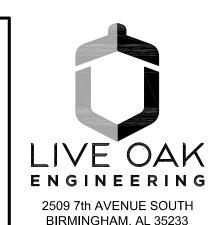
# WOODMEADOW SUBDIVISION WOODMEADOW LANE HOOVER, ALABAMA

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DODMEADOW SUBDIVISION

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DATE: 08.04.2021

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T100

# **GENERAL NOTES**

- PRIOR TO CONSTRUCTION, CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING GROUND ELEVATIONS, TIE-IN POINTS, STORM SEWER STRUCTURES, PIPES, ETC.
- 2. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRS OF DAMAGE TO ANY EXISTING IMPROVEMENTS DURING CONSTRUCTION, SUCH AS, BUT NOT LIMITED TO, DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURBS, ETC. REPAIRS SHALL BE EQUAL TO OR BETTER THAN THE EXISTING CONDITIONS.
- 3. FINISH SURFACES TO BE SMOOTH AND EVEN WITH NO ABRUPT OR AWKWARD CHANGES IN GRADE. IF SPECIFIC GRADES AND SLOPES ARE NOT SHOWN FOR WORK IN ANY AREA, THE CONTRACTOR SHALL TIE INTO EXISTING CONDITIONS AND ENSURE POSITIVE DRAINAGE IS ACHIEVED AWAY FROM EXISTING BUILDINGS AND STRUCTURES.
- 4. CONTRACTOR SHALL ESTABLISH VEGETATION FOR ALL AREAS DISTURBED DURING CONSTRUCTION.

# **EROSION CONTROL NOTES**

- 1. THIS PROJECT HAS COVERAGE UNDER THE STATE OF MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY (MDEQ) SMALL CONSTRUCTION GENERAL PERMIT FOR LAND DISTURBING ACTIVITIES OF ONE (1) TO LESS THAN FIVE (5) ACRES.
- 2. THE CONTRACTOR SHALL BE FAMILIAR WITH, AND KNOWLEDGEABLE OF, ALL REQUIREMENTS, REGULATIONS, AND SPECIFICATIONS OF THE MDEQ SMALL CONSTRUCTION GENERAL PERMIT.
- 3. THE CONTRACTOR WILL BE REQUIRED TO COMPLETE A SMALL CONSTRUCTION NOTICE OF INTENT (SCNOI) FORM AND MAINTAIN A COPY OF THE SWPPP AND OTHER DOCUMENTS REQUIRED BY THE PERMIT ON THE SITE AND SHALL MAKE THESE DOCUMENTS READILY AVAILABLE UPON REQUEST. DOCUMENTS PERTAINING TO THE SMALL CONSTRUCTION GENERAL PERMIT CAN BE FOUND AT WWW.DEQ.STATE.MS.US.
- 4. THE CONTRACTOR SHALL MAINTAIN EROSION AND SEDIMENT CONTROLS DURING THE ENTIRE COURSE OF WORK TO PREVENT ANY SEDIMENT FROM LEAVING THE CONSTRUCTION SITE AND ENTERING ROADWAYS, STORM DRAINS SYSTEMS, DITCHES, SWALES, DETENTION BASINS, LOCAL WATER BODIES. AND/OR ADJACENT PROPERTIES.
- 5. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO EXPOSING ANY SOIL.
- 6. CONTRACTOR SHALL STAGE, TIME AND SEQUENCE CONSTRUCTION TO MINIMIZE THE SIZE OF EXPOSED SOIL AREAS AND THE TIME BETWEEN EXPOSING THE SOIL AREA AND FINISHING THE SOIL AREA.
- 7. PERIMETER CONTROLS SHALL BE CONSTRUCTED OF SILT FENCE AND/OR APPROVED BMP'S AT LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- 8. ALL INLETS WITHIN THE CONTRACTOR'S LIMITS OF WORK SHALL BE PROTECTED WITH APPROVED EROSION AND SEDIMENT CONTROL MEASURES.
- 9. CONTRACTOR SHALL PROVIDE VEGETATION FOR AREAS WHERE SOILS HAVE BEEN EXPOSED AND WHERE CONSTRUCTION WILL CEASE FOR MORE THAN 14 DAYS. SEE ARCHITECTURAL FOR ADDITIONAL INFORMATION.
- 10. THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL OF ANY SEDIMENT THAT MIGRATES INTO THE STORM DRAIN SYSTEM. ANY SEDIMENT THAT HAS MIGRATED OFF OF THE PROJECT SITE SHALL BE REMOVED IMMEDIATELY UPON DISCOVERY.
- 11. TEMPORARY EROSION AND SEDIMENT CONTROLS SHALL REMAIN FUNCTIONAL UNTIL PERMANENT EROSION AND SEDIMENT CONTROLS (SUCH AS PERMANENT GRASSING, PAVEMENT, ETC.) HAVE BEEN ESTABLISHED.
- 12. ALL SEDIMENT AND EROSION CONTROL STRUCTURES SHALL BE INSPECTED EVERY 7 DAYS AND AFTER ALL RAINFALLS IN EXCESS OF 0.5". AN INSPECTION REPORT SHALL BE MADE ON EACH OCCASION, NOTING CONDITION OF ALL STRUCTURES AND OUTLINING ANY REQUIRED MAINTENANCE. ALL STRUCTURES SHALL BE CLEANED AND REESTABLISHED WHEN SEDIMENT REACHES 50% OF STORAGE CAPACITY.
- 13. ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFFSITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED. ANY ADDITIONAL TEMPORARY CONTROL DEVICES THAT MAY BE REQUIRED SHALL BE PROVIDED AS PART OF THIS PROJECT AT NO ADDITIONAL COST TO THE OWNER.
- 14. CONTRACTOR SHALL COMPLY WITH THE GOOD HOUSEKEEPING BMPS ESTABLISHED IN THE SWPPP. CONTRACTOR SHALL SUBMIT A GOOD HOUSEKEEPING PLAN TO ESTABLISH PROCEDURES FOR MATERIAL HANDLING, WASTE MANAGEMENT, MATERIAL STORAGE, CONCRETE WASHOUT, EQUIPMENT/VEHICLE FUELING AND MAINTENANCE, AND SPILL PREVENTION AND CONTROL. ALL EQUIPMENT REPAIR AND MAINTENANCE SHALL BE DONE OFFSITE.

# SITE EXCAVATION NOTES

- EROSION CONTROL MEASURES: THE INITIAL STEP FOR SITE PREPARATION SHALL BE TO ESTABLISH EROSION AND SEDIMENT CONTROL MEASURES.
- 2. SUB-GRADE PREPARATION: ONCE ALL TOPSOIL, ORGANIC MATERIALS, AND/OR OTHER UNSUITABLE SOILS HAVE BEEN REMOVED, THE FILL AREAS SHOULD BE LEVELED AND SEATED USING A STATIC ROLLER AND THEN PROOF-ROLLED USING A LOADED TANDEM AXLE DUMP TRUCK WEIGHING AT LEAST 20 TONS TO IDENTIFY AREAS OF WEAK SOIL.
- 3. SELECT FILL: A SELECT GRANULAR MATERIAL, SUCH AS LOCALLY AVAILABLE SAND (SP) SHOULD BE USED AS BACKFILL AND STRUCTURAL FILL. THE MATERIAL SHOULD BE FREE OF WOOD, ROOTS, CLAY LUMPS, AND OTHER DELETERIOUS MATERIALS, AND SHOULD HAVE AN ORGANIC CONTENT NO GREATER THAN 2% BY WEIGHT. THE MATERIAL SHOULD CONFORM TO THE REQUIREMENTS FOR AN A-3 MATERIAL ACCORDING TO THE AASHTO SOIL CLASSIFICATION SYSTEM.
- COMPACTION: FILL MATERIAL MEETING THE REQUIREMENTS OF STRUCTURAL FILL SHALL BE PLACED TO THE REQUIRED GRADES LINES, CROSS SECTIONS, AND THICKNESS AS SHOWN ON THE PLANS. THIS MATERIAL SHOULD BE COMPACTED IN 8 INCH LOOSE LIFTS TO NOT LESS THAN 95 PERCENT OF THE MAXIMUM DRY UNIT WEIGHT ACCORDING TO ASTM D 698 (STANDARD PROCTOR).

# **GRADING & DRAINAGE NOTES**

- 1. SUB-GRADE FOR PLAY AREAS IN COURTYARD SHALL BE SET 7" BELOW FINAL GRADE.
- 2. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING TIE-IN POINTS, STRUCTURES, PIPES, ETC., PRIOR TO CONSTRUCTION.
- 3. NO ACCESSIBLE PARKING STALLS OR ADJACENT ACCESS AISLES SHALL EXCEED 2% SLOPE IN ANY DIRECTIONS. CONTRACTOR SHALL NOTIFY ENGINEER PRIOR TO CONSTRUCTION IF CONDITIONS CANNOT BE MET ON SITE.
- NO SIDEWALK CROSS SLOPE SHALL EXCEED 2%. CONTRACTOR SHALL NOTIFY ENGINEER PRIOR TO CONSTRUCTION IF CONDITIONS CANNOT BE MET ON SITE.
- 5. FINISH SURFACES TO BE SMOOTH AND EVEN WITH NO ABRUPT OR AWKWARD CHANGES IN GRADE. IF SPECIFIC GRADES AND SLOPES ARE NOT SHOWN FOR WORK IN ANY AREA, THE CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE IS ACHIEVED AWAY FROM BUILDINGS AND STRUCTURES AND TIE INTO EXISTING CONDITIONS.
- DRAIN BASIN AND INLINE DRAIN TOP ELEVATIONS SHALL BE ADJUSTED AS REQUIRED TO ENSURE THAT POSITIVE DRAINAGE IS MAINTAINED TOWARD THE DRAIN STRUCTURES.

