

**REVIEW BY FORT BEND COUNTY COMMISSIONERS COURT**

124

On this 10 day of FEBRUARY, 2015, Commissioners Court came on to be heard and reviewed the accompanying notice of GONZALES CONSTRICTION ENTERPRISE, INC.

Job Location SEABOURNE CREEK

Dated 01/29/15 BOND NO. 456579C, Permit No. 84762 to make use of certain Fort Bend County property subject to, "A Revised Order Regulating the Laying, Construction, Maintenance, and Repair of Buried Cables, Conduits, and Pole Lines, In, Under, Across or Along Roads, Streets, Highways, and Drainage Ditches in Fort Bend County, Texas, Under the Jurisdiction of the Commissioners Court of Fort Bend County, Texas," as passed by the Commissioners Court of Fort Bend County, Texas, date the 3<sup>rd</sup> day of August, 1987, recorded in Volume \_\_\_\_\_ of the Minutes of the Commissioners Court of Fort Bend County, Texas, to the extent that such order is not inconsistent with Article 1436a, Vernon's Texas Civil Statues. Upon Motion of Commissioner Meyers, seconded by Commissioner Patterson, duly put and carried, it is ORDERED, ADJUGED AND DECREED that said notice of said above purpose is hereby acknowledged by the Commissioners Court of Fort Bend County, Texas, and that said notice be placed on record according to the regulation order thereof.

**Notes:**

1. Evidence of review by the Commissioners Court must be kept on the job site and failure to do so constitutes grounds for job shutdown.
2. Written notices are required:
  - a. 48 hours in advance of construction start up, and
  - b. When construction is completed and ready for final inspection

Mail notices to: Permit Administrator  
Fort Bend County Engineering  
301 JACKSON STREET  
RICHMOND, Texas 77469  
281-633-7500

3. This permit expires one (1) year from date of permit if construction has not commenced.

By [Signature]  
County Engineer

By [Signature]  
Drainage District Engineer/Manager

Presented to Commissioners Court and approved.  
Recorded in Volume 2/10/15  
Minutes of Commissioners Court.

Clerk of Commissioners Court  
By [Signature]  
Deputy **RENEE MICHULKA**

# COUNTY OF FORT BEND

## Engineering Department

301 JACKSON STREET  
RICHMOND, Texas 77469

Johnny Ortega  
Permit Administrator

1124 Blume Road  
Phone: (281) 633-7500

### PERMIT APPLICATION REVIEW FORM FOR CABLE, CONDUIT, AND POLE LINE ACTIVITY IN FORT BEND COUNTY

PERMIT NO. 084762

The following "Notice of Proposed Cable, Conduit, and/or Pole Line activity in Fort Bend County" and accompanying attachments have been reviewed and the notice conforms to appropriate regulations set by Commissioner's Court of Fort Bend County, Texas.

- (1) Complete Application Form.
- a. Name of road, street, and/or drainage ditch affected.
  - b. Vicinity map showing course of direction.
  - c. Plans and specifications.

- (2) Bond:
- District Attorney, approval when applicable.
  - Perpetual bond currently posted.  
No. 456579C  
Amount \$50,000.00
  - Performance bond submitted.  
No. \_\_\_\_\_  
Amount \_\_\_\_\_
  - Cashier's Check.  
No. \_\_\_\_\_  
Amount \_\_\_\_\_

- (3) Verbal permission given for emergencies, to start construction before approved in Commissioner's Court.

\_\_\_\_\_  
Precinct Engineer Acknowledgment Date \_\_\_\_\_

\_\_\_\_\_  
Precinct Commissioner Acknowledgment Date \_\_\_\_\_

- (4) Adam Wright  
Drainage District Approval when applicable

We have reviewed this project and agree it meets minimum requirements.

  
Johnny Ortega CFM/ Permit Administrator  
(REVISED 5/30/08)

01/23/2015  
Date

NO. 121

**RECEIVED**  
JAN 23 2015  
FBC DRAINAGE DIST.

**NOTICE OF PROPOSED CABLE, CONDUIT AND/OR POLE LINE ACTIVITY  
IN, UNDER, ACROSS OR ALONG ROADS, STREETS, HIGHWAYS AND DRAINAGE DITCHES  
IN FORT BEND COUNTY**

APPLICANT'S JOB NO. \_\_\_\_\_  
 PERMIT No. 84762 PCT. No. 1  
 BOND No. 4565790 perpetual Bond.

