GENERAL UTILITY NOTES

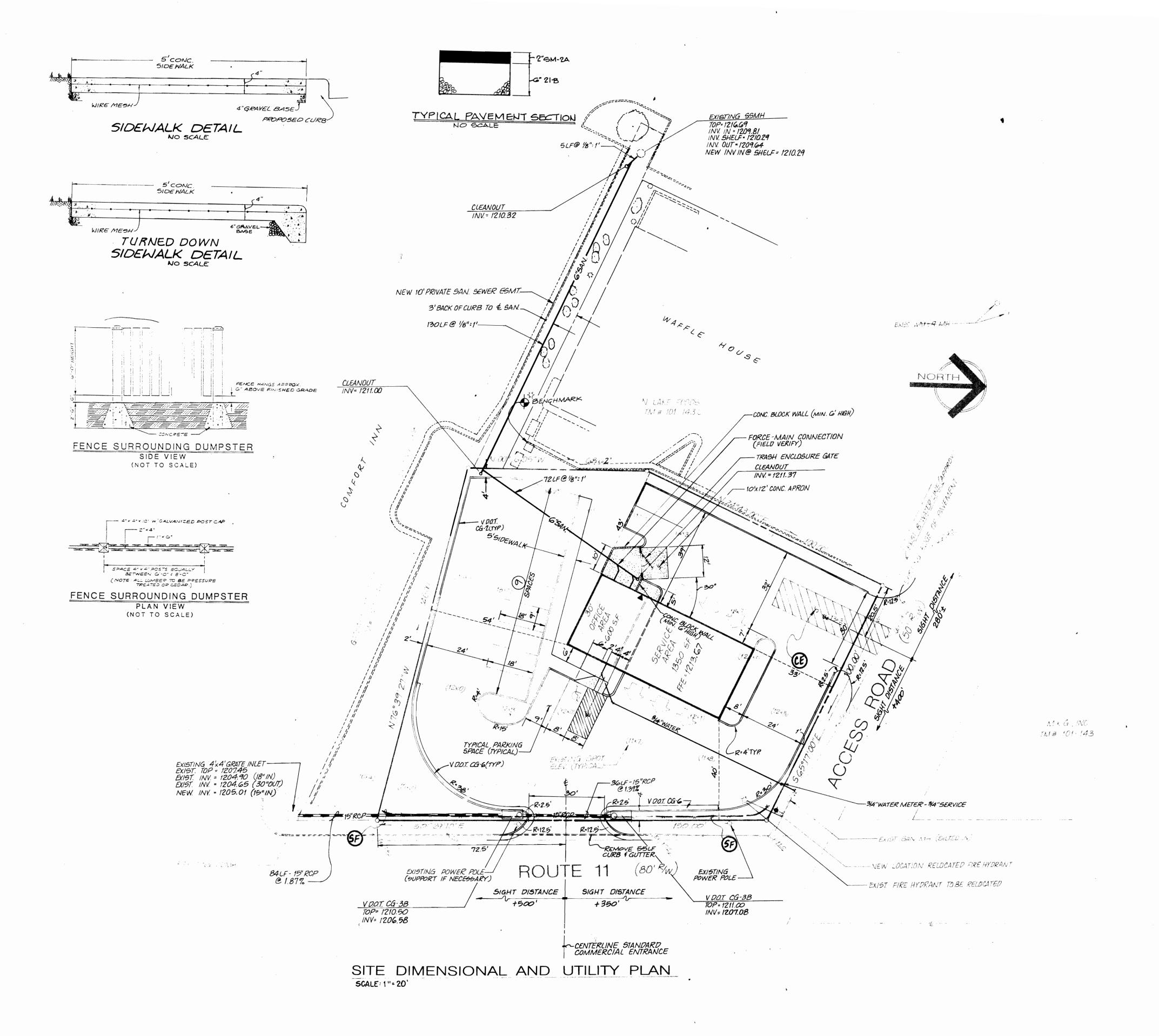
- 1. SUPPLY AND INSTALL ALL MATERIALS AND METHODS FOR WATERLINES, SANITARY SEWERS AND STORM DRAINAGE IN ACCORDANCE WITH THE SPECIFICATIONS AND REQUIREMENTS OF THE BOUTETOURT COUNTY THE VIRGINIA DEPARTMENT OF TRANSPORTATION "ROAD AND BRIDGE STANDARDS AND SPECIFICATIONS", LATEST EDITION, AND THE REQUIREMENTS OF PRIVATE UTILITY OWNERS.
- 2. OBTAIN ALL REQUIRED PERMITS AND NOTIFY APPROPRIATE OFFICIALS 48 HOURS PRIOR TO COMMENCEMENT OF WORK. OBTAIN INFORMATION FROM UTILITY OWNERS CONCERNING PERMITS AND CONNECTIONS TO EXISTING LINES.
- 3. ALL WORK SHALL BE SUBJECT TO INSPECTION BY BOUTETOURT COUNTY. NOTIFY APPROPRIATE OFFICIALS PRIOR TO COMMENCEMENT OF WORK.
- 4. SITE SHALL BE TO SUBGRADE PRIOR TO INSTALLATION OF UTILITIES. ALL UTILITIES SHALL BE IN PLACE PRIOR TO PLACEMENT OF PAVEMENT BASE MATERIAL.
- 5. USE SELECT MATERIAL FREE FROM FROST, LARGE CLODS, STONES, AND DEBRIS FOR BACKFILL FROM THE BOTTOM OF THE TRENCH TO TWELVE (12) INCHES ABOVE THE PIPE
- 6. MINIMIZE ANY DISTURBANCE TO EXISTING WATER SERVICE, SEWER LINES OR ANY OTHER UTILITY DURING CONSTRUCTION AND PROVIDE QUALITY WORKMANSHIP.
- 7. MAKE ALL PIPE JOINTS IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND THE COUNTY'S SPECIFICATIONS. MAKE JOINTS BETWEEN DIFFERENT PIPE MATERIALS WITH STANDARD FITTINGS MANUFACTURED FOR THE PURPOSE.
