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SEP 23 1999
ENGINEERING DEPARTMENT
RECEIVED
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ENGINEERING DEPARTMENT

Bruce Carter Hisp
APPROVED
AS NOTED
9-27-99
Judge Lumsden

L O W E'S O F O' F A L L O N

O'Fallon, Missouri

GENERAL NOTES:

1. UNDERGROUND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE INFORMATION AND THEREFORE, THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. THE VERIFICATION OF THE LOCATION OF ALL UNDERGROUND UTILITIES, EITHER SHOWN OR NOT SHOWN ON THESE PLANS, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE LOCATED PRIOR TO ANY GRADING OR CONSTRUCTION OF IMPROVEMENTS.
2. AERIAL TOPOGRAPHY PROVIDED BY WALKER & ASSOC., INC.
3. ALL CONSTRUCTION AND MATERIALS USED IN BUILDING SEWERS SHALL CONFORM TO THE CITY OF O'FALLON, MISSOURI CURRENT STANDARDS AND SPECIFICATIONS.
4. DIMENSIONS ARE TO FACE OF CURB AND FACE OF BUILDING UNLESS OTHERWISE NOTED.
5. ALL EXISTING ABOVE & BELOW GROUND UTILITIES TO BE PROTECTED AND USED IN PLACE UNLESS OTHERWISE NOTED
6. ALL MANHOLES AND INLET TOPS BUILT WITHOUT ELEVATIONS FURNISHED BY THE ENGINEER WILL BE THE RESPONSIBILITY OF THE SEWER CONTRACTOR.
7. STORM SEWERS SHALL BE A.S.T.M. C-76, CLASS III R.C.P. OR A.D.S.-NR UNLESS OTHERWISE NOTED ON PLANS.
8. ALL PVC SANITARY SEWER PIPE SHALL BE A.S.T.M. D-3034 SDR-35.
9. WHEN PVC PIPE IS USED, APPROPRIATE RUBBER SEAL WATERSTOP, AS APPROVED BY THE SEWER DISTRICT, SHALL BE INSTALLED BETWEEN PVC PIPE AND MASONRY (CONCRETE OR BRICK) STRUCTURES.
10. DOMESTIC WATER SERVICE, TO BE INSTALLED BY CONTRACTOR, SHALL BE P.V.C. RATED FOR 200 P.S.I. AND HAVE A MINIMUM COVER OF 42".
11. FIRE SERVICE SHALL BE INSTALLED BY THE CONTRACTOR TO A POINT INSIDE THE BUILDING, ONE (1) FOOT ABOVE FINISHED FLOOR AND CAPPED.
12. CONTRACTOR TO INSTALL ALL STORM SEWERS, SANITARY SEWERS, WATER LINES, METERS, METER BOXES, AND VALVES AS REQUIRED.
13. LOCATION AND ELEVATION OF ALL EXISTING INLETS, MANHOLES AND PIPES TO BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION.
14. CONTRACTOR SHALL REMOVE ALL EXISTING ABOVE GROUND AND BELOW GROUND IMPROVEMENTS WHICH INTERFERE WITH NEW CONSTRUCTION. CONTRACTOR SHALL CAP OFF OR REROUTE EXISTING UTILITIES AS REQUIRED.

CONSTRUCTION NOTES:

1. AFTER PERMITS HAVE BEEN OBTAINED & EROSION CONTROL MEASURES INSTALLED, THE CONTRACTOR SHALL GRADE BUILDING PAD, GARDEN CENTER & APRONS TO +/- 0.1 FT. OF SUBGRADE AS PER DIVISION 2 COMPACTION SPECIFICATIONS.
2. IMMEDIATELY APPLY & COMPACT STONE BASE FOR BUILDING PAD TO +/- 1/2" OF CONCRETE SUBGRADE AS PER DIVISION 2 SPECIFICATIONS. STONE SHALL BE APPLIED PRIOR TO EXCAVATING INTERIOR & PERIMETER FOOTINGS.
3. COMPACT & MAINTAIN 30,000 SQ. FT. OF 4" THICK STONE MATERIAL LAYDOWN AREA & 25' WIDE GRAVEL ACCESS ROAD TO BUILDING. LAYDOWN AREA TO BE LOCATED BY LOWE'S PROJECT MANAGER.