Formal notice is hereby given that GONZALEZ CONSTRUCTION ENTERPRISE, INC  
 proposes to lay, construct, maintain and/or repair cable, conduit and/or pole line, in, under, across, or along roads, streets, highways and  
 drainage ditches in Fort Bend County, as follows:

**In, Under, or Across Roads and/or Drainage Ditches**

Road or Ditch Name	Distance & Direction From Nearest Intersection	Length of Crossing	Type of Construction			
			Bored	Jacked	Driven	Cased
<u>Walsh Rd.</u>		<u>Connecting to ditch</u>				

**Along Roads and/or Drainage Ditches**

Road or Ditch Name	Distance & Direction From Nearest Intersection	To	Distance

Connecting 2x3' RC Boxes to ditch with slope paving also General Description

The Location and description of the proposed installation and appurtenances is more fully shown on the attached detail drawings. The laying, construction, maintenance and/or repair of the proposed installation shall be subject to "A Revised Order Regulating the Laying, Construction, Maintenance and/or Repair of Cables, Conduits, and/or Pole Lines, In, Under, Across, or Along Roads, Streets, Highways and Drainage Ditches in Fort Bend County, Texas, Under the Jurisdiction of the Commissioners Court of Fort Bend County, Texas," as passed by Commissioners Court of Fort Bend County, Texas, dated the 3rd day of August, 1987, recorded in Volume 639 of the Minutes of the Commissioners Court of Fort Bend County, Texas.

Written notices are required: 1) 48 hours in advance of start of construction and  
 2) when construction is complete and ready for final inspection.

Mail to: **Permit Administrator/Fort Bend County Engineering**  
 301 Jackson Richmond, TX 77469.

Violation of Requirements shall constitute grounds for job shut down.

COMPANY NAME: GONZALEZ CONSTRUCTION ENTERPRISE, INC  
 AGENT AND/OR OWNER

NAME & TITLE: MARIA GONZALEZ VICE PRESIDENT

DATE: \_\_\_\_\_

ADDRESS: 3114 BLACKWOOD ROAD

ROSENBERG, TX 77471

City State Zip

TELEPHONE No. 832 606 2361

(Accessible 24hrs/day, 7 days/week)

As of 9/1/2014, we will no longer mail out permits. Instead, we will email them.  
 Please complete:  
 Name:  
MARIA GONZALEZ  
 Email address:  
Mariego9@aol.com

ROS

STATE OF TEXAS  
COUNTY OF FORT BEND  
CITY OF ROSENBERG

Walsh Road Industrial Park, Ltd., a Texas Limited Partnership, being by and through LARRY ROSENBERG, Member of Walsh Road Industrial Park, Ltd., a Texas limited liability company, acting as its General Partner of Walsh Road Industrial Park, Ltd., owners of the 24,259 acre tract described in the plans and plat records of Walsh Road Industrial Park, do hereby amend and establish said subdivision and development map of said property according to the plans, specifications, restrictions and conditions of said map and hereby dedicate to the use of the public forever, all streets (except those streets designated as private streets), parks, ponds, water courses, drains, canals, and other public places, and all easements and servitudes therein expressed, and all zoning and other laws, that have and may hereafter be enacted and amended, that relate to the land so described.

FURTHER, we do hereby authorize for public utility purposes an unincorporated canal easement that (1) lead in, across and from a plane level (SL) just above the ground level surface, located adjacent to all public utility easements across terrain.

FURTHER, we do hereby warrant and agree that all of the property within the boundaries of the plat shall be restricted to prevent the entrance of any public utility lines or public streets, roads or any other or any drainage ditch, other utility or industry.

FURTHER, we do hereby warrant and agree that all of the property within the boundaries of the subdivision and adjacent to any drainage easement, ditch, water course or other structure any that hereby is restricted to keep such drainage upon one easement strip of fence, building, structure, driveway and other structure for the protection and maintenance of the drainage facility and that such structure property will not be permitted to cross directly into the easement strip or across an approved structure.

FURTHER, we do hereby warrant and agree that the City of Rosenberg, Texas, and its duly authorized officers and agents shall have the right to enter upon the land described in the plat to inspect and verify the compliance of the plat with the provisions of the plat and to take any action necessary to enforce the provisions of the plat.

As Testimony Whereof, WALSH ROAD INDUSTRIAL PARK, LTD., a Texas Limited Partnership, has caused these presents to be signed by LARRY ROSENBERG, Member of Walsh Road Industrial Park, Ltd., a Texas limited liability company, as General Partner of Walsh Road Industrial Park, Ltd., and the same to be attested by the undersigned.