- MAINTAIN ALL WATER LINES AT TEN (10) FEET HORIZONTAL SEPARATION FROM SEWER LINES AND MANHOLES; MEASURE THE DISTANCE EDGE-TO-EDGE. WHEN LOCAL CONDITIONS PREVENT THE DESIRED HORIZONTAL SEPARATION, THE WATERLINE MAY BE LAID CLOSER TO THE SEWER OR MANHOLE PROVIDED THAT THE BOTTOM OF THE WATERLINE SHALL BE AT LEAST EIGHTEEN (18) INCHES ABOVE THE TOP OF THE SEWER. WHERE THIS VERTICAL SEPARATION CANNOT BE OBTAINED, CONSTRUCT THE SEWER OF AWWA APPROVED WATER PIPE AND PRESSURE TREAT IN PLACE PRIOR TO BACKFILLING. THE SEWER MANHOLE SHALL BE OF WATER-TIGHT CONSTRUCTION TESTED IN PLACE.
- 9. SEWER AND WATER TAPS SHALL BE LOCATED BY THE CONTRACTOR AND MADE BY THE UTILITY OWNERS AT THE DEVELOPER'S EXPENSE.
- 10. LOCATE AND UNCOVER VALVE VAULTS AND MANHOLES AFTER PAVING AND ADJUST TO FINAL GRADE. IF NECESSARY.
- 11. REFER TO BUILDING PLANS BY BALZER AND ASSOCIATES FOR EXACT LOCATIONS WHERE UTILITIES ENTER THE BUILDING.
- 12. VERIFY THE LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES SHOWN ON THE PLANS IN AREAS OF CONSTRUCTION PRIOR TO STARTING WORK. CONTACT THE ENGINEER IMMEDIATELY IF:
 - ANY LOCATION OR ELEVATION IS DIFFERENT FORM THAT SHOWN ON THE PLANS.
 - IF THERE APPEARS TO BE ANY CONFLICT.
 - UPON DISCOVERY OF ANY UTILITY NOT SHOWN ON THE PLANS.

