINE WHETHER ADDITIONAL CONTROL PRACTICES ARE NEEDED.
- 3, PREPARATION OF REPORTS AND RETENTION OF RECORDS

SAMPLING AND ANALYSIS.

- A. EACH DISCHARGER MUST CERTIFY ANNUALLY THAT ITS CONSTRUCTION ACTIVITY IS IN COMPLIANCE WITH THE REQUIREMENTS OF THE GENERAL PERMIT AND THIS SWPPP. THIS CERTIFICATION MUST BE BASED ON THE SITE INSPECTIONS. THE FIRST CERTIFICATION MUST BE COMPLETED BY MAY 1, 2010, AND EACH MAY 1 THEREAFTER.
- B. THE DISCHARGER IS REQUIRED TO RETAIN RECORDS OF ALL MONITORING INFORMATION, COPIES OF ALL REPORTS REQUIRED BY THIS GENERAL PERMIT. AND RECORDS OF ALL DATA USED TO COMPLETE THE NOTICE OF INTENT FOR CONSTRUCTION ACTIVITY FOR A PERIOD OF AT LEAST THREE YEARS. THIS PERIOD MAY BE EXTENDED BY REQUEST OF THE STATE. WITH THE EXCEPTION OF NONCOMPLIANCE REPORTING, DISCHARGERS ARE NOT REQUIRED TO SUBMIT THE RECORDS EXCEPT UPON SPECIFIC REQUEST BY THE STATE DEQ DIVISION OF WATER QUALITY
- C. DISCHARGERS WHO CANNOT CERTIFY COMPLIANCE MUST NOTIFY THE STATE DEQ DIVISION OF WATER QUALITY. THIS NOTIFICATION SHALL IDENTIFY THE TYPE OR TYPES OF NONCOMPLIANCE. DESCRIBE THE ACTIONS NECESSARY TO ACHIEVE COMPLIANCE, AND INCLUDE A TIME SCHEDULE, SUBJECT TO THE MODIFICATIONS BY THE STATE DEQ DIVISION OF WATER QUALITY, INDICATION WHEN COMPLIANCE WILL BE ACHIEVED. NONCOMPLIANCE REPORTS MUST BE SUBMITTED WITHIN 30 DAYS OF THE IDENTIFICATION OF THE NONCOMPLIANCE.

### F. MAINTENANCE OF CONTROLS

1. MAINTENANCE AND REPAIR ALL CONTROLS AND MEASURES INDICATED ON THIS PLAN SHOULD BE MAINTAINED IN GOOD AND EFFECTIVE CONDITION. IF ANY CONTROLS OR MEASURES ARE DAMAGED OR REMOVED, THEY