EROSION CONTROL NOTES:

1. NO LAND CLEARING OR GRADING SHALL BEGIN UNTIL ALL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
2. ALL EXPOSED AREAS SHALL BE SEEDED AS SPECIFIED WITHIN 30 DAYS OF FINAL GRADING.
3. SHOULD CONSTRUCTION STOP FOR LONGER THAN 15 DAYS, THE SITE SHALL BE SEEDED AS SPECIFIED.
4. MAINTAIN EROSION CONTROL MEASURES AFTER EACH RAIN AND AT LEAST ONCE A WEEK.
5. THIS PLAN SHALL NOT BE CONSIDERED ALL INCLUSIVE AS THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT SOIL SEDIMENT FROM LEAVING THE SITE.
6. CONTRACTOR SHALL COMPLY WITH ALL STATE AND LOCAL ORDINANCES THAT APPLY.
7. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED IF DEEMED NECESSARY BY ON SITE INSPECTION.
8. LAND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED BY GOVERNING AUTHORITIES
9. IF INSTALLATION OF STORM DRAINAGE SYSTEM SHOULD BE INTERRUPTED BY WEATHER OR NIGHTFALL, THE PIPE ENDS SHALL BE COVERED WITH FILTER FABRIC.
10. ALL EXISTING STRUCTURES, FENCING, TREES, AND ETC., WITHIN CONSTRUCTION AREA SHALL BE REMOVED AND DISPOSED OF OFF SITE. ANY BURNING ON SITE SHALL BE SUBJECT TO LOCAL ORDINANCES AND LOWES SPECIFICATIONS.
11. CONTRACTOR SHALL BE RESPONSIBLE TO TAKE WHATEVER MEANS NECESSARY TO ESTABLISH PERMANENT SOIL STABILIZATION.
12. SEDIMENT SHALL BE REMOVED FROM THE SEDIMENT BASIN BEFORE IT IS 50%.
13. SEDIMENT BASIN OUTLET STRUCTURE & CMP SIZED TO INCLUDE EMERGENCY SPILLWAY FOR 10 YR. STORM

SITE NOTES

1. ASPHALT PARKING LOT TO BE STRIPED WITH 4" WIDE PAINTED WHITE LINES AS INDICATED. CONCRETE PAVED AREAS TO BE PAINTED YELLOW. PAINT SHALL BE SHERWIN WILLIAMS "PROMAR TRAFFIC MARKING".
2. CONTRACTOR SHALL COORDINATE AND COMPLY WITH ALL UTILITY COMPANIES INVOLVED IN PROJECT AND PAY ALL REQUIRED FEES AND COSTS.
3. ALL DIMENSIONS ARE TO FACE OF CURB OR FACE OF BUILDING UNLESS OTHERWISE NOTED.
4. ALL CONCRETE SIDEWALKS AND APRONS SHALL RECEIVE CONSTRUCTION JOINTS AT 25'-0" O.C. UNLESS OTHERWISE NOTED.
5. FOR SITE UTILITIES, SEE SITE UTILITIES PLAN SHT. C-5.

GRADING AND DRAINAGE NOTES

1. ALL EXISTING STRUCTURES, UNLESS OTHERWISE NOTED TO REMAIN, FENCING, TREES, & ETC., WITHIN CONSTRUCTION AREA SHALL BE REMOVED & DISPOSED OF OFF SITE. BURNING ON SITE IS NOT PERMITTED.
2. ALL DRAINAGE STRUCTURES SHALL BE PRE-CAST.
3. ALL DRAINAGE STRUCTURES AND STORM SEWER PIPES SHALL MEET HEAVY DUTY TRAFFIC (H20) LOADING AND BE INSTALLED ACCORDINGLY.
4. CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES HAVING UNDERGROUND UTILITIES ON SITE OR IN RIGHT-OF-WAY PRIOR TO EXCAVATION. CONTRACTOR SHALL CONTACT UTILITY LOCATING COMPANY AND LOCATE ALL UTILITIES PRIOR TO GRADING START.
5. SITE GRADING SHALL NOT PROCEED UNTIL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
6. SICP - SMOOTH INTERIOR CORRUGATED PLASTIC PIPES & FITTINGS SHALL BE:

   A.D.S.-N12 MFRD. BY ADVANCED DRAINAGE SYSTEMS, INC.
   5200 RIVERSIDE DRIVE, COLUMBUS, OHIO 43221
   (614) 457-3051

   OR

   HI Q MFRD. BY HANCOR INC.
   P.O. BOX 1047
   FINDLAY, OH. 45839-1047
   1-800-537-4520

   SICP SHALL BE INSTALLED PER MANUFACTURER'S GUIDELINE FOR HEAVY DUTY DRAINAGE APPLICATIONS.
7. FRENCH DRAIN SHALL BE INSTALLED IF DIRECTED BY THE GEOTECHNICAL ENGINEER OR AS SHOWN ON PLANS.
8. NO EARTH SLOPE TO BE GREATER THAN 3' HORIZONTAL TO 1' VERTICAL.
9. BEFORE LEAVING SITE, CONTRACTOR TO BE RESPONSIBLE FOR REMOVAL OF SILT FROM DETENTION BASIN & RESTORING GRADES TO DESIGN ELEVATIONS.

