City of Duncanville

GPS Control Network

established by

The Wallace Group, Inc.
1825 Market Center Blvd., Suite 210
Dallas, Texas 75207-3330
214-747-3733

DUNCANVILLE
The perfect blend of family, community and business.
CITY OF DUNCANVILLE
GPS CONTROL NETWORK

BASIS FOR CONTROL

The values for the City of Duncanville GPS Control Network were established using Rapid Static data collection procedures during the month of December 2002. The Wallace Group, Inc., in conjunction with the City of Duncanville set all custom made 4 inch domed bronze monuments throughout the City at designated key areas. All fieldwork and post processing was performed by The Wallace Group. Final data sheets were published after consultation with the City of Duncanville.

Horizontal State Plane Coordinates (SPC) are on the Lambert Projection System – NAD83 (CORS96) – Texas Coordinate System (Texas North Central Zone 4202). A position was derived using the National Geodetic Service (NGS) OnLine Positioning User Service (OPUS) position for Monument No. 9 near the center of Duncanville, as a base point. All other monuments within the City of Duncanville are tied to a constellation of multiple observations (baselines) using 5 GPS receivers from this base point location. The position for a second monument (Mon. No. 14) based on this constellation compared favorably with a position derived by OPUS as an external check.

Federal Emergency Management Agency (FEMA) elevations were determined by adjusting the GPS Static observations with given data from Flood Insurance Rate Map (FIRM). The Map Number 48113CO470 J with an effective date of August 23, 2001 has a given elevation of 661.97 (NGVD29) for RM241. The conversion through NGS Vertical Conversion (Vertcon) converts this elevation from 661.97 (NGVD29 datum) to 661.98 (NAVD88 datum). From this reference point, set by The Wallace Group, the RM241 elevation was held for all vertical adjustments. GPS derived elevations were computed using a Geoid Model (GEOID99). Using this process, the given elevation of 636.01 (NGVD29) for RM244 shown on the same panel checked to the converted elevation of 636.03 (NAVD88), through a reference point. All NAVD88 elevations shown on the data sheets were then converted back to NGVD29 elevations using Vertcon for FEMA elevations.

In summary, The Wallace Group provided the City of Duncanville with a GPS Control Network based on the position of Monument No. 9 and the elevation of RM241. All data sheets will show State Plane Coordinates in both the Geodetic and grid formats. The horizontal data is referenced to Texas North Central Zone- 4202, in both U.S. Survey feet and meters. Vertical data is referenced to NAVD88 elevations and NGVD29. The FEMA datum in the Duncanville area is referenced to NGVD29.
**CITY OF DUNCANVILLE**

**GPS CONTROL SHEET**

Established By:

The Wallace Group, Inc.

(214) 747-3733

|--------------------------|---------------------------------|----------------|--------------|----------------------|
| NAD–83 (CORS 96) GEODETIC POSITION | NAD–83 (CORS 96) STATE PLANE COORDINATES 
LATITUDE N 032° 40' 35.64655" | NORTH CENTRAL ZONE (METERS) 
NORTHING (Y) 2113142.6250 | NAD – 83 (CORS 96) STATE PLANE COORDINATES 
NORTH CENTRAL ZONE (U.S. SURVEY FEET) 
NORTHING (Y) 6932888.7621 | NADVD–29 ELEV: 682.96' (FEMA) (U.S. SURVEY FEET) |
| LONGITUDE W 096° 53' 30.15859" | EASTING (X) 750823.8886 | EASING (X) 2463328.0413 | NAVD–88 ELEVATION: 682.95' (U.S. SURVEY FEET) |
| ELLIPSOIDAL ELEVATION (METERS) 181.50 | ELLIPSOIDAL HEIGHT (METERS) -26.66 | \[NGVD-29 ELEV: 682.96' (FEMA) (U.S. SURVEY FEET)\] |

**NOTE:**

4" DIAMETER DOMED BRONZE DISK SET IN THE STORM DRAIN INLET APPROXIMATELY 87' WEST OF THE CENTERLINE OF COCKRELL HILL ROAD ON THE SOUTH SIDE OF THE MEDIAN OF W. RED BIRD LANE, IN THE CITY OF DALLAS. APPROX. 310' EAST OF DUNCANVILLE CITY LIMITS.

**LEGEND**

- MONUMENT
- LIGHT POLE
- STORM DRAIN MANHOLE
- FIRE HYDRANT

**PHOTO TAKEN FROM WEST OF THE MONUMENT LOOKING EAST TOWARD COCKRELL HILL ROAD**
### CITY OF DUNCANVILLE

#### GPS CONTROL SHEET

**Established By:**

**The Wallace Group, Inc.**  
(214) 747-3733

|---------------------------|---------------------------------|----------------|-------------|-----------------------|

<table>
<thead>
<tr>
<th>NAD-83 (CORS 96) GEODETC POSITION</th>
<th>NAD-83 (CORS 96) STATE PLANE COORDINATES NORTH CENTRAL ZONE (METERS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LATITUDE N 032° 40' 30.73082&quot;</td>
<td>NORTHING (Y) 2112967.1641</td>
</tr>
<tr>
<td>LONGITUDE W 096° 54' 30.80284&quot;</td>
<td>EASTING (X) 749246.5387</td>
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<table>
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<tr>
<th>ELLIPSOIDAL ELEVATION (METERS)</th>
<th>ELLIPSOIDAL HEIGHT (METERS)</th>
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<tr>
<td>200.02</td>
<td>-26.70</td>
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<table>
<thead>
<tr>
<th>NGVD-29 ELEV: 743.86' (FEMA) (U.S. SURVEY FEET)</th>
<th>NAVD-88 ELEVATION: 743.85' (U.S. SURVEY FEET)</th>
</tr>
</thead>
</table>

**NOTE:**

4” DIAMETER DOMED BRONZE DISK IN A 12” DIAMETER CONCRETE MONUMENT SET APPROXIMATELY 199' NORTH OF THE CENTERLINE OF W. RED BIRD LANE IN THE GRASS MEDIAN OF N. DUNCANVILLE ROAD.

---

### LEGEND

- @ MONUMENT
- O POWER POLE

---

**PHOTO TAKEN FROM NORTH OF THE MONUMENT LOOKING SOUTH TOWARD W. RED BIRD LANE**
**CITY OF DUNCANVILLE**

**GPS CONTROL SHEET**

Established By: The Wallace Group, Inc. (214) 747-3733

|----------------------------|---------------------------------|----------------|--------------|---------------------|

**NAD-83 (CORS 96) GEODETIC POSITION**

<table>
<thead>
<tr>
<th>Latitude</th>
<th>Longitude</th>
</tr>
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<tbody>
<tr>
<td>N 032° 40' 15.37909&quot;</td>
<td>W 096° 55' 31.94177&quot;</td>
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**NAD-83 (CORS 96) STATE PLANE COORDINATES NORTH CENTRAL ZONE (METERS)**

<table>
<thead>
<tr>
<th>Northing (Y)</th>
<th>Easting (X)</th>
</tr>
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<tbody>
<tr>
<td>2112470.3621</td>
<td>747661.0638</td>
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</tbody>
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**ELLIPOSOIDAL ELEVATION (METERS)** 201.95

**ELLIPOSOIDAL HEIGHT (METERS)** -26.75

**NGVD-29 ELEVATION: 750.34' (FEMA) (U.S. SURVEY FEET)**

**NOTE:**

4" DIAMETER DOMED BRONZE DISK IN A 12" DIAMETER CONCRETE MONUMENT SET APPROXIMATELY 172' NORTH OF THE CENTERLINE OF THE WESTBOUND ACCESS ROAD OF INTERSTATE HIGHWAY NO. 20 AND APPROXIMATELY 6' EAST OF THE EAST EDGE OF ASPHALT OF N. CEDAR RIDGE DRIVE.

