SEWER AREA STUDY
AND PRELIMINARY LIFT STATION DESIGN

FOR

BEAUMONT CROSSROADS II LOGISTICS

4th Street
BEAUMONT, CA 92223
P.M. No. 36426

Prepared for:
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TEI PROJECT #3080i

Reinhard Stenzel, RCE #56155

Date: June 1, 2020

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1. INTRODUCTION

The following study is being prepared at the request of the City of Beaumont to verify that the proposed size of public sewer mains, being constructed with the Beaumont Crossroads II Logistics project, will adequately convey the ultimate sewer discharges from all tributary developments.

The tributary developments for this study include various properties on the north and south side of 4th Street (see Exhibit 1), bounded on the east by Distribution Way and bounded on the west by the west end of the proposed Jack Rabbit Trail development.

A 15" public gravity sewer main and 6" and 16" sewer force mains have been constructed in 4th Street from the Amazon/Wolverine development to the intersection of 4th Street and Potrero Blvd., with a 15" gravity sewer main stubbed to the south and west at Potrero Blvd.

A preliminary sewer lift station design is presented based on a 2-phase approach with an interim and ultimate tributary sewer flow as determined by the sewer area study.

2. PROJECT DESCRIPTION

The project site will consist of two warehouse buildings. Building 1 (1,867,040 SF), south of 4th Street and Building 2 (1,000,170 SF), north of 4th Street. The project will be responsible to construct new sewer mains in 4th Street from the west end cul-de-sac, west to the proposed public sewer lift station (Line A) and from the intersection with Potrero Blvd east to the proposed lift station (Line B). Refer to attached Exhibit 2. The proposed sewer lift station will be located at the east end of building 1, on the south side of 4th Street.

The entire project site and the majority of tributary sewer area study is designated as "Industrial" by the City of Beaumont General Plan Land Use map (see Appendix A) with only the Legacy Highland project being proposed Residential and a portion of the Legacy Highlands and Jack Rabbit Trail projects being Commercial/Retail.

3. SEWER CAPACITY ANALYSIS

The City of Beaumont has adopted the Eastern Municipal Water Districts (EMWD) design guidelines for wastewater collection system master plan design. Wastewater Flow (GPD/Acre) based on Land Use Category was obtained from EMWD Table 1 for each tributary land use (see Appendix C).

The areas and densities used to determine the proposed flow generated by the Highland Legacy Residential/Warehouse/Commercial projects were obtained from the Legacy Highlands Site Plan and Preserve Phasing Map prepared by SRD Design Studio, Inc. dated 5/19/20 and 6/3/19 (see Appendix E).

The areas used to determine the proposed flow generated by the Jack Rabbit Trail Warehouse/Commercial project were obtained from the JRT Site Plan prepared by HPA (see Appendix E). Much of the project site is natural open space, therefore, the actual project area, for use in determining sewer flow, was based on an assumed 50% site coverage for warehouse

use. The known proposed building square footage was multiplied by 2 to obtain site area. The commercial site area is based on the site plan.
The Wolverine, Amazon, ASM, Hall, Ricker, Lassen and Beaumont Crossroads II project flows are all based on site area (excluding open space) and warehouse land use.

The proposed sanitary sewer pipelines were analyzed using the EMWD Sanitary Sewer System Planning & Design Guidelines. The sewer capacity criteria cites a maximum design capacity at 50% full for new pipes less than 15" and 70% full for new pipes 15" and greater. Each pipe segment is modeled at peak flow, calculated from the average daily flow factor for land use category from EMWD Table 1. A maximum peak flow factor of 2.87 is applied, per EMWD 2015 Master Plan Supplement – Planning and Sizing Criteria.

The equation for the tributary sewer discharge is:

$$\mathbf{Q_{Design} = Q_{Ave} \times Peaking\ Factor}$$

Where, Q_{Ave} = Design Loading Criteria (GPD/Acre) x Service Area (Acres)

Pipe capacity calculations were generally provided for the pipe segment with the least slope (s) for each pipe diameter (D) and flow (Q) condition. This would represent the maximum flow depth (d) for a particular reach with similar Q and D.

4. SEWER CAPACITY STUDY RESULTS

Sewer flow values used in the capacity analysis can be found in the Sewer Area Study Calculations Tables (see Appendix A). Table 1 reflects interim condition at build out of Beaumont Crossroads II project and Table 2 reflects ultimate condition at buildout of entire sewer study area. The flow depth and velocity of each sewer reach was calculated using AES Hydraulic Elements I software and are presented in Hydraulic Calculations (see Appendix B).

The controlling reach for Line A is between Manhole 1 and Manhole 7. The proposed pipe diameter for this reach is 12" with a slope of 0.0040. With a projected Q=0.6664 cubic feet per second (cfs), the velocity (V) is 2.5 feet per second (fps) and the depth is 0.37'. This reach therefore is flowing at 53% of the maximum allowed depth of 50% full. The remainder reaches in Line A are also 12" in diameter with the same Q and slopes greater than 0.0040, therefore these reaches will all meet capacity requirements.

The controlling reach for Line B is between Manhole 10 and the future Lift Station. The proposed pipe diameter for this reach is 15" with a slope of 0.0080. With a projected Q=3.7835 cfs, the V=5.0 fps and the d=0.74'. This reach therefore is flowing at 85% of the maximum allowed depth of 70% full. The remainder reaches in Line B are also 15" in diameter with the same or lesser Q's and slopes greater than 0.0080, therefore these reaches will all meet capacity requirements.
It must be noted that a reach upstream of Line B, the existing pipe between Manhole 17 and the next existing upstream manhole, will be the limiting reach for flow from the east. The existing pipe diameter for this reach is 15" with a slope of 0.0055. With a projected Q=3.6585 cfs, the V=4.3 fps and the d=0.82'. This reach therefore is flowing at 94% of the maximum allowed depth of 70% full.

5. LIFT STATION DESCRIPTION

The above sewer area study provides the sewer flow data necessary, per EMWD and City of Beaumont standards, to design a new public sewer lift station that utilizes the two force mains and gravity main installed in 4th Street (see Exhibit 3). In addition, Romtec has provided support for the preliminary design of the lift station and force main capacities. This public lift station will be located on the south side of 4th Street (by easement from Parcel 1 owner), approximately 650 feet west of Cooper's Creek on Parcel 1 of Parcel Map 36426. The public sewer lift station will be maintained and operated by the City of Beaumont upon completion and activation of Phase 1. Based on the preliminary sewer/lift station study we have concluded a two-phase lift station concept, with both lift stations located side by side in the same easement area (approximately 75' x 180'), will best meet the interim and ultimate needs.

The Phase 1 lift station design will accommodate sewer flow from the existing Wolverine and Amazon buildings and the proposed flow anticipated from the entire Beaumont Crossroads II warehouse project upon full buildout. The Beaumont Crossroads II discharge assumes standard warehouse/ logistics uses (excludes non-food manufacturing or heavy processing sewer needs, if any). The Peak Average Dry Weather Flow from these projects is 171 gpm. The existing Wolverine and Amazon buildings currently utilize a temporary private lift station located at Prime Dr. and 4th Street. The temporary lift station will be abandoned when the Phase 1 lift station is activated. The Phase 1 lift station will utilize the 6" force main in 4th street to pump flows to the existing sewer treatment plant on the south side of 4th Street, east of Nicholas Road. The Phase 1 sewer lift station will require two 72 horsepower pumps and have a maximum capacity of 300 gpm. The fully completed and operational Phase 1 lift station, along with the basic infrastructure of the overall lift station site, will be installed prior to a certificate of occupancy for either: a) The first building completed by the Beaumont Crossroads II project, or b) The first new building tributary to the lift station requiring sewer service and not being served by the existing temporary lift station located at 4th Street and Prime Way.

The Phase 2 lift station design will accommodate sewer flow from the entire Sewer Area Study tributary to this lift station. The Peak Average Dry Weather Flow for the entire sewer study area is 1,997 gpm. The Phase 2 sewer lift station will require three 160 horsepower pumps and have a maximum capacity of 3,000

gpm. When future development occurs that exceeds the maximum capacity of the Phase 1 lift station, the development that causes this increase will be responsible to install and pay for the Phase 2 lift station project and extension of the 16" force main from Distribution Way to Nicholas Road. The Phase 2 lift station will utilize the 16" force main to pump flows to the sewer treatment plant. When the Phase 2 lift station becomes active, the Phase 1 lift station may be disconnected/abandoned or incorporated into the Phase 2 lift station design.

6. PRELIMINARY LIFT STATION DESIGN

A preliminary lift station design has been prepared by Romtec Utilities based on flow data and sewer improvement plans provided by Thienes Engineering. Per EMWD design standards the lift station and force mains will be designed with a 20% allowance for wet weather flows (Peak Lift Station Flow = Peak Average Dry Weather Flow X 1.2).

Phase 1 Lift Station:

Peak Lift Station Flow = 171 gpm X 1.2 = 205 gpm

Phase 1 lift station and 6" force main maximum capacity = 300 gpm, therefore OK

Phase 2 Lift Station:

Peak Lift Station Flow = 1,997 gpm X 1.2 = 2,396 gpm

Phase 2 lift Station and 16" force main maximum capacity = 3,000 gpm, therefore OK

Preliminary Lift Station Layout

Romtec Utilities has completed a preliminary equipment layout for the proposed lift station site (see Exhibit 4). The following are key considerations and notes for this proposed equipment layout and site plan:

1. **Site Size**
    a. Romtec Utilities is showing 77' ft. from the street to the back CMU wall, and 146' ft. of total driveway. The CMU screened area would be roughly 63 x 84 ft. and includes space for both lift stations, generator pad, CMU control building, and the access drive. This is not an exact layout, as we have not designed all equipment, but is "best efforts" at this time.

2. **CMU Walls**
    a. Romtec Utilities is proposing that the site be screened by CMU walls with 16' gates at each end.

3. **Center Driveway**
    a. Romtec Utilities is proposing that the site be accessed by a 16' wide center driveway which would allow "now and future" access to both lift stations for delivery, construction, and maintenance of both systems without having to have trucks/semis turning within the site. By having a "drive through" configuration, the lot is significantly smaller than if we needed appropriate space for trucks to turn around within the site.
    b. Romtec Utilities would envision a gravel driveway be added first during construction of the first lift station and the wet well of the future lift station. Then, after the full buildout of the future station, the finishing site work/paving could be completed.
    c. It is crucial that an operator boom truck can access both wet wells and valve manifold for removal, installation, and maintenance.

4. **Generator Location**
    a. Romtec Utilities is proposing a single generator location in which the pad is sized for the future generator, but the initial phase generator can be located until it needs to be replaced.

5. **CMU Building**
    a. Romtec Utilities has sized a simple CMU building that can house the Motor Control Center (MCC). The equipment layout is currently designed such that the building only houses the full-buildout control panel. If needed, Romtec Utilities can review the options of housing both the initial and full-buildout MCC's within the control building.

6. **System Phasing**
    a. For the initial phase, Romtec Utilities would recommend that the first pump station and the wet well of the full buildout system be installed as well as the generator pad, CMU building, CMU screening walls, and driveway.
    b. Then, once the full buildout system is needed, the construction can be finished with the addition of the valve manifold, MCC, and Generator.
    c. Also, the first phase wet well would become the upstream manhole to the full buildout wet well which would simplify the gravity piping and provide direct access for maintenance or bypass pumping within the pump station site.

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Exhibits:

Exhibit 1. Sewer Study Area Map

Exhibit 2. Proposed Sewer Sizing Exhibit

Exhibit 3. Public Sewer Improvement Exhibit

Exhibit 4. Preliminary Sewer Lift Station Layout

STUDY AREA BOUNDARY

SUB AREA BOUNDARY

Help

5/2020

Moreno Valley Fwy

Oak Valley Pkwy

JACK RABBIT TRAIL
APPROXIMATE AREA

Potrero Blvd

Western Knolls Ave

Frontage Rd

60

10

HALL

ASM

LEGACY
HIGHLANDS
WAREHOUSE/
COMMERCIAL

WOLVERINE

AMAZON

BEAUMONT
CROSSROADS II

LASSEN

RICKER

PROPOSED
LIFT STATION

LEGACY
HIGHLANDS
RESIDENTIAL

(APPROXIMATE AREA)

Jack Rabbit Trail

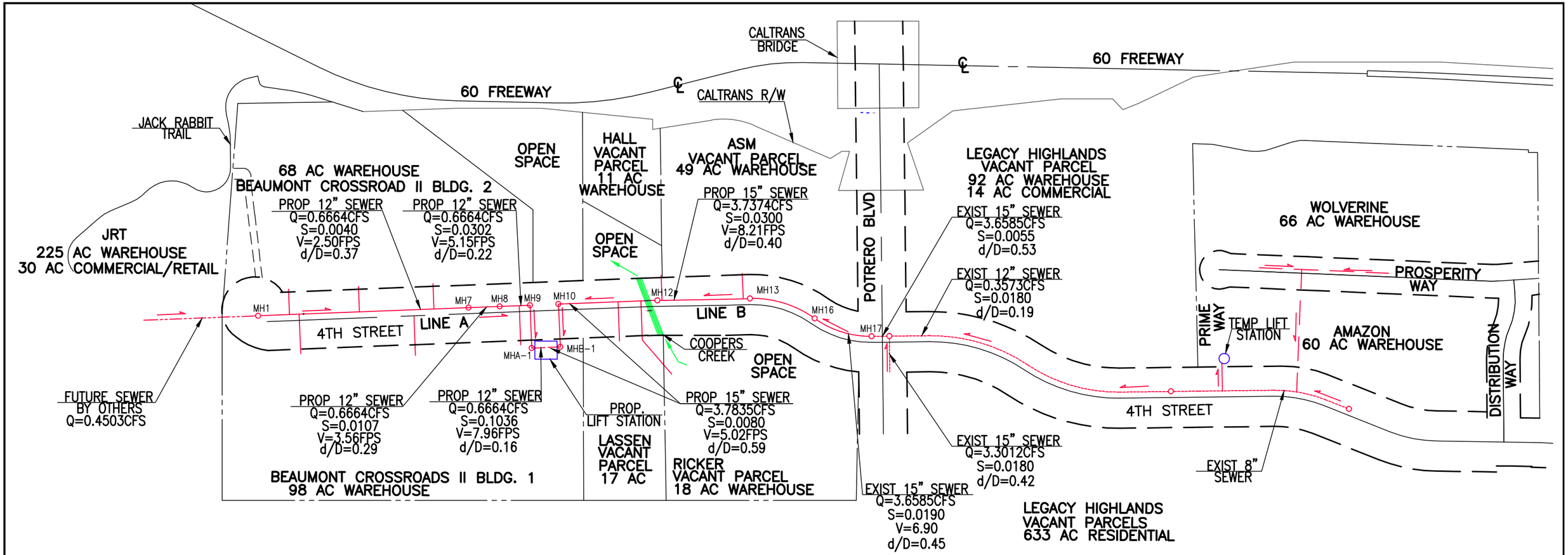
1996

17387 ft

Google Earth

EXHIBIT 1

SEWER STUDY AREA MAP



REFER TO PUBLIC SEWER IMPROVEMENT PLAN FOR 4TH STREET WEST OF POTRERO BLVD. PW2020-0430

REFER TO PUBLIC SEWER IMPROVEMENT PLAN FOR 4TH STREET EAST OF POTRERO BLVD. PW2018-0250, FILE NO. 3251

NTS

EXHIBIT 2

Last Update: 5/31/20
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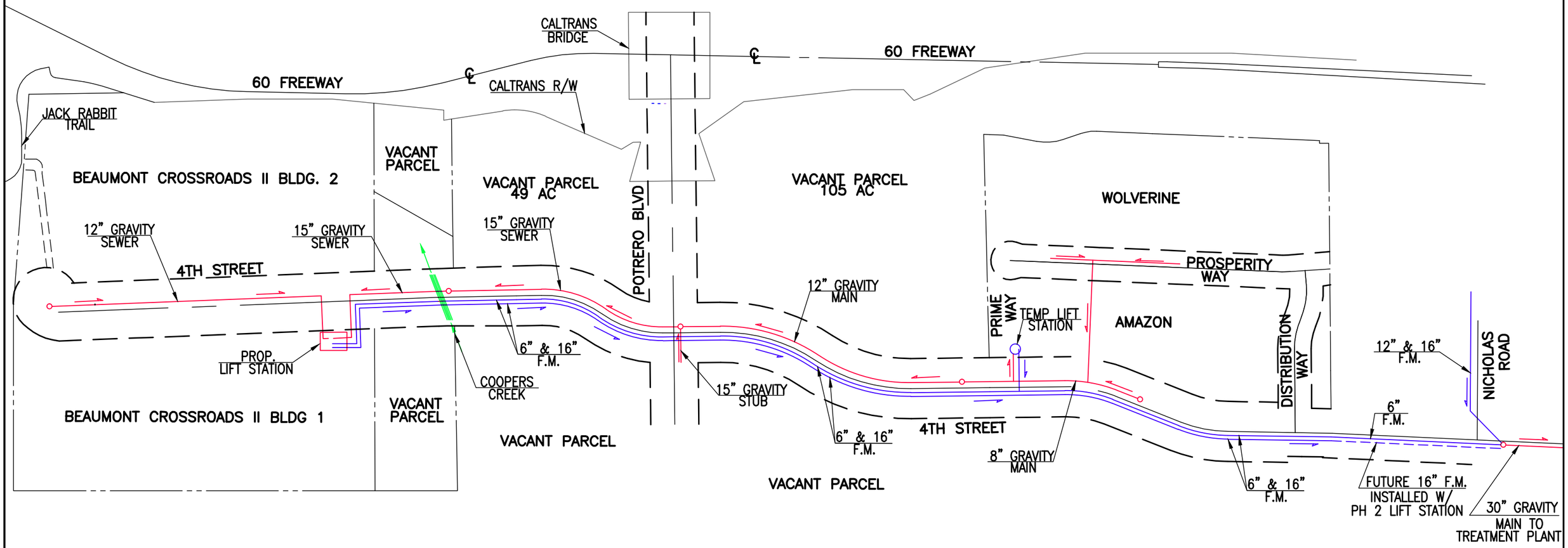
PROPOSED SEWER SIZING EXHIBIT

BEAUMONT CROSSROADS II LOGISTICS
GRAVITY SEWER
4TH STREET – BEAUMONT, CA



NTS

Last Update: 6/1/20
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PUBLIC SEWER IMPROVEMENT - EXHIBIT 3

4TH STREET GRAVITY SEWER & FORCE MAIN
4TH STREET
BEAUMONT, CA

PRELIMINARY LAYOUT WITH RU EQUIPMENT.
4-23-20

4TH STREET

8FT WET WELL
INITIAL PHASE
DUPLEX PUMPS 7.2HP

INITIAL PHASE
CONTROL PANEL AREA

ABOVE GROUND
VALVE ASSEMBLY

GRAVITY SEWER
INLET PIPE

NEW GRAVITY
SEWER MANHOLE

GRAVITY SEWER
INLET PIPE

NEW GRAVITY
SEWER MANHOLE

6" FORCE MAIN TO CONNECT
TO PRE INSTALLED FORCE MAIN.

GRAVITY SEWER INLET
FROM INTIAL PHASE
WET WELL TO FULL BUILD
OUT WET WELL.

BURIED SERVICE SHUT OFF
VALVE. TO BE CLOSED UNTIL
FULL BUILD OUT LIFT STATION
IS NEEDED.

16.00'

77'

16.00'

ABOVE GROUND
VALVE ASSEMBLY

16" FORCE MAIN

6" FORCE MAIN

10FT WET WELL
FULL BUILD OUT
TRIPLEX 160HP PUMPS

GENERATOR AREA

12.00'

16.00'

CMU BLOCK WALL
AROUND SITE

BUILDING FOR FULL BUILD OUT
MCC CONTROL PANEL AREA

MOVE PROPERTY LINE TO GIVE
ROOM FOR BUILDING AND GENERATOR
SO THEY ARE NOT OVER THE FORCE
MAINS.

146'

EXHIBIT 4

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Appendix A

Sewer Area Study Calculations

4th Street, Beaumont Public Sewer Main

TEI Project #3080i - June 1, 2020

Table 1: Sewer Area Study Calculations - Interim Condition, Phase 1 Lift Station

Subarea/Reach	Pipe		[1]Capacity (cfs)		Building Area (SF)	Building Area (ac)	Parcel Area (acres)	[2]Average Daily Flow (GPD/ac)	Average Daily Flow (GPD)	Average Daily Flow (MGD)	Cumulative Average Daily Flow (MGD)	Peak Factor	Peak Flow (MGD)	Peak Flow (GPD)	Peak Flow (cfs)	Peak Flow (GPM)	Cumulative Depth (ft)	Velocity (ft/sec)	[3]d/D (ft/ft)	% Full
	Size (ft.)	Slope (ft/ft)	50% Full (<15")	70% Full (>15")																Allowed Depth
Proposed Sewer Flowing West in 4th St.																				
Wolverine Project[4]							65.74	294	19328	0.0193	0.0193	2.87	0.0555	55470	0.0858	39				
Amazon Project							59.98	294	17634	0.0176	0.0176	2.87	0.0506	50610	0.0783	35				
SUB TOTAL	0.67	0.0040	0.390											**106080**	**0.1641**	**74**	0.21	1.74	**0.32**	**63.0%**
Legacy Highlands- Warehouse							92.00	0	0	0.0000	0.0000	2.87	0.0000	0	0.0000	0				
Legacy Highlands- Commercial							14.00	0	0	0.0000	0.0000	2.87	0.0000	0	0.0000	0				
SUB TOTAL														**0**	**0.0000**	**0**				
TOTAL	1.00	0.0180	2.390											**106080**	**0.1641**	**74**	0.19	3.58	**0.19**	**38.0%**
Proposed Sewer Flowing North in Potrero																				
Legacy Highlands Residential																				
Low Density							234.30	0	0	0.0000	0.0000	2.87	0.0000	0	0.0000	0				
Medidum Density							196.40	0	0	0.0000	0.0000	2.87	0.0000	0	0.0000	0				
Medium High Density							110.70	0	0	0.0000	0.0000	2.87	0.0000	0	0.0000	0				
High Density							71.30	0	0	0.0000	0.0000	2.87	0.0000	0	0.0000	0				
School							20.00	0	0	0.0000	0.0000	2.87	0.0000	0	0.0000	0				
SUB TOTAL	1.25	0.0180		7.260										**0**	**0.0000**	**0**	0.53	6.58	**0.42**	**60.6%**
Confluence at Potrero & 4th St. - TOTAL	1.25	0.0055		4.010										**106080**	**0.1641**	**74**	0.82	4.30	**0.66**	**93.7%**
Proposed Sewer Flowing West in 4th St.																				
ASM Beaumont - Warehouse	1.25	0.0300					49.25	0	0	0.0000	0.0000	2.87	0.0000	0	0.0000	0				
Hall - Warehouse	1.25	0.0300					11.16	0	0	0.0000	0.0000	2.87	0.0000	0	0.0000	0				
SUB TOTAL	1.25	0.0300		9.370										**106080**	**0.1641**	**74**	0.42	7.50	**0.34**	**48.0%**
Ricker - Warehouse	1.25	0.0080					18	0	0	0.0000	0.0000	2.87	0.0000	0	0.0000	0				
Lassen - Warehouse	1.25	0.0080					17.34	0	0	0.0000	0.0000	2.87	0.0000	0	0.0000	0				
Lift Station Flow From East - TOTAL	1.25	0.0080		4.840										**106080**	**0.1641**	**74**	0.74	5.02	**0.59**	**84.6%**
Proposed Sewer Flowing East in 4th St.																				
Jack Rabbit Trail																				
Commercial/Retail							30.00	0	0	0.0000	0.0000	2.87	0.0000	0	0.0000	0				
Warehouse							225.00	0	0	0.0000	0.0000	2.87	0.0000	0	0.0000	0				
SUB TOTAL														**0**	**0.0000**	**0**				
Beaumont Crossroads II Logistics																				
Parcel 2							67.87	294	19954	0.0200	0.0200	2.87	0.0573	57267	0.0886	40				
Parcel 1							97.67	294	28715	0.0287	0.0287	2.87	0.0824	82412	0.1275	57				
SUB TOTAL														**139679**	**0.2161**	**97**				
Lift Station Flow From West - TOTAL	1.00	0.0040	1.130											**139679**	**0.2161**	**97**	0.37	2.50	**0.37**	**52.9%**
Confluence at Lift Station- GRAND TOTAL[5]														**245759**	**0.3802**	**171**				

[1] Calculated using n=0.013

[2] Based on 2015 EMWD flow factors by land use type

[3] Flow depth shall not exceed 0.50 for pipes 12" or smaller and 0.70 for pipes 15" and larger

[4] Acreage shown includes expansion land

[5] Maximum design capacity of Phase 1 lift station and force main = 300 gpm

4th Street, Beaumont Public Sewer Main

TEI Project #3080i - May 31, 2020

Table 2: Sewer Area Study Calculations - Proposed Ultimate Condition, Phase 2 Lift Station

Subarea/Reach	Pipe		[1]Capacity (cfs)		Building Area (SF)	Building Area (ac)	Parcel Area (acres)	[2]Average Daily Flow (GPD/ac)	Average Daily Flow (GPD)	Average Daily Flow (MGD)	Cumulative Average Daily Flow (MGD)	Peak Factor	Peak Flow (MGD)	Peak Flow (GPD)	Peak Flow (cfs)	Peak Flow (GPM)	Cumulative Depth (ft)	Velocity (ft/sec)	[3]d/D (ft/ft)	% Full
	Size (ft.)	Slope (ft/ft)	50% Full (<15")	70% Full (>15")																Allowed Depth
Proposed Sewer Flowing West in 4th St.																				
Wolverine Project[6]							65.74	294	19328	0.0193	0.0193	2.87	0.0555	55470	0.0858	39				
Amazon Project							59.98	294	17634	0.0176	0.0176	2.87	0.0506	50610	0.0783	35				
SUB TOTAL	0.67	0.0040	0.390											**106080**	**0.1641**	**74**	0.21	1.74	**0.32**	**63.0%**
Legacy Highlands- Warehouse[5]							92.00	294	27048	0.0270	0.0270	2.87	0.0776	77628	0.1201	54				
Legacy Highlands- Commercial[5]							14.00	1175	16450	0.0165	0.0165	2.87	0.0472	47212	0.0730	33				
SUB TOTAL														**124839**	**0.1932**	**87**				
TOTAL	1.00	0.0180	2.390											**230919**	**0.3573**	**160**	0.19	3.58	**0.19**	**38.0%**
Proposed Sewer Flowing North in Potrero																				
Legacy Highlands Residential[4]																				
Low Density							234.30	1175	275303	0.2753	0.2753	2.87	0.7901	790118	1.2225	549				
Medidum Density							196.40	1175	230770	0.2308	0.2308	2.87	0.6623	662310	1.0247	460				
Medium High Density							110.70	1175	130073	0.1301	0.1301	2.87	0.3733	373308	0.5776	259				
High Density							71.30	1175	83778	0.0838	0.0838	2.87	0.2404	240441	0.3720	167				
School							20.00	1175	23500	0.0235	0.0235	2.87	0.0674	67445	0.1044	47				
SUB TOTAL	1.25	0.0180		7.260										**2133623**	**3.3012**	**1482**	0.53	6.58	**0.42**	**60.6%**
Confluence at Potrero & 4th St. - TOTAL	1.25	0.0055		4.010										**2364542**	**3.6585**	**1642**	0.82	4.30	**0.66**	**93.7%**
Proposed Sewer Flowing West in 4th St.																				
ASM Beaumont - Warehouse	1.25	0.0300					49.25	294	14480	0.0145	0.0145	2.87	0.0416	41556	0.0643	29				
Hall - Warehouse	1.25	0.0300					11.16	294	3281	0.0033	0.0033	2.87	0.0094	9417	0.0146	7				
SUB TOTAL	1.25	0.0300		9.370										**2415515**	**3.7374**	**1677**	0.42	7.50	**0.34**	**48.0%**
Ricker - Warehouse	1.25	0.0080					18	294	5292	0.0053	0.0053	2.87	0.0152	15188	0.0235	11				
Lassen - Warehouse	1.25	0.0080					17.34	294	5098	0.0051	0.0051	2.87	0.0146	14631	0.0226	10				
Lift Station Flow From East - TOTAL	1.25	0.0080		4.840										**2445334**	**3.7835**	**1698**	0.74	5.02	**0.59**	**84.6%**
Proposed Sewer Flowing East in 4th St.																				
Jack Rabbit Trail																				
Commercial/Retail							30.00	1175	35250	0.0353	0.0353	2.87	0.1012	101168	0.1565	70				
Warehouse							225.00	294	66150	0.0662	0.0662	2.87	0.1899	189851	0.2937	132				
SUB TOTAL														**291018**	**0.4503**	**202**				
Beaumont Crossroads II Logistics																				
Parcel 2							67.87	294	19954	0.0200	0.0200	2.87	0.0573	57267	0.0886	40				
Parcel 1							97.67	294	28715	0.0287	0.0287	2.87	0.0824	82412	0.1275	57				
SUB TOTAL														**139679**	**0.2161**	**97**				
Lift Station Flow From West - TOTAL	1.00	0.0040	1.130											**430697**	**0.6664**	**299**	0.37	2.50	**0.37**	**52.9%**
Confluence at Lift Station-GRAND TOTAL[7]														**2876031**	**4.4499**	**1997**				

[1] Calculated using n=0.013

[2] Based on 2015 EMWD flow factors by land use type

[3] Flow depth shall not exceed 0.50 for pipes 12" or smaller and 0.70 for pipes 15" and larger

[4] Parcel Areas and Residential Density obtained from "Preserve Phasing Map" prepared by SRD Design Studio, Inc dated 6/3/19

[5] Parcel Area obtained from Legacy Highlands Site Plan" prepared by SRD Design Studio, Inc dated 5/19/20