SITE UTILITY NOTES

1. LOCATION OF SITE UTILITIES SHALL BE VERIFIED WITH PROPER UTILITY COMPANY PROVIDING SERVICE.
2. UTILITY CONTRACTOR SHALL PROVIDE 2' x 2' x 8" THICK CONCRETE APRON AT ALL SEWERLINE CLEANOUTS OUTSIDE OF BUILDING.
3. UTILITY CONTRACTOR WILL BE RESPONSIBLE FOR ALL TAP AND TIE ON FEES REQUIRED, AS WELL AS COST OF UNDERGROUND SERVICE CONNECTIONS TO THE BUILDING.
4. ELECTRICAL SERVICE TO PAD MOUNTED TRANSFORMER SHALL BE RUN UNDERGROUND, FROM ROAD RIGHT-OF-WAY TO TRANSFORMER LOCATION. ASSOCIATED COST BY UTILITY CONTRACTOR.
5. UTILITY CONTRACTOR SHALL FURNISH (2) - 3" TELEPHONE CONDUIT(S) AS SHOWN ON PLAN. VERIFY LOCATION OF TIE IN AT TELEPHONE COMPANIES SERVICE LINE. PROVIDE NYLON PULL CORD INSIDE CONDUIT.

SITE DATA

GENERAL

Acreage:
Total = 18.22
Developed = 18.22

Buildings:
Classification : 115K
Sales Floor = 115,506 SF.
Offices = 4,261 SF.
Receiving = 9,271 SF.
Total = 135,197 SF.
Garden Center = 48,472 SF.
(Fenced Area)
Food Court = 1,272 SF

PARKING

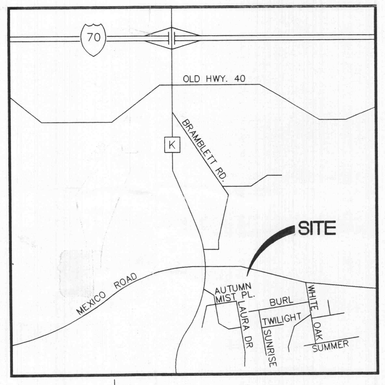
Parking Requirements:
Building Area = 150,035 s.f.

10 Spaces for first 2,000 s.f. + 1 space for every 400 s.f. above 2,000 s.f.

Parking Required = 381 Stalls
Parking Provided = 603 Stalls
(Includes 14 H.C. spaces, 2 van accessible)

PREPARED FOR:

LOWE'S Companies, Inc.
P. O. Box 1111 N. Wilkesboro, N. C. 28656



N LOCATION MAP
N.T.S.

UTILITIES & DISTRICTS
O'FALLON FIRE PROTECTION DISTRICT
ALLIANCE WATER & SEWER
LACLEDE GAS COMPANY
AMEREN UE ELECTRIC
NETWORK SERVICES TELEPHONE

PREPARED BY:

Heideman & Associates, Inc.
Consulting
Civil, Surveying
Electrical
Mechanical
Engineers
13545 Barrett Parkway Drive
Suite 200
St. Louis, Missouri 63021
Phone: 314-822-2217
Fax: 314-822-7858

SHEET INDEX

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C-11	PAVEMENT JOINT PLAN / DETAILS
D-1	DRAINAGE AREA MAP (NOT FOR CONSTRUCTION)

