# 1294B

# 14009 Thompson Rd

# Charlotte NC

# 19501708

Groundwater and Wastewater Services File Imaging Project

April 1017

Thompson Place Dr.
Apparent 60' Public R/W

Thompson Road
Apparent 60' Public R/W

EX. FIRE HYDRANT FLOW TEST:
STATIC PRESSURE xx PSI
RESIDUAL PRESSURE xx PSI
RESIDUAL FLOW xxxx GPM
FLOW @ 20 PSI xxxx GPM
TEST DATE xx/xx/xx

N/F
19501726
Fred & Maxine Archuleta
DB 12843 pg 626

N/F
19501728
Church of Jesus Christ
of Later Day Saints
DB 7500 pg RE REA 89

N/F
19501728
Church of Jesus
Christ
of Later Day Saints
DB 7500 pg 89

N/F
19520101
Walter R. Cornwell
DB 26927 pg 208

N/F
19520105
William M. Blythe
Et.Al (by Will)
DB 3044 pg 589

REAN/F
19501707
Luther & Jean Williams
DB 29998 pg 222

N/F
19501701
Matthew & Mary Benton
DB 6654 pg 885

N/F
19520107
Michael & Vickie Benton
DB 3652 pg 644

PROP. FIRE HYDRANT SERVICE LINE

APPROXIMATE LOCATION OF BACKFLOW PREVENTION DEVICE

PROP. PRIVATE FIRE HYDRANT ASSEMBLY

CONTRACTOR TO CONNECT PROP. ASPHALT DRIVEWAY TO EXISTING ASPHALT DRIVEWAY

#3 Rebar
NC Grid Coords
N:509032.5156
E:1501671.9570

PROP. SEPTIC DRAIN FIELD FOR TRACT #2

PROP. DISTRIBUTION MANIFOLD FOR TRACT #2

PROP. 10' PUMP LINE EASEMENT FOR TRACT #2

EXISTING LOCATION OF FIRE WATER TANK AND PUMP

vinyl equine pasture fence

Ex. Frame Barn

Ex. 1 1/2 STORY Brick Bldg

Ex. asphalt driveway

PROPOSED 572 LF OF 2" SCH 40 PVC PUMP LINE

PROPOSED 3" CPVC FIRE LINE

PROP. 235 LF 3" CPVC FIRE LINE

PROP. 20' ASPHALT DRIVEWAY

PROP. SEPTIC DRAIN FIELD EASEMENT FOR TRACT #2

APPROXIMATE LOCATION OF EXISTING SEPTIC DRAIN FIELD

PVC PUMP LINE CROSSING AT PROPOSED ASPHALT DRIVEWAY. MUST MAINTAIN 36" COVER OTHERWISE INSTALL DIP UNDER DRIVEWAY.