- SHOULD BE PROMPTLY REPAIRED OR RESTORED.
- 2. PLAN REVISIONS IF CONSTRUCTION ACTIVITY OR CONDITIONS CHANGE FROM THOSE SHOWN IN THIS PLAN, THEN THIS PLAN SHALL BE REVISED TO REFLECT THE CURRENT CONDITIONS.
- G. STABILIZATION PRACTICES (NOT APPLICABLE TO THIS SITE) 1. STABILIZATION PRACTICES MAY INCLUDE: TEMPORARY SEEDING, PERMANENT SEEDING, MULCHING,
- GEOTEXTILES, SOD STABILIZATION, VEGETATIVE BUFFER STRIPS, PROTECTION OF TREES, PRESERVATION OF MATURE VEGETATION AND OTHER APPROPRIATE MEASURES. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN
- THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED EXCEPT AS NOTED BELOW. -WHERE THE INITIATION OF STABILIZED MEASURES BY THE 14TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASED IS PRECLUDED BY SNOW COVER OR FROZEN GROUND
- CONDITIONS, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICAL -WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 21 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE.
- H. FINAL STABILIZATION AND POST-CONSTRUCTION CONTROLS 1. AFTER CONSTRUCTION HAS BEEN COMPLETED, THE SITE SHALL BE SWEPT CLEAN, STORM WATER INLETS (GRATES AND BASINS) SHALL BE CLEANED, AND ALL WASTE AND LEFTOVER MATERIALS SHALL BE REMOVED FROM THE SITE.
- 2. ALL LANDSCAPING AND PLANTING ARE SHOULD BE WELL MAINTAINED TO PREVENT EROSION, AVOID OV ER WATERING OF LANDSCAPING.
- 3. ALL PAVED AREAS SHOULD BE SWEPT WEEKLY EITHER BY HAND OR BY MECHANICAL MEANS TO KEEP THE SITE CLEAR OF DIRT, DUST, AND DEBRIS. 4. WATER MATERIALS ON-SITE SHOULD BE STORED IN COVERED CONTAINERS WHICH ARE CLEANED OUT
- 5. TESTING OF FIRE HYDRANTS ON-SITE SHALL NOT BE CONDUCTED UNTIL THE AREA WHERE THE WATER DISCHARGES HAS BEEN SWEPT CLEAN OF DIRT AND DEBRIS.
- 6. STORM DRAIN LINES SHOULD BE CHECKED AND CLEANED ANNUALLY TO KEEP THEM CLEAN AND CLEAR 7. ALL ON-SITE STORM WATER INLETS SHOULD BE CLEARLY MARKED "STORM WATER ONLY".
- I. COMPLETION OF CONSTRUCTION ACTIVITIES AND NOTICE OF TERMINATION WHEN CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED ON THIS SITE, THE OWNER SHALL FILE A LETTER WITH THE STATE DEQ DIVISION OF WATER QUALITY. HIS LETTER SHALL CERTIFY THAT THE CONSTRUCTION ACTIVITY HAS BEEN COMPLETED, THAT ALL ELEMENTS OF THE SWPPP HAVE BEEN IMPLEMENTED, THAT CONSTRUCTION AND EQUIPMENT MAINTENANCE WASTES HAVE BEEN DISPOSED OF PROPERLY, THAT THE SITE IS IN COMPLIANCE WITH ALL LOCAL STORM WATER REQUIREMENTS INCLUDING EROSION/SEDIMENT CONTROL REQUIREMENTS, POLICIES, AND GUIDELINES.

1. BEST MANAGEMENT PRACTICES"(BMP'S) MEANS SCHEDULES OF ACTIVITIES, PROHIBITIONS OF PRACTICES, MAINTENANCE PROCEDURES, AND OTHER MANAGEMENT PRACTICES TO PREVENT OR REDUCE THE POLLUTION OF WATERS OF THE UNITED STATES. BMP'S ALSO INCLUDE TREATMENT REQUIREMENTS, OPERATING PROCEDURES, AND PRACTICES TO CONTROL SITE RUNOFF. SPILLAGE OR LEAKS, WASTE DISPOSAL, OR DRAINAGE FROM RAW MATERIAL STORAGE.

2. "CLEAN WATER ACT" ("CWA") MEANS THE FEDERAL WATER POLLUTION CONTROL ACT ENACTED BY PUBLIC LAW 92-500 AS AMENDED BY PUBLIC LAWS 95-217, 95-576, 96-483, AND 97-111; 33 USC

3. "CONSTRUCTION SITE" IS THE LOCATION OF THE CONSTRUCTION ACTIVITY. 4. "NON-STORM WATER DISCHARGE" MEANS ANY DISCHARGE TO STORM DRAIN SYSTEM THAT IS NOT COMPOSED ENTIRELY OF STORM WATER EXCEPT DISCHARGE PURSUANT TO AND NPDES PERMIT AND DISCHARGES RESULTING FROM FIRE FIGHTING ACTIVITIES.

5. "SIGNIFICANT MATERIALS' INCLUDES, BUT IS NOT LIMITED TO RAW MATERIAL; FUELS; MATERIALS

SUCH AS SOLVENTS, DETERGENTS, AND PLASTIC PELLETS; FINISHED MATERIALS SUCH AS METALLIC PRODUCTS; RAW MATERIALS USED IN FOOD PROCESSING OR PRODUCTION HAZARDOUS SUBSTANCES DESIGNATED UNDER SECTION 101(14) OF THE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT (CERLCA); ANY CHEMICAL THE FACILITY IS REQUIRED TO REPORT PURSUANT TO SECTION 313 OF TITLE III OF SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT(SARA): FERTILIZERS: PESTICIDES: AND WASTE PRODUCTS SUCH AS ASHES, SLAG, AND SLUDGE THAT HAVE THE POTENTIAL TO BE RELEASED WITH STORM WATER DISCHARGES.

