APPEAL OF APPORTIONMENT DETERMINATION TO THE CITY PLAN COMMISSION

Plat S178-288	§	City of Dallas
Preliminary Plat Approval (September 6, 2018)	\$ \$ \$ \$ \$	Date: February 6, 2023
Pre-Final Plat Approval (April 21, 2022)	<i>\$\text{\tint{\text{\tin}\text{\tein}\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\tex{\tex</i>	

CITY OF DALLAS'S POSITION STATEMENT WITH SUPPORTING EVIDENCE AND AUTHORITY

To the Honorable City Plan Commission ("CPC"):

The City of Dallas ("City") submits this position statement, together with the attached evidence and the included authority, for consideration by the CPC regarding the appeal requested by Adrian Cole of Shady Hollow Development LLC ("Developer") as to the City's apportionment determination (the "Apportionment Determination") described more fully below.

I. INTRODUCTION

This appeal arises from Developer's misunderstanding and denial of its obligations with regard to the proposed development of the Shady Hollow Estates subdivision (the "Proposed Development") on low-lying property that currently has no paved roads and no water, wastewater, or drainage facilities. Although Developer acknowledges the need to construct paved roads so that residents and first-responders will be able to access the Proposed Development, Developer speculates that paving the road on the western edge of the Proposed Development would somehow provide only minimal benefit to the eventual residents of the subdivision. Similarly, while acknowledging the Proposed Development's need for water and wastewater mains, Developer incongruously argues that the City should pay for this critical infrastructure because other existing structures – which already have their own water and wastewater connections – would somehow benefit from infrastructure necessitated solely by the Proposed Development. Moreover, the City

has agreed to contribute approximately \$95,000 to construct offsite water and wastewater facilities that would benefit the Proposed Development. Finally, despite knowing from the outset that a detention pond would likely be necessary to adequately address stormwater drainage for the Proposed Development, Developer suggests that this requirement is purely a function of conforming to standards in the City's 2019 pavement and drainage manual, rather than those of the 1993 manual. However, analysis of plans for the Proposed Development under both the 1993 and 2019 standards confirms the need for a detention pond, and Developer confirmed as much in its March 2022 pre-final plat, which explicitly designates 3.1 acres of land as a detention area and dedicates easements for drainage and access. Simply put, Developer is asking the City to pay for improvements that are necessitated by, and primarily for the benefit of, the Proposed Development. This request lacks a basis in law or fact, and therefore, Developer's appeal of the apportionment for the Proposed Development should be denied.

II. FACTUAL AND PROCEDURAL BACKGROUND

On September 7, 2018, CPC conditionally approved the preliminary plat of Shady Hollow Estates Addition. *See* Ex. A ("CPC Letter"). The approval-conditions required the developer to submit a full set of civil engineering plans by a licensed professional engineer for approval by the City, and the approval-conditions specifically notified the developer that "[d]etention may be required if the capacity of available outfall is not adequate to carry the developed runoff." *Id.* ¶ 12 (citing Section 51A-8.611(e)). On November 6, 2019, the City received civil engineering plans for Shady Hollow Estates (the "2019 Plans"). In the City's December 19, 2019 response to the First Development Plans ("2019 Review"), the City specifically (A) notified the development engineer of a proposed residential subdivision being developed downstream of Shady Hollow Estates, (B)

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¹ The developer for the First Plan was KPA Consulting, Inc., rather than Shady Hollow Development LLC.

requested that the development engineer confirm the drainage capacity of the existing outfalls for Shady Hollow Estates to determine whether detention would be required; and (C) submit a drainage study on whether the Shady Hollow Estates development would adversely affect the downstream subdivision. *See* Ex. B, 2019 Review, ¶¶ 46, 48, 64-65, 89.

On March 22, 2022, Developer submitted a pre-final plat for the Proposed Development that would include 73 individual lots in the Shady Hollow Estates subdivision. *See* Ex. C ("Pre-Final Plat"). Although not inside the Proposed Development, the Pre-Final Plat reflects Los Angeles Boulevard ² as the western thoroughfare providing the only access point for eight lots and connecting to two interior streets. In other words, more than half of the lots in the Proposed Development would be accessible primarily or solely via Los Angeles Boulevard. Currently, the portion of Los Angeles Boulevard bordering the Proposed Development is unpaved.

In November 2022, Lim and Associates, Inc. submitted civil engineering plans ("2022 Plans") for development of Shady Hollow Estates on behalf of the current Developer. The City engaged Freese and Nichols, Inc. ("FNI") to review the 2022 Plans. FNI reviewed the 2022 Plans using the standards and criteria provided in both the 1993 Drainage and Design Manual ("1993 Manual) and the 2019 Drainage and Design Manual ("2019 Manual"). FNI determined that, under both the 1993 Manual and the 2019 Manual, the Proposed Development would require a detention pond. *See* Ex. D (FNI Memo dated 12/16/2022); Ex. E (FNI Memo dated 1/27/2023). Notably, the Pre-Final Plat designates 134,596 square feet (3.1 acres) as "detention area/drainage/utility

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² Developer's apportionment appeal documents refer to Los Angeles Boulevard as this westernmost thoroughfare, but the Pre-Final Plat lists it as "Shady Hollow Lane." In the hope of avoiding confusion and to be consistent with Developer's appeal documents, this Position Paper uses the term "Los Angeles Boulevard."

³ The 1993 Manual and criteria were in effect when the preliminary plat for Shady Hollow Estates was submitted in 2018; however, by the time the 2022 Plans were submitted, the 2019 Manual and criteria were in effect.

easement" and specifically provides a "detention area access easement" connecting to the easternmost thoroughfare, Wenatchie Drive.

It is undisputed that the Proposed Development currently has no water or wastewater infrastructure. See Ex. F (GIS of water/wastewater services at Proposed Development). That is, there are no water mains or sewer lines servicing the entire property, and the City does not have any plans to construct water or wastewater facilities for that property. Thus, for the lots in the Proposed Development to receive water and wastewater services, the entire infrastructure will need to be built out.

On December 21, 2022, the City provided an apportionment determination to Developer. *See* Ex. G (Apportionment Determination). In brief, the City concluded that Developer would be responsible for the following improvements necessitated by and roughly proportionate to the impact of the Proposed Development: (1) paving the relevant portion of Los Angeles Boulevard to a minimum width of 20 feet in order to provide access for residents and emergency services; (2) constructing a detention pond sufficient to address increased runoff from the Proposed Development and prevent adverse impacts to downstream properties⁴; (3) the detention pond constituted a drainage facility and did not qualify as open space for purposes of a community unit development; (4) to provide necessary services to the eight lots facing Los Angeles Boulevard, Developer would have to construct water and wastewater facilities along that thoroughfare; and (5) to provide water and wastewater service to all lots in the Proposed Development, Developer would have to construct offsite facilities; however, the City would contribute \$95,170.⁵ Notably, the City determined that no further alley dedications would be necessary.

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⁴ The City specifically noted that, if Developer's engineer provided drainage reports and calculations showing that less-intrusive improvements could prevent adverse impacts to downstream properties, the City might re-evaluate.

⁵ A copy of the City's estimate for its participation in offsite water and wastewater facilities is attached as Exhibit H.

III. ARGUMENT AND AUTHORITIES

A. Standard to Determine Exactions

As a preliminary matter, there is some question regarding whether the City is imposing an exaction on Developer or merely exercising its power to protect the health, safety, and welfare of the community. To the extent the conditions for approval of Developer's plat for the Proposed Development are an exaction, they must be related to the needs created by, and roughly proportionate to the impact of, the Proposed Development. *See* City of Dallas, Texas Code of Ordinances ("City Code") § 51A-1.109(a)(1). "No precise mathematical calculation is required, but the city must make an individualized determination that the required exaction is related both in nature and extent to the impact of the property development." *Id.* at § 51A-1.109(a)(2). Here, the City has made precisely the individualized determination required under this standard, and the City is merely requiring Developer to address the needs created by the Proposed Development through improvements that are roughly proportionate to its impact. Developer bears the burden to demonstrate that the City's determination is incorrect. *Id.* at § 51A-1.109(f)(2). As demonstrated below, Developer cannot satisfy its burden in this case.

B. Street Apportionment.

While Developer suggests that the City should be responsible for 65% of the cost to pave the portion of Los Angeles Boulevard providing access to the eight lots that face that

⁶ "[A]n exaction occurs if a governmental entity requires an action by a landowner as a condition to obtaining governmental approval of a requested land development." *City of Carrollton v. RIHR Inc.*, 308 S.W.3d 444, 449 (Tex. App.—Dallas 2010, pet. denied). However, if a city ordinance requiring a developer to take certain actions is both reasonable and substantially related to the health, safety, or general welfare of city residents/visitors, the requirement may not be considered a compensable exaction. *Lamar Corp. v. City of Longview*, 270 S.W.3d 609, 615 (Tex. App.—Texarkana 2008, no pet.) (citing *City of College Station v. Turtle Rock Corp.*, 680 S.W.2d 802, 804 (Tex. 1984)). Here, there can be no doubt that requiring Developer to provide infrastructure sufficient to ensure that lots in the Proposed Development can receive necessary water, sanitary, and emergency services is both reasonable and substantially related to health, safety, and welfare.

thoroughfare, Developer's argument lacks merit or support and relies on speculation bordering on paranoia. Every plat must provide appropriate access to the developed property for passenger, delivery, emergency, and maintenance vehicles. City Code § 51A-8.604(a). Additionally, developers may be required to construct minor streets "based on the existing condition or width of the streets, and if warranted by the expected traffic volumes, property access requirements, or truck, bus, and taxi loading." Id. § 51A-8.604(c). Here, the portion of Los Angeles Boulevard at issue provides the only access to eight lots in the Proposed Development, is unpaved, and is not wide enough to allow emergency or sanitation vehicles to pass. In other words, unless the section of Los Angeles Boulevard between Blue Ridge Boulevard and Shady Hollow Lane is paved, 8 those eight lots will be inaccessible to their eventual owners or to essential services. Moreover, Developer's suggestion that building out Los Angeles Boulevard would "largely benefit[] other properties" is at best speculative and arguably disingenuous. Not only would this construction be critical to the eight lots facing Los Angeles Boulevard, but two of the interior streets in the Proposed Development connect to Los Angeles Boulevard. If it were left unpaved, the lots on those interior streets would only be accessible from the southeast corner of the subdivision via Wenatchie Drive.9

To the extent Developer argues that the existing church and school should have been required to pave the portion of Los Angeles Boulevard that borders their property, Developer

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⁷ Developer refers to six lots facing Los Angeles Boulevard, but the Pre-Final Plat shows eight lots facing that roadway. *See* Ex. C.

⁸ Notably, although the City could require Los Angeles Boulevard to be paved to a 36-foot width, the Apportionment Determination provides for a 20-foot width if Developer obtains approval from the Fire Marshall. Stated otherwise, the City is trying to help Developer defray costs for this approval-condition.

⁹ While Developer refers to "eventual completion" of Los Angeles Boulevard to Blue Ridge Boulevard, Developer tellingly fails to provide any timetable or City plan for such completion – because none exists. Moreover, Developer's suggestion that the Proposed Development would "contribute less than 10% of traffic usage" after this imaginary "eventual completion" is also purely speculative.

ignores the fact that those structures have adequate access and drainage from Blue Ridge Boulevard – a paved street that complies with the relevant City Code provisions. Simply put, the church and school complied with their build-out obligations under their plats, just as Developer is being required to do now. As such, the street apportionment relating to Los Angeles Boulevard is directly related to the needs created by the Proposed Development and roughly proportionate to its impact.

C. Alleys.

The City is not requiring additional alley dedication or construction. Thus, any argument on this subject is most and not subject to appeal.

D. Drainage Apportionment.

Texas Water Code § 11.086(a) provides that "No person may divert or impound the natural flow of surface waters in this state, or permit a diversion or impounding by him to continue, in a manner that damages the property of another by the overflow of the water diverted or impounded." As described above, analyzing the 2022 Plans under the standards of both the 1993 Manual and the 2019 Manual, FNI determined that detention or downstream improvements would be required to address increased outfall from the Proposed Development. Thus, Developer's suggestion that it would not be required to construct a detention pond under the 1993 standards lacks merit. To support Developer's argument, its engineer of record would have to provide calculations to account for the incremental difference in detention volume required between the 1993 and 2019 Manuals as well as a supporting statement of engineering judgment on which National Oceanic

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¹⁰ Notably, Section I of the 1993 Manual states that its purpose is to provide guidelines and "it is not intended to limit the design capabilities or engineering judgment of the design professional or the use of new technical developments in engineering." Thus, the 1993 Manual encourages engineers to use the most current and accurate data available when designing drainage infrastructure. As such, analysis under the 2019 standards (based on the most current and accurate data) would comply with the 1993 Manual.

and Atmospheric Administration rainfall intensities would be best to use for Developer's current design. Tellingly, Developer's engineer of record has provided no such calculations. Similarly, Developer's claim that the Proposed Development would cause only a "small increase in drainage flows" is unsupported by data, and Developer again provides no statement to that effect from its design engineer. Stated otherwise, Developer has no empirical basis to support its appeal of the drainage apportionment.

Although the drainage requirements for the Proposed Development are influenced by the existing structures in surrounding properties, Developer's claim that those structures do not have proper drainage themselves is unfounded. Moreover, Developer fails to account for the topography of the Proposed Development: it is on land that lies lower than surrounding properties, and it must accommodate waterflow from a nearby creek. Simply put, the Proposed Development must be designed to address both natural flow and the additional runoff created by the development. That is exactly what the City is requiring Developer to do here. The storm drain inlets, underground outflow pipe, detention pond, and other drainage improvements necessarily benefit the Proposed Development by preventing flooding within the subdivision and are roughly proportionate to the impact the Proposed Development creates.

E. Detention Pond Is Not Open Space.

Because Developer intends to designate the Proposed Development as a Community Unit Development ("CUD"), Developer could decrease the minimum size of its lots if Developer also provided an equal amount of "community open space" to serve the Proposed Development. *See* City Code § 51A-8.510(c); City Code § 51-8.109(3). That is, Developer could effectively squeeze more lots into the Proposed Development if Developer could designate an undeveloped area as "open space." Here, Developer hoped to designate the drainage-detention area in the Proposed

Development as "open space" in order to decrease the minimum size of its lots. However, under the City Code, a drainage-detention area cannot qualify as open space. ¹¹ The drainage-detention area is a storm drainage facility that requires dedicated easements to the City (see Ex. C). Open space, whether improved or unimproved, cannot have any structures above or below it and does not contemplate dedication of easements. 12 Simply put, the Code distinguishes between drainagedetention areas and open space. The fact that Developer cannot elide those concepts in order to decrease lot-sizes in the Proposed Development does not result in a physical or regulatory taking; rather, it simply means that Developer cannot double-dip by avoiding flood-protection obligations in order to increase the number of lots it can develop. Thus, the City is not depriving Developer of any land, but merely requiring Developer to implement stormwater drainage measures that are necessary for, beneficial to, and roughly proportionate to the impact of the Proposed Development.

¹¹ To be more precise, and as described in the Apportionment Determination, Section 51A-8.201(17) defines detention area to mean an area which temporarily stores stormwater runoff and discharges that runoff at a reduced rate. Section 51A-8.611, "Storm Drainage Design," states that drainage systems, including all conveyances, inlets, conduits, structures, basins, or outlets used to drain storm water, must be designed and constructed to promote the health, safety, and welfare of the property owner and the public. Moreover, detention facilities must be designed and constructed in conformance with the Drainage Design Manual of the City of Dallas (§ 51A-8.611(c)(2)). The general definition of open space means an area that is unobstructed to the sky and contains no structures except for ordinary projections of cornices and eaves (§ 51A-2.102(101)). Article VIII goes further and defines "improved open space" to mean open space containing structures or improvements, including but not limited to hike and bike trails, and "unimproved open space" to mean open space containing no buildings, fences, or other structures above or below grade. Because a detention area is used to temporarily store stormwater runoff and discharges that runoff, it appears that detention areas meet the definition and provisions of storm drainage facilities and not open space. The platting process requirements in Section 51A-8.403(a)(1)(A)(xi) and (xii) require that the layout and dimensions of proposed storm drainage areas, storm drainage facilities, water and wastewater facilities be indicated on the preliminary plat. Moreover, romanette (xxv) of this section requires the preliminary plat to show the location of any open space required pursuant to Article XIII. In other words, the City Code makes a distinction between open space and dedications and does not lump open space with the dedications provisions. Furthermore, the dedications provision in Section 51A-8.602 states that the owner of the property to be platted must provide an easement or fee simple dedication of property needed for the construction of streets, sidewalks, storm drainage facilities, floodways, water mains, and any other property necessary to serve the plat and to implement the requirements of this article. Thus, a detention area be a dedication. Lastly, the code defines infrastructure to mean all streets, alleys, sidewalks, storm drainage facilities, water and wastewater facilities, utilities, lighting, transportation, and any other facilities required by law to adequately serve and support development. (§ 51A-8.201(29) (emphasis added)). If detention areas were intended to be considered open space, then the code would include them in the definition of open space. Instead, the code includes detention areas in the definition of infrastructure.

¹² As the CPC is likely aware, a detention pond includes underground construction to regulate stormwater outflow and, therefore, necessarily includes "structures below grade."

