

PROJECT LOCATION

BROOKFIELD LANE SUBDIVISION

IMPROVEMENT PLANS
SITUATED IN:
SECTION 26, TOWN 4, F.R. 2
MIAMI PURCHASE, COLUMBIA TOWNSHIP
CITY OF CINCINNATI, HAMILTON COUNTY, OHIO

BENCHMARK INFORMATION

VICINITY MAP
NOT TO SCALE

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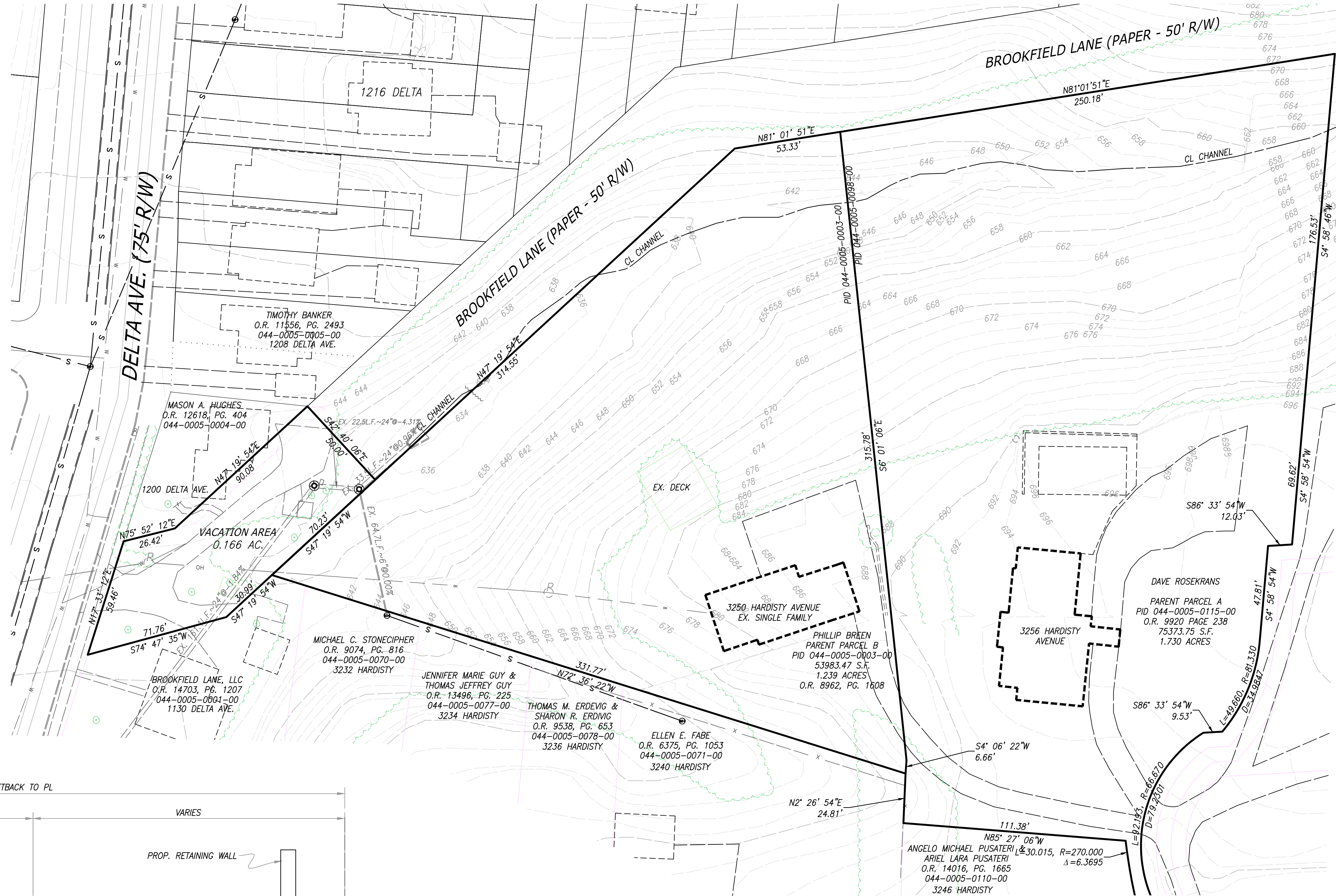
RIGHT OF WAY DEDICATION 19

STORM STRUCTURE DRAINAGE AREAS 20

SITE DRAINAGE AREAS 21

- ITEM 448 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
- ITEM 407 TACK COAT (APPLICATION RATE OF 0.1 GAL./SQ. YD.)
- ITEM 448 1 1/2" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-22
- ITEM 301 6" BITUMINOUS AGGREGATE BASE ITEM
- ITEM 304 6" AGGREGATE BASE W/UNDERDRAIN
- ITEM 608 CONCRETE WALK, 5" THICK, CLASS C

(DRIVE APRON INSIDE RIGHT OF WAY SHALL BE 7" PLAIN CONCRETE PAVEMENT PER THE CITY OF CINCINNATI SPECIFICATIONS)



ZONING REQUIREMENTS

DESIGNATION: SF-10
TYPICAL SETBACKS
FRONT: 30 FEET
REAR: 35 FEET (45 FEET SHOWN)
SIDES: 10 FEET
MIN SIZE: 10,000 S.F.
MIN WIDTH AT SETBACK: 60 FEET
MIN SINGLE PANHANDLE WIDTH: 20 FEET

DEVELOPMENT DATA

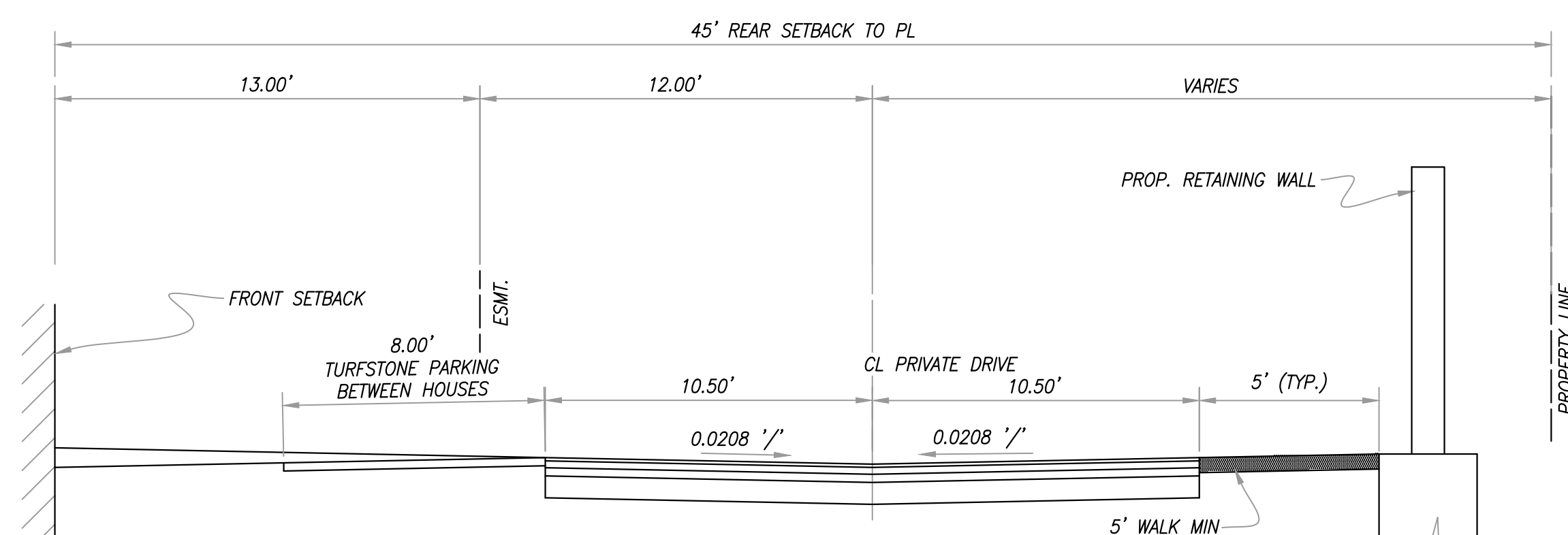
OWNER INFO:
PARCEL A:
OWNER: ROSEKRANS, CONSTANCE J TRUSTEE
PID: 0044-0005-0098
TOTAL PARCEL ACREAGE: 1.736
ACREAGE TO DEVELOPMENT: 0.810
REMAINDER ACREAGE: 0.928
(513)659-9748

PARCEL B:
OWNER: BREEN, PHILLIP L JR.
PID: 0044-0005-0003
TOTAL PARCEL ACREAGE: 1.224
ACREAGE TO DEVELOPMENT: 0.790
REMAINDER ACREAGE: 0.434
(513)382-5388

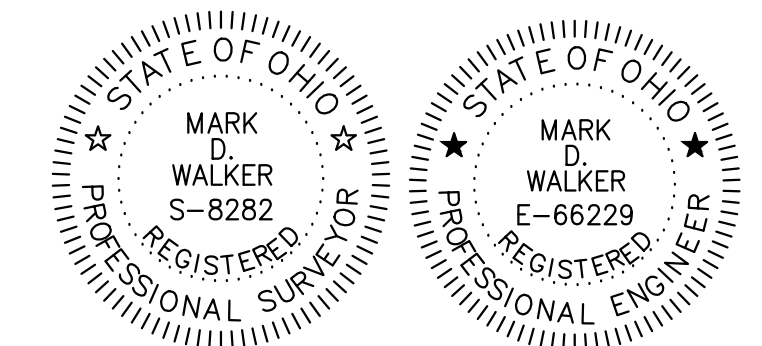
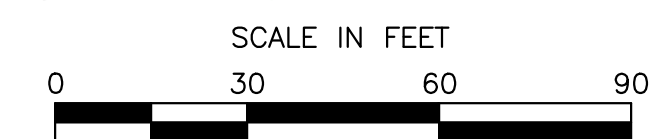
PROPOSED SEWER: PUBLIC SEWER (LOW PRESSURE FORCE MAIN)
PROPOSED WATER: PUBLIC WATER

DEVELOPER DATA

BROOKFIELD LANE, LLC.
PAT GUNNING
(513)965-6305
6355 EAST KEMPER ROAD
CINCINNATI, OH 45241



PROP. TYPICAL SECTION
SCALE 1/4" = 1'-0"



REVISIONS		Brookfield Lane Subdivision		SHEET NO. 1/21
#	DESCRIPTION	CLIENT CODE:	TITLE SHEET	
		BROOKFIELD LLC	IMPROVEMENT PLANS	
		DATE:	11/04/2022	
		SCALE:	AS NOTED	
		M.D. WALKER & ASSOCIATES LAND SURVEYORS CIVIL & STRUCTURAL ENGINEERS (513)284-3232 6809 MAIN ST. #1064 CINCINNATI, OH 45244		
FILE NAME: BROOKFIELD TITLE.dwg FILE PATH: 2018 Projects\McGarey Custom Homes\Brookfield Improvement Plan\CAD				

GENERAL CONSTRUCTION NOTES

OVERALL

APPROPRIATE UTILITY COMPANIES SHALL BE NOTIFIED AT LEAST 48 HOURS PRIOR TO BREAKING GROUND FOR THE PURPOSE OF VERIFYING BY FIELD INSPECTION, THE EXACT LOCATION OF UNDERGROUND UTILITIES.

THE CONTRACTOR SHALL EXERCISE DUE CARE DURING CONSTRUCTION SO AS NOT TO DESTROY ANY TREES, PLANTS, SHRUBS OR STRUCTURES OUTSIDE OF THE INDICATED WORK LIMITS AND THOSE NOT SPECIFICALLY MARKED FOR REMOVAL OR RELOCATION WITHIN THE WORK LIMITS.

ALL MATERIALS AND CONSTRUCTION PROCEDURES SHALL BE IN ACCORDANCE WITH "CONSTRUCTION AND MATERIAL SPECIFICATIONS OF THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION."

UNLESS OTHERWISE NOTED ALL CONSTRUCTION DETAILS SHALL CONFORM WITH THE "STANDARD CONSTRUCTION DRAWINGS OF THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION."

THE ENGINEER/SURVEYOR DOES NOT ASSUME ANY LIABILITY FOR THE LOCATION OF UTILITIES, INCLUDING INDIVIDUAL SERVICE LINES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR EXACTLY LOCATING AND PROTECTING ALL UTILITIES, BOTH ABOVE AND BELOW GROUND, THAT EXIST IN THE WORK AREA AND WHICH MAY COME IN CONFLICT WITH HIS OPERATIONS. ANY DAMAGE TO UTILITIES WHICH HAVE BEEN ACCURATELY LOCATED, WHICH IS CAUSED BY THE CONTRACTOR'S OPERATIONS, SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. ASSISTANCE IN LOCATING UNDERGROUND UTILITIES CAN BE OBTAINED BY CONTACTING THE UTILITY COMPANIES AT THE LOCATIONS LISTED ON THIS PAGE.

THE CONTRACTOR SHALL OBTAIN OR VERIFY THAT ALL PERMITS ARE OBTAINED. THE CONTRACTOR SHALL VERIFY EXISTING SITE INFORMATION AND REQUIRED EARTHWORK. A GEOTECHNICAL INSPECTION IS RECOMMENDED AND ALL RECOMMENDATIONS IN THE GEOTECHNICAL REPORT SHALL BE FOLLOWED.

UTILITY SPECIFICATION

ALL STORM SEWER TO BE PRIVATE, MAINTAINED BY THE OWNER AND BE CORRUGATED POLYETHYLENE SMOOTH LINED PIPE, CONFORMING TO ODOT ITEM 707.33 OR PVC CORRUGATED SMOOTH INTERIOR PIPE, CONFORMING TO ODOT ITEM 707.42 AND INSTALLED PER ODOT ITEM 603.

UNDERGROUND DETENTION SYSTEM TO BE CORRUGATED METAL 14 GAUGE AND CONFORM TO ODOT ITEM 707.01 AND BE INSTALLED PER ODOT ITEM 603. INSTALLATION SHALL AGREE WITH MANUFACTURERS' RECOMMENDED SHOP DRAWINGS.

RCP INDICATES ITEM 601, ROCK CHANNEL PROTECTION. THE DIMENSIONS ON THE PLANS INDICATE WIDTH, LENGTH AND DEPTH OF THE ROCK CHANNEL PROTECTION. PLANS ALSO INDICATE THE TYPE (SIZE) OF ROCK PER ODOT ITEM 601.07.

STEPS SHALL BE REQUIRED IN ALL CATCH BASINS WHERE THE DEPTH EXCEEDS FOUR (4) FEET AND SHALL MEET THE REQUIREMENTS OF THE STATE OF OHIO STANDARD CONSTRUCTION DRAWING MH-1.

ALL CATCH BASINS 2-3 OR LARGER IN PAVED AREAS TO HAVE 8" HEAVY DUTY TOP SLABS. ALL DOWNSPOUTS ARE TO TIE IN TO THE STORM SEWER SYSTEM.

FIRE LINE TO BE DUCTILE IRON CLASS 53 (ODOT ITEM 748.01) OR PVC AWWA C900, (ODOT ITEM 748.02) UNLESS OTHERWISE NOTED. FIRE HYDRANTS TO BE "MUELLER" OR "KENNEDY" OR APPROVED EQUAL.

PROPERLY SIZED THRUST BLOCKS SHALL BE PROVIDED FOR FIRE LINE AT EVERY CHANGE IN DIRECTION SUCH THAT IT PROVIDES ADEQUATE RESISTANCE TO MAINTAIN THE INTEGRITY OF THE JOINTS. SEE DETAILS ON PLANS FOR BLOCKING DETAILS.

ALL SANITARY SEWER PIPE SHALL BE PVC SDR 35, ASTM D-3034. UTILITY TRENCH BACKFILL SHALL BE PER THE DETAILS SHOWN ON THE PLANS.

EROSION CONTROL

ALL EROSION CONTROL MEASURES MUST BE IN PLACE PRIOR TO ANY STRIPPING OF VEGETATION OR EXCAVATION.

EROSION CONTROL WILL BE ACCOMPLISHED BY STRATEGICALLY PLACING ROCK CHECK DAMS, MULCH, BERMS AND/OR SILT FENCES IN SWALES AND RUNOFF AREAS, SUCH ITEMS TO BE REPLACED AND EXPANDED AS NECESSARY TO AFFORD NECESSARY CONTROL.

SILT FENCES FOR EROSION/SEDIMENT CONTROL TO BE ENTRENCHED AT LEAST 6" BELOW GRADE, AND FOLDED ACCORDING TO DETAIL SHOWN.

ALL EROSION CONTROLS MUST BE MAINTAINED DURING CONSTRUCTION BY REMOVING COMPACTED SILT AND SEDIMENT, AND REDISTRIBUTING IT AS IS APPROPRIATE. SEEDING AND MULCHING SHALL BE APPLIED IN ACCORDANCE WITH ODOT ITEM 659 TO ALL DISTURBED AREAS WITHIN 7 DAYS IF THE AREA IS AT FINAL GRADE OR IS TO REMAIN DORMANT FOR MORE THAN 45 DAYS.

ALL CATCH BASINS SHALL HAVE SEDIMENT INLET PROTECTION METHODS INSTALLED DURING CONSTRUCTION, USING DETAILS SHOWN ON PLAN.

SANITARY SEWER NOTES

1. All plans and construction within Hamilton County shall comply with the latest edition of the "Rules and Regulations" manual governing the design, construction, maintenance, operation, and use of sanitary and combined sewers in the Metropolitan Sewer District of Greater Cincinnati, Hamilton County, Ohio, effective March 1, 2001. Copies may be obtained from the Division of Wastewater Engineering MSD, 1600 Gest Street, Cincinnati, Ohio 45204.