WALSH ROAD INDUSTRIAL PARK, LTD., a Texas Limited Partnership, has caused these presents to be signed by LARRY ROSENBERG, Member of Walsh Road Industrial Park, Ltd., a Texas limited liability company, as General Partner of Walsh Road Industrial Park, Ltd., and the same to be attested by the undersigned.

WALSH ROAD INDUSTRIAL PARK, LTD., a Texas Limited Partnership, has caused these presents to be signed by LARRY ROSENBERG, Member of Walsh Road Industrial Park, Ltd., a Texas limited liability company, as General Partner of Walsh Road Industrial Park, Ltd., and the same to be attested by the undersigned.

Larry Rosenberg  
Member of Walsh Road CP, Ltd.

STATE OF TEXAS  
COUNTY OF FORT BEND

STATE OF TEXAS, the undersigned authority, on this day personally appeared Larry Rosenberg, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purposes and consideration therein expressed and in the capacity therein and before me, and he and I are not related by blood or marriage.

Notary Public in and for the State of Texas

STATE OF TEXAS  
COUNTY OF FORT BEND

STATE OF TEXAS, the undersigned authority, on this day personally appeared Thomas A. Sherry, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purposes and consideration therein expressed and in the capacity therein and before me, and he and I are not related by blood or marriage.

Notary Public in and for the State of Texas

PLANNING COMMISSION APPROVAL  
This is to certify that the Planning Commission of the City of Rosenberg, Texas has approved the plat and subdivision of WALSH ROAD INDUSTRIAL PARK in conformity with the laws of the State of Texas and the ordinances of the City of Rosenberg to show terrain and subdivide the remaining of the plat this \_\_\_\_\_ day of \_\_\_\_\_, 2014.

For President, Chairman \_\_\_\_\_  
Mayor Pollock, Secretary \_\_\_\_\_

CITY COUNCIL APPROVAL  
This is to certify that the City Council of the City of Rosenberg, Texas has approved this plat and subdivision of WALSH ROAD INDUSTRIAL PARK in conformity with the laws of the State of Texas and the ordinances of the City of Rosenberg to show terrain and subdivide the remaining of the plat this \_\_\_\_\_ day of \_\_\_\_\_, 2014.

Mayor M. Barnes, Jr., Mayor \_\_\_\_\_  
Diana Cervantes, City Secretary \_\_\_\_\_

I, David R. Schaefer, am authorized under the laws of the State of Texas to prepare the plat and subdivision and hereby certify that the above subdivision is true and correct, was prepared from an actual survey of the property made under my supervision and to the best of my knowledge and belief, and that all of the requirements of the laws of the State of Texas and the ordinances of the City of Rosenberg to show terrain and subdivide the remaining of the plat this \_\_\_\_\_ day of \_\_\_\_\_, 2014.



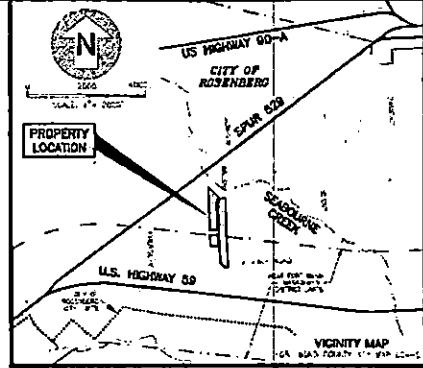
David R. Schaefer  
Regional Professional Land Surveyor  
License Registration No. 6400

I, Dennis Roberts, County Clerk in and for Fort Bend County, Texas, hereby certify that the foregoing instrument was in my possession and control and that I have recorded the same in the public records of Fort Bend County, Texas.