# SITE UTILITY NOTES

- . CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING LOCATIONS OF ALL PROJECT RELATED UTILITIES, BURIED AND ABOVE GROUND, REGARDLESS OF INCLUSION ON THESE PLANS. THE LOCATIONS OF ANY EXISTING UTILITIES SHOWN ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATIONS OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. ALL CONTRACTOR DAMAGED UTILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- 2. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH OTHER TRADES FOR TIE IN LOCATION AND SIZE/FLOW REQUIREMENTS FOR WATER AND SEWER TIE IN. TIE IN LOCATIONS AND SIZES ARE SUBJECT TO CHANGE BASED ON ARCHITECTURAL AND PLUMBING PLANS.
- IN THE EVENT OF CONFLICT BETWEEN CITY OF OXFORD SPECIFICATIONS AND THE PLANS, THE CITY OF OXFORD SPECIFICATIONS GOVERN FOR ALL UTILITIES TO BE OWNED AND MAINTAINED BY THE CITY.
- 4. ALL INTERIOR WATER AND SEWER UTILITIES ARE PRIVATELY OWNED AND MAINTAINED.
- 5. CONTRACTOR SHALL NOTIFY THE APPROPRIATE UTILITY AT LEAST 48 HOURS PRIOR TO COMMENCING CONSTRUCTION HAVING POTENTIAL IMPACT TO THE UTILITY'S STRUCTURE.
- 6. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH BUILDING CONTRACTOR FOR LOCATION OF ALL UTILITY ENTRANCES AND CONNECTIONS INTO THE BUILDING.
- 7. EXISTING WATER AND SANITARY SERVICE LINES SHOWN ARE APPROXIMATE LOCATIONS ONLY. CONTRACTOR MUST COORDINATE WITH THE CITY OF OXFORD FOR THE LOCATION OF THE UTILITIES TO BE MAINTAINED BY THE CITY.
- 8. CONTRACTOR SHALL INSTALL FITTINGS, THRUST BLOCKS, AND OTHER REQUIRED COMPONENTS TO ESTABLISH THE PROPER ALIGNMENT OF UTILITY MAINS AND SERVICES AS SHOWN ON THE PLANS.
- 9. CONTRACTOR SHALL INSTALL ALL WATER MAINS AND SERVICES AT AN ELEVATION WHICH WILL AVOID ALL CONFLICTS WITH SEWER, DRAINAGE, AND OTHER UNDERGROUND UTILITIES. WATER MAINS SHALL BE LAID WITH A MINIMUM OF 30" COVER UNLESS APPROVED BY THE ENGINEER TO AVOID A CONFLICT.
- 10. ALL VALVES BOXES, CLEANOUTS, SEWER MANHOLE TOPS, AND OTHER UTILITY STRUCTURE TOPS SHALL BE ADJUSTED BY THE CONTRACTOR TO MATCH FINAL GRADES IN ALL AREAS.

# SITE GRADING NOTES

- 1. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING TIE-IN POINTS, STRUCTURES, PIPES, ETC., PRIOR TO CONSTRUCTION.
- 2. NO ACCESSIBLE PARKING STALLS OR ADJACENT ACCESS AISLES SHALL EXCEED 2% SLOPE IN ANY DIRECTIONS. CONTRACTOR SHALL NOTIFY ENGINEER PRIOR TO CONSTRUCTION IF CONDITIONS CANNOT BE MET ON SITE.
- 3. NO SIDEWALK CROSS SLOPE SHALL EXCEED 2% AND NO SIDEWALK LONGITUDINAL SLOPE SHALL EXCEED 5%. CONTRACTOR SHALL NOTIFY ENGINEER PRIOR TO CONSTRUCTION IF CONDITIONS CANNOT BE MET ON SITE.
- 4. FINISH SURFACES TO BE SMOOTH AND EVEN WITH NO ABRUPT OR AWKWARD CHANGES IN GRADE. IF SPECIFIC GRADES AND SLOPES ARE NOT SHOWN FOR WORK IN ANY AREA, THE CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE IS ACHIEVED AWAY FROM BUILDINGS AND STRUCTURES AND TIE INTO EXISTING CONDITIONS.



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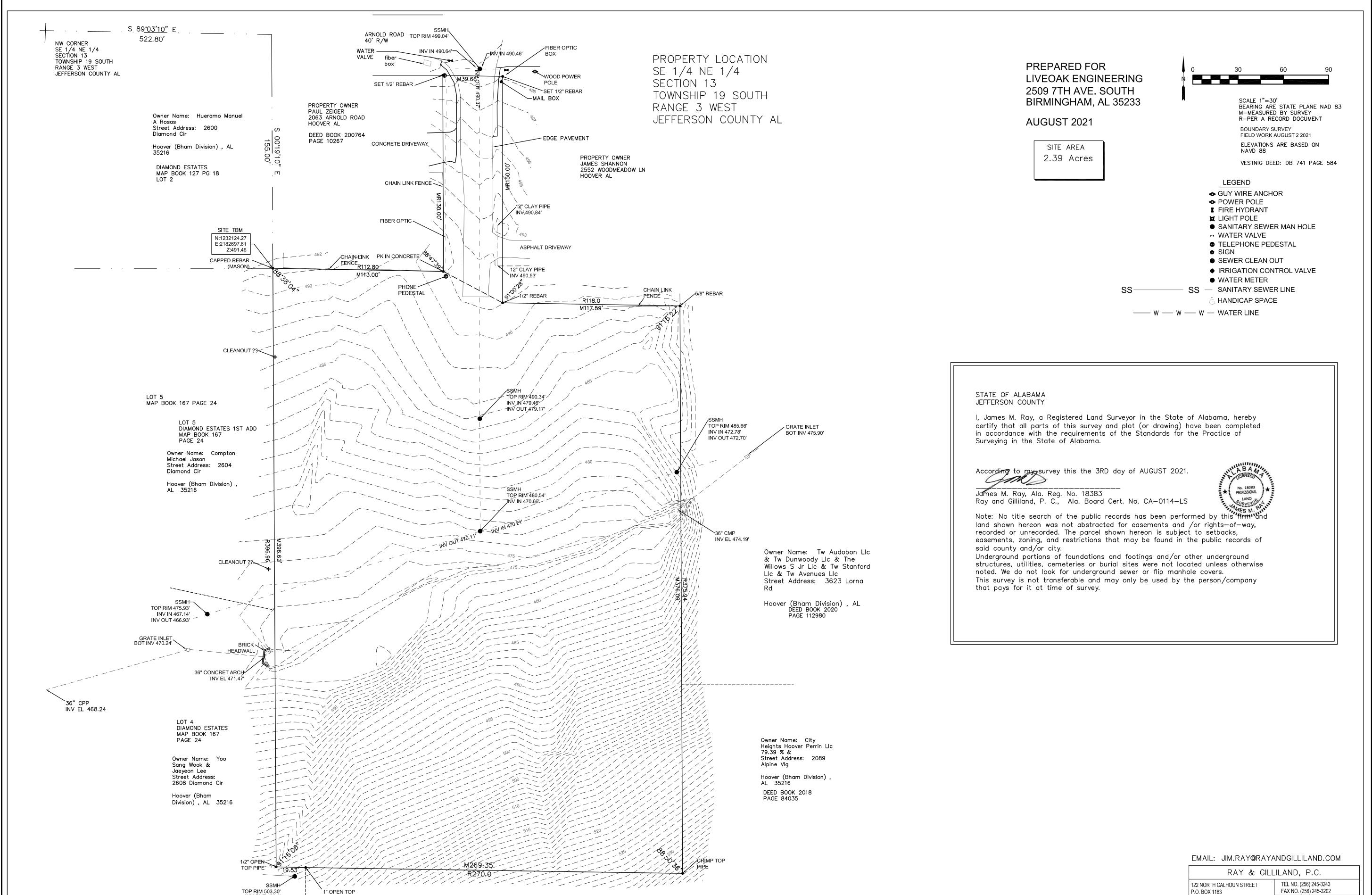
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GENERAL NOTES

SHEET TITLE:

SHEET NUMBER: 1 0F 8

DATE: 08.04.2021



TOP RIM 503.30' INV OUT 499.1'

1" OPEN TOP

Owner Name: City Heights Hoover Perrin Llc 79.39 % & Street Address: 2089 Alpine Vlg