2. All sanitary sewers shall be constructed under the inspection of the Sewers Chief Engineer, MSD.

3. The owners of all properties shown on this improvement plan shall be subject to all applicable sewer service charges, assessments, tap-in charges or fees which have been or may be established by the Board of County Commissioners.

4. Appropriate utility companies shall be notified at least 48 hours prior to breaking ground for the purpose of verifying by field inspection the exact location of underground utilities.

5. All sanitary sewer pipe shall be PVC, SDR35, ASTM D-3034 in accordance with MSD Rules and Regulations, except where noted.

6. All manholes on sanitary sewers shall be Type "S" MSD Accession No. 49037.

7. Sanitary manholes shall be temporarily constructed to an elevation of two feet above the surrounding grade by means of an additional manhole section or brick masonry on top of the cone.

8. Sanitary building sewers for public and private sewers shall not be extended more than ten (10) feet beyond the proposed right-of-way line, easement line or, in cases of private sewers, no more than ten (10) feet beyond the main line sewer prior to issuance of tap permits.

9. Two-way cleanouts shall be installed at the right-of-way line or sanitary sewer easement, where applicable, in accordance to MSD Accession No. 61979.

10. All lowest finished floor elevations shall be at least 36 inches above the crown of the sewer at the point of tap connection to said sewer, whether public or private, and/or in accordance with City of Cincinnati Supplement CC-51-49. Any building to be served by means other than gravity must be so noted on the plans.

11. All manholes on public sanitary sewers shall have standard lids and frames, MSD Accession No. 49005, except where noted. The frame shall be securely fastened to the top manhole section by four 3/4-inch stainless steel cinch anchors.

12. CONTRACTOR'S LICENSE - All work done on sanitary and/or combined sewers within the jurisdiction of the Metropolitan Sewer District must be done by a contractor who is an approved sewer tapper properly licensed by the Department and bonded.

13. Sanitary building sewers shall be connected to the main line with wyes. Tee fittings are to be used only where shown on the approved plan.

14. A tap permit is required for each building. Bond or final approval of the main line is required prior to issuance of a tap permit.

15. Sanitary sewer construction must commence within 12 months and be completed within 36 months of the date of approval shown hereon or these plans become void.

16. For sanitary sewer manholes constructed in parking lots, the rim elevation shall be 1" higher than the surrounding grade and the pavement shall be feathered away from the manhole rim at a gradual slope.

17. For sanitary manholes constructed in grass areas, the rim elevation shall be 3" higher than the surrounding grade, and the fill shall be feathered away from the manhole rim at a gradual slope.

18. Roof drains, foundation drains, cooling water, swimming pool water or other clean water connections to the sanitary sewer system are prohibited.

19. To assure that stormwater does not enter the sanitary sewer system, a schematic plan of the footing and foundation drainage system, including the point of discharge, is necessary.

20. The Contractor shall test all manholes leakage by means of vacuum testing. The vacuum testing cannot be done until after the manholes are set to final grade and the manhole castings are bolted down. All lift holes shall be plugged. Any other openings, such as for pressure relief valves, shall be temporarily plugged to allow the vacuum test. All pipes entering the manhole shall be plugged and care shall be taken to securely brace the plugs from being drawn into the manhole. The vacuum equipment test head shall be placed in the opening of the casting only, and the seal inflated in accordance with the manufacturer's recommendations. Vacuum testing shall be in accordance with ASTM C1244. A vacuum of 10 inches mercury (10" Hg) shall be drawn and the vacuum pump shut off. With the valves closed, the time shall be measured for the vacuum to drop to nine inches mercury (9" Hg). The manhole shall pass if the time meets or exceeds the allowable times as calculated from ASTM C1244, or as approved by the Engineer. All manhole repair and retesting required because of the failure to meet the testing requirements shall be borne by the Contractor at his cost.

21. Installation of a private force main requires a permit from the Hamilton County Board of Health. Contact the Board of Health at 513-946-7852 regarding permit and inspection.

22. All sanitary sewers within this development to be private are to be maintained by the owner. [ONLY IF APPLICABLE.]

STORM DRAINAGE NOTES

1. ALL PLANS AND CONSTRUCTION WITHIN THE CITY OF CINCINNATI SHALL COMPLY WITH THE LATEST EDITION OF THE "STORMWATER RULES AND REGULATIONS" MANUAL GOVERNING THE HANDLING OF STORMWATER DRAINAGE, AND THE DESIGN, CONSTRUCTION, MAINTENANCE, OPERATION AND USE OF STORMWATER SEWERS, DETENTION BASINS, AND OTHER STORMWATER STRUCTURES WITHIN THE CITY OF CINCINNATI EFFECTIVE JUNE 1989. COPIES MAY BE OBTAINED FROM THE DIVISION OF WASTEWATER ENGINEERING, MSD, 1600 GEST STREET, CINCINNATI, OHIO 45204.

2. ALL STORM SEWERS SHALL BE CONSTRUCTED UNDER THE INSPECTION OF THE CHIEF ENGINEER, STORMWATER MANAGEMENT UTILITY.

3. THE OWNERS OF ALL PROPERTIES SHOWN ON THIS IMPROVEMENT PLAN SHALL BE SUBJECT TO ALL APPLICABLE SEWER MAINLINE INSPECTION FEES, SERVICE CHARGES, ASSESSMENTS, TAP-IN CHARGES OR OTHER FEES, WHICH HAVE BEEN OR MAY BE ESTABLISHED BY CITY COUNCIL, CITY OF CINCINNATI.

4. APPROPRIATE UTILITY COMPANIES SHALL BE NOTIFIED AT LEAST 48 HOURS PRIOR TO BREAKING GROUND FOR THE PURPOSE OF VERIFYING BY FIELD INSPECTION THE EXACT LOCATION OF UNDERGROUND UTILITIES.

5. ALL PUBLIC STORM DRAINAGE AND CONSTRUCTION MATERIAL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS, AND WITH THE LATEST EDITION OF THE CITY OF CINCINNATI SUPPLEMENT TO THE ODOT CONSTRUCTION AND MATERIAL SPECIFICATIONS.

6. STORM SEWERS SHALL COMPLY WITH ODOT ITEM 603, AND SHALL BE REINFORCED CONCRETE, TYPE C, CLASS III UNLESS OTHERWISE NOTED. PVC AND PLASTIC CONDUITS, IF NOTED, SHALL CONFORM WITH ODOT ITEM 603. TYPE E CONDUIT SHALL NOT BE USED FOR PUBLIC STORM SEWERS OR SEWERS LOCATED UNDER PAVED SURFACES. ALL CONDUIT SHALL HAVE CLASS B BEDDING PER ODOT ITEM 603.04 UNLESS OTHERWISE NOTED. ALL STORM SEWERS UNDER, OR WITH TRENCH WALL WITHIN 3' OF A PAVED SURFACE, SHALL BE BACKFILLED WITH CONTROLLED DENSITY FILL, MEETING REQUIREMENTS OF HAM-CIN-CLSM-CDF AND THE MOST RECENT VERSION OF CITY OF CINCINNATI STREET RESTORATION BOOK. EXCEPT THAT GRANULAR BACKFILL SHALL BE PLACED TO 1' ABOVE CONDUIT AND IN SPECIFIC LOCATIONS AS DIRECTED.

7. ALL SEWER MANHOLES SHALL BE TYPE P, IN ACCORDANCE WITH CITY OF CINCINNATI ACCESSION NO. 490001 UNLESS OTHERWISE NOTED.

8. ALL STORMWATER CATCH BASINS SHALL BE COMBINATION INLET (CI) ACCESSION NO. 49016 UNLESS OTHERWISE NOTED. ALL CONNECTIONS BETWEEN INLETS/CATCH BASINS AND THE MAINLINE STORM SEWER SHALL BE MADE USING MINIMUM 12" DIAMETER PIPE WITH MINIMUM SLOPE OF 2% UNLESS OTHERWISE NOTED.

9. ALL LOWEST FINISHED FLOOR ELEVATION SHALL BE AT LEAST 36" ABOVE THE CROWN OF STORM SEWER AT THE POINT OF TAP CONNECTION, WHETHER PUBLIC OR PRIVATE, AND MADE IN ACCORDANCE WITH CITY OF CINCINNATI PLUMBING CODE. ANY BUILDING TO BE SERVED BY ANY MEANS OTHER THAN GRAVITY MUST BE NOTED SO ON THE PLANS.

10. ALL MANHOLES ON PUBLIC STORM SEWERS SHALL HAVE STANDARD LIDS AND FRAMES, ACC. NO. 120282 UNLESS NOTED. FRAME SHALL BE SECURELY FASTENED TO TOP MANHOLE SECTION BY FOUR 3/4-INCH STAINLESS STEEL CINCH ANCHORS.

11. CONTRACTOR'S LICENSE-- ALL WORK DONE ON STORM SEWERS WITHIN CITY OF CINCINNATI MUST BE DONE BY A CONTRACTOR WHO IS AN APPROVED SEWER TAPPER PROPERLY LICENSED AND BONDED THROUGH THE METROPOLITAN SEWER DISTRICT.

12. ALL STORMWATER BUILDING SEWERS SHALL BE CONNECTED TO THE MAIN LINE. WATER-TIGHT NEOPRENE FITTINGS ARE TO BE USED.

13. A STORMWATER TAP PERMIT IS REQUIRED FOR EACH BUILDING, BOND OR FINAL ACCEPTANCE OF THE MAIN LINE IS REQUIRED PRIOR TO ISSUANCE OF A TAP PERMIT. A SKETCH SHALL BE SUBMITTED BY THE PLUMBER, WHICH SHALL SHOW THE ELEVATION AND LOCATION OF THE STORMWATER TAP WITH RESPECT TO THE NEAREST STORM MANHOLE.

14. ALL STORM SEWERS WITHIN THE DEVELOPMENT TO BE PRIVATE AND MAINTAINED BY THE OWNER [ONLY IF APPLICABLE.]

15. STORM SEWER CONSTRUCTION MUST COMMENCE WITHIN 12 MONTHS AND BE COMPLETED WITHIN 36 MONTHS OF THE DATE OF APPROVAL SHOWN HEREON OR THESE PLANS BECOME VOID.

16. ALL STORM SEWERS PROPOSED FOR ACCEPTANCE BY THE CITY OF CINCINNATI SHALL BE INSPECTED, HAVE AS-BUILT DRAWINGS PREPARED, AND BE VIDEO-TAPED IN ACCORDANCE WITH THE LATEST EDITION OF THE CITY OF CINCINNATI SUPPLEMENT TO THE ODOT CONSTRUCTION AND MATERIAL SPECIFICATIONS AND WITH SECTION 1007 OF THE GREATER CINCINNATI METROPOLITAN SEWER DISTRICT RULES AND REGULATIONS (EXCEPT THAT PARTS B & C DO NOT APPLY)

17. NPDES PERMIT IS REQUIRED (IF OVER 1 ACRE). A COPY OF THE NOI MUST ACCOMPANY REQUEST FOR APPROVAL OF THE PLAN.

18. NO INLET, CATCH BASIN OR INTAKE SHALL BE INSTALLED CLOSER TO A DRIVEWAY, DRIVEWAY APRON, UTILITY POLE, GUY WIRE ANCHOR OR FIRE HYDRANT.

19. TEMPORARY EROSION CONTROL MEASURES SHOWN ON THE PLANS SHALL BE INSTALLED AS EARLY AS POSSIBLE AND BE MAINTAINED THROUGHOUT THE PROJECT.

SMU Standard Plan Notes--

1. All plans and construction within the City of Cincinnati shall comply with Chapter 720 of the City's Municipal Code along with the latest editions of SMU's: a) Detention Operation and Maintenance Plan, b) Fees, c) Standard Drawings, d) Pipe Materials Policy, and e) Rules & Regulations. These documents can be downloaded from SMU's website at: <http://www.cincinnati-oh.gov/stormwater/>. If there are conflicts between these documents SMU shall be contacted to resolve the issue prior to work commencing. SMU can be reached at 513-591-7746 or StormwaterManagement@cincinnati-oh.gov.

2. Temporary erosion control measures shown on the plans shall be installed as early as possible and be maintained throughout the project.

3. A National Pollutant Discharge Elimination System (NPDES)/Municipal Separate Storm Sewer System (MS4) permit is required if the total land disturbance will be equal to or greater than one acre in a storm only sewer and/or if discharging to a creek. A copy of the permit must accompany the request for approval of the plan.

4. SMU does not allow two-piece castings or slab top manholes and only reinforced concrete pipe (RCP) or ductile iron pipe (DIP) is permitted within an easement or right-of-way.

5. SMU does not allow any drainage structures within 5 feet of a driveway.

6. All public storm drainage construction and materials shall be in accordance with latest edition of the Ohio Department of Transportation (ODOT) Construction and Material Specifications, and with the latest edition of the City of Cincinnati Supplement to the ODOT Construction and Material Specifications. If there is a conflict between the governing specifications the most stringent shall be used. SMU shall be contacted to resolve any discrepancies prior to work commencing. SMU can be reached at 513-591-7746 or StormwaterManagement@cincinnati-oh.gov.

7. The owners of all properties shown on this improvement plan shall be subject to all applicable sewer mainline inspection fees, service charges, assessments, tap-in charges or other fees, which have been established by City Council, City of Cincinnati.

8. All work done on stormwater infrastructure within the City of Cincinnati must be done by a contractor who is an approved sewer tapper properly licensed and bonded through the Metropolitan Sewer District of Greater Cincinnati.

9. A stormwater tap permit is required for each building. Bond or final acceptance of the main line is required prior to issuance of a tap permit. A sketch shall be submitted by the plumber, which shall show the elevation and location of the stormwater tap with respect to the nearest storm manhole. A request for application can be sent to StormwaterManagement@cincinnati-oh.gov.

10. All public stormwater infrastructure that is being tapped into must be cored, and inspected as part of the Tap Permit Process.

11. All stormwater infrastructure within this development is to be private and maintained by the owner(s). [ONLY IF APPLICABLE.]

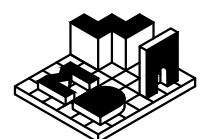
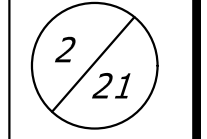
12. Stormwater infrastructure construction must commence within 12 months and be completed within 36 months of the date of approval shown hereon or these plans become void.

13. Near the completion of work on all stormwater infrastructure, the [contractor/owner/developer/etc.] shall request CAGIS IDs from SMU. Upon completion of the work using said IDs the [contractor/owner/developer/etc.] shall close circuit televise (CCTV) the public stormwater mainlines as well as provide digital photographs of the lines and structures. The CCTV shall be Pipeline Assessment Certification Program (PACP)-compliant and submitted to SMU for approval.

14. FINAL ACCEPTANCE: In order for SMU to grant final acceptance the following must be supplied:
a. As-built drawings with accurate locations, descriptions, and quantities of the installed materials
b. Final cleaning and inspection by the owner of the infrastructure must be completed and without conflicts.

15. SMU reserves the right to refuse ownership on behalf of the City.

16. Shop drawings for all Stormwater structures shall be submitted to SMU for review before delivery onsite.

REVISIONS	#	Brookfield Lane Subdivision		
		Improvement Plans		
		CLIENT CODE: BROOKFIELD LLC	SHEET TITLE: GENERAL NOTES	SHEET NO.
		DATE: 11/04/2022	 M.D. WALKER & ASSOCIATES LAND SURVEYORS CIVIL & STRUCTURAL ENGINEERS (513)284-3232 6809 MAIN ST. #1064 CINCINNATI, OH 45244	
		SCALE: AS NOTED		
		FILE NAME: BROOKFIELD COMBO - DESIGN AND SHEETS.dwg		
		FILE PATH: 2018 Projects\McGarey Custom Homes\Brookfield Improvement Plan\CAD		

MAINTENANCE OF TRAFFIC

ITEM 614 – MAINTAINING TRAFFIC

The contractor must perform the required work with the maximum safety of, and the least inconvenience to, the traveling public and the contractor. The Engineer must approve any proposed variance from the Maintenance of Traffic notes, in advance, in writing. Except as modified herein, the requirements for maintaining traffic, as indicated in the "State of Ohio Department of Transportation Construction and Material Specification", Item 614; "The Ohio Manual Of Uniform Traffic Control Devices"(OMUTCD), Part 6; and the City of Cincinnati "Traffic Safety Handbook"(Blue Book) current editions, latest revisions and pertinent items of specifications and proposal apply.

Use drums, signs, sign supports, barricades, impact attenuators and other traffic control devices that are certified to meet NCHRP350 safe crash standards or are modified by contract documents. Do not use heavy, non-yielding devices or supports that do not conform to the current standards of NCHRP350 unless allowed by contract documents.

ITEM 614.03 Traffic Control General

All traffic control will conform to the requirements of the plan, standard construction drawings shown on the plan, and the OMUTCD for streets and highways, for the installation, maintenance, and operation of all traffic controls and traffic control devices. When the plans or standard construction drawings do not cover a specific traffic control situation, place the necessary traffic control devices according to the OMUTCD and use the procedures required by the OMUTCD.

1. In addition to Item 614, "Maintaining Traffic," as set forth in the State of Ohio Department of Transportation Construction and Material Specifications, the following notes also apply to the work carried out within the limits of this project.

a. The Contractor will be required on an interim and/or permanent basis to furnish, erect, maintain and subsequently remove all lights, signs, barricades and all other traffic control devices necessary for the safety and maintenance of traffic.