County Clerk Fort Bend County, Texas

By \_\_\_\_\_  
Deputy

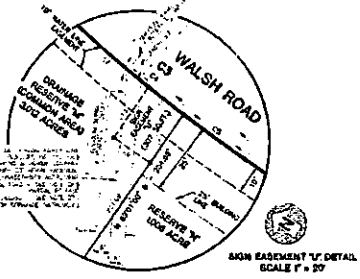
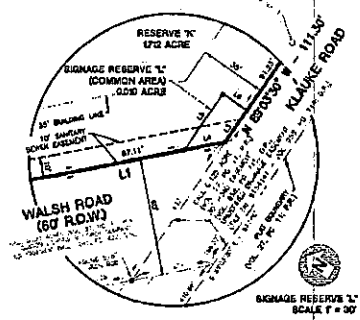
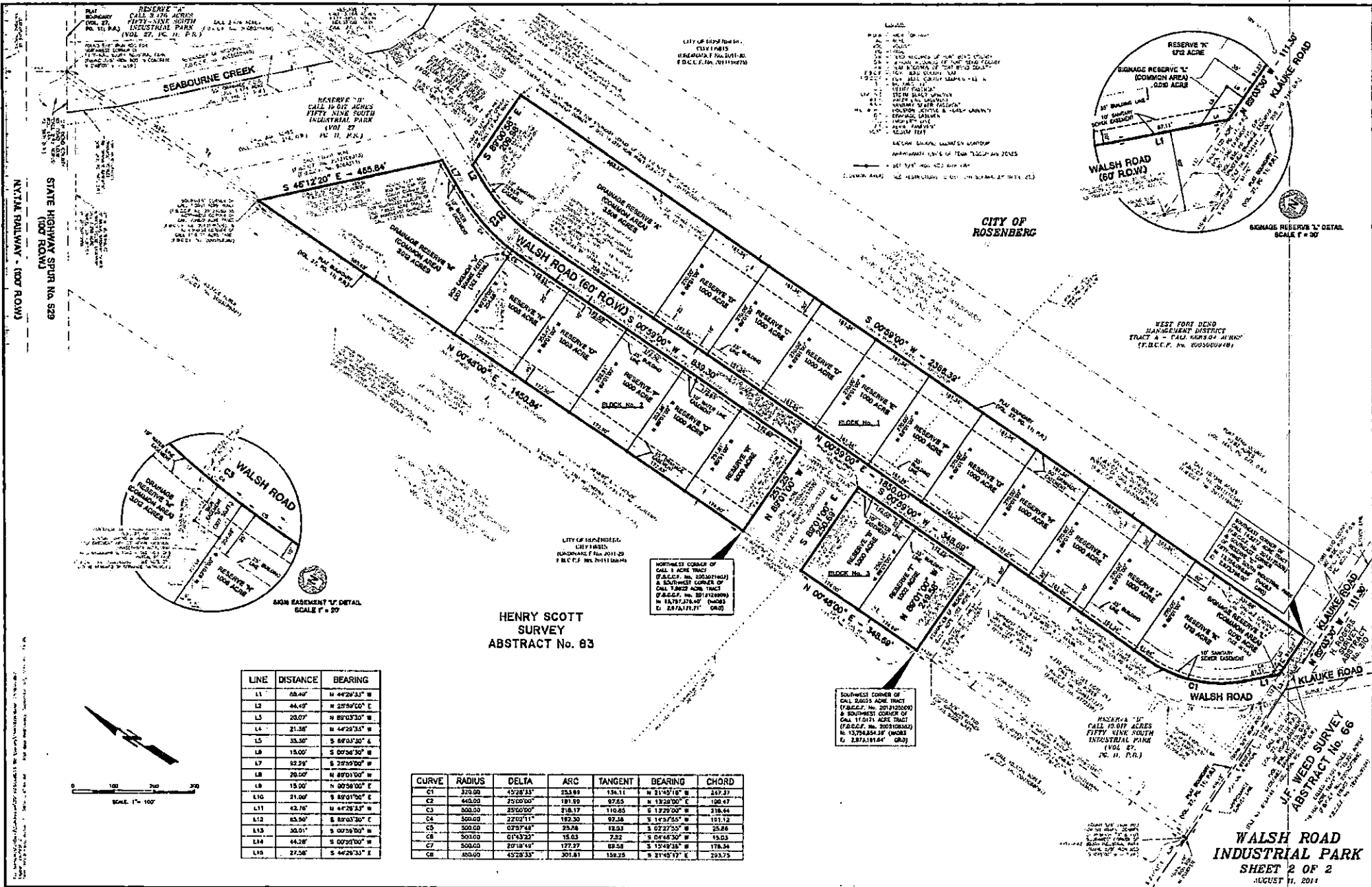
- 1) B.L. INDICATES BRADING LINE; U.E. INDICATES UTILITY EASEMENT; S.M. S.E. INDICATES SURVEY MARKER (CANTONMENT); W.L. INDICATES WATER LINE EASEMENT; S.S.E. INDICATES SANITARY SEWER EASEMENT; P.L. & P.E. INDICATES PAVEMENT LAYOUT AND POWER LAYOUT; S.S. INDICATES SANITARY SEWER EASEMENT; P.L. INDICATES PROPERTY LINE.
- 2) ELEVATION REFERENCE & TEMPORARY DEMONSTRATION  
ELEVATION REFERENCE: N.G.S. 7-1504 1087 (790 483340) = FOUND STAINLESS STEEL ROD ON WEST SIDE OF AMBER ROAD AT THE NORTH SIDE RAILROAD TRACKS ALONG STATE HIGHWAY SPUR NO. 82E. ELEVATION = 101.87' (NAVD83)
- 3) PROJECT INFORMATION - SET BRASS USE IN CONCRETE FOR NORTHEAST CORNER OF RESERVE "C" OF BLOCK No. 1 OF WALSH ROAD INDUSTRIAL PARK  
E = 2,871,422.87  
T = 1,215,221.52  
ELEVATION = 101.02' (NAVD83)
- 4) ELEVATIONS USED FOR DRAINAGE CONTROL LINES ARE BASED UPON U.S.C. & G.S. DATA, NAD-83 (1991 ADA)
- 5) THIS PLAN WAS PREPARED TO MEET CITY OF ROSENBERG, FORT BEND COUNTY AND WEST FORT BEND MANAGEMENT DISTRICT REQUIREMENTS.
- 6) THIS PLAN WAS PREPARED FROM INFORMATION FURNISHED BY CHARLES TITLE COMPANY FORT BEND, OF 841. 3121007023/2, EFFECTIVE DATE MARCH 28, 2014. THE SURVEYOR HAS NOT ABSTRACTED THE ABOVE PROPERTY.
- 7) THIS PLAN SHALL BE RECORDED WITHIN FORT BEND COUNTY CLERK'S OFFICE, FORT BEND COUNTY CLERK'S OFFICE, 1400 FORT BEND COUNTY CLERK'S OFFICE, FORT BEND COUNTY, TEXAS. THIS PLAN SHALL BE RECORDED WITHIN THE WEST FORT BEND MANAGEMENT DISTRICT.