**LEGEND**

- @ = MONUMENT
- P = POWER POLE

**INTERSTATE HIGHWAY NO. 20**

WEST BOUND ACCESS ROAD

PHOTO TAKEN FROM NORTH OF THE MONUMENT LOOKING SOUTH TOWARD INTERSTATE HIGHWAY NO. 20 WESTBOUND ACCESS ROAD
CITY OF DUNCANVILLE
GPS CONTROL SHEET
Established By:
The Wallace Group, Inc. (214) 747-3733

<table>
<thead>
<tr>
<th>MONUMENT NAME: MON. NO. 4-A</th>
<th>DATE ESTABLISHED: OCTOBER 2008</th>
<th>COUNTY: DALLAS</th>
<th>STATE: TEXAS</th>
<th>MAPSCO PAGE NO. 61B-U</th>
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<td>NAD–83 (CORS 96) GEODETC POSITION</td>
<td>NAD–83 (CORS 96) STATE PLANE COORDINATES</td>
<td>NAD–83 (CORS 96) STATE PLANE COORDINATES</td>
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<td></td>
</tr>
<tr>
<td>LATITUDE N 032° 39' 40.388895&quot;</td>
<td>NORTH CENTRAL ZONE (METERS)</td>
<td>NORTH CENTRAL ZONE (U.S. SURVEY FEET)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LONGITUDE W 096° 56' 35.222486&quot;</td>
<td>NORTING (Y) 2111368.1461</td>
<td>NORTING (Y) 6927046.9925</td>
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<td></td>
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<tr>
<td></td>
<td>EASTING (X) 746028.6034</td>
<td>EASTING (X) 2447595.5096</td>
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<tr>
<td></td>
<td>ELLIPSOIDAL ELEVATION (METERS) 204.39</td>
<td>ELLIPSOIDAL ELEVATION (U.S. SURVEY FEET)</td>
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<tr>
<td></td>
<td>ELLIPSOIDAL HEIGHT (METERS) -26.90</td>
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</table>

NOTE:
4" DIAMETER DOMED BRONZE DISK SET ON THE NORTHEAST CORNER OF A STORM DRAIN INLET ON THE WEST SIDE OF THE MEDIAN ON N. CLARK ROAD APPROXIMATELY 400' SOUTH OF THE CENTERLINE OF W. CAMP WISDOM ROAD.

LEGEND

Φ = MONUMENT
⊙ = STORM DRAIN MANHOLE

W. CAMP WISDOM ROAD
N. CLARK ROAD

PHOTO TAKEN FROM SOUTH OF THE MONUMENT LOOKING NORTH TOWARD W. CAMP WISDOM ROAD

(NOT TO SCALE)
MONUMENT NAME: MON. NO. 5
DATE ESTABLISHED: DECEMBER 2002
COUNTY: DALLAS
STATE: TEXAS
MAPSCO PAGE NO. 62-S

NAD-83 (CORS 96) GEODETIC POSITION
LATITUDE: N 032° 39' 42.95827"
LONGITUDE: W 096° 55' 26.71907"

NAD-83 (CORS 96) STATE PLANE COORDINATES
NORTH CENTRAL ZONE (METERS)
NORTHING (Y): 2111473.8912
EASTING (X): 747812.0921

ELLIPSOIDAL ELEVATION (METERS): 200.20
ELLIPSOIDAL HEIGHT (METERS): -26.74

NAD-83 (CORS 96) STATE PLANE COORDINATES
NORTH CENTRAL ZONE (U.S. SURVEY FEET)
NORTHING (Y): 6927393.9246
EASTING (X): 2453446.8388

NGVD-29 ELEV: 744.56' (FEMA) (U.S. SURVEY FEET)
NAVD-88 ELEVATION: 744.56' (U.S. SURVEY FEET)

NOTE:
4" DIAMETER DOMED BRONZE DISK SET IN THE SOUTHEAST CORNER OF A STORM DRAIN INLET ON THE SOUTH SIDE OF W. CAMP WISDOM ROAD APPROXIMATELY 49.5' WEST OF THE CENTERLINE OF TOWER CREST DRIVE AND APPROXIMATELY 400' EAST OF N. CEDAR RIDGE DRIVE.

LEGEND
- = MONUMENT
= LIGHT POLE
= STORM DRAIN MANHOLE
= SIGN

PHOTO TAKEN FROM EAST OF THE MONUMENT LOOKING WEST TOWARD N. CEDAR RIDGE DRIVE
### CITY OF DUNCANVILLE

#### GPS CONTROL SHEET

**Established By:** The Wallace Group, Inc.  
(214) 747-3733

|---------------------------|----------------------------------|----------------|---------------|----------------------|

#### NAD-83 (CORS 96) GEODETIC POSITION

<table>
<thead>
<tr>
<th>LATITUDE</th>
<th>LONGITUDE</th>
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<tbody>
<tr>
<td>N 032° 39' 48.20082&quot;</td>
<td>W 096° 54' 29.80002&quot;</td>
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#### NAD-83 (CORS 96) STATE PLANE COORDINATES

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<th>NORTHING (Y)</th>
<th>EASTING (X)</th>
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<tr>
<td>2111857.7107</td>
<td>749292.5059</td>
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#### NAD-83 (CORS 96) ELLIPSODAL ELEVATION (METERS)

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<th>ELLIPSODAL HEIGHT</th>
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<tr>
<td>197.82</td>
<td>-26.70</td>
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#### NGVD-29 ELEV: 736.61' (FEMA) (U.S. SURVEY FEET)

#### NAVD-88 ELEVATION: 736.61' (U.S. SURVEY FEET)

**NOTE:**
4" DIAMETER DOMED BRONZE DISK SET ON A DOUBLE STORM DRAIN INLET ON THE EAST SIDE OF N. DUNCANVILLE ROAD APPROXIMATELY 534' NORTH OF THE CENTERLINE OF W. CAMP WISDOM ROAD.