This also includes all advance warning signage, regulatory signs, informational signs, detour signs and directional signs. Keep all equipment clean and in proper working condition. All signs are to be retroreflectorized or illuminated and have the most recent color and type as specified in the OMUTCD manual.

b. Replace any traffic control device that becomes moved or damaged during the duration of the project. Assign a competent person to check the work zone on a daily basis to correct any deficiencies. Make these checks before work is to start for the day to assure all devices are in place or, if not needed, are covered or removed from the site. If the contractor is not working and no roadway hazards are present, cover or remove any unnecessary signs.

c. The standard channelizing device for closing any lane to traffic is properly weighted 36" drums or 42" cones. Tapers for lane closures have 36" drums or 42" cones. 28" cones may be used for daytime only, short duration closures.

All channelizing devices are orange in color with a minimum of two retroreflective bands (42" cones have four retroreflective bands). The retroreflective material used on channelizing devices has a smooth, sealed surface that will display approximately the same color day and night. Keep all retroreflective material on devices in good condition, maintaining their retroreflective properties.

d. The use of flashing arrow panels should be used for all lane closures and may be required at any time during the job or project by the Right Of Way (ROW) Inspector or a Traffic Engineering official. Use arrow panels in the Cincinnati Business District (CBD) area for any work within a travel lane.

Arrow panels must conform to the OMUTCD Part 6, Section 6F.53, "Arrow Panels". For a stationary lane closure the arrow panel should be located on the shoulder at the beginning of the merging taper. Where the shoulder is narrow, the arrow panel should be located in the closed lane. Use the arrow panel in combination with appropriate signs, channelizing devices and other temporary traffic control devices. Locations that will require a flashing arrow panel will appear in item #14.

e. If flagging is necessary, the required method of flagging is with approved Stop/Slow paddles. Flags should be limited to emergency situations, intersections and low speed, low volume locations, which can best be controlled by a single flagger. The flagging operation and flagging station will conform to the OMUTCD Part 6E, "Flagger Control".

2. Failure to comply with Maintenance of Traffic requirements will result in the Right Of Way permit being cancelled. The Contractor will be ordered to remove all personnel and equipment from the City of Cincinnati Right Of Way until proper traffic control is in place and approved by the Department of Transportation and Engineering's ROW Inspector and/or a Traffic Engineering official.

3. Before work begins, submit to the Engineer the name and telephone number of a person(s) who can be reached 24 hours a day by the City of Cincinnati and all interested police agencies. This person(s) is responsible for replacing and maintaining necessary traffic control devices per the approved traffic control plan.

4. Pedestrian protection and pedestrian access will be maintained at all times and will conform to the OMUTCD Part6D.01, "Pedestrian Consideration". Pedestrians' safety is of utmost importance throughout the life of the contract or job. Pedestrians will not be led into conflicts with work site vehicles, equipment or operations. Pedestrians will not be led into conflicts with vehicles moving through or around the work site. Pedestrians will be provided with a safe, convenient and accessible path that replicates as nearly as practical the most desired characteristics of the existing sidewalk(s) or footpath(s). If the pedestrian pathway is to be closed, post signs to direct pedestrians to the safest crossing point. If the pathway is to be closed between safe crossing points, post signs in advance of the closed area at a safe crossing point or make arrangements for safe pedestrian passage. If Traffic Engineering or the Engineer requires pedestrian barriers, the Engineer will approve the type used. The safety of pedestrians is the responsibility of the Contractor.

5. Notify the following groups five (5) working days prior to the start of work and three (3) days prior to any street closure with the approval of the City Traffic Engineer or his/her designee and the Project Engineer.

- Local Police District
- Local Firehouses
- Queen City Metro
- TANK (for work in CBD)
- Local schools
- Local hospitals
- Abutting property owners

The Engineer may require additional contacts.

6. If temporary signs to restrict parking are installed, notify the local police district 24 hours prior to installation and post the signs at least 14 hours before the parking restriction listed on the sign. Dates and times on temporary signs must be properly worded and legible.

7. The Contractor will make arrangements and pay for the services of an off duty police officer and cruiser, as needed. The Cincinnati Police Department (Phone: 352 2583) and Hamilton County Sheriff's Department (Phone: 595 8513) requires advance notice for these services. The use of a police officer(s) with a marked police vehicle is encouraged and may be required by Traffic Engineering, the Project Engineer, or the ROW Inspector when work is done within a signalized intersection. Locations that will require a police officer(s) will appear in Item #14. The hiring of a police officer(s) is for assistance with traffic and pedestrian control, for the safety of the traveling public and for the safety of the Contractor's employees. The police officer(s) is considered to be employed by the Contractor and the Contractor is responsible for their actions. Although the Contractor employs them, Traffic Engineering, the Project Engineer, or the ROW Inspector will determine the police officer's placement and duties. The closing of a road for the purpose of the proposed work will only be done with advanced notification and the approval of Traffic Engineering.

8. The Contractor, through the Engineer or ROW Inspector, is required to contact Traffic & Road Operations Division Supervisor, Jeff Ventre @ 352.3712, or Traffic Service Bureau Controller Service section at 352 4391 one week prior to any grinding or curb repair operations near vehicle loop detectors. They will coordinate with the Contractor to save the existing loops or to arrange for proper signal operation if the loop(s) must be destroyed.

9. A copy of these notes shall be kept available at the site any time work is in progress. Should you have any further questions on Maintenance of Traffic, contact: Please notify the Division of Traffic Engineering after completion of the project.

10. All sub contractors must adhere to the same Maintenance of Traffic requirements as the general Contractor. The general Contractor is responsible for all sub contractors.

11. One week prior to any grinding or paving, notify the Traffic Engineering representative. The Traffic Engineering representative will approve or not approve the date and time with respect to area events and/or planned lane closures.

12. If, in the opinion of the City Engineer, the City Traffic Engineer, or his/her designee, proper provisions and maintenance of traffic or traffic controls are not provided by the Contractor, the City will provide appropriate provisions to maintain safe traffic controls. The cost of these services will be charged to the permittee.

13. Failure to follow established traffic safety requirements constitutes a violation of the Street Opening Permit and subjects the permittee to all sanctions and penalties authorized by the Cincinnati Municipal Code.

Mark Mahoney, 352-3733 or 470-0946(cell)

14. Maintain Police, Fire and local resident traffic at all times. The following restrictions on local roadways apply to the construction involved in this project. These restrictions are subject to be changed by the City of Cincinnati Traffic Engineer or his/her designee due to unforeseen circumstances or traffic conditions. No traffic will be detoured or roadway closed without prior approval of the Department of Transportation and Engineering, Division of Traffic Engineering. No open trench will be left unattended. Leave all areas in the roadway and sidewalk in safe, passable condition and meet all requirements set by the Department of Transportation and Engineering's City Engineer and City Traffic Engineer or his/her designee.

a. On the following street(s), from the hours of 6AM to 9AM and from 4PM to 6PM, Monday through Friday, all lanes will be open and available to traffic. All other times there will be at least two 11' lanes open and available to traffic (one lane in each direction). All lanes not approved for a permanent closure will be open and available to traffic when no work is being done. USE ARROW PANELS FOR ALL LANE CLOSURES.

N/A

b. On the following street(s), traffic will be maintained at all times. At least two 10' lanes will remain open and available to traffic (one lane in each direction) at all times, or use a flagging operation to move traffic around the work site. All lanes not approved for a permanent closure will be open and available to traffic when no work is being done.

- Kenwood Rd (No work 6-9AM)

c. The following street(s) may be closed during work hours. Post "ROAD CLOSED TO THROUGH TRAFFIC" signs at each end of the street segment to be closed.

Only one street segment (or block) may be closed at a time. Maintain local and emergency traffic at all times. Flag traffic as necessary. All lanes not approved for a permanent closure will be open and available to traffic when no work is being done.

N/A

d. When working in or within 50' of the following intersection(s), a uniformed police officer with patrol car will be required to assist with vehicular traffic and pedestrian traffic through the intersection(s).

AS DIRECTED BY THE ENGINEER

Item 614.10 Work Zone Traffic Signals

1. Refer to section 1314 of the City of Cincinnati Supplement to State of Ohio Department of Transportation Construction and Material Specifications for the requirements of Maintenance of Existing Traffic Signals and Street Lighting Circuits.

Item 614.11 Work Zone Pavement Markings

1. Replace all pavement markings, which are removed or damaged during the project or job to the same or better condition and type as before the work began.

2. Maintain visible pavement markings after each workday.

3. Following the grinding operations, use painted temporary pavement markings. Do not use construction tape in the wet or cold weather periods, as it should not be expected to withstand snowplowing operations.

4. Following the placement of the leveling course, apply paint or construction tape per the final striping plan to serve as temporary pavement markings. If construction tape is used for temporary pavement markings on the leveling course, remove it before placement of the surface course.

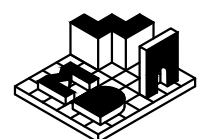
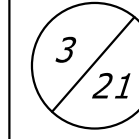
5. Place all temporary pavement markings to retain lane assignments and shy away from

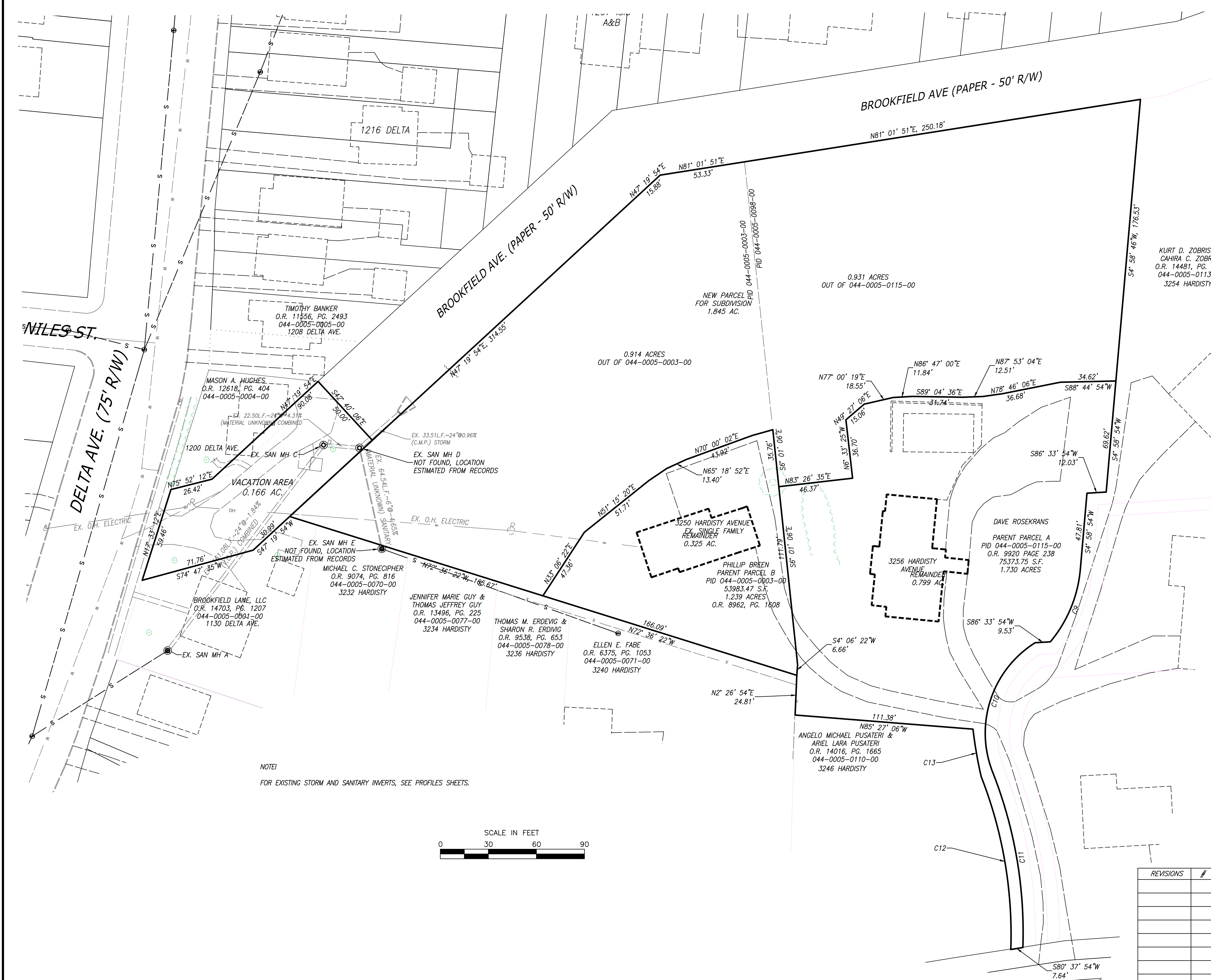
areas near curbs, islands, etc., unless otherwise directed by the Engineer. Install these temporary pavement markings with the same professional alignment and general positive guidance that is utilized with the permanent pavement markings.

6. After placement of the surface course, use paint for the layout of the final striping plan. Do not use construction tapes on the surface course. After the Engineer has approved the layout of the temporary pavement markings, apply permanent pavement markings in thermoplastic on asphalt surface courses.

7. The City will provide documentation so that the temporary pavement markings can be properly aligned. The Engineer will provide inspection and approve the layout. The Contractor will perform the layout.

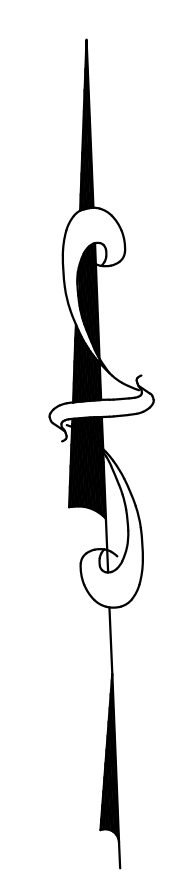
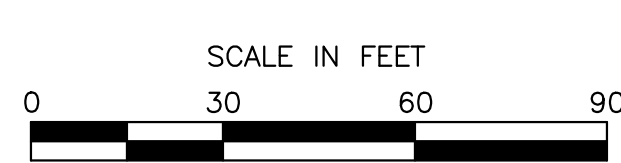
8. On any street which has the surface course placed after November 1, the Contractor will be required to maintain visible pavement markings until March 15 of the following year or until the permanent pavement markings are placed.

REVISIONS	#	<p style="text-align: center;">Brookfield Lane Subdivision Improvement Plans</p>		
		CLIENT CODE: BROOKFIELD LLC	SHEET TITLE: MAINTENANCE OF TRAFFIC NOTES	SHEET NO.
		DATE: 11/04/2022	 <p>M.D. WALKER & ASSOCIATES LAND SURVEYORS CIVIL & STRUCTURAL ENGINEERS (513)284-3232 6809 MAIN ST. #1064 CINCINNATI, OH 45244</p>	
		SCALE: AS NOTED		
<p>FILE NAME: BROOKFIELD COMBO - DESIGN AND SHEETS.dwg FILE PATH: 2018 Projects\McGarey Custom Homes\Brookfield Improvement Plan\CAD</p>				



KURT D. ZOBRIST &
CAHIRA C. ZOBRIST
O.R. 14481, PG. 3184
044-0005-0113-00
3254 HARDISTY

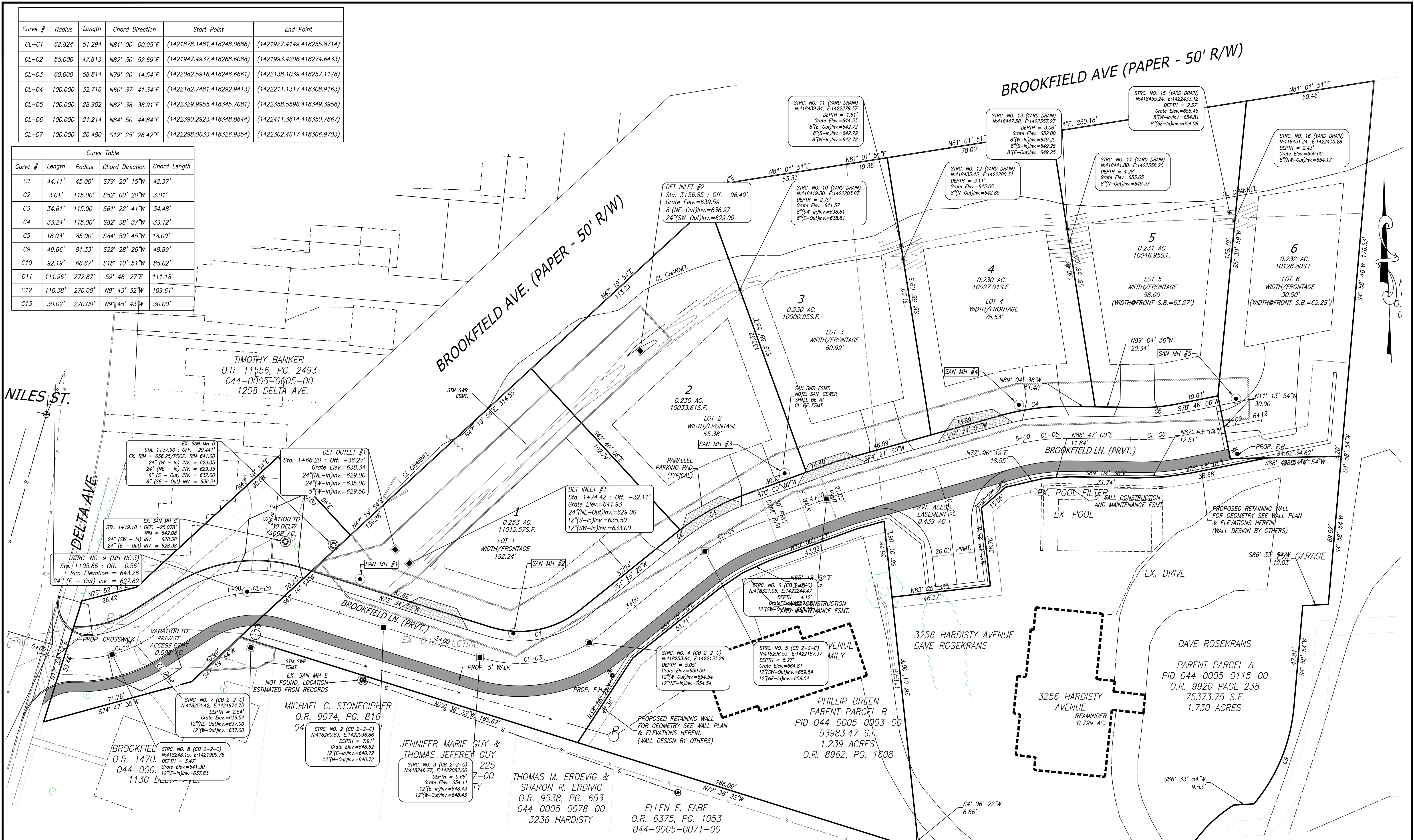
NOTE:
FOR EXISTING STORM AND SANITARY INVERTS, SEE PROFILES SHEETS.