Hoover (Bham Division), AL 35216

DEED BOOK 2018

LIVEOAK ENGINEERING

2509 7th AVENUE SOUTH

BIRMINGHAM, AL 35233

LIVEOAKENGINEERING.COM

SHEET REVISIONS: DATE/REFERENCE

SHEET TITLE:

**EXISTING** 

SURVEY

DATE: 08.04.2021 SHEET NUMBER:

C100

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FILE: WOODMEADOWJAYCOM

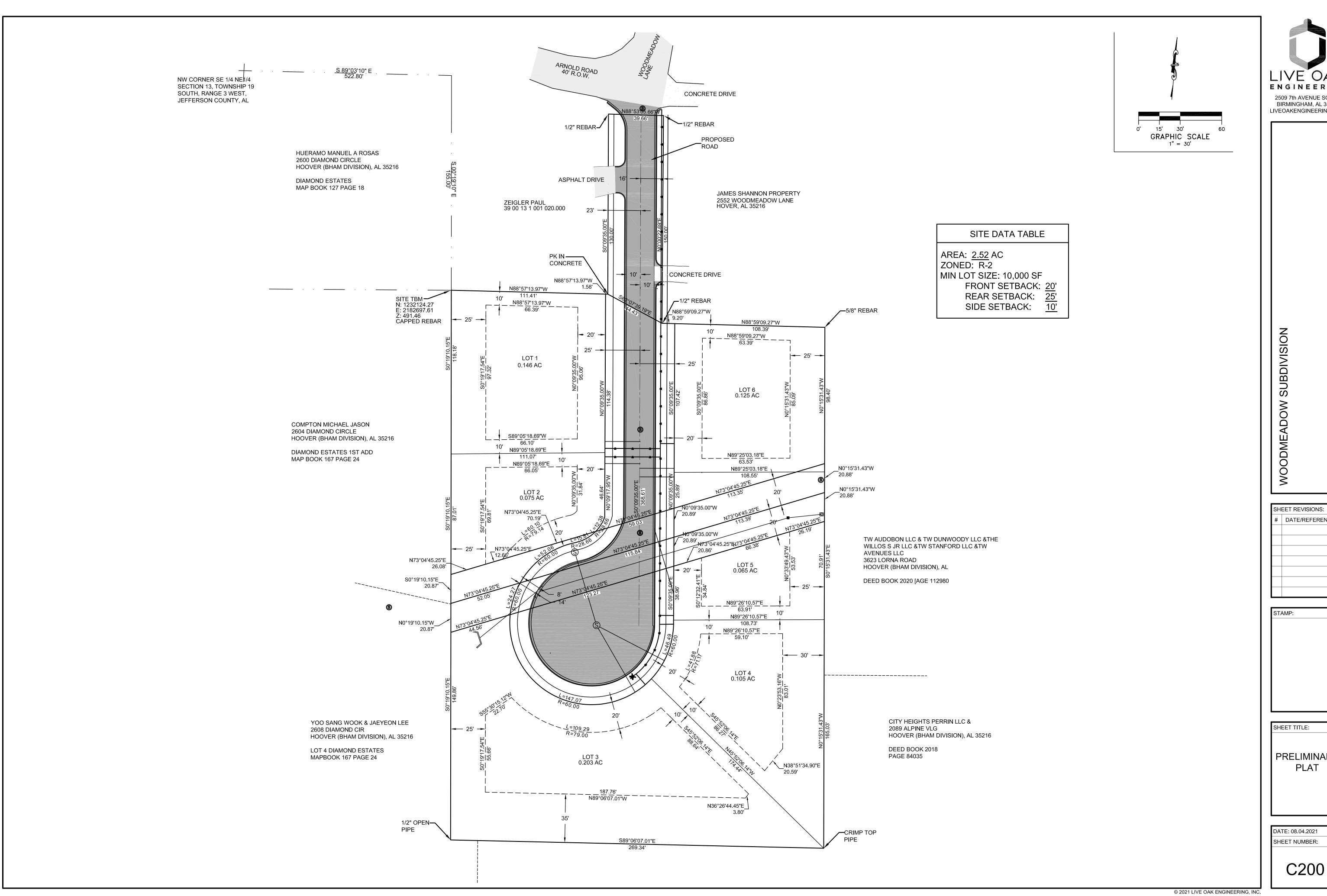
SCALE: 1" = 30'

P.O. BOX 1183

DRAWN BY: JMR

BOUNDARY SURVEY

SYLACAUGA, ALABAMA 35150



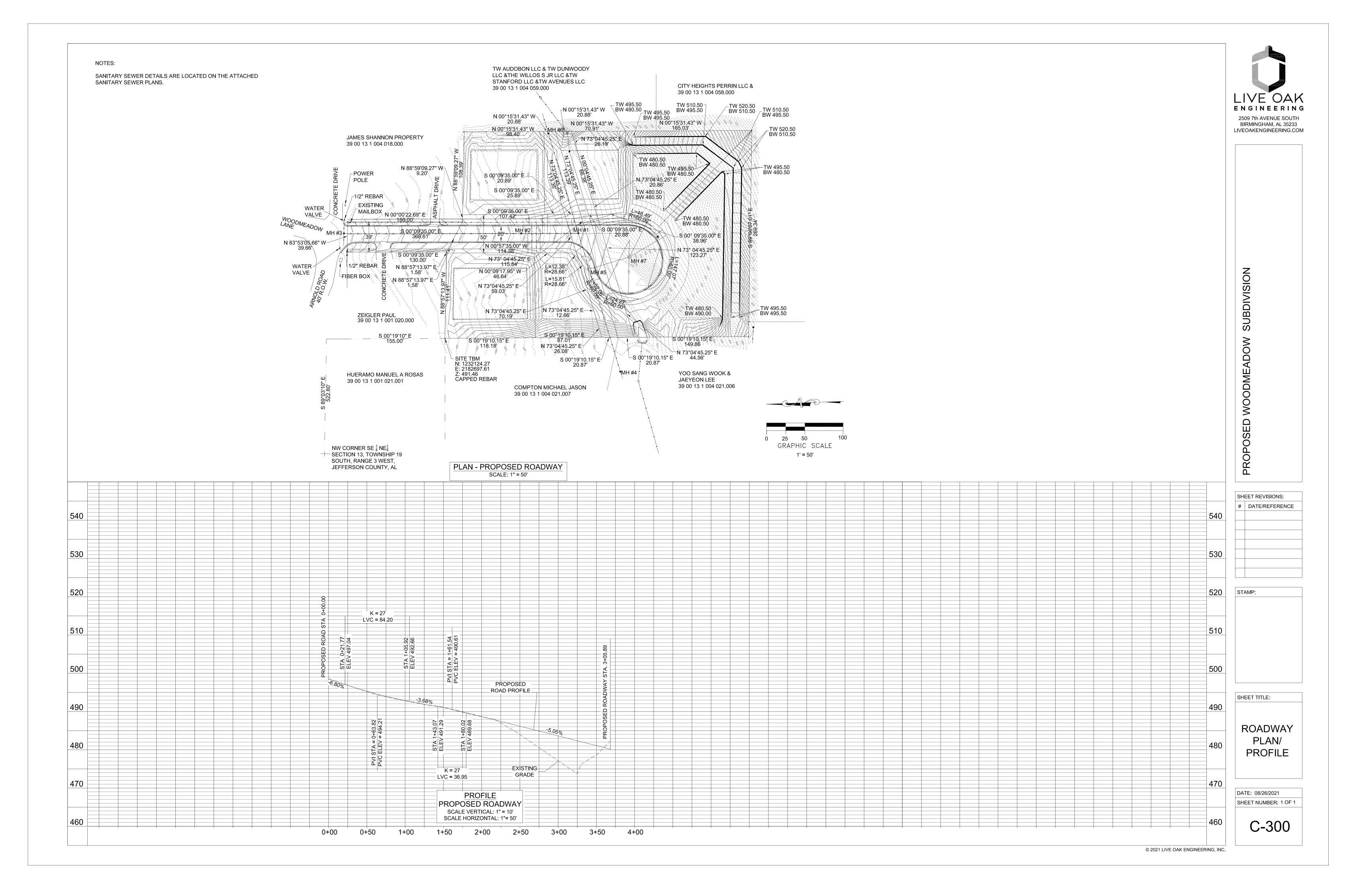
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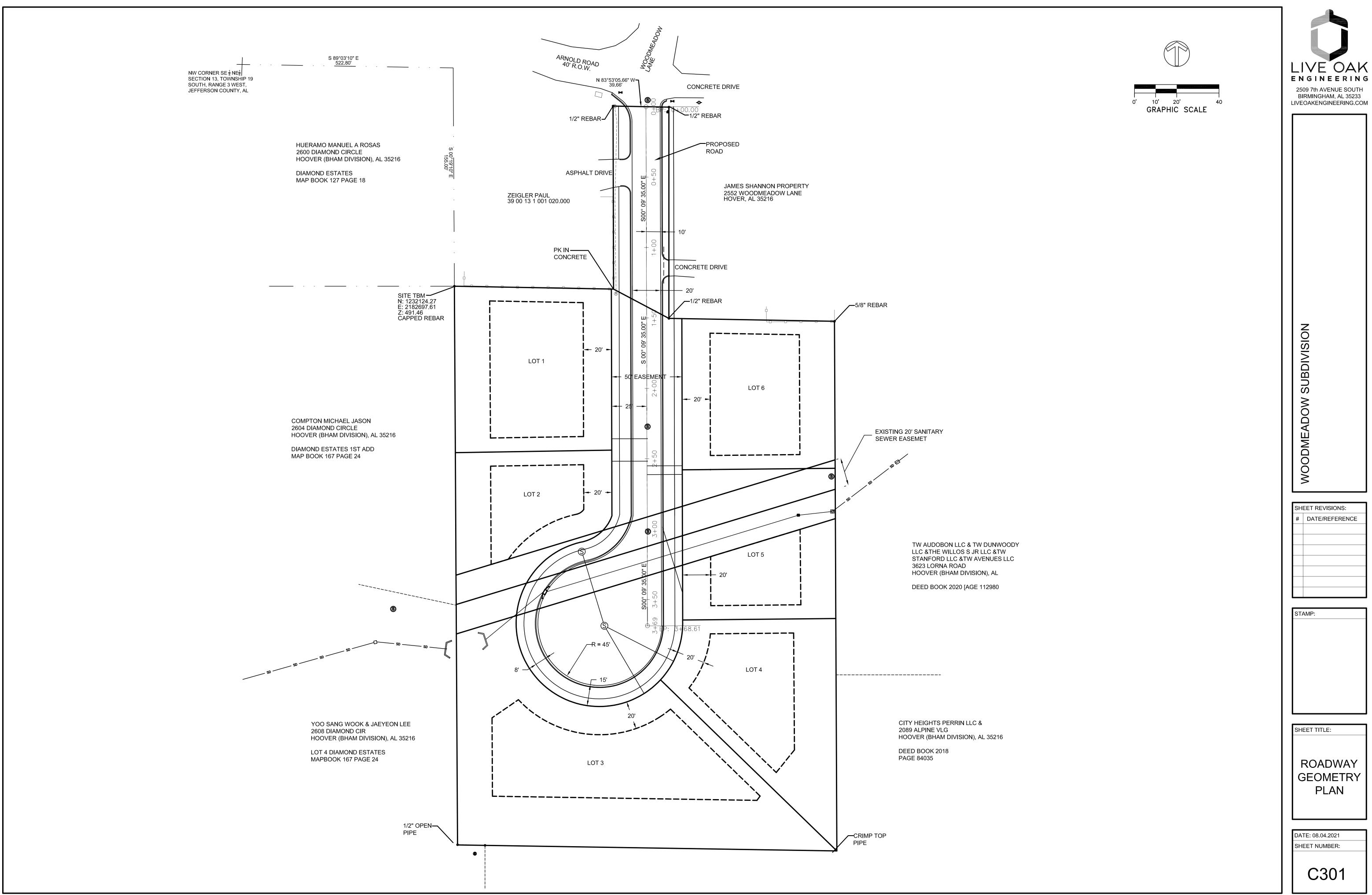
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PRELIMINARY PLAT