6 . "SIGNIFICANT QUANTITIES" IS THE VOLUME, CONCENTRATIONS, OR MASS OF A POLLUTANT IN STORM WATER DISCHARGE THAT CAN CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR NUISANCE; ADVERSELY IMPACT HUMAN HEALTH OR THE ENVIRONMENT; AND CAUSE CONTRIBUTE TO VIOLATION OF ANY APPLICABLE WATER QUALITY STANDARDS FOR THE RECEIVING WATER.

7. "STORM WATER" MEANS STORM WATER RUNOFF, SNOW MELT RUNOFF, SURFACE RUNOFF AND DRAINAGE. IT EXCLUDES INFILTRATION AND RUNOFF FROM AGRICULTURAL LAND. 8. "POLLUTION" MEANS THE "MAN-MADE OF MAN-INDUCED ALTERATION OF THE CHEMICAL. PHYSICAL, BIOLOGICAL, AND RADIOLOGICAL INTEGRITY OF WATER" [CLEAN WATER ACT SECTION 502(19)]. POLLUTION ALSO MEANS "AN ALTERATION OF THE QUALITY OF THE WATERS OF THE STATE BY WASTE T A DEGREE WHICH UNREASONABLY AFFECTS EITHER... THE WATERS FOR BENEFICIAL USES... OR FACILITIES WHICH SERVE THESE BENEFICIAL USES... [CALIFORNIA WATER

9. "CONTAMINATION" MEANS "AN IMPAIRMENT OF THE QUALITY OF THE WATER OF THE STATE BY WASTE TO A DEGREE WHICH CREATES A HAZARD TO THE PUBLIC HEALTH THROUGH POISONING OR THROUGH THE SPREAD OF DISEASE...INCLUDING ANY EQUIVALENT EFFECT RESULTING FROM THE DISPOSAL OF WASTE, WHETHER OR NOT WATERS OF THE STATE ARE AFFECTED." 10. "NUISANCE" MEANS ANYTHING WHICH MEETS ALL OF THE FOLLOWING REQUIREMENTS: (1) IS INJURIOUS TO HEALTH, OR IS INDECENT OR OFFENSIVE TO THE SENSES, OR AN OBSTRUCTION TO THE FREE USE OF PROPERTY, SO AS TO INTERFERE WITH THE COMFORTABLE ENJOYMENT OF LIFE AND PROPERTY; (2) AFFECTS AT THE SAME TIME AN ENTIRE COMMUNITY OR NEIGHBORHOOD, OR ANY CONSIDERABLE NUMBER OF PERSONS, ALTHOUGH THE EXTENT OF THE ANNOYANCE OR DAMAGE INFLICTED UPON INDIVIDUALS MAY BE UNEQUAL; 93) OCCURS DURING OR AS A RESULT OF THE TREATMENT OR DISPOSAL OF WASTES."

11. "LOCAL AGENCY" MEANS ANY AGENCY THAT IS INVOLVED WITH REVIEW, APPROVAL, OR OVERSIGHT OF THE CONSTRUCTION SITES' (a) CONSTRUCTION ACTIVITY, (b) EROSION AND SEDIMENT CONTROLS, (c) STORM WATER DISCHARGE.