### LEGEND

- **= MONUMENT**
- **= STORM DRAIN MANHOLE**

**PHOTO TAKEN FROM NORTH OF THE MONUMENT LOOKING SOUTH TOWARD W. CAMP WISDOM ROAD**
### CITY OF DUNCANVILLE
**GPS CONTROL SHEET**

Established By:

The Wallace Group, Inc.
(214) 747-3733

<table>
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<tr>
<th>MONUMENT NAME:</th>
<th>DATE ESTABLISHED:</th>
<th>COUNTY:</th>
<th>STATE:</th>
<th>MAPSCO PAGE NO.</th>
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<td>MON. NO. 7</td>
<td>DECEMBER 2002</td>
<td>DALLAS</td>
<td>TEXAS</td>
<td>62-Z</td>
</tr>
</tbody>
</table>

#### NAD–83 (CORS 96) GEODETIC POSITION
- Latitude: N 032° 39' 40.23889"
- Longitude: W 096° 53' 29.46670"

#### NAD–83 (CORS 96) STATE PLANE COORDINATES
- North Central Zone (Meters)
  - Northing (Y): 2111436.4389
  - Easting (X): 750868.0406

#### NAD–83 (CORS 96) STATE PLANE COORDINATES
- North Central Zone (U.S. Survey Feet)
  - Northing (Y): 6927271.0501
  - Easting (X): 2463472.8965

#### NGVD–29 ELEV: 705.57' (FEMA) (U.S. Survey Feet)
#### NAVD–88 ELEVATION: 705.57' (U.S. Survey Feet)

**NOTE:**
4" diameter domed bronze disk set in the southwest corner of a storm drain inlet on the west side of N. Cockrell Hill Road approximately 104' north of the centerline of the westbound access road of Interstate Highway No. 20 and approximately 294' south of the centerline of Camp Wisdom Road.

**LEGEND**
- "- MONUMENT
- "= STORM DRAIN MANHOLE

**PHOTO**
Taken from north of the monument looking south toward Interstate Highway No. 20 westbound access road.
**CITY OF DUNCANVILLE**  
**GPS CONTROL SHEET**  
Established By: **The Wallace Group, Inc.**  
(214) 747-3733

<table>
<thead>
<tr>
<th>MONUMENT NAME: MON. NO. 8</th>
<th>DATE ESTABLISHED: DECEMBER 2002</th>
<th>COUNTY: DALLAS</th>
<th>STATE: TEXAS</th>
<th>MAPSCO PAGE NO. 72-D</th>
</tr>
</thead>
</table>

**NAD-83 (CORS 96) GEODETC POSITION**  
**LATITUDE** N 032° 38' 56.70690"  
**LONGITUDE** W 096° 53' 28.77625"

**ELLIPSOIDAL ELEVATION (METERS)** 186.96  
**ELLIPSOIDAL HEIGHT (METERS)** -26.65

**NAD-83 (CORS 96) STATE PLANE COORDINATES**  
**NORTH CENTRAL ZONE (METERS)**  
**NORTHING (Y)** 2110096.0033  
**EASTING (X)** 750906.5599

**NGVD-29 ELEV: 700.82’ (FEMA) (U.S. SURVEY FEET)**  
**NAVD-88 ELEVATION: 700.83’ (U.S. SURVEY FEET)**

**NOTE:**  
4" DIAMETER DOMED BRONZE DISK IN A 12" DIAMETER CONCRETE MONUMENT SET IN THE GRASS MEDIAN OF S. COCKRELL HILL ROAD, APPROXIMATELY 593’ NORTH OF THE CENTERLINE OF E. WHEATLAND ROAD.

---

**LEGEND**  
★ = MONUMENT

**PHOTO TAKEN FROM NORTH OF THE MONUMENT LOOKING SOUTH TOWARD E. WHEATLAND ROAD**

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**CENTERLINE — — — E. WHEATLAND ROAD (NOT TO SCALE)**
CITY OF DUNCANVILLE
GPS CONTROL SHEET
Established By: The Wallace Group, Inc.
(214) 747-3733

MONUMENT NAME: MON. NO. 9
DATE ESTABLISHED: DECEMBER 2002
COUNTY: DALLAS
STATE: TEXAS
MAPSCO PAGE NO. 72-C

NAD-83 (CORS 96) GEOEDIC POSITION
LATITUDE N 032° 38' 50.82988"
LONGITUDE W 096° 54' 16.07701"

NAD-83 (CORS 96) STATE PLANE COORDINATES NORTH CENTRAL ZONE (METERS)
NORTHING (Y) 2109896.2040
EASTING (X) 749676.8508

ELLIPSOIDAL ELEVATION (METERS) 192.05
ELLIPSOIDAL HEIGHT (METERS) -26.69

NGVD-29 ELEV: 717.64' (FEMA) (U.S. SURVEY FEET)
NAVD-88 ELEVATION: 717.65' (U.S. SURVEY FEET)

NOTE:
4" DIAMETER DOMED BRONZE DISK IN A 12" DIAMETER CONCRETE MONUMENT SET IN THE MEDIAN OF THE SOUTH PARKING LOT FOR ARMSTRONG PARK BETWEEN THE POLICE STATION AND CRANKSHAFT DRIVE.
CITY OF DUNCANVILLE
GPS CONTROL SHEET

Established By: The Wallace Group, Inc. (214) 747-3733

<table>
<thead>
<tr>
<th>MONUMENT NAME: MON. NO. 10</th>
<th>DATE ESTABLISHED: DECEMBER 2002</th>
<th>COUNTY: DALLAS</th>
<th>STATE: TEXAS</th>
<th>MAPSCO PAGE NO. 718-D</th>
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<table>
<thead>
<tr>
<th>NAD-83 (CORS 96) GEODETC POSITION</th>
<th>NAD-83 (CORS 96) STATE PLANE COORDINATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>LATITUDE N 032° 38' 50.67327&quot;</td>
<td>NORTH CENTRAL ZONE (METERS)</td>
</tr>
<tr>
<td>LONGITUDE W 096° 55' 44.37667&quot;</td>
<td>NORTHING (Y) 2109856.7031</td>
</tr>
<tr>
<td></td>
<td>EASTING (X) 747376.1568</td>
</tr>
</tbody>
</table>

| ELLIPSOIDAL ELEVATION (METERS) | 186.76 |
| ELLIPSOIDAL HEIGHT (METERS)   | -26.75 |

<table>
<thead>
<tr>
<th>NGVD-29 ELEV: 700.49' (U.S. SURVEY FEET) (FEMA)</th>
<th>NAVD-88 ELEVATION: 700.50' (U.S. SURVEY FEET)</th>
</tr>
</thead>
</table>

NOTE:
4" DIAMETER DOMED BRONZE DISK IN A 12" DIAMETER CONCRETE MONUMENT SET APPROXIMATELY 37' WEST OF THE CENTERLINE OF KENSINGTON DRIVE IN GRASS MEDIAN OF W. WHEATLAND ROAD.