AREA TABLE			
RESERVE No.	RESTRICTED USE	ACREAGE	SQUARE FOOTAGE
BLOCK No. 1	RESERVE "A" DRAINAGE (COMMON AREA)	3.508	182,888
	RESERVE "B" NON-RESIDENTIAL	1,000	43,562
	RESERVE "C" NON-RESIDENTIAL	1,000	43,562
	RESERVE "D" NON-RESIDENTIAL	1,000	43,562
	RESERVE "E" NON-RESIDENTIAL	1,000	43,562
	RESERVE "F" NON-RESIDENTIAL	1,000	43,562
	RESERVE "G" NON-RESIDENTIAL	1,000	43,562
	RESERVE "H" NON-RESIDENTIAL	1,000	43,562
	RESERVE "I" DRAINAGE (COMMON AREA)	0.010	415
TOTAL FOR BLOCK No. 1		14.228	ACRES
BLOCK No. 2	RESERVE "A" DRAINAGE (COMMON AREA)	3.018	151,164
	RESERVE "B" NON-RESIDENTIAL	1,000	43,577
	RESERVE "C" NON-RESIDENTIAL	1,000	43,578
	RESERVE "D" NON-RESIDENTIAL	1,000	43,579
	RESERVE "E" NON-RESIDENTIAL	1,000	43,579
	RESERVE "F" NON-RESIDENTIAL	1,000	43,580
TOTAL FOR BLOCK No. 2		8.026	ACRES
BLOCK No. 3	RESERVE "A" NON-RESIDENTIAL	1,000	43,572
	RESERVE "B" NON-RESIDENTIAL	1,000	43,584
TOTAL FOR BLOCK No. 3		2.002	ACRES
GRAND TOTAL		24.259	ACRES

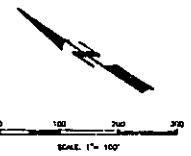
**WALSH ROAD INDUSTRIAL PARK**  
A SUBDIVISION OF 24.259 ACRES OF LAND OVERALL BEING A PARTIAL REPLAT OF RESERVE "C" (CALL 14.2272 ACRES - TRACT 1; FORT BEND COUNTY CLERK'S FILE NO. 2013125600) AND A PARTIAL REPLAT OF RESERVE "D" (CALL 7.9822 ACRES - TRACT II & CALL 2.0025 ACRES - TRACT III); FORT BEND COUNTY CLERK'S FILE NO. 2013125609 OF FIFTY-NINE SOUTH INDUSTRIAL PARK SUBDIVISION (VOLUME 27, PAGE 11; PLAT RECORDS OF FORT BEND COUNTY, TEXAS) BEING IN THE HENRY SCOTT SURVEY, ABSTRACT NO. 83, CITY OF ROSENBERG, FORT BEND COUNTY, TEXAS.

