

1. LOCATIONS OF UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THIS PLAN ARE APPROXIMATE AND FOR GENERAL INFORMATION PURPOSES ONLY. CONTRACTOR IS RESPONSIBLE FOR VERIFYING UTILITY LOCATIONS PRIOR TO BEGINNING EXCAVATION.

- THE FOLLOWING REQUIREMENTS SHALL BE FOLLOWED FOR EVERY UNDERGROUND FIRE SERVICE INSTALLATION
- PLEASE NOTE: WATER PUREYORS MAY HAVE MORE STRINGENT REQUIREMENTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE RESPECTIVE WATER COMPANY FOR ANY ADDITIONAL REQUIREMENTS. NFPA 13 & 24.

FIRE DEPARTMENT ACCESS
IF SECURITY GATES ARE DESIGNED AT ANY ENTRANCES TO THE SITE, THEY SHALL BE PROVIDED WITH A DEPARTMENT APPROVED KEY ENTRY SYSTEM. THE COMPLETED GATES SHALL REMAIN OPEN AND NOT OBSTRUCT THE FIRE DEPARTMENT ACCESS UNTIL INSPECTED AND APPROVED BY THE FIRE PREVENTION BUREAU. BEGIN APPLICATION PROCESSING WITH THE FIRE DEPARTMENT PRIOR TO THE BUILDING PERMIT BEING ISSUED. IFC 503.6

- A MINIMUM OF TWO (3) SETS OF WET STAMPED, SIGNED DRAWINGS SHALL BE SUBMITTED

- SIZE AND TYPE OF MATERIAL, FOR UNDERGROUND SERVICE LINE, LOCATION AND A DETAIL (I.E. SPECIFIC MEASUREMENTS) FOR THURST BLOOMS, AND A DETAIL OF THE PROPOSED PROTECTION DESIGN FOR CHECK VALVE. A MANUAL OF INSTRUCTIONS FOR THE PROPOSED PROTECTION DESIGN WILL BE SUPPLIED. THE DEVICE SHALL BE LISTED AND APPROVED FOR ITS INTENDED USE WITH A MINIMUM CLASS 150 LISTING, CHECK WATER PUMP/ATOR, SYSTEMS, CHLORINE PUMP, SODIUM HYPOCHLORITE, AND BE REQUIRED TO PROVIDE A LISTED STAMPER DEVICE, STAMPERED WITH THE FOLLOWING INFORMATION: THE BUILDING EXTENSION TO PROVIDE FOR UNDERGROUND FIRE MAIN TO COMPLY WITH NFPA 24 AND NFA STANDARDS. THE STAMPER SHALL BE USED TO ACCOMMODATE THE ANNUAL TEST AND INSPECTION OF THE DOUBLE BACKFLOW PREVENTION DEVICE. THE FIRE INSPECTOR WILL EVALUATE VALT SIZE ON A CASE-BY-CASE BASIS.

PROVIDE THE FIRE DEPARTMENT WITH ONE 8 1/2" x 11" PLAN INDICATING UNDERGROUND SYSTEM. THIS MUST BE A CLEAR, EASILY READ COPY FOR USE BY SUPPRESSION CREWS.

UNDERGROUND FIRST-RESPONSE MAINS AND COMPONENTS SHALL CONFORM TO NFPA 24 MINIMUM STANDARD. THE PLANS SHALL BE REVIEWED AND APPROVED BY THE FIRE DEPARTMENT PRIOR TO INSTALLATION. STAMPED APPROVED PLANS MUST BE KEPT ON SITE FOR THE FIRE INSPECTOR. IFC 105.3.5