LEGEND

= MONUMENT

PHOTO TAKEN FROM WEST OF THE MONUMENT LOOKING EAST ALONG W. WHEATLAND ROAD

(W. WHEATLAND ROAD)

MON. NO. 10

MON. NO. 10

NOT TO SCALE

KENSINGTON DRIVE

GRASS MEDIAN
CITY OF DUNCANVILLE
GPS CONTROL SHEET
Established By:
The Wallace Group, Inc.
(214) 747-3733

MONUMENT NAME: DAlE
MON. NO. 11
DATE ESTABLISHED: DECEMBER 2002
COUNTY: DALLAS
STATE: TEXAS
MAPSCO PAGE NO. 71B-C

NAD-83 (CORS 96) GEODETIC POSITION
LATITUDE N 032° 38' 50.81868"
LONGITUDE W 096° 56' 34.22551"

NAD-83 (CORS 96) STATE PLANE COORDINATES
NORTH CENTRAL ZONE (METERS)
NORTHING (Y) 2109841.8419
EASTING (X) 746077.2079

ELLIPSOIDAL ELEVATION (METERS) 198.32
ELLIPSOIDAL HEIGHT (METERS) -26.79

NAD-83 (CORS 96) STATE PLANE COORDINATES
NORTH CENTRAL ZONE (U.S. SURVEY FEET)
NORTHING (Y) 6922039.4428
EASTING (X) 2447754.9728

NGVD-29 ELE: 738.52' (FEMA) (U.S. SURVEY FEET)
NAVD-88 ELEVATION: 738.53' (U.S. SURVEY FEET)

NOTE:
4" DIAMETER DOMED BRONZE DISK SET IN THE NORTHWEST CORNER OF A STORM DRAIN INLET
APPROXIMATELY 88.5' NORTH OF THE CENTERLINE OF W. WHEATLAND ROAD ON THE EAST SIDE OF
THE MEDIAN IN S. CLARK ROAD.

LEGEND
MONUMENT
LIGHT POLE
STORM DRain MANHOLE
FIRE HYDRANT

PHOTO TAKEN FROM NORTH OF THE MONUMENT LOOKING SOUTH TOWARD W. WHEATLAND ROAD
**CITY OF DUNCANVILLE**
**GPS CONTROL SHEET**

Established By:

The Wallace Group, Inc.
(214) 747-3733

<table>
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<tr>
<th>MONUMENT NAME: MON. NO. 12</th>
<th>DATE ESTABLISHED: DECEMBER 2002</th>
<th>COUNTY: DALLAS</th>
<th>STATE: TEXAS</th>
<th>MAPSCO PAGE NO. 71B-L</th>
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**NAD–83 (CORS 96) GEOETIC POSITION**

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<th>LONGITUDE</th>
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<tbody>
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<td>N 032° 37' 55.44218&quot;</td>
<td>W 096° 56' 36.15327&quot;</td>
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**NAD–83 (CORS 96) STATE PLANE COORDINATES NORTH CENTRAL ZONE (METERS)**

<table>
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<th>NORTHING (Y)</th>
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<tbody>
<tr>
<td>2108135.5841</td>
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**ELLIPSOIDAL ELEVATION (METERS)** 199.19

**ELLIPSOIDAL HEIGHT (METERS)** -26.79

**NAD–83 (CORS 96) STATE PLANE COORDINATES NORTH CENTRAL ZONE (U.S. SURVEY FEET)**

<table>
<thead>
<tr>
<th>NORTHING (Y)</th>
<th>EASTING (X)</th>
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<tbody>
<tr>
<td>6916441.4955</td>
<td>2447673.0913</td>
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**NGVD–29 ELEV: 741.35' (FEMA) (U.S. SURVEY FEET)**

**NAVD–88 ELEVATION: 741.37' (U.S. SURVEY FEET)**

**NOTE:**

4" DIAMETER DOMED BRONZE DISK SET IN THE SOUTHWEST CORNER OF THE SECOND STORM DRAIN INLET ON THE WEST SIDE OF THE SOUTHBOUND LANES OF S. CLARK ROAD APPROXIMATELY 224' SOUTH OF THE CENTERLINE OF W. DANIELDALE ROAD.

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**W. DANIELDALE ROAD**

**S. CLARK ROAD**

**(SOUTHBOUND LANES)**

**LEGEND**

- MONUMENT
- STORM DRAIN MANHOLE

**PHOTO TAKEN FROM SOUTH OF THE MONUMENT LOOKING NORTH TOWARD W. DANIELDALE ROAD**

**MON. NO. 12**

**PARKING AREA**

**(NOT TO SCALE)**
CITY OF DUNCANVILLE
GPS CONTROL SHEET
Established By: The Wallace Group, Inc.
(214) 747-3733

MONUMENT NAME: MON. NO. 13
DATE ESTABLISHED: DECEMBER 2002
COUNTY: DALLAS
STATE: TEXAS
MAPSCO PAGE NO.: 72-J

NAD-83 (CORS 96) GEODETIC POSITION
LATITUDE N 032° 37' 56.76948"
LONGITUDE W 096° 55' 31.50693"

ELLIPSOIDAL ELEVATION (METERS) 176.47
ELLIPSOIDAL HEIGHT (METERS) -26.74

NAD-83 (CORS 96) STATE PLANE COORDINATES
NORTH CENTRAL ZONE (METERS)
NORTHING (Y) 2108201.5720
EASTING (X) 747736.3804

NGVD-29 ELEV: 666.68' (FEMA) (U.S. SURVEY FEET)

NOTE:
4" DIAMETER DOMED BRONZE DISK SET IN THE SOUTHWEST CORNER OF A STORM DRAIN INLET ON THE WEST SIDE OF S. SANTA FE TRAIL APPROXIMATELY 97' SOUTH OF THE CENTERLINE OF W. DANIELDALE ROAD.

LEGEND
= MONUMENT

PHOTO TAKEN FROM SOUTHWEST OF THE MONUMENT LOOKING NORTHEAST TO TOWARD W. DANIELDALE ROAD

MON. NO. 13

W. DANIELDALE ROAD
"S. SANTA FE TRAIL"

MON. NO. 13

NORTH CENTRAL ZONE (U.S. SURVEY FEET)
NORTHING (Y) 6916657.9909
EASTING (X) 2453198.4415

NAVD-88 ELEVATION: 666.70' (U.S. SURVEY FEET)
CITY OF DUNCANVILLE
GPS CONTROL SHEET
Established By:
W The Wallace Group, Inc.
(214) 747-3733

MONUMENT NAME: MON. NO. 14
DATE ESTABLISHED: DECEMBER 2002
COUNTY: DALLAS
STATE: TEXAS
MAPSCO PAGE NO. 72-L

NAD-83 (CORS 98) GEODETIC POSITION
LATITUDE N 032° 37' 54.09558"
LONGITUDE W 096° 54' 19.50814"

NAD-83 (CORS 98) STATE PLANE COORDINATES NORTH CENTRAL ZONE (METERS)
NORTHING (Y) 2108147.5244
EASTING (X) 749613.9721

ELLIPSOIDAL ELEVATION (METERS) 167.58
ELLIPSOIDAL HEIGHT (METERS) -26.69

NGVD-29 ELEV: 637.34' (FEMA) (U.S. SURVEY FEET)

NOTE:
4" DIAMETER DOMED BRONZE DISK IN A 12" DIAMETER CONCRETE MONUMENT SET IN THE NORTHEAST CORNER OF THE INTERSECTION OF BOB LEE BOULEVARD AND SHADY TRAIL BETWEEN THE EAST CURB LINE OF BOB LEE BOULEVARD AND THE WEST CURB LINE OF A PARKING AREA NORTH OF THE CITY OF DUNCANVILLE MUNICIPAL SERVICE CENTER BUILDING.