F. Water and Wastewater Apportionment

When water and wastewater improvements are necessary to develop property, the developer may enter into private development contracts for construction of those improvements and request that the City share in the costs. City Code §§ 51A-1.109(e)(5); 51A-612(a); 51A-614(a). Here, because there is no existing water or wastewater infrastructure in the area to service the Proposed Development, Developer will have to construct water and wastewater mains that comply with Chapter 49 of the City Code. *See* City Code §§ 51A-612(a) (requiring compliance with Chapter 49); 49-62(b) ("The developer must construct all new on-site extensions necessary to adequately serve the development."); *see also* Ex. F. Developer would have to pay the full cost of any infrastructure that must be installed within the Proposed Development, and the City would cost-share in the construction of necessary outside facilities. *See* City Code § 49-62(b), (c).

Developer's argument for the City to pay for construction of the water and wastewater infrastructure for the Proposed Development is based, in part, on misapplying City Code § 49-62 to the facts of this case. While Section 49-62(a) would allow Developer to make a legitimate claim for reimbursement of the cost to install a new *oversize* main for the Proposed Development, the new mains the City is requiring Developer to install are <u>not</u> oversize. Rather, they are 8-inch diameter pipes (i.e., the minimum standard) that are the same as the water mains to which they will connect for service. Because these water and wastewater mains would be within the Proposed Development, Developer is responsible for the full cost of providing these on-site extensions. *See* City Code § 49-62(b).

Tellingly, Developer does not deny (1) the need to construct off-site facilities to provide water and wastewater services to the Proposed Development, (2) the benefit such facilities would provide to the Proposed Development, or (3) the City's willingness to contribute up to \$95,170 to

the cost of those facilities. *See* Ex. H. Instead, Developer claims (again without support) that an adjacent church, school, and subdivision should have constructed water and wastewater facilities that would eventually service the Proposed Development. Under Developer's logic, the adjacent property-owners' failure to create facilities to serve the Proposed Development means the City (i.e., taxpayers) should now pay the full cost for those facilities. In other words, Developer argues that it should not be required to pay for any portion of facilities necessitated by, and solely for the benefit and service of, the Proposed Development. This argument contravenes the substance and intent of the City Code, and it seeks to impose a public burden for the Developer's private benefit. This runs afoul of both law and policy.

The water and wastewater facilities that Developer must construct are directly related to the needs of, and roughly proportionate to the impact of, the Proposed Development. The City has agreed to contribute up to \$95,170 to the cost of off-site facilities in compliance with Chapter 49 of the City Code. Accordingly, Developer's appeal of this share of the Apportionment Determination should be denied.

G. Developer's Calculations and Cost Estimates

Although Developer includes square-footage and dollar-figures in its "Compensation Summary," Developer fails to provide any context to support or explain these calculations. That is, Developer fails to explain what exactly the square footage (or any other unit measurement) comprises; why that measure is an appropriate gauge for a particular share of the apportionment; or why the portion Developer attributes to the City is proper. In other words, even if Developer had a legitimate claim, Developer has failed to meet its burden of proof to show that the City's Apportionment Determination is incorrect. As such, Developer's appeal should be denied.

IV. CONCLUSION

Developer has failed to demonstrate that the City's Apportionment Determination is inaccurate; therefore, Developer's appeal should be denied, and the City's Apportionment Determination should be affirmed.

Respectfully submitted,

/s/ Andrew G. Spaniol
Andrew G. Spaniol
Assistant City Attorney
Gary Powell
Senior Assistant City Attorney

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CERTIFICATE OF SERVICE

I hereby certify that on February 6, 2023, a true and correct copy of the above and foregoing, together with all exhibits thereto, was served on the following:

Via Email:

For the City

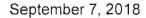
Yolanda Hernanez (yolanda.hernandez@dallas.gov)

Daniel Moore (daniel.moore@dallas.gov)

M. Samuell Eskander (mina.eskander@dallas.gov)

/s/ Andrew G. Spaniol
Andrew G. Spaniol







Centro Cristiano Para La Familia 2719 S. Hampton Road Dallas, TX 75244-2327

RE: S178-288

The City Plan Commission on Thursday, September 6, 2018, approved the preliminary plat of "Shady Hollow Estates Addition", subject to the following conditions:

- 1. The final plat must conform to all requirements of the Dallas Development Code, Texas Local Government Code, Texas Land Surveying Practices Act and the General Rules and Regulations of the Texas Board of Land Surveying.
- 2. Department of Sustainable Development and Construction, Engineering Division must verify that the plat conforms with the water, wastewater, and easement requirements under the provisions of Chapter 49 of the Dallas City Code.
- 3. Compliance with all plans, contracts, ordinances, and requirements of the City of Dallas. Section 51A-8.102(a), (b), (c), and (d)
- 4. The number and location of fire hydrants, must comply with the Dallas Fire Code.
- 5. Any structure new or existing structure may not extend across new property lines. Section 51A-8.503(e)
- 6. On the final plat, all easement abandonments, and ROW abandonments must be by separate instrument with the recording information shown on the face of the plat. A release from the Real Estate Division is required prior to the plat being submitted to the Chairman for signature.
- 7. On the final plat, include two boundary corners tagged with these coordinates: "Texas State Plane Coordinate System, North Central Zone, North American Datum of 1983 on Grid Coordinate values, No Scale and no Projection."
- 8. On the final plat, monument all set corners per the Monumentation Ordinance. Prior to submittal of the final plat for the Chairman's signature the monuments must be verified by the Chief City Surveyors Office in the Public Works Department. Section 51A-8.617
- 9. Provide ALL supporting documentation (i.e. deeds, plats, ordinances, easements...etc) with a completed Final Plat Checklist to the Survey Plat Review Group (**SPRG**) with the Final Plat Submittal **after** City Plan Commission Approval.
- 10. The number of lots permitted by this plat is 24 and one common area.

- 11. Submit a full set of Civil Engineering plans, prepared per City Standards by a licensed (TX) Professional Engineer, to Sustainable Development and Construction, Engineering Division, Room 200, Oak Cliff Municipal Center. (i.e. 311T) Additions and alterations to the public infrastructure require approval and may require private development contracts with bonds. Sections 51A-8.102(c) and Section 51A-8.601(b)(4), (5), (6), (7), (8), and (9).
- 12. Detention may be required if the capacity of available outfall is not adequate to carry the developed runoff. Section 51A-8.611(e).
- 13. Place a note on the final plat stating "Lot-to-lot drainage will not be allowed without proper City of Dallas Engineering Department approval". (Note must be on plat) Section 51A-8.611(e).
- 14. On the final plat, dedicate 28-feet of Right-of-Way (via Fee Simple) from the established center line of Los Angeles Boulevard. 51A 8.602(c)
- On the final plat, dedicate 7.5-feet of Right-of-Way (via Fee Simple or Street Easement) from the established center line of all alleys. Sections 51A-8.602(c), 51A-8.604(c) and 51A-8.611(e).
- 16. On the final plat, dedicate a 10-feet by 10-feet corner clip (VIA Fee Simple or Street Easement) at Los Angeles Boulevard and all internal intersections. Section 51A 8.602(d)(1).
- 17. On the final plat, dedicate a 15-foot by 15-foot Alley Sight Easement at the intersection of Los Angeles Boulevard and the alley. Section 51A-8.602(e),
- 18. On the final plat, dedicate a 15-foot by 15-foot Alley Sight Easement at the intersection of Wenatche Court and the alley. Section 51A-8.602(e),
- 19. Provide a turn-around per the City of Dallas Standards at the end of alley to the north. Section 51A-8.506(b).
- 20. On the final plat, determine the 100-year water surface elevation across the plat. Section 51A-8.611(d) and Trinity Watershed Management.
- 21. On the final plat, dedicate floodway easement, floodway management area, or floodway easement (within common area) with the appropriate easement statement included on the face of the plat. Section 51A-8.611(d) and Trinity Watershed Management, Drainage Design Manual Addendum V.
- 22. On the final plat, show the correct recording information for the subject property. Platting Guidelines.

- On the final plat, show how all adjoining right-of-way was created. Section 51A-8.403(a)(1)(A)(xxii).
- 24. On the final plat, show distances/width across all adjoining right-of-way. Platting Guidelines.
- 25. On the final plat, show recording information on all existing easements within 150 feet of the property.
- 26. On the final plat, all utility easement abandonments must be shown with the correct recording information. Platting Guidelines.
- 27. O the final plat, label original abstract line.
- 28. Engineer must furnish plans for water and sanitary sewer. Developer must furnish a contract for water and sanitary sewer. Sections 49-60(g)(1) and (2) and 49-62(b), (c), and (f).
- 29. Additional design information is required for assessment. Site plan must be submitted showing proposed development, building finished floor elevation, development, existing mains including downstream manhole, and proposed water and wastewater service locations. Submit water/wastewater engineering plans to 320 E. Jefferson Blvd., Room 200, Attention: Water and Wastewater Engineering.
- Water and wastewater main improvements are required by Private Development Contract. Submit water/wastewater engineering plans to 320 E. Jefferson Blvd., Room 200, Attention: Water and Wastewater Engineering.
- 31. Prior to final plat, provide conformation if easement area conveyed from CPI Pipe and Steel Inc. to Centro Cristiano Para La Familia in Instrument No. 200900300707 was ever abandoned by City of Dallas and provide copy of abandonment ordinance and recorded instruments. Real Estate release is required prior to recordation of plat.
- On the final plat, specify if open space is unimproved, otherwise must comply with open space distance required. Development must comply with Section 51A-8.510
- On the final plat, identify the property as Lots various and Common area "A" and "B" in City Block 1-4/6960. Ordinance 1A, Page 131 pages 131-148, Section 2 (passed August 13, 1872).
- 34. On the final plat, change "Wenatche Dr. and Wenatche Ct." to "Wenatche Drive". Section 51A-8.403(a)(1)(A)(xii)
- 35. On the final plat, change "Los Angles Blvd" to "Los Angles Boulevard". Section 51A-8.403(a)(1)(A)(xii)

- 36. On the final plat, label "Kimball Ridge Court" and "Kimball Ridge Circle". Section. 51A-8.403. (a) (1) (A) (xii)
- 37. On the final plat, add enough street labels to show what will end up as "Los Angles Boulevard" Section. 51A-8.403. (a) (1) (A) (xii)

If you have any questions concerning the action of the City Plan Commission, please contact me at (214) 948-4452.

Sincerely,

Paul Nelson, Subdivision Administrator

Subdivision Section, Current Planning Division

Sustainable Development and Construction Department

320 E. Jefferson Blvd., Room 101

Dallas, TX 75203

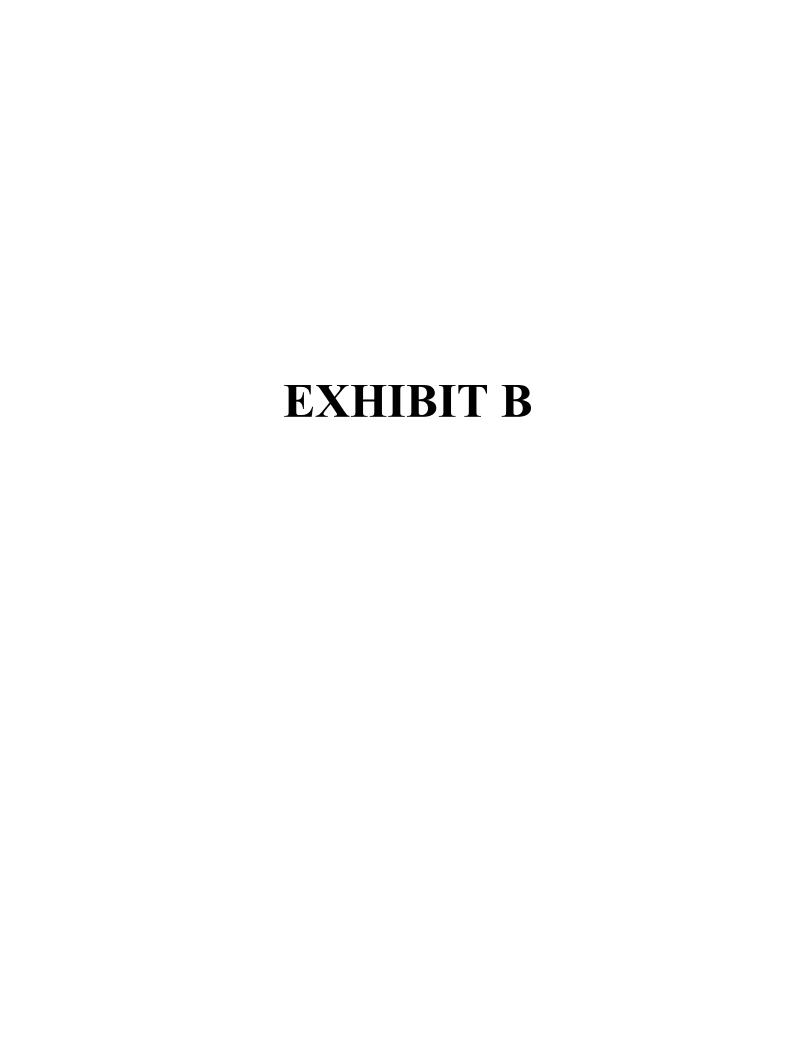
cc: RCM Surveying

Attn: Calvin Meyers

488 Arroyo Court

Sunnyvale, Texas 75182

Emails: Calvin Meyers, Clayton Buehrle, Jasmine Chacko, Julio Delgado, Mina Eskander, Maricela Garza, Donna Kirwan-Smithson, David Lam, Laura Morrison, Anel Rodriguez, David Scott, John Stepp, Ursula Walker, Nina Williams





Recipient: Andrew Cansler, P.E. Email: atc.tcci@gmail.com

Date Emailed: $\underline{12/19/2019}$ **No. of Pages:** $\underline{9}$ (+ $\underline{6}$ attachments)

П	STORM WATER	Project: Shady Hollow Estates	
ш	STORIVI WATER	Project: Shady Hollow Estates	
\times	DRAINAGE	Date Received: 11/06/2019	Copies Recd.: 2
\times	PAVING	Engineer: Red Caprock Engineering	
\times	PRELIMINARY	Developer: KPA Consulting, Inc	Mapsco Grid: 63-A
	REVISED (2nd)	City Plan File No.: <u>\$178-288</u>	File No.: <u>311T-10059</u>
	REVISED FINAL	Reviewed By: Sam Eskander, P.E.	
	REVISION LETTER		
	APPROVAL LETTER		

A. General Comments

- 1. Address all comments below and resubmit **each** of the following:
 - a. Revised plans (2);
 - b. **Comment response letter** signed and sealed by the Engineer of Record referencing the date of review comments, how each comment has been addressed, and the sheet number where the correction can be found; **and**
 - c. A **PDF copy** of the entire resubmittal (may be emailed (if less than 15 MB) or on CD).
- Add file number <u>311T-10059</u> to each civil construction sheet and cover sheet and plat number S178-288.
- 3. Add the Lot & Block Number to the cover sheet. If none is applicable, please add the legal description.
- 4. Clearly show and label any existing trees to be removed during demolition and construction. Trees to be removed should be individually identified (including caliper and description). The total number of trees to be removed should be labeled as well. Planting, relocation, or removal of any trees during site demolition and construction may not take place until approved by the Chief Arborist, Mr. Phil Erwin (214-948-4117; philip.erwin@dallascityhall.com). Please also add the following note to the cover sheet: "Approval from the chief arborist is required before any trees may be removed during demolition or construction."
- 5. All paving and storm drainage work being done within public right-of-way and easements, including sidewalks, barrier-free ramps and drive approaches, must be constructed under a 3-way private development contract. Submit an itemized list of improvements and a cost estimate per number 8 on the Plan Review Check List.
- The contractor will be required to apply for a ROW Permit online at https://rowmanagement.dallascityhall.com/Login.aspx and to schedule inspections for all the proposed work within City right-of-way and easements.
- For your information, see the attached list of Helpful Utility Related Numbers, updated 04/30/2018, and Atmos Energy Dallas County Project Managers Map, updated 04/11/2018.
- 8. Upon approval of these plans, please submit an electronic copy of the final plans, prepared in compliance with the attached Engineering File Submission Guidelines.
- 9. The City of Dallas reserves the right to add additional comments as necessary.

B. Plat Comments

- 10. Please include the preliminary plat with all future submittals.
- 11. Dedicate 7.5' ROW from the established center line of all alleys.