0 LOTS 20 RESERVES 3 BLOCKS  
WALSH ROAD INDUSTRIAL PARK, LTD.  
2525 TOWN CENTER DRIVE, SUITE 300  
ROSENBERG, TEXAS 77069  
C/O LARRY ROSENBERG  
(281) 245-1000  
SUSHEILA J. KALUZA  
KELLY R. KALUZA & ASSOCIATES, INC.  
CONSULTING ENGINEERS AND SURVEYORS  
ENGINEERING FIRM NO. 17-1430  
TARRANT SURVEYING PLUM BO 1000000  
2014-08-08  
281-245-1000  
281-245-1000



LINE	DISTANCE	BEARING
L1	88.40'	N 44°29'31" W
L2	44.49'	N 25°59'00" E
L3	20.07'	N 85°03'00" W
L4	21.38'	N 44°28'31" W
L5	35.30'	S 86°03'30" E
L6	15.00'	S 07°56'30" W
L7	32.21'	S 25°59'00" W
L8	20.00'	N 89°01'00" W
L9	15.00'	N 07°59'00" E
L10	21.00'	S 89°01'00" E
L11	42.76'	N 44°28'31" W
L12	83.50'	S 86°03'30" E
L13	30.01'	S 07°59'00" W
L14	44.28'	S 07°59'00" W
L15	27.58'	S 44°29'31" E

CURVE	RADIUS	DELTA	ARC	TANGENT	BEARING	CHORD
C1	370.00	45°28'33"	233.89	134.11	N 21°49'16" W	267.37
C2	640.00	20°00'00"	181.50	87.65	N 13°28'00" E	100.47
C3	500.00	29°00'00"	218.17	110.85	S 19°29'00" W	318.44
C4	500.00	22°02'11"	182.30	92.28	S 14°37'55" W	181.12
C5	500.00	02°57'49"	29.88	13.23	S 02°27'57" W	29.88
C6	500.00	01°43'23"	15.03	7.52	S 01°48'30" W	15.03
C7	500.00	07°18'49"	177.27	89.53	S 12°49'33" W	178.34
C8	500.00	45°28'33"	301.81	158.25	S 21°49'17" E	293.75



HENRY SCOTT SURVEY  
ABSTRACT No. 83

WALSH ROAD INDUSTRIAL PARK  
SHEET 2 OF 2  
AUGUST 11, 2014

- RESERVE 11
- RESERVE 12
- RESERVE 13
- RESERVE 14
- RESERVE 15
- RESERVE 16
- RESERVE 17
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- RESERVE 100

NORTHWEST CORNER OF  
CALL 15 OFF ACRES  
FIFTY-NINE SOUTH  
INDUSTRIAL PARK  
(VOL. 27, PG. 11, P.R.)  
E.B.C.C.P. NO. 200300040

SOUTHWEST CORNER OF  
CALL 20005 ACRES TRACT  
(E.B.C.C.P. NO. 200300000)  
& SOUTHWEST CORNER OF  
CALL 15 OFF ACRES TRACT  
(E.B.C.C.P. NO. 200300040)  
E.B.C.C.P. NO. 200300040  
E. 287A191.84' (280)

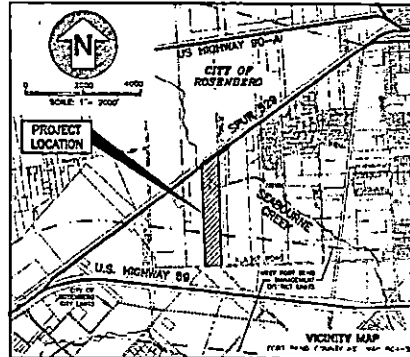
STATE HIGHWAY SPUR No. 529  
(100' ROW)

CITY OF ROSENBERG

BEST FORT ROAD  
MANAGEMENT DISTRICT  
TRACT A - CALL 15 OFF ACRES  
FIFTY-NINE SOUTH  
(E.B.C.C.P. NO. 200300040)