DATE: 08.04.2021





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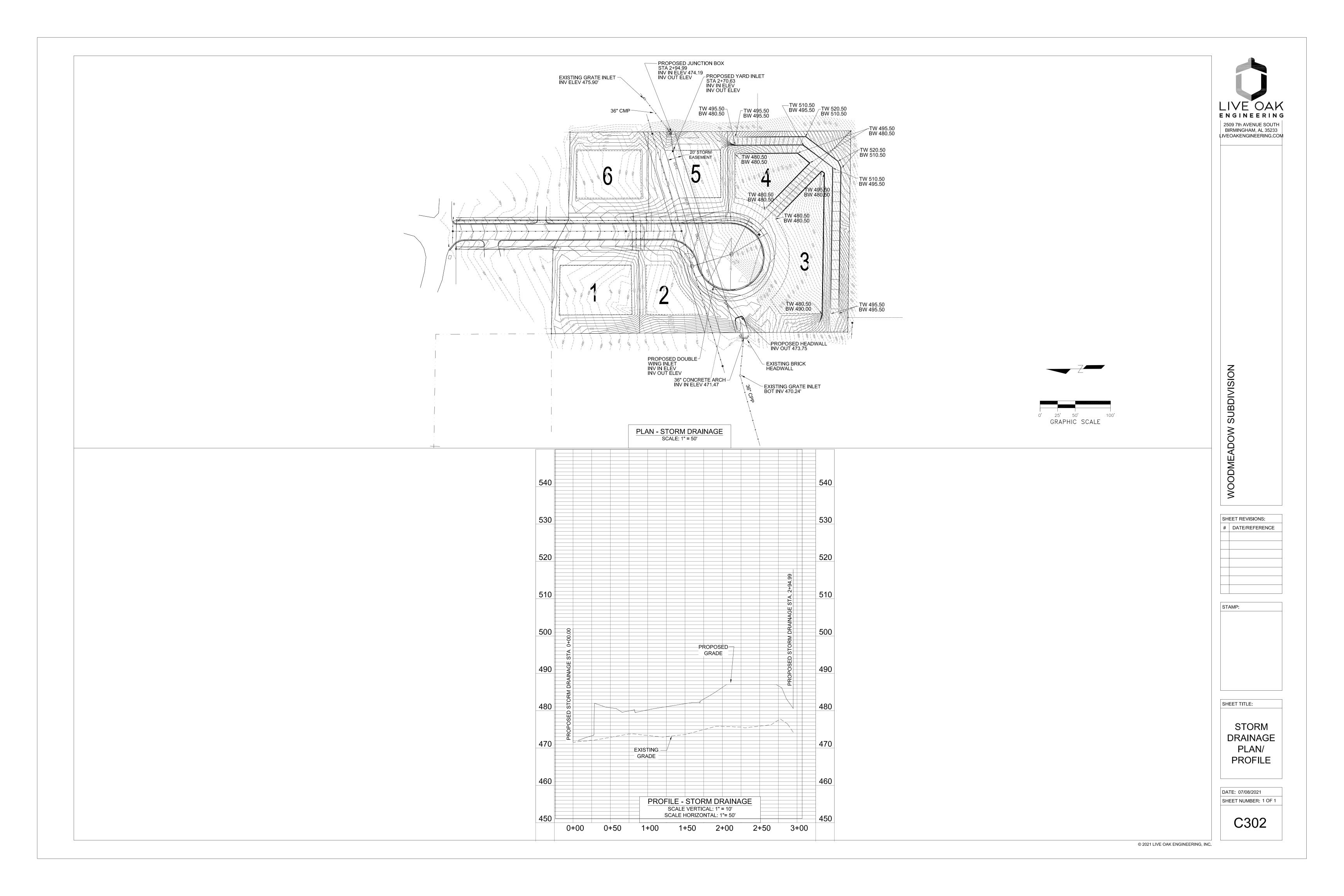
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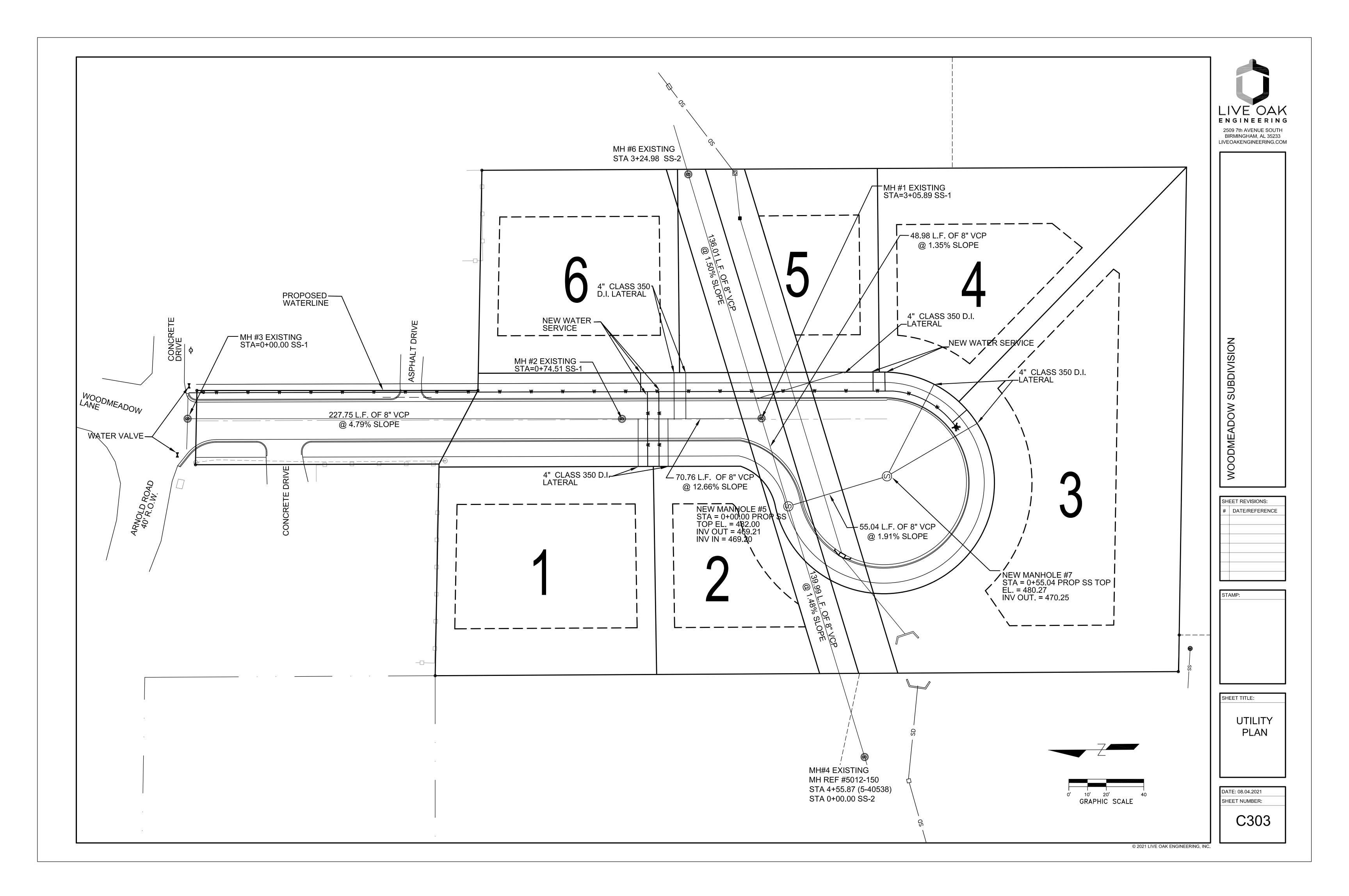
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ROADWAY GEOMETRY PLAN