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- 12. A turn around is required to be constructed at the end of any dead-end alley.
- 13. Dedicate a 10'x10' corner clip at all street intersections.
- 14. Dedicate a 15'X15' Alley Sight Easement at Los Angeles Boulevard and the alley.
- 15. Dedicate a 15'X15' Alley Sight Easement at Wenatche Drive and the alley

C. Dimension Control and Paving Plan Comments

- 16. Provide an Overall Paving Plan and add key maps to each of the paving sheets.
- 17. Clearly show and label all existing signs, utilities, signal poles, parking meters, bike racks, newspaper racks, advertising kiosks, DART benches/shelters, etc. located within the right-of-way. Please place the following note on the Cover Sheet: The property owner is liable to restore/replace any damaged city approved/controlled infrastructure in the public right-of-way.
- 18. Per Dallas City Code Sec. 51A-8.606, sidewalks and barrier-free ramps are required on all street frontages. Clearly show and label all existing and proposed sidewalks along your development's frontage of all streets. Please note: A barrier-free ramp with detectable warning is required at all intersections, as well as at driveways with high traffic volume.
- 19. City of Dallas File 251D-1 does not have a detail for directional barrier-free ramp at drive approaches or street intersections. Please show and provide an ADA-compliant barrier-free ramp detail. You may reference attached TxDOT PED-18 ramp Type 7 or Type 10 as detail for proposed barrier-free ramps. Please be advised that Type 5 ramps are not encouraged by Transportation and Public Works staff.
- 20. Please add dimensions from the edge of sidewalk to any proposed/existing utility poles, fire hydrants, or standards located within the sidewalk. Per Dallas City Code, "... the sidewalk must be widened as necessary to provide a three-foot-wide clear distance between the edge of the obstruction or overhang projection and the edge of sidewalk." (Sec. 51A-8.606b)
- 21. All code-required frontage sidewalks must be located within City right-of-way or street easement/sidewalk & utility easement.
- 22. Confirm that all existing and proposed sidewalks and barrier-free ramps comply with Texas Accessibility Standards (TAS) and Americans with Disabilities Act (ADA). If existing barrier-free ramps at drive approaches do not meet TAS/ADA standards, they will need to be replaced. If both barrier-free ramps at a drive approach need to be replaced, the entire driveway ramp portion within public right-of-way will need to be rebuilt.
- 23. Please add the following notes to the sidewalks, barrier-free ramps, and curb & gutter detail(s):
 - a. Class test strength for sidewalk is 3,000 psi compressive strength at 28 days after placement.
 - b. Class test strength for curb and gutter is 4,500 psi compressive strength at 28 days after placement.
 - c. Standard subgrade compaction for sidewalks is minimum 95% of standard proctor density within minus 2% to plus 4% of optimum moisture content.
 - d. Sidewalks require minimum #3 bars spaced on 24" centers.
 - e. All curbs within City right-of-way must be reinforced with #4 bars.
 - f. Curb and gutter must be designed and constructed to provide positive drainage.
 - g. Separate concrete curb & gutter shall be marked 3/8" deep with an approved tool (saw cut) in 15 foot sections. Install #4 "L-shaped" rebar dowels (12" into existing pavement), every 18", epoxied in.
 - h. 1" Redwood expansion joints are required at all abrupt changes in alignment or width, radii points, or every 80 feet, beginning at the curb return.
 - i. If sidewalk is located at back-of-curb, redwood joints should match with existing redwood joints in the street.
 - j. At all expansion joints, 24" long, #6 (3/4") smooth dowel is required every 24" on center.



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k. 1" footings are required at all expansion joints and the pavement depth transitions from 4" to 5" thick, over the 24" length of pavement.

- I. 8" footing is required for sidewalks located at back-of-curb, with a 6" dowel.
- m. Sidewalk must be minimum 5' wide if located at back-of-curb.
- 24. Please add the following notes to the drive approach detail(s):
 - a. Minimum pavement depth is 8". Drive approach pavement depth should match onsite pavement depth if onsite pavement is thicker than the minimum thickness for approaches.
 - b. Hand Finish Class test strength is 4,500 psi compressive strength at 28 days after placement.
 - c. Standard subgrade compaction under drive approaches is 98% standard proctor density at minus 2% to plus 4% of optimum moisture to the depth specified.
 - d. #3 bars are required for concrete thickness less than 9", spaced on 24" centers. #4 bars are required for concrete thickness that is 9" or greater, spaced on 24" centers.
 - e. 1" Redwood expansion joints are required at all property lines.
 - f. Dowel proposed drive approach into existing pavement with 24" long, #4 bars, at 12" on center, epoxied in.
 - g. For the expansion joint at the property line, 24" long, #8 (1") smooth dowel is required for paving thickness greater than 6". All dowels required every 12" on center and must be greased and capped.
 - h. Drive approaches require a saw joint at the centerline.
- 25. Specify subgrade preparation for the drive approach. In section V of the Paving Design Manual, starting on page V-2, subgrade requirements are provided based on street type and soil P.I. Please choose the option that complies with the requirements: compacted subgrade, lime treated subgrade, cement modified subgrade, or cement stabilized subgrade. In lieu of all options except for compacted subgrade, two additional inches of concrete must be added to the concrete thickness.
- 26. Please add the following notes to the Paving Plan & Profile notes and details:
 - a. Machine Finish Class test strength is 4,000 psi compressive strength at 28 days after placement.
 - b. Concrete base and pavement will be required to be finished mechanically with approved power-driven machines when the street is wider than 27 feet or when the street is 200' in length or longer. A vibrating screed is not considered a paving machine.
 - c. Hand Finish Class test strength is 4,500 psi compressive strength at 28 days after placement.
 - d. Hand finishing will be permitted on pavement widening, on sections where the pavement width is not uniform, at intersections, where required monolithic widths are greater than that of available finishing machines, on streets less than 200 feet in length, alley paving, and elsewhere where mechanical finishing is not specified or required by City specifications.
 - e. Minimum pavement depth is 8".
 - f. #3 bars are required for concrete thickness less than 9", spaced on 24" centers. #4 bars are required for concrete thickness that is 9" or greater, spaced on 24" centers.
 - g. Specify subgrade preparation. In section V of the Paving Design Manual, starting on page V-2, subgrade requirements are provided based on street type and soil P.I. Please choose the option that complies with the requirements: compacted subgrade, lime treated subgrade, cement modified subgrade, or cement stabilized subgrade.
 - h. Standard subgrade compaction under street pavement is 98% standard proctor density at minus 2% to plus 4% of optimum moisture to the depth specified.
 - i. 1" Redwood expansion joints are required at all abrupt changes in alignment or width, or every 150 feet, beginning at the curb return.



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j. At all expansion joints, 24" long, #8 (1") smooth dowel is required every 12" on center and must be greased and capped.

- k. Sawed traverse dummy joints spaced 15 feet. Sawed longitudinal dummy joints along center line of all single road way sections except paving less than 14 feet wide. Additional similar joints on 10 foot centers each side of center line for road way sections wider than 30 feet.
- l. Integral concrete curb and curb & gutter shall be of the same compressive strength as the pavement.
- 27. Confirm that these design plans conform to the following requirements:
 - a. The minimum longitudinal desirable grade for streets is five tenths (0.5) percent. The minimum acceptable grade is four tenths (0.4) percent where use of the minimum desirable grade is not practical.
 - b. Where valley gutters are used for intersecting drainage, the minimum grade for valley gutters is four tenths (0.4) percent for concrete.
 - c. The maximum longitudinal grade is 10%.
 - d. Minimum crossfall for longitudinal paving grades equal to or exceeding 1%, minimum pavement crossfall is 1/8 inch per foot (1%). For longitudinal paving grades less than 1% and at storm drainage inlets, the minimum pavement crossfall is 1/4 inch per foot (2%).
 - e. Maximum street pavement crossfall permitted is 1/2 inch per foot (4%) at any point in the roadway. Crossfalls should normally not exceed 1/4 inch per foot (2%).
 - f. When two longitudinal street grades intersect at a point of vertical intersection (PVI) and the algebraic difference in the grades is greater than 1.0%, a vertical curve is required.
 - g. The minimum safe stopping sight distances for the City of Dallas street types and design speeds is 200'.
 - h. The minimum crest vertical curve K is 24'. The minimum sag vertical curve K is 20'.
- 28. Place the following note on the plans: Sawcut lines shown on the design plans for the removal and replacement of concrete pavement, drives, slabs, sidewalks, etc. are for informational purposes only. If pavement is more than 5 years old, the Pavement Cut and Repair Standards Manual must be followed. If pavement is 5 years old or less, the entire concrete panel must be replaced.
- 29. Driveway approaches shall not occupy more than 70 percent of the frontage abutting the roadway of the tract of ground devoted to one use which abuts the roadway.
- 30. The angle of the driveway approach with the curb line shall be not less than 45 degrees.
- 31. Residential driveway approaches shall not be less than 10 feet nor more than 30 feet in width measured at the property line.
- 32. A residential driveway approach shall be constructed with the return curbs having a rolled face disappearing at the sidewalk and joining the street curb with a minimum radius of five feet. Along arterial streets, driveways with a width of less than 18 feet must have a minimum curb return radius of ten feet.
- 33. Clearly show and label all visibility triangles at all drive approaches and street intersections.
- 34. Please follow the guidelines starting on page IV-11 of the Paving Design Manual for determining the required intersection sight distance at the proposed drive approach. This should be clearly shown and labeled on the Paving Plan. Note that this is a calculated sight distance triangle and is different from the visibility triangle. Ensure that these areas remain clear of any visibility obstructions.



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35. Place the following note on all civil construction sheets: Any Traffic Control Plan (TCP) must be submitted to the Department of Public Works for review and approval by Traffic Safety Coordinators prior to start of construction. No traffic lane or sidewalk along any public street or alley is to be closed without first obtaining the appropriate permit(s). Closure of any traffic lane must be restricted to the hours of 9:30 a.m. to 3:30 p.m. workdays (hours may differ in school zones). Contractor must call (214) 948-4290 to request approval of TCP and to obtain a right-of-way permit.

- 36. Driveway approaches shall be located entirely within the frontage of the premises abutting the work and shall be located not less than five feet from each side of the property line, except that joint driveway approaches with adjoining property holders may be permitted provided joint application is made by all interested parties, and the width set out in Section 43-94 of the Dallas City Code is not exceeded. Please revise your design and remove the encroachment, or obtain an approval from the adjoining property owner by means of a private access easement on their lot.
- 37. No portion of any driveway shall be located within 3 feet of any fire hydrant, electrical pole, or any other surface public utility.

D. Signage and Striping Plan Comments

- 38. These plans must be reviewed and approved by our division's Traffic Engineering review staff prior to our issuance of an approval letter. I will provide them one copy of the submitted plans and forward any comments they may have on to you once they are given to me.
- 39. All submitted engineering plan sets now require a signage and striping plan. If no traffic signs belonging to the City of Dallas, DART, or any other public entity are located within the street frontage of the proposed work area and the proposed paving/drainage work will not result in any changes to the pavement marking of public roads, a note stating this on the dimension control or paving plan may be provided in lieu of a signage and striping plan. In this case, there should be plan named "dimension control & signage plan".
- 40. The signage and striping plan must include the following information:
 - a. The plan should show and label all existing and proposed public signage, referencing the sign codes from the City of Dallas Traffic Sign Standards (dated August 2018). Existing signs should be also labeled as "to remain", "to be relocated", or "to be removed." Signs which are to be relocated should be labeled in a manner which clarifies the existing and proposed locations of the sign. Existing traffic signs not in conformance with the City's Traffic Sign Standards must be replaced.
 - b. The plan should show all existing and proposed pavement striping/marking, including any stop lines, yield lines, crosswalk markings, on-street parking space markings, lane-use arrows, or word markings. Existing striping to be removed should be labeled and the limits of the removed striping should be clear. Proposed striping should also be clearly labeled. Please label the variety of striping appropriately (i.e. "existing double solid yellow line", "proposed single dotted white line", etc.).
 - c. Traffic signal poles, utility poles, fire hydrants, utility boxes and vaults, sign kiosks, or any other appurtenances located within the street right-of-way/easement must be shown.
 - d. Public streets must be labeled. The label should include right-of-way width and the type of pavement (existing asphalt over concrete base, existing concrete, proposed concrete, etc.).
 - e. The plan should also include property lines, easement lines, building lines, drive approach locations, and any other relevant information which will impact signage visibility or traffic operation. When applicable, superimpose existing and proposed trees/landscaping.

If you would like an example of a previously approved signage and striping plan, you may contact our staff and we will provide you with a PDF.



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41. If there is any proposed demolition or reconstruction in proximity to city traffic signals or street lights (including conduits, foundation boxes, etc), review and coordination with the Department of Transportation will be necessary. We need confirmation of their review and approval of the proposed work prior to issuance of an approval letter for the submitted engineering plans. To coordinate their review, please contact Mr. Sri Veeramallu at s.veeramallu@dallascityhall.com.

42. Place the following note on the Paving Plan: "72 hours prior to beginning the construction of sidewalk/BFR which could impact traffic signal equipment, underground conduits or traffic signal loops, the contractor shall contact Alfred Lemon (214-670-4812) with the City of Dallas Traffic Signal Operation Division. Contractor shall preserve and protect all existing signal conduit and traffic signal loop detector wiring to the extent possible."

E. Grading/Drainage Plan Comments

- 43. Provide typical cross sections for all retaining walls/screen walls and show the footings, utility crossings, wall heights, and distances to property lines. All walls, including footings, should be located entirely within private property. If any proposed walls encroach into City Right-of-Way or easements, a license agreement will be required. No buttresses, steps, projections, retaining walls or fences shall be constructed on any public property unless such construction is approved by the city council. If any walls cross property lines, easements will be required.
- 44. A building permit is required for all retaining walls/screen walls that are 4' in height or taller. The wall height is the vertical distance measured from the bottom of the footing to the top of the wall.
- 45. Is the retaining wall supporting a surcharge? A surcharge is a vertical load imposed on the retained soil that may impose a lateral force in addition to the lateral earth pressure of the retained soil. Examples of surcharges are: sloping retained soil, structure footings supported by the retained soil, adjacent vehicle loads supported by the retained soil, etc. Solid fences that are attached (or directly adjacent) to a retaining wall also impose additional lateral forces on a retaining wall when wind pressures act on the fence.
- 46. There is a proposed residential subdivision being developed downstream of this site. Have you obtained a copy of the design plans for 311T-9437? Please prepare and submit a drainage study and show that there will be no adverse effect on the downstream development and creek.
- 47. The engineer of record should confirm if this project disturbs one acre or more of soil. If so, this project requires a storm water discharge permit from the Texas Commission on Environmental Quality (TCEQ). The requirements are outlined in TPDES General Permit Number TXR150000 (www.tceq.com). A completed copy of the **executed** (signed) Storm water Pollution Prevention Plan (scanned PDF on a CD) must be submitted to this office prior to the start of construction. Please notify your client to avoid unnecessary delays in the future.
- 48. Regarding detention ponds:
 - a. Security fencing shall encompass the basin area due to potential safety hazards created by prolonged storage of floodwater.
 - b. Access from an adjacent street will be constructed to the detention basin and the outlet structure for normal removal of debris and desiltation. The access will be of a level cross-section, 15 feet in width, maximum 6:1 grade, sloped to drain, and positioned outside of and at least 3 feet above the detention basin floor. If access is between platted lots, concrete paving (to City alley standards) will be required. Rock (e.g., mixed crushed rock less than 3 inch, or other suitable material) a minimum of 10 inch in depth may be compacted to form an all-weather driving surface.
 - c. Access points must be controlled by a locked gate.
 - d. Concrete aprons and wingwalls should be used at all outlet structures.



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e. All pipes discharging into a detention basin will be discharged at the basin's flowline with adequate erosion control.

- f. Concrete paved low flow channels must be used to control meandering and minimize erosion. 3" weepholes are required and must be spaced 15' on center longitudinally. #4 bars are required at 12" on center longitudinally, and #4 traverse bars are required at 15" on center. 6" rock foundation is required on top of the 10 mil. film. *Refer to 251D-1 Standard Construction Details, page 2009.*
- g. Place the following note on the plans: Establishment of vegetation is required prior to acceptance of the pond.
- h. If slopes are flatter than 3:1, established vegetation should be used for slope protection. If steeper than 3:1, concrete or gabions should be used.
- i. Provide latitudinal and longitudinal cross sections for the detention pond and show the maximum grade slopes, the 100-year water surface elevations, the required volume, and volume provided.
- j. A Detention Area Easement must be dedicated for the detention pond and the outfall pipe. A Detention Area Access must also be dedicated from an adjacent street to the detention pond. These easements must be shown on the plat and on all civil construction sheets. All easements within the limits of the plat can be dedicated by plat.

F. Overall Drainage Area Map Comments

- 49. Is the existing drainage pattern being matched?
- 50. Provide onsite and offsite directional flow arrows. Is there any lot-to-lot drainage?
- 51. Private Drainage Easements are required for all lot-to-lot drainage. Private Drainage Easements cannot be dedicated by plat; it must be by separate instrument. These easements must be filed and recorded at the County, and the document number must be shown on the plat and on all civil construction sheets, prior to the approval of these engineering plans. Private Drainage Easement (Sample) is attached without the exhibit. An exhibit should be included in your submittal.
- 52. Please note: All private easements and franchised utility easements (e.g. Private Drainage Easements, Access Easements, Mutual Access Agreements, Private Utility Easements, etc.) must be dedicated by separate instrument. The City of Dallas does not own or maintain these easements and all responsibilities lie with the user. Please ensure that the easement language is worded accordingly, and submit all easements to this department for verification prior to filing at the County.
- 53. On the Existing Drainage Area Map, E1 & E2 on the table are mislabeled.
- 54. The acreage for offsite area E1 on the Existing Drainage Area Map differs from what is shown on the downstream design plans. Please reconfirm this area.
- 55. The C-factor for drainage area 1 on the Drainage Area Map should be based on fully developed runoff.
- 56. Clearly show the Natural Channel Setback Line. Per Section 51A-5.106 of the Dallas City Code:
 - a. Natural Channel Setback Line means that setback line described below located the **farther** beyond the crest:
 - i. That line formed by the intersection of the surface of the land and the vertical plane located a horizontal distance of 20 feet beyond the crest.
 - ii. That line formed by the intersection of the surface of the land beyond the crest and a plane passing through the toe and extending upward and outward from the channel at the designated slope. For purposes of this paragraph, the designated slope is:
 - a. four to one if the channel contains clay or shale soil; and
 - b. three to one in all other cases.



