| PROPOSED DRAINAGE AREA CALCULATIONS  |   |
|--|---|
| DA Area (ac) C C*A Tc (min) I <sub>5</sub> (in/hr) I <sub>10</sub> (in/hr) I <sub>25</sub> (in/hr) I <sub>100</sub> (in/hr) I <sub>25</sub> (   |   |
| 3-1.0 0.12 0.90 0.11 10.00 6.10 7.10 8.30 9.80 0.66 0.77 0.90 1.06 Runoff to Roof Drains 3-1.1 0.06 0.90 0.05 10.00 6.10 7.10 8.30 9.80 0.33 0.38 0.45 0.53 Proposed 5' Curb Inlet   |   |
| 3-1.2 0.04 0.90 0.04 10.00 6.10 7.10 8.30 9.80 0.22 0.26 0.30 0.35 Proposed 5' Curb Inlet 3-1.3 0.03 0.90 0.03 10.00 6.10 7.10 8.30 9.80 0.16 0.19 0.22 0.26 Proposed 5' Curb Inlet  |   |
| 3-1.3A 0.06 0.90 0.05 10.00 6.10 7.10 8.30 9.80 0.33 0.38 0.45 0.53 Proposed 2'x2' Drop Inlet 3-1.4 0.02 0.90 0.02 10.00 6.10 7.10 8.30 9.80 0.11 0.13 0.15 0.18 Proposed 12"x12" Grate Inlet  |   |
| 3-1.4A 0.01 0.90 0.01 10.00 6.10 7.10 8.30 9.80 0.05 0.06 0.07 0.09 Proposed 12"x12" Grate Inlet 3-1.5 0.03 0.90 0.03 10.00 6.10 7.10 8.30 9.80 0.16 0.19 0.22 0.26 Proposed 5' Curb Inlet   |   |
| 3-1.6 0.21 0.90 0.19 10.00 6.10 7.10 8.30 9.80 1.15 1.34 1.57 1.85 Proposed 5' Curb Inlet  - 0.58 - 0.52 3.18 3.71 4.33 5.12   |   |
| 3-2.0 0.45 0.90 0.41 10.00 6.10 7.10 8.30 9.80 2.47 2.88 3.36 3.97 Proposed 5' Curb Inlet  - 0.45 - 0.41 2.47 2.88 3.36 3.97   |   |
| 3-3.0 0.29 0.90 0.26 10.00 6.10 7.10 8.30 9.80 1.59 1.85 2.17 2.56 Proposed 5' Curb Inlet  - 0.29 - 0.26 1.59 1.85 2.17 2.56   |   |
| 3A 0.09 0.90 0.08 10.00 6.10 7.10 8.30 9.80 0.49 0.58 0.67 0.79 Goes to DA3-3.0  - 0.09 - 0.08 0.49 0.58 0.67 0.79   |   |
| Notes: 1. Runoff coefficients obtained from Table 3.2 (Runoff Coefficient for Types of Land Use) from the City of Rockwall, Standards of Design and Construction Manual.   |   |
| 2. Time of Concentration obtained from Table 3.3 (Minimum Inlet Time of Concentration) from the City of Rockwall, Standards of Design and Construction Manual.  3. Rainfall Intensities obtained from Figure 3.1 (IDF Curve) from the City of Rockwall, Standards of Design and Construction Manual.   |   |
| 4. Drainage Design Discharge Method: Rational Formula: Q=CiA  — c = 0.90 for Commercial Uses   |   |
| 5. All coefficients, times of concentrations, and intensities are consistent with Hickman Consulting Engineers Inc's proposed Drainage Area Map, sheet C-4, area 3 (to be considered as existing conditions at the start of this project)  |   |
| OLP V  |   |
| BM 3   |   |
|  |   |
| NORTH LAKESHORE DRIVE  |   |
| (VARIABLE WIDTH PUBLIC RIGHT-OF-WAY) VOL. 3828, PG. 23 D.R.R.C.T.  |   |
| D.R.R.C.T.   |   |
| FOVET NOTE OF THE PROPERTY OF  |   |
|  |   |
| 474<br>475<br>18P/LP   |   |
| (3-1.3A)<br>(0.06)<br>(3-1.3A)   |   |
|  |   |
| 3-1.3 P) 7 - 0.06 P) 7 P   |   |
|  |   |
| $\frac{3-1.4}{2}$  |   |
| $\uparrow \qquad \qquad \uparrow \qquad \qquad \downarrow \qquad \qquad \qquad \downarrow \qquad \qquad \qquad \downarrow \qquad \qquad \qquad \downarrow \qquad \qquad \qquad \qquad \downarrow \qquad \qquad \qquad \downarrow \qquad \qquad \qquad \qquad \downarrow \qquad \qquad \qquad \downarrow \qquad \qquad \qquad \qquad \qquad \downarrow \qquad \qquad$ |   |
| FFE 474.00   |   |
| $\begin{array}{c c} \hline \\ \hline $   | l |
|  |   |
| BM 2   |   |
| LOT I, BLOCK A LAKESHORE COMMONS   |   |
| LAKESHORE COMMONS INST. No. 20170000015245 O.P.R.R.C.T.  |   |
| $\frac{473}{4}$  |   |
| $\frac{3-1.6}{3}$  |   |
|  |   |
|  |   |
|  |   |
|  |   |
| GRATE INLET TOP OF INLETT 469' 89'   |   |
| GRATE INLE: TOP-OF-INLETT 469-89' FL. 8' OPENING: 467.20 FL IB* RCP OUT S: 463.53'  DETENTION POND  TOP-OF-INLETT 469-89' JB  DETENTION POND   |   |
| DE TENTION FOND  |   |
| FIL 12* (3P) 470.90'   | ı |
| 470 CI PPTO  |   |
| 147) A P CPP: 470.63'  |   |
| PLANTER  PLA   |   |
| RY HICKMAN CONSULTING FINGINFERS   |   |
| TOP OF INLET: 471.71′ FL I8' RCP OUT E: 467.43′  TOP OF RIM: 471.67′  BOTTOM: 464.76′  |   |
| SSDMH  |   |
|  |   |
| SDMH SDMH  |   |
| LOT 3, BLOCK A  LAKESHORE COMMONS  INOT. N. COLTOCOCOLEGAE   | ! |
| INST. No. 20170000015245 O.P.R.R.C.T.  | • |
|  |   |