PROP. 4" PVC SANITARY SEWER LATERAL @ 2.00% MIN

PROP. 2000 GALLON SEPTIC TANK

PROP. 1500 GALLON PUMP TANK

REFER TO ARCHITECTURAL/PLUMBING PLANS FOR CONNECTION TO RESIDENCE

FFE: 738

FFE: 733

FFE: 719

PROP. 4" PVC SANITARY SEWER LATERAL @ 2.00% MIN

PROP. 2000 GALLON SEPTIC TANK

PROP. 1500 GALLON PUMP TANK

PROPOSED 208 LF OF 2" SCH 40 PVC PUMP LINE

PROP. SEPTIC DRAIN FIELD EASEMENT FOR TRACT #4

PROP. SEPTIC DRAIN FIELD FOR TRACT #4

PROP. DISTRIBUTION MANIFOLD FOR TRACT #4

PROP. SEPTIC DRAIN FIELD REPAIR AREA FOR TRACT #4

PROP. SEPTIC DRAIN FIELD FOR TRACT #3

PROP. SEPTIC DRAIN FIELD EASEMENT FOR TRACT #3

PROP. DISTRIBUTION MANIFOLD FOR TRACT #3

PROP. SEPTIC DRAIN FIELD REPAIR AREA FOR TRACT #3

PROPOSED 309 LF OF 2" SCH 40 PVC PUMP LINE

PROP. SEPTIC DRAIN FIELD EASEMENT FOR TRACT #3

PROPOSED 1.5" CPVC DOMESTIC WATER LINE

PROPOSED 3" CPVC FIRE LINE

PROP. 660 LF 1.5" CPVC DOMESTIC LINE

PROP. 195 LF 3" CPVC FIRE LINE

PROP. 195 LF 1.5" CPVC DOMESTIC LINE

PROPOSED 25 LF 1.5" CPVC DOMESTIC WATER LINE

APPROXIMATE LOCATION OF WELL

PROPOSED 1.5" CPVC DOMESTIC WATER LINE

PROPOSED 3" CPVC FIRE WATER LINE

WELL AREA

APPROXIMATE LOCATION OF ARCHITECTURAL/PLUMBING PLANS FOR CONNECTION TO RESIDENCE

PROPOSED WET POND

Pond

Pond

100' UNDISTURBED BUFFER

100' UNDISTURBED BUFFER

100' UNDISTURBED BUFFER

SWM BUFFER

SWM BUFFER

SWM BUFFER

SWM BUFFER

1 [14009]
Portion of
19501708
Unlimited Possibilities
Family Home Care Inc.
DB 26976 pg 930
±3.74 Acres

2 [14015]
Portion of
19501708
Unlimited Possibilities
Family Home Care Inc.
DB 26976 pg 930
±2.10 Acres

3 [14019]
19501731 &
19501732
Unlimited Possibilities
Family Home Care Inc.
DB 26976 pg 907
±3.996 Acres

4 N/F
19501730
Unlimited Possibilities
Family Home Care Inc.
DB 26976 pg 907
±6.595 Acres

LEGEND

- EXISTING UTILITY POLE
- EXISTING OVERHEAD ELECTRICAL
- PROPOSED SANITARY SEWER
- PROPOSED WATER LINE
- PROPOSED SEPTIC DRAIN FIELD REPAIR AREA

approved Well areas will require Easement agreements before Permits Can be issued

## WATER NOTES:

1. CONSTRUCTION SHALL BE IN ACCORDANCE WITH MECKLENBURG COUNTY HEALTH DEPARTMENT AND STATE OF NORTH CAROLINA SPECIFICATIONS.
2. THE CONTRACTOR SHALL VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.
3. ALL SHORING SHALL BE IN ACCORDANCE TO OSHA TRENCHING STANDARDS PART 1926, SUBPART P, AS AMENDED TO DATE.
4. IF THE PROPOSED WATER MAIN IS INSTALLED WITHIN 12" IN ANY DIRECTION (VERTICALLY OR HORIZONTALLY) FROM A GAS MAIN, THEN THE CONTRACTOR SHALL CALL THE APPROPRIATE GAS COMPANY AND INFORM THEM.
5. WATER MAIN TO BE INSTALLED WITH A MINIMUM OF 36" OF COVER.

## SEWER NOTES:

1. CONSTRUCTION SHALL BE IN ACCORDANCE WITH MECKLENBURG COUNTY HEALTH DEPARTMENT AND STATE OF NORTH CAROLINA SPECIFICATIONS.
2. THE CONTRACTOR SHALL VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.
3. ALL SHORING SHALL BE IN ACCORDANCE TO OSHA TRENCHING STANDARDS PART 1926, SUBPART P, AS AMENDED TO DATE.
4. IF THE PROPOSED SEWER SERVICE IS INSTALLED WITHIN 12" IN ANY DIRECTION (VERTICALLY OR HORIZONTALLY) FROM A GAS MAIN, THEN THE CONTRACTOR SHALL CALL THE APPROPRIATE GAS COMPANY AND INFORM THEM.
5. THE CONTRACTOR SHALL SEED AND MULCH AT THE END OF EACH DAY.
6. PROPOSED SEPTIC, PUMPING, AND MANIFOLD TANKS TO BE INSTALLED SHALL BE FROM THE STATE OF NORTH CAROLINA APPROVED LIST.
7. PROPOSED SEPTIC AND PUMPING TANKS ARE TO BE PLACED ON A MINIMUM 6" BED OF NO. 57 COMPACTED STONE ON VIRGIN GROUND.
8. MANIFOLD TANK IS TO BE PLACED ON A MINIMUM 4" BED OF WASHED STONE ON VIRGIN GROUND.