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iii. CREST means that line at the top of the bank where the slope becomes less than four to one.

- iv. TOE means that line at the bottom of the bank where the slope becomes less than four to one.
- b. Except as otherwise provided in Subsection (c), all structures must be located behind the natural channel setback line.
- c. A structurally engineered retention system approved by the director may be substituted for the setback required in Subsection (b).
- 57. Provide a cross section exhibit (with dimensions) showing both natural channel setback lines. Only the line located that father beyond the crest should be shown on the plat and all civil construction sheets.
- 58. The Natural Channel Setback Line should only be shown when it extends beyond the Floodway Easement (100-year base flood elevation). In all areas where the Natural Channel Setback falls within the Floodway Easement, that portion of the Natural Channel Setback should be removed.
- 59. Clearly show the portions of the Natural Channel Setback line to be abandoned. This must be shown on the plat and on all civil construction sheets.

G. Storm Sewer Plan Comments

- 60. What is the 100-year water surface elevation within the drainage channel? Clearly show and label this elevation on all civil construction sheets.
- 61. A Floodway Easement should be dedicated for all portions of the lot within the 100-year water surface elvation, and must be shown on the plat and on all civil construction sheets.
- 62. Show the velocity at each outfall.
- 63. The maximum allowed velocities into a channel are as follows:
 - a. Earth unlined vegetated clay soils is 8 fps.
 - b. Earth unlined vegetated sandy soils is 6 fps.
 - c. Partially lined is 12 fps.
 - d. Fully lined is 15 fps.
- 64. Does the drainage outfall have the capacity to convey the 100-yr flood? Per the Drainage Design Manual, investigation shall be made by the engineer to validate the adequacy of the storm drain outfall. Show the Q_{100} and Q_{CAP} for all downstream storm drain systems. Show that there is capacity downstream to convey the 100-year storm.
- 65. Per the Dallas City Code, Section 51A-8.611(c)(1)(C), Detention must be provided when "The proposed development does not have adequate outfall to carry the 100-year flood without damaging property downstream, or the owner of downstream property refuses to provide the needed easements to the city." Please verify the downstream capacity and determine if detention is required or not.
- 66. Clearly show and label all existing storm drain systems and label all existing inlet sizes, manhole sizes, storm pipe sizes, 421Q-# / 311T-#, etc...
- 67. Drainage Easements should be dedicated for all public storm sewer lines located within private property. Typical easement widths are as follows: 15 feet for 39" and under, 20 feet for 42" through 54", 25 feet for 60" through 66", and 30 feet for 72" through 102".
- 68. All Y-inlets and inlets 10-foot or greater should have a minimum 21-inch lateral.
- 69. All public storm drain pipes must be minimum 18", Class III RCP. Please label the pipes accordingly.
- 70. Proposed driveway turnouts must be minimum 10 feet from any existing or proposed inlet. For example, how do you propose to build a driveway on Lot 17, Block A/6960?
- 71. All sections of the storm drain pipe profiles should show the Q_{100} , Q_{CAP} , Velocity, Slope, etc...
- 72. A minimum grade of 0.3 percent must be maintained in the pipe.



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73. Horizontal and vertical curve design for storm drains shall take into account joint closure. Half tongue exposure is the maximum opening permitted with tongue and groove pipe. Where vertical and/or horizontal alignment require greater deflection, radius pipe on curved alignment should be used.

- 74. End-to-end connections on different size pipes shall match at the crown of the pipe unless utility clearance dictates otherwise.
- 75. Embedment material for all public storm drain lines is 1" crushed limestone, from 6" below the pipe to half way up the pipe or to the spring line.
- 76. Manhole covers on inlet boxes should be located at the same end of the inlet box as the lateral draining the inlet.
- 77. A manhole or junction structure must be provided when connecting multiple pipes into a main line at the same joint, except when the diameter of the main line is more than twice as great as the diameter of the largest adjoining lateral.
- 78. The minimum manhole inside dimension is 4 feet.
- 79. Cylindrical manholes are **not** allowed.
- 80. Steps are required in any manhole that is at least 5' in depth. Manhole lid/riser should be located toward the side of the structure (offset) such that the steps descending into the structure are aligned vertically. The first step must not exceed 15" from top of pavement. Bass & Hayes plastic coated steel, Neoprene coated steel steps or equal shall be placed securely into manhole walls on 15" centers vertically and staggered on 12" centers horizontally, per 251D-1 Standard Construction Details, Sheet 2008.
- 81. All manhole structures in pavement should be blocked-out in 1" redwood (diamond shaped).
- 82. Place the following note on the plans: All storm drain lines must be videoed by the contractor after the paving work above the pipe is complete. Please confirm that there is adequate access.
- 83. Storm drain lines 45 inches in diameter or less should have points of access no more than 500 feet apart. A manhole should be provided where this condition is not met.
- 84. Provide typical channel cross sections.
- 85. Channels shall be designed to convey the 100-year storm, assuming fully developed watershed conditions, with two (2) foot of freeboard to the top of channel bank.
- 86. Developers will be expected to ensure that all requirements of the Clean Water Act (404 permit) are met. Provide letters/email correspondences with Army Corps of Engineers.
- 87. The engineer should verify, through stable channel (normal depth) calculations, the suitability of the floodplain to contain the flows. If this analysis demonstrates erosion outside of the designated flow path (easement and/or ROW), an analysis of the equilibrium slope and degradation or aggregation depths is required and suitable improvements identified.
- 88. These engineering plans must be reviewed and approved by Mr. Steve Parker, P.E. with Dallas Water Utilities (DWU) Floodplain Management. Please submit an additional set of plans that we will forward to him. We will forward his comments to you as soon as we receive them.
- 89. The Engineer of record shall certify that the drainage analysis is accurate and that downstream conditions will not be adversely affected by the proposed drainage design.

Attachments (6)



HELPFUL UTILITY RELATED NUMBERS (Updated 04/2018)

City of Dallas - SDC Engineering

*Please note that it is contact list is not all-inclusive. It is the <u>consulting engineer's</u> <u>responsibility</u> provide further coordination/research and to verify that the listed contacts are current and specific to their project site's needs.

City of Dallas

DWU line locate: 311

SANITATION

Kirk Hemphill 214-670-3674 <u>kirk.hemphill@dallascityhall.com</u>
Anthony O'suillvan 214-670-6164 <u>Anthony.OSullivan@dallascityhall.com</u>

<u>STREETS</u>

(SEE STREET MAPS FOR CONTACT)

LANE CLOSURES: STREETS
TRAFFIC ENGINEERING DIVISION

Department of Transportation 214-670-6904

Traffic Signal Conduit 214-670-3983

TRAFFIC SIGNALS

Brittney Donehoo Office: 214-670-4024

PUBLIC WORKS-STREETS-LINE AND

GRADE

Dorothy Martinez Office: 214-670-5311

DART (Dallas Area Rapid Transit)

Matt Lannon Office: 214-749-2917 mlannon@dart.org

1410 Pacific Ave. Dallas, TX 75202

TxDOT (Texas Department of Transportation)

TxDot District Office Office: 214-320-6100
TxDot Permits - Terry Carter Office: 214-320-6270

Utility Locators

Underground Locates: 1-800-344-8377 (1-800-DIG-TESS)

Electric Power Outage

Electric Power Outage: 1-800-233-2133

TXU Energy - Electric

TXU Energy Customer Service: 972-791-2888 1-800-242-9113

Oncor - Electric

Richard Brewster Energy Plaza

1616 Woodall Rodgers Dallas, Texas 75202 Office/Mobile: 214-486-4245

Richard.brewster@oncor.com

Oncor Northeast Service Center - Designer's Zip Code Areas

David Solis 972-860-6652 <u>David Solis@oncor.com</u>

75201 75219 75235

Blessey Castallas 972-860-6654 <u>bcastallas@oncor.com</u>

75204 75223 75226 75246

Keith Kinney 972-860-6650 <u>Keith.Kinney@oncor.com</u>

75205 75209 75225

David Solis 972-860-6652 <u>David.Solis@oncor.com</u>

75202 75214 75218 75228

Jordan Reed 972-860-6664 Jordan.Reed@oncor.com

75206 75231 75238

Mark Russel 469-502-8663 Mark.Russel@oncor.com

75215

Atmos - Natural Gas

Gas Emergency Leaks: 1-800-817-8090

Gas Customer Service: 972-934-9227 1-800-460-3030

Atmos Energy-Gas (Mesquite): 214-4856277 <u>dinah.wood@atmosenergy.com</u>

Dinah Wood

South of I-30 & 469-261-2006 <u>sue.inurrigarro@atmosenergy.com</u>

North of I-30 (East of US 75 only)

Sue Inurrigarro

North of I-30 & West of US 75 214-426-7074 thomas.hunter@atmosenergy.com

TJ Hunter

Far North Dallas 972-964-4109 <u>bobby.rogers@atmosenergy.com</u>

Bobby Rogers

Telecommunications

2

AT&T

AT & T Customer Repair Center: 1-800-246-8464

Peter Russell Office: 972-649-8749 pr7004@att.com

Mobile: 469-215-0541

AT&T

308 S. Akard St., Rm. 2124

Dallas, TX 75202

AT&T

Jim Mullins Office: 530-541-0061

AT&T Long Distance 3910 San Jacinto St. Rm 4

Dallas, TX 75204

Centurylink Communications, Quest Communications, Enron Communications

Scott Whaley Office: 214-302-0254 <u>scott.whaley@centurylink.com</u>

12001 N. Central Expressway, Mobile: 214-929-5553

Suite 900, Dallas, TX 75243

<u>Level 3 Communications</u>

Roger Underwood Office: 214-443-2702 <u>roger.underwood@centurylink.</u>

3180 Irving Blvd, Dallas, TX 75247 Mobile: 214-621-6097 <u>com</u>

<u>SPRINT</u>

James Stuart Mobile: 214-289-5105 <u>james.stuart@sprint.com</u>

1616 Maryland Rd., Irving, TX 75061

TW TELECOM

4055 Valley View Lane #110 Office: 214-451-6600

Dallas, Texas 75244

Spectrum

Spectrum Customer Service: 1-800-892-4357 Spectrum Service for City Issues: 1-866-519-1263

Jorge Barrera Office: 214-320-5443 Jorge.barrera@charter.com

1565 Chenault St., Dallas, Texas 75228 Mobile: 214-869-7563

Verizon

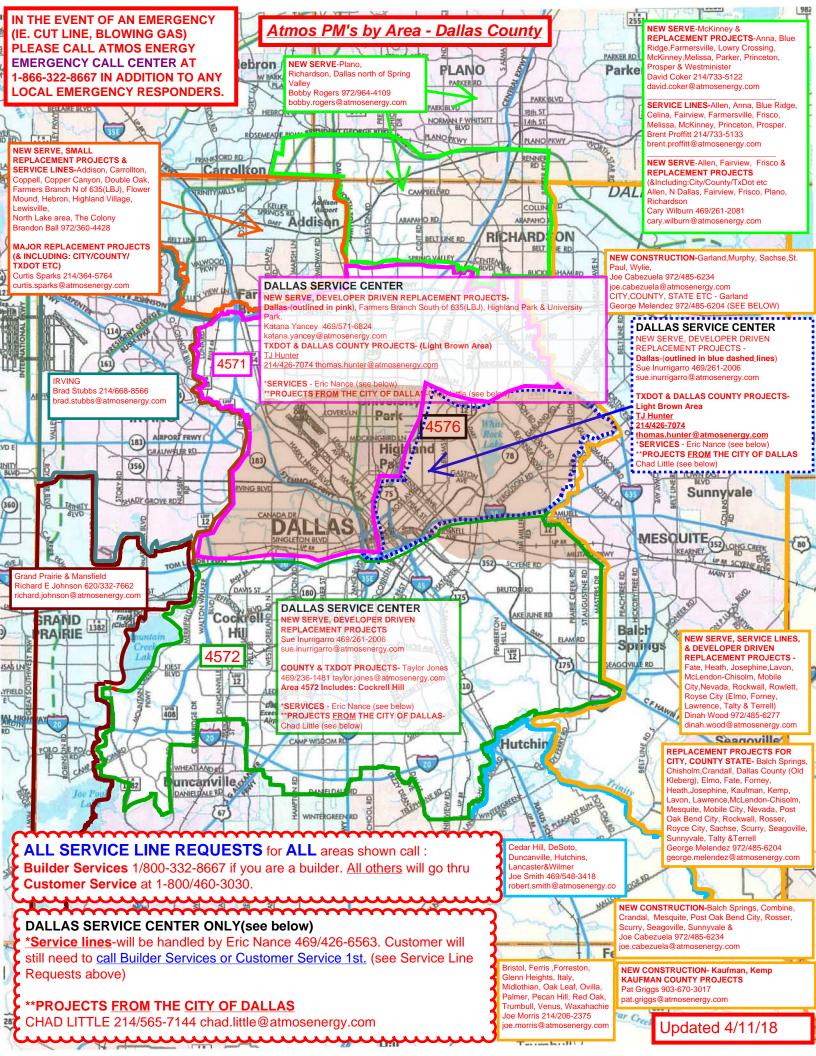
George Mohrmann Office:

2400 N. Glenville, Richardson, TX 75082 Mobile: 214-783-1231

Jeff Buehler Office: 972-729-6404 jeff.buehler@verizon.com

Mobile: 214-995-2518

<u>Verizon Communications</u> Office: 972-516-9126



Engineering File Submission Guidelines Paving and Drainage

Effective January 1, 2015



The following are guidelines for submitting digital files of engineering plans approved through the paving and drainage review process. Guidelines for digital file submissions will be strictly enforced. Multiple project submittals on a single Disc will not be accepted. Any submittals not **complete** and in conformance to the specified guidelines will not be accepted and may result in the delay in the release of permits and construction.

a. Submittals must be on a single CD or DVD, hereinafter called *Disc*.

1. Media

	b. The Disc shall be labeled with <u>ALL</u> of the following information:		
	□ Name of the engineering consultant company submitting the plans		
	□ Project name		
	☐ Assigned 311T- project number		
	☐ City plat file number (S-number)		
	☐ Mapsco Grid Location per Dallas County Appraisal District		
	□ Newly assigned address or if not available;		
	□ City Block number		
	☐ Effective Date (seal date)		
	□ Notate if plans are Revisions to Final (RTF)		
2. Disc Content			
a. The Disc shall contain <u>ALL</u> of the following data files in Portable Document Format			
(PDF):			
	□ Combined full set of approved engineering plans, complete with the most current		
	version of the preliminary plat or, if approved, final plat.		
	☐ Separated single PDF file of each approved engineering plan sheet.		
	☐ Copy of the executed transmittal letter accompanying the submittal.		
	☐ A compressed and self-extracting file type (.ZIP) is acceptable in consideration		

3. File Naming Convention

Files of engineering plans and drawings shall utilize the following naming convention:

of media file size limitations.

□ Combined full set:

 $City\ assigned\ project\ number_Project\ Name_Final\ Full\ Set$

Example: 311T-3000 City Park Apartments Final Full Set

□ Single and separated drawings:

City assigned project number_Project Name_Sheet Number_Sheet Name

Example: 311T-3000_City Park Apartments_C001_Paving Plan

□ Revision to Final drawings:

City assigned project number_Project Name_Sheet Number_Sheet Name_RTF

Example: 311T-3000_City Park Apartments_C001_Paving Plan_RTF

If more than one RTF, please indicate which version it is, i.e. RTF2, RTF3



EASEMENT 20070328349

DECLARATION OF PRIVATE DRAINAGE EASEMENT

THIS DECLARATION OF PRIVATE DRAINAGE EASEMENT is made this 7 day of September, 2007, by MURPHY SENN CUSTOM HOMES, L.P., a Texas limited partnership ("Declarant")

Introductory Provisions:

- A. Declarant owns a certain tract of land located in the City of Dallas, Dallas County, Texas, and described on Exhibit A attached hereto (the "Property").
- B. Declarant intends to subdivide the Property into three (3) residential building lots to be designated as Lots 30, 31 and 32 of White Rock West Addition to the City of Dallas, pursuant to a Plat for said Addition to be filed in the Plat Records of Dallas County, Texas.
- C. Declarant desires to create a private drainage easement upon and across the Property to provide for the proper drainage of storm and surface waters.