## CAUTION !!

EXISTING UTILITIES ARE INDICATED ON THE PLANS FROM AVAILABLE INFORMATION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION OF ALL UTILITIES, TO NOTIFY ALL UTILITY COMPANIES OF THE CONTRACTORS OPERATIONS, TO PROTECT ALL UTILITIES FROM DAMAGE, TO REPAIR ALL UTILITIES DAMAGED DUE TO THE CONTRACTORS OPERATIONS, AND TO NOTIFY THE ENGINEER PROMPTLY OF ALL CONFLICTS OF THE WORK WITH EXISTING UTILITIES.

**RECORD DRAWING** 

June 9, 2020 To the best of our knowledge Wier & Associates, Inc., states this plan is As-Built. This information provided is based on surveying at the site and information provided by the contractor.

ALL RESPONSIBILITY FOR ADEQUACY OF DESIGN REMAINS WITH THE DESIGN ENGINEER. THE CITY OF ROCKWALL, IN REVIEWING AND RELEASING PLANS FOR

TOTAL SITE ACREAGE = 1.40 ACRES

<u>LEGEND</u>

EXIST. CONTOUR

DRAINAGE DIVIDE

DIRECTION OF FLOW

**ACRES** 

CURB INLET

GRATE INLET

DROP INLET

REFERENCE DATUM = NORTH AMERICAN VERTICAL DATUM (NAD) 88 UTILIZING THE RTK NETWORK ADMINISTRATED BY WESTERN DATA SYSTEMS.

SITE BENCHMARK NO. I AN 'X' CUT ON THE SOUTHWEST CORNER OF THE CONCRÉTE PAD OF A TRAFFIC SIGNAL BOX LOCATED AT THE SOUTHWEST CORNER OF N LAKESHORE DR AND N GOLIAD ST, 4'+/- SOUTHWEST OF THE SOUTHWEST CORNER OF THE TRAFFIC SIGNAL BOX, I6'+/- SOUTH OF A FIBER OPTIC PEDESTAL, AND I7'+/- WEST OF THE TRAFFIC SIGNAL POLE.

SITE BENCHMARK NO. 2 AN "X" CUT IN CONCRETE BACK OF CURB WEST SIDE OF ACCESS DRIVE WEST OF LOT 2, LAKESHORE COMMONS, ±3' EAST OF FIRE HYDRANT AND ±12 SOUTHWEST OF SANITARY SEWER MAN HOLE.

SITE BENCHMARK NO. 3 AN "X" CUT IN PAVERS BRICK MEDIAN OF NORTH LAKESHORE DRIVE ±45' DIRECTLY EAST OF A LIGHT POLE ±176' WEST OF INTERSECTION WITH NORTH GOLIAD STREET.

ELEVATION = 471.87

ELEVATION = 472.68'

JUNCTION BOX

DRAINAGE AREA NUMBER

CONSTRUCTION, ASSUMES NO RESPONSIBILITY FOR ADEQUACY OR

ACCURACY OF DESIGN



Atlanta Georgia, 30349-2998

Revisions:

Mark Date By 3 1<u>2/17/19 RBC</u> ISSUED FOR

CONSTRUCTION Mark Date By

Mark Date By

PRIYA ACHARYA

DRIVE

STORE SERIES

P13-LSR

SHEET TITLE DRAINAGE **AREA** MAP

□For Permit □For Bid

■For Construction : <u>17144</u> Job No.

: <u>#</u>03897 : 1/2/2020 Drawn By : RRW Checked By: RSE

Sheet

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