## TESTING/INSPECTION

1. TRENCH BACKFILL AND COMPACTION TESTING SHALL BE PERFORMED BY A CERTIFIED SOILS LABORATORY UNDER ALL PAVED AREAS. BACKFILL MATERIAL FROM THE BOTTOM OF TRENCH TO WITHIN SIX (6) INCHES OF THE SUBGRADE SHALL BE COMPACTED TO 98% OF THE MAX. DRY DENSITY AS DEFINED BY THE STANDARD PROCTOR TEST. ALL MATERIAL WHEN THE TOP 6 INCHES OF THE SUBGRADE LEVEL SHALL HAVE AN IN PLACE DENSITY OF 100%.
2. THE CONTRACTOR SHALL SUPPLY THE ENGINEER WITH WATER & SEWER AS-BUILTS (LOCATION, LENGTH, SLOPE, ETC.) PREPARED BY A REGISTERED LAND SURVEYOR WITH ALL APPURTENANCES AND WATER AND SEWER SERVICE MEASUREMENTS SUITABLE FOR PREPARATION OF FINAL AS-BUILTS.

## GENERAL NOTES:

1. SEWER AND WATER CONSTRUCTION SHALL NOT BEGIN UNTIL PERMITS ARE ISSUED BY MECKLENBURG COUNTY HEALTH DEPARTMENT. THE WORK IS SUBJECT TO INSPECTION AT ALL TIMES BY REPRESENTATIVES OF THE MECKLENBURG COUNTY HEALTH DEPARTMENT, THE OWNER, AND THE ENGINEER.
2. CONTRACTOR SHALL VERIFY THE ACTUAL LOCATION AND ELEVATION FOR ALL UTILITIES, DRAINAGE AND OTHER UNDERGROUND FACILITIES, AND SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR CONFLICTS PRIOR TO CONSTRUCTION.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF LOCATING AND MARKING ALL EXISTING UNDERGROUND UTILITIES.
4. PVC PIPING SHALL BE INSTALLED WITH APPROVED COPPER TRACER WIRE.
5. RESIDUAL WATER PRESSURE WHICH EXCEEDS 100 PSI MAY REQUIRE PRESSURE REDUCING VALVES ON EACH BUILDING SERVICE.
6. ALL WATER MAIN VALVES SHALL BE OPEN RIGHT IN CONFORMANCE WITH CHARLOTTE-MECKLENBURG UTILITY DEPARTMENT (CMUD) STANDARDS.
7. INSTALL FERROUS PIPING FOR BOTH WATER AND SEWER WITHIN 10 FEET OF CROSSING IF:
   - 7.1. SEWER CROSSES OVER WATER, OR
   - 7.2. VERTICAL CLEARANCE BETWEEN SEWER AND WATER IS LESS THAN 18 INCHES.
8. MAINTAIN 10 FEET HORIZONTAL SEPARATION BETWEEN WATER AND SEWER SERVICES. IF WATER AND SEWER ARE LAID IN THE SAME TRENCH, THEN THE TOP OF SEWER SHALL BE AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER LINE; OR USE FERROUS PIPE FOR BOTH WATER AND SEWER.
9. MAINTAIN 12 INCH VERTICAL SEPARATION BETWEEN STORM AND SANITARY OR INSTALL FERROUS PIPE ON SANITARY WITHIN 10 FEET EACH SIDE OF CROSSING.
10. COORDINATE EXACT LOCATIONS OF VAULTS, METERS, BACK FLOW PREVENTION DEVICES, AND BUILDING SERVICE LINE LOCATIONS AND PENETRATIONS WITH THE DETAILED ARCHITECTURAL, PLUMBING, AND LANDSCAPING PLANS.