I CERTIFY UNDER PENALTY OF PERJURY THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM OF THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE, I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

BROCK D. LOOMIS PROFESSIONAL ENGINEER NO. 9249169 BENCHMARK ENGINEERING AND LAND SURVEYING

DEVELOPER SIGNATURE AND DATE

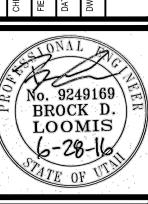
CONTRACTOR

ROLE-COMPANY DEFINITION OF OPERATION SIGNATURE

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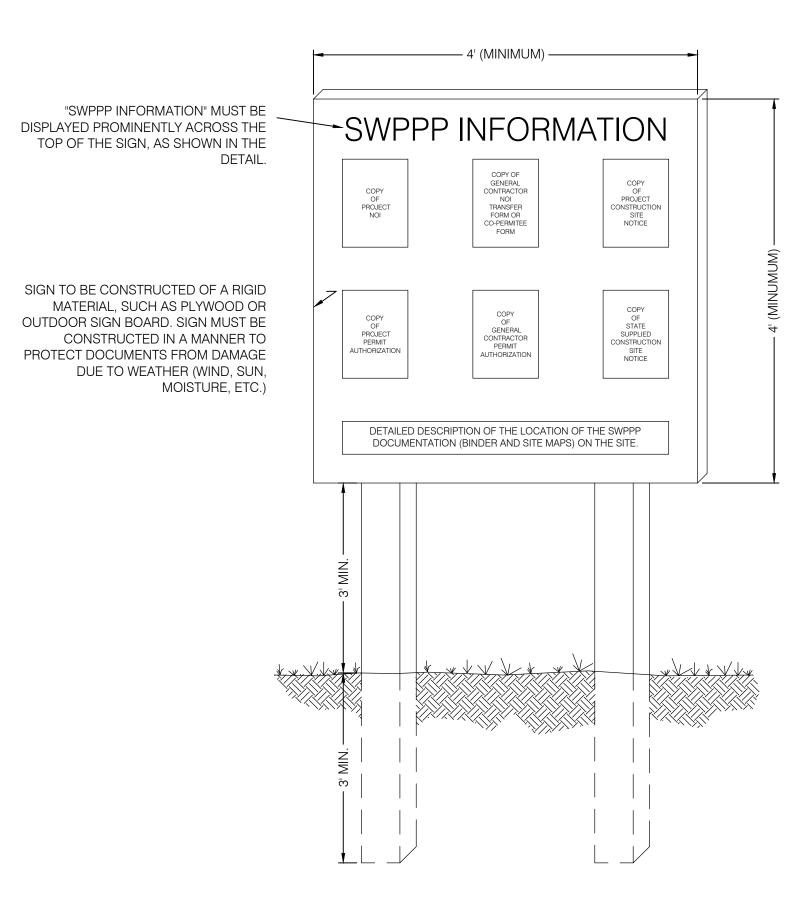
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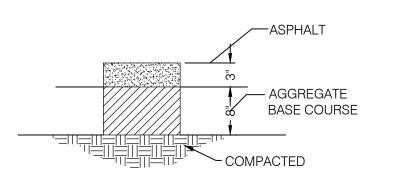
- NOTES:

  1) THE SWPPP INFORMATION SIGN MUST BE LOCATED NEAR THE CONSTRUCTION EXIT OF THE SITE, SUCH THAT IT IS ACCESSIBLE AND VIEWABLE BY THE GENERAL PUBLIC, BUT NOT OBSTRUCTING VIEWS AS TO CAUSE A SAFETY HAZARD.
- 2) ALL POSTED DOCUMENTS MUST BE MAINTAINED IN A CLEARLY READABLE CONDITION AT ALL TIMES THROUGHOUT CONSTRUCTION AND UNTIL THE NOTICE-TO TERMINATION (NOT) IS FILED FOR THE PERMIT.
- 3) CONTRACTOR SHALL POST OTHER STORM WATER AND/OR EROSION AND SEDIMENT CONTROL RELATED PERMITS ON THE SIGN AS REQUIRED BY THE GOVERNING AGENCY.
- 4) SIGN SHALL BE LOCATED OUTSIDE OF PUBLIC RIGHT-OF-WAY AND EASEMENTS UNLESS APPROVED BY THE GOVERNING AGENCY.
- 5) CONTRACTOR IS RESPONSIBLE FOR ENSURING STABILITY IF THE SWPPP INFORMATION SIGN.