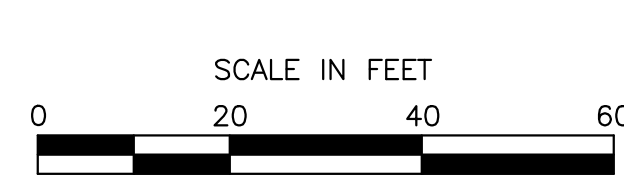
REVISIONS		Brookfield Lane Subdivision Improvement Plans		SHEET NO.
		CLIENT CODE: BROOKFIELD LLC	SHEET TITLE: PLAT 1	4 / 21
		DATE: 11/04/2022		
		SCALE: AS NOTED		
		M.D. WALKER & ASSOCIATES LAND SURVEYORS CIVIL & STRUCTURAL ENGINEERS (513) 284-3232 6809 MAIN ST., #1064 CINCINNATI, OH 45244		
		FILE NAME: BROOKFIELD COMBO - DESIGN AND SHEETS.dwg FILE PATH: 2018 Projects\McGarry Custom Homes\Brookfield Improvement Plan\CAD		

Curve #	Radius	Length	Chord Direction	Start Point	End Point
CL-C1	62.824	51.294	N81° 00' 00.95"E	(1421878.1481,418248.0686)	(1421927.4149,418255.8714)
CL-C2	55.000	47.813	N82° 30' 52.69"E	(1421947.4937,418268.6088)	(1421993.4206,418274.6433)
CL-C3	60.000	58.814	N79° 20' 14.54"E	(1422082.5916,418246.6661)	(1422138.1039,418257.1178)
CL-C4	100.000	32.716	N60° 37' 41.34"E	(1422182.7481,418292.9413)	(1422211.1317,418308.9163)
CL-C5	100.000	28.902	N82° 38' 36.91"E	(1422329.9955,418345.7081)	(1422358.5596,418349.3958)
CL-C6	100.000	21.214	N84° 50' 44.84"E	(1422390.2923,418348.8844)	(1422411.3814,418350.7867)
CL-C7	100.000	20.480	S12° 25' 26.42"E	(1422298.0633,418326.9354)	(1422302.4617,418306.9703)

Curve #	Length	Radius	Chord Direction	Chord Length
C1	44.11'	45.00'	S79° 20' 15"W	42.37'
C2	3.01'	115.00'	S52° 00' 20"W	3.01'
C3	34.61'	115.00'	S61° 22' 41"W	34.48'
C4	33.24'	115.00'	S82° 38' 37"W	33.12'
C5	18.03'	85.00'	S84° 50' 45"W	18.00'
C9	49.66'	81.33'	S22° 28' 26"W	48.89'
C10	92.19'	66.67'	S18° 10' 51"W	85.02'
C11	111.96'	272.87'	S9° 46' 27"E	111.18'
C12	110.38'	270.00'	N9° 43' 32"W	109.61'
C13	30.02'	270.00'	N9° 45' 43"W	30.00'



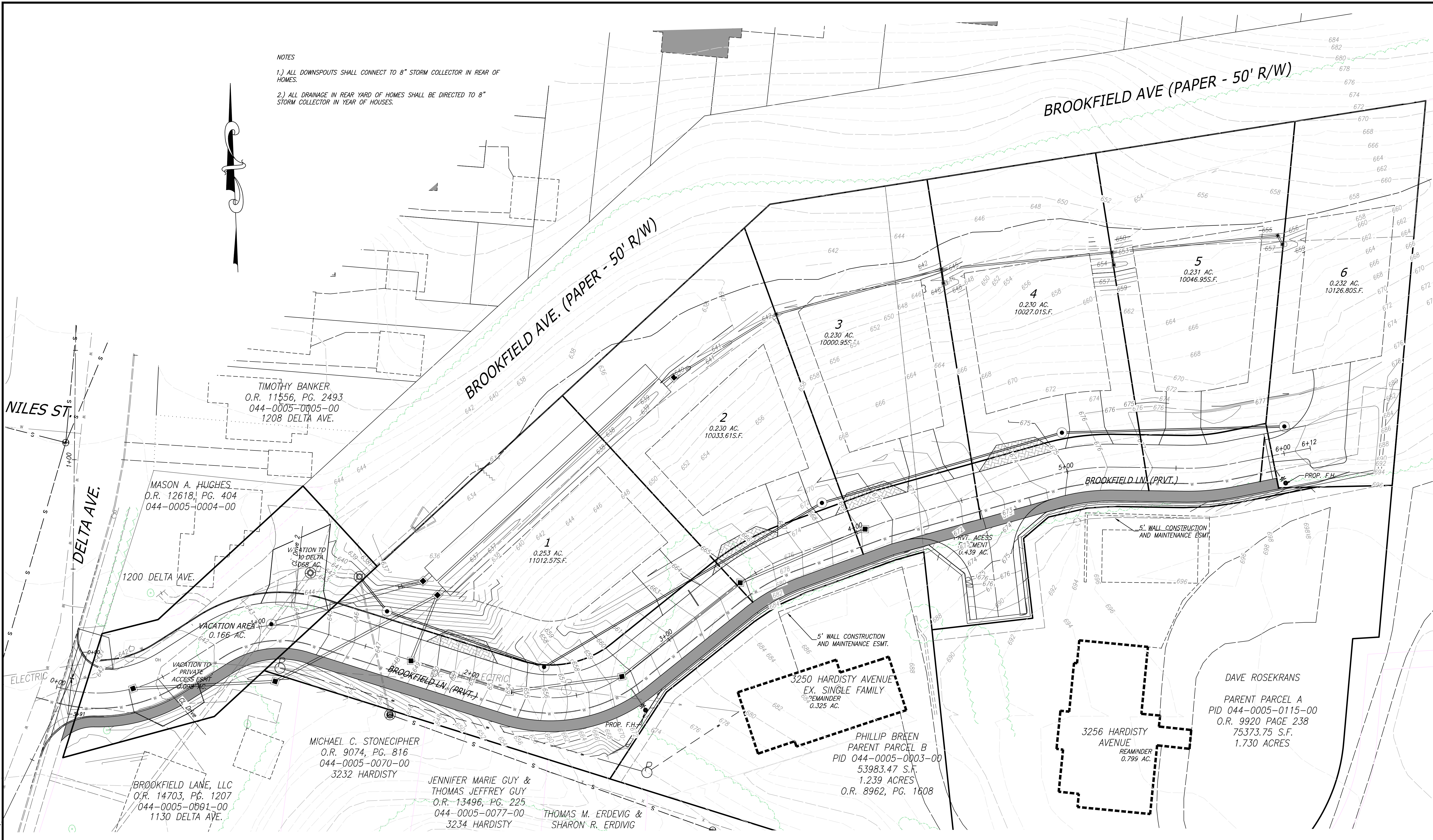
ZONING: DESIGNATION: SF-10
 TYPICAL SETBACKS:
 FRONT: 30 FEET
 REAR: 35 FEET (45 FEET SHOWN)
 SIDES: 10 FEET
 MIN SIZE: 10,000 S.F.
 MIN WIDTH AT SETBACK: 60 FEET
 MIN SINGLE PANHANDLE WIDTH: 15 FEET



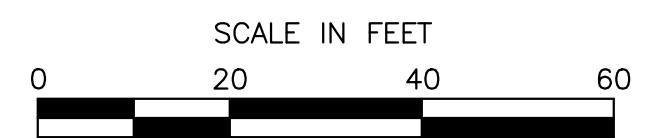
REVISIONS		

Brookfield Lane Subdivision		
Improvement Plans		
CLIENT CODE: BROOKFIELD LLC	SHEET TITLE: PRIVATE STREET LAYOUT	SHEET NO. 6/21
DATE: 11/04/2022	M.D. WALKER & ASSOCIATES LAND SURVEYORS CIVIL & STRUCTURAL ENGINEERS (513)284-3232 6809 MAIN ST. #1064 CINCINNATI, OH 45244	
SCALE: AS NOTED	FILE NAME: BROOKFIELD COMBO - DESIGN AND SHEETS.dwg FILE PATH: 2018 Projects\McGarry Custom Homes\Brookfield Improvement Plan\CAD	

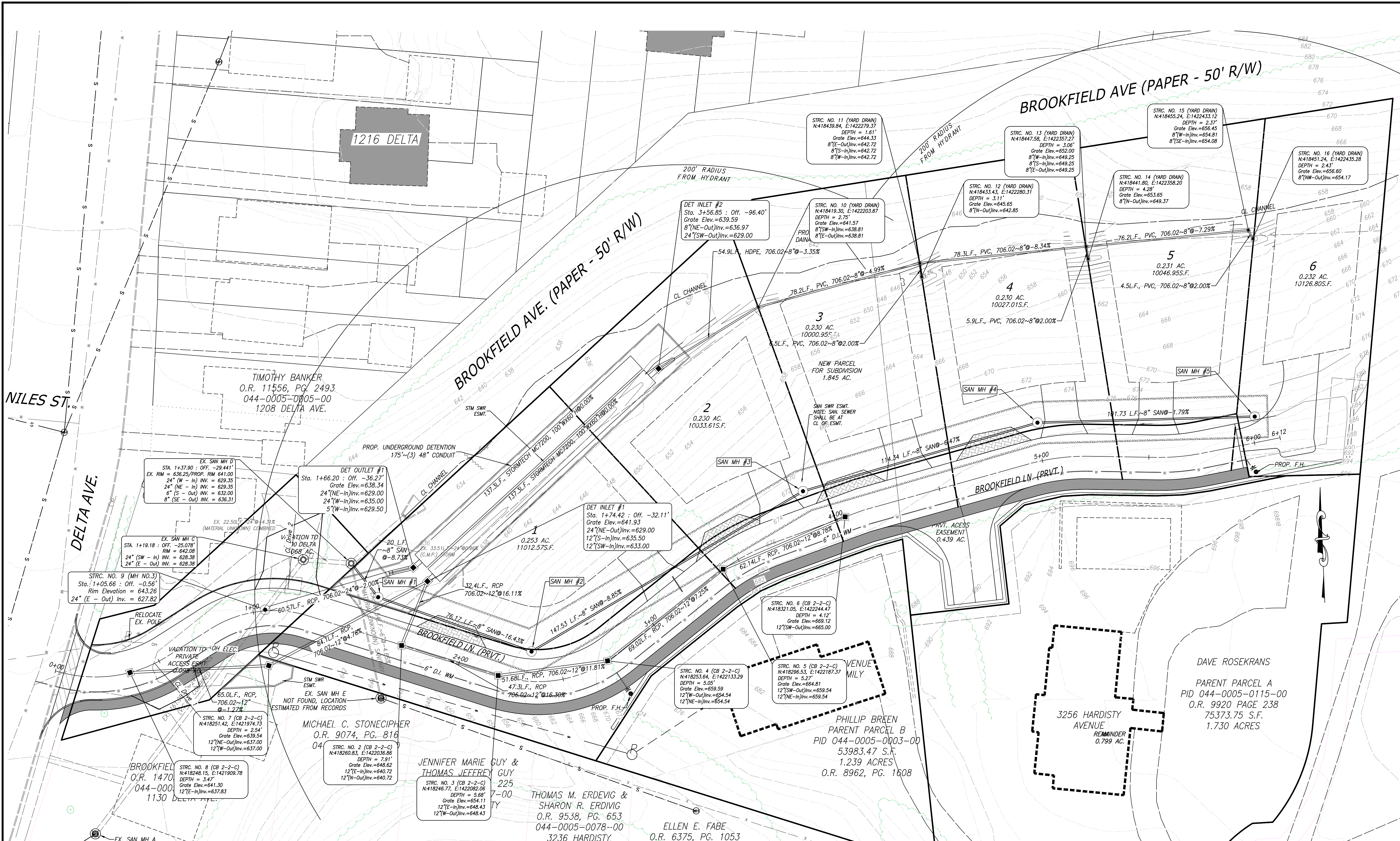
NOTES
 1.) ALL DOWNSPOUTS SHALL CONNECT TO 8" STORM COLLECTOR IN REAR OF HOMES.
 2.) ALL DRAINAGE IN REAR YARD OF HOMES SHALL BE DIRECTED TO 8" STORM COLLECTOR IN REAR OF HOUSES.



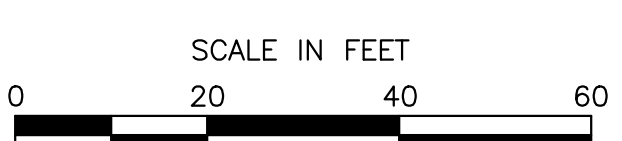
SITE GRADING DATA - BASED UPON 1' GRID
 MAXIMUM CUT FOR PROPOSED SITE GRADING - 19.28 FEET (RETAINING WALL STA. 0+75)
 MAXIMUM FILL FOR PROPOSED SITE GRADING - 5.5 FEET CL STATION 1+30
 MEAN CUT/FILL ACROSS SITE - CUT 1.3 FEET
 LOWEST PROPOSED ELEVATION IN A CUT AREA = 642± (CUT AT THIS LOCATION = 1 FT ±)
 HIGHEST PROPOSED ELEVATION IN A FILL AREA = 688± (FILL AT THIS LOCATION = 0.5 FT ±)
 GRADE ELEVATION CHANGE ACROSS SITE (CUMULATIVE CUT/FILL) = 688 - 642 = 46± FT



REVISIONS	#	Brookfield Lane Subdivision		SHEET NO.
		Improvement Plans		
		CLIENT CODE: BROOKFIELD LLC	SHEET TITLE: GRADING PLAN	
		DATE: 11/04/2022		
		SCALE: AS NOTED	M.D. WALKER & ASSOCIATES LAND SURVEYORS CIVIL & STRUCTURAL ENGINEERS (513) 284-3232 6809 MAIN ST. #1064 CINCINNATI, OH 45244	7/21
FILE NAME: BROOKFIELD COMBO - DESIGN AND SHEETS.dwg FILE PATH: 2018 Projects\McGarry Custom Homes\Brookfield Improvement Plan\CAD				