ONSITE WATERLINE NOTES

1. FOR GENERAL SITE WORK NOTES, SEE DRAWING C-3 .
2. ALL PIPE 4" AND LARGER SHALL BE C900, CLASS 200, P.V.C. WATER PIPE WITH 200 P.S.I. PRESSURE RATING. WATER LINE PIPE SHALL CONFORM TO ASTM D2241 AND SDR 21.
3. FITTINGS 4" AND LARGER SHALL BE CAST IRON MECHANICAL JOINT. CONFORMING TO ANSI AND AWWA STANDARD SPECIFICATIONS.
4. PIPE AND FITTINGS 3" AND SMALLER TO BE EITHER P.V.C. SCHE. 40 W/ SOLVENT WELD JOINTS OR SOFT K-COPPER.
5. ALL WATER MAINS SHALL HAVE A MINIMUM COVER OF 3'-6" ABOVE TOP OF PIPE.
6. THE MINIMUM HORTIZONTAL SEPARATION BETWEEN THE CLOSEST TWO POINTS OF THE WATER AND SEWER LINE IS TEN FEET (10'). THE MINIMUM VERTICAL SEPARATION BETWEEN THE CLOSEST TWO POINTS OF THE WATER AND SEWER LINE IS EIGHTEEN INCHES (18").
7. THRUST BLOCKS SHALL BE PROVIDED AT ALL BENDS, TEES, AND FIRE HYDRANTS..
8. DIMENSIONS SHOWN ARE TO CENTERLINE OF PIPE OR FITTING.
9. ALL SPRINKLER, DOMESTIC AND SANITARY LEADS TO BUILDING SHALL END AS SHOWN ON PLAN AND SHALL BE PROVIDED WITH A TEMPORARY PLUG AT END (FOR OTHERS TO REMOVE AND EXTEND AS NECESSARY).
10. ALL FIRE HYDRANTS SHALL BE PROVIDED WITH AN APPROVED GATE VALVE A MAXIMUM OF 5'-0" FROM HYDRANT.
11. ALL WATER MAINS SHALL BE HYDROSTATICALLY TESTED AND DISINFECTED BEFORE ACCEPTANCE. SEE SITE WORK SPECIFICATIONS.
12. ALL GATE VALVES SHALL BE PROVIDED WITH A ROADWAY SCREW TYPE CAST IRON VALVE BOX. BOXES FOR VALVES 3" AND SMALLER SHALL HAVE ARCH BASE.
13. VALVES 3/4" THROUGH 3" SHALL BE BRONZE WEDGE TYPE GATE VALVE. VALVES SHALL HAVE NON-RISING STEM WITH SOLID TEE HEAD OPERATING NUT.
14. VALVES 4" AND LARGER SHALL BE CAST IRON WITH PARALLEL DOUBLE DISC GATE VALVE. VALVES SHALL HAVE MECHANICAL JOINT ENDS AND NON-RISING STEM WITH SQUARE OPERATING NUT.
15. ALL TRENCHING, PIPE LAYING, AND BACKFILLING SHALL BE IN ACCORDANCE WITH FEDERAL OSHA REGULATIONS.
16. SEE SITE SPECIFICATIONS "SITE UTILITIES" FOR BACKFILLING AND COMPACTION REQUIREMENTS.
17. UTILITY CONTRACTOR SHALL HAVE APPROVAL OF ALL GOVERNING AGENCIES HAVING JURISDICTION OVER THIS SYSTEM PRIOR TO INSTALLATION.
18. ALL WORK OF THIS PLAN SHALL BE DONE IN STRICT ACCORDANCE WITH SITE WORK SPECIFICATIONS.
19. REFER TO SHEETS FP-1 & FP-2 FOR LOCATION AND DETAIL OF FIRE LINE LEAD IN..

THE SEAL OF STANLEY F. VISNOVSKE ON THIS DRAWING APPLIES ONLY TO THE CIVIL/SITE ENGINEERING SHOWN. IT DOES NOT APPLY, NOR IS ANY RESPONSIBILITY TAKEN FOR GEOTECHNICAL (INCLUDING BUT NOT LIMITED TO SOILS STABILITY), STRUCTURAL, HVAC, PLUMBING, ELECTRICAL, FIRE PROTECTION, TRAFFIC ENGINEERING, SURVEYING (BOUNDARY AND TOPOGRAPHIC), OR ARCHITECTURAL (BUILDING OR LANDSCAPE).

STATE OF MISSOURI
STANLEY F. VISNOVSKE
NUMBER
E-23436
PROFESSIONAL ENGINEER
9-27-99

REVISIONS	
DATE	DESCRIPTION
12/23/98	CITY REVIEW COMMENTS
4/6/99	REV. ENTRANCES
5/28/99	CITY REVIEW COMMENTS
8/6/99	CITY REVIEW COMMENTS
8/30/99	CITY REVIEW COMMENTS

DATE 11-10-98
CHECKED BY SFV DRAWN BY DPB