- ALL NEW FIRE HOBS MUST MEET THE FOLLOWING REQUIREMENTS:
- * NEW TYPE FIRE HOBS
 - * NEW METALLIC PAGER
 - * 6" MINIMUM SUPPLY FOR FIRE HOBOANT
 - * IF COMBUSTIBLE BUILDING MATERIALS ARE USED (INCLUDING FRAMING) THE WATER SUPPLY FOR THE FIRE DEPARTMENT PRIOR TO STOCKPILING COMBUSTIBLE BUILDING MATERIALS, APPROVED WATER SUPPLY SYSTEMS FOR PHASED CONSTRUCTION SHALL PROVIDE REQUIRED FLOW
 - * ALL PHASES
 - * NEW FIRE HOBS MUST BE PROVIDED WITH A 5-INCH HARGREAVEN HINS STORZ ADAPTOR WITH THE APPROVED
 - * ATTACHED SEAL CAP AND AIRCRAFT CABLE
- UNDERGROUND PIPING SHALL BE CONSTRUCTION WITH SCHEDULE 40S, 60S, 80S, AND 120S STEEL PIPE. SIZE AND TYPE OF THE SERVICE LINES SHALL BE APPROVED BY THE FIRE DEPARTMENT PRIOR TO INSTALLATION. UNDERGROUND SUPPLY LINES SHALL BE FOR THE SPRINKLER SERVICE LESS THAN 6" IN DIAMETER SHALL BE MINIMUM SCHEDULE 80. NFP 13.24
- UNDERGROUND PIPING AND FITTINGS TO BE ROUGHED AND THURST BLOKED ACCORDING TO NFP-24, AWWA AND ANY OTHER STANDARDS THAT MAY APPLY.
- INSTALLATION TO BE IN ACCORDANCE WITH STATE AND LOCAL A.H.J.'S, UNDERGROUND PIPE TO BE FLOUSED IN ACCORDANCE WITH NFP-24 AND AWWA.
- NFP-24, AND AWWA M22-C-600.
- ALL UNDERGROUND PIPING TO BE HYDROSTATICALLY TESTED WITH ALLOWABLE LEAKAGE IN ACCORDANCE WITH ALL UNDERGROUND PIPING TO BE CHLORINATED AS PER REQUIREMENTS OF THE STATE HEALTH DEPARTMENT.
- CHLORINATION TEST TO BE DONE ON BASIS OF 50 P.P.M. OVER 24 HR. PERIOD.
- (X) CLASS 150 PVC C-900 DR-18
 - (X) CLASS 200 PVC C-900 DR-14
 - (X) CLASS 300 DUCTILE IRON
- DUCTILE IRON PIPE IS CEMENT LINED AND SHALL BE INKED IN POLYETHYLENE TUBING.

ALL BLOCKING SHALL BE AGAINST UNDISTURBED HARD DUG SOIL OF THE EXISTING FOUNDATION. ALL BLOCKING SHALL BE AGAINST THE END OF THE EXISTING CONDUITS. MAXIMUM SPACING BETWEEN THESE JOINTS SHALL BE 10 FEET. THE MINIMUM THICKNESS TO RESIST MOMENT OF THESE JOINTS SHALL BE 6 INCHES. ALL JOINTS SHALL BE REINFORCED WITH #4 BARS WHERE A CALCULATION IS BASED ON THRUST DUE TO STATIC PRESSURE + 50% THRUST = 24K. THE AREA OF PIPE = WATER PRESSURE DIVIDED BY PERCENT RATING OF CONCRETE. WHEN SLEEVES ARE USED FOR JOINTS, THEY MUST BE OVERLAPPED TO PREVENT RIPPING OF CONCRETE. WHERE STEEL BECOMES A PROBLEM, PROPER REINFORCING MUST BE INSTALLED INTO THE BLOCKING. THERE SHALL BE A MINIMUM OF 8' BETWEEN PIPS AND OBSTRUCTIONS. CLEANANCE ON PIPES BELONGING TO OIL/GAS COMPANIES SHALL BE 18" UNLESS SPECIAL PERMISSION IS GIVEN BY THESE COMPANIES.

THE LOCATIONS OF UNDERGROUND UTILITIES REPRESENTED ON THIS DRAWING HAVE BEEN DETERMINED FROM A FIELD SURVEY AND FROM RECORDS OBTAINED FROM THE VARIOUS UTILITY COMPANIES. THE NUMBER AND LOCATIONS OF ALL UNDERGROUND UTILITIES SHOWN ARE FOR INFORMATIONAL PURPOSES ONLY. FOR YOUR SAFETY, STATE LAW REQUIRES THAT YOU CALL THE LOCAL "ONE-CALL" UNDERGROUND UTILITY LOCATING CENTER AT LEAST TWO WORKING DAYS BEFORE BEGINNING ANY EXCAVATION: 1-800-342-1365