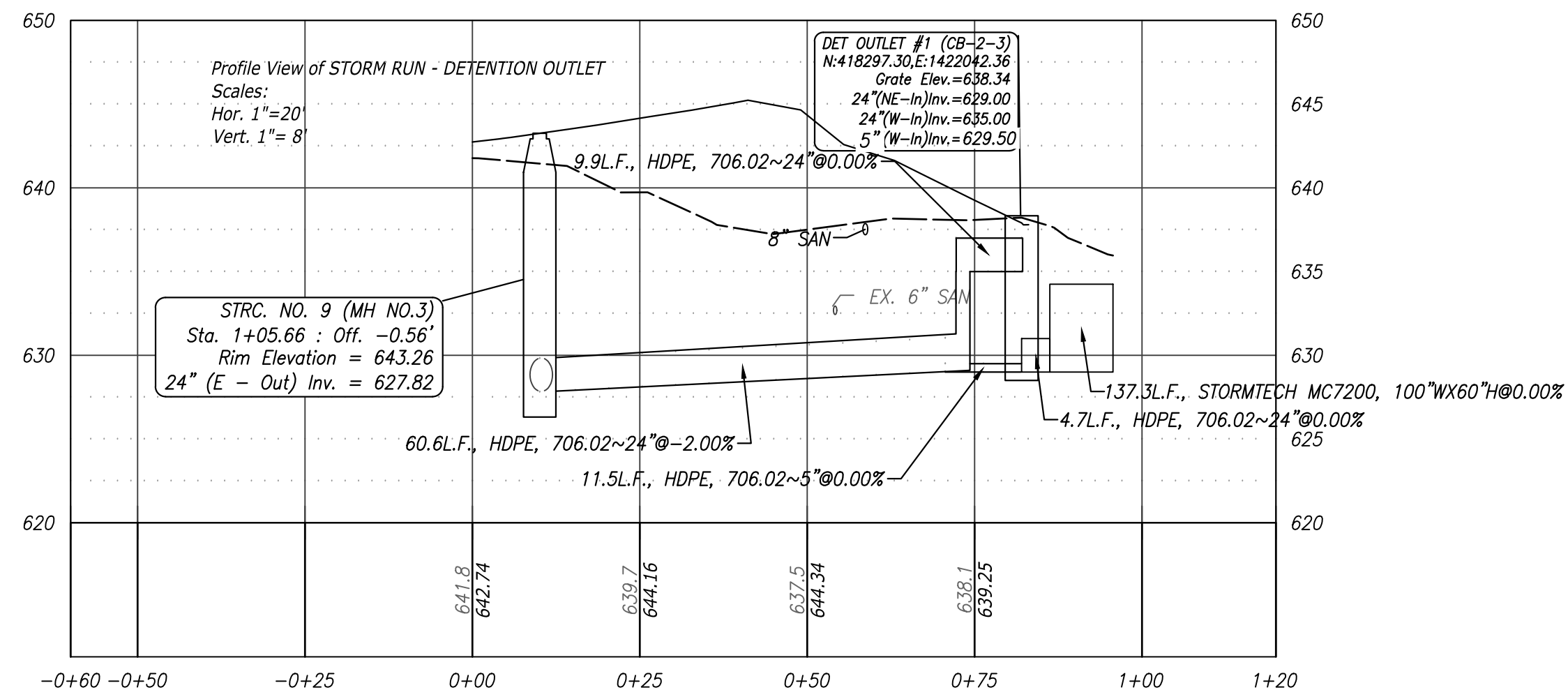
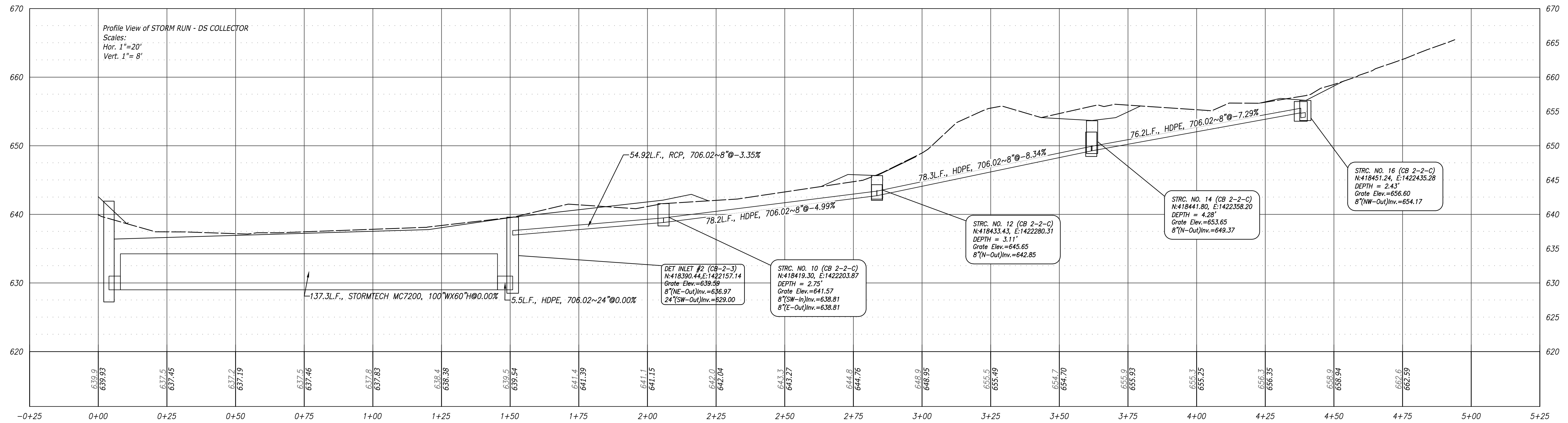
NOTE: CONTRACTOR SHALL INSTALL A TEMPORARY MASONRY BULKHEAD JUST DOWNSTREAM OF SANITARY MH#1.



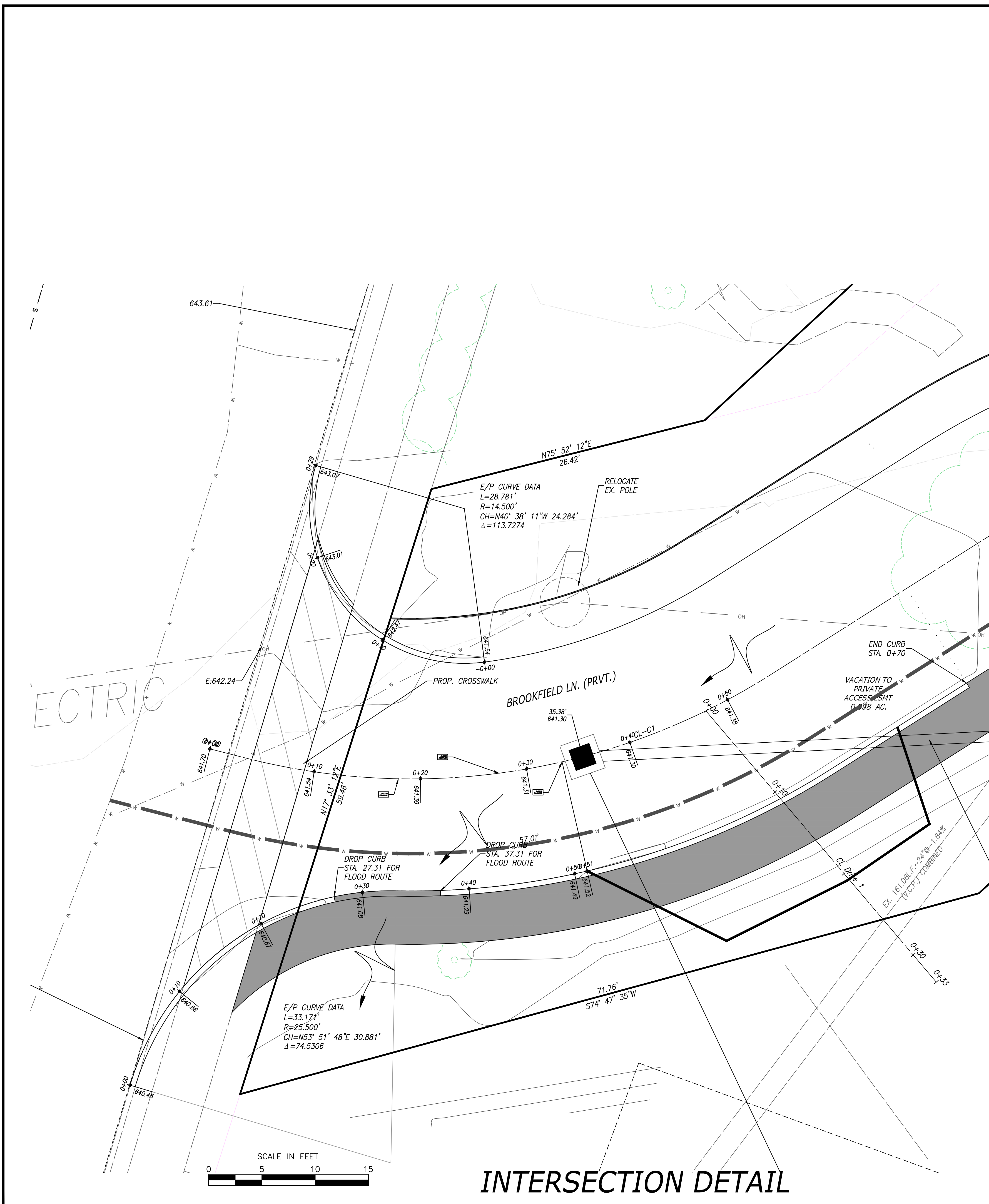
- LOWEST FINISHED FLOOR ELEVATIONS
- LOT 1 - 645.58
 - LOT 2 - 649.04
 - LOT 3 - 650.85
 - LOT 4 - 655.23
 - LOT 5 - 658.92
 - LOT 6 - 658.59

Note: ALL LOTS SHALL SANITARY SERVICE SHALL BE PUMPED TO GRAVITY SEWER IN FRONT OF HOMES

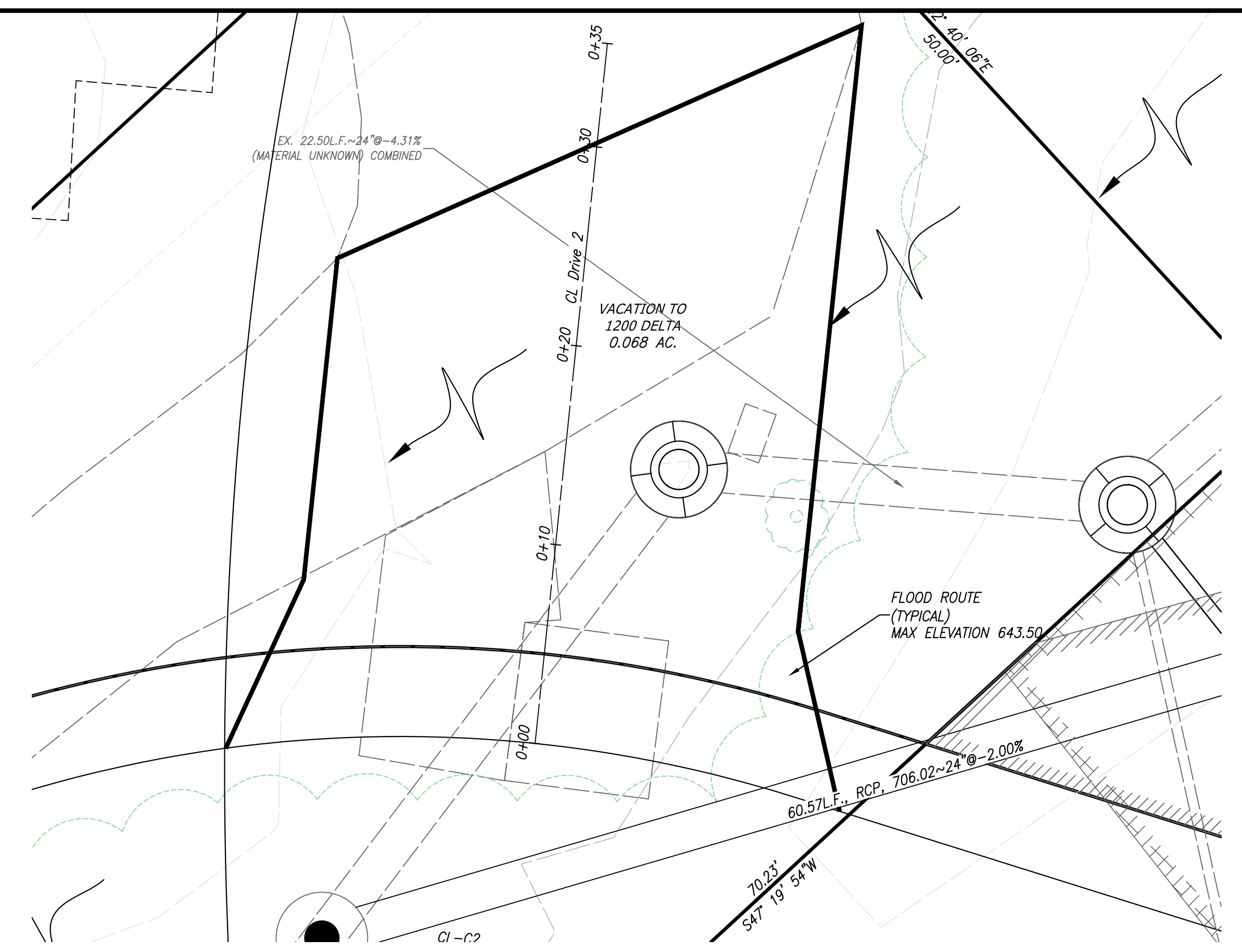
REVISIONS		Brookfield Lane Subdivision		SHEET NO. 8/21
#		CLIENT CODE:	SHEET TITLE:	
		BROOKFIELD LLC	UTILITY PLAN	
		DATE:		
		11/04/2022		
		SCALE:		
		AS NOTED		
		M.D. WALKER & ASSOCIATES LAND SURVEYORS CIVIL & STRUCTURAL ENGINEERS (513)284-3232 6809 MAIN ST. #1064 CINCINNATI, OH 45244		
		FILE NAME: BROOKFIELD COMBO - DESIGN AND SHEETS.dwg FILE PATH: 2018 Projects\McGarry Custom Homes\Brookfield Improvement Plan\CAD		



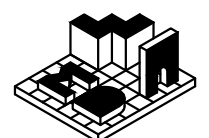
REVISIONS	#	Brookfield Lane Subdivision Improvement Plans		
		CLIENT CODE: BROOKFIELD LLC	SHEET TITLE: STORM SEWER PROFILES - 2	SHEET NO. 11/21
		DATE: 11/04/2022	M.D. WALKER & ASSOCIATES LAND SURVEYORS CIVIL & STRUCTURAL ENGINEERS 8809 MAIN ST. #1064 CINCINNATI, OH 45244	
		SCALE: AS NOTED	FILE NAME: BROOKFIELD COMBO - DESIGN AND SHEETS.dwg FILE PATH: 2018 Projects\McGarey Custom Homes\Brookfield Improvement Plan\CAD	

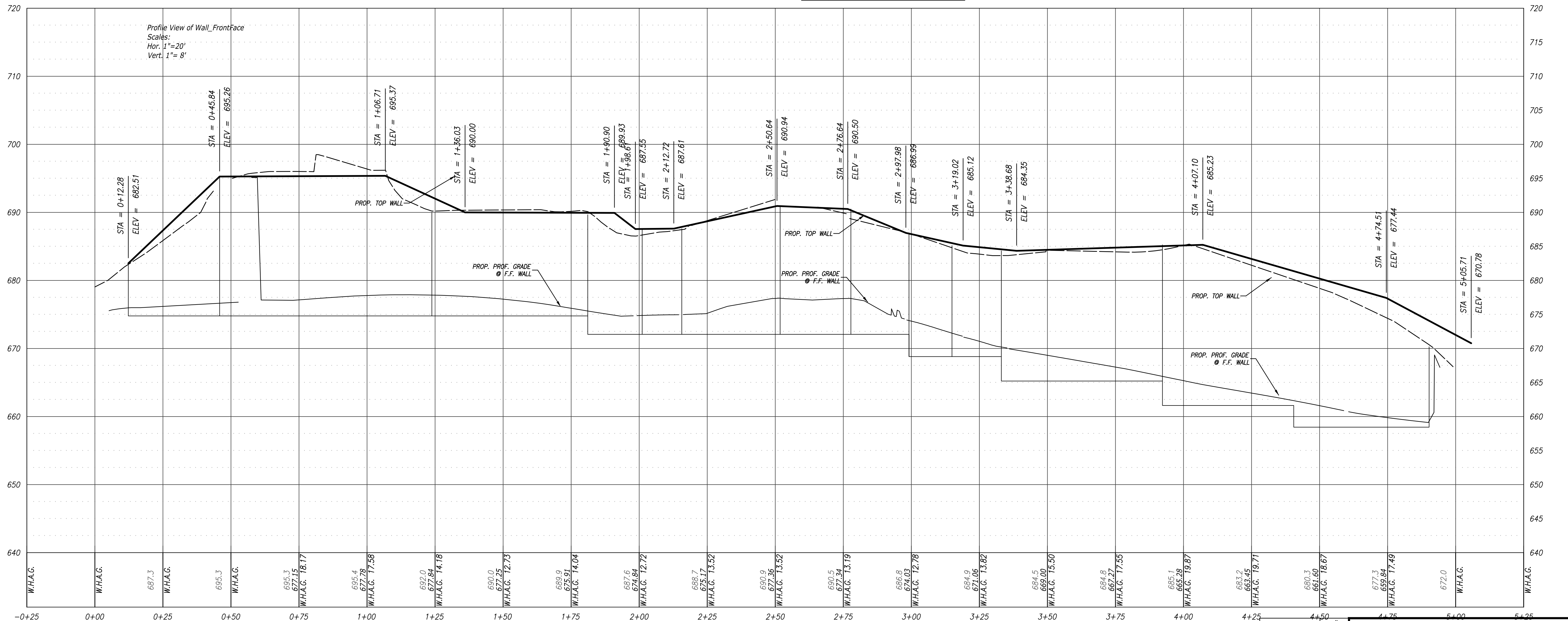
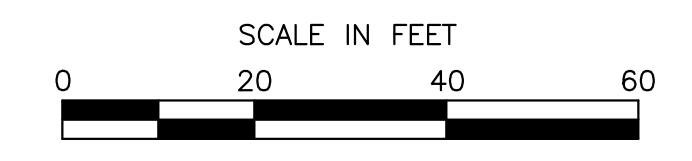
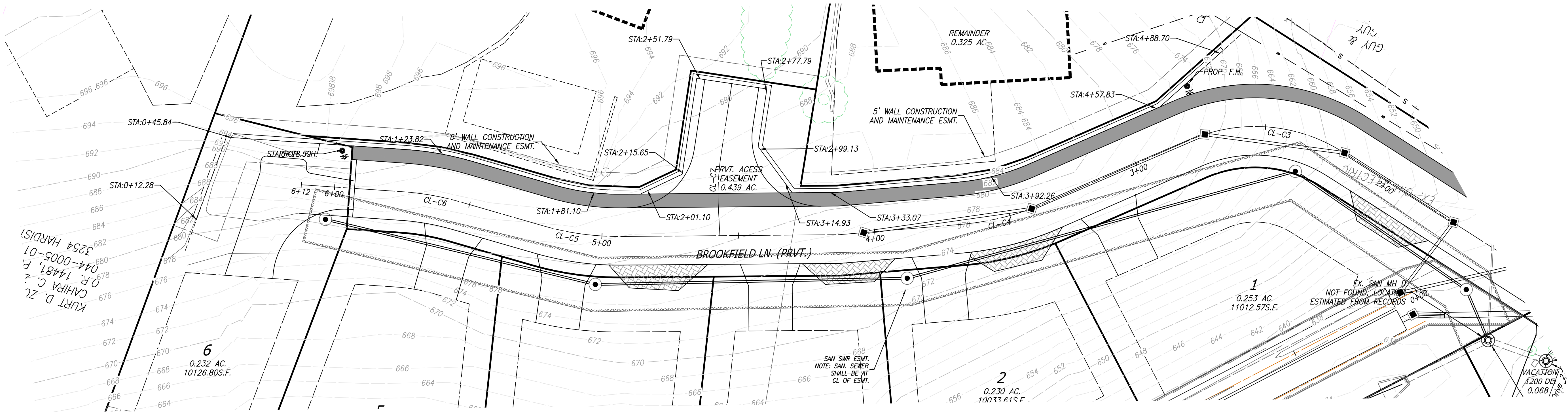


INTERSECTION DETAIL



DRIVE 2 DETAIL

REVISIONS	#	Brookfield Lane Subdivision Improvement Plans		
		CLIENT CODE: BROOKFIELD LLC	SHEET TITLE: INTERSECTION DETAILS	SHEET NO. 12/21
		DATE: 11/04/2022	 M.D. WALKER & ASSOCIATES LAND SURVEYORS CIVIL & STRUCTURAL ENGINEERS (513)284-3232 6809 MAIN ST. #1064 CINCINNATI, OH 45244	
		SCALE: AS NOTED		
<small>FILE NAME: BROOKFIELD COMBO - DESIGN AND SHEETS.dwg FILE PATH: 2018 Projects\McGarey Custom Homes\Brookfield Improvement Plan\CAD</small>				



W.H.A.G. = WALL HEIGHT ABOVE GRADE

REVISIONS		Brookfield Lane Subdivision		SHEET NO.
#	DESCRIPTION	CLIENT CODE:	SHEET TITLE:	
		BROOKFIELD LLC	WALL PLAN AND PROFILE	14/21
		DATE:		
		11/04/2022		
		SCALE:		
		AS NOTED		
		M.D. WALKER & ASSOCIATES LAND SURVEYORS CIVIL & STRUCTURAL ENGINEERS (513)284-3232 6809 MAIN ST. #1064 CINCINNATI, OH 45244		
		FILE NAME: BROOKFIELD COMBO - DESIGN AND SHEETS.dwg FILE PATH: 2018 Projects\McGarry Custom Homes\Brookfield Improvement Plan\CAD		

PROJECT INFORMATION	
ENGINEERED PRODUCT MANAGER	
ADS SALES REP	
PROJECT NO.	