TO MISS UTILITIES, CALL "MISS UTILITY" OF VIRGINIA (TOLL FREE 1-800-552-7001) 48 HOURS BEFORE YOU DIG. THE CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGE CAUSED TO ANY UTILITY, PUBLIC OR PRIVATE, AS A RESULT OF THIS WORK

- 13. REPAIR ALL DAMAGE CAUSED TO ANY UTILITY, PUBLIC OR PRIVATE, AS A RESULT OF THIS WORK AT NO ADDITIONAL COST TO OWNER.
- 14. PROVIDE A CONTINUOUS AND UNIFORM BEDDING IN THE TRENCH FOR ALL PIPE. REMOVE STONES AND ROCKS FOUND IN THE TRENCH FOR A DEPTH OF AT LEAST SIX (6) INCHES BELOW THE BOTTOM OF THE PIPE AND TAMP SELECT FILL BEDDING PROVIDED. AFTER THE PIPE HAS BEEN PLACED IN THE TRENCH, BACKFILL THE TRENCH WITH SELECT MATERIAL, THOROUGHLY COMPACT TO 90% (95% UNDER PAVEMENT OR CONCRETE SLAB) OF THE STANDARD PROCTOR (ASTM D-698) USING CARE NOT TO DAMAGE THE PIPE. USE VDOT STANDARD PB-1 TRENCH FOR STORM SEWER AND UB-1 FOR SANITARY SEWER AND WATER.
- 15. PLACE BACKFILL FOR ALL UTILITIES IN ACCORDANCE WITH THE <LOCALITY> SPECIFICATIONS, AND THE FOLLOWING CRITERIA:
 - (1) BACKFILL NO TRENCH UNTIL AUTHORIZED BY THE <LOCALITY>. MATERIALS USED FOR BACKFILL FROM THE BOTTOM OF THE TRENCH TO 12" (TWELVE INCHES) ABOVE THE PIPE SHALL BE CRUSHER RUN. THOROUGHLY AND CAREFULLY COMPACT THE BACKFILL MATERIAL.
 - (2) COMPACT BACKFILL BY MECHANICAL TAMPING THROUGHOUT THE DEPTH OF THE TRENCH TO INSURE A SUITABLE SUBBASE ACCEPTABLE TO THE ROAD ENGINEER. IF THE MATERIAL TAKEN FROM THE DITCH IS NOT SUITABLE FOR BACKFILLING, REMOVE IT AND USE AN ACCEPTABLE MATERIAL FOR BACKFILLING THE TRENCH.
- 16. STORM SEWER MATERIAL SHALL BE REINFORCED CONCRETE. USE STANDARD VDOT STRUCTURES WITH IS-1 SHAPING.
- 17. TIE DOWNSPOUTS INTO UNDERGROUND SCH40 PVC PIPES AND DISCHARGE TO STORM SEWER SYSTEM. PROVIDE CLEANOUT AT EACH BEND.
- 18. UTILITY LOCATIONS SHOWN ARE A RESULT OF EXISTING INFORMATION AND FIELD LOCATION OF SURFACE FEATURES. CONSIDER LOCATIONS APPROXIMATE. DO NOT BEGIN WORK, INCLUDING GRADING, PRIOR TO VERIFYING UTILITY LOCATIONS.
- 19. PROVIDE GREASE TRAP ON SANITARY SEWER DISCHARGE LATERAL FROM BAY DRAIN.
- 20. REMOVE EXISTING SHRUBS AND STORE DURING INSTALLATION OF SANITARY SEWER LATERAL. PROTECT SITE LIGHTING AND CURB. REPLACE SHRUBS AND SEED UPON COMPLETION OF CONSTRUCTION.

DIMENSIONAL NOTES

- IN GENERAL DIMENSIONS ARE TO BOTTOM FACE OF CURB, CENTER OF PAINTED LINE, EDGE OF PAVEMENT, FACE OF WALL.
- 2. RADII ARE 5.0' UNLESS OTHERWISE NOTED.
- 3. SEPARATE PARKING SPACES WITH 4" WIDE WHITE PAINTED LINES. USE PAINT MANUFACTURED FOR THE PURPOSE.
- 4. PLAN IS LAID OUT WITH PARKING AND BUILDING PARALLEL TO EAST PROPERTY LINE (N24° 43'00"E).
- 5. DO NOT SCALE DIMENSIONS. IF A QUESTION CONCERNING A DIMENSION ARISES, CONTACT THE ENGINEER FOR INTERPRETATION.



PATRICIA L'MILEY S
No. 023323
11.12.96

PECEIVED

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DEVELOPMENT SERVILLS



• PLANNERS • ARCHITECTS • ENGINEERS • SURVEYORS

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SITE DIMENSIONAL
AND UTILITY PLAN
LUBE TECH

DRAWN BY : PRB

DESIGNED BY : PLM

CHECKED BY : PLM

DATE OCTOBER 11,1996

REVISIONS
10.21.96
1.29.97
3.7.97

SCALE AS NOTED

SHEËT NO.