# **SWPPP INFORMATION SIGN**

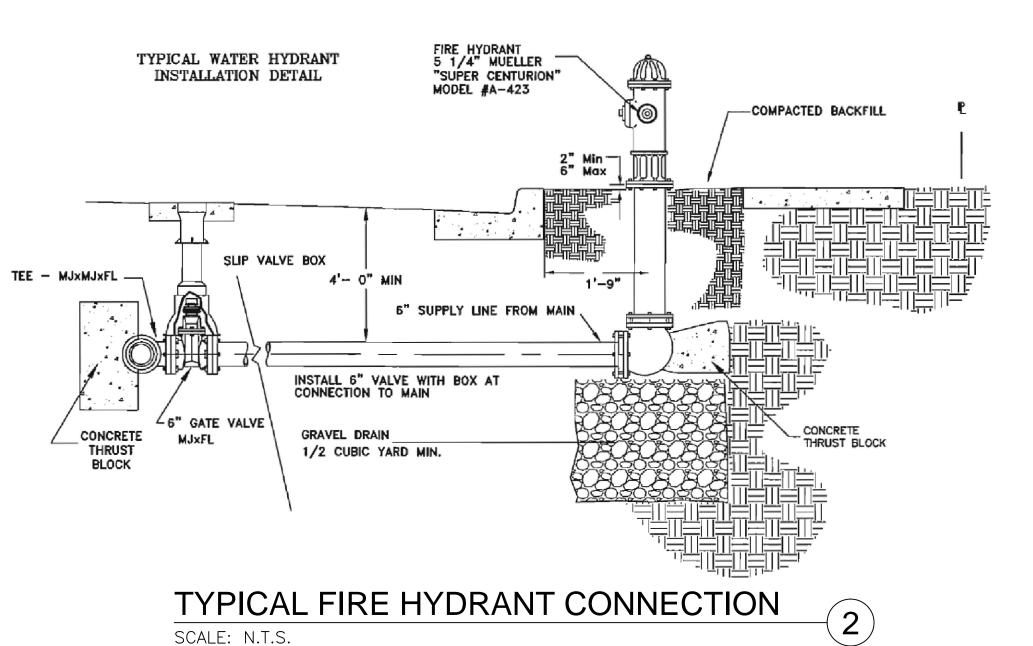
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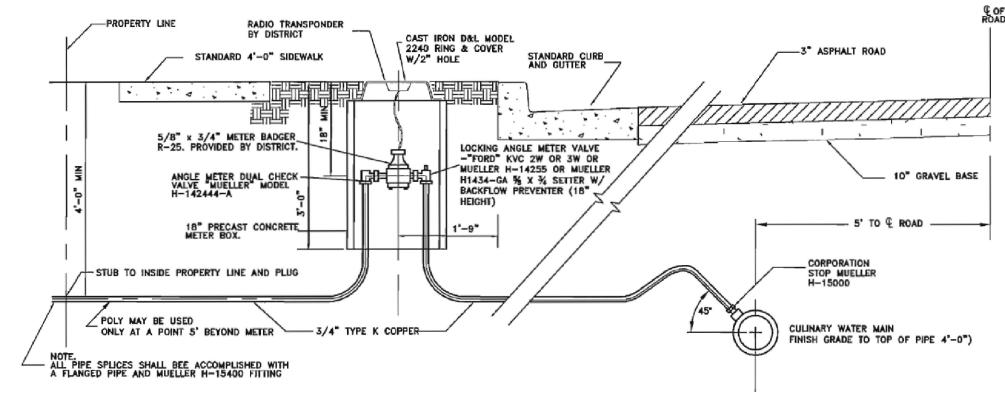