BROOKFIELD LANE CINCINNATI, OH

MC-7200 STORMTECH CHAMBER SPECIFICATIONS

- CHAMBERS SHALL BE STORMTECH MC-7200.
- CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 60x101.
- CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
- THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
- CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 450 LBS/FT². THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418, AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
- ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
 - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
 - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.85 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
 - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
- CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF MC-7200 CHAMBER SYSTEM

- STORMTECH MC-7200 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
- STORMTECH MC-7200 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-7200 CONSTRUCTION GUIDE".
- CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
 - STONE SHOOTER LOCATED OFF THE CHAMBER BED.
 - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
 - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
- THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
- JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
- MAINTAIN MINIMUM - 9" (230 mm) SPACING BETWEEN THE CHAMBER ROWS.
- INLET AND OUTLET MANIFOLDS MUST BE INSERTED A MINIMUM OF 12" (300 mm) INTO CHAMBER END CAPS.
- EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE MEETING THE AASHTO M33 DESIGNATION OF #3 OR #4.
- STONE SHALL BE BROUGHT UP EVENLY AROUND CHAMBERS SO AS NOT TO DISTORT THE CHAMBER SHAPE. STONE DEPTHS SHOULD NEVER DIFFER BY MORE THAN 12" (300 mm) BETWEEN ADJACENT CHAMBER ROWS.
- STONE MUST BE PLACED ON THE TOP CENTER OF THE CHAMBER TO ANCHOR THE CHAMBERS IN PLACE AND PRESERVE ROW SPACING.
- THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIAL BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
- ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

- STORMTECH MC-7200 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-7200 CONSTRUCTION GUIDE".
- THE USE OF EQUIPMENT OVER MC-7200 CHAMBERS IS LIMITED:
 - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
 - NO RUBBER Tired LOADER, DUMP TRUCK, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-7200 CONSTRUCTION GUIDE".
 - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH MC-7200 CONSTRUCTION GUIDE".
- FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY USING THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

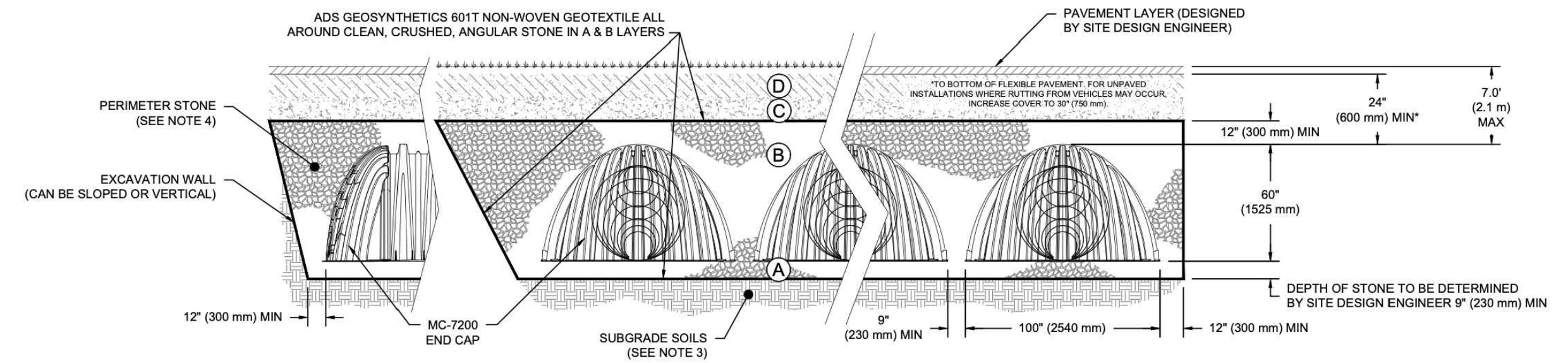
CONTACT STORMTECH AT 1-888-892-2894 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

ACCEPTABLE FILL MATERIALS: STORMTECH MC-7200 CHAMBER SYSTEMS

MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	AASHTO M445 A-1, A-2.4, A-3 OR AASHTO M43 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 24" (600 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 12" (300 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	AASHTO M33 3, 4	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	AASHTO M33 3, 4	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. ^{2,3}

PLEASE NOTE:

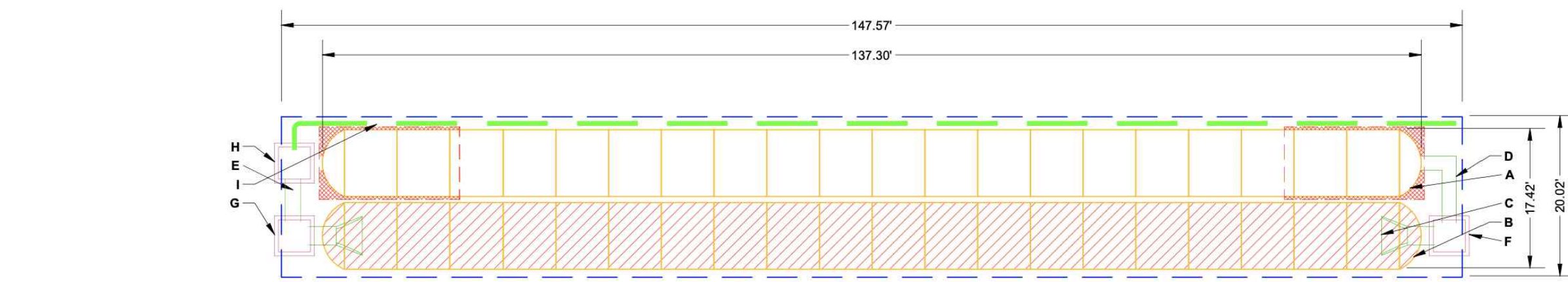
- THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
- STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
- WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
- ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



NOTES:

- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 60x101.
- MC-7200 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
- PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 450 LBS/FT². THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418, AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

PROPOSED LAYOUT	CONCEPTUAL ELEVATIONS	PART TYPE	ITEM ON LAYOUT	DESCRIPTION	INVERT	MAX FLOW	
40	STORMTECH MC-7200 CHAMBERS	MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT UNPAVED):	12.75				
4	STORMTECH MC-7200 END CAPS	MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC):	8.29	PREFABRICATED END CAP	A	18" TOP PARTIAL CUT END CAP, PART# MC7200EP181 / TYP OF ALL 18" TOP CONNECTIONS	29.36'
12	STONE ABOVE (IN)	MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC):	7.75	PREFABRICATED END CAP	B	24" BOTTOM PARTIAL CUT END CAP, PART# MC7200EP24B / TYP OF ALL 24" BOTTOM CONNECTIONS AND ISOLATOR PLUS ROWS	2.26'
9	STONE BELOW (IN)	MINIMUM ALLOWABLE GRADE (TOP OF RIGID CONCRETE PAVEMENT):	17.75	FLAMP	C	INSTALL FLAMP ON 24" ACCESS PIPE / PART# MC720024RAMP (TYP 2 PLACES)	
40	STONE VOID	MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT):	7.75	MANIFOLD	D	18" x 18" TOP MANIFOLD, ADS N-12	29.36'
12292	INSTALLED SYSTEM VOLUME (CF) (PERIMETER STONE INCLUDED)	TOP OF MC-7200 CHAMBER:	6.75	MANIFOLD	E	18" x 18" TOP MANIFOLD, ADS N-12	29.36'
	(COVER STONE INCLUDED)	18" x 18" TOP MANIFOLD INVERT:	3.20	CONCRETE STRUCTURE	F	(DESIGN BY ENGINEER / PROVIDED BY OTHERS)	5.5 CFS IN
	(BASE STONE INCLUDED)	18" x 18" TOP MANIFOLD INVERT:	3.20	CONCRETE STRUCTURE	G	(DESIGN BY ENGINEER / PROVIDED BY OTHERS)	5.5 CFS IN
2954	SYSTEM AREA (SF)	24" ISOLATOR ROW PLUS INVERT:	0.94	CONCRETE STRUCTURE	H	(DESIGN BY ENGINEER / PROVIDED BY OTHERS)	4.0 CFS OUT
335.2	SYSTEM PERIMETER (ft)	24" ISOLATOR ROW PLUS INVERT:	0.94	CONCRETE STRUCTURE	H	(DESIGN BY ENGINEER / PROVIDED BY OTHERS)	4.0 CFS OUT
		18" BOTTOM CONNECTION INVERT:	0.91	UNDERDRAIN	I	18" ADS N-12 DUAL WALL PERFORATED HDPE UNDERDRAIN	
		BOTTOM OF MC-7200 CHAMBER:	0.78				
		UNDERDRAIN INVERT:	0.91				
		BOTTOM OF STONE:	0.00				



- ISOLATOR ROW PLUS (SEE DETAIL)
- PLACE MINIMUM 17.5' OF ADSPLUS175 WOVEN GEOTEXTILE OVER BEDDING STONE AND UNDERNEATH CHAMBER FEET FOR SCOUR PROTECTION AT ALL CHAMBER INLET ROWS.
- BED LIMITS

NOTES

- MANIFOLD SIZE TO BE DETERMINED BY SITE DESIGN ENGINEER. SEE TECH NOTE #6.32 FOR MANIFOLD SIZING GUIDANCE.
- DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL PIPE TO STANDARD MANIFOLD COMPONENTS IN THE FIELD.
- THIS CHAMBER SYSTEM WAS DESIGNED WITHOUT SITE-SPECIFIC INFORMATION ON SOIL CONDITIONS OR BEARING CAPACITY. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR DETERMINING THE SUITABILITY OF THE SOIL AND PROVIDING THE BEARING CAPACITY OF THE IN-SITU SOILS. THE BASE STONE DEPTH MAY BE INCREASED OR DECREASED ONCE THIS INFORMATION IS PROVIDED.
- NOT FOR CONSTRUCTION:** THIS LAYOUT IS FOR DIMENSIONAL PURPOSES ONLY TO PROVE CONCEPT & THE REQUIRED STORAGE VOLUME CAN BE ACHIEVED ON SITE.