[6] Acreage shown includes expansion land

[7] Maximum design capacity of Phase 2 lift station and force main = 3,000 gpm

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Appendix B

Hydraulic Calculations

SEWER LINE A HYDRAULICS

```
**************************************************************************
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--------------------------------------------------------------------------
  TIME/DATE OF STUDY: 19: 2   5/10/2020
==========================================================================


 ************************* DESCRIPTION OF STUDY *************************
* BEAUMONT CROSSROADS II LOGISTICS                                       *
* MH1 TO MH7                                                             *
* LINE A                                                                 *
 ************************************************************************

**************************************************************************
>>>>PIPEFLOW HYDRAULIC INPUT INFORMATION<<<<
--------------------------------------------------------------------------
    PIPE DIAMETER(FEET) =   1.000
    PIPE SLOPE(FEET/FEET) =  0.0040
    PIPEFLOW(CFS) =          0.67
    MANNINGS FRICTION FACTOR = 0.013000
==========================================================================
    CRITICAL-DEPTH FLOW INFORMATION:
--------------------------------------------------------------------------
    CRITICAL DEPTH(FEET) =       0.34
    CRITICAL FLOW AREA(SQUARE FEET) =      0.236
    CRITICAL FLOW TOP-WIDTH(FEET) =    0.947
    CRITICAL FLOW PRESSURE + MOMENTUM(POUNDS) =             5.74
    CRITICAL FLOW VELOCITY(FEET/SEC.) =      2.829
    CRITICAL FLOW VELOCITY HEAD(FEET) =             0.12
    CRITICAL FLOW HYDRAULIC DEPTH(FEET) =       0.25
    CRITICAL FLOW SPECIFIC ENERGY(FEET) =              0.46
==========================================================================
    NORMAL-DEPTH FLOW INFORMATION:
--------------------------------------------------------------------------
    NORMAL DEPTH(FEET) =       0.37
    FLOW AREA(SQUARE FEET) =       0.27
    FLOW TOP-WIDTH(FEET) =      0.967
    FLOW PRESSURE + MOMENTUM(POUNDS) =             5.81
    FLOW VELOCITY(FEET/SEC.) =            2.498
    FLOW VELOCITY HEAD(FEET) =            0.097
    HYDRAULIC DEPTH(FEET) =       0.28
    FROUDE NUMBER =      0.838
    SPECIFIC ENERGY(FEET) =              0.47
==========================================================================

1
```

```
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-----------------------------------------------------------------------------
  TIME/DATE OF STUDY:  8:31   5/13/2020
=============================================================================


 ************************* DESCRIPTION OF STUDY *************************
* BEAUMONT CROSSROADS II LOGISTICS                                        *
* MH7 TO MH8                                                              *
* LINE A                                                                  *
 ************************************************************************

*****************************************************************************
>>>>PIPEFLOW HYDRAULIC INPUT INFORMATION<<<<
-----------------------------------------------------------------------------
    PIPE DIAMETER(FEET) =   1.000
    PIPE SLOPE(FEET/FEET) =  0.0107
    PIPEFLOW(CFS) =          0.67
    MANNINGS FRICTION FACTOR = 0.013000
=============================================================================
    CRITICAL-DEPTH FLOW INFORMATION:
-----------------------------------------------------------------------------
    CRITICAL DEPTH(FEET) =       0.34
    CRITICAL FLOW AREA(SQUARE FEET) =      0.236
    CRITICAL FLOW TOP-WIDTH(FEET) =    0.947
    CRITICAL FLOW PRESSURE + MOMENTUM(POUNDS) =              5.74
    CRITICAL FLOW VELOCITY(FEET/SEC.) =      2.829
    CRITICAL FLOW VELOCITY HEAD(FEET) =             0.12
    CRITICAL FLOW HYDRAULIC DEPTH(FEET) =       0.25
    CRITICAL FLOW SPECIFIC ENERGY(FEET) =              0.46
=============================================================================
    NORMAL-DEPTH FLOW INFORMATION:
-----------------------------------------------------------------------------
    NORMAL DEPTH(FEET) =       0.29
    FLOW AREA(SQUARE FEET) =       0.19
    FLOW TOP-WIDTH(FEET) =      0.906
    FLOW PRESSURE + MOMENTUM(POUNDS) =             6.00
    FLOW VELOCITY(FEET/SEC.) =            3.560
    FLOW VELOCITY HEAD(FEET) =            0.197
    HYDRAULIC DEPTH(FEET) =       0.21
    FROUDE NUMBER =      1.380
    SPECIFIC ENERGY(FEET) =             0.48
=============================================================================

1
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```
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 TIME/DATE OF STUDY:  8:35   5/13/2020
==========================================================================

 ************************* DESCRIPTION OF STUDY *************************
* BEAUMONT CROSSROADS II LOGISTICS                                       *
* MH8 TO MH9                                                             *
* LINE A                                                                 *
 **************************************************************************

**************************************************************************
>>>>PIPEFLOW HYDRAULIC INPUT INFORMATION<<<<
--------------------------------------------------------------------------
    PIPE DIAMETER(FEET) =   1.000
    PIPE SLOPE(FEET/FEET) =  0.0302
    PIPEFLOW(CFS) =          0.67
    MANNINGS FRICTION FACTOR = 0.013000
==========================================================================
    CRITICAL-DEPTH FLOW INFORMATION:
--------------------------------------------------------------------------
    CRITICAL DEPTH(FEET) =       0.34
    CRITICAL FLOW AREA(SQUARE FEET) =      0.236
    CRITICAL FLOW TOP-WIDTH(FEET) =    0.947
    CRITICAL FLOW PRESSURE + MOMENTUM(POUNDS) =             5.74
    CRITICAL FLOW VELOCITY(FEET/SEC.) =      2.829
    CRITICAL FLOW VELOCITY HEAD(FEET) =             0.12
    CRITICAL FLOW HYDRAULIC DEPTH(FEET) =       0.25
    CRITICAL FLOW SPECIFIC ENERGY(FEET) =              0.46
==========================================================================
    NORMAL-DEPTH FLOW INFORMATION:
--------------------------------------------------------------------------
    NORMAL DEPTH(FEET) =       0.22
    FLOW AREA(SQUARE FEET) =       0.13
    FLOW TOP-WIDTH(FEET) =      0.831
    FLOW PRESSURE + MOMENTUM(POUNDS) =             7.40
    FLOW VELOCITY(FEET/SEC.) =            5.150
    FLOW VELOCITY HEAD(FEET) =            0.412
    HYDRAULIC DEPTH(FEET) =       0.16
    FROUDE NUMBER =      2.300
    SPECIFIC ENERGY(FEET) =             0.63
==========================================================================

1
```

```
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--------------------------------------------------------------------------
 TIME/DATE OF STUDY:  8:38   5/13/2020
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 ************************* DESCRIPTION OF STUDY *************************
* BEAUMONT CROSSROADS II LOGISTICS                                       *
* MHA1 TO LIFT STATION                                                   *
* LINE A-1                                                               *
 **************************************************************************

**************************************************************************
>>>>PIPEFLOW HYDRAULIC INPUT INFORMATION<<<<
--------------------------------------------------------------------------
    PIPE DIAMETER(FEET) =   1.000
    PIPE SLOPE(FEET/FEET) =  0.1036
    PIPEFLOW(CFS) =          0.67
    MANNINGS FRICTION FACTOR = 0.013000
==========================================================================
    CRITICAL-DEPTH FLOW INFORMATION:
--------------------------------------------------------------------------
    CRITICAL DEPTH(FEET) =       0.34
    CRITICAL FLOW AREA(SQUARE FEET) =      0.236
    CRITICAL FLOW TOP-WIDTH(FEET) =    0.947
    CRITICAL FLOW PRESSURE + MOMENTUM(POUNDS) =             5.74
    CRITICAL FLOW VELOCITY(FEET/SEC.) =      2.829
    CRITICAL FLOW VELOCITY HEAD(FEET) =             0.12
    CRITICAL FLOW HYDRAULIC DEPTH(FEET) =       0.25
    CRITICAL FLOW SPECIFIC ENERGY(FEET) =              0.46
==========================================================================
    NORMAL-DEPTH FLOW INFORMATION:
--------------------------------------------------------------------------
    NORMAL DEPTH(FEET) =       0.16
    FLOW AREA(SQUARE FEET) =       0.08
    FLOW TOP-WIDTH(FEET) =      0.740
    FLOW PRESSURE + MOMENTUM(POUNDS) =            10.63
    FLOW VELOCITY(FEET/SEC.) =            7.957
    FLOW VELOCITY HEAD(FEET) =            0.983
    HYDRAULIC DEPTH(FEET) =       0.11
    FROUDE NUMBER =      4.168
    SPECIFIC ENERGY(FEET) =             1.15
==========================================================================

1
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SEWER LINE B HYDRAULICS

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------------------------------------------------------------------------------
  TIME/DATE OF STUDY: 17:36   5/25/2020
==============================================================================


 ************************** DESCRIPTION OF STUDY **************************
* BEAUMONT CROSSROADS II LOGISTICS                                           *
* MH17 TO MH16                                                               *
* LINE B                                                                     *
 ****************************************************************************

******************************************************************************
>>>>PIPEFLOW HYDRAULIC INPUT INFORMATION<<<<
------------------------------------------------------------------------------
    PIPE DIAMETER(FEET) =   1.250
    PIPE SLOPE(FEET/FEET) =  0.0190
    PIPEFLOW(CFS) =          3.66
    MANNINGS FRICTION FACTOR = 0.013000
==============================================================================
    CRITICAL-DEPTH FLOW INFORMATION:
------------------------------------------------------------------------------
    CRITICAL DEPTH(FEET) =       0.77
    CRITICAL FLOW AREA(SQUARE FEET) =      0.796
    CRITICAL FLOW TOP-WIDTH(FEET) =    1.215
    CRITICAL FLOW PRESSURE + MOMENTUM(POUNDS) =            49.22
    CRITICAL FLOW VELOCITY(FEET/SEC.) =      4.594
    CRITICAL FLOW VELOCITY HEAD(FEET) =             0.33
    CRITICAL FLOW HYDRAULIC DEPTH(FEET) =       0.66
    CRITICAL FLOW SPECIFIC ENERGY(FEET) =              1.10
==============================================================================
    NORMAL-DEPTH FLOW INFORMATION:
------------------------------------------------------------------------------
    NORMAL DEPTH(FEET) =       0.56
    FLOW AREA(SQUARE FEET) =       0.53
    FLOW TOP-WIDTH(FEET) =      1.243
    FLOW PRESSURE + MOMENTUM(POUNDS) =            56.69
    FLOW VELOCITY(FEET/SEC.) =             6.900
    FLOW VELOCITY HEAD(FEET) =             0.739
    HYDRAULIC DEPTH(FEET) =       0.43
    FROUDE NUMBER =      1.862
    SPECIFIC ENERGY(FEET) =              1.30
==============================================================================

1
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-----------------------------------------------------------------------------
  TIME/DATE OF STUDY: 17:39   5/25/2020
=============================================================================


 ************************* DESCRIPTION OF STUDY *************************
* BEAUMONT CROSSROADS II LOGISTICS                                        *
* MH16 TO MH13                                                            *
* LINE B                                                                  *
 ************************************************************************

*****************************************************************************
>>>>PIPEFLOW HYDRAULIC INPUT INFORMATION<<<<
-----------------------------------------------------------------------------
    PIPE DIAMETER(FEET) =   1.250
    PIPE SLOPE(FEET/FEET) =  0.0300
    PIPEFLOW(CFS) =         3.66
    MANNINGS FRICTION FACTOR = 0.013000
=============================================================================
    CRITICAL-DEPTH FLOW INFORMATION:
-----------------------------------------------------------------------------
    CRITICAL DEPTH(FEET) =      0.77
    CRITICAL FLOW AREA(SQUARE FEET) =     0.796
    CRITICAL FLOW TOP-WIDTH(FEET) =   1.215
    CRITICAL FLOW PRESSURE + MOMENTUM(POUNDS) =           49.22
    CRITICAL FLOW VELOCITY(FEET/SEC.) =     4.594
    CRITICAL FLOW VELOCITY HEAD(FEET) =            0.33
    CRITICAL FLOW HYDRAULIC DEPTH(FEET) =      0.66
    CRITICAL FLOW SPECIFIC ENERGY(FEET) =            1.10
=============================================================================
    NORMAL-DEPTH FLOW INFORMATION:
-----------------------------------------------------------------------------
    NORMAL DEPTH(FEET) =      0.49
    FLOW AREA(SQUARE FEET) =      0.45
    FLOW TOP-WIDTH(FEET) =     1.221
    FLOW PRESSURE + MOMENTUM(POUNDS) =           63.58
    FLOW VELOCITY(FEET/SEC.) =           8.159
    FLOW VELOCITY HEAD(FEET) =           1.034
    HYDRAULIC DEPTH(FEET) =      0.37
    FROUDE NUMBER =     2.373
    SPECIFIC ENERGY(FEET) =            1.53
=============================================================================

1
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------------------------------------------------------------------------------
  TIME/DATE OF STUDY: 17:42   5/25/2020
==============================================================================


 ************************* DESCRIPTION OF STUDY *************************
* BEAUMONT CROSSROADS II LOGISTICS                                          *
* MH13 TO MH12                                                              *
* LINE B                                                                    *
 ****************************************************************************

******************************************************************************
>>>>PIPEFLOW HYDRAULIC INPUT INFORMATION<<<<
------------------------------------------------------------------------------
    PIPE DIAMETER(FEET) =   1.250
    PIPE SLOPE(FEET/FEET) =  0.0300
    PIPEFLOW(CFS) =          3.74
    MANNINGS FRICTION FACTOR = 0.013000
==============================================================================
    CRITICAL-DEPTH FLOW INFORMATION:
------------------------------------------------------------------------------
    CRITICAL DEPTH(FEET) =       0.78
    CRITICAL FLOW AREA(SQUARE FEET) =      0.807
    CRITICAL FLOW TOP-WIDTH(FEET) =    1.210
    CRITICAL FLOW PRESSURE + MOMENTUM(POUNDS) =            50.64
    CRITICAL FLOW VELOCITY(FEET/SEC.) =      4.633
    CRITICAL FLOW VELOCITY HEAD(FEET) =             0.33
    CRITICAL FLOW HYDRAULIC DEPTH(FEET) =       0.67
    CRITICAL FLOW SPECIFIC ENERGY(FEET) =             1.11
==============================================================================
    NORMAL-DEPTH FLOW INFORMATION:
------------------------------------------------------------------------------
    NORMAL DEPTH(FEET) =       0.50
    FLOW AREA(SQUARE FEET) =       0.46
    FLOW TOP-WIDTH(FEET) =      1.224
    FLOW PRESSURE + MOMENTUM(POUNDS) =            65.33
    FLOW VELOCITY(FEET/SEC.) =            8.206
    FLOW VELOCITY HEAD(FEET) =            1.046
    HYDRAULIC DEPTH(FEET) =       0.37
    FROUDE NUMBER =      2.370
    SPECIFIC ENERGY(FEET) =             1.54
==============================================================================

1
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--------------------------------------------------------------------------
  TIME/DATE OF STUDY: 14:40   5/27/2020
==========================================================================


 ************************** DESCRIPTION OF STUDY **************************
* BEAUMONT CROSSROADS II LOGISTICS                                        *
* MH12 TO LIFT STATION                                                    *
* LINE B, LAT B-1                                                         *
 **************************************************************************

**************************************************************************
>>>>PIPEFLOW HYDRAULIC INPUT INFORMATION<<<<
--------------------------------------------------------------------------
    PIPE DIAMETER(FEET) =   1.250
    PIPE SLOPE(FEET/FEET) =  0.0080
    PIPEFLOW(CFS) =          3.78
    MANNINGS FRICTION FACTOR = 0.013000
==========================================================================
    CRITICAL-DEPTH FLOW INFORMATION:
--------------------------------------------------------------------------
    CRITICAL DEPTH(FEET) =      0.79
    CRITICAL FLOW AREA(SQUARE FEET) =     0.813
    CRITICAL FLOW TOP-WIDTH(FEET) =   1.208
    CRITICAL FLOW PRESSURE + MOMENTUM(POUNDS) =           51.47
    CRITICAL FLOW VELOCITY(FEET/SEC.) =     4.655
    CRITICAL FLOW VELOCITY HEAD(FEET) =            0.34
    CRITICAL FLOW HYDRAULIC DEPTH(FEET) =      0.67
    CRITICAL FLOW SPECIFIC ENERGY(FEET) =           1.12
==========================================================================
    NORMAL-DEPTH FLOW INFORMATION:
--------------------------------------------------------------------------
    NORMAL DEPTH(FEET) =      0.74
    FLOW AREA(SQUARE FEET) =      0.75
    FLOW TOP-WIDTH(FEET) =     1.230
    FLOW PRESSURE + MOMENTUM(POUNDS) =           51.74
    FLOW VELOCITY(FEET/SEC.) =           5.021
    FLOW VELOCITY HEAD(FEET) =           0.391
    HYDRAULIC DEPTH(FEET) =      0.61
    FROUDE NUMBER =     1.130
    SPECIFIC ENERGY(FEET) =            1.13
==========================================================================

1
```