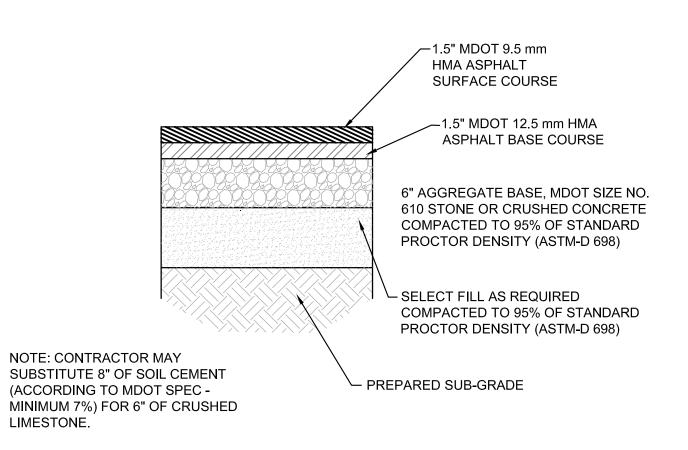
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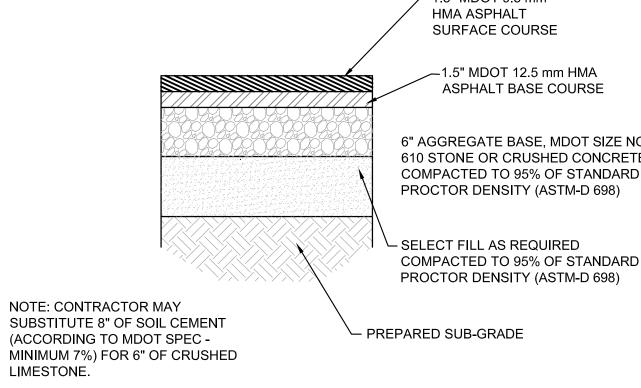




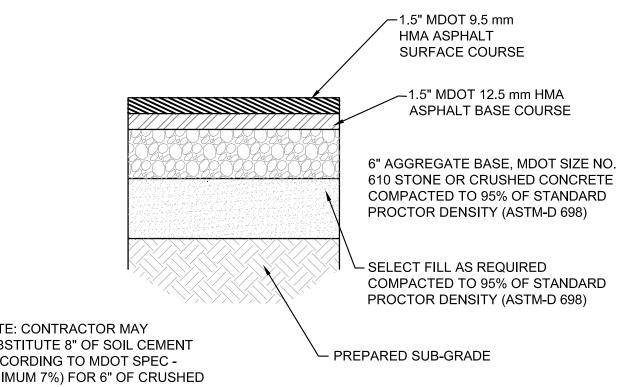
# TYPICAL SECTION 20' ROADWAY SCALE: NTS



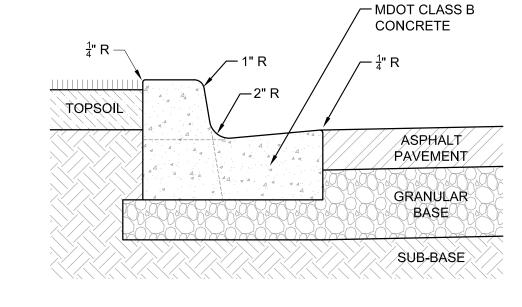
TYPICAL ASPHALT PAVEMENT SECTION

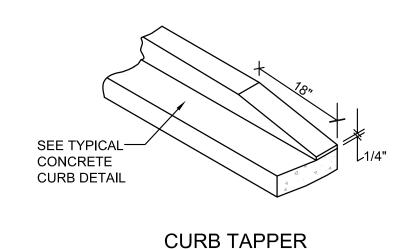












# **CURB & GUTTER NOTES**

- CONSTRUCTION SHALL BE IN ACCORDANCE WITH LATEST ADDITION OF ACI 330R.
- EXPANSION JOINTS SHALL BE SPACED AT A MAXIMUM DISTANCE OF 40' APART AND AT ALL RADIUS POINTS, PT'S, AND PC'S.
- EXPANSION JOINTS SHALL BE LOCATED WHERE CURB ABUTS CONCRETE DRIVEWAYS, SIDEWALKS OR OTHER ADJACENT STRUCTURES.
- CONTRACTION JOINTS SHALL BE SPACED AT A MAXIMUM DISTANCE OF 10' APART.
- JOINTS SHALL BE PROVIDED WITHIN TWELVE (12) HOURS OF FINISHING CONCRETE.
- 6. 1/2 INCH BITUMINOUS JOINT FILLER SHALL BE INSTALLED AT EXPANSION JOINT LOCATIONS AND SHALL EXTEND THE FULL DEPTH OF THE CONCRETE.
- CONTRACTION JOINT SHALL BE TOOLED AND BE 1/4 OF THE PAVEMENT THICKNESS DEEP. THE WIDTH OF THE TOOL SHOULD BE APPROXIMATELY 1/8 INCH FOR UNSEALED JOINTS AND 1/4 INCH FOR SEALED JOINTS.
- 8. FORMED CONTRACTION JOINTS SHALL BE FINISHED WITH A TOOL HAVING A 1/4" RADIUS.

**TYPICAL CONCRETE CURB DETAIL** 

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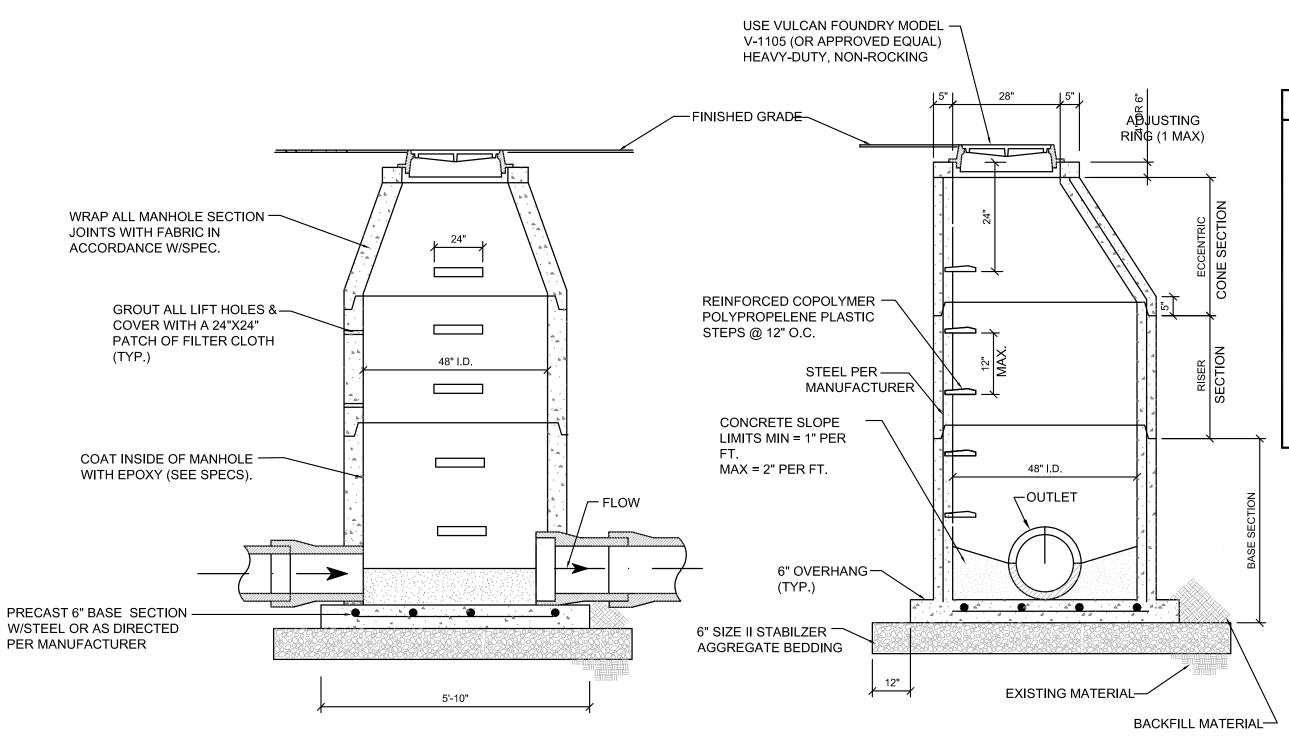
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DATE: 08.04.2021 SHEET NUMBER: C600