BROOKFIELD LANE
CINCINNATI, OH

DATE: _____ DRAWN: KHI
PROJECT #: _____ CHECKED: NIA

StormTech®
Chamber System

1640 TREEMAN BLVD
CINCINNATI, OH 45226
1-800-752-7473

SHEET
2 OF 5

REVISIONS	#	DESCRIPTION

Brookfield Lane Subdivision
Improvement Plans

CLIENT CODE: **BROOKFIELD LLC**

DATE: **11/04/2022**

SCALE: **AS NOTED**

FILE NAME: **BROOKFIELD COMBO - DESIGN AND SHEETS.dwg**

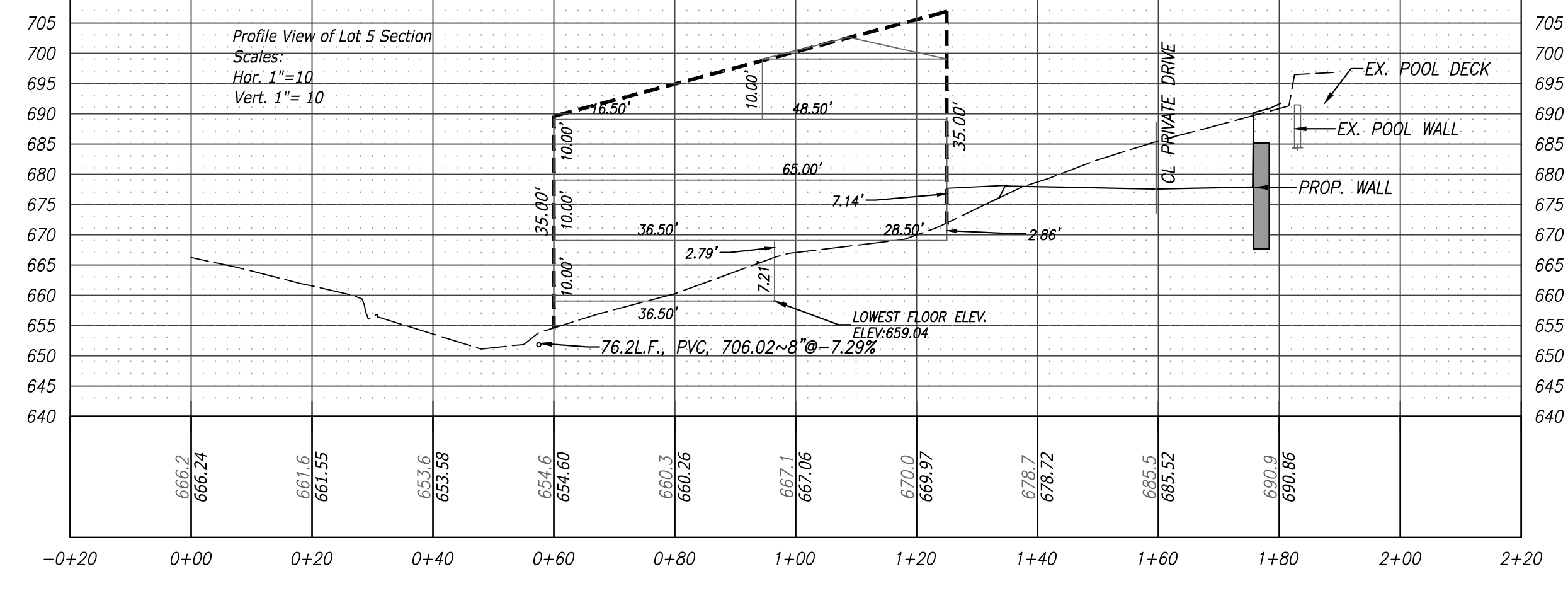
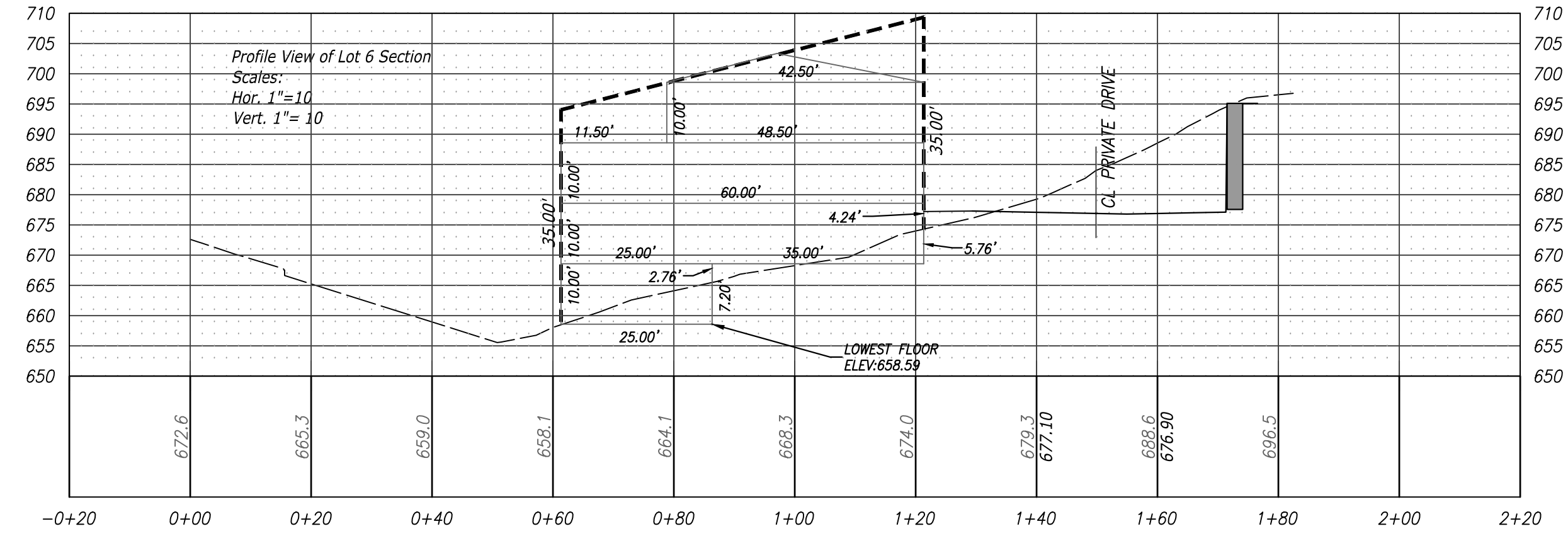
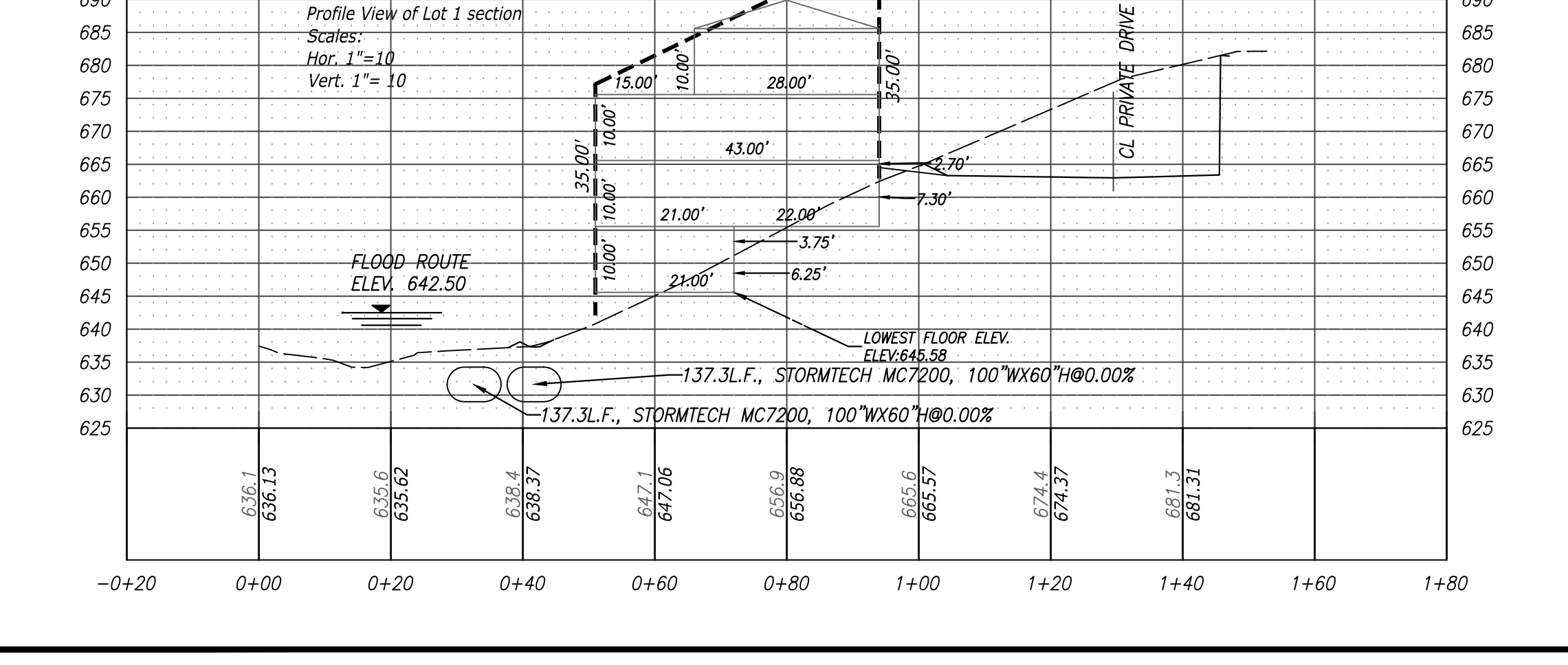
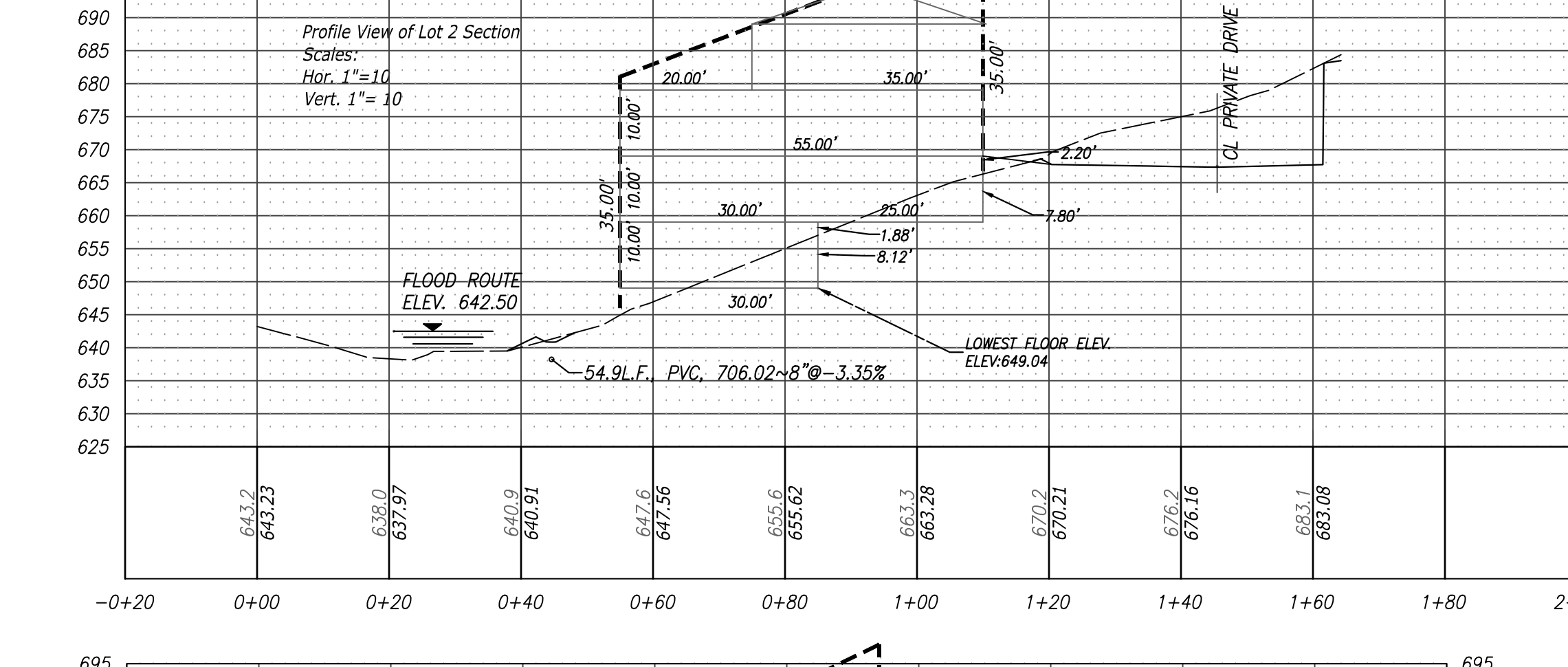
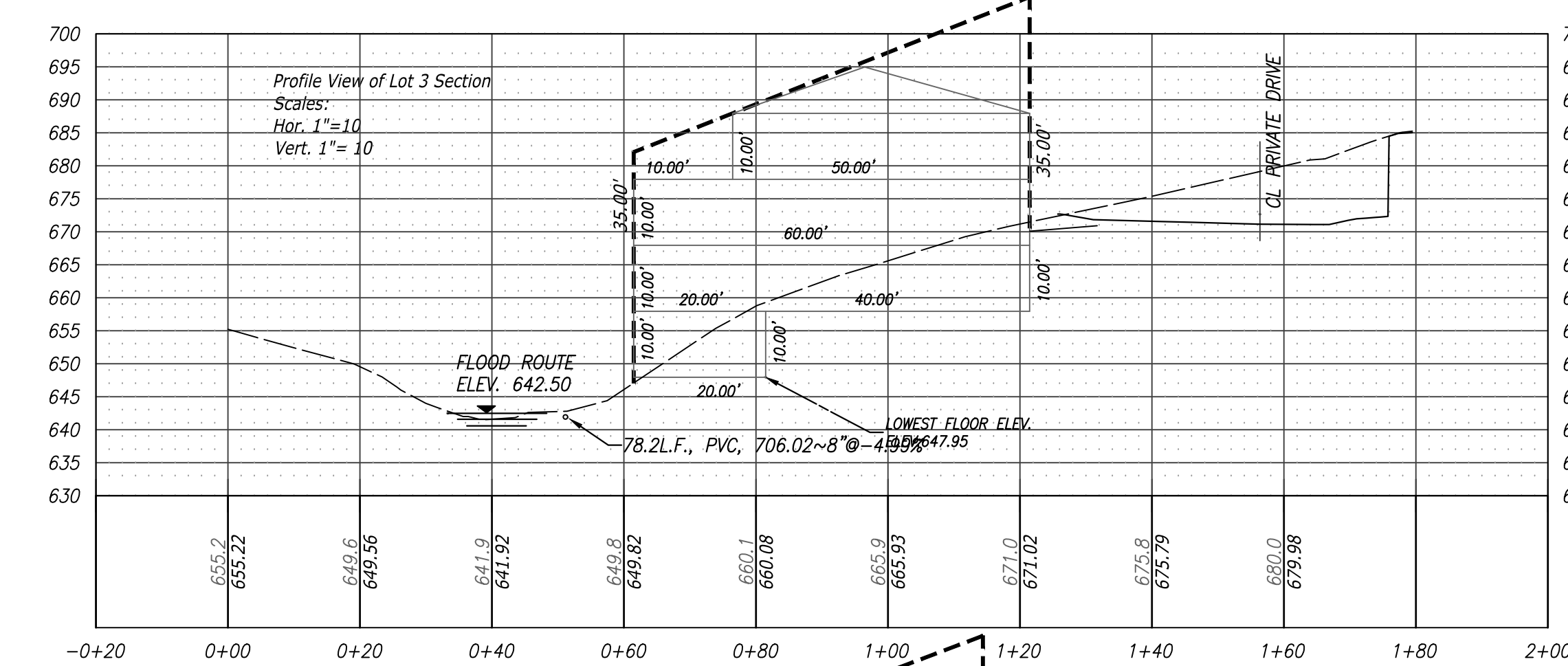
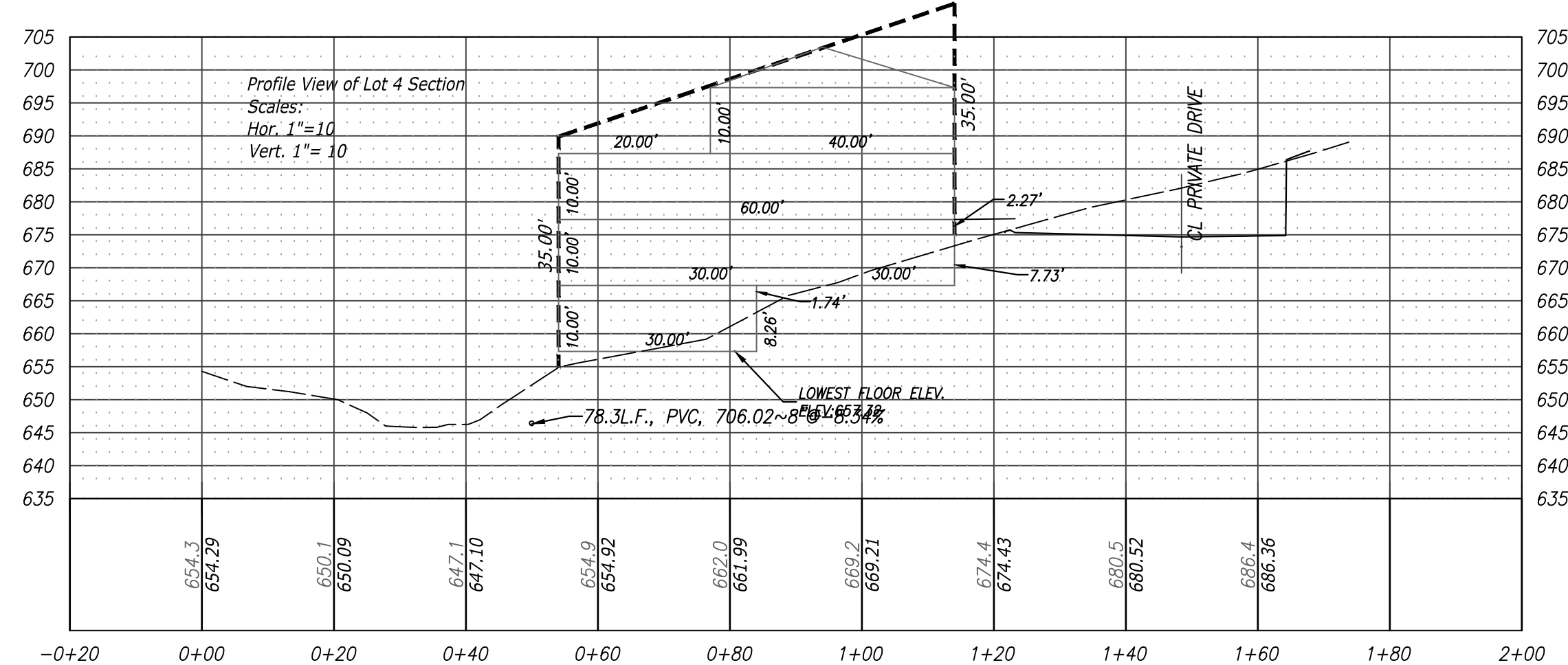
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SHEET TITLE:
DETENTION DETAILS - 1

SHEET NO.
15 / 21

M.D. WALKER & ASSOCIATES
LAND SURVEYORS | CIVIL & STRUCTURAL ENGINEERS
(513) 284-3232
8809 MAIN ST., #1064
CINCINNATI, OH 45244

BUILDING HEIGHTS
 NOTE: THE MAXIMUM BUILDING ENVELOPE FOR EACH LOT HAS BEEN CALCULATED AT THE DIRECTION OF CITY STAFF AND SHOWN ON THE BELOW CROSS SECTIONS AS HEAVY DASHED LINES. PROPOSED BUILDING HEIGHTS ARE PROPOSED TO BE CONSTRUCTED TO FIT WITHIN THE MAXIMUM BUILDING ENVELOPE ON ALL SIX (6) LOTS. I.E. DEVIATIONS FROM THE MAXIMUM BUILDING ENVELOPE WITH RESPECT TO HEIGHT ARE NO LONGER BEING REQUESTED AS OF 7/25/2022.