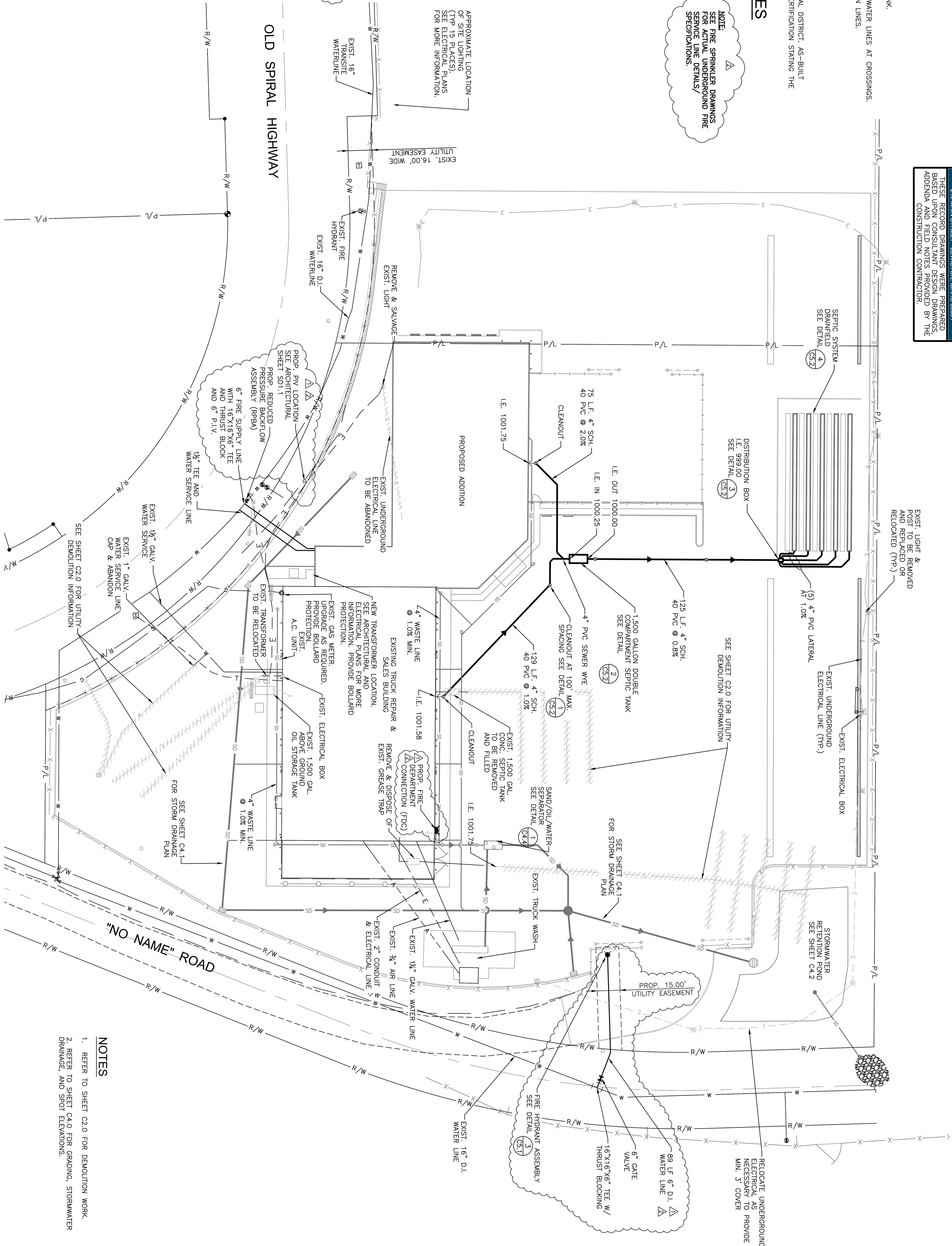
NAME Shahid Ali TITLE ENGINEERING MANAGER DATE 03/27/18

TD&H
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THESE RECORD DRAWINGS WERE PREPARED
BASED UPON CONSULTANT DESIGN DRAWINGS
AND FIELD NOTES PROVIDED BY THE
CONSTRUCTION CONTRACTOR.

08/05/2016



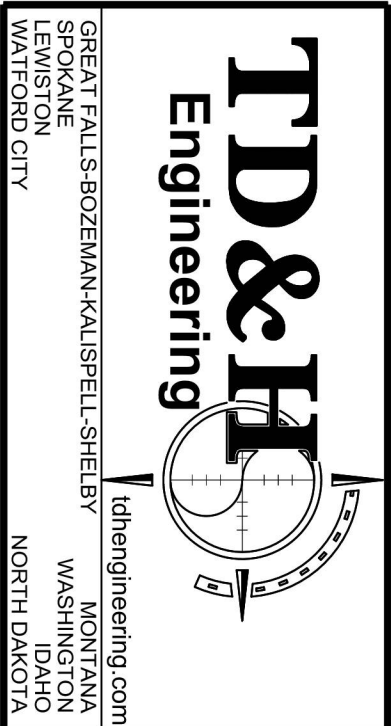
1. REFER TO SHEET C2.0 FOR DEMOLITION WORK.
2. REFER TO SHEET C4.0 FOR GRADING, STORMWATER DRAINAGE, AND SPOT ELEVATIONS.

PROJECT:

SHEET
TITLE:


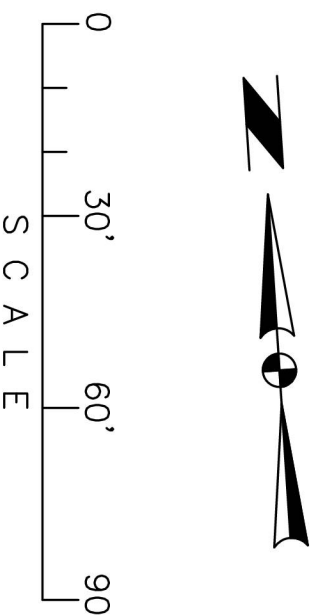
KENWORTH SALES COMPANY, INC.
1643 OLD SPIRAL HIGHWAY
LEWISTON, IDAHO

OVERALL UTILITY PLAN



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