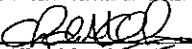
J.F. WEED SURVEY  
ABSTRACT No. 66

CONSTRUCTION PLANS FOR  
**WALSH ROAD INDUSTRIAL PARK  
 WATER LINE EXTENSION, SANITARY SEWER,  
 DETENTION POND, AND DRAINAGE FACILITY**  
 CITY OF ROSENBERG  
 FORT BEND COUNTY, TEXAS



SHEET INDEX

SHEET No.	DESCRIPTION
1	COVER SHEET
2	OVERALL SITE PLAN, SHEET LAYOUT, TEMPORARY BENCHMARK LOCATION, AND SURVEY CONTROL
3	STATE HIGHWAY SPUR No. 529 - PLAN & PROFILE STA. 0+00 TO END
4	WALSH ROAD - PLAN & PROFILE STA. 0+00 TO 10+00
5	WALSH ROAD - PLAN & PROFILE STA. 10+00 TO 20+00
6	WALSH ROAD - PLAN & PROFILE STA. 20+00 TO 30+00
7	WALSH ROAD - PLAN & PROFILE STA. 30+00 TO END
7B	LOT GRADING PLAN 1 of 2
7C	LOT GRADING PLAN 2 of 2
8	DETENTION & DRAINAGE 1 of 2
9	DETENTION & DRAINAGE 2 of 2
10	DRAINAGE CALCULATIONS
11	CONSTRUCTION NOTES
12	WATER LINE CONSTRUCTION DETAILS
13	WATER LINE CONSTRUCTION DETAILS
14	SANITARY SEWER CONSTRUCTION DETAILS
15	STORM SEWER CONSTRUCTION DETAILS
16	SUBDIVISION PLAT PAGE 1 of 2
17	SUBDIVISION PLAT PAGE 2 of 2
18	STORM WATER POLLUTION PREVENTION PLAN

CITY OF ROSENBERG APPROVAL	
	9/15/14
JOHN MARECH - ASSISTANT CITY MANAGER	DATE
	9/15/14
CHARLES RANNEY - CITY ENGINEER	DATE
APPROVALS WILL BE DELETED IF CONSTRUCTION HAS NOT BEGUN WITHIN ONE YEAR OF APPROVAL DATE.	

PREPARED BY:  
**KELLY R. KALUZA & ASSOCIATES, INC.**  
 CONSULTING ENGINEERS AND SURVEYORS  
 ENGINEERING FIRM No. F-1339  
 3014 AVENUE I  
 ROSENBERG, TEXAS 77471  
 (281) 341-0808

SEPTEMBER 12, 2014

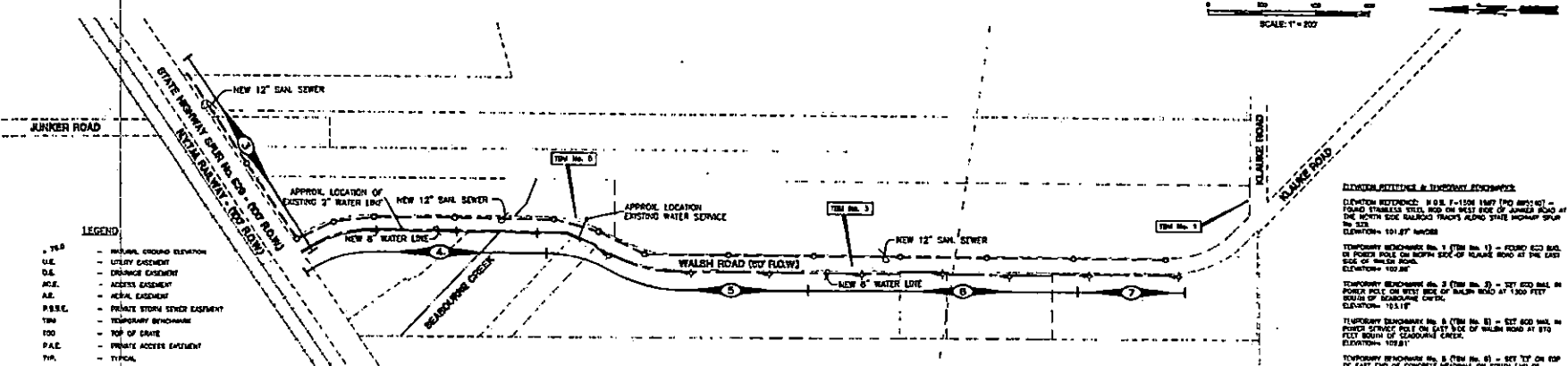


SHEET 1

WALSH ROAD INDUSTRIAL PARK WATER, SANITARY, DETENTION, AND DRAINAGE

This drawing is the property of Kelly R. Kaluza & Associates, Inc. It is to be used only for the project and location specified hereon. It is not to be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage and retrieval system, without the prior written permission of Kelly R. Kaluza & Associates, Inc.