LEGEND
= MONUMENT

PHOTO TAKEN FROM NORTH OF THE MONUMENT LOOKING SOUTH TOWARD THE CITY OF DUNCANVILLE MUNICIPAL SERVICE CENTER
CITY OF DUNCANVILLE
GPS CONTROL SHEET
Established By:
The Wallace Group, Inc.
(214) 747-3733

MONUMENT NAME: MON. NO. 15
DATE ESTABLISHED: DECEMBER 2002
COUNTY: DALLAS
STATE: TEXAS
MAPSCO PAGE NO. 72-M

NAD-83 (CORS 96) GEODETC POSITION
LATITUDE N 032° 37' 59.80328"
LONGITUDE W 096° 53' 29.18624"

NAD-83 (CORS 96) STATE PLANE COORDINATES
NORTH CENTRAL ZONE (METERS)
NORTHING (Y) 2108343.3063
EASTING (X) 750922.7139

ELLIPSOIDAL ELEVATION (METERS) 162.75
ELLIPSOIDAL HEIGHT (METERS) -26.65

NAD-83 (CORS 96) STATE PLANE COORDINATES
NORTH CENTRAL ZONE (U.S. SURVEY FEET)
NORTHING (Y) 6917122.9975
EASTING (X) 2463652.2704

NGVD-29 ELEV: 621.41' (FEMA) (U.S. SURVEY FEET)
NAVD-88 ELEVATION: 621.41' (U.S. SURVEY FEET)

NOTE:
4" DIAMETER DOMED BRONZE DISK SET IN THE NORTHWEST CORNER OF A STORM DRAIN INLET ON THE WEST SIDE OF S. COCKRELL HILL ROAD APPROXIMATELY 90' NORTH OF THE CENTERLINE OF E. DANIELDALE ROAD.

LEGEND
= MONUMENT
= POWER POLE

PHOTO TAKEN FROM NORTH OF THE MONUMENT LOOKING SOUTH TOWARD E. DANIELDALE ROAD
CITY OF DUNCANVILLE
GPS CONTROL SHEET

Established By:
The Wallace Group, Inc.
(214) 747-3733

MONUMENT NAME: MON. NO. 16
DATE ESTABLISHED: DECEMBER 2002
COUNTY: DALLAS
STATE: TEXAS
MAPSCO PAGE NO. 72-V

NAD-83 (CORS 96) GEODETIC POSITION
LATITUDE N 032° 37' 07.87931"
LONGITUDE W 096° 53' 30.47453"

NAD-83 (CORS 96) STATE PLANE COORDINATES
NORTH CENTRAL ZONE (METERS)
NORTHING (Y) 2105746.7042
EASTING (X) 750913.5759

ELLIPSOIDAL ELEVATION (METERS) 166.46
ELLIPSOIDAL HEIGHT (METERS) -26.65

NGVD-29 ELEV: 633.56' (FEMA) (U.S. SURVEY FEET)

NAD-83 (CORS 96) STATE PLANE COORDINATES
NORTH CENTRAL ZONE (U.S. SURVEY FEET)
NORTHING (Y) 6911884.6121
EASTING (X) 2463622.2903

NAV-D-88 ELEVATION: 633.57' (U.S. SURVEY FEET)

NOTE:
4" DIAMETER DOMED BRONZE DISK SET IN THE NORTHWEST CORNER OF A STORM DRAIN INLET ON THE NORTH SIDE OF E. WINTERGREEN ROAD APPROXIMATELY 155' WEST OF THE CENTERLINE OF S. COCKRELL HILL ROAD.

LEGEND

MONUMENT
SIGN

PHOTO TAKEN FROM NORTH SIDE OF E. WINTERGREEN ROAD LOOKING EAST TOWARD S. COCKRELL HILL ROAD.
**CITY OF DUNCANVILLE**
**GPS CONTROL SHEET**

Established By:
The Wallace Group, Inc.
(214) 747-3733

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**NAD-83 (CORS 96) GEODETIC POSITION**

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<th>Latitude</th>
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<tbody>
<tr>
<td>N 032° 37' 17.69853&quot;</td>
<td>W 096° 54' 31.11158&quot;</td>
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**ELLIPSOIDAL ELEVATION (METERS)**
182.13

**ELLIPSOIDAL HEIGHT (METERS)**
-26.70

**NAD-83 (CORS 96) STATE PLANE COORDINATES NORTH CENTRAL ZONE (METERS)**

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<th>Northing (Y)</th>
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<td>2107021.9702</td>
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**NAD-83 (CORS 96) STATE PLANE COORDINATES NORTH CENTRAL ZONE (U.S. SURVEY FEET)**

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<tr>
<th>Northing (Y)</th>
<th>Easting (X)</th>
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<tbody>
<tr>
<td>6912787.9138</td>
<td>2458422.1087</td>
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**NGVD-29 ELEV: 685.10' (FEMA) (U.S. SURVEY FEET)**

**NAVD-88 ELEVATION: 685.12' (U.S. SURVEY FEET)**

**NOTE:**
4" DIAMETER DOMED BRONZE DISK IN A 12" DIAMETER CONCRETE MONUMENT SET IN THE GRASS MEDIAN OF S. MAIN STREET APPROXIMATELY 193' NORTH OF THE CENTERLINE OF MEADOWCREEK DRIVE.

**LEGEND**
- MONUMENT
- LIGHT POLE
- WATER METER

**PHOTO TAKEN FROM NORTH OF THE MONUMENT LOOKING SOUTH TOWARD THE INTERSECTION OF MEADOWCREEK DRIVE**
## CITY OF DUNCANVILLE
### GPS CONTROL SHEET

Established By:

The Wallace Group, Inc.

(214) 747-3733

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**NAD-83 (CORS 96) GEODE&TIC POSITION**

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<tr>
<th>LATITUDE</th>
<th>LONGITUDE</th>
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<tbody>
<tr>
<td>N 032' 37' 29.92772&quot;</td>
<td>W 096° 55' 34.07997&quot;</td>
</tr>
</tbody>
</table>

**ELLIPSOIDAL ELEVATION (METERS)**: 176.73

**ELLIPSOIDAL HEIGHT (METERS)**: -26.74

**NGVD-29 ELEV: 667.54' (FEMA) (U.S. SURVEY FEET)**

**NAVD-88 ELEVATION: 667.56' (U.S. SURVEY FEET)**

**NOTE:**

4" DIAMETER DOMED BRONZE DISK SET ON THE NORTHEAST CORNER OF A STORM DRAIN INLET APPROXIMATELY 187' NORTHWEST OF THE CENTERLINE OF CEDAR HILL ROAD AND APPROXIMATELY 8' NORTHEAST OF THE NORTHEAST EDGE OF ASPHALT OF JOE WILSON ROAD.

**PHOTO TAKEN FROM NORTHWEST OF THE MONUMENT LOOKING SOUTHEAST TOWARD CEDAR HILL ROAD.**
CITY OF DUNCANVILLE
GPS CONTROL MONUMENTATION
MAIN STREET PROJECT

BASIS FOR CONTROL

The values for the City of Duncanville GPS Control Monuments along Main Street were established using Rapid Static data collection procedures in November of 2008. Brittain & Crawford, LLC, set five custom made 3 ½" Aluminum monuments along Main Street in strategic locations for the project. All fieldwork and post processing was performed by Brittain & Crawford.