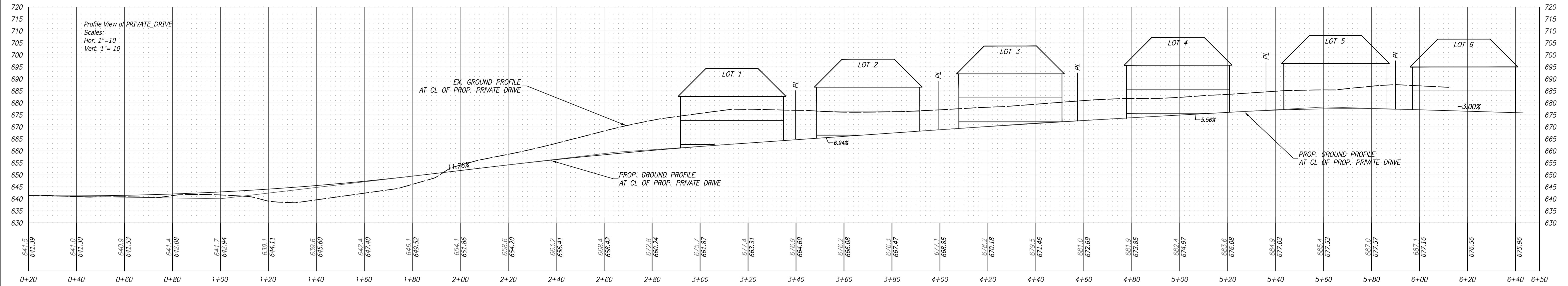


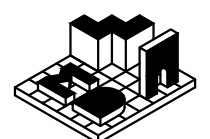
HILLSIDE/ZONING INFORMATION

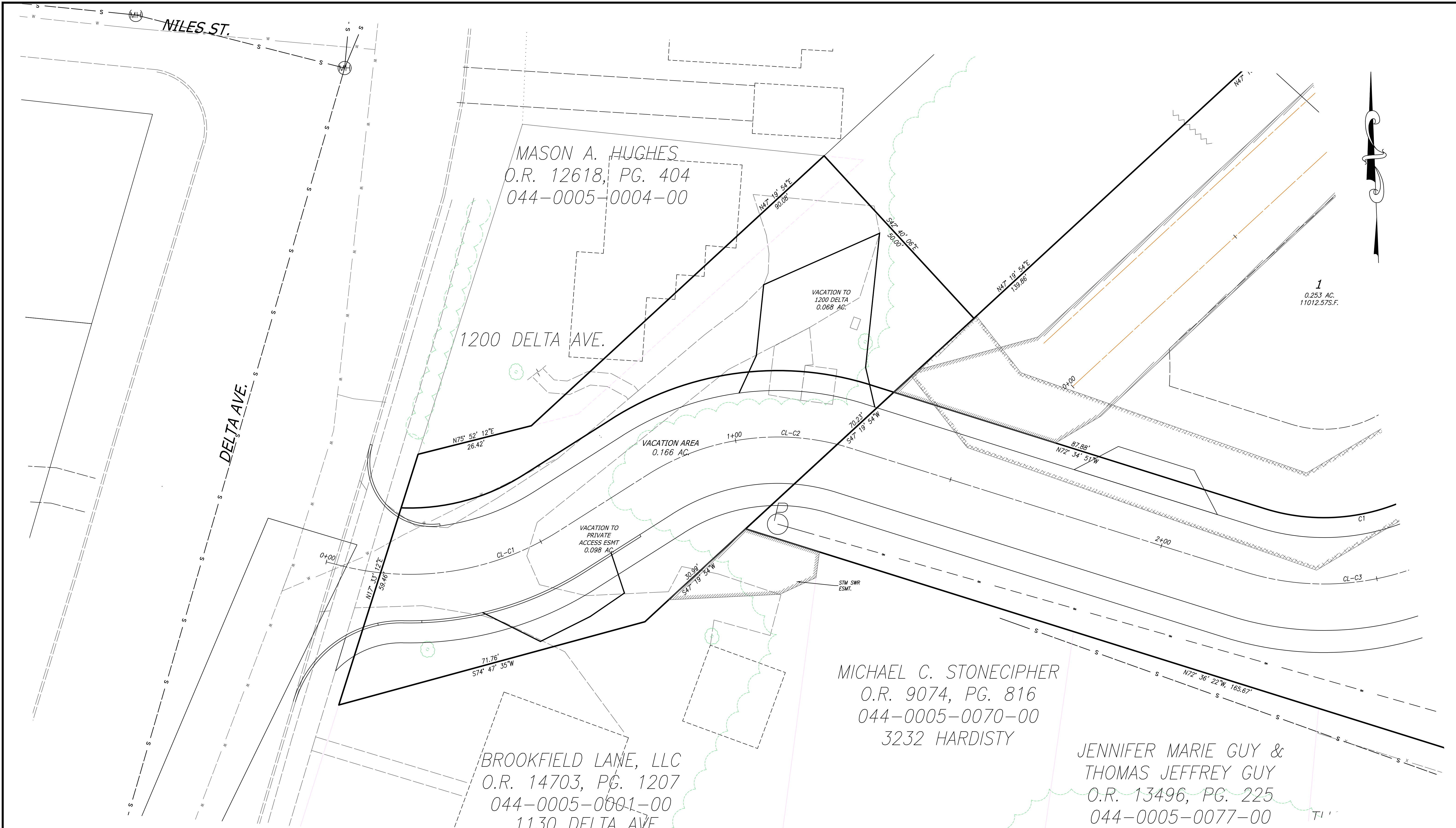
- NOTES:
 1.) ALL LOTS WILL REQUIRE CUTS AND FILLS SHOWN HEREON THESE SECTIONS.
 2.) THE SITE REQUIRES RETAINING WALL HEIGHTS GREATER THAN 8', THEREFORE A VARIANCE IS BEING REQUESTED FOR THE RETAINING WALL HEIGHTS AS SHOWN ON THESE PLANS.
 3.) IT IS THE INTENT OF THIS PROPOSAL FOR THE APPROVAL FOR THE CONSTRUCTION OF SINGLE FAMILY HOMES. ALL HOMES SHALL BE CONSTRUCTED WITHIN THE PROPOSED SETBACKS AS SHOWN ON THIS PLAN SET.

REVISIONS	#	Brookfield Lane Subdivision	
		Improvement Plans	
		CLIENT CODE: BROOKFIELD LLC	SHEET TITLE: SITE CROSS SECTIONS
		DATE: 11/04/2022	SHEET NO. 17/21
		SCALE: AS NOTED	M.D. WALKER & ASSOCIATES LAND SURVEYORS CIVIL & STRUCTURAL ENGINEERS (513)284-3232 6809 MAIN ST., #1064 CINCINNATI, OH 45244
FILE NAME: BROOKFIELD COMBO - DESIGN AND SHEETS.dwg			
FILE PATH: 2018 Projects\McGarry Custom Homes\Brookfield Improvement Plan\CAD			

NOTE: HOUSES SHOWN ARE PRELIMINARY. HOUSES SHOWN ARE BASED UPON HEIGHTS AND DIMENSIONS SHOWN ON PREVIOUS SHEET (SHEET 14/14).



REVISIONS	#	Brookfield Lane Subdivision Improvement Plans		
		CLIENT CODE: BROOKFIELD LLC	SHEET TITLE: FRONT PROFILE ELEVATION OF HOUSES	SHEET NO.
		DATE: 11/04/2022		18/21
		SCALE: AS NOTED		
		 M.D. WALKER & ASSOCIATES LAND SURVEYORS CIVIL & STRUCTURAL ENGINEERS (513)284-3232 6809 MAIN ST. #1064 CINCINNATI, OH 45244		
		FILE NAME: BROOKFIELD COMBO - DESIGN AND SHEETS.dwg FILE PATH: 2018 Projects\McGarey Custom Homes\Brookfield Improvement Plan\CAD		



MASON A. HUGHES
 O.R. 12618, PG. 404
 044-0005-0004-00

1200 DELTA AVE.

VACATION TO
 1200 DELTA
 0.068 AC.

VACATION AREA
 0.166 AC.

VACATION TO
 PRIVATE
 ACCESS ESMT
 0.098 AC.

MICHAEL C. STONECIPHER
 O.R. 9074, PG. 816
 044-0005-0070-00
 3232 HARDISTY

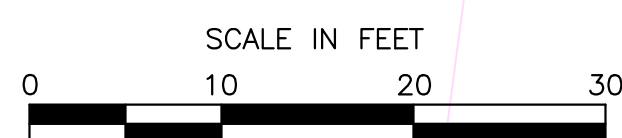
BROOKFIELD LANE, LLC
 O.R. 14703, PG. 1207
 044-0005-0001-00
 1130 DELTA AVE.

JENNIFER MARIE GUY &
 THOMAS JEFFREY GUY
 O.R. 13496, PG. 225
 044-0005-0077-00
 3234 HARDISTY

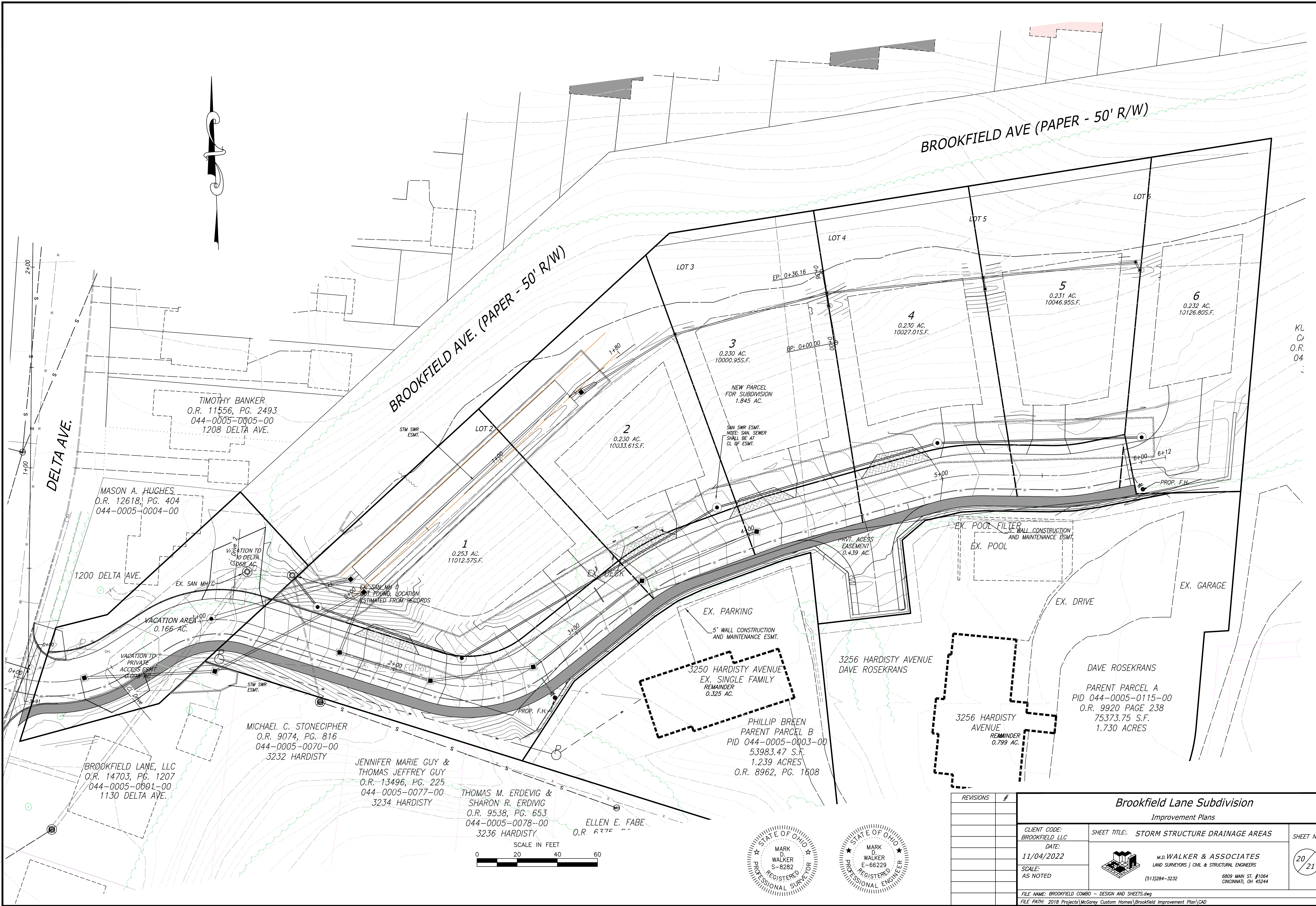
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 0.253 AC.
 11012.575.F.

CENTERLINE CURVE DATA

CURVE #	P.I. STATION	RADIUS	DELTA ANGLE	ARC LENGTH	CHORD DISTANCE	CHORD DIRECTION	START POINT	END POINT
CL-C1	0+30.57	62.82	46°46'49"	51.29	49.88	N81° 00' 00.95"E	(1421878.15,418248.07)	(1421927.41,418255.87)
CL-C2	1+04.00	55.00	49°48'32"	47.81	46.32	N82° 30' 52.69"E	(1421947.49,418268.67)	(1421993.42,418274.64)
CL-C3	2+51.75	60.00	56°09'48"	58.81	56.49	N79° 20' 14.54"E	(1422082.59,418246.67)	(1422138.10,418257.12)
CL-C4	3+52.30	100.00	18°44'42"	32.72	32.57	N60° 37' 41.34"E	(1422182.75,418292.94)	(1422211.13,418308.92)
CL-C5	5+07.57	100.00	16°33'34"	28.90	28.80	N82° 38' 36.91"E	(1422330.00,418345.71)	(1422358.56,418349.40)
CL-C6	5+64.31	100.00	12°09'18"	21.21	21.17	N84° 50' 44.84"E	(1422390.29,418348.88)	(1422411.38,418350.79)
CL-C7	0+19.76	100.00	11°44'02"	20.48	20.44	S12° 25' 26.42"E	(1422298.06,418326.94)	(1422302.46,418306.97)

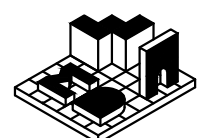


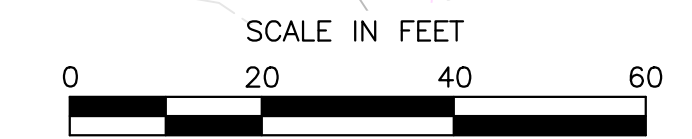
REVISIONS		Brookfield Lane Subdivision		SHEET NO. 19/21
		Improvement Plans		
CLIENT CODE: BROOKFIELD LLC	DATE: 11/04/2022	SHEET TITLE: RIGHT OF WAY DEDICATION		
SCALE: AS NOTED				
<small>FILE NAME: BROOKFIELD COMBO - DESIGN AND SHEETS.dwg FILE PATH: 2018 Projects\McGarry Custom Homes\Brookfield Improvement Plan\CAD</small>				

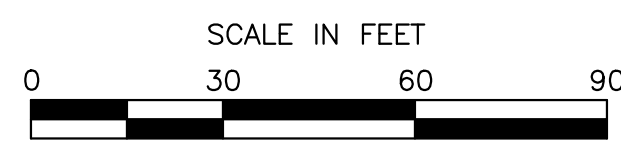
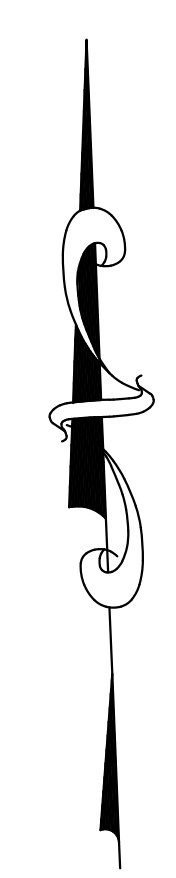
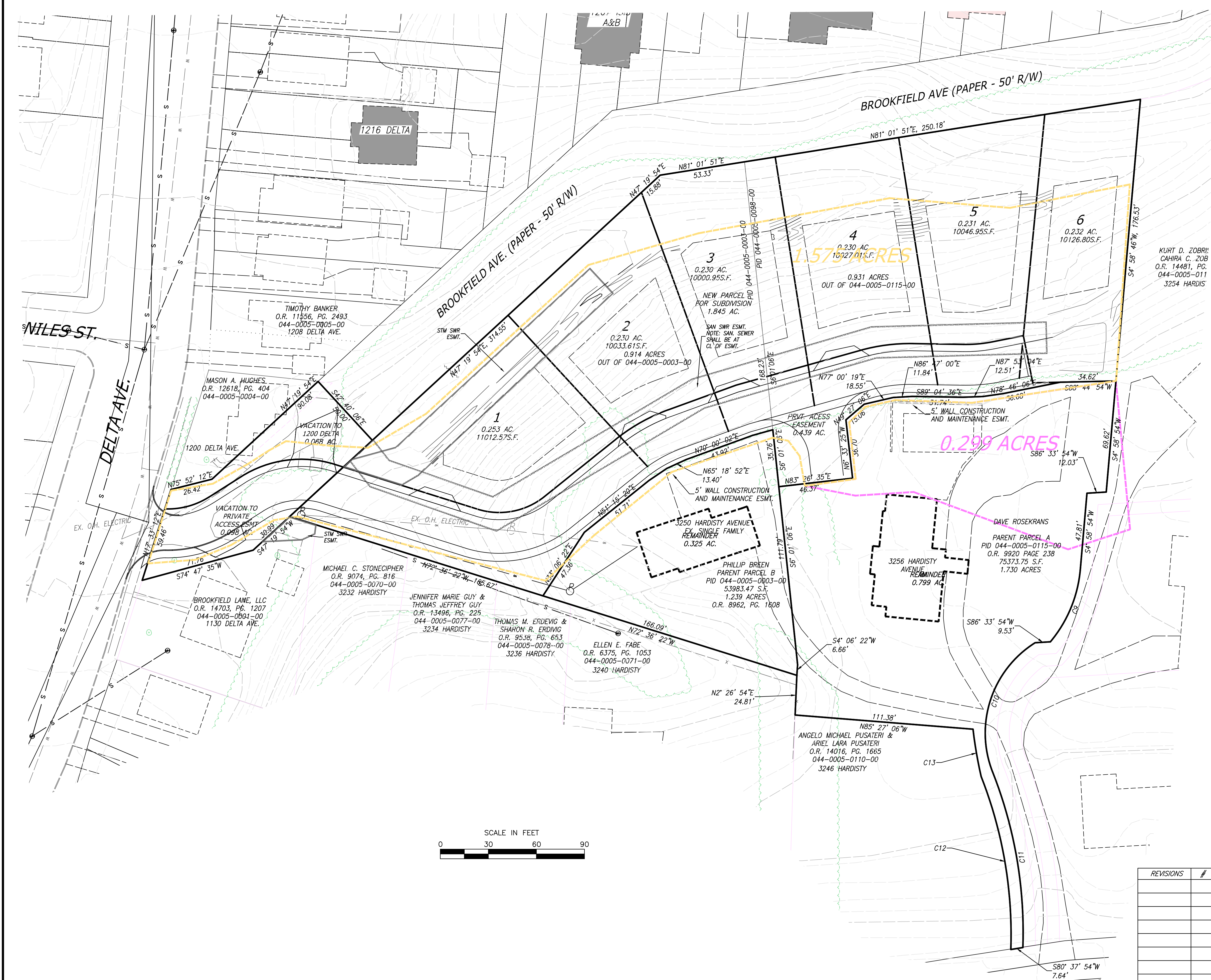


KL
C/A
O.R.
04

REVISIONS		#

Brookfield Lane Subdivision		
Improvement Plans		
CLIENT CODE: BROOKFIELD LLC	SHEET TITLE: STORM STRUCTURE DRAINAGE AREAS	SHEET NO.
DATE: 11/04/2022		20/21
SCALE: AS NOTED	 M.D. WALKER & ASSOCIATES LAND SURVEYORS CIVIL & STRUCTURAL ENGINEERS (513)284-3232 6809 MAIN ST. #1064 CINCINNATI, OH 45244	
<small>FILE NAME: BROOKFIELD COMBO - DESIGN AND SHEETS.dwg FILE PATH: 2018 Projects\McGarry Custom Homes\Brookfield Improvement Plan\CAD</small>		





REVISIONS	#

Brookfield Lane Subdivision		
Improvement Plans		
CLIENT CODE: BROOKFIELD LLC	SHEET TITLE: SITE DRAINAGE AREAS	SHEET NO. 21 / 21
DATE: 11/04/2022	M.D. WALKER & ASSOCIATES LAND SURVEYORS CIVIL & STRUCTURAL ENGINEERS (513)284-3232	6809 MAIN ST. #1064 CINCINNATI, OH 45244
SCALE: AS NOTED	<small>FILE NAME: BROOKFIELD COMBO - DESIGN AND SHEETS.dwg FILE PATH: 2018 Projects\McGarry Custom Homes\Brookfield Improvement Plan\CAD</small>	