-3" MDOT 12.5 mm HMA ASPHALT PAVEMENT PLACED IN TWO 1½" LIFTS -8" AGGREGATE BASE, MDOT SIZE NO. 610 STONE OR CRUSHED CONCRETE COMPACTED TO 95% OF STANDARD PROCTOR DENSITY (ASTM-D 698) IN LIEU OF AGGREGATE BASE MATERIAL, - SELECT FILL AS REQUIRED CONTRACTOR MAY USE CEMENT-TREATED COMPACTED TO 95% OF STANDARD GRANULAR MATERIAL, CLASS 9 GROUP D PROCTOR DENSITY (ASTM-D 698) (8" WITH TOP 6" CEMENT TREATED) ─ PREPARED SUB-GRADE





MINIMUM

TYPICAL PRECAST SANITARY SEWER MANHOLE DETAIL

SANITARY SEWER DETAIL NOTES

REFER TO OTHER DETAILS FOR DROP SEWER MANHOLES, MANHOLE CASTINGS, MANHOLE ADJUSTING RINGS, AND ROAD REPAIR DETAILS.

- BEDDING MATERIAL, BACKFILL MATERIAL, AND EXISTING GRANULAR MATERIAL SHALL BE COMPACTED TO 95% PROCTER PER ASTM D1557.
- BEDDING MATERIAL SHALL BE 6" THICK, BUT SHALL BE DEEPER IF DIRECTED BY THE CITY ENGINEER OR HIS AUTHORIZED REPRESENTATIVE.
- EPOXY COATING SHALL BE EITHER COAL TAR EPOXY OR 100% SOLID EPOXY IN ACCORDANCE WITH SECTION 907-604-1 OF THE SPECIFICATIONS.
- IN PAVED AND NON-PAVED AREAS, MANHOLES SHALL BE FLUSH WITH THE FINISHED GRADE UNLESS INDICATED OR DIRECTED OTHERWISE THAT THE TOP OF MANHOLE SHALL BE ABOVE FINISHED GRADE.

MIN. TRENCH PIPE DIAM. BACKFILL - 10 GAUGE LOCATOR WIRE ALONG TOP OF PIPE - INITIAL BACKFILL SPRINGLINE ---- HAUNCH - BEDDING 3" FOR 24" AND SMALLER FOUNDATION 4" FOR 30"-60" PIPE 6" FOR LARGER THAN 60" MIN TRENCH WIDTH (SEE TABLE)

# WATER AND SEWER PIPE INSTALLATION NOTES

- SUITABLE EMBEDMENT MATERIALS, EITHER ON-SITE OR IMPORTED, SHALL MEET THE REQUIREMENTS FOR CLASS I, II, OR III PER THE LATEST VERSION OF ASTM D2321. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION TO THE ENGINEER FOR EMBEDMENT MATERIAL TO BE USED FOR PIPE INSTALLATION. SEE THE EMBEDMENT MATERIAL TABLE FOR COMPACTION AND LIFT PLACEMENT REQUIREMENTS.
- FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER.
- BEDDING: BEDDING IS REQUIRED TO ESTABLISH LINE AND GRADE AND TO PROVIDE FIRM PIPE SUPPORT. MINIMUM BEDDING THICKNESS SHALL BE 4" FOR UP TO 24" DIAMETER PIPE AND 6" FOR 30"-60" DIAMETER PIPE. THE MIDDLE 1/3 BENEATH THE PIPE INVERT SHALL BE LOOSELY PLACED, WHILE THE REMAINDER SHALL BE THOROUGHLY COMPACTED.
- HAUNCHING: THE HAUNCHING MATERIAL SHALL BE INSTALLED UNIFORMLY IN LIFTS ON EACH SIDE OF THE PIPE AND SHOVELED UNDER THE PIPE ENSURING TO FILL VOIDS. THE MATERIAL SHALL BE THOROUGHLY COMPACTED TO THE SPRING LINE OF THE PIPE EXTENDING TO THE SIDE WALLS OF THE TRENCH ENSURING THAT THE PIPE ALIGNMENT IS NOT DISTURBED.
- INITIAL BACKFILL: THE INITIAL BACKFILL SHALL PROCEED TO THE TOP OF THE PIPE. THE MATERIAL SHALL BE THOROUGHLY COMPACTED INSTALLED IN UNIFORMED LIFTS ON EACH SIDE OF THE PIPE EXTENDING TO THE SIDE WALLS OF THE TRENCH.
- FINAL BACKFILL (NON-TRAFFIC): SUITABLE MATERIAL IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) SHALL BE GENERAL FILL MATERIAL. BACKFILL SHALL PROCEED TO FINISHED GRADE IN 12 INCH LIFTS COMPACTED TO ELIMINATE AIR VOIDS.
- FINAL BACKFILL (TRAFFIC): SUITABLE MATERIAL IN TRAFFIC APPLICATIONS SHALL BE SELECT FILL COMPACTED IN 8 INCH LOOSE LIFTS TO NOT LESS THAN 95 PERCENT STANDARD PROCTOR.
- MINIMUM COVER (NON-TRAFFIC): FOR NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS), MINIMUM COVER IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE.
- MINIMUM COVER (TRAFFIC): FOR TRAFFIC APPLICATIONS THE MINIMUM COVER IS 12" FOR UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR 60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.
- 10. CONTRACTOR SHALL MAINTAIN TRENCH BACKFILL AT GROUND SURFACE UNTIL FINAL ACCEPTANCE OF THE WORK. ALL SURPLUS MATERIALS NOT USED IN BACKFILLING SHALL BE REMOVED AND DISPOSED OF BY CONTRACTOR AT HIS OWN EXPENSE.

$\Lambda$	— CULVERT OR DRAINAGE STRUCTURE AS REQ'D.
	BURY FABRIC IN A MINIMUM 6"x12" VARIES
	4 x PIPE OD TRENCH
	24" MIN
RIP-RAP ALONG SIDES & AROUND UPPER END OF OUTLET STRUCTURE	FILTER  RIP-RAP FABRIC

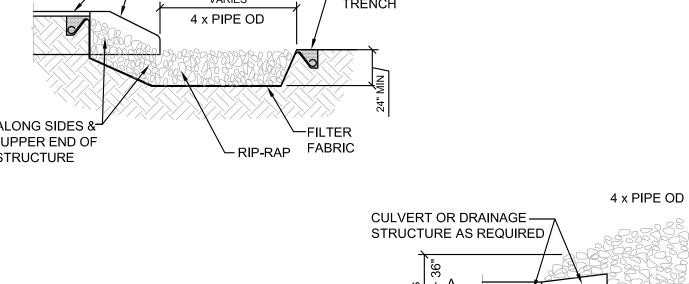
RIP-RAP DETAIL NOTES

WATER AND SEWER PIPE INSTALLATION DETAIL

### MAXIMUM LIFT STANDARD ASTM D2321 ASTM D2487 NOTATION DESCRIPTION PLACEMENT PROCTOR **CLASS DESCRIPTION** DEPTH DENSITY (%) ANGULAR CRUSHED STONE OR ROCK. CRUSHED ROCK, 18" N/A CRUSHED GRAVEL, CRUSHED SLAG; DUMPED ANGULAR LARGE VOIDS WITH LITTLE OR NO FINES WELL-GRADED GRAVEL, GRAVEL-SAND MIXTURES; LITTLE OR NO FINES POORLY-GRADED GRAVELS, GRAVEL-SAND MIXTURES; LITTLE OR NO CLEAN, COARSE-GRAINED SOILS WELL-GRADED SANDS, GRAVELLY 85% 12" SANDS; LITTLE OR NO FINES POORLY-GRADED SANDS, GRAVELLY SAND; LITTLE OR NO FINES SANDS AND GRAVELS WHICH ARE COARSE-GRAINED GW-GC, SOILS, BODERLINE BORDERLINE BETWEEN CLEAN AND WITH SP-SM CLEAN TO W/FINES SILTY GRAVELS, GRAVEL-SAND-SILT GM MIXTURES CLAYEY GRAVELS, GRAVEL-SAND-CLAY GC MIXTURES COURSE-GRAINED SOILS WITH FINES SILTY SANDS, SAND-CLAY MIXTURES 90% CLAYEY SANDS, SAND-CLAY MIXTURES INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS, SILTS WITH SLIGHT INORGANIC PLASTICITY **FINE-GRAINED SOILS** INORGANIC CLAYS OF LOW TO MEDIUM



PLASTICITY; GRAVELLY, SANDY, OR SILTY CLAYS; LEAN CLAYS



RIP-RAP IS REQUIRED AT ALL FLARED END SECTION AND HEADWALLS LOCATIONS RIP-RAP ALONG SIDES & -2. GEOTEXTILE FILTER FABRIC IS REQUIRED BETWEEN AROUND UPPER END OF THE RIP-RAP AND SUB-GRADE. OUTLET STRUCTURE . IN A WELL-DEFINED CHANNELS, EXTEND THE RIP-RAP APRON UP THE CHANNEL BANKS ABOVE THE TAILWATER ELEVATION.