EXISTING SEWER LINES

```
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------------------------------------------------------------------------------
  TIME/DATE OF STUDY: 18: 6   5/25/2020
==============================================================================


 ************************** DESCRIPTION OF STUDY **************************
* BEAUMONT CROSSROADS II LOGISTICS                                           *
* POTRERO SOUTH                                                              *
* EXISTING SEWER STUB                                                        *
 ****************************************************************************

******************************************************************************
>>>>PIPEFLOW HYDRAULIC INPUT INFORMATION<<<<
------------------------------------------------------------------------------
    PIPE DIAMETER(FEET) =   1.250
    PIPE SLOPE(FEET/FEET) =  0.0180
    PIPEFLOW(CFS) =          3.30
    MANNINGS FRICTION FACTOR = 0.013000
==============================================================================
    CRITICAL-DEPTH FLOW INFORMATION:
------------------------------------------------------------------------------
    CRITICAL DEPTH(FEET) =       0.73
    CRITICAL FLOW AREA(SQUARE FEET) =      0.747
    CRITICAL FLOW TOP-WIDTH(FEET) =    1.232
    CRITICAL FLOW PRESSURE + MOMENTUM(POUNDS) =            42.93
    CRITICAL FLOW VELOCITY(FEET/SEC.) =      4.419
    CRITICAL FLOW VELOCITY HEAD(FEET) =             0.30
    CRITICAL FLOW HYDRAULIC DEPTH(FEET) =       0.61
    CRITICAL FLOW SPECIFIC ENERGY(FEET) =             1.04
==============================================================================
    NORMAL-DEPTH FLOW INFORMATION:
------------------------------------------------------------------------------
    NORMAL DEPTH(FEET) =       0.53
    FLOW AREA(SQUARE FEET) =       0.50
    FLOW TOP-WIDTH(FEET) =      1.237
    FLOW PRESSURE + MOMENTUM(POUNDS) =           49.12
    FLOW VELOCITY(FEET/SEC.) =            6.583
    FLOW VELOCITY HEAD(FEET) =            0.673
    HYDRAULIC DEPTH(FEET) =       0.41
    FROUDE NUMBER =      1.822
    SPECIFIC ENERGY(FEET) =             1.21
==============================================================================

1
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------------------------------------------------------------------------------
  TIME/DATE OF STUDY: 18: 7   5/25/2020
==============================================================================


 ************************* DESCRIPTION OF STUDY *************************
* BEAUMONT CROSSROADS II LOGISTICS                                         *
* 4TH STREET EAST                                                          *
* EXISTING SEWER LINE                                                      *
 ************************************************************************

******************************************************************************
>>>>PIPEFLOW HYDRAULIC INPUT INFORMATION<<<<
------------------------------------------------------------------------------
    PIPE DIAMETER(FEET) =   1.000
    PIPE SLOPE(FEET/FEET) =  0.0180
    PIPEFLOW(CFS) =          0.36
    MANNINGS FRICTION FACTOR = 0.013000
==============================================================================
    CRITICAL-DEPTH FLOW INFORMATION:
------------------------------------------------------------------------------
    CRITICAL DEPTH(FEET) =       0.25
    CRITICAL FLOW AREA(SQUARE FEET) =     0.151
    CRITICAL FLOW TOP-WIDTH(FEET) =   0.863
    CRITICAL FLOW PRESSURE + MOMENTUM(POUNDS) =            2.63
    CRITICAL FLOW VELOCITY(FEET/SEC.) =     2.377
    CRITICAL FLOW VELOCITY HEAD(FEET) =             0.09
    CRITICAL FLOW HYDRAULIC DEPTH(FEET) =      0.18
    CRITICAL FLOW SPECIFIC ENERGY(FEET) =            0.34
==============================================================================
    NORMAL-DEPTH FLOW INFORMATION:
------------------------------------------------------------------------------
    NORMAL DEPTH(FEET) =      0.19
    FLOW AREA(SQUARE FEET) =       0.10
    FLOW TOP-WIDTH(FEET) =     0.778
    FLOW PRESSURE + MOMENTUM(POUNDS) =            2.98
    FLOW VELOCITY(FEET/SEC.) =           3.581
    FLOW VELOCITY HEAD(FEET) =           0.199
    HYDRAULIC DEPTH(FEET) =      0.13
    FROUDE NUMBER =     1.755
    SPECIFIC ENERGY(FEET) =             0.38
==============================================================================

1
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------------------------------------------------------------------------------
  TIME/DATE OF STUDY: 18: 9   5/25/2020
==============================================================================


 ************************** DESCRIPTION OF STUDY **************************
* BEAUMONT CROSSROADS II LOGISTICS                                           *
* 4TH STREET WEST                                                            *
* EXISTING SEWER STUB                                                        *
 ****************************************************************************

******************************************************************************
>>>>PIPEFLOW HYDRAULIC INPUT INFORMATION<<<<
------------------------------------------------------------------------------
    PIPE DIAMETER(FEET) =   1.250
    PIPE SLOPE(FEET/FEET) =  0.0055
    PIPEFLOW(CFS) =          3.66
    MANNINGS FRICTION FACTOR = 0.013000
==============================================================================
    CRITICAL-DEPTH FLOW INFORMATION:
------------------------------------------------------------------------------
    CRITICAL DEPTH(FEET) =      0.77
    CRITICAL FLOW AREA(SQUARE FEET) =     0.796
    CRITICAL FLOW TOP-WIDTH(FEET) =   1.215
    CRITICAL FLOW PRESSURE + MOMENTUM(POUNDS) =           49.22
    CRITICAL FLOW VELOCITY(FEET/SEC.) =     4.594
    CRITICAL FLOW VELOCITY HEAD(FEET) =            0.33
    CRITICAL FLOW HYDRAULIC DEPTH(FEET) =      0.66
    CRITICAL FLOW SPECIFIC ENERGY(FEET) =           1.10
==============================================================================
    NORMAL-DEPTH FLOW INFORMATION:
------------------------------------------------------------------------------
    NORMAL DEPTH(FEET) =      0.82
    FLOW AREA(SQUARE FEET) =      0.85
    FLOW TOP-WIDTH(FEET) =     1.189
    FLOW PRESSURE + MOMENTUM(POUNDS) =           49.48
    FLOW VELOCITY(FEET/SEC.) =           4.300
    FLOW VELOCITY HEAD(FEET) =           0.287
    HYDRAULIC DEPTH(FEET) =      0.72
    FROUDE NUMBER =     0.896
    SPECIFIC ENERGY(FEET) =           1.11
==============================================================================

1
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LA MIRADA, CALIFORNIA 90638
PH.(714)521-4811 FAX(714)521-4173

Appendix C

EMWD Table 1: Development Densities

City of Beaumont General Plan

Table 1: Development Densities

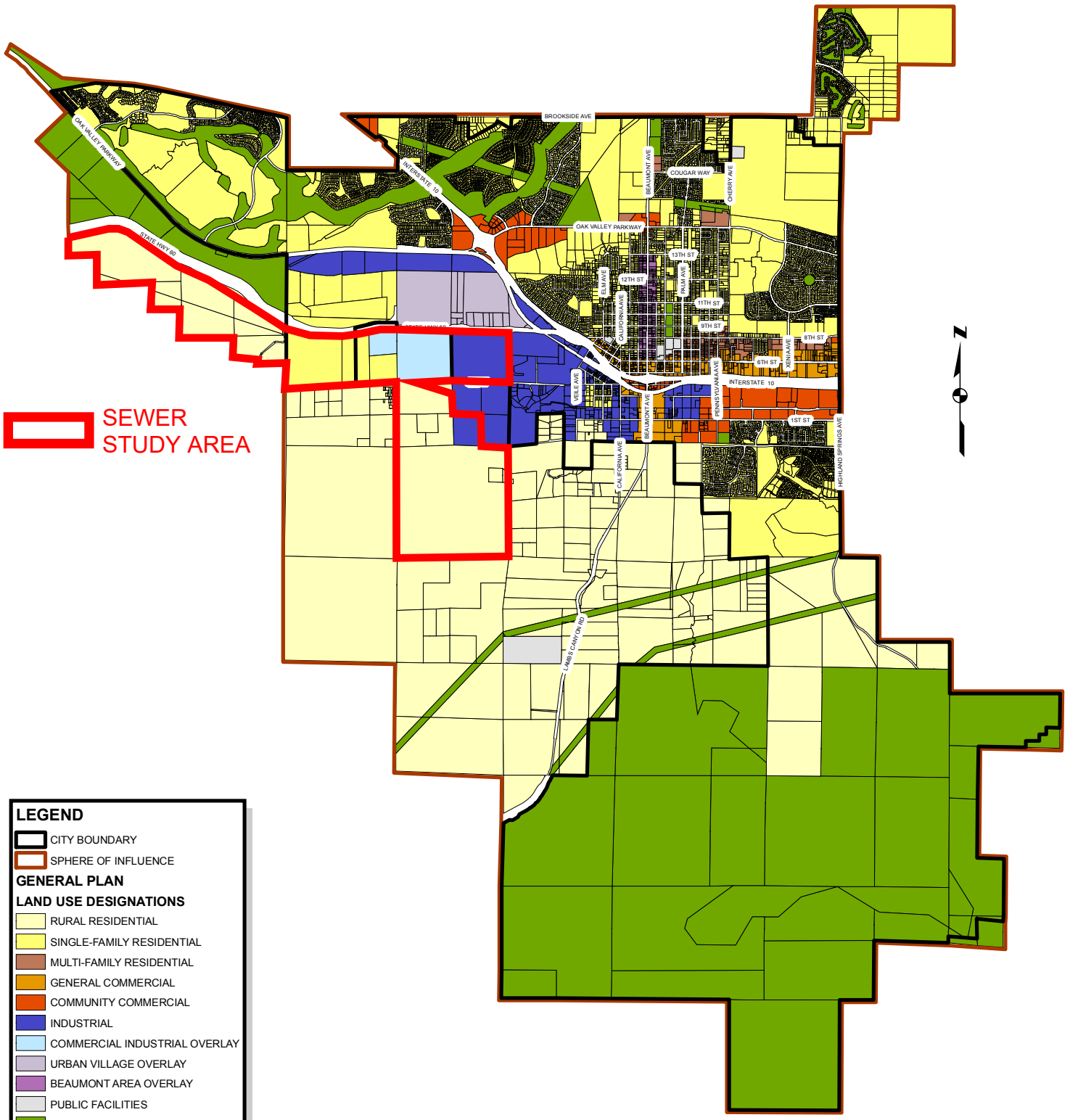
LAND USE CATEGORY	UNITS	AVERAGE RESIDENTIAL DENSITY (DU/ACRE)	RESIDENTIAL (EDU/DU)	DEVELOPMENT DENSITY (EDU/ACRE)
Residential Land Use				
Estate Density	DU	0.5	1.5	0.8
High Density	DU	12	0.7	8.4
Low Density	DU	2	1.3	2.6
Medium Density	DU	4.5	1	4.5
Medium High Density	DU	6	0.9	5.4
Mobile Home Park	DU	10	0.65	6.5
Rural Mountainous [1]	DU	0.1	3	0.3
Rural [1]	DU	0.2	3	0.6
Very High Density	DU	17	0.65	11.1
Very Low Density [1]	DU	1	1	1.5
Non-Residential Use				
Agriculture [1]	acre			0
Business Park/Light Industrial	acre			5
Business Park/Light Industrial/Warehouse	acre			1.25
Commercial Office	acre			5
Commercial Retail	acre			5
Heavy Industrial	acre			7.5
Hospital	acre			5
Mixed Use Policy Area	acre			5
Open Space (Conservation, Landscape, Recreation, Rural, or Water) [1]	acre			5
Public Facilities (Municipal or School)	acre			5

[1] The following uses were assumed to be served by septic systems and do not contribute flow to the wastewater collection system: Rural Mountainous, Rural, Very Low Density, and Agriculture, and Open Space.

3A2.1.3 Flow Per Equivalent Dwelling Unit

For all types of development, the land use categories were converted to EDUs based on Table 1. Wastewater flow (ADWF) was calculated by multiplying the number of EDUs per land parcel by a rate of 235 gpd/EDU; the District's criteria used for regional planning.

CITY OF BEAUMONT
General Plan



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Appendix D

Preliminary Lift Station Pump Design

PROJECT INFO

Job Name:	**3080i Hidden Canyon**
Company:	**Thienes**
Contact:	**Reinhard Stenzel**
Job Type:	**New Station**
Water Type/Source:	**Wastewater (Sewage)**
Import/Domestic:	**Import Acceptable**

PACKAGE/STARTUP

Offering:	**Complete System**
Mechanical:	**All by Romtec Utilities**
Pumps:	**By Romtec Utilities**
Control Panel:	**By Romtec Utilities**
Generator:	**By Romtec Utilities**
Advisor/Startup:	**Mechanical & Electrical**
Turnkey:	**No**

DESIGN CRITERIA - WWC10D-VM-T1500-2000x230-10S-43-DPG

FLOW RATE

Peak Inflow:	**2986**	GPM
Pumping Rate:	**1900**	GPM (of single pump)
Static Head:	**183.0**	Feet
TDH:	**232.1**	Feet
TDH Calcs:	**RU Calcs**	

ACTIVE VOLUME

Max Pump Starts:	**10.00**	Starts/Hr
Cycle Time:	**6.00**	Minutes
Active Volume:	**2850.00**	Gallons
Active Volume:	**381.01**	Cu Feet
Well Shape:	**Round**	
Well Diameter:	**10**	Feet
Well Dimensions:	**N/A**	**N/A**
Cross-Section Area:	**78.54**	Sq Feet
Min. Depth Required:	**4.85**	Feet
Active Depth:	**4.90**	Feet

STORAGE VOLUME (if required)

Time:		Minutes
Flow Rate:		GPM
Volume:	**0.00**	Gallons
Volume:	**0.00**	Cu. Feet
Min. Depth Required:	**0.00**	Feet
Storage Depth:		Feet

ON-SITE POWER

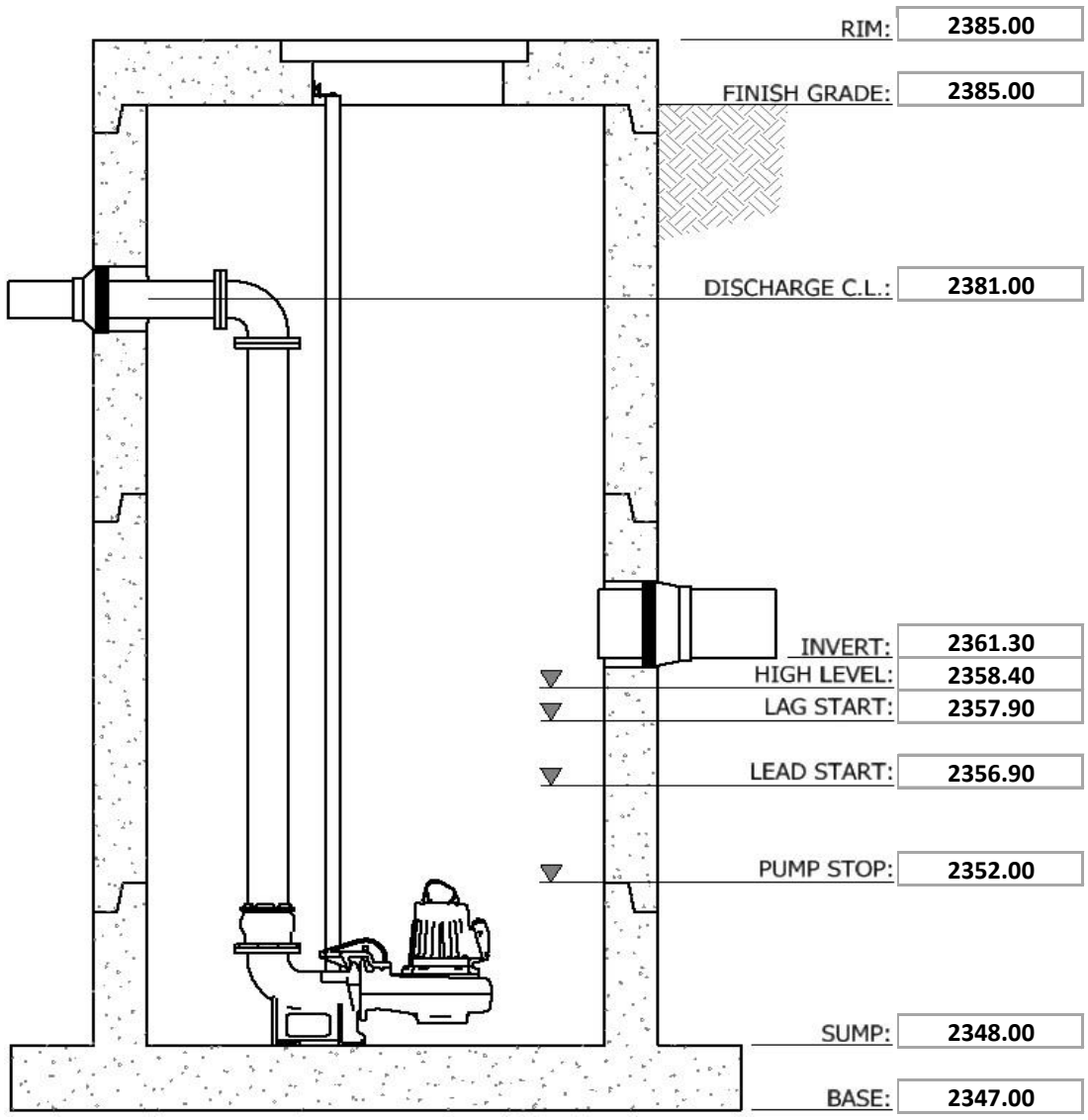
Power:	**480V / 3-Phase**

FORCE MAIN

FM Info:	**New**	**Dual FM**	
Length:	**9140**	Feet	
FM Discharge:	**2535.00**	Feet	
FM High Point:	**2535.00**	Feet	

INFLUENT PIPING

	(1)	*(2)*	*(3)*
Nominal ID:	**6"**	**16"**	
Type/Rating:	**PVC C900 DR 18, PVC C905 DR25**		
Influent Invert:	**2361.3**		
Influent Size:			
Type:			



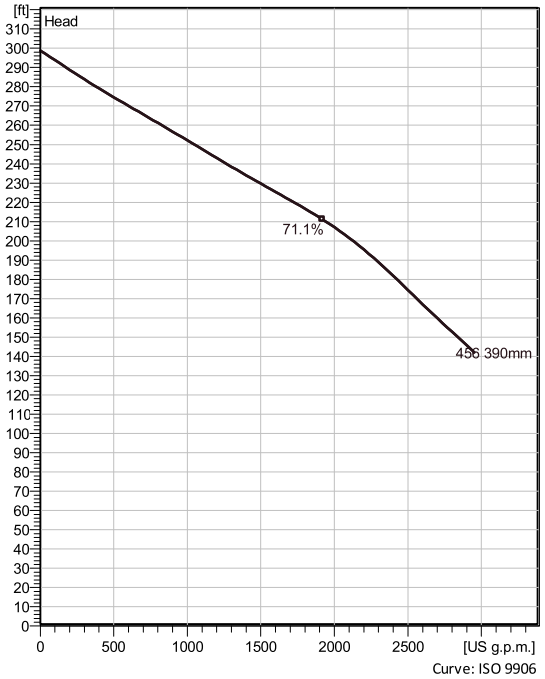
Note: Image is a preliminary representation of the pumping system.
Elevations shown are the primary factors used for sizing the wet well.
Backup levels not shown. Additional (or fewer) level settings may be required.

NP 3315 HT 3~ 456

Patented self cleaning semi-open channel impeller, ideal for pumping in waste water applications. Possible to be upgraded with Guide-pin® for even better clogging resistance. Modular based design with high adaptation grade.

Technical specification

Curves according to: Water, pure [100%],39.2 °F,62.43 lb/ft³,1.6889E-5 ft²/s



Curve: ISO 9906

Configuration

Motor number
N3315.095 35-45-4AA-W 160hp

Installation type
P - Semi permanent, Wet

Impeller diameter
390 mm

Discharge diameter
5 7/8 inch

Pump information

Impeller diameter
390 mm

Discharge diameter
5 7/8 inch

Inlet diameter
200 mm

Maximum operating speed
1780 rpm

Number of blades
3

Max. operating temperature
40 °F

Materials

Impeller
Hard-Iron ™

Project		**Created by**	**Last update**
Block	0	**Created on**	3/27/2020

NP 3315 HT 3~ 456

Technical specification

Motor - General

Motor number N3315.095 35-45-4AA-W 160hp	**Phases** 3~	**Rated speed** 1780 rpm	**Rated power** 160 hp
Approval EN	**Number of poles** 4	**Rated current** 190 A	**Stator variant** 1
Frequency 60 Hz	**Rated voltage** 460 V	**Insulation class** H	**Type of Duty** S1
Version code 095			

Motor - Technical

Power factor - 1/1 Load 0.83	**Motor efficiency - 1/1 Load** 94.7 %	**Total moment of inertia** 43.9 lb ft²	**Starts per hour max.** 15
Power factor - 3/4 Load 0.78	**Motor efficiency - 3/4 Load** 95.4 %	**Starting current, direct starting** 1120 A	
Power factor - 1/2 Load 0.68	**Motor efficiency - 1/2 Load** 95.6 %	**Starting current, star-delta** 375 A	

Project		**Created by**		**Last update**
Block	0	**Created on**	3/27/2020	

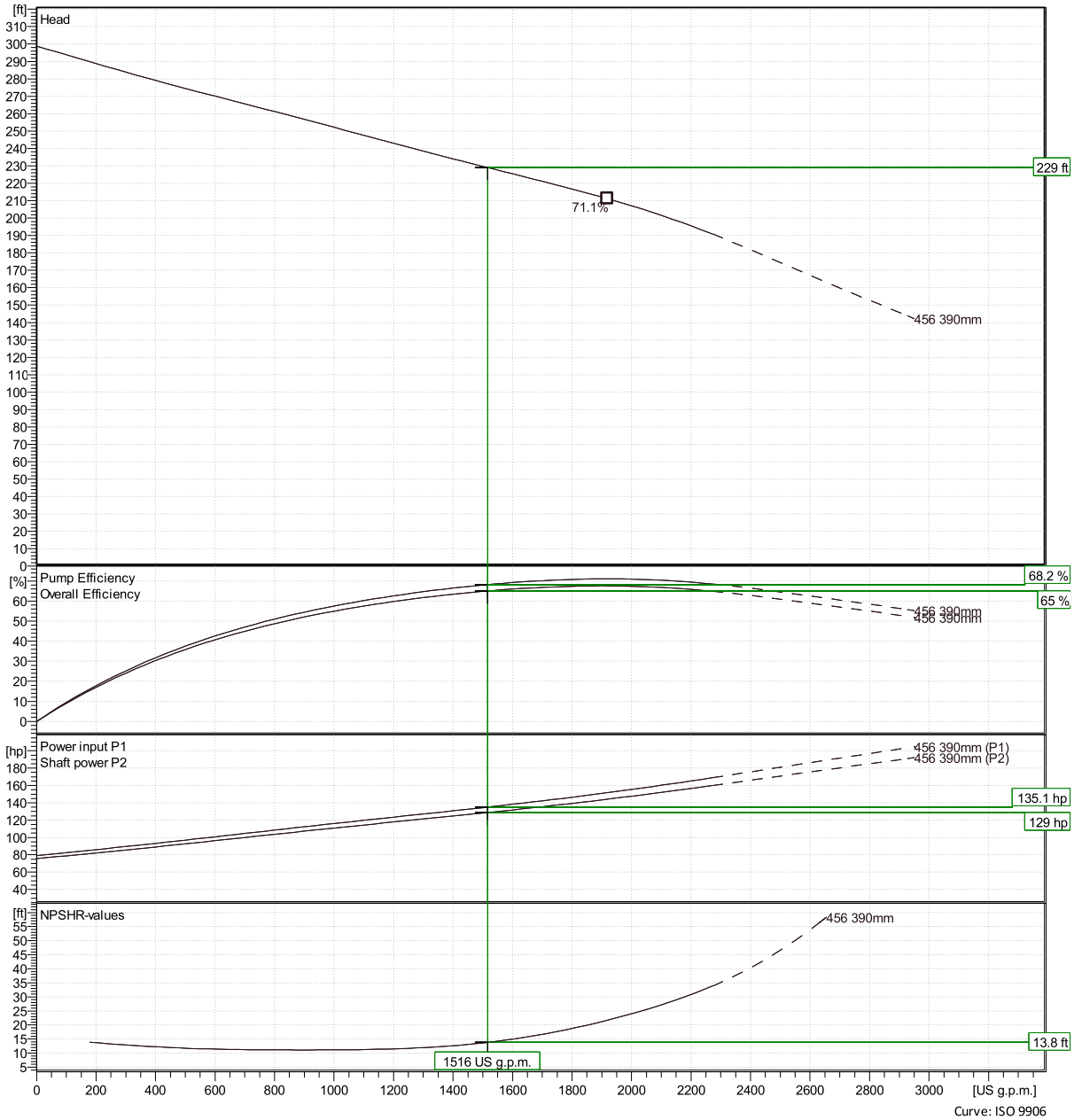
NP 3315 HT 3~ 456

Performance curve

Duty point

Flow	Head
1520 US g.p.m.	229 ft

Curves according to: Water, pure [100%],39.2 °F,62.43 lb/ft³,1.6889E-5 ft²/s



Curve: ISO 9906

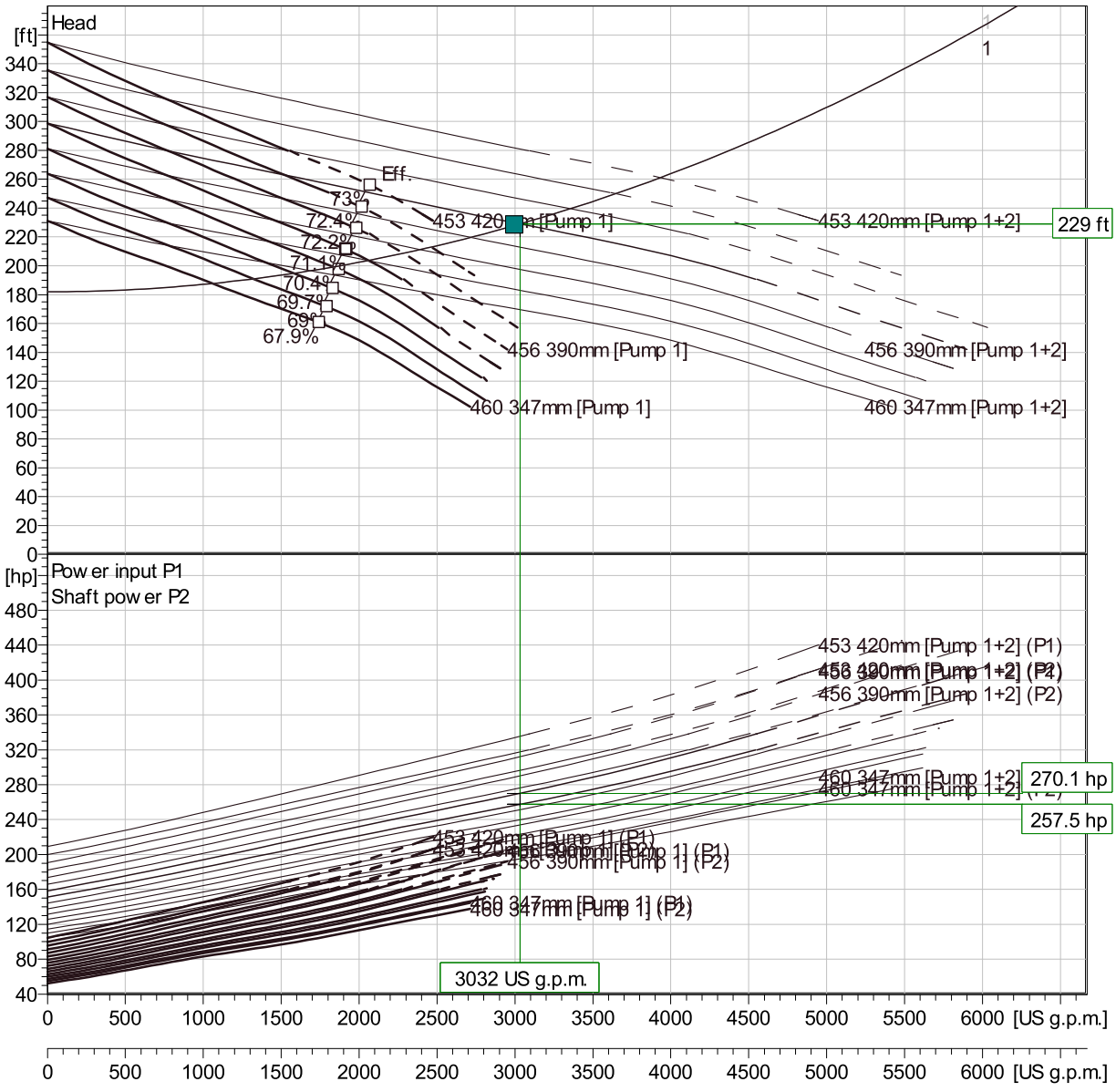
Project		Created by		Last update
Block	0	Created on	3/27/2020	

NP 3315 HT 3~ 456

Duty Analysis

FLYGT
a xylem brand

Curves according to: Water, pure [100%],39.2 °F,62.43 lb/ft³,1.6889E-5 ft²/s



Curve: ISO 9906

Operating characteristics

Pumps/Systems	Flow	Head	Shaft power	Flow	Head	Shaft power	Hydr.eff.	Specific energy	NPSHr
2 / 1	1520 US g.p.m.	229 ft	129 hp	3030 US g.p.m.	229 ft	258 hp	68.2 %	1110 kWh/US M	13.8 ft
1 / 1	2060 US g.p.m.	204 ft	150 hp	2060 US g.p.m.	204 ft	150 hp	70.7 %	955 kWh/US M	25.9 ft

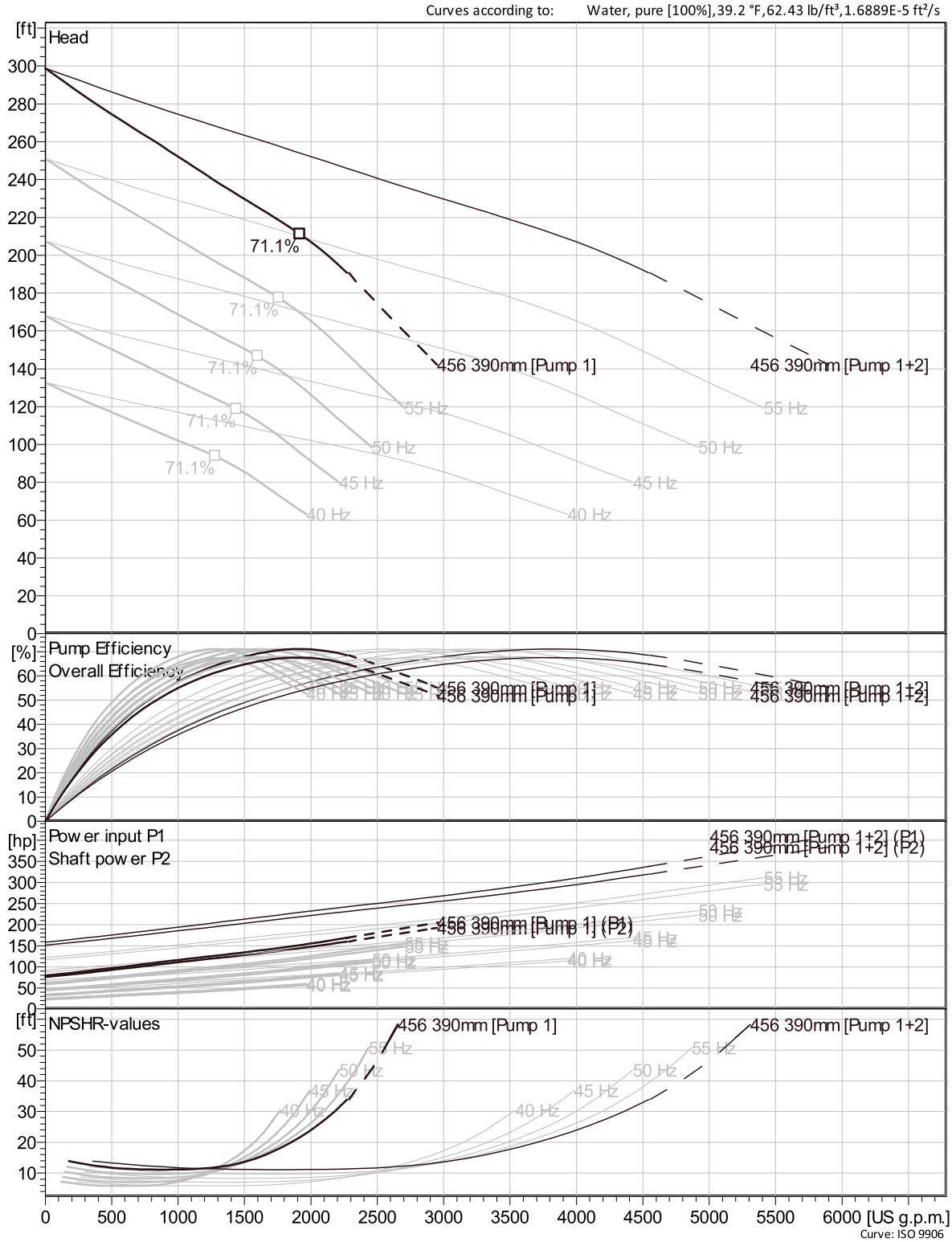
Project		**Created by**		**Last update**	
Block	0	**Created on**	3/27/2020		

NP 3315 HT 3~ 456

VFD Curve

FLYGT
a xylem brand

Curves according to: Water, pure [100%],39.2 °F,62.43 lb/ft³,1.6889E-5 ft²/s

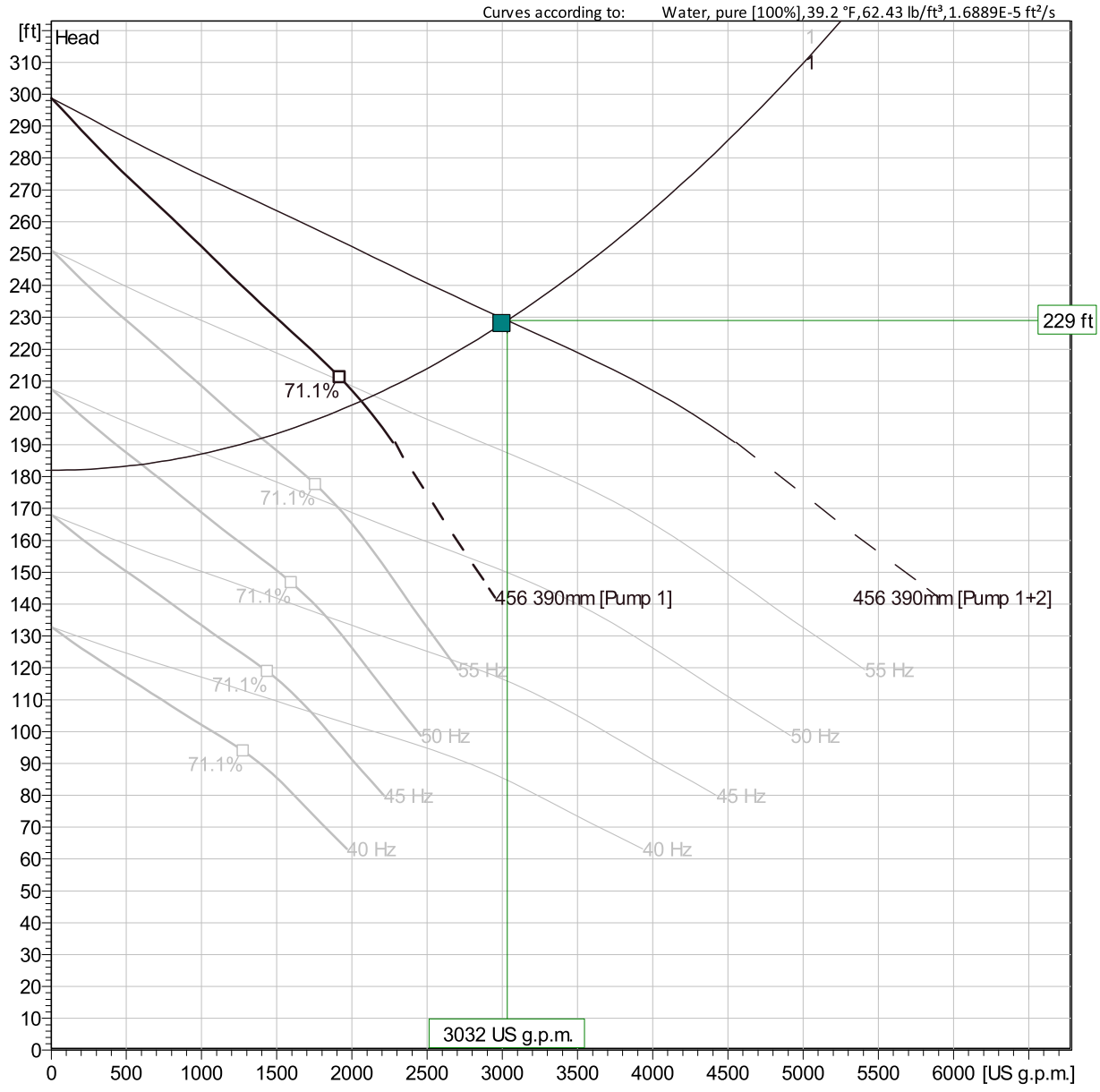


Curve: ISO 9906

Project		**Created by**	**Last update**
Block	0	**Created on**	3/27/2020

NP 3315 HT 3~ 456

VFD Analysis



Curve: ISO 9906

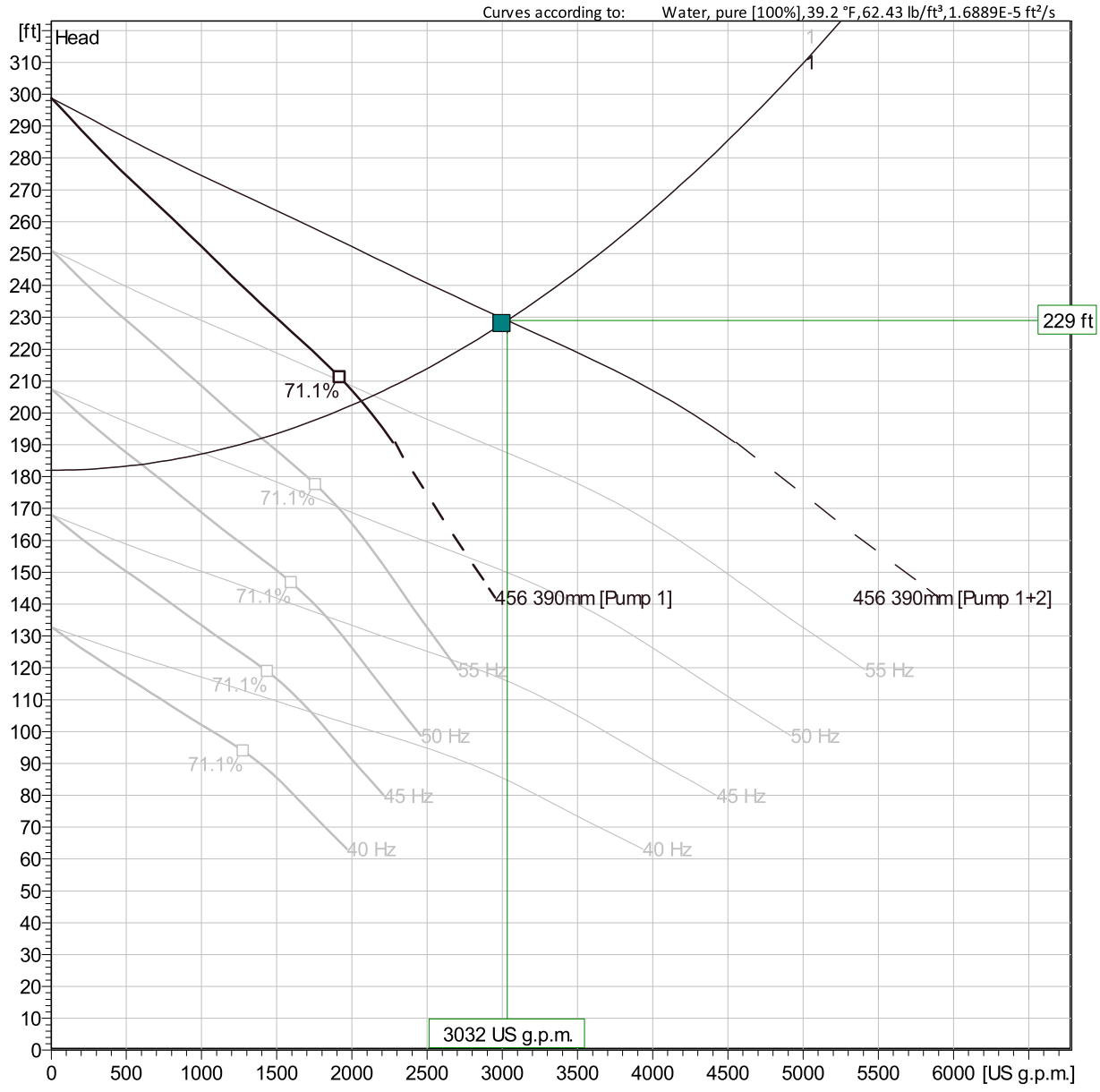
Operating Characteristics

Pumps/Systems	Frequency	Flow	Head	Shaft power	Flow	Head	Shaft power	Hydr.eff.	Specific Energy	NPSHr
2 / 1	60 Hz	1520 US g.p.m	229 ft	129 hp	3030 US g.p.m	229 ft	258 hp	68.2 %	1110 kWh/US M	13.8 ft
2 / 1	55 Hz	1070 US g.p.m	205 ft	89.9 hp	2140 US g.p.m	205 ft	180 hp	61.9 %	1090 kWh/US M	9.94 ft
2 / 1	50 Hz	508 US g.p.m.	187 ft	55.9 hp	1020 US g.p.m	187 ft	112 hp	43 %	1440 kWh/US M	8.53 ft
2 / 1	45 Hz									
2 / 1	40 Hz									
1 / 1	60 Hz	2060 US g.p.m	204 ft	150 hp	2060 US g.p.m	204 ft	150 hp	70.7 %	955 kWh/US M	25.9 ft

Project		**Created by**	**Last update**
Block	0	**Created on**	3/27/2020

NP 3315 HT 3~ 456

VFD Analysis



Curve: ISO 9906

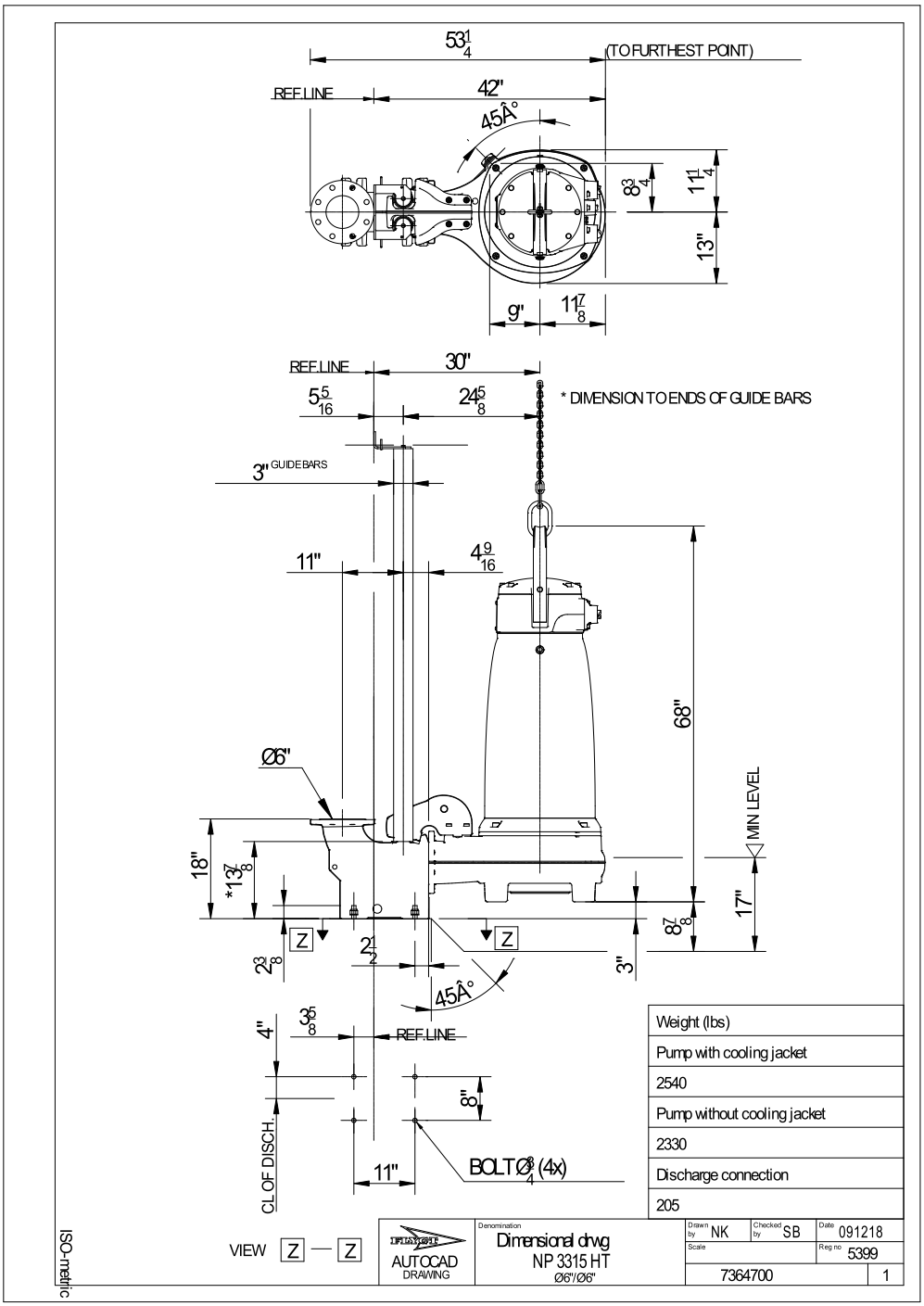
Operating Characteristics

Pumps/Systems	Frequency	Flow	Head	Shaft power	Flow	Head	Shaft power	Hydr.eff.	Specific Energy	NPSHr
1 / 1	55 Hz	1400 US g.p.m	192 ft	99.5 hp	1400 US g.p.m	192 ft	99.5 hp	68.4 %	924 kWh/US M	12.1 ft
1 / 1	50 Hz	601 US g.p.m.	184 ft	58.3 hp	601 US g.p.m.	184 ft	58.3 hp	47.9 %	1260 kWh/US M	8.38 ft
1 / 1	45 Hz									
1 / 1	40 Hz									