NOW, THEREFORE, Declarant hereby declares that the Property shall be held, sold, used and conveyed subject to the following private drainage easement and covenants, which shall run with the title to the Property:

- 1. The Property is hereby made subject to a private drainage easement (the "Easement") ten feet (10') wide along the entire length of the southwesterly boundary of the Property, from Goforth Road at the northwest corner of the Property to a public alley at the southwest corner of the Property, as more particularly described in Exhibit B attached hereto.
- 2. The Easement shall be for the purposes of drainage of storm and surface waters from the Property to the public alley and drainage facilities located in such public alley adjacent to the Property, and shall include the rights to excavate the land within the Easement to create an open or closed, or partially open and partially closed, drainage channel or swale, to install pipes and drain inlets and outlets for same; and to keep, maintain, repair and replace all improvements so constructed.
- 3. After Declarant shall have constructed within the Easement a drainage channel or swale, and underground pipes and drain inlets and outlets, such drainage facilities shall not be materially altered without the consent of the owners of all of the Property benefited by the Easement; provided however, that consent shall not be unreasonably withheld or delayed if alteration is reasonably necessary to accomplish proper drainage of storm and surface waters. Each owner of any portion of the Property shall maintain the drainage facilities within the portion of the Easement located on such owner's portion of the Property in a state of good repair so that the drainage facilities shall function as intended.

4. Then owner fails to maintain the drainage facilities located within the Easement on such owner portion of the Property, any other owner may enforce such obligation by any lawful mean, and shall have the right of ingress and egress to or from and upon the Easement for the purpose of inspecting, maintaining, reconstructing and adding to or removing all or parts of its drainage facilities, and the right to remove and keep removed all or parts of any building, fences, shrubs, trees, or other improvements or growths which, in any way, endanger or interfere with the construction, maintenance or efficiency of its use of the Easement.

5. This Declaration shall be binding upon all parties having any right, title or interest in any portion of the Property, their heirs, successors, and assigns, and shall inure to the benefit of Declarant and each owner of any portion of the Property.

EXECUTED as of the date set forth above.

DECLARANT:

MURPHY SENN CUSTOM HOMES, L.P. a Texts limited partnership

CNIA INTUES

SNM INVESTMENTS, INC.

a Texas corporation, its General Partner

Bv:

Chad Senn, President

THE STATE OF TEXAS

COUNTY OF DALLAS

This instrument was acknowledged before me on the day of September, 2007, by CHAD SENN, President of SNM INVESTMENTS, INC., a Texas corporation, General Partner of MURPHY SENN CUSTOM HOMES, L.P., a Texas limited partnership, on behalf of said corporation and partnership.

Notary Public, State of Texas

My Commission Expires

CHESTL MCINTRE
Notary Public, State of Temps
My Commission Expres 87-12-10

EXHIBIT A

The Property

Being a 0.572-acre tract of land situated in the D.A. Murdock Survey, Abstract No. 997, City of Dallas, Dallas Comty, Texas, and being part of Block 5446 of the City of Dallas, and having been conveyed to Murally Senn Custom Homes, L.P. by Deed recorded under Instrument No. 20060030514 of the Deed Records of Dallas County, Texas, and being more particularly described as follows:

BEGINNING at a 1/2 inoth iron rod found with cap marked "Surveying & Assoc." at the intersection of the southeast line of Goforth Road (variable width) with the southwest line of Bargiames Lane (30 feet wide), same being the north corner of said Block 5446;

THENCE South 45 degrees 07 minutes 30 seconds East along said southwest line of Bargiames Lane, a distance of 200:17 feet to a 1/2 inch iron rod found at the intersection of said southwest line with the northwest line of a 15 feet wide alley, same being the most easterly north corner of White Rock Forrest Addition, an Addition to the City of Dallas, Texas, according to the Map thereof recorded in Volume 26, Page 225, Map Records, Dallas County, Texas;

THENCE South 45 degrees 15 minutes 00 seconds West along said northwest line of said alley, a distance of 124.37 feet to a ½ inch iron rod marked Surveying & Assoc." found for corner, same being the most east corner of that certain tract of land conveyed to John G. Johnson, et ux by Deed recorded in Volume 74134, Page 2115 Deed Records, Dallas County, Texas;

THENCE North 45 degrees 18 minutes 20 seconds West along the northeast line of said Johnson tract and the northeast line of that certain tract of land conveyed to Kelly Dupree by Deed recorded in Volume 2004189, Page 1935, Deed Records, Dallas County, Texas, a distance of 199.75 feet to a ½ inch iron rod found in the southeast line of Goforth Road, same being the north corner of said Dupree tract:

THENCE North 45 degrees 03 minutes 25 seconds East along the southeast line of Goforth Road, a distance of 125.00 feet to the PLACE OF BEGINNING and containing 24,932 square feet or 0.572 acre of land, more or less.

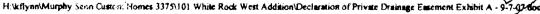


EXHIBIT B

10 FOOT PRIVATE DRAINAGE EASEMENT

BEING a 1,998 square foot tract of land situated in the D. A. Murdock Survey, Abstract No. 997, City of Dallas, Dallas County, Texas, and being part of Block 5446, and being part of that certain tract of land conveyed to Murphy Senn Custom Homes, L.P. by Deed recorded under Instrument No. 200600305514, Dallas County, Texas, and being more particularly described as foliows:

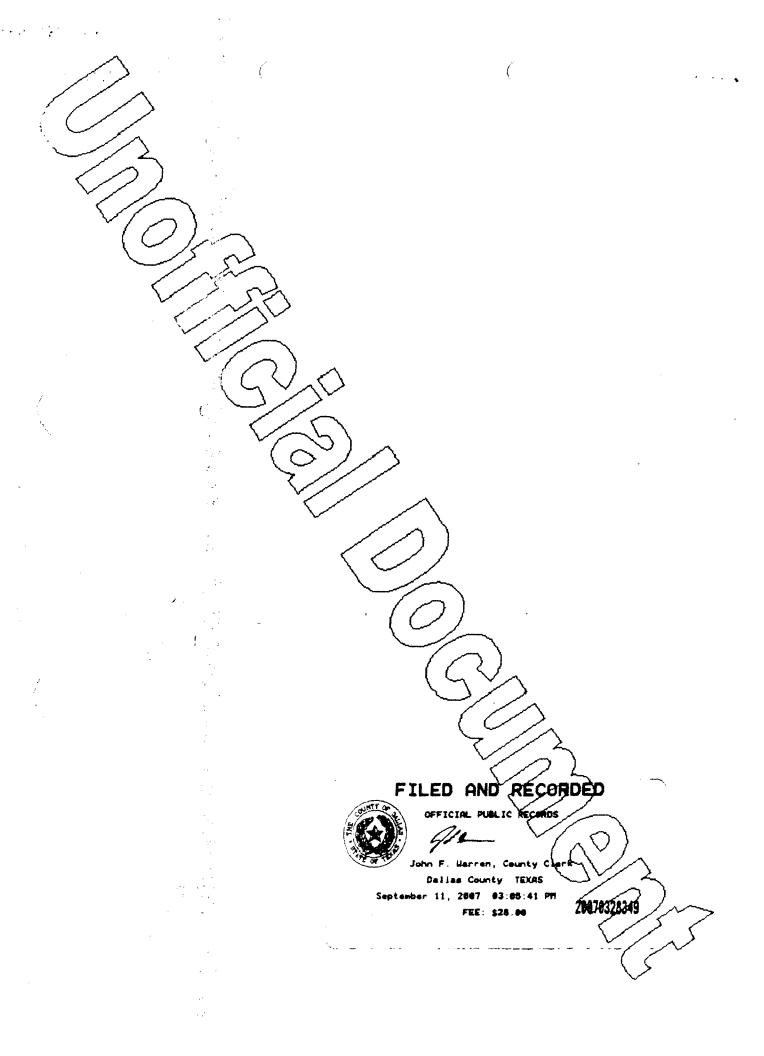
COMMENCING at a 1/2 inch iron rod found with cap marked "Surveying & Assoc." at the intersection of the southeast line of Goforth Road (variable width R.O.W.) with the southwest line of Bargiames Lane (30 foot R.O.W.), same being the north comer of said Block 5446 thence South 45 degrees 03 minutes 25 seconds West blong said southeast line of Goforth Road, a distance of 115.00 feet for the PLACE OF BEGINNING;

THENCE South 45 degrees 18 minutes 20 seconds East, being Northeast 10 feet and parallel with the southwest line of said Murphy Senn tract, a distance of 199.78 feet for comer in the southeast line of Murphy Senn tract, same being in the northwest line of a 15 footwide alley.

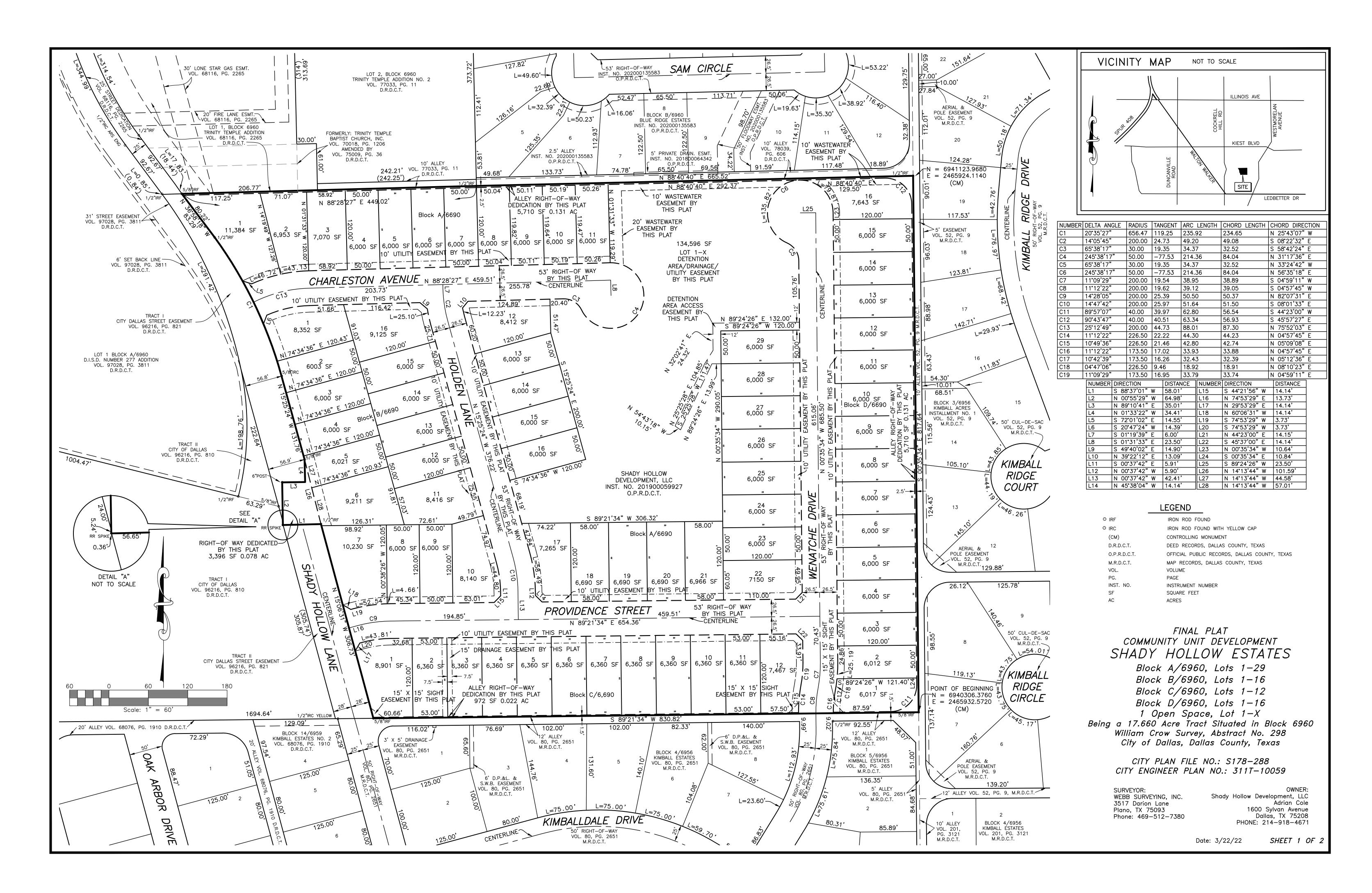
THENCE South 45 degrees 15 minutes 00 seconds West along the northwest line of said alley, a distance of 10.00 feet to a 1/2 inch iron rod found at the common easterly corner of said Murphy Senn tract and that certain tract of land conveyed to John G. Johnson and Edith Johnson by Deed recorded in Volume 74134, Page 2115, Deed Records, Dallas County, Texas;

THENCE North 45 degrees 18 minutes 20 seconds West along the southwest line of Murphy Serin tract and part of the way along the northeast line of said Johnson tract and part of the way along the northeast line of that certain tract of land conveyed to Kelly Dupree by Deed recorded in Volume 2004189, Page 1935, Deed Records, Dallas County, Texas, a distance of 198,75 feet to a 1/2 inch iron rod found in the southeast line of Goforth Read, same being the common westerly corner of Murphy Senn tract and said Dupree tract:

THENCE North 45 degrees 03 minutes 25 seconds East along the southeast line of Goforth Road, a distance of 10.00 feet to the PLACE OF BEGINNING and containing 1.538 square feet or 0.046 acre of land, more or less







OWNER'S CERTIFICATE

STATE OF TEXAS}
COUNTY OF DALLAS}

WHEREAS, SHADY HOLLOW DEVELOPMENT, LLC, IS THE OWNER OF THAT CERTAIN TRACT OF LAND SITUATED IN THE CITY OF DALLAS, BLOCK 6960, DALLAS COUNTY, TEXAS, AND BEING OUT OF THE WILLIAM CROW SURVEY, ABSTRACT NO. 298, AND BEING OUT OF AND A PORTION OF THAT CERTAIN TRACT OF LAND CONVEYED TO SHADY HOLLOW DEVELOPMENT, LLC, BY GENERAL WARRANTY DEED DATED MARCH 8, 2019, AND RECORDED IN INSTRUMENT NO. 201900059927, OFFICIAL PUBLIC RECORDS, DALLAS COUNTY, TEXAS, AND BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

BEGINNING AT A 5/8" IRON ROD FOUND IN THE WEST LINE OF BLOCK 3/6956, KIMBALL ACRES — INSTALLMENT NO. 1, AN ADDITION TO THE CITY OF DALLAS, RECORDED IN VOLUME 52, PAGE 9, MAP RECORDS, DALLAS COUNTY, TEXAS, AT THE NORTHEAST CORNER OF BLOCK 4/6956, KIMBALL ESTATES, AN ADDITION TO THE CITY OF DALLAS, RECORDED IN VOLUME 80, PAGE 2651, MAP RECORDS, DALLAS COUNTY, TEXAS, SAME BEING THE SOUTHEAST CORNER HEREOF;

THENCE SOUTH 89°21'34" WEST, ALONG THE NORTH LINE OF SAID KIMBALL ESTATES, AND A 12' WIDE ALLEY RIGHT-OF-WAY AS DEDICATED BY VOLUME 80, PAGE 2651, MAP RECORDS, DALLAS COUNTY, TEXAS, A DISTANCE OF 830.82 FEET TO A 5/8" IRON ROD FOUND FOR CORNER AT THE SOUTHWEST CORNER HEREOF, SAID POINT BEING AT THE INTERSECTION OF THE NORTH LINE OF SAID ALLEY WITH THE EAST LINE OF LOS ANGELES BOULEVARD, AND BEING IN THE EAST LINE OF TRACT II AS DESCRIBED IN A STREET EASEMENT TO THE CITY OF DALLAS BY INSTRUMENT RECORDED IN VOLUME 96216, PAGE 821, DEED RECORDS, DALLAS COUNTY, TEXAS;

THENCE NORTH 15°06'31" WEST, ALONG THE EAST LINE OF SAID TRACT II, BEING THE WEST LINE OF THE HEREIN DESCRIBED TRACT, A DISTANCE OF 306.73 FEET TO A 1/2" IRON ROD FOUND FOR AN EXTERIOR ELL CORNER OF HEREIN DESCRIBED TRACT AND BEING THE NORTHEAST CORNER OF SAID TRACT II;

THENCE SOUTH 88°37'01" WEST, ALONG THE NORTH LINE OF SAID TRACT II, AT 56.65' FEET, PASSING THE NORTHWEST CORNER OF SAID TRACT II AND CONTINUING FOR A TOTAL DISTANCE OF A DISTANCE OF 58.01 FEET TO A RAILROAD SPIKE FOUND FOR AN EXTERIOR ELL CORNER OF THE HEREIN DESCRIBED TRACT AND AN INTERIOR CORNER OF TRACT I, DESCRIBED IN A DEED TO THE CITY OF DALLAS RECORDED VOLUME 96216, PAGE 810, DEED RECORDS, DALLAS COUNTY, TEXAS;

THENCE NORTH 00°55'29" WEST, ALONG A WEST LINE OF THE HEREIN DESCRIBED TRACT AND AN EAST LINE OF SAID TRACT I, AT 5.24 FEET, PASSING AN ANGLE POINT THEREOF COMMON TO THE MOST SOUTHERN CORNER OF TRACT I, DESCRIBED IN SAID INSTRUMENT TO THE CITY OF DALLAS, RECORDED IN VOLUME 96216, PAGE 821, DEED RECORDS, DALLAS COUNTY, TEXAS, AND CONTINUING ALONG A COMMON WEST LINE OF THE HEREIN DESCRIBED TRACT AND THE EAST LINE OF SAID TRACT I, FOR A TOTAL DISTANCE OF 64.98 FEET, TO A 6" POST FOUND;

THENCE ALONG THE COMMON LINES OF SAID TRACT I AND THE HEREIN DESCRIBED TRACT THE FOLLOWING FIVE (5) COURSES:

- 1. NORTH 89°10'41" EAST, A DISTANCE OF 35.01 FEET TO A POINT;
- 2. NORTH 01°33'22" WEST, A DISTANCE OF 34.41 FEET TO A 5/8" IRON ROD FOUND FOR A SOUTHEASTERLY CORNER OF SAID TRACT 1, AND IN THE WEST LINE OF THE HEREIN DESCRIBED TRACT;
- 3. NORTH 15°25'24" WEST, ALONG A NORTHEAST LINE OF SAID TRACT I AND WITH A WEST LINE OF THE HEREIN DESCRIBED TRACT A DISTANCE OF 131.76 FEET TO 5/8" IRON ROD FOUND WITH YELLOW CAP FOR THE BEGINNING OF A NON-TANGENT CURVE TO THE LEFT:
- 4. ALONG SAID NON-TANGENT CURVE TO THE LEFT HAVING A RADIUS OF 657.47 FEET, THROUGH A CENTRAL ANGLE OF 20°35'27", AN ARC DISTANCE OF 235.92 FEET AND A CHORD WHICH BEARS NORTH 25°43'07" WEST, A DISTANCE OF 234.65 FEET TO A 1/2" IRON ROD FOUND;
- 5. NORTH 36°58'18" WEST, ALONG LAST MENTIONED COMMON LINES, A DISTANCE OF 83.29 FEET, TO A 5/8" IRON ROD FOUND AT THE SOUTHWEST CORNER OF LOT 1, BLOCK 6960, TRINITY TEMPLE ADDITION, AN ADDITION TO THE CITY OF DALLAS, RECORDED IN VOLUME 68116, PAGE 2265, DEED RECORDS, DALLAS COUNTY, TEXAS, SAID POINT ALSO BEING THE NORTHEAST CORNER OF SAID TRACT I AND A NORTHWEST CORNER OF THE HEREIN DESCRIBED TRACT;

THENCE NORTH 88*28'27" EAST, ALONG THE SOUTH LINE OF SAID TRINITY TEMPLE ADDITION, PASSING AT A DISTANCE OF 206.77 FEET THE EAST LINE OF SAID LOT 1 OF TRINITY TEMPLE ADDITION AND THE SOUTHWEST CORNER OF LOT 2, BLOCK 6960, TRINITY TEMPLE ADDITION NO. 2, AN ADDITION TO THE CITY OF DALLAS, RECORDED IN VOLUME 77033, PAGE 11, DEED RECORDS, DALLAS COUNTY, TEXAS, AND CONTINUING ALONG THE SOUTH SIDE OF A 10' ALLEY BY SAID VOLUME 77033, PAGE 11, DEED RECORDS, DALLAS COUNTY, TEXAS, FOR A TOTAL DISTANCE OF 449.02 FEET TO A 1/2" IRON ROD FOUND AT THE SOUTHEAST CORNER OF SAID TRINITY TEMPLE ADDITION NO. 2, SAME BEING THE SOUTHWEST CORNER OF BLOCK B/6960, BLUE RIDGE ESTATES, AN ADDITION TO THE CITY OF DALLAS, RECORDED INSTRUMENT NO. 202000135583, OFFICIAL PUBLIC RECORDS, DALLAS COUNTY, TEXAS;

THENCE NORTH 88*40'40" EAST, ALONG THE SOUTH LINE OF A 12.5' ALLEY BY INSTRUMENT NO. 202000135583, OFFICIAL PUBLIC RECORDS, DALLAS COUNTY, TEXAS, AND BY VOLUME 78039, PAGE 606, DEED RECORDS, DALLAS COUNTY, TEXAS, AND THE SOUTH LINE OF SAID BLOCK B/6960, A DISTANCE OF 665.52 FEET, TO A 1/2" IRON ROD FOUND FOR CORNER IN THE WEST LINE OF KIMBALL ACRES INSTALLMENT NO. 1, AN ADDITION TO THE CITY OF DALLAS, RECORDED IN VOLUME 52, PAGE 9, MAP RECORDS, DALLAS COUNTY, TEXAS, SAME BEING THE NORTHEAST CORNER OF THE HEREIN DESCRIBED TRACT, AND BEING IN THE WEST LINE OF A 10' WIDE ALLEY AS DEDICATED BY VOLUME 52, PAGE 9, MAP RECORDS, DALLAS COUNTY, TEXAS;

THENCE SOUTH 00°35'34" EAST, ALONG THE WEST LINE OF SAID 10' ALLEY AND THE EAST LINE OF THE HEREIN DESCRIBED TRACT, A DISTANCE OF 817.78 FEET, TO THE POINT OF BEGINNING AND CONTAINING 769,262 SQUARE FEET OR 17.660 ACRES OF LAND, MORE OR LESS.

OWNER'S DEDICATION

NOW THEREFORE, KNOW ALL MEN BY THESE PRESENTS:

THAT, SHADY HOLLOW DEVELOPMENT, LLC, ACTING BY AND THROUGH IT'S DULY AUTHORIZED AGENT, ADRIAN COLE, DOES HEREBY ADOPT THIS PLAT DESIGNATING THE HEREIN ABOVE DESCRIBED PROPERTY AS SHADY HOLLOW ESTATES AN ADDITION TO THE CITY OF DALLAS, DALLAS COUNTY, TEXAS AND DOES HEREBY DEDICATE, IN FEE SIMPLE, TO THE PUBLIC USE FOREVER ANY STREETS, ALLEYS AND FLOODWAY MANAGEMENT AREAS SHOWN THEREON. THE EASEMENTS SHOWN THEREON ARE HEREBY RESERVED FOR THE PURPOSES INDICATED. THE UTILITY AND FIRE LANE EASEMENTS SHALL BE OPEN TO THE PUBLIC, FIRE AND POLICE UNITS, GARBAGE AND RUBBISH COLLECTION AGENCIES, AND ALL PUBLIC AND PRIVATE UTILITIES FOR EACH PARTICULAR USE. THE MAINTENANCE OF PAVING ON THE UTILITY AND FIRE LANE EASEMENTS IS THE RESPONSIBILITY OF THE PROPERTY OWNER. NO BUILDINGS, FENCES, TREES, SHRUBS, OR OTHER IMPROVEMENTS OR GROWTHS SHALL BE CONSTRUCTED, RECONSTRUCTED OR PLACED UPON, OVER OR ACROSS THE EASEMENTS AS SHOWN. SAID EASEMENTS BEING HEREBY RESERVED FOR THE MUTUAL USE AND ACCOMMODATION OF ALL PUBLIC UTILITIES USING OR DESIRING TO USE SAME. ALL, AND ANY PUBLIC UTILITY SHALL HAVE THE RIGHT TO REMOVE AND KEEP REMOVED ALL OR PARTS OF ANY BUILDING, FENCES, TREES, SHRUBS OR OTHER IMPROVEMENTS OR GROWTHS WHICH IN ANY WAY MAY ENDANGER OR INTERFERE WITH THE CONSTRUCTION, MAINTENANCE OR EFFICIENCY OF ITS RESPECTIVE SYSTEM ON THE EASEMENTS, AND ALL PUBLIC UTILITIES SHALL AT ALL TIMES HAVE THE FULL RIGHT OF INGRESS AND EGRESS TO OR FROM THE SAID EASEMENTS FOR THE PURPOSE OF CONSTRUCTING, RECONSTRUCTING, INSPECTING, PATROLLING. MAINTAINING AND ADDING TO OR REMOVING ALL OR PARTS OF ITS RESPECTIVE SYSTEMS WITHOUT THE NECESSITY AT ANY TIME OF PROCURING THE PERMISSION OF ANYONE. (ANY PUBLIC UTILITY SHALL HAVE THE RIGHT OF INGRESS AND EGRESS TO PRIVATE PROPERTY FOR THE PURPOSE OF READING METERS AND ANY MAINTENANCE OR SERVICE REQUIRED OR ORDINARILY PERFORMED BY THAT UTILITY.)

WATER MAIN AND WASTEWATER EASEMENTS SHALL ALSO INCLUDE ADDITIONAL AREA OF WORKING SPACE FOR CONSTRUCTION AND MAINTENANCE OF THE SYSTEMS. ADDITIONAL EASEMENT AREA IS ALSO CONVEYED FOR INSTALLATION AND MAINTENANCE OF MANHOLES, CLEANOUTS, FIRE HYDRANTS, WATER SERVICES AND WASTEWATER SERVICES FROM THE MAIN TO THE CURB OR PAVEMENT LINE, AND DESCRIPTION OF SUCH ADDITIONAL EASEMENTS HEREIN GRANTED SHALL BE DETERMINED BY THEIR LOCATION AS INSTALLED.

THIS PLAT APPROVED SUBJECT TO ALL PLATTING ORDINANCES, RULES, REGULATIONS, AND RESOLUTIONS OF THE CITY OF DALLAS, TEXAS.

WITNESS MY HAND THIS THE _____DAY OF _____, 2022.

BY: ADRIAN COLE, MANAGER
SHADY HOLLOW DEVELOPMENT, LLC

STATE OF TEXAS}
COUNTY OF DALLAS}

BEFORE ME, THE UNDERSIGNED AUTHORITY, ON THIS DAY PERSONALLY APPEARED ADRIAN COLE, KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE/SHE EXECUTED THE SAME FOR THE PURPOSES AND CONSIDERATION THEREIN EXPRESSED, AND IN THE CAPACITY THEREIN STATED.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, THIS THE _____DAY O

NOTARY PUBLIC IN AND FOR STATE OF TEXAS

SURVEYOR'S STATEMENT:

I, KURTIS R. WEBB, a Registered Professional Land Surveyor, licensed by the State of Texas, affirm that this plat was prepared under my direct supervision, from recorded documentation, evidence collected on the ground during field operations and other reliable documentation; and that this plat substantially complies with the Rules and Regulations of the Texas Board of Professional Engineers and Land Surveyors, the City of Dallas Development Code (Ordinance No. 19455, as amended), and Texas Local Government Code, Chapter 212. I further affirm that monumentation shown hereon was either found or placed in compliance with the City of Dallas Development Code, Sec. 51A—8.617 (a) (b) (c) (d) & (e); and that the digital drawing file accompanying this plat is a precise representation of this Signed Final Plat.

Dated this the _____day of ______, 2022.

KURTIS R. WEBB
Texas Registered
Professional Land Surveyor No. 4125

STATE OF TEXAS}
COUNTY OF COLLIN

BEFORE ME, the undersigned authority, on this day personally appeared Kurtis R. Webb, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he/she executed the same for the purposes and consideration therein expressed, and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the _____day of _____, 2022.

Notary Public in and for State of Texas

OT 1 BLOCK A/6960 11,384 OT 1X BLOCK A/6960 134,596 OT 2 BLOCK A/6960 6,953 OT 3 BLOCK A/6960 6,000 OT 4 BLOCK A/6960 6,000 OT 5 BLOCK A/6960 6,000 OT 6 BLOCK A/6960 6,000 OT 7 BLOCK A/6960 6,000 OT 7 BLOCK A/6960 6,000 OT 8 BLOCK A/6960 6,000 OT 10 BLOCK A/6960 6,000 OT 11 BLOCK A/6960 6,000 OT 12 BLOCK A/6960 6,000 OT 13 BLOCK A/6960 6,000 OT 14 BLOCK A/6960 6,000 OT 15 BLOCK A/6960 6,000 OT 16 BLOCK A/6960 6,000 OT 17 BLOCK A/6960 6,000 OT 18 BLOCK A/6960 6,000 OT 10 BLOCK A/6960 6,000 OT 12 BLOCK A/6960 6,000 OT 14 BLOCK A/6960 6,000 OT 15 BLOCK A/6960 6,000 OT 16 BLOCK A/6960 6,000 OT 17 BLOCK A/6960 6,000 OT 19 BLOCK A/6960 6,960 OT 20 BLOCK A/6960 6,960 OT 21 BLOCK A/6960 6,960 OT 22 BLOCK A/6960 6,960 OT 23 BLOCK A/6960 6,000 OT 24 BLOCK A/6960 6,000 OT 25 BLOCK A/6960 6,000 OT 25 BLOCK A/6960 6,000 OT 26 BLOCK A/6960 6,000 OT 27 BLOCK A/6960 6,000 OT 27 BLOCK A/6960 6,000			·	
BLOCK A/6960 134,596 BLOCK A/6960 6,953 BLOCK A/6960 7,070 BLOCK A/6960 6,000 T 4 BLOCK A/6960 6,000 BLOCK A/6960 6,000 T 5 BLOCK A/6960 6,000 T 6 BLOCK A/6960 6,000 T 7 BLOCK A/6960 6,000 T 8 BLOCK A/6960 6,000 T 10 BLOCK A/6960 6,000 T 11 BLOCK A/6960 6,000 T 12 BLOCK A/6960 6,000 T 13 BLOCK A/6960 6,000 T 14 BLOCK A/6960 6,000 T 15 BLOCK A/6960 6,000 T 16 BLOCK A/6960 6,000 T 17 BLOCK A/6960 6,000 T 18 BLOCK A/6960 6,000 T 19 BLOCK A/6960 6,000 T 19 BLOCK A/6960 6,960 T 19 BLOCK A/6960 6,960 T 20 BLOCK A/6960 6,960 T 21 BLOCK A/6960 6,960 T 22 BLOCK A/6960 6,960 T 23 BLOCK A/6960 6,000 T 24 BLOCK A/6960 6,000 T 25 BLOCK A/6960 6,000 T 25 BLOCK A/6960 6,000 T 26 BLOCK A/6960 6,000 T 27 BLOCK A/6960 6,000	_OT	NUMBER	BLOCK NUMBER	SQUARE FEET
OT 2		•		
BLOCK A/6960 7,070	_OT	1X	BLOCK A/6960	134,596
DOT 4 BLOCK A/6960 6,000 DOT 5 BLOCK A/6960 6,000 DOT 6 BLOCK A/6960 6,000 DOT 6 BLOCK A/6960 6,000 DOT 7 BLOCK A/6960 6,000 DOT 8 BLOCK A/6960 6,000 DOT 10 BLOCK A/6960 6,000 DOT 11 BLOCK A/6960 6,000 DOT 12 BLOCK A/6960 6,000 DOT 13 BLOCK A/6960 6,000 DOT 14 BLOCK A/6960 6,000 DOT 15 BLOCK A/6960 6,000 DOT 16 BLOCK A/6960 6,000 DOT 17 BLOCK A/6960 6,000 DOT 18 BLOCK A/6960 6,000 DOT 19 BLOCK A/6960 6,960 DOT 19 BLOCK A/6960 6,960 DOT 20 BLOCK A/6960 6,960 DOT 21 BLOCK A/6960 6,960 DOT 22 BLOCK A/6960 6,000 DOT 23 BLOCK A/6960 6,000 DOT 24 BLOCK A/6960 6,000 DOT 25 BLOCK A/6960 6,000 DOT 25 BLOCK A/6960 6,000 DOT 26 BLOCK A/6960 6,000 DOT 27 BLOCK A/6960 6,000 DOT 28 BLOCK A/6960 6,000	_OT		BLOCK A/6960	6,953
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BLOCK A/6960 6,960 OT 21 BLOCK A/6960 6,966 OT 22 BLOCK A/6960 7,150 OT 23 BLOCK A/6960 6,000 OT 24 BLOCK A/6960 6,000 OT 25 BLOCK A/6960 6,000 OT 26 BLOCK A/6960 6,000 OT 27 BLOCK A/6960 6,000 OT 28 BLOCK A/6960 6,000	TO.	18	BLOCK A/6960	6,960
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	TO.	27	BLOCK A/6960	6,000
	.OT	28	BLOCK A/6960	6,000
• • •	_OT	29	•	6,000

LOT NUMBER	NAME	SQUARE FEI
LOT 1	BLOCK B/6960	8,352
LOT 2	BLOCK B/6960	6,003
LOT 3	BLOCK B/6960	6,000
LOT 4	BLOCK B/6960	6,000
LOT 5	BLOCK B/6960	6,021
LOT 6	BLOCK B/6960	9,211
LOT 7	BLOCK B/6960	10,230
LOT 8	BLOCK B/6960	6,000
LOT 9	BLOCK B/6960	6,000
LOT 10	BLOCK B/6960	8,140
LOT 11	BLOCK B/6960	8,416
LOT 12	BLOCK B/6960	6,000
LOT 13	BLOCK B/6960	6,000
LOT 14	BLOCK B/6960	6,000
LOT 15	BLOCK B/6960	6,000
LOT 16	BLOCK B/6960	9,125
LOT 1	BLOCK C/6960	8,901
LOT 2	BLOCK C/6960	6,360
LOT 3	BLOCK C/6960	6,360
LOT 4	BLOCK C/6960	6,360
LOT 5	BLOCK C/6960	6,360
LOT 6	BLOCK C/6960	6,360
LOT 7	BLOCK C/6960	6,360
LOT 8	BLOCK C/6960	6,360
LOT 9	BLOCK C/6960	6,360
LOT 10	BLOCK C/6960	6,360
LOT 11	BLOCK C/6960	6,360
LOT 12	BLOCK C/6960	7,467

LOT NUMBER	BLOCK	NUMBER	SQUARE FEET
LOT 1	BLOCK	D/6960	6,017
LOT 2	BLOCK	D/6960	6,012
LOT 3	BLOCK	D/6960	6,000
LOT 4	BLOCK	D/6960	6,000
LOT 5	BLOCK	D/6960	6,000
LOT 6	BLOCK	D/6960	6,000
LOT 7	BLOCK	D/6960	6,000
LOT 8	BLOCK	D/6960	6,000
LOT 9	BLOCK	D/6960	6,000
LOT 10	BLOCK	D/6960	6,000
LOT 11	BLOCK	D/6960	6,000
LOT 12	BLOCK	D/6960	6,000
LOT 13	BLOCK	D/6960	6,000
LOT 14	BLOCK	D/6960	6,000
LOT 15	BLOCK	D/6960	6,000
LOT 16	BLOCK	D/6960	7,643

GENERAL NOTES:

- 1. THE PURPOSE OF THIS PLAT IS TO CREATE SEVENTY THREE LOTS.
- 2. NO BUILDING OR STRUCTURE SHALL CROSS ANY LOT LINES OR PROPERTY LINES.
- 3. LOT TO LOT DRAINAGE WILL NOT BE ALLOWED WITHOUT CITY OF DALLAS PAVING & DRAINAGE ENGINEERING SECTION APPROVAL.
- 4. BEARINGS SHOWN HEREON ARE BASED ON GRID BEARINGS, STATE PLANE COORDINATE SYSTEM, TEXAS NORTH CENTRAL ZONE 4202, NORTH AMERICAN DATUM OF 1983, ADJUSTMENT REALIZATION 2011.
- 5. COORDINATES SHOWN ARE STATE PLANE COORDINATE SYSTEM, TEXAS NORTH CENTRAL ZONE 4202, NORTH AMERICAN DATUM OF 1983, (2011), GRID COORDINATE VALUES, NO SCALE AND NO PROJECTION.
- 6. ALL LOT CORNERS ARE MONUMENTED WITH A 5/8" IRON ROD SET WITH PLASTIC CAP MARKED "WEBB 4125".
- 7. ALL LOT LINES ARE PERPENDICULAR TO STREET RIGHT-OF-WAY UNLESS OTHERWISE INDICATED.

