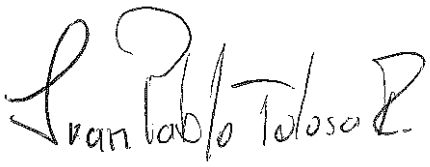
ESTUDIO TOPOGRAFICO
MUNICIPIO DE PIEDECUESTA DEPARTAMENTO DE SAMTANDER
UNIDADES TECNOLOGICAS DE SANTANDER SEDE PIEDECUESTA

INFORME DE TOPOGRAFÍA

ELABORADO POR:



JUAN PABLO TOLOSA ROJAS

PRESENTADO A:

UTS PIEDECUESTA

OCTUBRE DE 2020
BUCARAMANGA

Estudio Topográfico Piedecuesta Santander

Elaborado para: UTS Piedecusta



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T.P. 01-17918 CPNT

Bucaramanga, 21 de octubre 2020

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INTRODUCCIÓN

Juan Pablo Tolosa Rojas realizará para las unidades tecnológicas de Santander un estudio topográfico en la sede del municipio de Piedecuesta; sirviendo como complemento esencial al proyecto base que busca establecer los sectores aprovechables.

El estudio incluye uno de los aspectos importantes como lo son el detalle topográfico de los accidentes del terreno, arboles, estructuras, vias etc.

1. OBJETIVOS

- Realizar el levantamiento topográfico requerido (planimetría y altimetría) de la universidad UTS.

- Detallar topográficamente cada uno de los accidentes topográficos más representativos y de afectación directa en cada uno de los sectores como, paramentos, cercas, árboles, alcantarillados y otros que puedan representar importancia para la elaboración del proyecto.

- Dibujar los detalles topográficos tomados en campo con el fin de poder tener un medio físico de fácil manejo y de reconocimiento más detallado en cada uno de los sectores.

2. ALCANCE:

El alcance de este trabajo consiste en hacer unos levantamientos topográficos con el fin de poder plasmarlos en dibujos y construir planos que permitan hacer los diseños respectivos.

3. LOCALIZACIÓN DEL PROYECTO

Los levantamientos a realizar se encuentran localizado en via Guatiguara, Piedecusta departamento de Santander.

En la siguiente figura se puede apreciar la localización general del sector objeto de este levantamiento topográfico.

Ilustración 1. Ubicación General



Ilustración 2. Ubicación Por Sectores









4. METODOLOGÍA

Con el propósito de cumplir con los objetivos propuestos hasta el nivel de detalle requerido, se desarrolló la siguiente serie ordenada de actividades:

4.1. PERSONAL Y EQUIPO:

Para la realización de los trabajos se hace necesaria la utilización de una serie de elementos tanto humanos como mecánicos y electrónicos para poder cumplir los objetivos planteados y estarán distribuidos de la siguiente manera:

4.1.1. PERSONAL:

- 1 TOPOGRAFO
- 1 CADENERO

4.1.2. EQUIPOS:

- 1 Estacion Total Marca Topcon Gts 235w, con precisión a los 2” para ángulos y 5 mm de error por kilómetro, con su respectivo trípode, bastones y prismas, además de herramienta menor como estacas, porras tachones puntillas entre otras.

- COMPUTADOR PORTÁTIL
- CÁMARA DIGITAL

4.2. TOPOGRAFÍA DEL TERRENO (PLANIMETRIA Y ALTIMETRÍA)

4.2.1 Reconocimiento de campo:

Se efectuó un recorrido de inspección en cada uno de los sectores a intervenir y zonas aledañas para reconocer especialmente su ubicación, alineamientos y demás detalles representativos al momento de iniciar los trabajos, de esta manera se puede apreciar los sitios a los cuales se le efectuara topografía especial y otros detalles necesarios para el levantamiento topográfico general.

4.2.2 Poligonales y secciones transversales

Los puntos georreferenciados fueron otorgados en coordenadas reales,
Se realizó el trazado de poligonal cerrada de las cuales se tomó la información, se realizó paralelamente un levantamiento de la topografía del terreno por secciones transversales con estación total.

4.2.3 Poligonales y cálculo de coordenadas del proyecto

La poligonal principal, todos los detalles y topografías necesarias para la ejecución de los diseños se hace con una estación Total TSK-202 con precisión de 1 segundo en ángulo y 5 milímetros de error por kilómetro con cartera electrónica incorporada que permite que los datos tomados en campo como la entrega de información a los computadores no se contamine y nos de mejores resultados de calidad en los planos.

4.2.4 Dibujo topográfico

Con el fin de plasmar la información tomada en campo se procedió a llevar todos y cada uno de los accidentes topográficos y detalles de Los sectores a un dibujo en planta (planimetría y altimetría) a escala 1:2000 requerida por el EMPAS y de esta manera obtuvimos un modelamiento de terreno utilizado para la elaboración de los diseños.

4.2.5 Carteras de campo

Ejecutado el dibujo topográfico se anexaron datos de campo (carteras de planimetría y altimetría) así como datos calculados de cierres altimétricos y planimétricos de los sectores levantados topográficamente.

4.2.6 Entrega de Informe final

Como resultado de cada uno de los procedimientos llevados a cabo para la realización de este proyecto topográfico se generó este informe que contiene de toda la información recopilada tanto en campo como la procesada en oficina.

Anexo 1: Carteras topográficas:

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