Horizontal State Plane Coordinates (SPC) are on the Lambert Projection System – NAD_83 (CORS96) (EPOCH: 2002.0000) – Texas Coordinate System (Texas North Central Zone 4202). Positions were derived using the National Geodetic Service (NGS) Online Positioning User Service (OPUS). All monuments were occupied and a Static collection was performed for at least four hours on each along with multiple Real-Time Kinematic observations on Existing Monuments No. 6 & No. 10, with an average Horizontal check of 0.05' and a Vertical check of 0.00' on Monument No. 6 and an average Horizontal check of 0.06' and a Vertical of 0.12' on Monument No. 10.

Federal Emergency Management Agency (FEMA) elevations were established by running conventional leveling procedures through the Monuments from the given data shown on the Flood Insurance Rate Map (FIRM) for Dallas County, Texas and Incorporated Areas according to Map Number 48113C0470 J, Effective Date: August 23, 2001. The Reference Mark used was RM241 and has a given elevation of 667.97 (NGVD29). The (NAVD88 Datum) shown on the GPS Control Sheets Produced by Brittain & Crawford are Geodetic elevations using NAVD88_GEOID03.

Brittain & Crawford provided the City of Duncanville with five GPS Control Monuments based upon Static Collections and post processed using OPUS. All Data Sheets show Geodetic Datum and State Plane Coordinates for the Texas North Central Zone – 4202 in Meters and U.S. Survey feet. Vertical Datum is referenced to NAVD88 elevations and NGVD29. The FEMA Datum in Duncanville area is referenced to NGVD29.
## CITY OF DUNCANVILLE
### GPS CONTROL SHEET
ESTABLISHED BY: BRITTAIN & CRAWFORD, LLC.
LAND SURVEYING & TOPOGRAPHIC MAPPING PH. 817-926-0211

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<th>MONUMENT NAME:</th>
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<td>MON. No. 22</td>
<td>NOVEMBER, 2008</td>
<td>DALLAS</td>
<td>TEXAS</td>
<td>62–Y</td>
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<tr>
<th>NAD–83 (CORS 96) GEODETIC POSITION</th>
<th>NAD–83 (CORS 96) STATE PLANE COORDINATES NORTH CENTRAL ZONE (METERS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LATITUDE N 032° 39' 33.15390&quot;</td>
<td>NORTTHING (Y) 2111195.658</td>
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<tr>
<td>LONGITUDE W 096° 54’ 26.33520&quot;</td>
<td>EASTING (X) 749389.797</td>
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<thead>
<tr>
<th>ELLIPSOIDAL ELEVATION (METERS) 198.064</th>
<th>ELLIPSOIDAL HEIGHT (METERS) –26.81</th>
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<table>
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<tr>
<th>NGVD–29 ELEV: 737.77’ (FEMA) (U.S. SURVEY FEET)</th>
<th>NAVD–88 ELEV: 737.761’ (U.S. SURVEY FEET)</th>
</tr>
</thead>
</table>

DESCRIPTION: 3 1/4” ALUMINUM DISK SET IN CONCRETE ON THE WEST SIDE OF MAIN STREET AT THE PROJECTION OF THE CENTERLINE E. FAIR STREET. THE MONUMENT IS 5.7 FEET WEST OF THE WEST CURBLINE OF MAIN STREET.

### LEGEND:
- = MONUMENT
- = FIRE HYDRANT

PHOTO TAKEN ON THE WEST SIDE OF MAIN STREET FROM THE SOUTH TO NORTH LOOKING TOWARDS CAMP WISDOM ROAD.
**CITY OF DUNCANVILLE**  
**GPS CONTROL SHEET**  
**ESTABLISHED BY: BRITTAIN & CRAWFORD, LLC.**  
**LAND SURVEYING & TOPOGRAPHIC MAPPING**  
**PH. 817-926-0211**

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<td>NOVEMBER, 2008</td>
<td>DALLAS</td>
<td>TEXAS</td>
<td>72-C</td>
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</table>

**NAD-83 (CORS 96) GEODETIC POSITION**
- **LATITUDE:** N 032° 39’ 09.23019"
- **LONGITUDE:** W 096° 54’ 30.93962"

**ELLIPSOIDAL ELEVATION (METERS)** 193.687

**ELLIPSOIDAL HEIGHT (METERS)** -26.81

**NGVD-29 ELEV:** 723.29’ (FEMA)  
(U.S. SURVEY FEET)

**NGVD-88 ELEV:** 723.407’  
(U.S. SURVEY FEET)

**DESCRIPTION:** 3 1/4” ALUMINUM DISK SET IN CONCRETE ON THE WEST SIDE OF MAIN STREET, AND APPROXIMATELY 34 FEET SOUTH OF THE CENTERLINE INTERSECTION OF MAIN STREET AND E. CHERRY STREET AND APPROXIMATELY 350 FEET NORTH OF THE CENTERLINE OF CENTER STREET. 5.1 FEET WEST OF THE SOUTHEAST CORNER OF A CURB INLET.

**LEGEND:**
- ⊙ = MONUMENT
- ☮ = FIRE HYDRANT

**PHOTO TAKEN ON THE WEST SIDE OF MAIN STREET FROM THE NORTH TO SOUTH LOOKING TOWARDS CENTER STREET.**

---

**MON. No. 21**

**MON. No. 21**

**MON. No. 21**

**MON. No. 21**
### CITY OF DUNCANVILLE GPS CONTROL SHEET

**ESTABLISHED BY:** BRITTAIN & CRAWFORD, LLC.

**LAND SURVEYING & TOPOGRAPHIC MAPPING**  PH. 817-926-0211

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<th>DATE ESTABLISHED: NOVEMBER, 2008</th>
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<tr>
<th>NAD-83 (CORS 96) GEODETiC POSITION</th>
<th>NAD-83 (CORS 96) STATE PLANE COORDINATES NORTH CENTRAL ZONE (METERS)</th>
<th>NAD-83 (CORS 96) STATE PLANE COORDINATES NORTH CENTRAL ZONE (U.S. SURVEY FEET)</th>
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<td>LATITUDE</td>
<td>NORTHING (Y) 2110141.387</td>
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<td>N 032' 38' 58.98090&quot;</td>
<td>EASTING (X) 749287.101</td>
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<td>LONGITUDE</td>
<td></td>
<td></td>
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<tr>
<td>W 096' 54' 30.88903&quot;</td>
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<tr>
<th>ELLIPSOIDAL ELEVATION (METERS) 195.746</th>
<th>ELLIPSOIDAL HEIGHT (METERS) -26.81</th>
<th>NGVD-29 ELEV: 730.12' (FEMA) (U.S. SURVEY FEET)</th>
<th>NAVD-88 ELEV: 730.16' (U.S. SURVEY FEET)</th>
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<td>NAD-83 (CORS 96) STATE PLANE COORDINATES NORTH CENTRAL ZONE (METERS)</td>
<td>NAD-83 (CORS 96) STATE PLANE COORDINATES NORTH CENTRAL ZONE (U.S. SURVEY FEET)</td>
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<td>EASTING (X) 2458286.09720</td>
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<td>EASTING (X) 2458286.09720</td>
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**DESCRIPTION:** 3 1/4” ALUMINUM DISK SET IN CONCRETE AT THE SOUTHWEST CORNER OF THE INTERSECTION OF MAIN STREET AND W. NANCE STREET, APPROXIMATELY 40 FEET WEST OF THE CENTERLINE OF MAIN STREET AND 23.5 FEET SOUT OF THE CENTERLINE OF W. NANCE STREET.