Project		**Created by**	**Last update**
Block	0	**Created on**	3/27/2020

NP 3315 HT 3~ 456

Dimensional Drawing



Project		**Created by**	**Last update**
Block	0	**Created on**	3/27/2020

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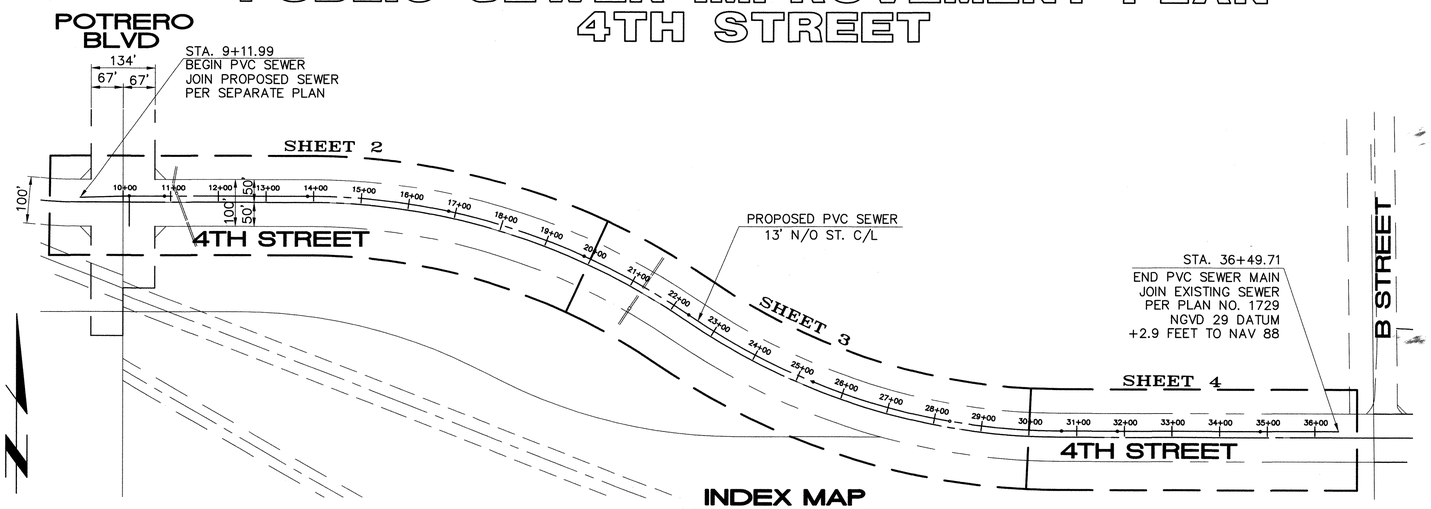
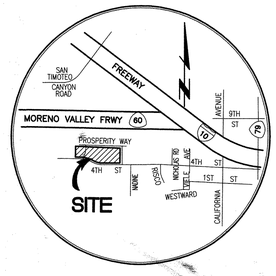
Appendix E

Sewer Improvement Plans

CITY OF BEAUMONT, CA
PUBLIC SEWER IMPROVEMENT PLAN
4TH STREET



INDEX MAP
SCALE 1" = 150'



VICINITY MAP
N.T.S.

SHEET INDEX	
1	TITLE SHEET
2	SEWER IMPROVEMENT PLANS STA 8+94 TO 20+00
3	SEWER IMPROVEMENT PLANS STA 20+00 TO 30+00
4	SEWER IMPROVEMENT PLANS STA 30+00 TO 36+49.71

GENERAL NOTES

1. THIS PLAN SUPERSEDES ALL OTHER PLANS PREVIOUSLY APPROVED BY THE CITY OF BEAUMONT REGARDING IMPROVEMENTS SHOWN ON THIS SET OF PLANS.
2. APPROVAL OF THIS PLAN DOES NOT LESSEN OR WAIVE ANY PORTION OF THE BEAUMONT MUNICIPAL CODE, RESOLUTION OF CONDITIONAL APPROVAL, CITY STANDARDS OR OTHER ADDITIONAL DOCUMENTS LISTED HEREIN AS THEY MAY PERTAIN TO THIS PROJECT. THE ENGINEER IN RESPONSIBLE CHARGE SHALL REVISE THESE PLANS WHEN NON-CONFORMANCE IS DISCOVERED.
3. CITY APPROVAL OF PLANS DOES NOT RELIEVE THE DEVELOPER OR ENGINEER-OF-WORK FROM RESPONSIBILITY FOR THE CORRECTION OF ERRORS AND OMISSIONS DISCOVERED DURING CONSTRUCTION. ALL PLAN REVISIONS SHALL BE PROMPTLY SUBMITTED TO THE CITY ENGINEER FOR APPROVAL.
4. A RIGHT-OF-WAY PERMIT FROM THE BUILDING & SAFETY DEPARTMENT WILL BE REQUIRED FOR ANY WORK IN THE PUBLIC RIGHT OF WAY. PRIOR TO PERMIT ISSUANCE, A CERTIFICATE OF INSURANCE MUST BE FILED NAMING THE CITY OF BEAUMONT AS AN ADDITIONAL INSURED ON THE PERMITTEE'S POLICY IN THE MINIMUM AMOUNT OF $1,000,000.00 FOR EACH OCCURRENCE OF LIABILITY. THE INSURANCE COMPANY WRITING THE POLICY MUST HAVE A RATING OF "A-" OR BETTER AND A SIZE CATEGORY OF CLASS VII OR BETTER AS ESTABLISHED BY "BESTS" KEY RATING GUIDE.
5. NO WORK SHALL BE COMMENCED UNTIL ALL PERMITS HAVE BEEN OBTAINED FROM THE CITY AND OTHER APPROPRIATE AGENCIES.
6. REVISION OF THESE PLANS MAY BE REQUIRED IF THE PROPOSED IMPROVEMENTS ARE NOT CONSTRUCTED PRIOR TO THE DEADLINE DATE OF THE IMPROVEMENT AGREEMENT.
7. NO REVISIONS WILL BE MADE TO THESE PLANS WITHOUT THE WRITTEN APPROVAL OF THE CITY ENGINEER, NOTED WITHIN THE REVISION BLOCK, ON THE APPROPRIATE SHEET OF THE PLANS AND TITLE SHEET.
8. ORIGINAL DRAWINGS SHALL BECOME THE PROPERTY OF THE CITY UPON BEING SIGNED BY THE CITY ENGINEER.
9. THE ORIGINAL DRAWING SHALL BE REVISED TO REFLECT AS-BUILT CONDITIONS BY THE ENGINEER-OF-WORK PRIOR TO FINAL ACCEPTANCE OF THE WORK BY THE CITY.
10. ACCESS FOR FIRE AND OTHER EMERGENCY VEHICLES SHALL BE MAINTAINED TO THE PROJECT SITE AT ALL TIMES DURING CONSTRUCTION.
11. WHERE TRENCHES ARE WITHIN CITY EASEMENTS, A SOILS REPORT COMPRISED OF:
    A. SUMMARY SHEET
    B. LABORATORY WORK SHEETS
    C. COMPACTION CURVES, SHALL BE SUBMITTED BY A PROFESSIONAL ENGINEER OF THE STATE OF CALIFORNIA, PRINCIPALLY DOING BUSINESS IN THE FIELD OF APPLIED SOILS MECHANICS. THE SOILS REPORT WILL BE SUBMITTED TO THE CITY ENGINEERING INSPECTOR WITHIN TWO WORKING DAYS OF COMPLETION OF FIELD TESTS. THE WRITTEN FIELD COMPACTION REPORT(S) SHALL BE IMMEDIATELY SUBMITTED TO THE CITY ENGINEERING INSPECTOR UPON COMPLETION OF THE FIELD TESTS.
12. A PRECONSTRUCTION MEETING SHALL BE HELD AT THE SITE PRIOR TO THE BEGINNING OF WORK AND SHALL BE ATTENDED BY ALL REPRESENTATIVES RESPONSIBLE FOR CONSTRUCTION, INSPECTION, SUPERVISION, TESTING AND ALL OTHER ASPECTS OF THE WORK. THE CONTRACTOR SHALL SCHEDULE THE MEETING BY CALLING THE INSPECTION LINE AT (951) 572-3224 AT LEAST FIVE (5) WORKING DAYS PRIOR TO STARTING CONSTRUCTION. APPROVED DRAWINGS MUST BE AVAILABLE PRIOR TO SCHEDULING.
13. ALL INSPECTION REQUESTS OTHER THAN FOR THE PRECONSTRUCTION MEETING WILL BE MADE BY CALLING THE BUILDING AND SAFETY INSPECTION REQUEST LINE AT (951) 572-3224. INSPECTION REQUESTS MUST BE RECEIVED PRIOR TO 2:00 P.M. ON THE DAY BEFORE THE INSPECTION IS NEEDED. INSPECTIONS WILL BE MADE THE NEXT WORK DAY UNLESS YOU REQUEST OTHERWISE. REQUESTS MADE AFTER 2:00 P.M. WILL BE SCHEDULED FOR TWO FULL WORK DAYS LATER.
14. THE OWNER AND/OR APPLICANT THROUGH THE DEVELOPER AND/OR CONTRACTOR SHALL DESIGN, CONSTRUCT AND MAINTAIN ALL SAFETY DEVICES, INCLUDING SHORING, AND SHALL BE SOLELY RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS AND REGULATIONS.
15. THE CONTRACTOR SHALL CONFORM TO LABOR CODE SECTION 6705 BY SUBMITTING A DETAIL PLAN TO THE CITY ENGINEER AND/OR CONCERNED AGENCY SHOWING THE DESIGN OF SHORING, BRACING SLOPE OR OTHER PROVISIONS TO BE MADE OF WORKER PROTECTION FROM THE HAZARD OF CAVING GROUND DURING THE EXCAVATION OF SUCH TRENCH OR TRENCHES OR DURING THE PIPE INSTALLATION THEREIN. THIS PLAN MUST BE PREPARED FOR ALL TRENCHES FIVE FEET (5') OR MORE IN DEPTH AND APPROVED BY THE CITY ENGINEER AND/OR CONCERNED AGENCY PRIOR TO EXCAVATION. IF THE PLAN VARIES FROM THE SHORING SYSTEM STANDARDS ESTABLISHED BY THE CONSTRUCTION SAFETY ORDERS, TITLE 8 CALIFORNIA ADMINISTRATIVE CODE, THE PLAN SHALL BE PREPARED BY A REGISTERED ENGINEER AT THE CONTRACTORS EXPENSE. A COPY OF THE OSHA EXCAVATION PERMIT MUST BE SUBMITTED TO THE INSPECTOR PRIOR TO EXCAVATION.
16. IF ANY ARCHAEOLOGICAL RESOURCES ARE DISCOVERED WITHIN ANY WORK ZONE DURING CONSTRUCTION, OPERATIONS WILL CEASE IMMEDIATELY, AND THE PERMITTEE WILL NOTIFY THE CITY ENGINEER. OPERATIONS WILL NOT RESTART UNTIL THE PERMITTEE HAS RECEIVED WRITTEN AUTHORITY FROM THE CITY ENGINEER TO DO SO.
17. ALL OPERATIONS CONDUCTED ON THE SITE OR ADJACENT THERETO SHALL ADHERE TO THE NOISE ORDINANCE SET FORTH BY THE CITY MUNICIPAL CODE. ALL OPERATIONS SHALL BE LIMITED BY THE NOISE ORDINANCE TO THE LEVEL OF DECIBELS SPECIFIED FOR THE AREA AND TIME PERIOD. CONSTRUCTION ACTIVITIES WILL BE LIMITED TO THE PERIOD BETWEEN 7:00 A.M. AND 6:00 P.M. EACH DAY MONDAY THROUGH FRIDAY, UNLESS OTHERWISE PERMITTED.
18. ALL OFF-SITE HAUL ROUTES SHALL BE SUBMITTED BY THE CONTRACTOR TO THE CITY ENGINEER FOR APPROVAL TWO FULL WORKING DAYS PRIOR TO BEGINNING OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DEBRIS OR DAMAGE OCCURRING ALONG THE HAUL ROUTE OR ADJACENT STREETS AS A RESULT OF THE GRADING OPERATION.
19. NO BLASTING SHALL BE COMMENCED WITHOUT A CITY ENGINEER APPROVED BLASTING PROGRAM AND BLASTING PERMIT.
20. THE EXISTENCE AND LOCATION OF UTILITY STRUCTURES AND FACILITIES SHOWN ON THE CONSTRUCTION PLANS WERE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. ATTENTION IS CALLED TO THE POSSIBLE EXISTENCE OF OTHER UTILITY FACILITIES OR STRUCTURES NOT SHOWN OR IN A LOCATION DIFFERENT FROM THAT SHOWN ON THE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES SHOWN ON THE PLANS AND ANY OTHER EXISTING FACILITIES OR STRUCTURES NOT SHOWN.
21. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING FACILITIES (ABOVEGROUND AND UNDERGROUND) WITHIN THE PROJECT SITE SUFFICIENTLY AHEAD OF THE CONSTRUCTION TO PERMIT THE REVISIONS OF THE CONSTRUCTION PLANS IF IT IS FOUND THAT THE ACTUAL LOCATIONS ARE IN CONFLICT WITH THE PROPOSED WORK.
22. THE CONTRACTOR SHALL NOTIFY AFFECTED UTILITY COMPANIES (SEE BELOW) AT LEAST TWO FULL WORKING DAYS PRIOR TO STARTING CONSTRUCTION NEAR THEIR FACILITIES AND SHALL COORDINATE WORK WITH A COMPANY REPRESENTATIVE.

UNDERGROUND SERVICE ALERT	(800) 422-4133
SOUTHERN CALIFORNIA EDISON	(800) 409-2365
AT&T	(800) 892-0123
TIME WARNER CABLE	(760) 340-2225
COX COMMUNICATIONS	(888) 423-3913

23. IN ACCORDANCE THE CITY STORM WATER STANDARDS ALL STORM DRAIN INLETS CONSTRUCTED BY THIS PLAN SHALL INCLUDE "STENCILS" BE ADDED TO PROHIBIT WASTE DISCHARGE DOWNSTREAM. STENCILS SHALL BE ADDED TO THE SATISFACTION OF THE CITY ENGINEER.

SEWER NOTES

1. SEWER SYSTEM CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH EASTERN MUNICIPAL WATER DISTRICT (EMWD'S) STANDARDS AND SPECIFICATIONS.
2. GRAVITY SEWER PROFILE ELEVATIONS ARE TO FLOW LINE (CONDUIT INVERT). FORCE MAIN PROFILE ELEVATIONS ARE TO CENTIGRADE (CG).
3. CONTRACTOR HAS THE OPTION TO INSTALL PLASTIC OR VCP SEWERS EXCEPT WHERE SPECIFICALLY DESIGNATED ON PLANS PER EMWD STANDARDS AND SPECIFICATIONS.
4. MANHOLES SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD DRAWINGS SB-53, SB-58, AND SB-61, AS APPLICABLE. SEWER MAINS MAY BE LAID THROUGH THE MANHOLES AND USED AS A FORM FOR THE INVERT.
5. MANHOLES OF DEPTHS LESS THAN FIVE FEET FROM FINISH STREET GRADE TO SEWER PIPE SHELF ARE TO BE CONSTRUCTED IN ACCORDANCE WITH STANDARD DRAWING SB-30.
6. ALL LATERALS SHALL HAVE AN ON-SITE CLEANOUT IN ACCORDANCE WITH STANDARD DRAWING SB-52. IN ADDITION, FOR LATERALS SERVING INDUSTRIAL AND/OR COMMERCIAL DEVELOPMENTS, THE REQUIREMENTS FOR SAMPLING AND/OR PRETREATMENT FACILITIES SHALL BE DETERMINED BY CONTRACTING THE BUILDING AND SAFETY DEPARTMENT.
7. MAINLINE CLEANOUTS, WHERE CALLED FOR ON THE PLANS, SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD DRAWING SB-52.
8. PRIOR TO CONSTRUCTION OF SEWER, CONTRACTOR SHALL EXPOSE EXISTING SEWER AND VERIFY ITS EXISTING ELEVATION AND LOCATION. WHEN CONNECTING TO EXISTING MANHOLES AND INLET STUB OF PROPER SIZE EXISTS, NO ALTERATIONS SHALL BE MADE TO EXISTING MANHOLE BASE OR STUB EXCEPT AS SPECIFICALLY AUTHORIZED BY THE CITY INSPECTOR.
9. ALL SEWER INLETS AT THE MANHOLE SHALL BE SUCH THAT ITS CROWN SHALL BE LEVEL WITH THE CROWN OF THE OUTLET PIPE, AT THEIR PROJECTIONS TO THE MANHOLE CENTERLINE.
10. RECONSTRUCTION OF EXISTING MANHOLES SHALL BE SCHEDULED AT THE CONVENIENCE OF THE CITY AND SHALL BE COMPLETED WITHIN FIVE WORKING DAYS FOLLOWING ITS COMMENCEMENT.
11. SEWER LATERALS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SB-177. LOCATIONS OF WYES AND LATERALS, WHERE NOT SHOWN ON THE PLANS, ARE TO BE DETERMINED IN THE FIELD PRIOR TO CONSTRUCTION TO MISS DRIVEWAYS. ALL LATERALS ARE TO BE 4" IN DIAMETER UNLESS OTHERWISE SHOWN ON PLANS. CONNECTIONS OF NEW LATERALS TO EXISTING SEWER ARE TO BE PER STANDARD DRAWING SB-176.
12. THE CONTRACTOR IS ADVISED THAT THE WORK ON THIS PROJECT MAY INVOLVE WORKING IN A CONFINED AIR SPACE. CONTRACTOR SHALL BE RESPONSIBLE FOR "CONFINED AIR SPACE" ARTICLE 108, TITLE 8, CALIFORNIA ADMINISTRATIVE CODE.
13. BACKWATER VALVES SHALL BE INSTALLED PER SECTION 710.1 OF THE UNIFORM PLUMBING CODE.
14. ALL PIPE ZONE BEDDING AND TRENCH BACKFILL ARE TO BE PER STANDARD DRAWING SB-157, SB-158, AND SB-159.

NOTE

1. APPROVAL OF THESE PLANS APPLIES ONLY WITHIN THE JURISDICTION OF THE CITY OF BEAUMONT.
2. TRENCHING FOR UTILITIES AND STRUCTURES IS NOT ALLOWED UNTIL SOIL COMPACTION REPORT IS SUBMITTED AND APPROVED BY THE PUBLIC WORKS DEPARTMENT.
3. THE CITY RESERVES THE RIGHT TO REQUIRE REVISION OF THE APPROVED PLANS TO CONFORM WITH CURRENT STANDARDS AND TO POST A NEW BOND IF CONSTRUCTION HAS NOT COMMENCED WITHIN TWO YEARS AFTER PLANS WERE APPROVED.
4. SIDEWALK AND DRIVEWAY APPROACHES WILL BE POURED/CONSTRUCTED ONLY AFTER DRIVEWAY LOCATIONS ARE DETERMINED.

PRIVATE ENGINEERS NOTICE TO CONTRACTOR(S)

1. THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITIES OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A SEARCH OF AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO EXISTING UTILITIES EXCEPT THOSE SHOWN ON THESE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE ALL PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES SHOWN, AND ANY OTHER LINES OR STRUCTURES NOT SHOWN ON THESE PLANS AND IS RESPONSIBLE FOR THE PROTECTION OF, AND ANY DAMAGE TO THESE LINES OR STRUCTURES
2. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO NOTIFY THE OWNER OF ALL UTILITIES OR STRUCTURES CONCERNED BEFORE STARTING WORK.
3. QUANTITIES SHOWN HEREON ARE PROVIDED FOR BIDDING PURPOSES ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL QUANTITIES PRIOR TO BIDDING FOR CONSTRUCTION.
4. THE PRIVATE ENGINEER SIGNING THESE PLANS IS RESPONSIBLE FOR ASSURING THE ACCURACY AND ACCEPTABILITY OF THE DESIGN HEREON. IN THE EVENT OF DISCREPANCIES ARISING AFTER CITY APPROVAL OR DURING CONSTRUCTION, THE PRIVATE ENGINEER SHALL BE RESPONSIBLE FOR DETERMINING AN ACCEPTABLE SOLUTION AND REVISING THE PLANS FOR APPROVAL BY THE CITY.

WORK TO BE DONE

THE IMPROVEMENT WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE FOLLOWING DOCUMENTS, CURRENT AT THE TIME OF CONSTRUCTION, AS DIRECTED BY THE CITY ENGINEER.

1. BEAUMONT MUNICIPAL CODE.
2. FOR STREETS: RIVERSIDE COUNTY ORDINANCE NO. 461.
   FLOOD CONTROL FACILITIES: THE RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT'S STANDARDS FOR FLOOD CONTROL FACILITIES.
   SANITARY SEWER FACILITIES: THE EASTERN MUNICIPAL WATER DISTRICT'S STANDARDS FOR SANITARY SEWER FACILITIES.
   ALL OTHER PUBLIC WORKS: THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREEN BOOK).
3. THIS SET OF PLANS.
4. RESOLUTION NO _____, DATED _____.
5. SOILS REPORT AND RECOMMENDATIONS BY _____, DATED_____.

ALL STANDARD DRAWINGS ARE COUNTY OF RIVERSIDE ROAD IMPROVEMENT STANDARDS & SPECIFICATIONS UNLESS NOTED OTHERWISE:
* RCFC&WCD STANDARD MANUAL.
** EMWD SEWER STANDARD DRAWINGS
*** STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION

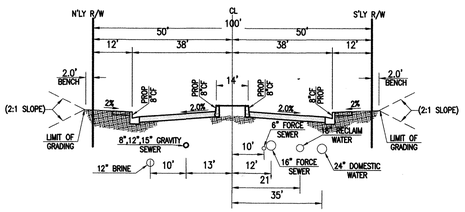
LINE TYPE LEGEND:

8"-15" GRAVITY SEWER MAIN	———
6" SEWER FORCE MAIN	— — —
16" SEWER FORCE MAIN	— — —
12" BRINE LINE	———
24" DOMESTIC WATER MAIN	— — —
18" RECLAIM WATER MAIN	———

"DECLARATION OF RESPONSIBLE CHARGE"

I HEREBY DECLARE THAT I AM THE ENGINEER OF WORK FOR THIS PROJECT, THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER THE DESIGN OF THE PROJECT AS DEFINED IN SECTION 6703 OF THE BUSINESS AND PROFESSIONS CODE, AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS. I UNDERSTAND THAT THE CHECK OF PROJECT DRAWINGS AND SPECIFICATIONS BY THE CITY OF BEAUMONT DOES NOT RELIEVE ME AS ENGINEER OF WORK OF MY RESPONSIBILITIES FOR PROJECT DESIGN.

FIRM: THIENES ENGINEERING, INC.
ADDRESS: 14349 FIRESTONE BLVD.
CITY, ST.: LA MIRADA, CA
TELEPHONE: 714-521-4811
BY: REINHARD STENZEL 56155 DATE: 1/28/19
(NAME OF ENGINEER & RCE)



4TH STREET
N.T.S.

NOTICE TO CONTRACTOR:
ALL WORK TO BE CONSTRUCTED PER THIS PLAN BY PREVAILING WAGES.

THIS PLAN DOES NOT INCLUDE PROPOSED SIDEWALKS, FIRE HYDRANTS, WATER MAINS, GAS LINES, ELECTRICAL LINES OR TELEPHONE LINES.

SEWER CONSTRUCTION NOTES:

		QTY:
1	INSTALL 8" SDR26 PVC SEWER MAIN	163 LF
2	INSTALL 12" SDR26 PVC SEWER MAIN	2,438 LF
3	INSTALL 15" SDR26 PVC SEWER MAIN	119 LF
4	INSTALL 48" SEWER MANHOLE PER COUNTY OF RIVERSIDE STD. 606	11 EA
5	REMOVE EXISTING PLUG AND JOIN EXISTING 8" SEWER MAIN	1 EA