FINAL PLAT
COMMUNITY UNIT DEVELOPMENT
SHADY HOLLOW ESTATES

Block A/6960, Lots 1-29
Block B/6960, Lots 1-16
Block C/6960, Lots 1-12

Block C/6960, Lots 1-12 Block D/6960, Lots 1-16

1 Open Space, Lot 1—X

Being a 17.660 Acre Tract Situated in Block 6960 William Crow Survey, Abstract No. 298 City of Dallas, Dallas County, Texas

CITY PLAN FILE NO.: S178-288
CITY ENGINEER PLAN NO.: 311T-10059

SURVEYOR: WEBB SURVEYING, INC. 3517 Darion Lane Plano, TX 75093 Phone: 469-512-7380

OWNER: Shady Hollow Development, LLC Adrian Cole 1600 Sylvan Avenue Dallas, TX 75208 PHONE: 214-918-4671

Date: 3/22/22

SHEET 1 OF 2



MEMORANDUM



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TO: M. Samuell Eskander, PE, CFM, LEED AP BD+C

FROM: Jeremy D. Dixon, P.E., CFM

SUBJECT: 311T-10059 Shady Hollow Estates, 1st Review

DATE: 12/16/2022

PROJECT: DAL22104 - Dallas Drainage Reviews

Freese and Nichols, Inc. (FNI) has reviewed the first submittal of the Shady Hollow Estates Civil Engineering Plans by Lim and Associates, Inc. (LIM) dated November, 2022. The project is located near Cockrell Hill Road, Kiest Boulevard, Westmoreland Road, and Loop 12 and is located outside the mapped 100-year floodplain. In general, the project aims to develop a single-family residential subdivision with detention to mitigate the increase in runoff. FNI reviewed the November 2022 Plans, March 2022 Plans, Responses to comments on March 2022 Plans, and other correspondence from the City.

This review is not considered all-inclusive and does not relieve the Owner, Developer, Responsible Engineer and/or Surveyor from the due diligence necessary for completion of all aspects of the project according to the City's Ordinances, Regulations, Design and Construction Criteria, and Development Standards.

Review Summary

In general, the original plat submittal associated with the site development ties this to the 1993 Drainage Design Manual and criteria, which has been used to generate these comments. The design of proposed detention pond is poorly documented and likely substantially undersized. Please also address the comments below.

November 2022 Plans:

- 1. Sheet C08.02, Proposed Drainage Area Map does not show a revised delineation of area draining to the detention pond within area D1. Some of this area will drain directly into the detention pond and should be accounted as part of the pond design.
- 2. Related to **Comment 1**, it is unclear how the stormwater detention calculations are derived with incorrect hydrology in Sheet C09.04.
- 3. Sheet C09.04, Proposed Drainage Pond and Outlet, the detention pond calculations use a non-standard methodology that is not documented or justified anywhere in these plans. As part of this review, the standard methodology was used to evaluate the pond and have determined that storage is undersized by a factor of 2-3 when accounting for the hydrologic parameters presented on Sheet C08.01 and Sheet C08.02, and the previously approved existing conditions calculations of 311T-9437, S167-275 (Blue Ridge Estates). A sample of a compliant Modified Rational Method spreadsheet analysis of the 100-year storm is shown in **Figure 1**.

4. The use of the minimum 10 minutes for the existing condition on-site is inappropriate, will overestimate existing runoff, and will lead to undersized detention volume. Please compute an onsite time of concentration for use in establishing existing conditions and show the selected time of concentration of the drainage area map, with labels for sheet, shallow concentrated, and channelized flow.

MODIFIED RATIONAL METHOD SPREADSHEET VARIABLE INTENSITY BY BDE EQUATION										
Storm	100-YR									
Step	b	d	е	Tc (min)	l (in/hr)	К	С	A (Acre)	Q (cfs)	
Pre-Project	98.16816	11.08957	0.760029	25.00	6.43	1	0.53	50.39	172.05	
Post-Project	98.16816	11.08957	0.760029	10.00	9.67	1.15	0.68	50.39	381.24	
-				•				•		
Timestep	5	min								
				Α			V _{out}		V _{req} (ac-	
Td (min)	K	С	I (in/hr)	(acre)	Q (cfs)	V _{in} (cf)	(cf)	V _{req} (cf)	ft)	
10.00	1.15	0.68	9.67	50.39	381.24	228743	103230	125512	2.881	
15.00	1.15	0.68	8.23	50.39	324.32	291885	129038	162848	3.738	
20.00	1.15	0.68	7.20	50.39	283.85	340625	154845	185780	4.265	
25.00	1.15	0.68	6.43	50.39	253.44	380156	180653	199503	4.580	
30.00	1.15	0.68	5.83	50.39	229.64	413348	206460	206887	4.749	
35.00	1.15	0.68	5.34	50.39	210.45	441935	232268	209667	4.813	
40.00	1.15	0.68	4.94	50.39	194.60	467041	258076	208965	4.797	
45.00	1.15	0.68	4.60	50.39	181.27	489428	283883	205544	4.719	
50.00	1.15	0.68	4.31	50.39	169.88	509636	309691	199946	4.590	
55.00	1.15	0.68	4.06	50.39	160.02	528063	335498	192565	4.421	
60.00	1.15	0.68	3.84	50.39	151.39	545007	361306	183701	4.217	
65.00	1.15	0.68	3.65	50.39	143.77	560698	387113	173584	3.985	
70.00	1.15	0.68	3.48	50.39	136.98	575316	412921	162395	3.728	
75.00	1.15	0.68	3.32	50.39	130.89	589006	438728	150278	3.450	
80.00	1.15	0.68	3.18	50.39	125.39	601886	464536	137350	3.153	
85.00	1.15	0.68	3.06	50.39	120.40	614051	490344	123708	2.840	
90.00	1.15	0.68	2.94	50.39	115.85	625582	516151	109431	2.512	
95.00	1.15	0.68	2.83	50.39	111.67	636547	541959	94589	2.171	
100.00	1.15	0.68	2.74	50.39	107.83	647003	567766	79236	1.819	
Maximum V _{req} (ac-ft) 4.813										

Figure 1: Sample Modified Rational Method Spreadsheet Documentation

Responses to City Comments pertaining to drainage plan, detention, etc.

- 5. Comment E.23, where the City requested a drainage study to document no adverse effect on the downstream development and creek. The response of "No adverse effect downstream" is not satisfactory. Major issues relating to the downstream system and the assumptions used in the development have been raised, and other comment responses have disregarded the primary concern without addressing it specifically.
- 6. Comment E.25.e, where the City requested longitudinal and latitudinal cross sections of the detention pond, maximum grading slopes of the pond, 100-year water surface elevations, required volume in the 100-year storm, and volume provided in the 100-year storm. It is not clear what the columns in the "Storm Water Detention Calculations" table are meant to represent. There are 2 columns that could be interpreted as required volume, and none that indicate the actual proposed volume that is provided and corresponds to a specific water surface elevation. It is not clear that the methodology used in this design is consistent with the defined process in the 1993 Drainage Design Manual, Section IV Appendix page 25. Please provide a similar presentation for the determination of controlling storm duration for each event.
- 7. Comments E.26 and F.27, relating to the back lots along Wenatche Drive, represented by the proposed drainage area F1, where the City requested confirmation that the existing drainage patterns would be matched and evaluation of the increased runoff relative to the alley capacity. A cross section of the alley was added to the grading plan, but the break points for lot drainage (generally mid-lot, approx. 60 ft off back property line) are inconsistent with the drainage areas identified on sheet C08.02 (approx. 30 ft off back property line). This means runoff from drainage area F1 is underestimated by approximately half (Q100=7.2cfs), and considering the equivalent existing conditions drainage area of A2 (Q100 = 5.0cfs), proposed flows in the alley will be increased. This is not allowed in the 1993 drainage design manual without a sealed acknowledgement of the increased runoff rates, statement of no adverse effects, and a letter of acceptance from the downstream property owner(s) Section IV Appendix: Checklist for Storm Drainage Plans #46.
- 8. Comment F.29, regarding a typo in the callout of STA 4+90.72 on the profile of Line A (sheet C09.01) was not addressed.
- 9. Comments F.30, F.31, and F.32, regarding the Modified Rational Method calculations and documenting the process used to determine the required mitigation. The revisions made to sheet C09.04, as discussed in the above **Comments on November 2022 Plans**, do not adequately address and document for posterity the design of the proposed detention pond. Please provide all elements requested.
- 10. Comment F.33, regarding evaluation of 100-year, 50-year, 10-year and 2-year storms. This request is based on the 2019 Drainage Design Manual and is rooted in the current standard of care for engineering design of detention ponds. It is recommended that the outflow structure be sized so that each of these events does not increase flow rates downstream but is not a requirement of the 1993 Drainage Design Manual, which governs. The 1993 Drainage Design Manual requires detention be evaluated for the 100-year fully developed condition and also the downstream storm drainage facility with less than 100-year capacity. In this case, consider the capacity of the existing 54" RCP in Blue Ridge Boulevard (File 421Q-1307) as the controlling criterion. The design of 311T-9437 considered this limitation in sizing on-site drainage and mitigation improvements.
- 11. Comment G.34, regarding labeling of existing storm drain systems. The revised plans do show references, but the references include typos, such as 411Q-1004, Sh.9 instead of 421Q-1004,

311T-10059 Shady Hollow Estates, 1st Review 12/16/22 Page 4 of 4

- Sh.9. Please correct all reference typos so that record drawings can be appropriately identified from the vault in the future.
- 12. Comment G.35, regarding certification of an accurate drainage analysis that demonstrates no adverse impacts to downstream property based on the proposed drainage design. As discussed in the above **Comments on November 2022 Plans**, the simple response of Agree is not satisfactory.



MEMORANDUM



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TO: M. Samuell Eskander, PE, CFM, LEED AP BD+C

FROM: Jeremy D. Dixon, P.E., CFM

SUBJECT: 311T-10059 Shady Hollow Estates, 1st Review

DATE: 1/27/2023

PROJECT: DAL22104 - Dallas Drainage Reviews

Freese and Nichols, Inc. (FNI) has reviewed the first submittal of the Shady Hollow Estates Civil Engineering Plans by Lim and Associates, Inc. (LIM) dated November, 2022. The project is located near Cockrell Hill Road, Kiest Boulevard, Westmoreland Road, and Loop 12 and is located outside the mapped 100-year floodplain. In general, the project aims to develop a single-family residential subdivision with detention to mitigate the increase in runoff. FNI reviewed the November 2022 Plans, March 2022 Plans, Responses to comments on March 2022 Plans, and other correspondence from the City.

This review is not considered all-inclusive and does not relieve the Owner, Developer, Responsible Engineer and/or Surveyor from the due diligence necessary for completion of all aspects of the project according to the City's Ordinances, Regulations, Design and Construction Criteria, and Development Standards.

Review Summary

In general, the original plat submittal associated with the site development ties this to the 1993 Drainage Design Manual and criteria, however due to the delay in development, the 2019 Drainage Design Manual governs. The design of proposed detention pond is poorly documented and likely substantially undersized. Please also address the comments below.

November 2022 Plans:

- 1. Sheet C08.02, Proposed Drainage Area Map does not show a revised delineation of area draining to the detention pond within area D1. Some of this area will drain directly into the detention pond and should be accounted as part of the pond design.
- 2. Related to **Comment 1**, it is unclear how the stormwater detention calculations are derived with incorrect hydrology in Sheet C09.04.
- 3. Sheet C09.04, Proposed Drainage Pond and Outlet, the detention pond calculations use a non-standard methodology that is not documented or justified anywhere in these plans. As part of this review, the standard methodology was used to evaluate the pond and have determined that storage is undersized by a factor of 2-3 when accounting for the hydrologic parameters presented on Sheet C08.01 and Sheet C08.02, and the previously approved existing conditions calculations of 311T-9437, S167-275 (Blue Ridge Estates). A sample of a compliant Modified

Rational Method spreadsheet analysis of the 100-year storm is shown in Figure 1.

4. The use of the minimum 10 minutes for the existing condition on-site is inappropriate, will overestimate existing runoff, and will lead to undersized detention volume. Please compute an onsite time of concentration for use in establishing existing conditions and show the selected time of concentration of the drainage area map, with labels for sheet, shallow concentrated, and channelized flow.

MODIFIED RATIONAL METHOD SPREADSHEET										
VARIABLE INTENSITY BY BDE EQUATION										
		Ī								
Storm	100-YR		1	Τ	П	T	T		T	
Step	b	d	е	Tc (min)	l (in/hr)	К	С	A (Acre)	Q (cfs)	
Pre-Project	98.16816	11.08957	0.760029	25.00	6.43	1	0.53	50.39	172.05	
Post-Project	98.16816	11.08957	0.760029	10.00	9.67	1.15	0.68	50.39	381.24	
Timestep	5	min								
				Α			V_{out}		V _{req} (ac-	
Td (min)	К	С	I (in/hr)	(acre)	Q (cfs)	V _{in} (cf)	(cf)	V _{req} (cf)	ft)	
10.00	1.15	0.68	9.67	50.39	381.24	228743	103230	125512	2.881	
15.00	1.15	0.68	8.23	50.39	324.32	291885	129038	162848	3.738	
20.00	1.15	0.68	7.20	50.39	283.85	340625	154845	185780	4.265	
25.00	1.15	0.68	6.43	50.39	253.44	380156	180653	199503	4.580	
30.00	1.15	0.68	5.83	50.39	229.64	413348	206460	206887	4.749	
35.00	1.15	0.68	5.34	50.39	210.45	441935	232268	209667	4.813	
40.00	1.15	0.68	4.94	50.39	194.60	467041	258076	208965	4.797	
45.00	1.15	0.68	4.60	50.39	181.27	489428	283883	205544	4.719	
50.00	1.15	0.68	4.31	50.39	169.88	509636	309691	199946	4.590	
55.00	1.15	0.68	4.06	50.39	160.02	528063	335498	192565	4.421	
60.00	1.15	0.68	3.84	50.39	151.39	545007	361306	183701	4.217	
65.00	1.15	0.68	3.65	50.39	143.77	560698	387113	173584	3.985	
70.00	1.15	0.68	3.48	50.39	136.98	575316	412921	162395	3.728	
75.00	1.15	0.68	3.32	50.39	130.89	589006	438728	150278	3.450	
80.00	1.15	0.68	3.18	50.39	125.39	601886	464536	137350	3.153	
85.00	1.15	0.68	3.06	50.39	120.40	614051	490344	123708	2.840	
90.00	1.15	0.68	2.94	50.39	115.85	625582	516151	109431	2.512	
95.00	1.15	0.68	2.83	50.39	111.67	636547	541959	94589	2.171	
100.00	1.15	0.68	2.74	50.39	107.83	647003	567766	79236	1.819	
Maximum V _{req} (ac-ft) 4.813										

Figure 1: Sample Modified Rational Method Spreadsheet Documentation

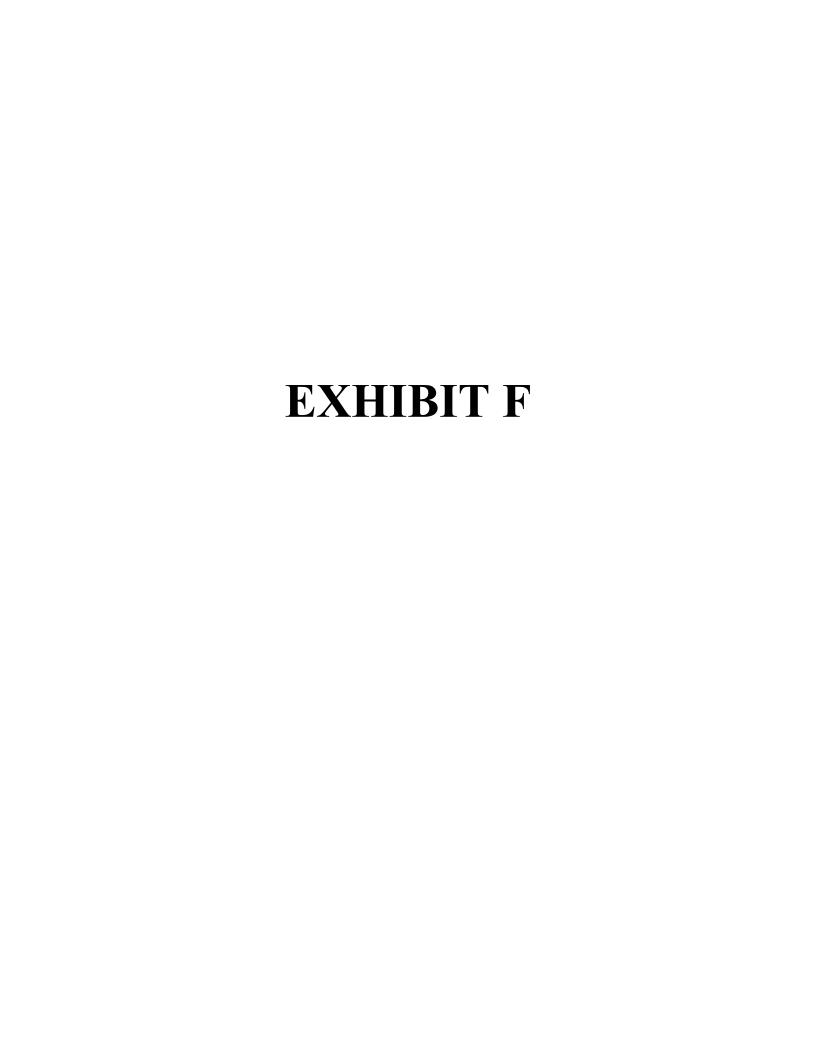
Responses to City Comments pertaining to drainage plan, detention, etc.