STANDARD DUTY PAVEMENT



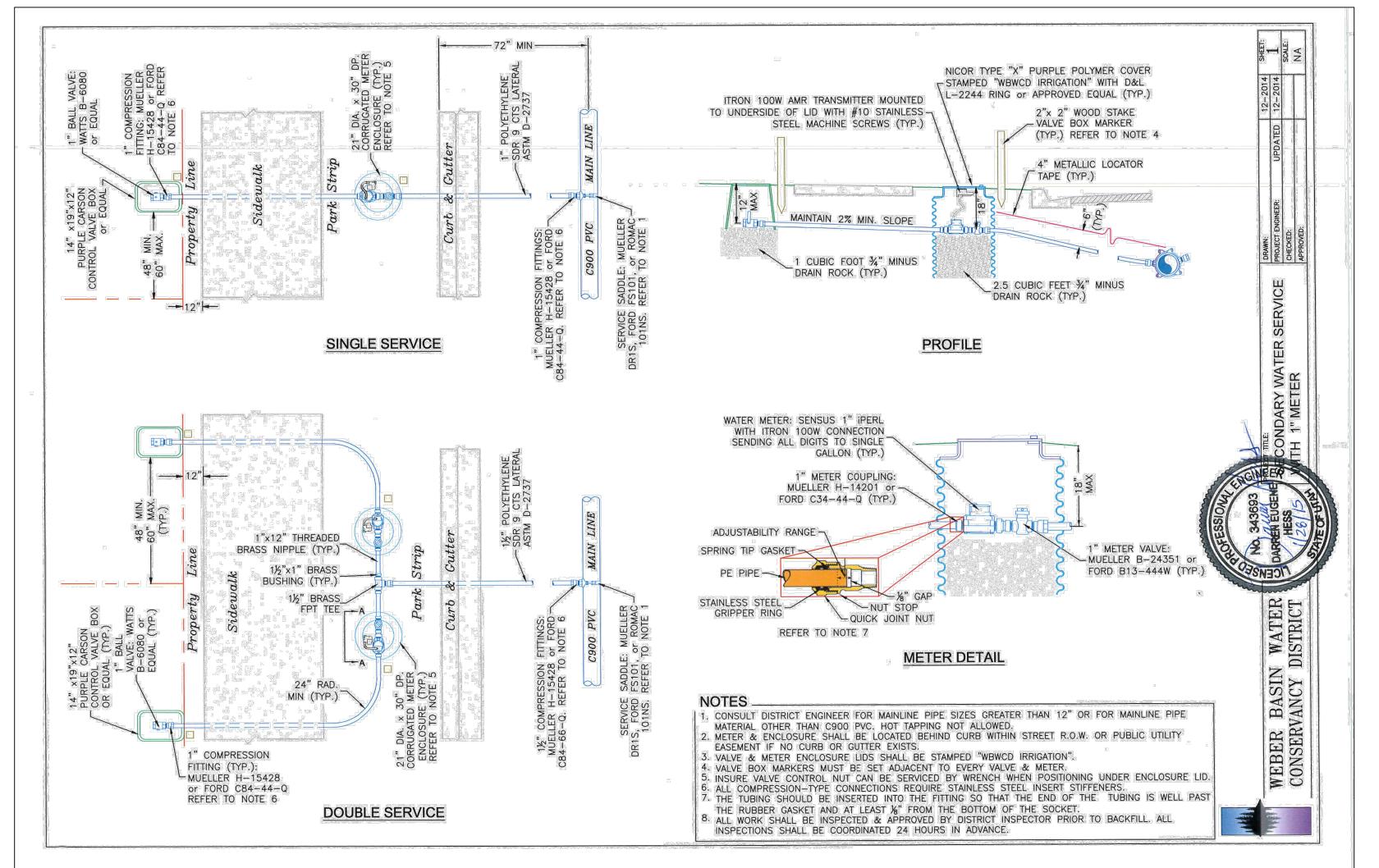




TYPICAL WATER CONNECTION

SCALE: N.T.S.

3



SECONDARY WATER SERVICE WITH 1" METER

(NOT TO SCALE)

DETAILS
AND
NOTES

CDT.01 8 OF 8

NICOR TYPE "X" PURPLE POLYMER COVER

STAMPED "WBWCD IRRIGATION" WITH D&L

L-2244 RING or APPROVED EQUAL (TYP.)

WITH #10 STAINLESS
CHINE SCREWS (TYP.)

(TYP.) REFER TO NOTE 4.

4" METALLIC LOCATOR

TAPE (TYP.)

SUBDIVISION

BROCK D

2060 EAST RYAN CIRCLE WEBER COUNTY, UTAH

EDGE

MOUNTAINS