6	INSTALL PLUG AT END OF PIPE	1 EA

AGENCIES	TELEPHONE
AT&T	(909) 776-3914
BEAUMONT-CHERRY VALLEY WATER	(951) 845-9581
CITY OF BEAUMONT	(951) 769-8520
KINDER MORGAN	(714) 560-4400
MCI WORLDCOM	(972) 729-6016
QUESTAR LINE 90 COMPANY	(801) 324-3388
SOUTHERN CALIFORNIA EDISON	(909) 307-6770
SOUTHERN CALIFORNIA GAS COMPANY	(909) 335-7725
VERIZON	(909) 748-6646

ABBREVIATIONS:

A.B.	AGGREGATE BASE	L.P.	LOW POINT
ARCH.	ARCHITECTURAL	M.H.	MANHOLE
A.C.	ASPHALT CONCRETE	N.G.	NATURAL GRADE
B.W.	BACK OF WALK	PKWY DRAIN	PARKWAY DRAIN
B.C.R.	BEGINNING OF CURVE	P.P.	POWER POLE
B.O.P.	BOTTOM OF PIPE	℄	PROPERTY LINE
B.O.W.	BOTTOM OF WALL	P.V.C.	POLYVINYLCHLORIDE
BLDG	BUILDING	R	RATE OF GRADE
C.I.P.	CAST IRON PIPE	R.C.P.	REINFORCED CONCRETE PIPE
C.B.	CATCH BASIN	R.D.	ROOF DRAIN
℄	CENTERLINE	R/W	RIGHT OF WAY
C.L.F.	CHAIN LINK FENCE	S	SLOPE
CONC.	CONCRETE	S.F.	SQUARE FEET
C.M.B.	CRUSHED MISC. BASE	S.D.	STORM DRAIN
C.F.	CURB FACE	ST.LT.	STREET LIGHT
E.P.	EDGE OF PAVEMENT	S.W.	STEM WALL
E.C.R.	END OF CURVE	T.B.	TOP OF BERM
EXIST.	EXISTING	T.C.	TOP OF CURB
(0.00)	EXISTING ELEVATION	T.S.	TOP OF CONCRETE SLAB
F.F.	FINISH FLOOR	T.E.	TRASH ENCLOSURE
F.G.	FINISH GRADE	TRANS PAD	TRANSFORMER PAD
F.S.	FINISH SURFACE	T.F.	TOP OF FOOTING
F.H.	FIRE HYDRANT	T.G.	TOP OF GRATE
F.L.	FLOW LINE	TOE	TOE OF SLOPE
G.B.	GRADE BREAK	TOP	TOP OF SLOPE
H.C.	HANDICAP	T.O.P.	TOP OF PIPE
H	HEIGHT OF RETAINING	T.R.	TOP OF RAIL
H.P.	HIGH POINT	T.W.	TOP OF WALL
INV.	INVERT	X+XX	SEWER STATION
L.S.	LANDSCAPING	[X+XX]	STREET STATION

OWNER INFORMATION:
MCDONALD PROPERTY GROUP
1140 N. COAST HIGHWAY
LAGUNA BEACH, CA 92651
PHONE: (949) 999-2800
FAX: (949) 999-2839

NOTE TO CONTRACTOR:
PRIOR TO CONSTRUCTION OF SEWER AND WATER. THE CONTRACTOR SHALL VERIFY INVERT AND LOCATION OF EXISTING UTILITIES AT POINT OF CONNECTION AND NOTIFY CIVIL ENGINEER IN CASE OF CONFLICT.

PW2018-025D

Last Update: 1/27/19
O:\3400-3499\3496\SEWER-GRAVITY\3496SEWER-GRAVITY-01.dwg

DIGALERT — Call 2 Working Days Before You Dig! 811

BENCHMARK:
NATIONAL GEODETIC SURVEY BENCHMARK NO. "Q 1311"
1.4 MILES WEST OF BEAUMONT ON INTERSTATE 10 TO SAN TIMEOTEO CANYON ROAD NEAR FRONTAGE ROAD ON SOUTHWEST SIDE OF INTERSTATE 10, 0.1 MILES SOUTHEAST ALONG FRONTAGE ROAD, SOUTH AND ACROSS THE ROAD FROM A GUY POLE 25.9 FEET SOUTH OF THE CENTERLINE OF FRONTAGE ROAD, 1.8 FEET WEST OF POWERPOLE AND 1.5 FEET EAST OF A WITNESS POST, INSIDE A 4 INCH PVC PIPE WITH SCREW PLUG 1 INCH ABOVE GROUND (ELEVATION = 2468.07). ALSO SHOWN ON "HIGHWAY 60 / POTRERO BLVD. INTERCHANGE STATIC GPS PROJECT CONTROL DIAGRAM" AND IDENTIFIED THEREON AS 3509 BM DX2474 WHEREIN THE PUBLISHED ELEVATION = 2468.07 IS CORRECTED WITH A MEASURED ELEVATION = 2468.081', USED HEREON.
ELEVATION = 2468.081' (NAVD '88), (STAMPED Q 1311 1978)

BY	MARK	DESCRIPTION	APPR.	DATE
ENGINEER		REVISIONS	CITY	

COMPANY NAME
Thienes Engineering, Inc.
CIVIL ENGINEERING • LAND SURVEYING
14349 FIRESTONE BOULEVARD
LA MIRADA, CALIFORNIA 90638
PH.(714)521-4811 FAX(714)521-4173

REINHARD STENZEL 1/28/19
R.C.E. 56155 EXPIRE 12-31-20 DATE

SEAL: REGISTERED PROFESSIONAL ENGINEER — REINHARD STENZEL — R.C.E. NO. 56155 — Exp. 12-31-20 — CIVIL — STATE OF CALIFORNIA

DESIGN BY: J.P.
DRAWN BY: J.P.
CHECKED BY: R.S.
SCALE:
DATE:
JOB NUMBER:

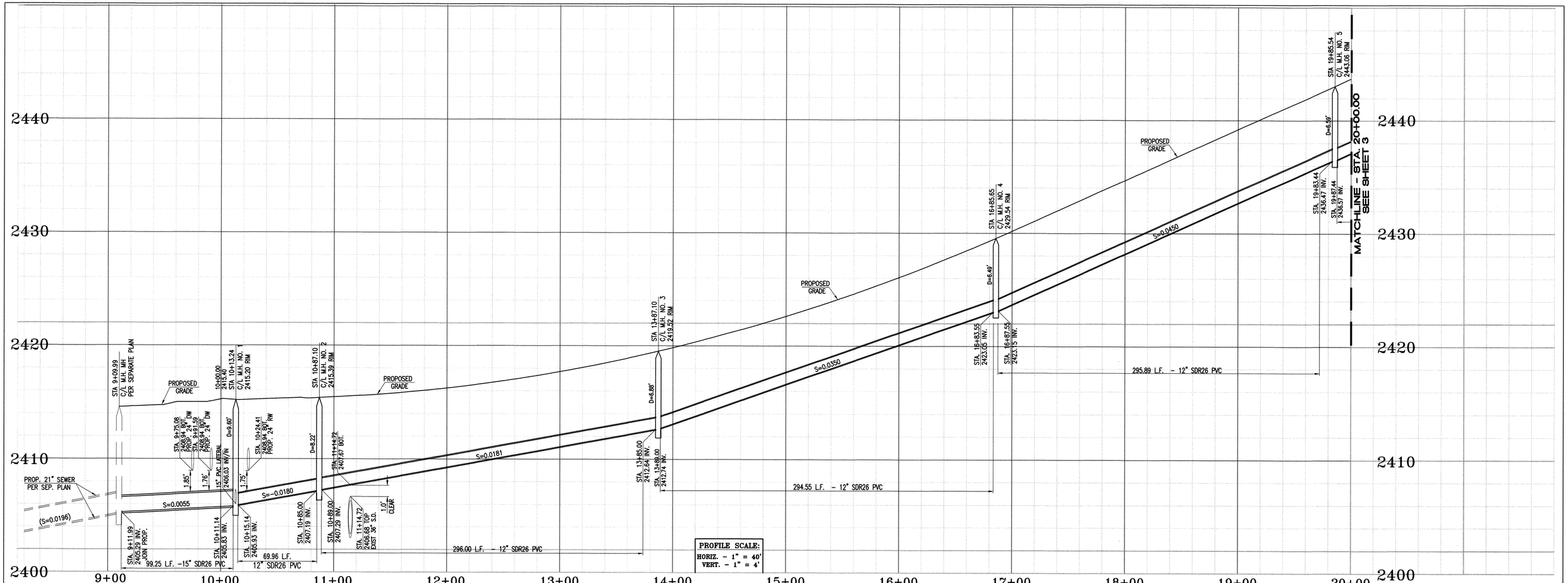
CITY of BEAUMONT — CALIFORNIA INC.NOV.18, 1912

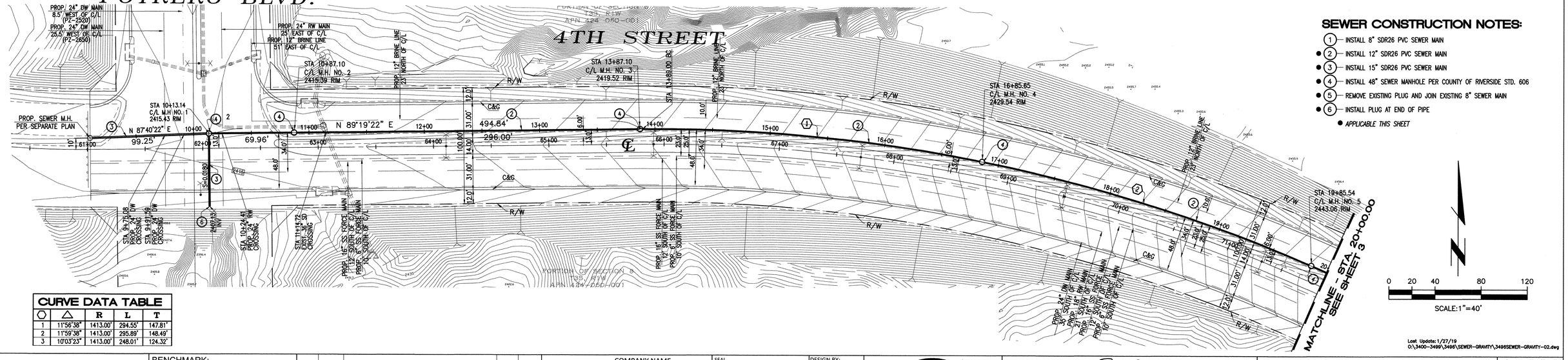
Reviewed By: _____ Staff Engineer Date: 2.1.19
Recommended for Approval By: _____ Administrative Engineer Date: 2.1.19
Approved By: Guadalupe Dojiada City Engineer/Director of Public Works RCE 36980 Date: 2.18.19

CITY OF BEAUMONT, PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION
550E. 6th St
Beaumont, CA 92223
TEL: (951) 769-8520 FAX: (951) 769-8526

CITY OF BEAUMONT, CALIFORNIA
PUBLIC SEWER IMPROVEMENT PLAN
FOR
4TH STREET
FROM POTRERO TO END OF 4TH STREET
TITLE SHEET

SHEET 1 OF 4 SHEETS
FILE NO: 3351





SEWER CONSTRUCTION NOTES:

1. INSTALL 8" SDR26 PVC SEWER MAIN
2. INSTALL 12" SDR26 PVC SEWER MAIN
3. INSTALL 15" SDR26 PVC SEWER MAIN
4. INSTALL 48" SEWER MANHOLE PER COUNTY OF RIVERSIDE STD. 606
5. REMOVE EXISTING PLUG AND JOIN EXISTING 8" SEWER MAIN
6. INSTALL PLUG AT END OF PIPE

● *APPLICABLE THIS SHEET*

CURVE DATA TABLE

○	△	R	L	T
1	11°56'38"	1413.00'	294.55'	147.81'
2	11°59'38"	1413.00'	295.89'	148.49'
3	10°03'23"	1413.00'	248.01'	124.32'

0 20 40 80 120
SCALE:1"=40'

Last Update: 1/27/19
O:\3400-3499\3496\SEWER-GRAVITY\3496SEWER-GRAVITY-02.dwg

DIGALERT
Call 2 Working Days Before You Dig
811

BENCHMARK:

NATIONAL GEODETIC SURVEY BENCHMARK NO. "Q 1311"

1.4 MILES WEST OF BEAUMONT ON INTERSTATE 10 TO SAN TIMEOTEO CANYON ROAD NEAR FRONTAGE ROAD ON SOUTH(WEST) SIDE OF INTERSTATE 10, 0.1 MILES SOUTHEAST ALONG FRONTAGE ROAD, SOUTH AND ACROSS THE ROAD FROM A GUY POLE 25.9 FEET SOUTH OF THE CENTERLINE OF FRONTAGE ROAD, 1.8 FEET WEST OF POWERPOLE AND 1.5 FEET EAST OF A WITNESS POST, INSIDE A 4 INCH PVC PIPE WITH SCREW PLUG 1 INCH ABOVE GROUND (ELEVATION = 2468.07), ALSO SHOWN ON "HIGHWAY 60 / POTRERO BLVD. INTERCHANGE STATIC GPS PROJECT CONTROL DIAGRAM" AND IDENTIFIED THEREON AS 3068 BM DX3474 WHEREIN THE PUBLISHED ELEVATION = 2468.07 IS CORRECTED WITH A MEASURED ELEVATION = 2468.061', USED HEREON.

ELEVATION = 2468.061' (NAVD '88), (STAMPED Q 1311 1978)

BY	MARK	DESCRIPTION	APPR.	DATE
ENGINEER		REVISIONS	CITY	

COMPANY NAME
Thienes Engineering, Inc.
CIVIL ENGINEERING • LAND SURVEYING
14349 FIRESTONE BOULEVARD
LA MIRADA, CALIFORNIA 90638
PH.(714)521-4811 FAX(714)521-4173

REINHARD STENZEL
R.C.E. 56155 EXPIRE 12-31-20
1/28/19
DATE

SEAL
REGISTERED PROFESSIONAL ENGINEER
REINHARD STENZEL
R.C.E. NO. 56155
Exp. 12-31-20
CIVIL
STATE OF CALIFORNIA

DESIGN BY: J.P.
DRAWN BY: J.P.
CHECKED BY: R.S.
SCALE:
DATE:
JOB NUMBER:

CITY of BEAUMONT
CALIFORNIA
INC. NOV. 18, 1912

Reviewed By: [signature] Date: 2.1.19
Staff Engineer
Recommended for Approval By: [signature] Date: 2.1.19
Administrative Engineer
Approved By: Cindy Engineering Director of Public Works Date: 2.18.19
RCE 36488

CITY OF BEAUMONT, PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION
550 E. 6th St.
Beaumont, CA 92223
TEL: (951) 769-8520 FAX: (951) 769-8526

CITY OF BEAUMONT, CALIFORNIA

PUBLIC SEWER IMPROVEMENT PLAN AND PROFILE

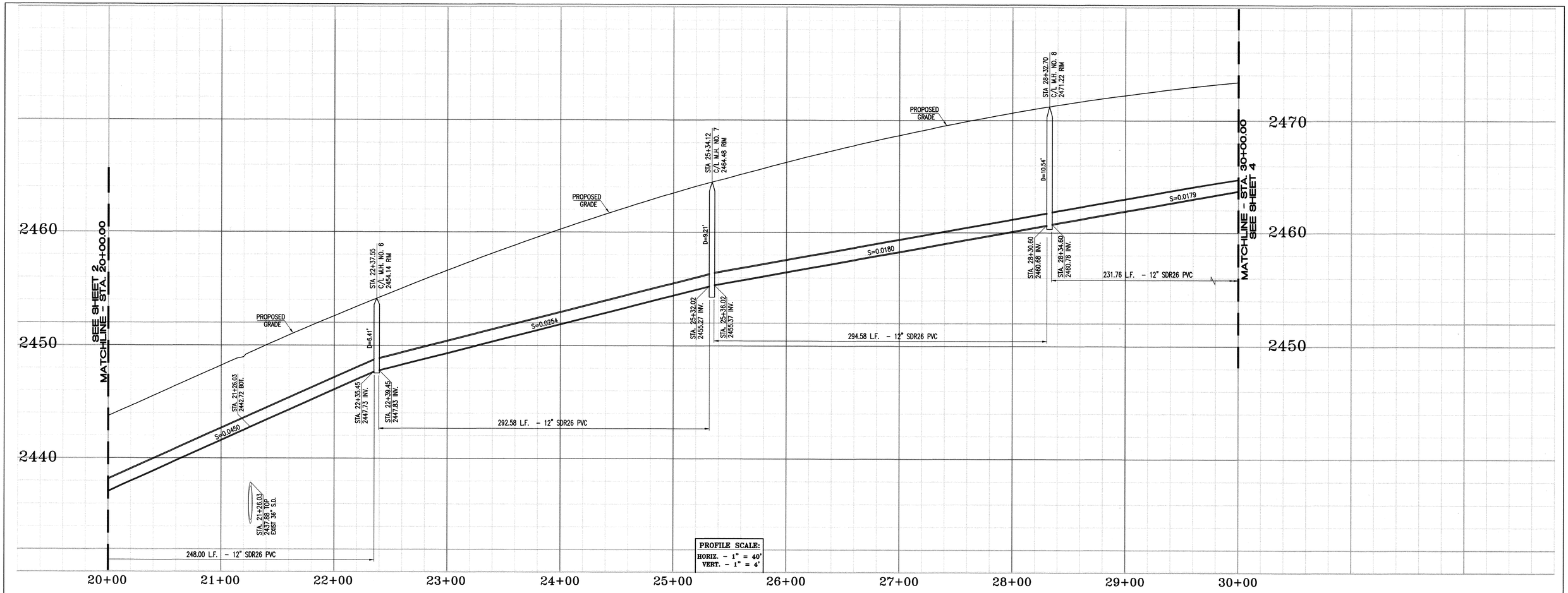
FOR

4TH STREET

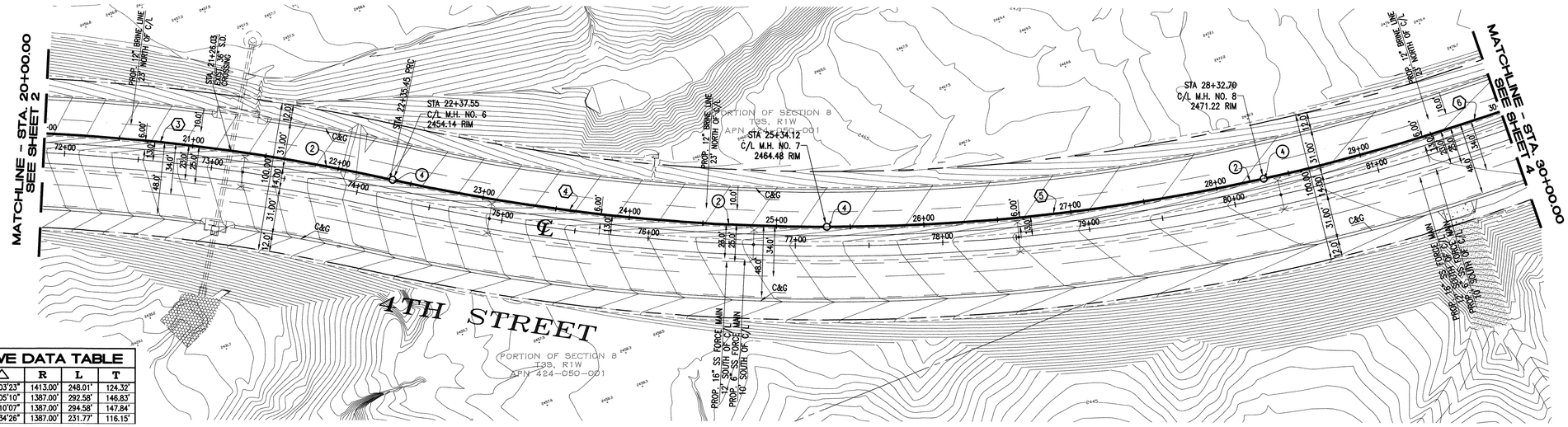
FROM POTRERO TO END OF 4TH STREET

STA. 8+94 TO STA. 20+00

SHEET 2 OF 4 SHEETS
FILE NO: 3251



PROFILE SCALE:
HORIZ. - 1" = 40'
VERT. - 1" = 4'

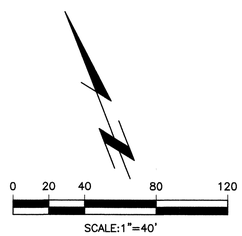


SEWER CONSTRUCTION NOTES:

1. INSTALL 8" SDR26 PVC SEWER MAIN
2. INSTALL 12" SDR26 PVC SEWER MAIN
3. INSTALL 15" SDR26 PVC SEWER MAIN
4. INSTALL 48" SEWER MANHOLE PER COUNTY OF RIVERSIDE STD. 606
5. REMOVE EXISTING PLUG AND JOIN EXISTING 8" SEWER MAIN
6. INSTALL PLUG AT END OF PIPE

● *APPLICABLE THIS SHEET*

CURVE DATA TABLE				
⬡	△	R	L	T
3	10°03'23"	1413.00'	248.01'	124.32'
4	12°05'10"	1387.00'	292.58'	146.83'
5	12°10'07"	1387.00'	294.58'	147.84'
6	09°34'26"	1387.00'	231.77'	116.15'



Last Update: 1/27/19
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DIGALERT
Call 2 Working Days Before You Dig!
811

BENCHMARK:

NATIONAL GEODETIC SURVEY BENCHMARK NO. "Q 1311"

1.4 MILES WEST OF BEAUMONT ON INTERSTATE 10 TO SAN TIMEOTEO CANYON ROAD NEAR FRONTAGE ROAD ON SOUTHWEST SIDE OF INTERSTATE 10, 0.1 MILES SOUTHEAST ALONG FRONTAGE ROAD, SOUTH AND ACROSS THE ROAD FROM A GUY POLE 25.9 FEET SOUTH OF THE CENTERLINE OF FRONTAGE ROAD, 1.8 FEET WEST OF POWERPOLE AND 1.5 FEET EAST OF A WITNESS POST, INSIDE A 4 INCH PVC PIPE WITH SCREW PLUG 1 INCH ABOVE GROUND (ELEVATION = 2468.07). ALSO SHOWN ON "HIGHWAY 60 / POTRERO BLVD. INTERCHANGE STATIC GPS PROJECT CONTROL DIAGRAM" AND IDENTIFIED THEREON AS 3508 BM DX3474 WHEREIN THE PUBLISHED ELEVATION = 2468.07 IS CORRECTED WITH A MEASURED ELEVATION = 2468.061', USED HEREON.

ELEVATION = 2468.061' (NAVD '88), (STAMPED Q 1311 1978)

BY	MARK	DESCRIPTION	APPR.	DATE
ENGINEER		REVISIONS	CITY	

COMPANY NAME
Thienes Engineering, Inc.
CIVIL ENGINEERING • LAND SURVEYING
14349 FIRESTONE BOULEVARD
LA MIRADA, CALIFORNIA 90638
PH.(714)521-4811 FAX(714)521-4173

REINHARD STENZEL
R.C.E. 56155 EXPIRE 12-31-20
1/22/19 DATE

SEAL
REGISTERED PROFESSIONAL ENGINEER
REINHARD STENZEL
R.C.E. NO. 56155
Exp. 12-31-20
CIVIL
STATE OF CALIFORNIA

DESIGN BY: J.P.
DRAWN BY: J.P.
CHECKED BY: R.S.
SCALE:
DATE:
JOB NUMBER:

CITY of BEAUMONT
CALIFORNIA
INC.NOV.18, 1912

Reviewed By: J.C.S. Staff Engineer Date: 2.1.19
Recommended for Approval By: J.C.S. Administrative Engineer Date: 2.1.19
Approved By: Gyedalupe D. Ortiz City Engineer/Director of Public Works RCE 36198 Date: 2.18.19

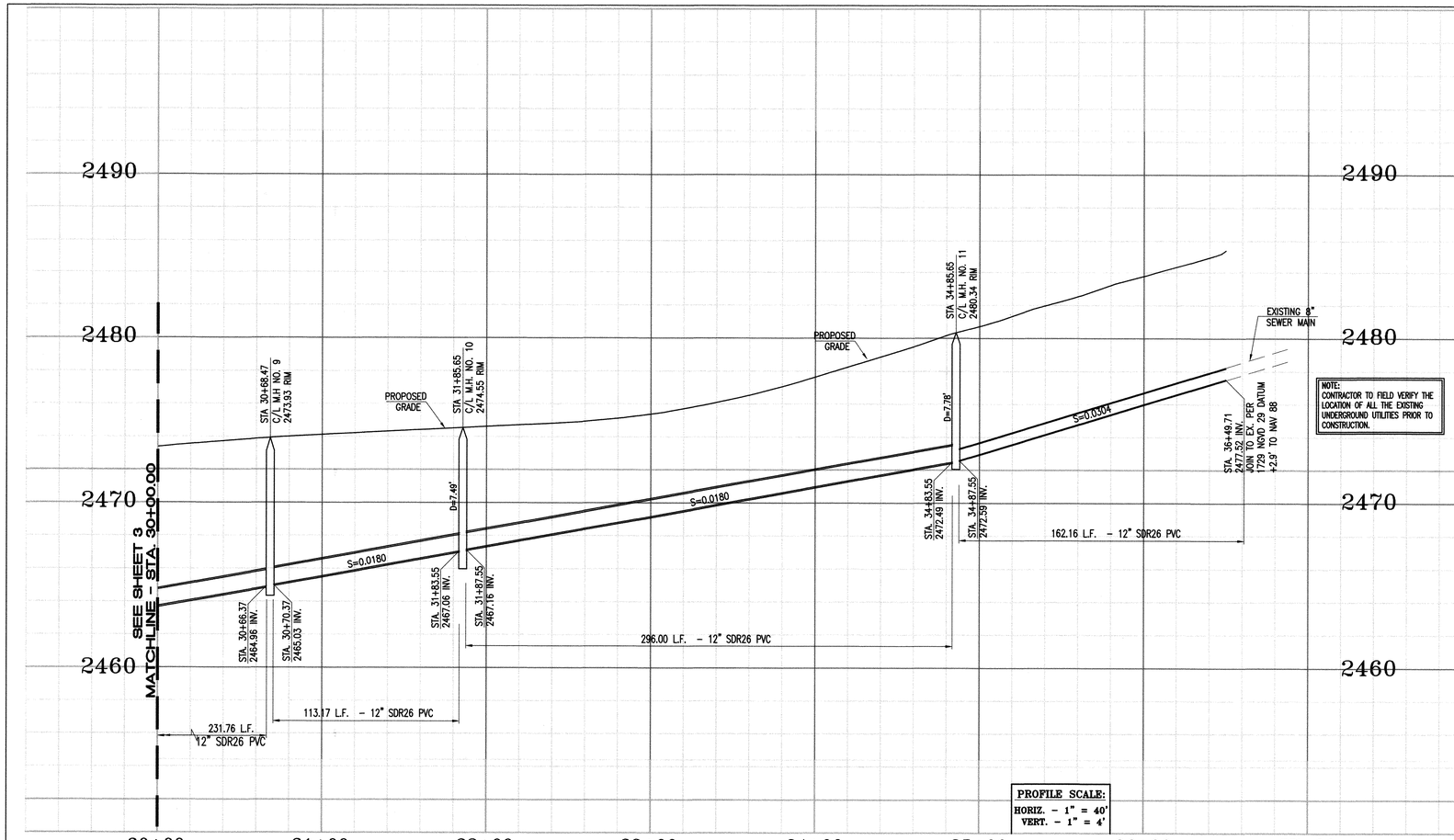
CITY OF BEAUMONT, PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION
550E. 6th St
Beaumont, CA 92223
TEL: (951) 769-8520 FAX: (951) 769-8526

CITY OF BEAUMONT, CALIFORNIA

PUBLIC SEWER IMPROVEMENT PLAN AND PROFILE
FOR
4TH STREET
FROM POTRERO TO END OF 4TH STREET

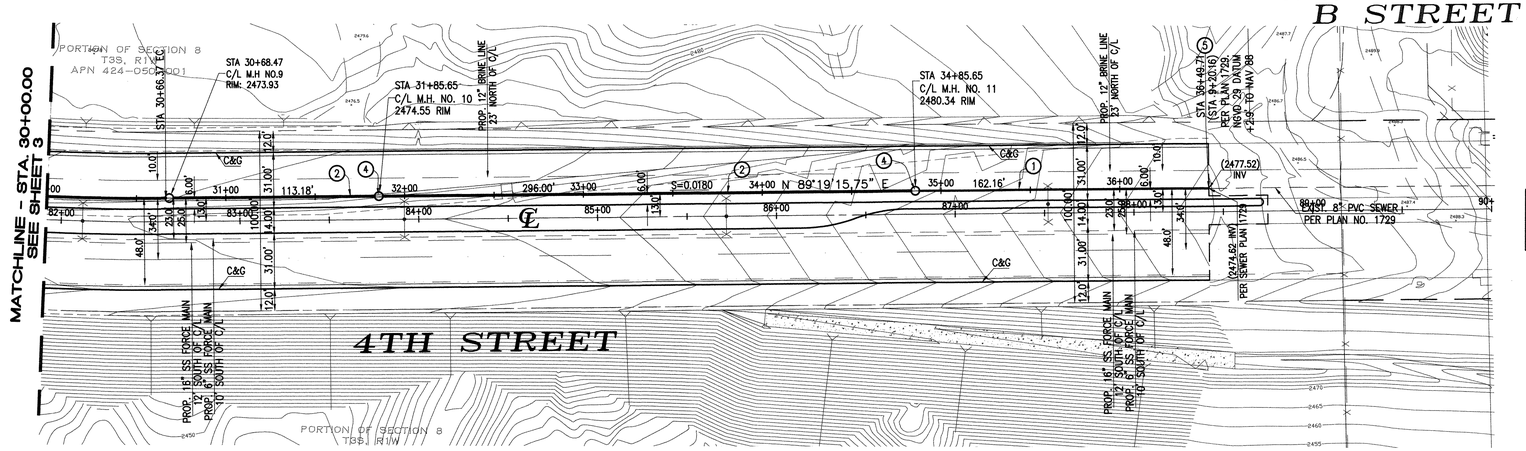
STA. 20+00 TO STA. 30+00

SHEET 3 OF 4 SHEETS
FILE NO: 3251



NOTE:
CONTRACTOR TO FIELD VERIFY THE LOCATION OF ALL THE EXISTING UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.

PROFILE SCALE:
HORIZ. - 1" = 40'
VERT. - 1" = 4'

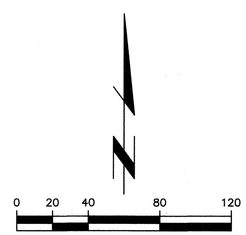


NOTE:
CONTRACTOR TO FIELD VERIFY THE LOCATION OF ALL THE EXISTING UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.

SEWER CONSTRUCTION NOTES:

- (1) INSTALL 8" SDR26 PVC SEWER MAIN
- (2) INSTALL 12" SDR26 PVC SEWER MAIN
- (3) INSTALL 15" SDR26 PVC SEWER MAIN
- (4) INSTALL 48" SEWER MANHOLE PER COUNTY OF RIVERSIDE STD. 606
- (5) REMOVE EXISTING PLUG AND JOIN EXISTING 8" SEWER MAIN
- (6) INSTALL PLUG AT END OF PIPE

● *APPLICABLE THIS SHEET*



Last Update: 1/27/19
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DIGALERT
Call 2 Working Days Before You Dig!
811

BENCHMARK:

NATIONAL GEODETIC SURVEY BENCHMARK NO. "Q 1311"

1.4 MILES WEST OF BEAUMONT ON INTERSTATE 10 TO SAN TIMEOTEO CANYON ROAD NEAR FRONTAGE ROAD ON SOUTHWEST SIDE OF INTERSTATE 10, 0.1 MILES SOUTHEAST ALONG FRONTAGE ROAD, SOUTH AND ACROSS THE ROAD FROM A GUY POLE 25.9 FEET SOUTH OF THE CENTERLINE OF FRONTAGE ROAD, 1.8 FEET WEST OF POWERPOLE AND 1.5 FEET EAST OF A WITNESS POST, INSIDE A 4 INCH PVC PIPE WITH SCREW PLUG 1 INCH ABOVE GROUND (ELEVATION = 2468.07). ALSO SHOWN ON "HIGHWAY 60 / POTRERO BLVD. INTERCHANGE STATIC GPS PROJECT CONTROL DIAGRAM" AND IDENTIFIED THEREON AS 3508 BM DX3474 WHEREIN THE PUBLISHED ELEVATION = 2468.07 IS CORRECTED WITH A MEASURED ELEVATION = 2468.061', USED HEREON.

ELEVATION = 2468.061' (NAVD '88), (STAMPED Q 1311 1978)

BY	MARK	DESCRIPTION	APPR.	DATE
ENGINEER		REVISIONS	CITY	

COMPANY NAME
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CIVIL ENGINEERING • LAND SURVEYING
14349 FIRESTONE BOULEVARD
LA MIRADA, CALIFORNIA 90638
PH.(714)521-4811 FAX(714)521-4173

REINHARD STENZEL
R.C.E. 56155 EXPIRE 12-31-20
1/28/19 DATE

SEAL: REGISTERED PROFESSIONAL ENGINEER · REINHARD STENZEL · R.C.E. NO. 56155 · Exp. 12-31-20 · CIVIL · STATE OF CALIFORNIA

DESIGN BY:	J.P.
DRAWN BY:	J.P.
CHECKED BY:	R.S.
SCALE:	
DATE:	
JOB NUMBER:	

CITY of BEAUMONT · CALIFORNIA INC. NOV. 18, 1912

Reviewed By: _____ Date: 2.1.19
Staff Engineer

Recommended for Approval By: _____ Date: 2.1.19
Administrative Engineer

Approved By: _____ Date: 2.18.19
City Engineer/Director of Public Works
RCE 36988

CITY OF BEAUMONT, PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION
550E. 6th St
Beaumont, CA 92223
TEL: (951) 769-8520 FAX: (951) 769-8526

CITY OF BEAUMONT, CALIFORNIA

PUBLIC SEWER IMPROVEMENT PLAN AND PROFILE

FOR

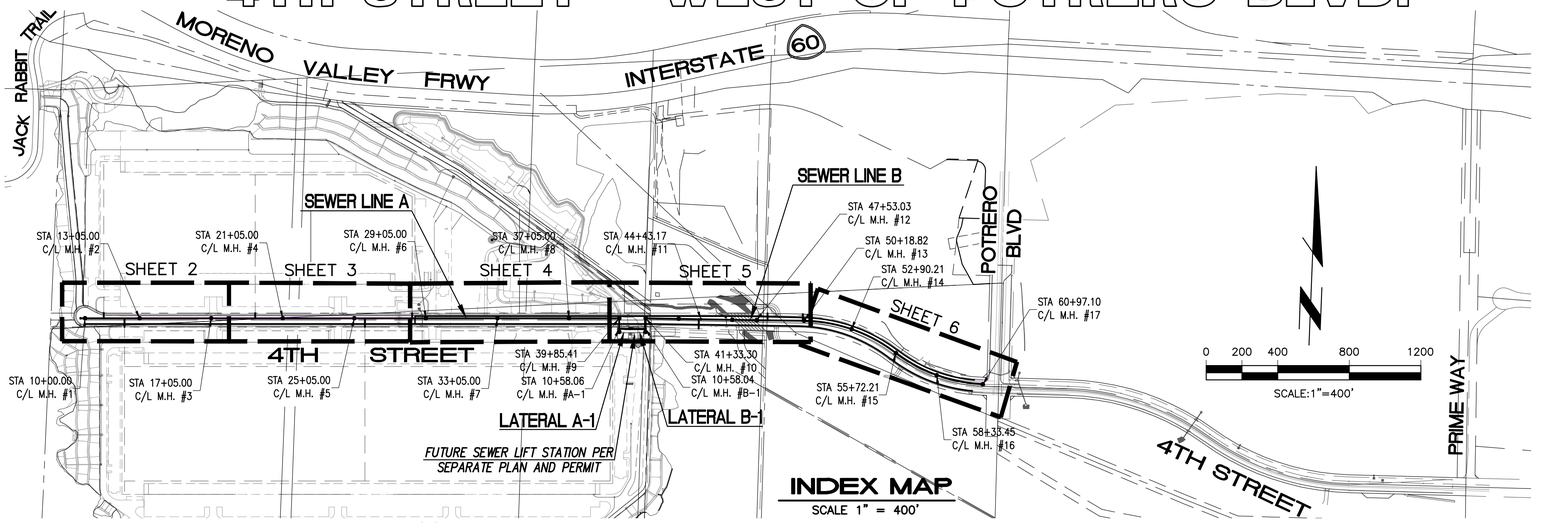
4TH STREET

FROM POTRERO TO END OF 4TH STREET

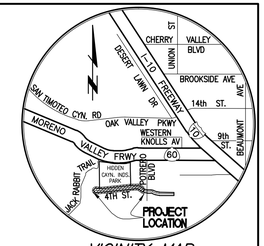
STA. 30+00 TO STA. 36+49.71

SHEET 4 OF 4 SHEETS
FILE NO: 3251

CITY OF BEAUMONT, CA
PUBLIC SEWER IMPROVEMENT PLAN
4TH STREET - WEST OF POTRERO BLVD.



INDEX MAP
SCALE 1" = 400'



VICINITY MAP

SHEET INDEX

1	TITLE SHEET
2	SEWER LINE 'A' PLAN & PROFILE STA 9+74.00 TO STA 19+00.00
3	SEWER LINE 'A' PLAN & PROFILE STA 19+00.00 TO STA 28+00.00
4	SEWER LINE 'A' PLAN & PROFILE STA 28+00.00 TO STA 39+00.00
5	SEWER LINE 'A' PLAN & PROFILE STA 39+00.00 TO STA 39+85.41 SEWER LINE 'B' PLAN & PROFILE STA 41+33.30 TO STA 50+00.00
6	SEWER LINE 'B' PLAN & PROFILE STA 50+00.00 TO STA 60+99.10
7	SEWER LATERAL 'A-1' PLAN & PROFILE STA 10+00.00 TO 11+34.96 SEWER LATERAL 'B-1' PLAN & PROFILE STA 10+00.00 TO 11+39.69

SEWER CONSTRUCTION NOTES:

		QTY:
1	INSTALL 6" SDR26 PVC SEWER LATERAL	364 LF
2	INSTALL 15" SDR26 PVC SEWER MAIN	2,062 LF
3	INSTALL 12" SDR26 PVC SEWER MAIN	3,093 LF
4	INSTALL 48" SEWER MANHOLE PER E.M.W.D. SB-53	20 EA
5	INSTALL PLUG AT END OF PIPE	12 EA
6	REMOVE EXISTING PLUG AND JOIN EXISTING 15" SEWER MAIN	1 EA
7	INSTALL CLEAN OUT PER E.M.W.D. SB-52	10 EA

AGENCIES — TELEPHONE

BEAUMONT-CHERRY VALLEY WATER..... (951) 845-9581
CITY OF BEAUMONT..... (951) 769-8520
KINDER MORGAN..... (951) 712-8842
MCI WORLDCOM..... (972) 729-6016
QUESTAR PIPELINE COMPANY..... (307) 352-7115
SOUTHERN CALIFORNIA EDISON..... (909) 307-6710
SOUTHERN CALIFORNIA GAS COMPANY..... (909) 335-7755
FRONTIER COMMUNICATIONS..... (909) 217-0116

GENERAL NOTES

1. THIS PLAN SUPERSEDES ALL OTHER PLANS PREVIOUSLY APPROVED BY THE CITY OF BEAUMONT REGARDING IMPROVEMENTS SHOWN ON THIS SET OF PLANS.
2. APPROVAL OF THIS PLAN DOES NOT LESSEN OR WAIVE ANY PORTION OF THE BEAUMONT MUNICIPAL CODE, RESOLUTION OF CONDITIONAL APPROVAL, CITY STANDARDS OR OTHER ADDITIONAL DOCUMENTS LISTED HEREIN AS THEY MAY PERTAIN TO THIS PROJECT. THE ENGINEER IN RESPONSIBLE CHARGE SHALL REVISE THESE PLANS WHEN NON-CONFORMANCE IS DISCOVERED.
3. CITY APPROVAL OF PLANS DOES NOT RELIEVE THE DEVELOPER OR ENGINEER- OF-WORK FROM RESPONSIBILITY FOR THE CORRECTION OF ERRORS AND OMISSIONS DISCOVERED DURING CONSTRUCTION. ALL PLAN REVISIONS SHALL BE PROMPTLY SUBMITTED TO THE CITY ENGINEER FOR APPROVAL.
4. A RIGHT-OF-WAY PERMIT FROM THE BUILDING & SAFETY DEPARTMENT WILL BE REQUIRED FOR ANY WORK IN THE PUBLIC RIGHT OF WAY. PRIOR TO PERMIT ISSUANCE, A CERTIFICATE OF INSURANCE MUST BE FILED NAMING THE CITY OF BEAUMONT AS AN ADDITIONAL INSURED ON THE PERMITTEE'S POLICY IN THE MINIMUM AMOUNT OF $1,000,000.00 FOR EACH OCCURRENCE OF LIABILITY. THE INSURANCE COMPANY WRITING THE POLICY MUST HAVE A RATING OF "A-" OR BETTER AND A SIZE CATEGORY OF CLASS VII OR BETTER AS ESTABLISHED BY "BESTS" KEY RATING GUIDE.