- 5. Comment E.23, where the City requested a drainage study to document no adverse effect on the downstream development and creek. The response of "No adverse effect downstream" is not satisfactory. Major issues relating to the downstream system and the assumptions used in the development have been raised, and other comment responses have disregarded the primary concern without addressing it specifically.
- 6. Comment E.25.e, where the City requested longitudinal and latitudinal cross sections of the detention pond, maximum grading slopes of the pond, 100-year water surface elevations, required volume in the 100-year storm, and volume provided in the 100-year storm. It is not clear what the columns in the "Storm Water Detention Calculations" table are meant to represent. There are 2 columns that could be interpreted as required volume, and none that indicate the actual proposed volume that is provided and corresponds to a specific water surface elevation. It is not clear that the methodology used in this design is consistent with the defined process in the 2019 Drainage Design Manual, Section 2.2, page 21. Please provide a similar presentation for the determination of controlling storm duration for each event.
- 7. Comments E.26 and F.27, relating to the back lots along Wenatche Drive, represented by the proposed drainage area F1, where the City requested confirmation that the existing drainage patterns would be matched and evaluation of the increased runoff relative to the alley capacity. A cross section of the alley was added to the grading plan, but the break points for lot drainage (generally mid-lot, approx. 60 ft off back property line) are inconsistent with the drainage areas identified on sheet C08.02 (approx. 30 ft off back property line). This means runoff from drainage area F1 is underestimated by approximately half (Q100=7.2cfs), and considering the equivalent existing conditions drainage area of A2 (Q100 = 5.0cfs), proposed flows in the alley will be increased. This is not allowed in the 2019 Drainage Design Manual without a sealed acknowledgement of the increased runoff rates, statement of no adverse effects, and a letter of acceptance from the downstream property owner(s). Appendix A.5.1: Checklist for Storm Drainage Plans, Statement #2.
- 8. Comment F.29, regarding a typo in the callout of STA 4+90.72 on the profile of Line A (sheet C09.01) was not addressed.
- 9. Comments F.30, F.31, and F.32, regarding the Modified Rational Method calculations and documenting the process used to determine the required mitigation. The revisions made to sheet C09.04, as discussed in the above Comments on November 2022 Plans, do not adequately address and document for posterity the design of the proposed detention pond. Please provide all elements requested.
- 10. Comment F.33, regarding evaluation of 100-year, 50-year, 10-year and 2-year storms. This request is based on the 2019 Drainage Design Manual and is rooted in the current standard of care for engineering design of detention ponds. It is recommended that the outflow structure be sized so that each of these events does not increase flow rates downstream but is not a requirement of the 1993 Drainage Design Manual. The 1993 Drainage Design Manual requires detention be evaluated for the 100-year fully developed condition and also the downstream

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storm drainage facility with less than 100-year capacity. In this case, consider the capacity of the existing 54" RCP in Blue Ridge Boulevard (File 421Q-1307) as the controlling criterion. The design of 311T-9437 considered this limitation in sizing on-site drainage and mitigation improvements.

- 11. Comment G.34, regarding labeling of existing storm drain systems. The revised plans do show references, but the references include typos, such as 411Q-1004, Sh.9 instead of 421Q-1004, Sh.9. Please correct all reference typos so that record drawings can be appropriately identified from the vault in the future.
- 12. Comment G.35, regarding certification of an accurate drainage analysis that demonstrates no adverse impacts to downstream property based on the proposed drainage design. As discussed in the above **Comments on November 2022 Plans**, the simple response of Agree is not satisfactory.



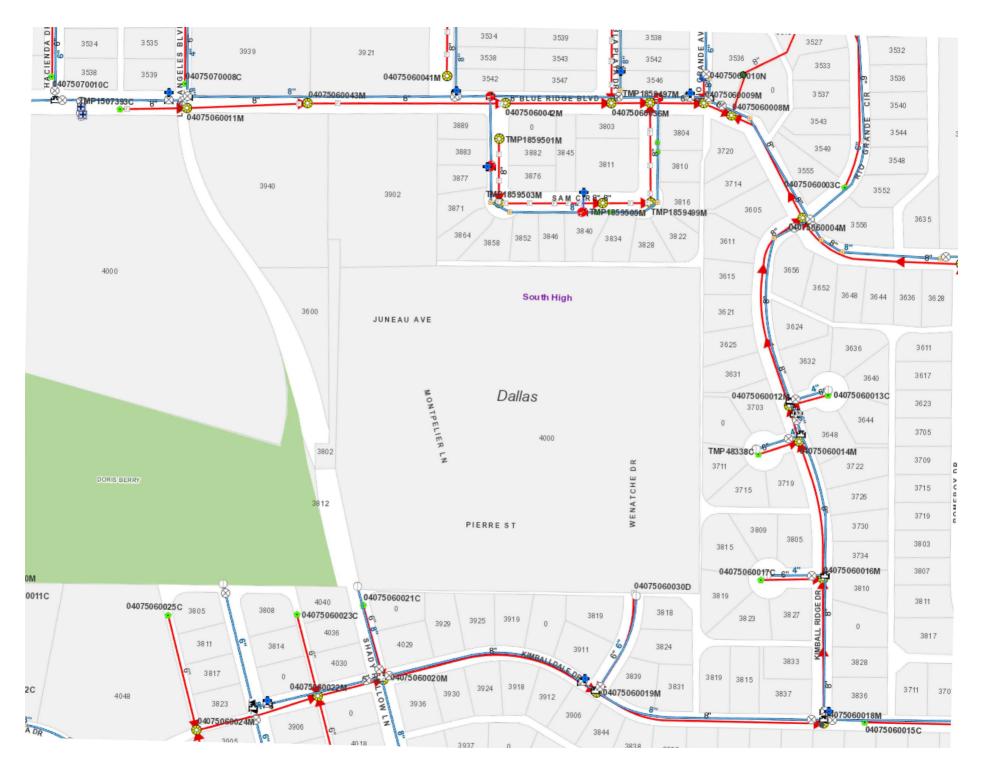


Exhibit F

EXHIBIT G

Apportionment Determination



DATE December 21, 2022

TO Adrian Cole, Developer

SUBJECT Shady Hollow Estates - 311T-10059 / WW22-231

This letter is in response to your request for a determination of apportionment that was submitted on November 11, 2022.

Street apportionment:

Per Section 51A-8.604(b)(2) of the Dallas City Code ("Code"): "When a minor street is along the perimeter of the proposed plat and the street is not improved with an approved all weather paving material to a width of 20 feet, the owner must improve the street to that standard along the length of the proposed plat."

According to your November 1, 2022 engineering plan, eight lots will have their driveway approaches taking access off Los Angeles Boulevard, which is an existing unimproved street with no pavement. Building Los Angeles Boulevard is necessary to access eight lots in the development that otherwise would not have street frontage. Building the minimum pavement width for Los Angeles Boulevard is therefore roughly and completely proportionate to the impact of the property development project.

Per Fire Code, a fire truck requires a minimum of 20 feet of pavement for emergency access. As long as the fire marshal approves, your engineer may revise the design for Los Angeles Boulevard to reduce the pavement width along the length of this street. The developer is responsible for the full amount of construction of Los Angeles Boulevard, which is solely related to the needs created by the project to serve the proposed development.

Alley apportionment:

The surrounding alleys were dedicated by a previous plat. No further alley dedications are necessary as long as the proposed development will not take access from the alleys.

Drainage apportionment:

Your initial plat application was filed in 2018. You may submit engineering plans using the 1993 drainage design manual which was in place when you initially submitted your plat application. We analyzed your project under the drainage requirements that were in place at the time of your initial plat application and disagree with your statement that this project would likely have not required detention due to the adequate outfall condition of Blue Ridge under the older design standards. We believe that the increased runoff from your development would have still required some detention or other downstream

infrastructure improvements. However, we have no way of knowing without your engineer's drainage report and calculations.

Per Section 51A-8.611(a)(1) of the Code: "Drainage systems, including all conveyances, inlets, conduits, structures, basins, or outlets used to drain storm water, must be designed and constructed to promote the health, safety, and welfare of the property owner and the public. Adequate provision must be made for the acceptance, collection, conveyance, detention, and discharge of storm water runoff drainage onto, through, and originating within the subdivision. No final plat release may be issued until proper provision has been made for drainage."

The engineer-of-record must show and prove that there will be no adverse impacts to any properties downstream due to this development. We believe that sizing the detention pond accordingly is related to the needs created by the property development project and is roughly proportionate to the impact of the property development project. The developer is responsible for the full construction cost of the detention pond which is needed to serve the proposed development.

The drainage infrastructure in Los Angeles Boulevard is related to the needs created by the property development project and is roughly proportionate to the impact of the property development project. The developer is responsible for the full amount of construction of the infrastructure which is solely needed to serve the proposed development.

A detention area is considered a dedicated area and not open space. Section 51A-8.201(17) of the Code defines detention area to mean an area which temporarily stores stormwater runoff and discharges that runoff at a reduced rate. Section 51A-8.611 of the Code, "Storm Drainage Design," states that drainage systems, including all conveyances, inlets, conduits, structures, basins, or outlets used to drain storm water, must be designed and constructed to promote the health, safety, and welfare of the property owner and the public. Moreover, per section 51A-8.611(c)(2) of the Code, detention facilities must be designed and constructed in conformance with the Drainage Design Manual of the city of Dallas.

Section 51A-2.102(101) of the Code defines open space to mean an area that is unobstructed to the sky and contains no structures except for ordinary projections of cornices and eaves. Chapter 51A, Article VIII of the Code goes further and defines improved open space to mean open space containing structures or improvements, including but not limited to hike and bike trails, and unimproved open space to mean open space containing no buildings, fences, or other structures above or below grade.

Because the detention area is used to temporarily store stormwater runoff and discharges that runoff, it appears that detention areas meet the definition and provisions of storm drainage facilities and not open space.

Shady Hollow Estates - 311T-10059 / WW22-231

The platting process requirements in Section 51A-8.403(a)(1)(A)(xi) and (xii) of the Code require that the layout and dimensions of proposed storm drainage areas, storm drainage facilities, water and wastewater facilities be indicated on the preliminary plat. The Code makes a distinction between open space and dedications and does not lump open space with the provisions.

Furthermore, the dedications provision in Section 51A-8.602 of the Code states that the owner of the property to be platted must provide an easement or fee simple dedication of property needed for the construction of streets, sidewalks, storm drainage facilities, floodways, water mains, and any other property necessary to serve the plat and to implement the requirements of this article. The code requires that the detention area be a dedication.

Section 51A-8.101(29) of the Code defines infrastructure to mean all streets, alleys, sidewalks, storm drainage facilities, water and wastewater facilities, utilities, lighting, transportation, and any other facilities required by law to adequately serve and support development. If detention areas were to be considered open space, then the code would have included that in the definition of open space, but it was omitted and defined as infrastructure.

The engineer-of-record must submit a drainage report that shows that there will be no adverse impacts to any properties downstream due to this development. Sizing the detention pond accordingly is related to the needs created by the property development project and is roughly proportionate to the impact of the property development project. The developer is responsible for the full amount of construction of the detention pond which is solely needed to serve the proposed development.

Water and Wastewater Apportionment:

We believe that the offsite infrastructure improvements shown on your engineering design plans are necessary to serve your proposed development. Each developer is responsible for the necessary infrastructure that is needed to adequately serve their development. Pursuant to Section 49-62(c)(1), the developer shall construct any new off-site extension necessary to adequately serve the development, if the city or another developer has not already commenced design or construction of the extension in connection with another development or project, subject to applicable city payments for participation in oversize cost under Subsection (a). Since the offsite infrastructure improvements are needed to serve your development, the infrastructure improvements are related to the needs created by the property development project and are roughly proportionate to the impact of the property development project. Pursuant to Section 49-62(i) of the Code, the proportional refundable city payment calculated by the City is approximately \$95,170.00. The developer is responsible for the remaining cost of the infrastructure which is needed to serve the proposed development.

Upon further investigation of the water line improvement in Los Angeles Boulevard, between Juneau Avenue and Blue Ridge Boulevard, there could be an alternate solid standard size loop in Wenatche Drive down to Kimballdale Drive, which would require

December 21, 2022

SUBJECT Shady Hollow Estates - 311T-10059 / WW22-231

upsizing the main from 6 inches to 8 inches. If this is an alternative solution that you would like to pursue, your engineer must submit a revision to the final WW22-231 engineering design plans.

Sam Eskander

M. Samuell Eskander, PE, CFM, LEED AP BD+C Assistant Director Development Services

c: Andrew Espinoza, CBO, MCP, CCEA, Director/Chief Building Official Casey Burgess, Executive Assistant City Attorney Guillermo R. Darce, PE, Engineer-of-Record, LIM & Associates, Inc. Daniel Lim, PE, RPLS, CFM, LIM & Associates, Inc.



Eli Luna

22-371/372-P

Shady Hollow Estates

685W-357 sh 34-37

Offsite 8" Water main in Los Angeles Blvd from South Plat Line to Blue Ridge Blvd

	Es		Eval Cost								
Item Nc Eligible Items		Quantity	Units per 19-1405		EC Total		Unit Bid		Total Bid		
180C	8" Water	1331	LF	\$	65.00	\$	86,515.00	\$	43.00	\$	57,233.00
510C	8" Valve	5	EA	\$	1,200.00	\$	6,000.00	\$1,	400.00	\$	7,000.00
509A	Fire Hydrant	2	EA	\$	3,000.00	\$	6,000.00	\$2,	800.00	\$	5,600.00
510B	6" Valve	2	EA	\$	900.00	\$	1,800.00	\$1,	100.00	\$	2,200.00
765B	Conc. Pav.	10	CY	\$	375.00	\$	3,750.00	\$	-	\$	-
	Pay on Completion Offsite Water Mains:					\$	104,065.00			\$	72,033.00

Offsite 8" Wastewater main in alley from North Plat Line to Blue Ridge Road

		Estimated	Eval Cost							
	Eligible Items	Quantity	Units	ре	er 19-1405		EC Total	U	nit Bid	Total Bid
310B	8" WW	422	LF	\$	65.00	\$	27,430.00	\$	33.50	\$ 14,137.00
613A	48" WW MH	2	EA	\$	5,800.00	\$	11,600.00	\$4,	,500.00	\$ 9,000.00
706	Flowable Fill	20	CY	\$	90.00	\$	1,800.00	\$	-	\$ Ę
765B	Conc. Pav.	10	CY	\$	375.00	\$	3,750.00	\$		\$ -
765A	Asph. Pav.	300	SY	\$	150.00	\$	45,000.00	\$	-	\$ -
	Pay on Completion Offsi			\$	89 580 00			\$ 23.137.00		

Water Participation \$ 72,033.00
Wastewater participation \$ 23,137.00

Total City participation: \$ 95,170.00

30% of Contract:

\$ 540,128.00 x 0.3= \$162,038.40

Maximum amount allowed by City Code