**TYPICAL RIP-RAP PROTECTION DETAIL** 

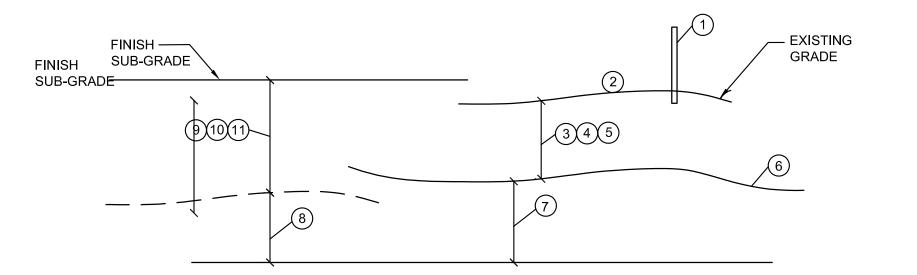


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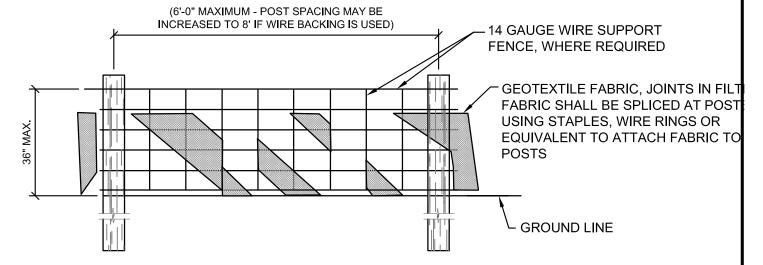
## **EXCAVATION NOTES**

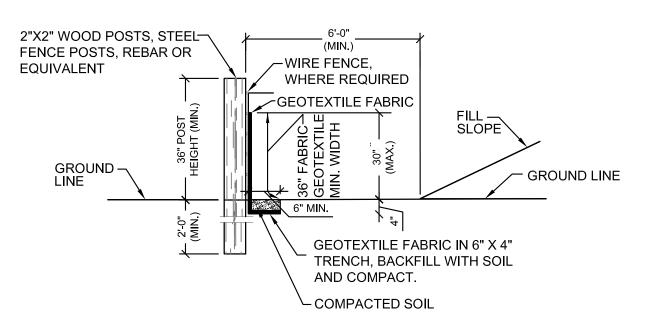
- 1) <u>EROSION CONTROL MEASURES:</u> THE INITIAL STEP FOR SITE PREPARATION SHALL BE TO ESTABLISH EROSION AND SEDIMENT CONTROL MEASURES.
- ② <u>DRAINAGE:</u> EFFECTIVE DRAINAGE, INCLUDING DITCHING AND/OR POSITIVE GRADING, SHOULD BE ESTABLISHED AT THE BEGINNING OF SITE DEVELOPMENT AND MODIFIED AS NECESSARY DURING CONSTRUCTION. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- (3) <u>CLEARING:</u> UPON COMPLETION OF DEMOLITION WORK THE CONTRACTOR SHALL VERIFY THAT ALL EXISTING PAVEMENTS, SLABS, FOUNDATIONS, SIDEWALKS, ABANDONED UTILITIES, AND OTHER MISCELLANEOUS DEBRIS HAVE BEEN COMPLETELY REMOVED TO AT LEAST A MINIMUM OF 5 FEET BEYOND THE PROPOSED BUILDING FOOTPRINTS AND NEW PAVEMENT AREAS.
- 4) <u>STRIPPING:</u> ONCE ALL PAVEMENTS, FOUNDATION AND DEBRIS HAVE BEEN REMOVED, STRIPPING EXCAVATIONS SHOULD BE CONTINUED TO APPROXIMATELY 12" BELOW EXISTING GRADE. STRIPPING EXCAVATION SHALL BE CARRIED OUT TO AT LEAST A MINIMUM OF 5 FEET BEYOND THE PROPOSED BUILDING FOOTPRINTS AND NEW PAVEMENT AREAS.
- (5) TOPSOIL: CONTRACTOR SHALL STOCKPILE TOPSOIL AND OTHER SUITABLE FILL MATERIAL TO BE REUSED ON SITE. ALL UNSUITABLE SOILS SHALL BE REMOVED FROM THE SITE.
- 6. <u>SUB-GRADE PREPARATION:</u> ONCE ALL TOPSOIL, ORGANIC MATERIALS, AND/OR OTHER UNSUITABLE SOILS HAVE BEEN REMOVED, THE FILL AREAS SHOULD BE LEVELED AND SEATED USING A STATIC ROLLER AND THEN PROOF-ROLLED USING A LOADED TANDEM AXLE DUMP TRUCK WEIGHING AT LEAST 20 TONS TO IDENTIFY AREAS OF WEAK SOIL.
- MUCK: WHEN EXCAVATIONS ENCOUNTER UNSUITABLE MATERIALS BELOW THE BOTTOM OF THE STRIPPING AND UNDERCUT EXCAVATIONS, THE CONTRACTOR WILL BE REQUIRED TO REMOVE THE MATERIAL AND BACKFILL WITH APPROPRIATE FILL MATERIAL AS APPROVED BY THE ENGINEER. THE DEPTH AND WIDTH OF MUCK EXCAVATION WILL BE AS DIRECTED OR APPROVED BY THE ENGINEER. THE CONTRACTOR WILL NOT BE COMPENSATED FOR EXCAVATION BEYOND THE DIMENSIONS AND ELEVATIONS AS SHOWN ON THE PLANS OR EXCAVATION THAT HAS NOT BEEN DIRECTED OR APPROVED BY THE ENGINEER.
  - THE CONTRACTOR SHALL ALLOW IN THEIR BASE BID PRICE FOR THE REMOVAL OF UNSUITABLE MATERIALS AND THE REPLACEMENT WITH STRUCTURAL FILL MATERIAL IN THE AMOUNT OF 500 CY (FIELD MEASURED).
- B GROUNDWATER: IN AREAS WHERE GROUNDWATER OR SATURATED SOIL CONDITIONS ARE ENCOUNTERED DURING THE REQUIRED EXCAVATIONS, THE INITIAL LIFT OF FILL MATERIAL SHALL CONSIST OF A CLEAN SAND PLACED AT LEAST 2 FEET ABOVE THE STATIC WATER TABLE OR TO A DISTANCE TO ADEQUATELY BRIDGE OVER THE SATURATED NATURAL SOIL. DURING PLACEMENT BELOW THE GROUNDWATER TABLE, THE CLEAN SAND MAY BE THOROUGHLY "TRACKED" WITH A BULLDOZER IN LIEU OF MEASURED COMPACTION TESTS.
- 9. STRUCTURAL FILL: STRUCTURAL FILL SHALL BE A SANDY MATERIAL (USCS CLASSIFICATION OF SP, SP-SM OR SM) WITH LESS THAN ABOUT 30 PERCENT OF THE SOIL PARTICLES (BY WEIGHT) PASSING THE NO. 200 MESH SIEVE, LESS THAN ABOUT 65 PERCENT OF THE SOIL PARTICLES (BY WEIGHT) PASSING THE NO. 40 MESH SIEVE AND A LIQUID LIMIT OF LESS THAN 20.
- (10) COMPACTION: MATERIALS SHOULD BE COMPACTED TO A MINIMUM OF 95% OF MAXIMUM DRY DENSITY PER MODIFIED PROCTOR (ASTM D 1557). COMPACTION SHOULD BE ACHIEVED PRIOR TO PLACING SUBSEQUENT LIFTS. FILL SOILS SHOULD BE PLACED IN MAXIMUM LOOSE LIFTS OF 8" AT A MOISTURE CONTENT COMPARABLE (±3%) TO THE OPTIMUM MOISTURE CONTENT ESTABLISHED IN THE LABORATORY.
- 11) <u>TESTING</u>: IN PLACE DENSITY TESTS SHOULD BE MADE PER 2,500 SQUARE FEET PER LIFT WITHIN THE BUILDING FOOTPRINT AND 5,000 SQUARE FEET PER LIFT UNDER PAVEMENT.