**LEGEND:**
- = MONUMENT

**PHOTO:** TAKEN ON THE WEST SIDE OF MAIN STREET FROM THE SOUTH TO NORTH LOOKING TOWARDS CENTER STREET LOCATED ON THE SOUTH SIDE OF W. NANCE STREET.
CITY OF DUNCANVILLE
GPS CONTROL SHEET

ESTABLISHED BY: BRITTAIN & CRAWFORD, LLC.
LAND SURVEYING & TOPOGRAPHIC MAPPING  PH. 817-926-0211

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<td>NAD–83 (CORS 96) GEODETIC POSITION</td>
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<tr>
<td>LATITUDE N 032° 38' 44.74727&quot;</td>
<td>NORTHING (Y) 2109703.471</td>
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<td>LONGITUDE W 096° 54’ 29.73349&quot;</td>
<td>EASTING (X) 749323.852</td>
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<td>ELLIPSOIDAL ELEVATION (METERS) 192.675</td>
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<td>NGVD–29 ELEV: 720.09’ (FEMA) (U.S. SURVEY FEET)</td>
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<td>NAVD–88 ELEV: 720.08’ (U.S. SURVEY FEET)</td>
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DESCRIPTION: 3 1/4" ALUMINUM DISK SET IN CONCRETE AT THE SOUTHEAST CORNER OF THE INTERSECTION OF MAIN STREET AND WHEATLAND ROAD, 15.6 FEET EAST OF THE EAST CURBLINE OF MAIN STREET AND 25.2 FEET SOUTH OF THE SOUTH CURBLINE OF WHEATLAND ROAD.

LEGEND:
Θ = MONUMENT

PHOTO TAKEN ON THE EAST SIDE OF MAIN STREET FROM THE SOUTH TO NORTH LOOKING TOWARDS WHEATLAND ROAD.
CITY OF DUNCANVILLE
GPS CONTROL SHEET
ESTABLISHED BY: BRITTAIN & CRAWFORD, LLC.
LAND SURVEYING & TOPOGRAPHIC MAPPING  PH. 817-926-0211


NAD–83 (CORS 96) GEODETIC POSITION
LATITUDE N 032° 39' 43.67753"
LONGITUDE W 096° 54' 23.27226"

NAD–83 (CORS 96) STATE PLANE COORDINATES NORTH CENTRAL ZONE (METERS)
NORTHING (Y) 2111520.979
EASTING (X) 749464.678

ELLIPSOIDAL ELEVATION (METERS) 198.064
ELLIPSOIDAL HEIGHT (METERS) –26.81

NAD–83 (CORS 96) STATE PLANE COORDINATES NORTH CENTRAL ZONE (U.S. SURVEY FEET)
NORTHING (Y) 6927548.41193
EASTING (X) 2458868.69774

NGVD–29 ELEV: 729.14’ (FEMA)
(U.S. SURVEY FEET)

NAV–88 ELEV: 729.168’
(U.S. SURVEY FEET)

DESCRIPTION: 3 1/4” ALUMINUM DISK SET IN CONCRETE ON THE EAST SIDE OF MAIN STREET, 45 FEET NORTH OF THE NORTH CURBLINE OF CAMP WISDOM ROAD AND 6.1 FEET EAST OF THE EAST CURBLINE OF MAIN STREET ALSO LYING 34.7 FEET FROM THE SOUTHWEST CORNER OF LOS LUPES MEXICAN RESTAURANT.

LEGEND:
= MONUMENT

CAMP WISDOM ROAD

MAIN STREET

PHOTO TAKEN ON THE EAST SIDE OF MAIN STREET FROM THE NORTH TO SOUTH LOOKING TOWARDS CAMP WISDOM ROAD.
**CITY OF DUNCANVILLE**  
**GPS CONTROL SHEET**

**ESTABLISHED BY:** BRITTAIN & CRAWFORD, LLC.  
**LAND SURVEYING & TOPOGRAPHIC MAPPING**  
**PH. 817-926-0211**

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<td>NAD–83 (CORS 96) STATE PLANE COORDINATES NORTH CENTRAL ZONE (METERS)</td>
<td>NAD–83 (CORS 96) STATE PLANE COORDINATES NORTH CENTRAL ZONE (U.S. SURVEY FEET)</td>
<td>NAD–83 (CORS 96) STATE PLANE COORDINATES NORTH CENTRAL ZONE (U.S. SURVEY FEET)</td>
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</table>
| LATITUDE N 032° 38’ 44.74727”  
LONGITUDE W 096° 54’ 29.73349” | NORTHING (Y) 2109703.471  
EASTING (X) 749323.852 | NORTHING (Y) 6921585.47110  
EASTING (X) 2458406.67110 | NORTHING (Y) 720.09’ (FEMA)  
EASTING (X) 2458406.67110 |
| ELLIPSOIDAL ELEVATION (METERS) 192.675  
ELLIPSOIDAL HEIGHT (METERS) –26.81 | NAVD–88 ELEV: 720.08’ (U.S. SURVEY FEET) |

**DESCRIPTION:** 3 1/4” ALUMINUM DISK SET IN CONCRETE AT THE SOUTHEAST CORNER OF THE INTERSECTION OF MAIN STREET AND WHEATLAND ROAD, 15.6 FEET EAST OF THE EAST CURBLINE OF MAIN STREET AND 25.2 FEET SOUTH OF THE SOUTH CURBLINE OF WHEATLAND ROAD.

**LEGEND:**

- **= MONUMENT**

**PHOTO TAKEN ON THE EAST SIDE OF MAIN STREET FROM THE SOUTH TO NORTH LOOKING TOWARDS WHEATLAND ROAD.**
### CITY OF DUNCANVILLE

**GPS CONTROL SHEET**

**Established by:** BRITTAIN & CRAWFORD, LLC.

**Land Surveying & Topographic Mapping**  
**Ph. 817-926-0211**

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<th>Monument Name:</th>
<th>Date Established:</th>
<th>County:</th>
<th>State:</th>
<th>MapSCO Page No.</th>
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<tbody>
<tr>
<td>MON. No. 20</td>
<td>NOVEMBER, 2008</td>
<td>DALLAS</td>
<td>TEXAS</td>
<td>72–C</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>NAD–83 (CORS 96) Geodetic Position</th>
<th>NAD–83 (CORS 96) State Plane Coordinates North Central Zone (Meters)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latitude: N 032° 38’ 58.98090&quot;</td>
<td>Northing (Y) 2110141.387</td>
</tr>
<tr>
<td>Longitude: W 096° 54’ 30.88903&quot;</td>
<td>Easting (X) 749287.101</td>
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<table>
<thead>
<tr>
<th>Ellipsoidal Elevation (Meters) 195.746</th>
<th>Ellipsoidal Height (Meters) -26.81</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAD–83 (CORS 96) State Plane Coordinates North Central Zone (U.S. Survey Feet)</td>
<td>Northing (Y) 6923022.20051</td>
</tr>
<tr>
<td></td>
<td>Easting (X) 2458286.09720</td>
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</tbody>
</table>

|-------------------------------------------------|----------------------------------------|

**Description:** 3 1/4” Aluminum disk set in concrete at the southwest corner of the intersection of Main Street and W. Nance Street, approximately 40 feet west of the centerline of Main Street and 23.5 feet south of the centerline of W. Nance Street.