## UTILITY NOTES:

1. ALL PIPE LENGTHS ARE HORIZONTAL DISTANCES AND ARE APPROXIMATE.
2. CONTRACTOR SHALL VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.
3. CONTRACTOR SHALL PROVIDE ALL THE MATERIALS AND APPURTENANCES NECESSARY FOR THE COMPLETE INSTALLATION OF THE UTILITIES. ALL PIPES AND FITTINGS SHALL BE INSPECTED BY THE BUILDING INSPECTOR PRIOR TO BEING COVERED.
4. ALL WORK SHALL COMPLY WITH ALL APPLICABLE CODE'S, REGULATIONS AND OR LOCAL STANDARDS IMPOSED BY LOCAL UTILITY, MECKLENBURG COUNTY HEALTH DEPARTMENT, AND STATE OF NORTH CAROLINA AS APPLICABLE.
5. ALL WATER LINES SHALL HAVE A MINIMUM COVER OF 36" ABOVE THE TOP OF THE PIPE.
6. CONTRACTOR SHALL ADJUST LOCATION OF PROPOSED WATERLINES AS REQUIRED TO AVOID CONFLICTS WITH STORM SEWER AND OTHER UTILITIES.
7. CONTRACTOR SHALL INSTALL UTILITIES TO WITHIN 5' OF BUILDING. PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR UTILITIES WITHIN 5' OF BUILDING.
8. LOCATION, SIZE, AND INVERT ELEVATIONS OF SANITARY SEWER SHALL BE COORDINATED WITH THE APPROVED PLUMBING PLANS FOR THE BUILDINGS.
9. THRUST BLOCKS ARE REQUIRED AT EACH TEE AND ELBOW. ALL THRUST BLOCKS TO COMFORM TO CHARLOTTE-MECKLENBURG UTILITY DEPARTMENT STANDARDS AND SPECIFICATIONS.
10. INSTALLATION AND REPAIR OF UNDERGROUND ELECTRICAL, GAS, AND TELEPHONE UTILITIES AND DISTURBED AREAS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR OR APPLICABLE UTILITY COMPANY. THE DISTURBED AREAS BENEATH EXISTING GRAVEL SHALL BE RECOMPACTED TO THE REQUIRED SPECIFICATIONS, AND THE STONE BASE AND ASPHALT BE RETURNED TO ITS ORIGINAL CONDITION.
11. ALL WATER LINES SHALL BE CPVC UNLESS OTHERWISE NOTED.
12. ALL SANITARY SEWER LATERALS SHALL BE PVC PIPE AND BE LAID AT A MIN. SLOPE OF 2.00% AND A MIN. COVER OF 36" TO THE TOP OF THE PIPE.
13. SANITARY SEWER SERVICES AND LATERALS SHALL BE DUCTILE IRON PIPE IF IT IS NOT POSSIBLE TO MAINTAIN 3' OF COVER.
14. CONTRACTOR SHALL COORDINATE ALL WORK WITH BUILDING/PLUMBING CONTRACTOR FOR PLACEMENT OF ALL SERVICE CONNECTIONS AND APPURTENANCES.
15. CONTRACTOR TO CONTACT UTILITY POLE OWNERS PRIOR TO CONSTRUCTION TO DISCUSS PROPOSED IMPROVEMENTS AND COORDINATE POLE / GUY WIRE RELOCATIONS. RELOCATION OF UTILITY POLES / GUY WIRES SHALL BE INCLUDED IN THE CONTRACT BETWEEN THE CONTRACTOR AND PROPERTY OWNER.
16. CONTRACTOR SHALL ADJUST SANITARY SEWER RIMS TO MATCH FINISHED GRADE. CONTRACTOR IS TO MAINTAIN A MINIMUM OF 2' FROM RIM ELEVATIONS AND TOP OF CONCRETE SLAB OF TANK.

BEFORE YOU DIG!
CALL 1-800-632-4949
N.C. UNDERGROUND CENTER
IT'S THE LAW!

NOTE:
BASE MAP DATA FROM CITY OF CHARLOTTE PLANIMETRICS, GIS TOPO, AND FIELD SURVEY PROVIDED BY LDSI, INC. DATED 10-26-12.

SCALE: 1" = 50'

LandDesign.
223 N Graham Street, Charlotte, NC 28202
P: 704.333.0325 F: 704.332.3246
www.LandDesign.com

LANDDESIGN, INC. CORPORATE SEAL NORTH CAROLINA

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 037773 FRANK J. MCMAHON

X Not for Construction
Issued for Permit Approval
Issued for Pricing
Issued for Construction

# FAMILY HOME CARE- MINT HILL SITE
## MINOR SUBDIVISION
UNLIMITED POSSIBILITIES FAMILY HOME CARE, INC. CHARLOTTE, NC

## UTILITY PLAN

REVISIONS:

DATE: 12/19/13
DESIGNED BY: MLG
DRAWN BY: MLG
CHECKED BY: FJM
Q.C. BY: FJM
PROJECT #: 1013303

SHEET #
C-5.0

N:\Current Projects\CMS\Construction Documents\2014\Nov\C5.0.dwg Dec 19, 2013 - 11:46am