5. NO WORK SHALL BE COMMENCED UNTIL ALL PERMITS HAVE BEEN OBTAINED FROM THE CITY AND OTHER APPROPRIATE AGENCIES.
6. REVISION OF THESE PLANS MAY BE REQUIRED IF THE PROPOSED IMPROVEMENTS ARE NOT CONSTRUCTED PRIOR TO THE DEADLINE DATE OF THE IMPROVEMENT AGREEMENT.
7. NO REVISIONS WILL BE MADE TO THESE PLANS WITHOUT THE WRITTEN APPROVAL OF THE CITY ENGINEER, NOTED WITHIN THE REVISION BLOCK, ON THE APPROPRIATE SHEET OF THE PLANS AND TITLE SHEET.
8. ORIGINAL DRAWINGS SHALL BECOME THE PROPERTY OF THE CITY UPON BEING SIGNED BY THE CITY ENGINEER.
9. THE ORIGINAL DRAWING SHALL BE REVISED TO REFLECT AS-BUILT CONDITIONS BY THE ENGINEER-OF-WORK PRIOR TO FINAL ACCEPTANCE OF THE WORK BY THE CITY.
10. ACCESS FOR FIRE AND OTHER EMERGENCY VEHICLES SHALL BE MAINTAINED TO THE PROJECT SITE AT ALL TIMES DURING CONSTRUCTION.
11. WHERE TRENCHES ARE WITHIN CITY EASEMENTS, A SOILS REPORT COMPRISED OF:
    A. SUMMARY SHEET
    B. LABORATORY WORK SHEETS
    C. COMPACTION CURVES, SHALL BE SUBMITTED BY A PROFESSIONAL ENGINEER OF THE STATE OF CALIFORNIA, PRINCIPALLY DOING BUSINESS IN THE FIELD OF APPLIED SOILS MECHANICS. THE SOILS REPORT WILL BE SUBMITTED TO THE CITY ENGINEERING INSPECTOR WITHIN TWO WORKING DAYS OF COMPLETION OF FIELD TESTS. THE WRITTEN FIELD COMPACTION REPORT(S) SHALL BE IMMEDIATELY SUBMITTED TO THE CITY ENGINEERING INSPECTOR UPON COMPLETION OF THE FIELD TESTS.
12. A PRECONSTRUCTION MEETING SHALL BE HELD AT THE SITE PRIOR TO THE BEGINNING OF WORK AND SHALL BE ATTENDED BY ALL REPRESENTATIVES RESPONSIBLE FOR CONSTRUCTION, INSPECTION, SUPERVISION, TESTING AND ALL OTHER ASPECTS OF THE WORK. THE CONTRACTOR SHALL SCHEDULE THE MEETING BY CALLING THE INSPECTION LINE AT (951) 572-3224 AT LEAST FIVE (5) WORKING DAYS PRIOR TO STARTING CONSTRUCTION. APPROVED DRAWINGS MUST BE AVAILABLE PRIOR TO SCHEDULING.
13. ALL INSPECTION REQUESTS OTHER THAN FOR THE PRECONSTRUCTION MEETING WILL BE MADE BY CALLING THE BUILDING AND SAFETY INSPECTION REQUEST LINE AT (951) 572-3224. INSPECTION REQUESTS MUST BE RECEIVED PRIOR TO 2:00 P.M. ON THE DAY BEFORE THE INSPECTION IS NEEDED. INSPECTIONS WILL BE MADE THE NEXT WORK DAY UNLESS YOU REQUEST OTHERWISE. REQUESTS MADE AFTER 2:00 P.M. WILL BE SCHEDULED FOR TWO FULL WORK DAYS LATER.
14. THE OWNER AND/OR APPLICANT THROUGH THE DEVELOPER AND/OR CONTRACTOR SHALL DESIGN, CONSTRUCT AND MAINTAIN ALL SAFETY DEVICES, INCLUDING SHORING, AND SHALL BE SOLELY RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS AND REGULATIONS.
15. THE CONTRACTOR SHALL CONFORM TO LABOR CODE SECTION 6705 BY SUBMITTING A DETAIL PLAN TO THE CITY ENGINEER AND/OR CONCERNED AGENCY SHOWING THE DESIGN OF SHORING, BRACING SLOPE OR OTHER PROVISIONS TO BE MADE OF WORKER PROTECTION FROM THE HAZARD OF CAVING GROUND DURING THE EXCAVATION OF SUCH TRENCH OR TRENCHES OR DURING THE PIPE INSTALLATION THEREIN. THIS PLAN MUST BE PREPARED FOR ALL TRENCHES FIVE FEET (5') OR MORE IN DEPTH AND APPROVED BY THE CITY ENGINEER AND/OR CONCERNED AGENCY PRIOR TO EXCAVATION. IF THE PLAN VARIES FROM THE SHORING SYSTEM STANDARDS ESTABLISHED BY THE CONSTRUCTION SAFETY ORDERS, TITLE 8 CALIFORNIA ADMINISTRATIVE CODE, THE PLAN SHALL BE PREPARED BY A REGISTERED ENGINEER AT THE CONTRACTORS EXPENSE. A COPY OF THE OSHA EXCAVATION PERMIT MUST BE SUBMITTED TO THE INSPECTOR PRIOR TO EXCAVATION.
16. IF ANY ARCHAEOLOGICAL RESOURCES ARE DISCOVERED WITHIN ANY WORK ZONE DURING CONSTRUCTION, OPERATIONS WILL CEASE IMMEDIATELY, AND THE PERMITTEE WILL NOTIFY THE CITY ENGINEER. OPERATIONS WILL NOT RESTART UNTIL THE PERMITTEE HAS RECEIVED WRITTEN AUTHORITY FROM THE CITY ENGINEER TO DO SO.
17. ALL OPERATIONS CONDUCTED ON THE SITE OR ADJACENT THERETO SHALL ADHERE TO THE NOISE ORDINANCE SET FORTH BY THE CITY MUNICIPAL CODE. ALL OPERATIONS SHALL BE LIMITED BY THE NOISE ORDINANCE TO THE LEVEL OF DECIBELS SPECIFIED FOR THE AREA AND TIME PERIOD. CONSTRUCTION ACTIVITIES WILL BE LIMITED TO THE PERIOD BETWEEN 7:00 A.M. AND 6:00 P.M. EACH DAY MONDAY THROUGH FRIDAY, UNLESS OTHERWISE PERMITTED.
18. ALL OFF-SITE HAUL ROUTES SHALL BE SUBMITTED BY THE CONTRACTOR TO THE CITY ENGINEER FOR APPROVAL TWO FULL WORKING DAYS PRIOR TO BEGINNING OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DEBRIS OR DAMAGE OCCURRING ALONG THE HAUL ROUTE OR ADJACENT STREETS AS A RESULT OF THE GRADING OPERATION.
19. NO BLASTING SHALL BE COMMENCED WITHOUT A CITY ENGINEER APPROVED BLASTING PROGRAM AND BLASTING PERMIT.
20. THE EXISTENCE AND LOCATION OF UTILITY STRUCTURES AND FACILITIES SHOWN ON THE CONSTRUCTION PLANS WERE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. ATTENTION IS CALLED TO THE POSSIBLE EXISTENCE OF OTHER UTILITY FACILITIES OR STRUCTURES NOT SHOWN OR IN A LOCATION DIFFERENT FROM THAT SHOWN ON THE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES SHOWN ON THE PLANS AND ANY OTHER EXISTING FACILITIES OR STRUCTURES NOT SHOWN.
21. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING FACILITIES (ABOVEGROUND AND UNDERGROUND) WITHIN THE PROJECT SITE SUFFICIENTLY AHEAD OF THE CONSTRUCTION TO PERMIT THE REVISIONS OF THE CONSTRUCTION PLANS IF IT IS FOUND THAT THE ACTUAL LOCATIONS ARE IN CONFLICT WITH THE PROPOSED WORK.
22. THE CONTRACTOR SHALL NOTIFY AFFECTED UTILITY COMPANIES (SEE BELOW) AT LEAST TWO FULL WORKING DAYS PRIOR TO STARTING CONSTRUCTION NEAR THEIR FACILITIES AND SHALL COORDINATE WORK WITH A COMPANY REPRESENTATIVE.

UNDERGROUND SERVICE ALERT	(800) 422-4133
SOUTHERN CALIFORNIA EDISON	(800) 409-2365
AT&T	(800) 892-0123
TIME WARNER CABLE	(760) 340-2225
COX COMMUNICATIONS	(888) 423-3913

23. IN ACCORDANCE THE CITY STORM WATER STANDARDS ALL STORM DRAIN INLETS CONSTRUCTED BY THIS PLAN SHALL INCLUDE "STENCILS" BE ADDED TO PROHIBIT WASTE DISCHARGE DOWNSTREAM. STENCILS SHALL BE ADDED TO THE SATISFACTION OF THE CITY ENGINEER.

NOTE

1. APPROVAL OF THESE PLANS APPLIES ONLY WITHIN THE JURISDICTION OF THE CITY OF BEAUMONT.
2. TRENCHING FOR UTILITIES AND STRUCTURES IS NOT ALLOWED UNTIL SOIL COMPACTION REPORT IS SUBMITTED AND APPROVED BY THE PUBLIC WORKS DEPARTMENT.
3. THE CITY RESERVES THE RIGHT TO REQUIRE REVISION OF THE APPROVED PLANS TO CONFORM WITH CURRENT STANDARDS AND TO POST A NEW BOND IF CONSTRUCTION HAS NOT COMMENCED WITHIN TWO YEARS AFTER PLANS WERE APPROVED.
4. SIDEWALK AND DRIVEWAY APPROACHES WILL BE POURED/CONSTRUCTED ONLY AFTER DRIVEWAY LOCATIONS ARE DETERMINED.

PRIVATE ENGINEERS NOTICE TO CONTRACTOR(S)

1. THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITIES OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A SEARCH OF AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO EXISTING UTILITIES EXCEPT THOSE SHOWN ON THESE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE ALL PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES SHOWN, AND ANY OTHER LINES OR STRUCTURES NOT SHOWN ON THESE PLANS AND IS RESPONSIBLE FOR THE PROTECTION OF, AND ANY DAMAGE TO THESE LINES OR STRUCTURES
2. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO NOTIFY THE OWNER OF ALL UTILITIES OR STRUCTURES CONCERNED BEFORE STARTING WORK.
3. QUANTITIES SHOWN HEREON ARE PROVIDED FOR BIDDING PURPOSES ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL QUANTITIES PRIOR TO BIDDING FOR CONSTRUCTION.
4. THE PRIVATE ENGINEER SIGNING THESE PLANS IS RESPONSIBLE FOR ASSURING THE ACCURACY AND ACCEPTABILITY OF THE DESIGN HEREON. IN THE EVENT OF DISCREPANCIES ARISING AFTER CITY APPROVAL OR DURING CONSTRUCTION, THE PRIVATE ENGINEER SHALL BE RESPONSIBLE FOR DETERMINING AN ACCEPTABLE SOLUTION AND REVISING THE PLANS FOR APPROVAL BY THE CITY.

WORK TO BE DONE

THE IMPROVEMENT WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE FOLLOWING DOCUMENTS, CURRENT AT THE TIME OF CONSTRUCTION, AS DIRECTED BY THE CITY ENGINEER.

1. BEAUMONT MUNICIPAL CODE.
2. FOR STREETS: RIVERSIDE COUNTY ORDINANCE NO. 461.
   FLOOD CONTROL FACILITIES: THE RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT'S STANDARDS FOR FLOOD CONTROL FACILITIES.
   SANITARY SEWER FACILITIES: THE EASTERN MUNICIPAL WATER DISTRICT'S STANDARDS FOR SANITARY SEWER FACILITIES.
   ALL OTHER PUBLIC WORKS: THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREEN BOOK).
3. THIS SET OF PLANS.
4. RESOLUTION NO 16-PP-02, DATED 9/16/2016
5. SOILS REPORT AND RECOMMENDATIONS BY KLING CONSULTING GROUP, DATED 5/1/2017,

ALL STANDARD DRAWINGS ARE COUNTY OF RIVERSIDE ROAD IMPROVEMENT STANDARDS & SPECIFICATIONS UNLESS NOTED OTHERWISE:
* RCFC&WCD STANDARD MANUAL
** EMWD SEWER STANDARD DRAWINGS
*** STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION

SEWER NOTES

1. SEWER SYSTEM CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH EASTERN MUNICIPAL WATER DISTRICT (EMWD'S) STANDARDS AND SPECIFICATIONS.
2. GRAVITY SEWER PROFILE ELEVATIONS ARE TO FLOW LINE (CONDUIT INVERT). FORCE MAIN PROFILE ELEVATIONS ARE TO TOP OF PIPE (TOP).
3. CONTRACTOR HAS THE OPTION TO INSTALL PLASTIC OR VCP SEWERS EXCEPT WHERE SPECIFICALLY DESIGNATED ON PLANS PER EMWD STANDARDS AND SPECIFICATIONS.
4. MANHOLES SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD DRAWINGS SB-53, SB-58, AND SB-61, AS APPLICABLE. SEWER MAINS MAY BE LAID THROUGH THE MANHOLES AND USED AS A FORM FOR THE INVERT.
5. MANHOLES OF DEPTHS LESS THAN FIVE FEET FROM FINISH STREET GRADE TO SEWER PIPE SHELF ARE TO BE CONSTRUCTED IN ACCORDANCE WITH STANDARD DRAWING SB-30.
6. ALL LATERALS SHALL HAVE AN ON-SITE CLEANOUT IN ACCORDANCE WITH STANDARD DRAWING SB-52. IN ADDITION, FOR LATERALS SERVING INDUSTRIAL AND/OR COMMERCIAL DEVELOPMENTS, THE REQUIREMENTS FOR SAMPLING AND/OR PRETREATMENT FACILITIES SHALL BE DETERMINED BY CONTRACTING THE BUILDING AND SAFETY DEPARTMENT.
7. MAINLINE CLEANOUTS, WHERE CALLED FOR ON THE PLANS, SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD DRAWING SB-52.
8. PRIOR TO CONSTRUCTION OF SEWER, CONTRACTOR SHALL EXPOSE EXISTING SEWER AND VERIFY ITS EXISTING ELEVATION AND LOCATION. WHEN CONNECTING TO EXISTING MANHOLES AND INLET STUB OF PROPER SIZE EXISTS, NO ALTERATIONS SHALL BE MADE TO EXISTING MANHOLE BASE OR STUB EXCEPT AS SPECIFICALLY AUTHORIZED BY THE CITY INSPECTOR.
9. ALL SEWER INLETS AT THE MANHOLE SHALL BE SUCH THAT ITS CROWN SHALL BE LEVEL WITH THE CROWN OF THE OUTLET PIPE, AT THEIR PROJECTIONS TO THE MANHOLE CENTERLINE.
10. RECONSTRUCTION OF EXISTING MANHOLES SHALL BE SCHEDULED AT THE CONVENIENCE OF THE CITY AND SHALL BE COMPLETED WITHIN FIVE WORKING DAYS FOLLOWING ITS COMMENCEMENT.
11. SEWER LATERALS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SB-177. LOCATIONS OF WYES AND LATERALS, WHERE NOT SHOWN ON THE PLANS, ARE TO BE DETERMINED IN THE FIELD PRIOR TO CONSTRUCTION TO MISS DRIVEWAYS. ALL LATERALS ARE TO BE 4" IN DIAMETER UNLESS OTHERWISE SHOWN ON PLANS. CONNECTIONS OF NEW LATERALS TO EXISTING SEWER ARE TO BE PER STANDARD DRAWING SB-176.
12. THE CONTRACTOR IS ADVISED THAT THE WORK ON THIS PROJECT MAY INVOLVE WORKING IN A CONFINED AIR SPACE. CONTRACTOR SHALL BE RESPONSIBLE FOR "CONFINED AIR SPACE" ARTICLE 108, TITLE 8, CALIFORNIA ADMINISTRATIVE CODE.
13. WHERE GROUNDWATER IS ENCOUNTERED, ALL VCP PIPE SHALL BE TREATED FOR ABSORPTION RESISTANCE PER EMWD'S SPECIFICATIONS.
14. BACKWATER VALVES SHALL BE INSTALLED PER SECTION 710.1 OF THE UNIFORM PLUMBING CODE.
15. ALL PIPE ZONE BEDDING AND TRENCH BACKFILL ARE TO BE PER STANDARD DRAWING SB-157, SB-158, AND SB-159.
16. ALL MANHOLE AND CLEANOUT COVERS WITHIN PAVED AREAS SHALL BE ADJUSTED TO FINISHED GRADES AFTER PAVING IS COMPLETED; AND SUCH ADJUSTMENTS SHALL BE DONE IN A MANNER AS TO PREVENT ENTRY OF SILT AND/OR DEBRIS INTO THE SEWER SYSTEM. A CONCRETE COLLAR AROUND SEWER MANHOLES 12" THICK AND 12" WIDE MUST BE PROVIDED.

LINE TYPE LEGEND:

PROPOSED GRAVITY SEWER MAIN	SF
PROPOSED SEWER FORCE MAIN	SF
PROPOSED DOMESTIC WATER MAIN	DW
PROPOSED RECLAIM WATER MAIN	RW
EXISTING GRAVITY SEWER MAIN	(SS)
EXISTING DOMESTIC WATER MAIN	(DW)
EXISTING RECLAIM WATER MAIN	(RW)
EXISTING SEWER FORCE MAIN	(SF)

NOTICE TO CONTRACTOR:
ALL WORK TO BE CONSTRUCTED PER THIS PLAN BY PREVAILING WAGES.

THIS PLAN DOES NOT INCLUDE PROPOSED SIDEWALKS, FIRE HYDRANTS, WATER MAINS, GAS LINES, ELECTRICAL LINES OR TELEPHONE LINES.

NOTE TO CONTRACTOR:
PRIOR TO CONSTRUCTION OF SEWER THE CONTRACTOR SHALL VERIFY INVERT AND LOCATION OF EXISTING UTILITIES AT POINT OF CONNECTION AND NOTIFY CIVIL ENGINEER IN CASE OF CONFLICT.

"DECLARATION OF RESPONSIBLE CHARGE"

I HEREBY DECLARE THAT I AM THE ENGINEER OF WORK FOR THIS PROJECT, THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER THE DESIGN OF THE PROJECT AS DEFINED IN SECTION 6703 OF THE BUSINESS AND PROFESSIONS CODE, AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS. I UNDERSTAND THAT THE CHECK OF PROJECT DRAWINGS AND SPECIFICATIONS BY THE CITY OF BEAUMONT DOES NOT RELIEVE ME AS ENGINEER OF WORK OF MY RESPONSIBILITIES FOR PROJECT DESIGN.

FIRM: THIENES ENGINEERING INC.
ADDRESS: 14349 FIRESTONE BLVD
CITY, ZIP: LA MIRADA, CA 90638
TELEPHONE: (714) 521-4811
BY: _____ DATE: _____
REINHARD STENZEL RCE 56155

OWNER INFORMATION:

MCDONALD PROPERTY GROUP
1140 N. COAST HIGHWAY
LAGUNA BEACH, CA 92651
PHONE: (949) 999-2800
FAX: (949) 999-2839

ABBREVIATIONS:

A.B.	AGGREGATE BASE	L.P.	LOW POINT
ARCH.	ARCHITECTURAL	M.H.	MANHOLE
A.C.	ASPHALT CONCRETE	N.G.	NATURAL GRADE
B.W.	BACK OF WALK	PKWY DRAIN	PARKWAY DRAIN
B.C.R.	BEGINNING OF CURVE	P.P.	POWER POLE
B.O.P.	BOTTOM OF PIPE	℄	PROPERTY LINE
B.O.W.	BOTTOM OF WALL	P.V.C.	POLYVINYLCHLORIDE
BLDG	BUILDING	R	RATE OF GRADE
C.I.P.	CAST IRON PIPE	R.C.P.	REINFORCED CONCRETE PIPE
C.B.	CATCH BASIN	R.D.	ROOF DRAIN
℄	CENTERLINE	R/W	RIGHT OF WAY
C.L.F.	CHAIN LINK FENCE	S	SLOPE
CONC.	CONCRETE	S.F.	SQUARE FEET
C.M.B.	CRUSHED MISC. BASE	S.D.	STORM DRAIN
C.F.	CURB FACE	ST.LT.	STREET LIGHT
E.P.	EDGE OF PAVEMENT	S.W.	STEM WALL
E.C.R.	END OF CURVE	T.B.	TOP OF BERM
EXIST.	EXISTING	T.C.	TOP OF CURB
(O.OO)	EXISTING ELEVATION	T.S.	TOP OF CONCRETE SLAB
F.F.	FINISH FLOOR	T.E.	TRASH ENCLOSURE
F.O.	FIBER OPTIC	TRANS PAD	TRANSFORMER PAD
F.G.	FINISH GRADE	T.F.	TOP OF FOOTING
F.S.	FINISH SURFACE	T.G.	TOP OF GRATE
F.H.	FIRE HYDRANT	TOE	TOE OF SLOPE
F.L.	FLOW LINE	TOP	TOP OF SLOPE
G.B.	GRADE BREAK	T.O.P.	TOP OF PIPE
H.C.	HANDICAP	T.R.	TOP OF RAIL
H	HEIGHT OF RETAINING	T.W.	TOP OF WALL
H.P.	HIGH POINT	X+XX	SEWER STATION
INV.	INVERT	[X+XX]	STREET STATION
L.S.	LANDSCAPING		

LEGAL DESCTIPTION:

DAVID RICKER (WEST OF PORTRERO):