**Legend:**

- = Monument

**Diagram:**

![Diagram of the area showing the monument's location on Main Street and W. Nance Street.]

**Photo:**

*Photo taken on the west side of Main Street from the south to north looking towards Center Street located on the south side of W. Nance Street.*

**Not to Scale**
### CITY OF DUNCANVILLE
### GPS CONTROL SHEET

ESTABLISHED BY: BRITTAIN & CRAWFORD, LLC.
LAND SURVEYING & TOPOGRAPHIC MAPPING   PH. 817-926-0211

<table>
<thead>
<tr>
<th>MONUMENT NAME: MON. No. 21</th>
<th>DATE ESTABLISHED: NOVEMBER, 2008</th>
<th>COUNTY: DALLAS</th>
<th>STATE: TEXAS</th>
<th>MAPSCO PAGE NO. 72-C</th>
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<table>
<thead>
<tr>
<th>NAD–83 (CORS 96) GEODETIC POSITION</th>
<th>NAD–83 (CORS 96) STATE PLANE COORDINATES NORTH CENTRAL ZONE (METERS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LATITUDE N 032° 39' 09.23019&quot;</td>
<td>NORTHING (Y) 2110457.029</td>
</tr>
<tr>
<td>LONGITUDE W 096° 54' 30.93962&quot;</td>
<td>EASTING (X) 749281.001</td>
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<table>
<thead>
<tr>
<th>ELLIPSOIDAL ELEVATION (METERS) 193.687</th>
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</thead>
<tbody>
<tr>
<td>ELLIPSOIDAL HEIGHT (METERS) -26.81</td>
</tr>
</tbody>
</table>

| NGVD–29 ELEV: 723.29' (FEMA) (U.S. SURVEY FEET) | NAVD–88 ELEV: 723.407' (U.S. SURVEY FEET) |

DESCRIPTION: 3 1/4" ALUMINUM DISK SET IN CONCRETE ON THE WEST SIDE OF MAIN STREET, AND APPROXIMATELY 34 FEET SOUTH OF THE CENTERLINE INTERSECTION OF MAIN STREET AND E. CHERRY STREET AND APPROXIMATELY 350 FEET NORTH OF THE CENTERLINE OF CENTER STREET. 5.1 FEET WEST OF THE SOUTHEAST CORNER OF A CURB INLET.

![Map with monument details and legend]

PHOTO TAKEN ON THE WEST SIDE OF MAIN STREET FROM THE NORTH TO SOUTH LOOKING TOWARDS CENTER STREET.
CITY OF DUNCANVILLE
GPS CONTROL SHEET
ESTABLISHED BY: BRITTAINE & CRAWFORD, LLC.
LAND SURVEYING & TOPOGRAPHIC MAPPING  PH. 817-926-0211

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<tr>
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<td>MON. No. 22</td>
<td>NOVEMBER, 2008</td>
<td>DALLAS</td>
<td>TEXAS</td>
<td>62-Y</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>NAD-83 (CORS 96) GEODETIC POSITION</th>
<th>NAD-83 (CORS 96) STATE PLANE COORDINATES NORTH CENTRAL ZONE (METERS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LATITUDE N 032° 39' 33.15390&quot;</td>
<td>NORTHING (Y) 2111195.658</td>
</tr>
<tr>
<td>LONGITUDE W 096° 54' 26.33520&quot;</td>
<td>EASTING (X) 749389.797</td>
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<tr>
<th>ELLIPSOIDAL ELEVATION (METERS) 198.064</th>
<th>NAD-83 (CORS 96) STATE PLANE COORDINATES NORTH CENTRAL ZONE (U.S. SURVEY FEET)</th>
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</thead>
<tbody>
<tr>
<td>ELLIPSODIAL HEIGHT (METERS) -26.81</td>
<td>NORTHING (Y) 6926481.08795</td>
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<td></td>
<td>EASTING (X) 2458623.02566</td>
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<table>
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<tr>
<th>NGVD-29 ELEV: 737.77' (FEMA) (U.S. SURVEY FEET)</th>
<th>NAVD-88 ELEV: 737.761' (U.S. SURVEY FEET)</th>
</tr>
</thead>
</table>

DESCRIPTION: 3 1/4" ALUMINUM DISK SET IN CONCRETE ON THE WEST SIDE OF MAIN STREET AT THE PROJECTION OF THE CENTERLINE E. FAIN STREET. THE MONUMENT IS 5.7 FEET WEST OF THE WEST CURBLINE OF MAIN STREET.

LEGEND:
⊙ = MONUMENT
♀ = FIRE HYDRANT

PHOTO TAKEN ON THE WEST SIDE OF MAIN STREET FROM THE SOUTH TO NORTH LOOKING TOWARDS CAMP WISDOM ROAD.
**CITY OF DUNCANVILLE**  
**GPS CONTROL SHEET**  
**ESTABLISHED BY:** BRITTAIN & CRAWFORD, LLC.  
**LAND SURVEYING & TOPOGRAPHIC MAPPING**  
**PH. 817-926-0211**

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<td>TEXAS</td>
<td>62-U</td>
</tr>
</tbody>
</table>

**NAD–83 (CORS 96) GEODETIC POSITION**
- **LATITUDE** N 032° 39' 43.67753"
- **LONGITUDE** W 096° 54' 23.27226"

**NAD–83 (CORS 96) STATE PLANE COORDINATES NORTH CENTRAL ZONE (METERS)**
- **NORTHING (Y)** 2111520.979
- **EASTING (X)** 749464.678

**ELLIPSOIDAL ELEVATION (METERS)** 198.064

**ELLIPSODIAL HEIGHT (METERS)** -26.81

**NGVD–29 ELEV: 729.14’ (FEMA) (U.S. SURVEY FEET)**

**NAVD–88 ELEV: 729.168’ (U.S. SURVEY FEET)**

**DESCRIPTION:**
3 1/4” ALUMINUM DISK SET IN CONCRETE ON THE EAST SIDE OF MAIN STREET, 45 FEET NORTH OF THE NORTH CURBLINE OF CAMP WISDOM ROAD AND 6.1 FEET EAST OF THE EAST CURBLINE OF MAIN STREET ALSO LYING 34.7 FEET FROM THE SOUTHWEST CORNER OF LOS LUPE'S MEXICAN RESTAURANT.

**LEGEND:**
- 📍 = MONUMENT

**PHOTO TAKEN ON THE EAST SIDE OF MAIN STREET FROM THE NORTH TO SOUTH LOOKING TOWARDS CAMP WISDOM ROAD.**