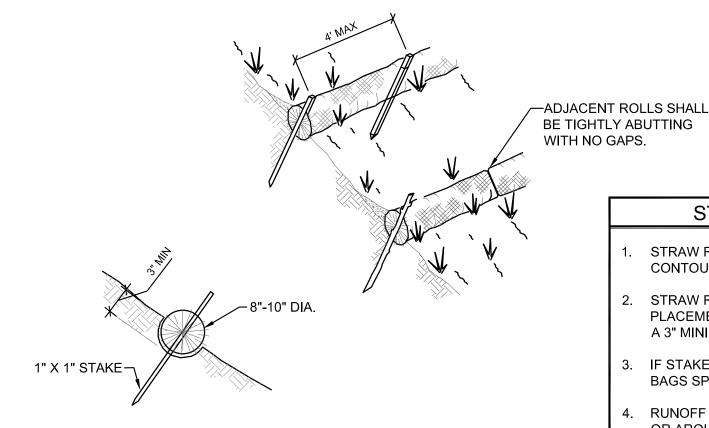


# SILT FENCE NOTES

- 1. FILTER FABRIC FENCES SHALL BE INSTALLED ALONG CONTOUR WHENEVER POSSIBLE.
- 2. POSTS SHALL BE SPACED A MAXIMUM OF 6' O.C, SPACING MAY BE INCREASED TO 8' IF WIRE BACKING IS USED.
- 3. POSTS SHALL BE A MINIMUM OF 5'-0" IN LENGTH. IN ADDITION POSTS SHALL BE EITHER 2" x 2" N.D. WOOD POST OR HEAVY DUTY STEEL T-POSTS WITH PROJECTIONS FOR WIRE FASTENING.
- 4. WIRE SUPPORT FENCE SHALL BE A MINIMUM OF 36" IN HEIGHT, SHALL NOT EXTEND MORE THAN 36" ABOVE THE GROUND, AND SHALL EXTEND 2" INTO THE TRENCH.
- WIRE FENCE SHALL BE A MINIMUM OF 14 GAUGE AND SHALL HAVE A MAXIMUM MESH SPACING OF 6". WIRE SHALL BE SECURELY FASTENED TO THE UPSLOPE, PROJECT SIDE OF POSTS USING HEAVY DUTY STAPLES (AT LEAST 1" LONG), TIE WIRES OR HOG RINGS.
- . GEOTEXTILE FABRIC SHALL BE A MINIMUM OF 36" IN HEIGHT, AND SHALL NOT EXTEND MORE THAN 36" ABOVE THE ORIGINAL GROUND SURFACE.
- FABRIC SHALL BE STAPLED OR WIRED TO THE FENCE AT THE TOP, MIDDLE, AND BOTTOM OF EACH POST. IN ADDITION THE FABRIC SHALL BE STAPLED OR WIRED TO THE WIRE FENCE APPROXIMATELY ONE HALF (1/2) THE DISTANCE BETWEEN THE POSTS AT THE TOP, MIDDLE AND BOTTOM OF THE WIRE FENCE.
- 3. GEOTEXTILE FABRIC SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST, WITH A MINIMUM OF 3' OVERLAP. EACH FREE END OF THE FABRIC SHALL BE SECURELY TIED TO THE WIRE FENCE AT 6" O.C. VERTICALLY.
- 9. SILT FENCES SHALL BE MAINTAINED FOR THE DURATION OF THE PROJECT. THE ENTIRE LENGTH OF FENCE SHALL BE CHECKED FOR ANY DAMAGES ON A DAILY BASIS AND BEFORE AND AFTER ANY RAINFALL EVENT, FOR ANY DAMAGES. ANY DAMAGES FOUND SHALL BE REMEDIATED BEFORE THE DAY'S END AT NO ADDITIONAL COST TO THE OWNER.
- 10. SILT FENCES SHALL BE MAINTAINED TO PREVENT ANY MATERIAL FROM MIGRATING FROM THE UPSLOPE SIDE OF THE FENCE. ANY REQUIRED MAINTENANCE OF THE SILT FENCE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 11. SEDIMENT DEPOSITS SHALL BE REMOVED AFTER EACH RAINFALL EVENT AND WHEN DEPOSITS REACH APPROXIMATELY ONE-HALF (1/2) THE HEIGHT OF THE FENCE.
- 12. IN ORDER TO PREVENT SEDIMENT LADEN STORM WATER FROM BY-PASSING THE FENCE, IN AREAS WHERE SILT FENCES ARE NOT UTILIZED ON ALL SIDES OF A DISTURBED AREA, THE FENCE SHALL EXTEND BEYOND THE DISTURBED AREA IN J-HOOK SHAPE ON EACH END AS SHOWN IN THE ISOLATED SILT FENCE INSTALLATION PLAN VIEW.







# STRAW WATTLE NOTES

- STRAW ROLLS MUST BE PLACED ALONG SLOPE CONTOURS.
- 2. STRAW ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE ROLL IN A 3" MINIMUM TRENCH DUG ON CONTOUR.
- 3. IF STAKES CAN NOT BE USED SECURE WITH SAND BAGS SPACED 4' APART.
- 4. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND ROLL.

1 TYPICAL PERIMETER CONTROL DETAILS
C600 SCALE: NTS



ENGINEERING

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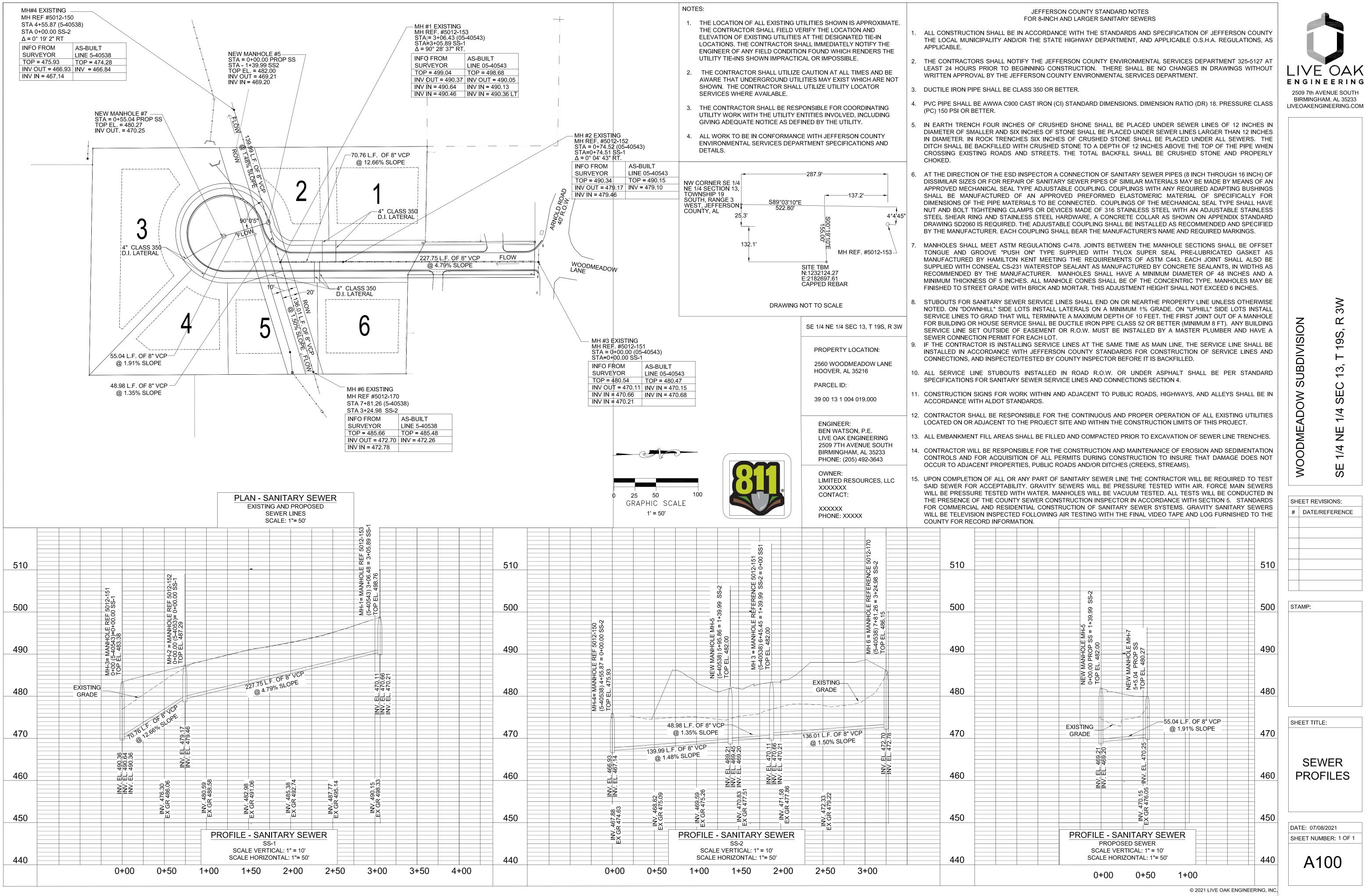
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