A STRIP OF LAND, 100.00 FEET IN WIDTH, SITUATED IN A PORTION OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 7, TOWNSHIP 3 SOUTH, RANGE 1 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE CITY OF BEAUMONT, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, BEING ALSO A PORTION OF THE LAND DESCRIBED IN THAT CERTAIN DEED RECORDED OCTOBER 1, 2008 AS DOCUMENT NO. 2008-0533024, OF OFFICIAL RECORDS OF SAID COUNTY.

LASSEN DEVELOPMENT PARTNERS (EAST OF PM NO. 36426):
THAT CERTAIN LAND DESCRIBED IN IRREVOCABLE RIGHT OF WAY OFFER OF DEDICATION TO THE CITY OF BEAUMONT, BEING A PORTION OF THE EAST HALF OF THE WEST HALF OF THE NORTHEAST QUARTER OF SECTION 7, TOWNSHIP 3 SOUTH, RANGE 1 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE CITY OF BEAUMONT, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, RECORDED JUNE 2, 2016 AS DOCUMENT NO. 2016-0227312, OF OFFICIAL RECORDS OF SAID COUNTY.

PARCEL MAP NO. 36426
BEING A SUBDIVISION OF A PORTION OF THE NORTH HALF OF SECTION 7 AND THE SOUTHWEST QUARTER OF SECTION 6, BOTH OF TOWNSHIP 3 SOUTH, RANGE 1 WEST, SAN BERARDINO MERIDIAN, AS RECORDED MARCH 16, 2017, AS DOCUMENT NO. 2017-0108002, OF OFFICIAL RECORDS OF SAID COUNTY.

DIGALERT — Call 2 Working Days Before You Dig! 811

BENCHMARK:
NATIONAL GEODETIC SURVEY BENCHMARK NO. "D 1311"
1.4 MILES WEST OF BEAUMONT ON INTERSTATE 10 TO SAN TIMEOTEO CANYON ROAD NEAR FRONTAGE ROAD ON SOUTH(WEST) SIDE OF INTERSTATE 10, 0.1 MILES SOUTHEAST ALONG FRONTAGE ROAD, SOUTH AND ACROSS THE ROAD FROM A GUY POLE 25.9 FEET SOUTH OF THE CENTERLINE OF FRONTAGE ROAD, 1.8 FEET WEST OF POWERPOLE AND 1.5 FEET EAST OF A WITNESS POST, INSIDE A 4 INCH PVC PIPE WITH SCREW PLUG 1 INCH ABOVE GROUND (ELEVATION = 2468.07). ALSO SHOWN ON "HIGHWAY 60 / POTRERO BLVD. INTERCHANGE STATIC GPS PROJECT CONTROL DIAGRAM" AND IDENTIFIED THEREON AS 3508 BM DX3474 WHEREIN THE PUBLISHED ELEVATION = 2468.07 IS CORRECTED WITH A MEASURED ELEVATION = 2468.061', USED HEREON.
ELEVATION = 2468.061' (NAVD 88), (STAMPED 6 1311 1978)

BASIS OF BEARINGS:
THE BEARINGS SHOWN HEREON ARE BASED ON THE CALIFORNIA STATE PLANE COORDINATE SYSTEM, ZONE 6, NORTH AMERICAN DATUM 1983, AS DETERMINED LOCALLY BY THE LINE BETWEEN CSRC CO CORS STATIONS "CNPP" AND "MOJC", BOTH PUBLISHED ON CSRC DATA SHEETS, BEING N 86°24'01.17163" E (2007.0 EPOCH).

BY	MARK	DESCRIPTION	APPR.	DATE
ENGINEER		REVISIONS	CITY	

COMPANY NAME
Thienes Engineering, Inc.
CIVIL ENGINEERING • LAND SURVEYING
14349 FIRESTONE BOULEVARD
LA MIRADA, CALIFORNIA 90638
PH.(714)521-4811 FAX(714)521-4173

REINHARD STENZEL DATE
R.C.E. 56155 EXPIRE 12-31-20

SEAL: REGISTERED PROFESSIONAL ENGINEER — REINHARD STENZEL — R.C.E. NO. 56155 Exp. 12-31-20 — CIVIL — STATE OF CALIFORNIA

DESIGN BY: J.P.
DRAWN BY: J.P.
CHECKED BY: R.S.
SCALE:
DATE:
JOB NUMBER:

CITY OF BEAUMONT, CALIFORNIA

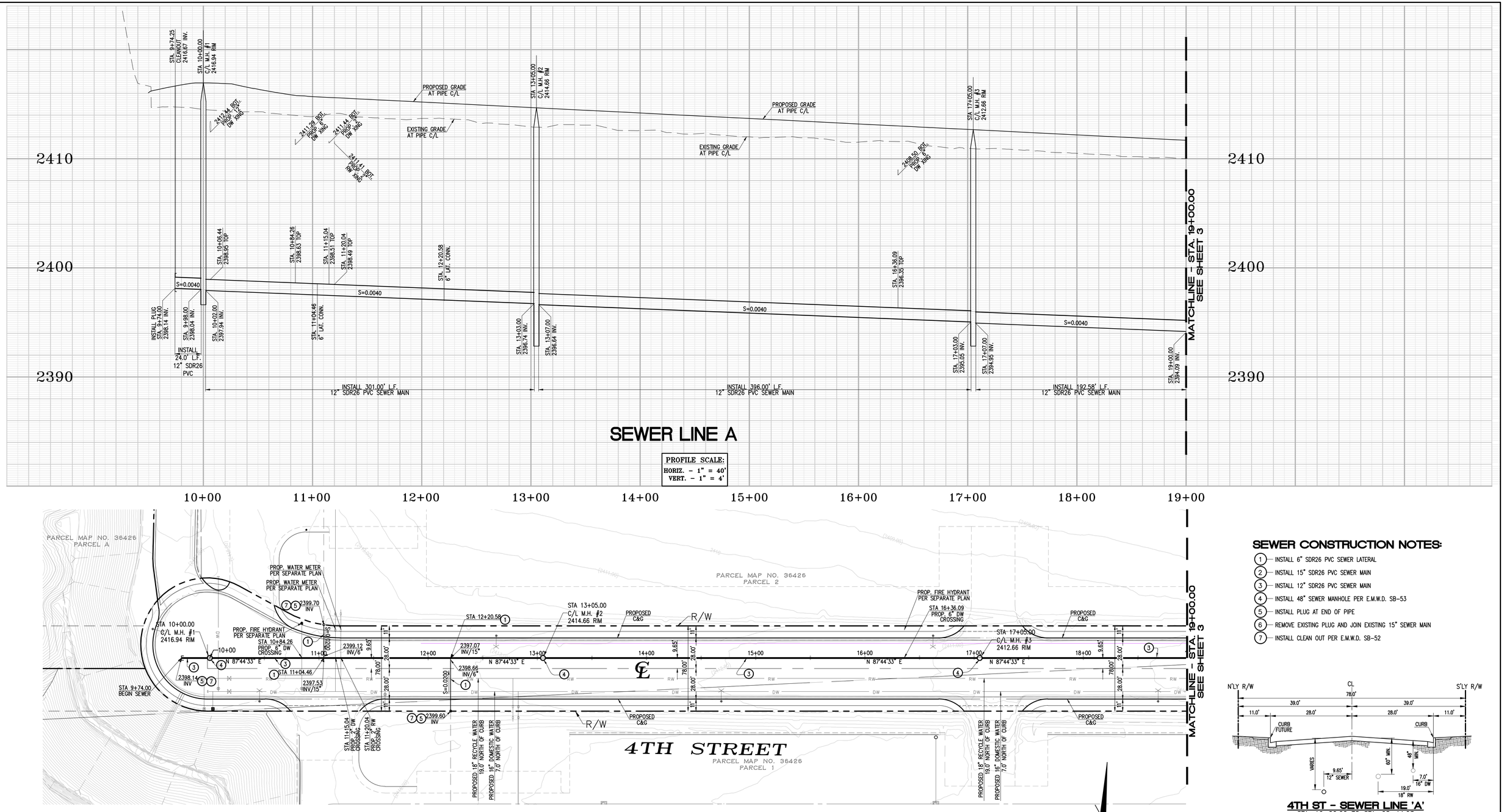
Reviewed By: _____ Date: _____ Staff Engineer
Recommended for Approval By: _____ Date: _____ Administrative Engineer
Approved By: _____ Date: _____ City Engineer/Director of Public Works

CITY OF BEAUMONT, PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION
550E. 6th St
Beaumont, CA 92223
TEL: (951) 769-8520 FAX: (951) 769-8526

CITY OF BEAUMONT, CALIFORNIA
PUBLIC SEWER IMPROVEMENT PLAN
FOR
4TH STREET WEST OF POTRERO BLVD.
TITLE SHEET

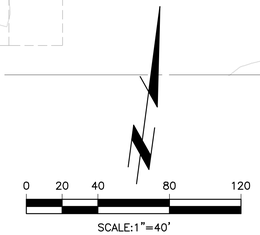
SHEET 1 OF 7 SHEETS
FILE NO: PW2020-0430

Last Update:6/1/20
O:\3000-3099\3080\SEWER\3080SEW-01.dwg



SEWER LINE A

PROFILE SCALE:
HORIZ. - 1" = 40'
VERT. - 1" = 4'



SEWER CONSTRUCTION NOTES:

1. INSTALL 6" SDR26 PVC SEWER LATERAL
2. INSTALL 15" SDR26 PVC SEWER MAIN
3. INSTALL 12" SDR26 PVC SEWER MAIN
4. INSTALL 48" SEWER MANHOLE PER E.M.W.D. SB-53
5. INSTALL PLUG AT END OF PIPE
6. REMOVE EXISTING PLUG AND JOIN EXISTING 15" SEWER MAIN
7. INSTALL CLEAN OUT PER E.M.W.D. SB-52

4TH ST - SEWER LINE 'A'
STA. 10+00.00 TO STA. 28+44.03
N.T.S.

DIGALERT
Call 2 Working Days Before You Dig!
811

BENCHMARK:
NATIONAL GEODETIC SURVEY BENCHMARK NO. "D 1311"
1.4 MILES WEST OF BEAUMONT ON INTERSTATE 10 TO SAN TIMEOTEO CANYON ROAD NEAR FRONTAGE ROAD ON SOUTH(WEST) SIDE OF INTERSTATE 10, 0.1 MILES SOUTHEAST ALONG FRONTAGE ROAD, SOUTH AND ACROSS THE ROAD FROM A GUY POLE 25.9 FEET SOUTH OF THE CENTERLINE OF FRONTAGE ROAD, 1.8 FEET WEST OF POWERPOLE AND 1.5 FEET EAST OF A WITNESS POST, INSIDE A 4 INCH PVC PIPE WITH SCREW PLUG 1 INCH ABOVE GROUND (ELEVATION = 2468.07). ALSO SHOWN ON "HIGHWAY 60 / POTRERO BLVD. INTERCHANGE STATIC GPS PROJECT CONTROL DIAGRAM" AND IDENTIFIED THEREON AS 3508 BM DX3474 WHEREIN THE PUBLISHED ELEVATION = 2468.07 IS CORRECTED WITH A MEASURED ELEVATION = 2468.061', USED HEREON.
ELEVATION = 2468.061' (NAVD 'BB), (STAMPED D 1311 1978)

BASIS OF BEARINGS:
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BY	MARK	DESCRIPTION	APPR.	DATE
ENGINEER		REVISIONS	CITY	

COMPANY NAME
Thienes Engineering, Inc.
CIVIL ENGINEERING • LAND SURVEYING
14349 FIRESTONE BOULEVARD
LA MIRADA, CALIFORNIA 90638
PH.(714)521-4811 FAX(714)521-4173

REINHARD STENZEL
R.C.E. 56155 EXPIRE 12-31-20
DATE

SEAL
REGISTERED PROFESSIONAL ENGINEER
REINHARD STENZEL
R.C.E. NO. 56155
Exp. 12-31-20
CIVIL
STATE OF CALIFORNIA

DESIGN BY: J.P.
DRAWN BY: J.P.
CHECKED BY: R.S.
SCALE:
DATE:
JOB NUMBER:

CITY OF BEAUMONT
CALIFORNIA
INC. NOV. 18, 1912

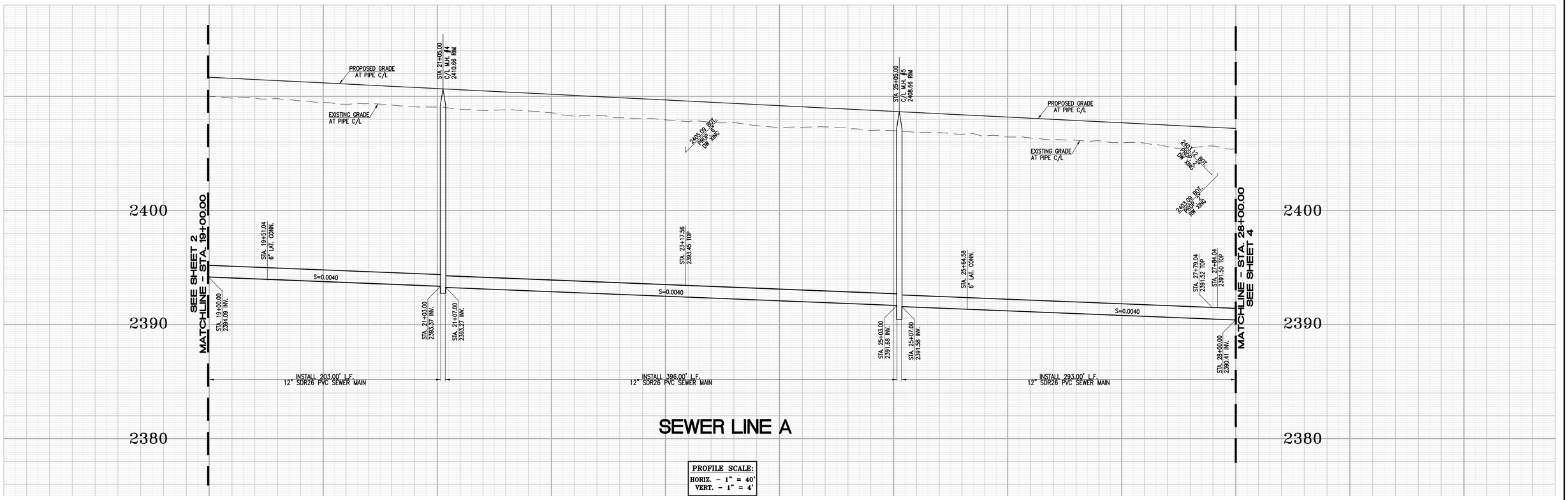
Reviewed By: _____ Date: _____
Staff Engineer
Recommended for Approval By: _____ Date: _____
Administrative Engineer
Approved By: _____ Date: _____
City Engineer/Director of Public Works

CITY OF BEAUMONT, PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION
550E. 6th St
Beaumont, CA 92223
TEL: (951) 769-8520 FAX: (951) 769-8526

CITY OF BEAUMONT, CALIFORNIA
PUBLIC SEWER IMPROVEMENTS
STA. 10+00.00 TO STA. 19+00.00
FOR
4TH STREET
WEST OF POTRERO BLVD.
PLAN & PROFILE

SHEET 2 OF 7 SHEETS
FILE NO: PW2020-0430

Last Update: 6/1/20
O:\3000-3099\3080\SEWER\3080SEW-02.dwg



SEWER LINE A

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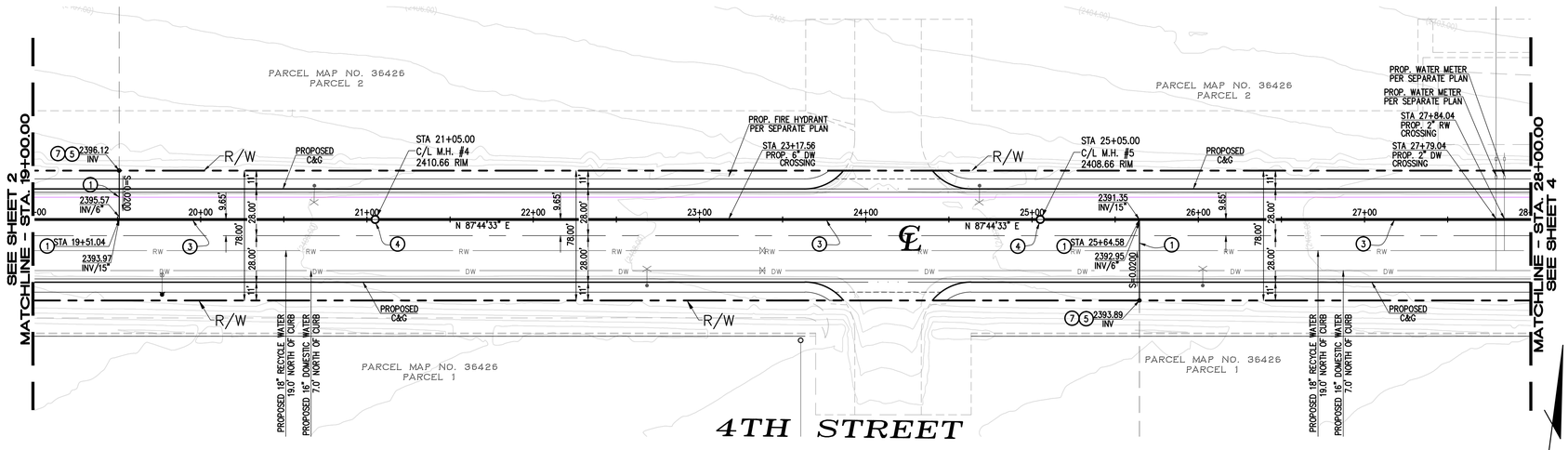

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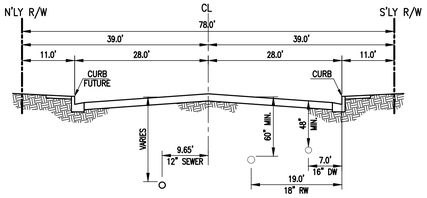

4TH ST – SEWER LINE 'A'
STA. 10+00.00 TO STA. 28+44.03
N.T.S.

0 20 40 80 120
SCALE:1"=40'

Last Update: 6/1/20
O:\3000-3099\3080\SEWER\3080SEW-03.dwg

DIGALERT
Call 2 Working Days Before You Dig! 811

BENCHMARK:
NATIONAL GEODETIC SURVEY BENCHMARK NO. "D 1311"
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REINHARD STENZEL DATE
R.C.E. 56155 EXPIRE 12-31-20

SEAL
REGISTERED PROFESSIONAL ENGINEER
REINHARD STENZEL
R.C.E. NO. 56155
Exp. 12-31-20
CIVIL
STATE OF CALIFORNIA

DESIGN BY: J.P.
DRAWN BY: J.P.
CHECKED BY: R.S.
SCALE:
DATE:
JOB NUMBER:

CITY OF BEAUMONT CALIFORNIA INC. NOV. 18, 1912

Reviewed By: _____ Date: _____
Staff Engineer
Recommended for Approval By: _____ Date: _____
Administrative Engineer
Approved By: _____ Date: _____
City Engineer/Director of Public Works

CITY OF BEAUMONT, PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION
550E. 6th St
Beaumont, CA 92223
TEL: (951) 769-8520 FAX: (951) 769-8526

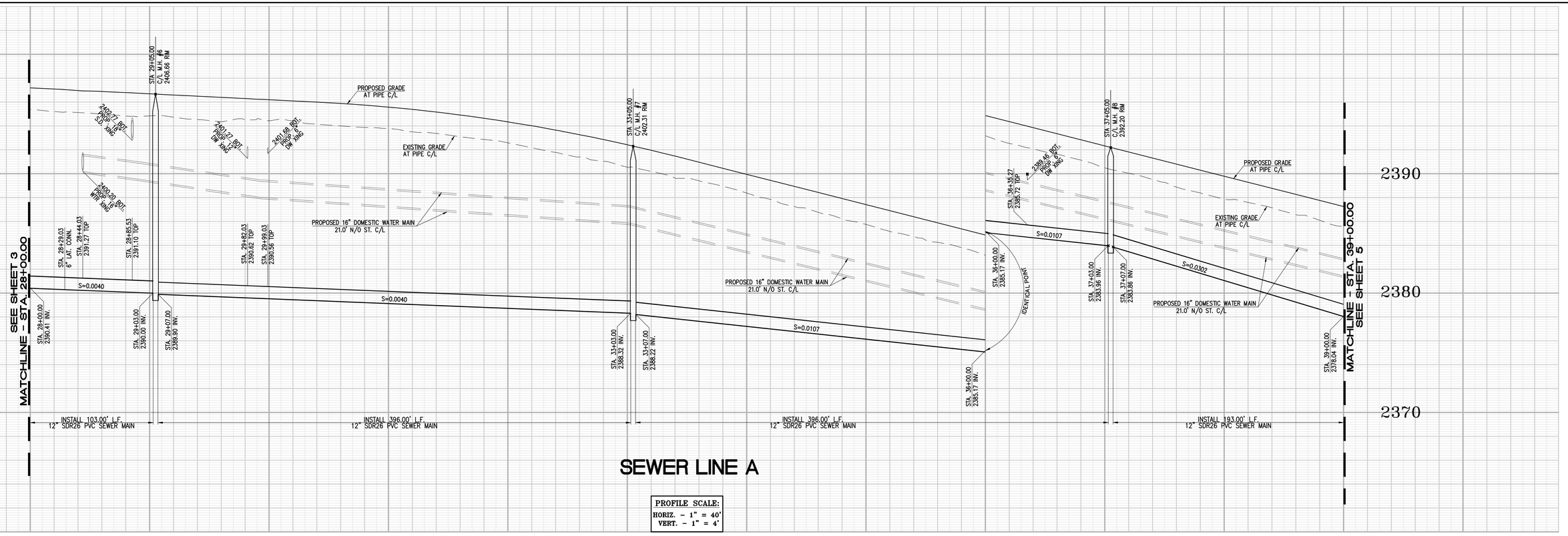
CITY OF BEAUMONT, CALIFORNIA

PUBLIC SEWER IMPROVEMENTS

STA. 19+00.00 TO STA. 28+00.00
FOR
4TH STREET
WEST OF POTRERO BLVD.

PLAN & PROFILE

SHEET 3 OF 7 SHEETS
FILE NO: PW2020-0430



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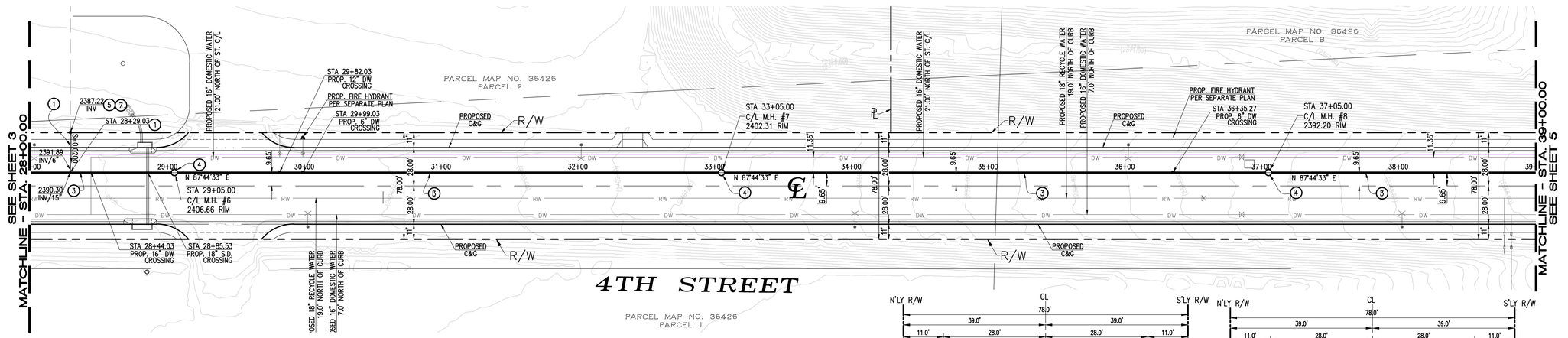
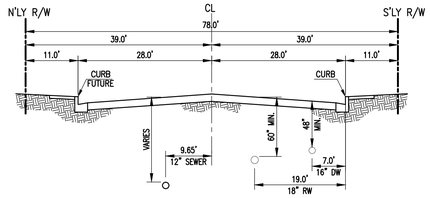
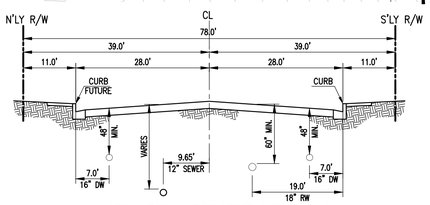




4TH ST - SEWER LINE 'A'
STA. 10+00.00 TO STA. 28+44.03
N.T.S.



4TH ST - SEWER LINE 'A'
STA. 28+44.03 TO STA. 39+85.41
N.T.S.

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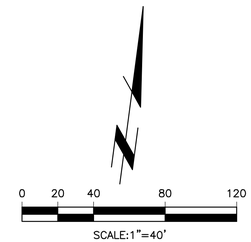

Last Update: 6/1/20
O:\3000-3099\3080\SEWER\3080SEW-04.dwg

DIGALERT
Call 2 Working Days Before You Dig! 811

BENCHMARK:

NATIONAL GEODETIC SURVEY BENCHMARK NO. "D 1311"
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BY	MARK	DESCRIPTION	APPR.	DATE
ENGINEER		REVISIONS	CITY	

COMPANY NAME
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LA MIRADA, CALIFORNIA 90638
PH.(714)521-4811 FAX(714)521-4173

REINHARD STENZEL
R.C.E. 56155 EXPIRE 12-31-20
DATE

SEAL
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Exp. 12-31-20
CIVIL
STATE OF CALIFORNIA

DESIGN BY: J.P.
DRAWN BY: J.P.
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SCALE:
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JOB NUMBER:

CITY OF BEAUMONT CALIFORNIA INC. NOV. 18, 1912

Reviewed By: _____ Staff Engineer Date: _____
Recommended for Approval By: _____ Administrative Engineer Date: _____
Approved By: _____ City Engineer/Director of Public Works Date: _____

CITY OF BEAUMONT, PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION
550E. 6th St
Beaumont, CA 92223
TEL: (951) 769-8520 FAX: (951) 769-8526

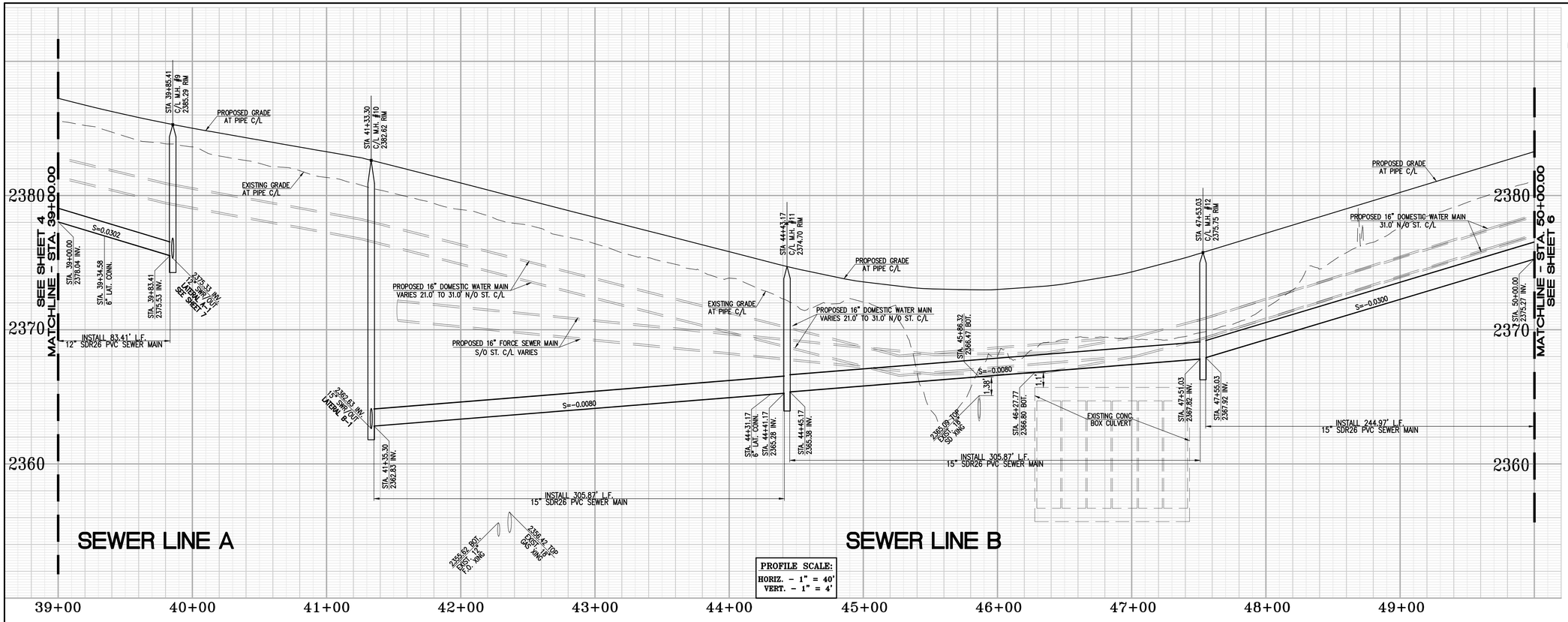
CITY OF BEAUMONT, CALIFORNIA

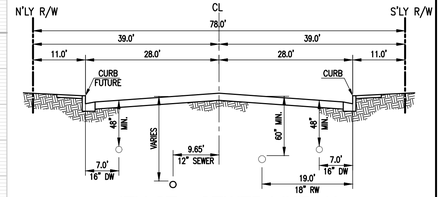
PUBLIC SEWER IMPROVEMENTS

STA. 28+00.00 TO STA. 39+00.00
FOR
4TH STREET
WEST OF POTRERO BLVD.

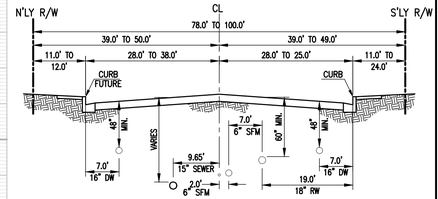
PLAN & PROFILE

SHEET 4 OF 7 SHEETS
FILE NO: PW2020-0430

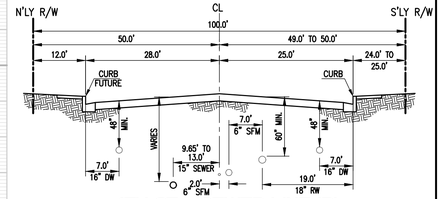




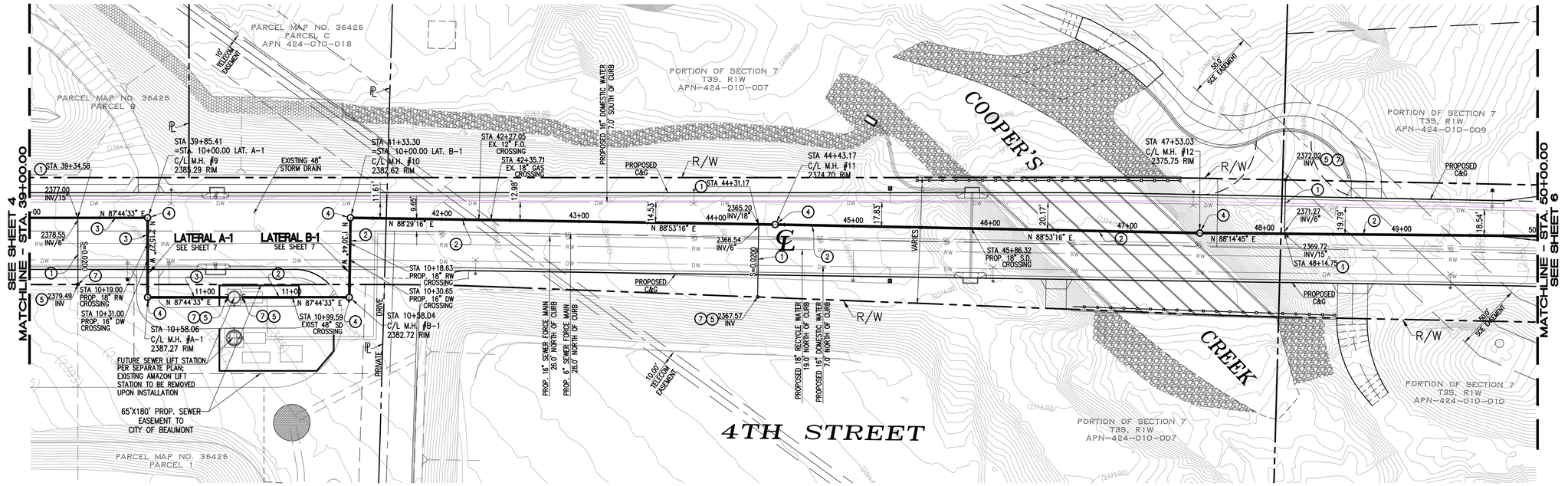
4TH ST - SEWER LINE 'A'
STA. 28+44.03 TO STA. 39+85.41
N.T.S.



4TH ST - SEWER LINE 'B'
STA. 41+33.30 TO STA. 47+53.03
N.T.S.



4TH ST - SEWER LINE 'B'
STA. 47+53.03 TO STA. 50+18.82
N.T.S.



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0 20 40 80 120
SCALE:1"=40'

Last Update:6/1/20
O:\3000-3099\3080\SEWER\3080SEW-05.dwg

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Call 2 Working Days Before You Dig! 811

BENCHMARK:
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BY	MARK	DESCRIPTION	APPR.	DATE
ENGINEER		REVISIONS	CITY	

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PH.(714)521-4811 FAX(714)521-4173

REINHARD STENZEL
R.C.E. 56155 EXPIRE 12-31-20 DATE

SEAL: REGISTERED PROFESSIONAL ENGINEER * REINHARD STENZEL * R.C.E. NO. 56155 Exp. 12-31-20 CIVIL STATE OF CALIFORNIA

DESIGN BY: J.P.
DRAWN BY: J.P.
CHECKED BY: R.S.
SCALE:
DATE:
JOB NUMBER:

CITY OF BEAUMONT CALIFORNIA INC.NOV.18,1912

Reviewed By: _____ Staff Engineer Date: _____
Recommended for Approval By: _____ Administrative Engineer Date: _____
Approved By: _____ City Engineer/Director of Public Works Date: _____

CITY OF BEAUMONT, PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION
550E. 6th St
Beaumont, CA 92223
TEL: (951) 769-8520 FAX: (951) 769-8526

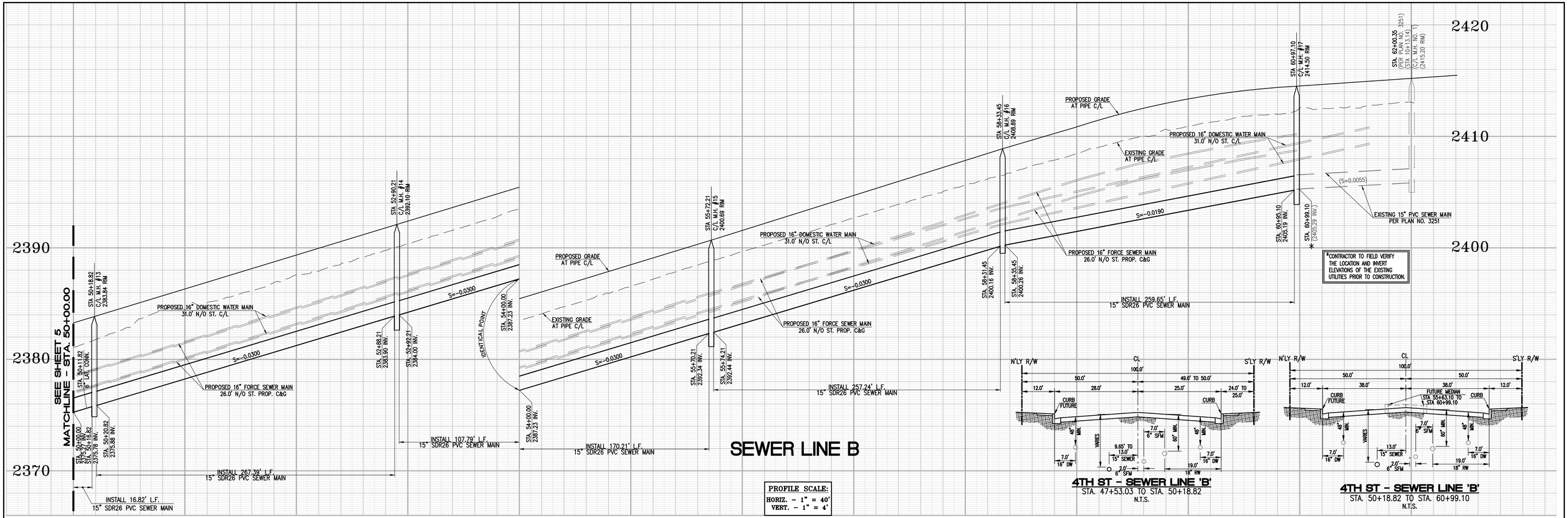
CITY OF BEAUMONT, CALIFORNIA

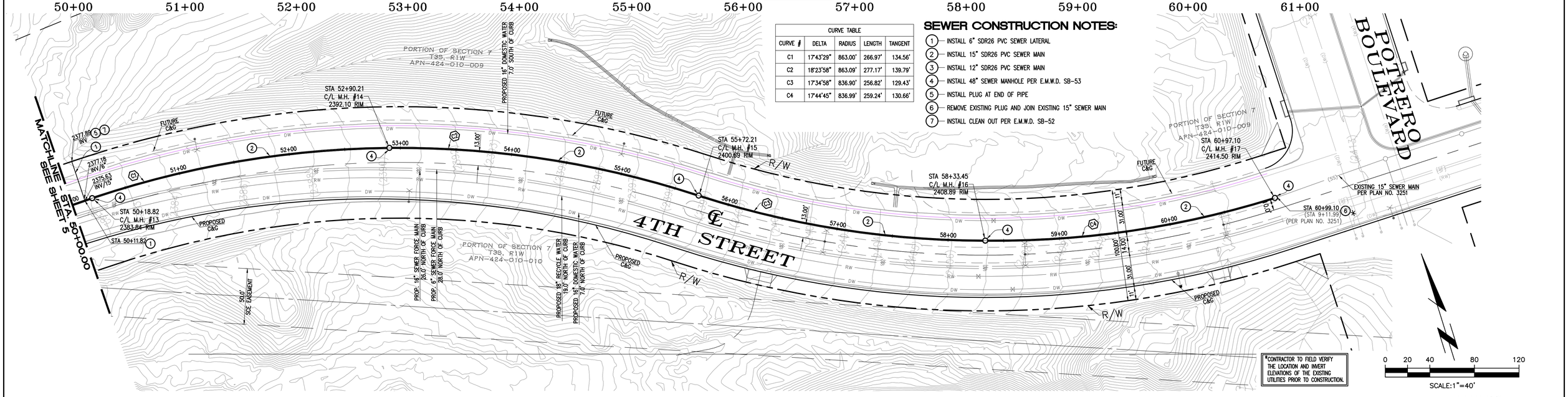
PUBLIC SEWER IMPROVEMENTS

STA. 39+00.00 TO STA. 50+00.00
FOR
4TH STREET
WEST OF POTRERO BLVD.

PLAN & PROFILE

SHEET 5 OF 7 SHEETS
FILE NO: PW2020-0430





CURVE TABLE				
CURVE #	DELTA	RADIUS	LENGTH	TANGENT
C1	17°43'29"	863.00'	266.97'	134.56'
C2	18°23'58"	863.09'	277.17'	139.79'
C3	17°34'58"	836.90'	256.82'	129.43'
C4	17°44'45"	836.99'	259.24'	130.66'

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SEAL
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REINHARD STENZEL DATE
R.C.E. 56155 EXPIRE 12-31-20

DESIGN BY: J.P.
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CITY of BEAUMONT CALIFORNIA INC. NOV. 18, 1912

Reviewed By: _____ Date: _____
Staff Engineer

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Administrative Engineer

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SHEET 6 OF 7 SHEETS
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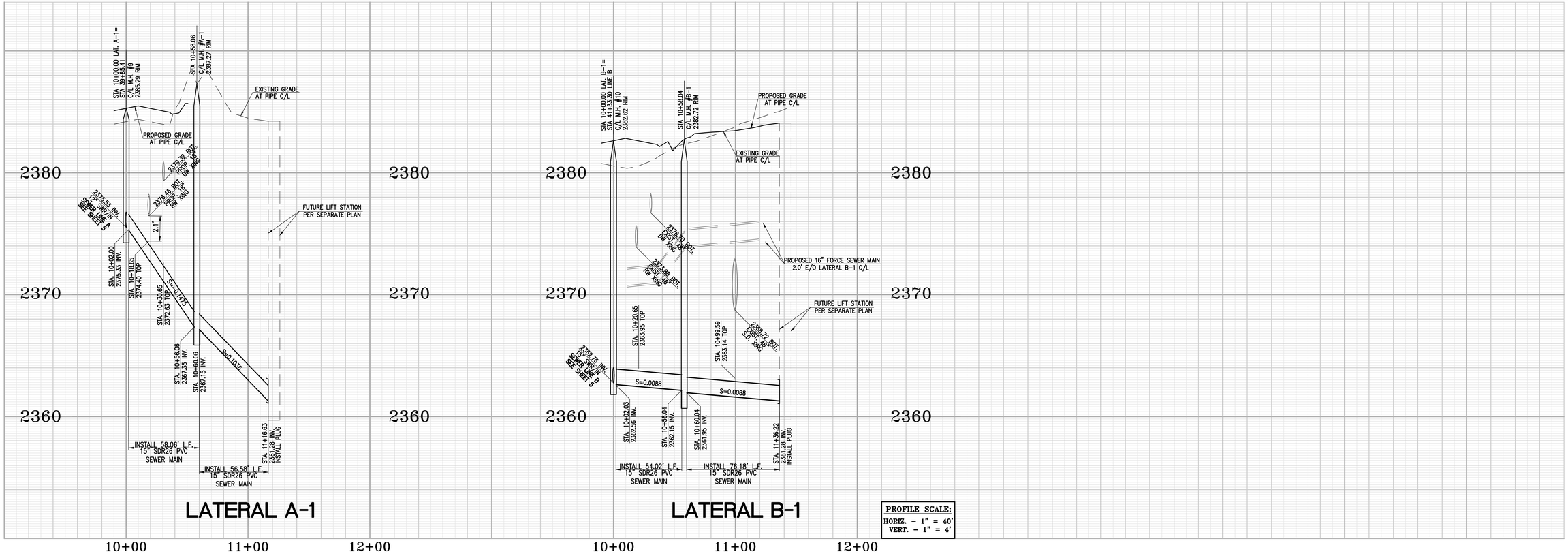
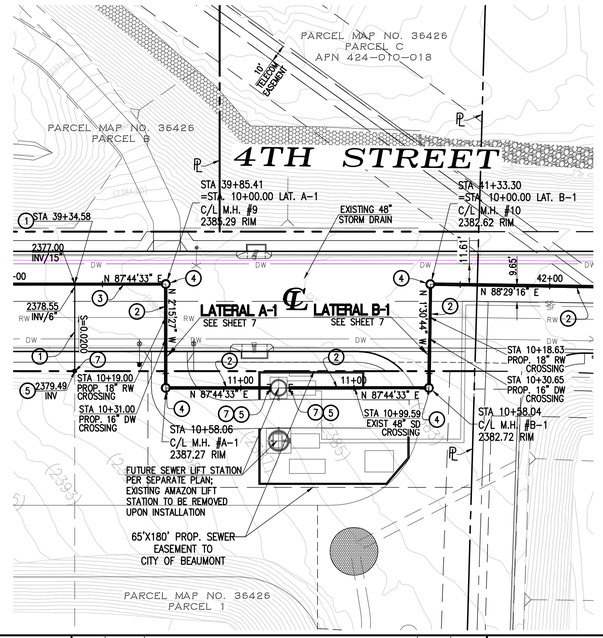
Last Update:6/1/20
O:\3000-3099\3080\SEWER\3080SEW-06.dwg





SEWER CONSTRUCTION NOTES:

1. INSTALL 6" SDR26 PVC SEWER LATERAL
2. INSTALL 15" SDR26 PVC SEWER MAIN
3. INSTALL 12" SDR26 PVC SEWER MAIN
4. INSTALL 48" SEWER MANHOLE PER E.M.W.D. SB-53
5. INSTALL PLUG AT END OF PIPE
6. REMOVE EXISTING PLUG AND JOIN EXISTING 15" SEWER MAIN
7. INSTALL CLEAN OUT PER E.M.W.D. SB-52

PROFILE SCALE:
HORIZ. - 1" = 40'
VERT. - 1" = 4'

Last Updated: 6/1/20
D:\3000-3099\3080\SEWER\3080SEW-07.dwg

DIGALERT
Call 2 Working Days Before You Dig! 811

BENCHMARK:
NATIONAL GEODETIC SURVEY BENCHMARK NO. "D 1311"
1.4 MILES WEST OF BEAUMONT ON INTERSTATE 10 TO SAN TIMEOTEO CANYON ROAD NEAR FRONTAGE ROAD ON SOUTH(WEST) SIDE OF INTERSTATE 10, 0.1 MILES SOUTHEAST ALONG FRONTAGE ROAD, SOUTH AND ACROSS THE ROAD FROM A GUY POLE 25.9 FEET SOUTH OF THE CENTERLINE OF FRONTAGE ROAD, 1.8 FEET WEST OF POWERPOLE AND 1.5 FEET EAST OF A WITNESS POST, INSIDE A 4 INCH PVC PIPE WITH SCREW PLUG 1 INCH ABOVE GROUND (ELEVATION = 2468.07). ALSO SHOWN ON "HIGHWAY 60 / POTRERO BLVD. INTERCHANGE STATIC GPS PROJECT CONTROL DIAGRAM" AND IDENTIFIED THEREON AS 3508 BM DX3474 WHEREIN THE PUBLISHED ELEVATION = 2468.07 IS CORRECTED WITH A MEASURED ELEVATION = 2468.061', USED HEREON.
ELEVATION = 2468.061' (NAVD 'BB), (STAMPED D 1311 1978)

BASIS OF BEARINGS:
THE BEARINGS SHOWN HEREON ARE BASED ON THE CALIFORNIA STATE PLANE COORDINATE SYSTEM, ZONE 6, NORTH AMERICAN DATUM 1983, AS DETERMINED LOCALLY BY THE LINE BETWEEN CSRC CO CORS STATIONS "CHPP" AND "MOJC", BOTH PUBLISHED ON CSRC DATA SHEETS, BEING N 86°04'01.17163" E (2007.0 EPOCH).

BY	MARK	DESCRIPTION	APPR.	DATE
ENGINEER		REVISIONS	CITY	

COMPANY NAME
Thienes Engineering, Inc.
CIVIL ENGINEERING • LAND SURVEYING
14349 FIRESTONE BOULEVARD
LA MIRADA, CALIFORNIA 90638
PH.(714)521-4811 FAX(714)521-4173

REINHARD STENZEL DATE
R.C.E. 56155 EXPIRE 12-31-20

SEAL: REGISTERED PROFESSIONAL ENGINEER * REINHARD STENZEL * R.C.E. NO. 56155 Exp. 12-31-20 CIVIL STATE OF CALIFORNIA

DESIGN BY: J.P.
DRAWN BY: J.P.
CHECKED BY: R.S.
SCALE:
DATE:
JOB NUMBER:

CITY OF BEAUMONT CALIFORNIA INC. NOV. 18, 1912

Reviewed By: _____ Staff Engineer Date: _____
Recommended for Approval By: _____ Administrative Engineer Date: _____
Approved By: _____ City Engineer/Director of Public Works Date: _____

CITY OF BEAUMONT, PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION
550E. 6th St
Beaumont, CA 92223
TEL: (951) 769-8520 FAX: (951) 769-8526

CITY OF BEAUMONT, CALIFORNIA

PUBLIC SEWER IMPROVEMENTS

STA. 39+00.00 TO STA. 50+00.00
FOR
4TH STREET
WEST OF POTRERO BLVD.

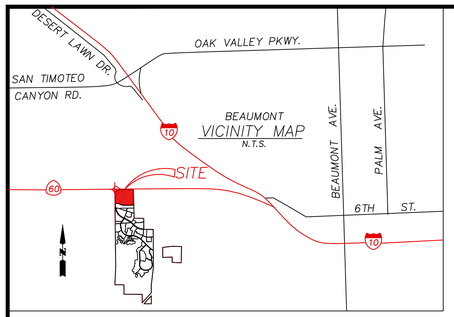
PLAN & PROFILE

SHEET 7 OF 7 SHEETS
FILE NO: PW2020-0430

Thienes Engineering, Inc.
CIVIL ENGINEERING • LAND SURVEYING
14349 FIRESTONE BOULEVARD
LA MIRADA, CALIFORNIA 90638
PH.(714)521-4811 FAX(714)521-4173

Appendix F

Legacy Highlands Site Plan
Preserve Phasing Map
Jack Rabbit Trail Site Plan



PROJECT ADDRESS

PRIMARILY A PORTION OF THE NORTH 1 /2 OF SECTION 7, TOWNSHIP 3 SOUTH, RANGE 1 WEST, SAN BERNARDINO MERIDIAN, BEAUMONT, CALIFORNIA

OWNER / DEVELOPER

PORTERO COMMERCIAL, LLC
4191 BROCKTON AVENUE
RIVERSIDE, CA 92501
PHONE, (951) 369-9898

APPLICANT'S REPRESENTATIVE.

SRD DESIGN STUDIO, INC.
10501 WILSHIRE BLVD. – STE# 1211
LOS ANGELES, CA 90211
CONTACT, DAVID GOLKAR
PHONE, (424) 279-0909

UTILITY PROVIDERS/ AGENCIES:

ELECTRIC SERVICES
SOUTHERN CALIFORNIA EDISON:
287 TENNESSEE STREET
REDLANDS, CALIFORNIA 92373
ATTN, BOB SIEGAL
PHONE, (949) 307-6770

NATURAL GAS SERVICE:

THE GAS COMPANY
1981 W. LUGONIA
REDLANDS, CA 92374-9720
ATTN, ALAN KESELOFF
PHONE, (909) 335-7725

ASSESSOR'S PARCEL NO.:

421-060-003

DEVELOPER:

PORTERO COMMERCIAL, LLC
4191 BROCKTON AVENUE
RIVERSIDE, CA 92501
PHONE, (951) 369-9898

SEWERAGE:

CITY OF BEAUMONT
550 E. 6TH STREET
BEAUMONT, CA 92223
PHONE, (909) 769-8520

TELEPHONE SERVICE:

PACIFIC BELL
1265 VAN BUREN ST. RM. 1 00
ANAHEIM, CA 92807
ATTN, NORMA GULLOT
PHONE, (714) 666-5692

DOMESTIC WATER:

BEAUMONT-CHERRY VALLY WATER
560 MAGNOLIA AVENUE
BEAUMONT, CALIFORNIA 92223
ATTN, JOEL ROBLES
PHONE, (951) 845-9581

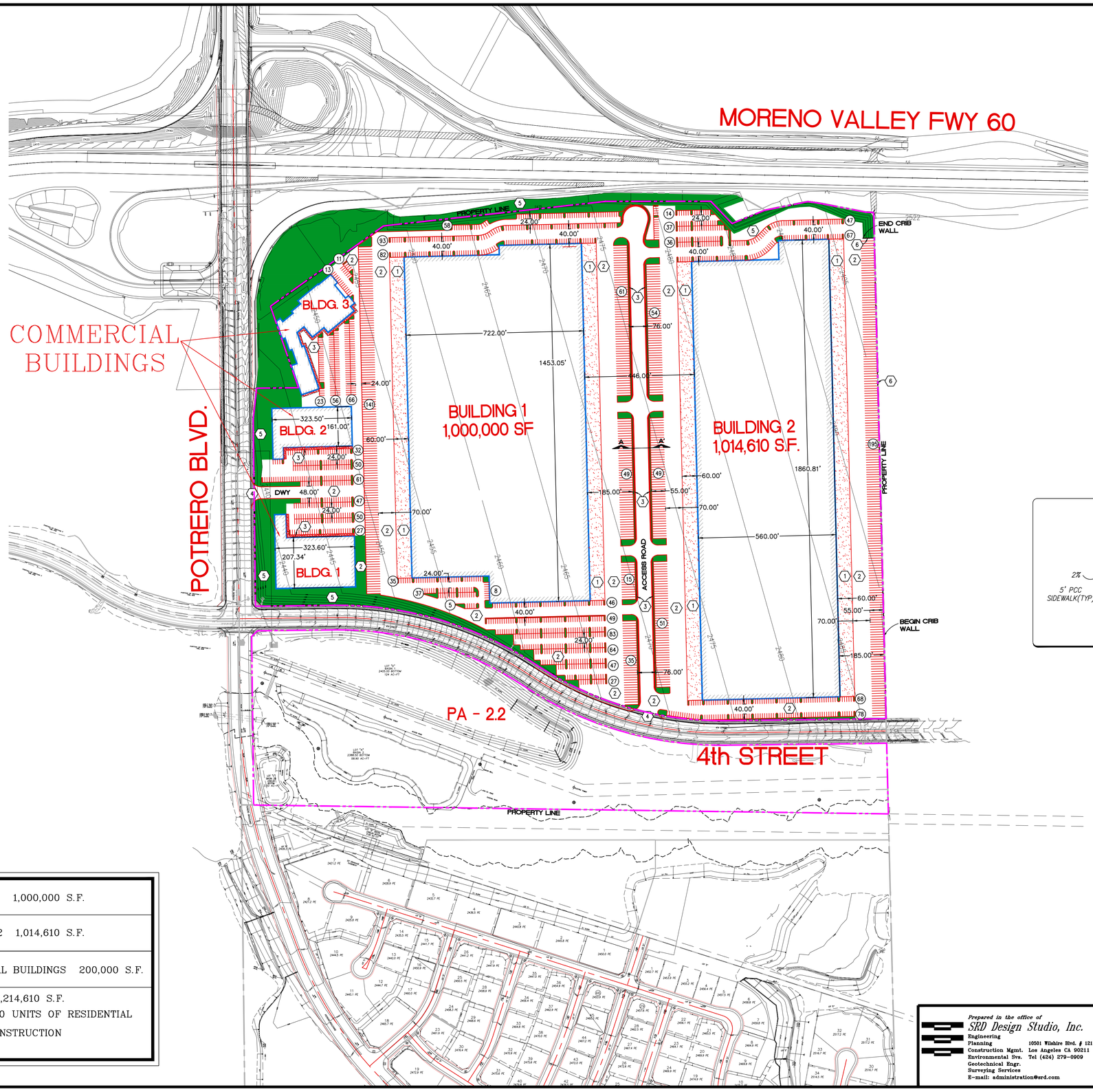
PROJECT ZONING:

SPECIFIC PLAN
COMMERCIAL / INDUSTRIAL

SITE PLAN - GENERAL NOTES

1. THE SOILS REPORT PREPARED IS TO BE A PART OF THESE CONTRACT DOCUMENTS.
2. IF SOILS ARE EXPANSIVE IN NATURE, USE STEEL REINFORCING FOR ALL SITE CONCRETE.
3. ALL DIMENSIONS ARE TO THE FACE OF CONCRETE WALL, FACE OF CONCRETE CURB OR GRID LINE U.N.O.
4. SEE "C" PLANS FOR ALL CONCRETE CURBS, GUTTERS AND SWALE S. DETAILS ON SHEET ARE MINIMUM STANDARDS.
5. THE ENTIRE PROJECT SHALL BE PERMANENTLY MAINTAINED WITH AN AUTOMATIC IRRIGATION SYSTEM.
   PRIOR TO INSTALLATION & AT LEAST 60 DAYS BEFORE BLDG. COMPLETION.
6. SEE " C" DRAWINGS FOR POINT OF CONNECTIONS TO OFF- SITE UTILITIES. CONTRACTOR SHALL VERIFY ACTUAL UTILITY LOCATIONS.
7. PROVIDE POSITIVE DRAINAGE AWAY FROM BLDG. SEE " C" DRAWINGS.
8. CONTRACTOR TO REFER TO " C" DRAWINGS FOR ALL HORIZONTAL CONTROL DIMENSIONS. SITE PLANS ARE FOR GUIDANCE AND STARTING LAYOUT POINTS.
9. SEE " C" DRAWINGS FOR FINISH GRADE ELEVATIONS.
10. CONCRETE SIDEWALK S TO BE A MINIMUM OF 4" THICK W/ TOOLED JOINTS AT 6' O.C. EXPANSION CONSTRUCTION JOINTS SHALL BE A MAXIMU M 12'EA. WAY. EXPANSION JOINTS TO HAVE COMPRESSIVE EXPANSION JOINT FILLER MATERIAL OF 1/4" FINISH TO BE A MEDIUM BROOM FINISH U.N.O.
11. A SEPARATE PERMIT SHALL BE OBTAINED FOR ALL FENCES, SCREEN WALLS, TRASH ENCLOSURES, LIGHT POLE BASES & SIGNAGE PER CITY STANDARDS.
12. PAINT CURBS AND PROVIDE SIGNS TO INFORM OF FIRE LANES AS REQUIRED BY FIRE DEPARTMENT.
13. CONSTRUCTION DOCUMENTS PERTAINING TO THE LAN DSCAPE AND IRRIGATION OF THE ENTIRE PROJECT SITE SHALL BE SUBMITTED TO THE BUILDING DEPARTMENT AND APPROVED BY PUBLIC FACILITIES DEVELOPMENT PRIOR TO ISSUANCE OF BUILDING PERMITS.
14. PRIOR TO FINAL CITY INSPECTION, LA LANDSCAPE ARCHITECT SHALL SUBMIT A CERTIFICATE OF COMPLETION TO PUBLIC FACILITIES DEVELOPMENT.
15. IT SHOULD BE A REPONSABILITY OF THE APPLICANT / REPRESENTATIVE TO FORWARD GUIDELINES FOR LANDSCAPE AND IRRIGATION CONSTRUCTION DOCUMENTS (GREEN HANDOUT) TO THE LANDSCAPE ARCHITECT FOR INFORMATION ON THE REQUIREMENTS AND SUBMITTAL FOR PLAN CHECK.
16. ALL LANDSCAPE AND IRRIGATION DESIGNS SHALL MEET CURRENT CITY STANDARDS AS LISTED IN GUIDELINES OR AS OBTAINED FROM PUBLIC FACILITIES DEVELOPMENT.
17. NOT USED
18. LANDSCAPED AREAS SHALL BE DELINEATED WITH A MINIMUM SIX INCHES (6") HIGH CURB.
19. EMPLOYEE BREAK AREA WILL BE PROVIDED WITHIN OFFICE T.I.
20. THE " ENTIRE PROJECT SHALL BE PERMANENTLY MAINTAINED WITH AN AUTOMATIC IRRIGATION SYSTEM.
21. APPROVED CONCEPTUAL LANDSCAPE PLAN PRIOR TO GRADING PERMIT.

BUILDING 1	1,000,000 S.F.
BUILDING 2	1,014,610 S.F.
COMMERCIAL BUILDINGS	200,000 S.F.
TOTAL	2,214,610 S.F.
TOTAL 1,200 UNITS OF RESIDENTIAL	
BEGINS CONSTRUCTION JUNE 2020	

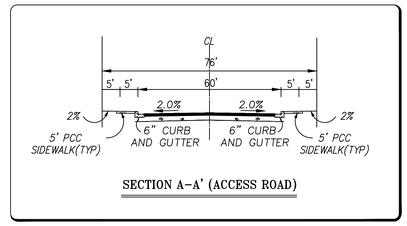


SITE PLAN - KEY NOTES:

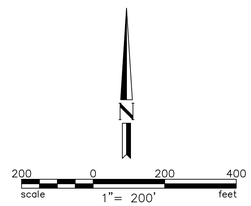
1. CONCRETE TRUCK APRON
2. ASPHALT CONCRETE (AC) PAVING, SEE SOIL REPORT FOR SECTION REQUIREMENTS, SEE REFERENCE DRAWING FOR LOCATION.
3. CONCRETE WALKWAY
4. DRIVEWAY APRONS TO BE CONSTRUCTED CITY STD.
5. LANDSCAPED AREAS
6. CRIB WALL

SITE LEGEND

- LANDSCAPED AREA
- CONCRETE PAVING
- AC. PAVING
- STANDARD PARKING STALL (9' X 20')
- SLOPE
- (64) PARKING STALL COUNT
- TRACT BOUNDARY
- R/W



SECTION A-A' (ACCESS ROAD)



Prepared in the office of
SRD Design Studio, Inc.
Engineering
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Construction Mgmt.
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Geotechnical Engr.
Surveying Services
10501 Wilshire Blvd. # 1211
Los Angeles CA 90211
Tel (424) 279-0909
E-mail: administration@srd.com

CITY OF BEAUMONT

SITE PLAN
LEGACY HIGHLANDS

Drawing No.
Job No. 2074.1165
Sheet No. 1 of 1

Drawing Name: S:\1165 WILLOW SPRINGS\EXHIBITS\EXHIBITS UPDATE 2019\1165 Commercial Site Plan.dwg
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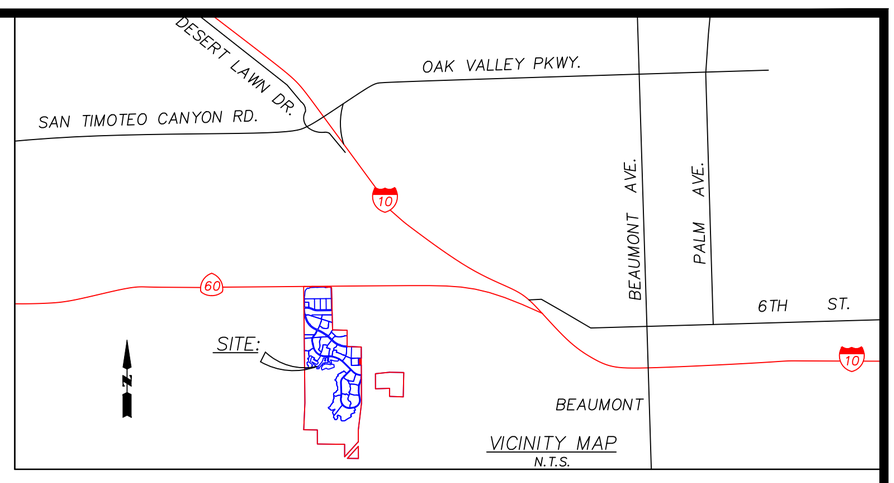
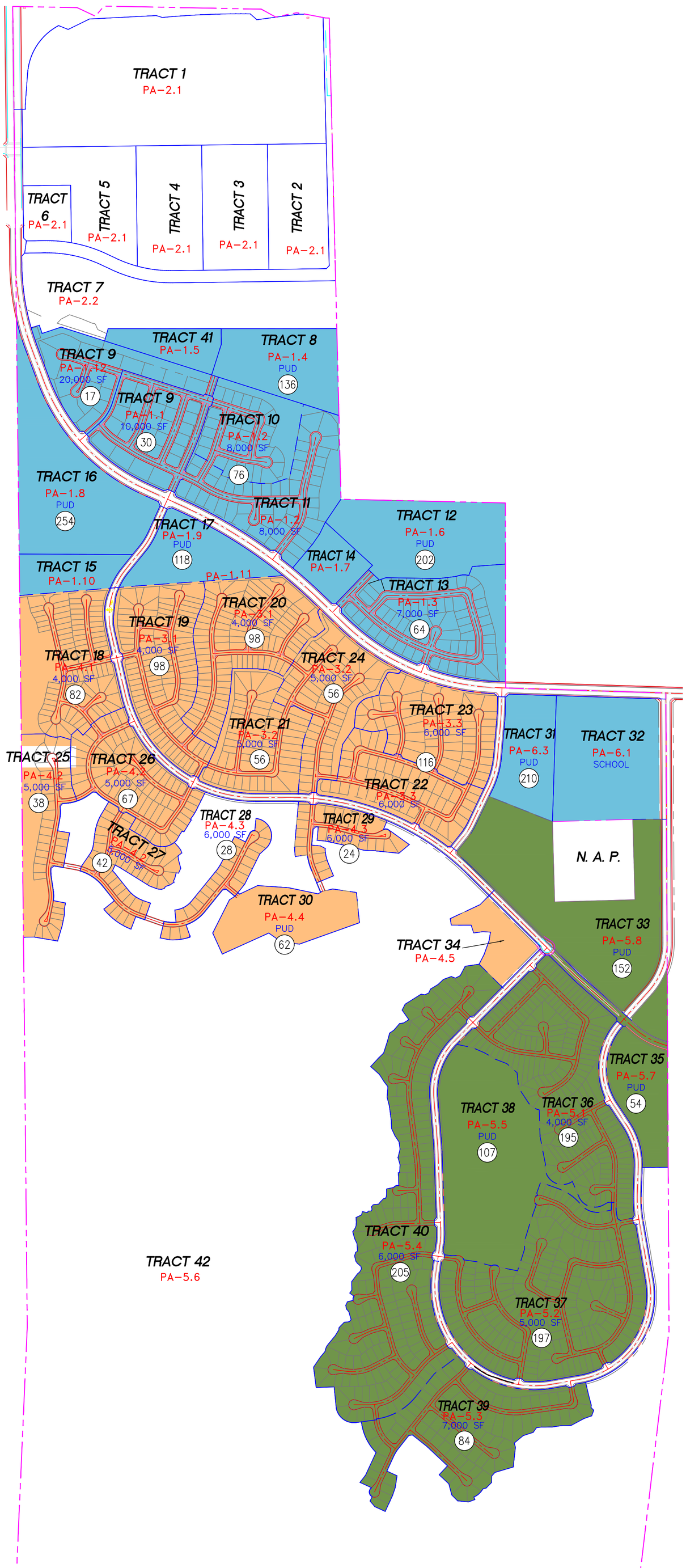


Development Plan Statistical Summary Table

Planning Area/ Neighborhood	Parcel No.	Land Use Designation	Zoning	House S. Foot Range	Average S. Footage	Gross Acres (1)	Specific Plan review Process Minimum Lot Size		Expected # of Units	Maximum Density
Planning Area 1										
Neighborhood 1.1	Parcel 9	Low Density Residential	R-SF	2,800-3,200	3,000	13.20	SFD-10,000 sf.		30	2.3 du/ac
Neighborhood 1.2	Parcel 10 & 11	Low Density Residential	R-SF	2,250-2,800	2,550	31.20	SFD-8,000 sf.		76	2.4 du/ac
Neighborhood 1.3	Parcel 13	Low Density Residential	R-SF	2,050-2,400	2,250	30.50	SFD-7,000 sf.		64	2.1 du/ac
Neighborhood 1.4	Parcel 8	Medium Density Residential	PUD	900-1,250	1,100	12.50	PUD		136	15.0 du/ac
Neighborhood 1.5	Parcel 41	Open Space	OS			5.90	-		-	-
Neighborhood 1.6	Parcel 12	Medium Density Residential	PUD	1,000-1,250	1,150	16.10	PUD		202	15.0 du/ac
Neighborhood 1.7	Parcel 14	Open Space	OS			5.00	-		-	-
Neighborhood 1.8	Parcel 16	Medium Density Residential	PUD	1,000-1,300	1,200	19.00	PUD		254	15.0 du/ac
Neighborhood 1.9	Parcel 17	High Density Residential	PUD	850-1,200	1,050	8.90	PUD		118	15.0 du/ac
Neighborhood 1.10	Parcel 15	Open Space	OS			6.00	-		-	-
Neighborhood 1.11	Parcel 9	Open Space	OS			3.50	-		-	-
Neighborhood 1.12	Parcel 9	Low Density Residential	R-SF	2,800-3,200	3,000	12.00	SFD-20,000 sf.		17	0.8 du/ac
TOTAL PLANNING AREA 1:						163.80			897	5.5
Planning Area 2										
Neighborhood 2.1	Parcel 1-6	Commercial	C-G			100.00	-		-	-
Neighborhood 2.2	Parcel 7	Open Space	OS			34.70	-		-	-
TOTAL PLANNING AREA 2:						134.70				
Planning Area 6										
Neighborhood 6.1	Parcel 32	School	-			20.00	-		-	-
Neighborhood 6.2	Parcel 44	Open Space	OS			111.20	-		-	-
Neighborhood 6.3	Parcel 31	Medium Density Residential	PUD	1,000-1,300	1,200	14.80	PUD		210	15.0 du/ac
TOTAL PLANNING AREA 6:						146.00			210	1.4
Sub-total - Conventional Planned Community:						444.50			1,107.00	
Planning Area 3										
Neighborhood 3.1	Parcel 19 & 20	Low Residential	R-SF	1,850-2,200	2,050	39.00	SFD-4,000 sf.		196	5.0 du/ac
Neighborhood 3.2	Parcel 21 & 24	Low Residential	R-SF	1,300-2,000	1,650	28.30	SFD-5,000 sf.		112	4.1 du/ac
Neighborhood 3.3	Parcel 22 & 23	Low Residential	R-SF	1,850-2,200	2,050	32.70	SFD-6,000 sf.		116	3.6 du/ac
TOTAL PLANNING AREA 3:						100.00			424	4.3
Planning Area 4										
Neighborhood 4.1	Parcel 18	Low Density Residential	R-SF	900-1,250	1,100	29.90	SFD-4,000 sf.		82	2.7 du/ac
Neighborhood 4.2	Parcel 25, 26 & 27	Low Density Residential	R-SF	1,650-2,200	1,950	37.50	SFD-5,000 sf.		147	4.0 du/ac
Neighborhood 4.3	Parcel 28 & 29	Low Density Residential	R-SF	1,850-2,200	2,050	22.00	SFD-6,000 sf.		52	2.4 du/ac
Neighborhood 4.4	Parcel 30	Low Density Residential	PUD	1,100-2,000	1,550	9.70	PUD		62	9.0 du/ac
Neighborhood 4.5	Parcel 34	Open Space	OS			4.40	-		-	-
TOTAL PLANNING AREA 4:						103.50			343	3.4
Planning Area 5										
Neighborhood 5.1	Parcel 36	Low Density Residential	R-SF	1,850-2,200	2,050	31.80	SFD-4,000 sf.		195	6.2 du/ac
Neighborhood 5.2	Parcel 37	Low Density Residential	R-SF	1,300-2,000	1,650	33.80	SFD-5,000 sf.		197	5.9 du/ac
Neighborhood 5.3	Parcel 39	Low Density Residential	R-SF	3,600-4,200	3,900	51.70	SFD-7,000 sf.		84	1.7 du/ac
Neighborhood 5.4	Parcel 40	Low Density Residential	R-SF	1,850-2,200	2,050	73.70	SFD-6,000 sf.		205	2.8 du/ac
Neighborhood 5.5	Parcel 38	Low Density Residential	PUD	1,850-2,200	2,050	29.00	PUD		107	9.0 du/ac
Neighborhood 5.6	Parcel 42 & 43	Open Space	OS			638.90	-		-	-
Neighborhood 5.7	Parcel 35	Low Density Residential	PUD	900-1,300	1,100	6.90	PUD		54	9.0 du/ac
Neighborhood 5.8	Parcel 33	Low Density Residential	PUD	900-1,300	1,100	28.50	PUD		152	9.0 du/ac
TOTAL PLANNING AREA 5:						894.30			994.0	1.2
sub-total - ACTIVE ADULT COMMUNITY						1097.8			1761.0	1.6
SUBTOTAL AREAS 1-6:						1542.3			2,868	
Public Road/Spine Circulation						56.5				
PROJECT TOTAL:						1598.8			2,868	1.79

(1) Gross Acreage includes streets within each Neighborhood.
(2) A maximum of 20% of the Maximum Allowable Dwelling Units may be transferred between Neighborhoods and Planning Areas provided that the total Maximum Allowable Dwelling Units shall not exceed 2,800.
(3) Maximum density as measured over the entire Neighborhood. Individual projects may have a density greater than 8.0 du./ac, provided that the Maximum Allowable Dwelling Units for any Neighborhood are not exceeded. Maximum project density shall not exceed 20.0 du/ac
(4) Minimum lot size applies
5) Maximum allowable density = 20.0 du/ac

Phase I Series A Bonds Total Number of Units=1,107
Phase II Series B Bonds Total Number of Units=767
Phase III Series C Bonds Total Number of Units=994



LEGEND

- TRACT 21 — TRACT NO.
- PA-3.2 — PLANNING AREA
- (55) — TOTAL LOTS
- PHASE I SERIES A BONDS TOTAL NO. OF UNITS=1,107
- PHASE II SERIES B BONDS TOTAL NO. OF UNITS=767
- PHASE III SERIES C BONDS TOTAL NO. OF UNITS=994

N

GRAPHIC SCALE

0 250 500 1000 2000

(IN FEET)
1 inch = 500 ft.

Prepared in the office of
SRD Design Studio, Inc.
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Construction Mgmt.
Environmental Svs.
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10501 Wilshire Blvd. # 1211
Los Angeles CA 90211
Tel (424) 279-0909

DAVID J. GOLKAR RCE# 54162 EXP. 12/31/2019
DATE:

PRESERVE

IN THE CITY OF BEAUMONT, COUNTY OF RIVERSIDE, CALIFORNIA.

PHASING MAP

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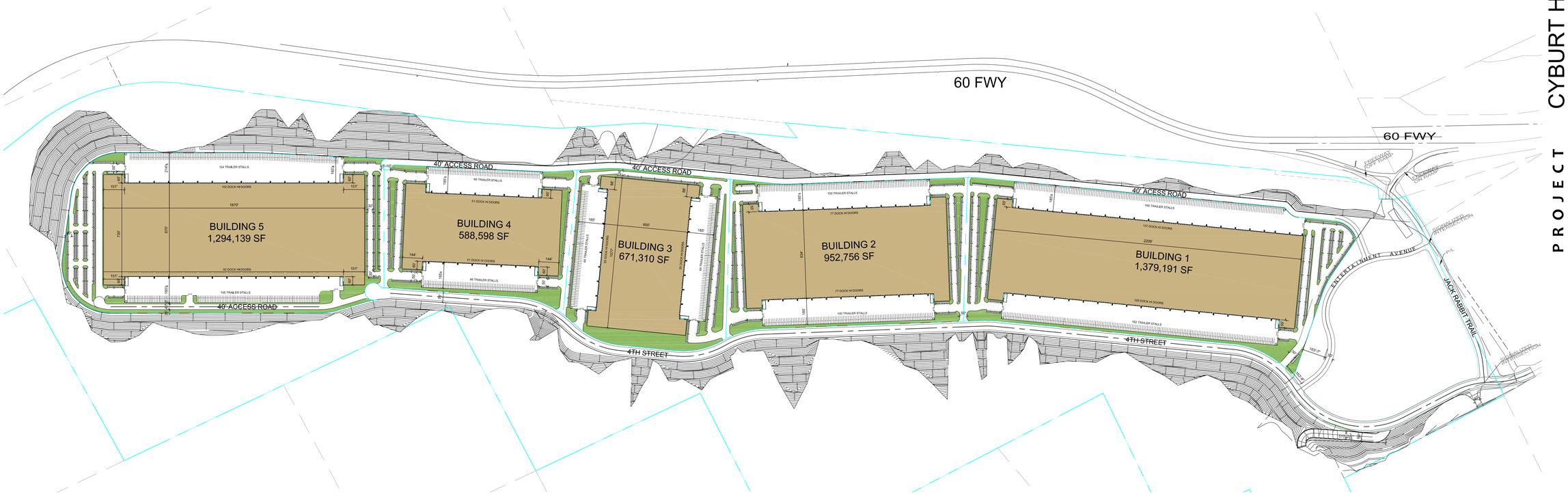

PROJECT CYBURT HOLDINGS SITE
BEAUMONT, CA

SCHEME 8
SITE PLAN

PROJECT INFORMATION - SCHEME 7			12.02.2019
GROSS SITE AREA	**27,114,668**	**SF**	**622.47 AC**
PAD AREA (SELLABLE AREA) - EXCLUDING RETAIL	9,505,884	SF	218.225 AC
4TH STREET	686,300	SF	15.76 AC
PROPOSED STREET (JACK RABBIT TRAIL)	78,216	SF	1.796 AC
NET DEVELOPABLE AREA (WHICH STREETS)	**10,364,886**	**SF**	**237.95 AC**
TOTAL BUILDING AREA	4,885,994	SF	
NET FAR			**47.14%**
MAX FAR			NONE
ZONE			(M)-MANUFACTURING
STREET FRONT BLDG. SETBACK			25 FT
STREET SIDE BLDG. SETBACK			NONE
STREET FRONT PARKING SETBACK			50 FT
STREET FRONT LANDSCAPE SETBACK			NONE
INT/REAR BLDG SETBACK			NONE
PARKING REQUIRED (9X19)			5,012
SUGGESTED: PARKING REQUIRED			2,461
PARKING PROVIDED			2,693
LANDSCAPE REQUIRED	15%		1,554,733 SF
LANDSCAPE PROVIDED	8.0%		826,319 SF
TRAILERS REQUIRED (12X50)			841
TRAILERS PROVIDED			1,021

BUILDING 1			
NET AREA		2,650,720	SF
FAR		52%	
BUILDING 1 AREA		**1,379,191**	**SF**
FOOTPRINT		1,374,191	SF
WAREHOUSE		1,369,191	SF
OFFICE		5,000	SF
MEZZANINE		5,000	SF
OFFICE		5,000	SF
PARKING REQUIRED PER ZONING (9X19)		1,409	
WAREHOUSE @ 1/1000		1,369	
OFFICE @ 1/250		40	
COMPACT: MAX 10% WHERE 20+ SPACES PROVIDED		0	
SUGGESTED: PARKING REQUIRED		*725*	
WAREHOUSE @ 1/2000		*685*	
OFFICE @ 1/250		*40*	
PARKING PROVIDED		725	
TRAILER REQUIRED (12X50)		270	
1/VEHICLE OPERATED FROM SITE			
TRAILER PROVIDED		322	
LANDSCAPE PROVIDED	6.4%	168,551	SF

BUILDING 2			
NET AREA		1,762,026	SF
FAR		54%	
BUILDING 2 AREA		**952,756**	**SF**
FOOTPRINT		947,756	SF
WAREHOUSE		942,756	SF
OFFICE		5,000	SF
MEZZANINE		5,000	SF
OFFICE		5,000	SF
PARKING REQUIRED PER ZONING (9X19)		983	
WAREHOUSE @ 1/1000		943	
OFFICE @ 1/250		40	
COMPACT: MAX 10% WHERE 20+ SPACES PROVIDED		0	
SUGGESTED: PARKING REQUIRED		*511*	
WAREHOUSE @ 1/2000		*471*	
OFFICE @ 1/250		*40*	
PARKING PROVIDED		531	
TRAILER REQUIRED (12X50)		154	
1/VEHICLE OPERATED FROM SITE			
TRAILER PROVIDED		200	
LANDSCAPE PROVIDED	6.8%	119,496	SF

BUILDING 3			
NET AREA		1,393,853	SF
FAR		48%	
BUILDING 3 AREA		**671,310**	**SF**
FOOTPRINT		668,310	SF
WAREHOUSE		665,310	SF
OFFICE		3,000	SF
MEZZANINE		3,000	SF
OFFICE		3,000	SF
PARKING REQUIRED PER ZONING (9X19)		689	
WAREHOUSE @ 1/1000		665	
OFFICE @ 1/250		24	
COMPACT: MAX 10% WHERE 20+ SPACES PROVIDED		0	
SUGGESTED: PARKING REQUIRED		*357*	
WAREHOUSE @ 1/2000		*333*	
OFFICE @ 1/250		*24*	
PARKING PROVIDED		370	
TRAILER REQUIRED (12X50)		100	
1/VEHICLE OPERATED FROM SITE			
TRAILER PROVIDED		138	
LANDSCAPE PROVIDED	13.7%	191,592	SF

BUILDING 4			
NET AREA		1,204,725	SF
FAR		49%	
BUILDING 4 AREA		**588,598**	**SF**
FOOTPRINT		585,598	SF
WAREHOUSE		582,598	SF
OFFICE		3,000	SF
MEZZANINE		3,000	SF
OFFICE		3,000	SF
PARKING REQUIRED PER ZONING (9X19)		607	
WAREHOUSE @ 1/1000		583	
OFFICE @ 1/250		24	
COMPACT: MAX 10% WHERE 20+ SPACES PROVIDED		0	
SUGGESTED: PARKING REQUIRED		*315*	
WAREHOUSE @ 1/2000		*291*	
OFFICE @ 1/250		*24*	
PARKING PROVIDED		391	
TRAILER REQUIRED (12X50)		102	
1/VEHICLE OPERATED FROM SITE			
TRAILER PROVIDED		132	
LANDSCAPE PROVIDED	10.2%	123,361	SF

BUILDING 5			
NET AREA		2,207,269	SF
FAR		59%	
BUILDING 5 AREA		**1,294,139**	**SF**
FOOTPRINT		1,289,139	SF
WAREHOUSE		1,284,139	SF
OFFICE		5,000	SF
MEZZANINE		5,000	SF
OFFICE		5,000	SF
PARKING REQUIRED PER ZONING (9X19)		1,324	
WAREHOUSE @ 1/1000		1,284	
OFFICE @ 1/250		40	
COMPACT: MAX 10% WHERE 20+ SPACES PROVIDED		0	
SUGGESTED: PARKING REQUIRED		*553*	
WAREHOUSE @ 1/2000		*642*	
OFFICE @ 1/250		*40*	
PARKING PROVIDED		676	
TRAILER REQUIRED (12X50)		215	
1/VEHICLE OPERATED FROM SITE			
TRAILER PROVIDED		229	
LANDSCAPE PROVIDED	7.3%	160,372	SF

HERDMAN
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NORTH

CONCEPTUAL SITE PLAN

A CONCEPTUAL SITE PLAN
SCALE: 1" = 300'