NO.	DATE	REVISIONS	APP.



**TEMPORARY BENCHMARKS & TEMPORARY BENCHMARKS:**

**TEMPORARY BENCHMARK No. 1 (TBM No. 1) -** FOUND 800 HLL. IN POWER POLE ON NORTH SIDE OF BLAIRWOOD AT THE WEST SIDE OF WALSH ROAD. ELEVATION= 102.80'

**TEMPORARY BENCHMARK No. 2 (TBM No. 2) -** SET 800 HLL. IN POWER POLE ON WEST SIDE OF WALSH ROAD AT 1500 FEET SOUTH OF SEASIDE PARK. ELEVATION= 103.18'

**TEMPORARY BENCHMARK No. 3 (TBM No. 3) -** SET 800 HLL. IN POWER POLE ON EAST SIDE OF WALSH ROAD AT 870 FEET SOUTH OF SEASIDE PARK. ELEVATION= 102.81'

**TEMPORARY BENCHMARK No. 4 (TBM No. 4) -** SET 800 HLL. ON TOP OF EAST END OF CONCRETE MONUMENT ON SOUTH END OF CHALKY BOND CHINA STATE HIGHWAY SPAN No. 529 AT 100 FEET WEST OF WALSH ROAD. ELEVATION= 103.54'

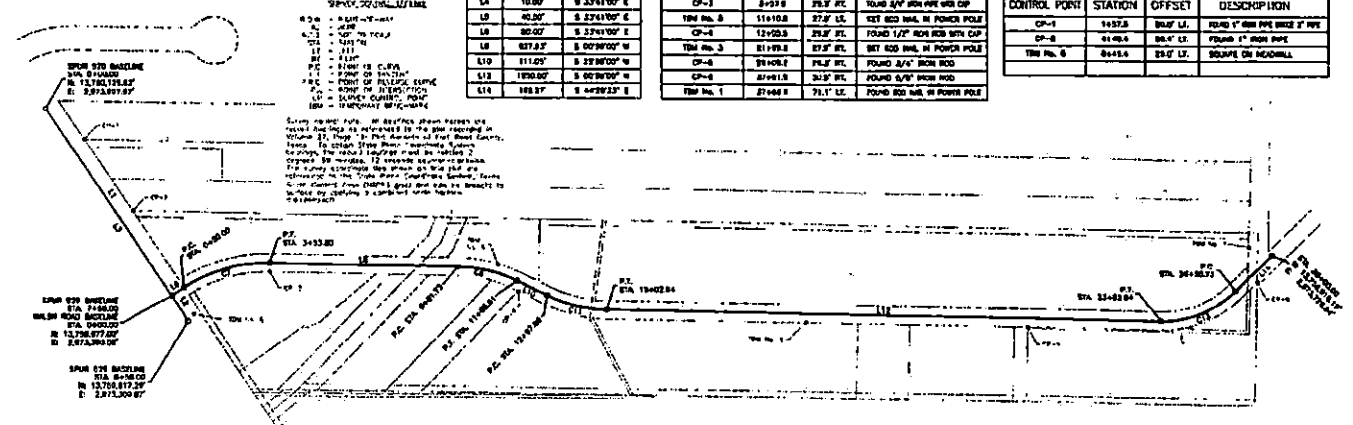
- LEGEND**
- 75.0 - MINIMUM GROUND ELEVATION
  - U.E. - UTILITY CASING
  - D.S. - DRAINAGE CASING
  - A.E. - ACCESS EASEMENT
  - A.E. - ACH. EASEMENT
  - P.S.E. - PRIVATE STORM SEWER EASEMENT
  - TBM - TEMPORARY BENCHMARK
  - 100 - TOP OF DATE
  - P.A.E. - PRIVATE ACCESS EASEMENT
  - TYP. - TYPICAL
  - T.S. - TOP SURFACE
  - EP - EDGE OF IMPAVMENT
  - TC - TOP OF CURB
  - C - TOP OF CUTTER
  - FL - FLOWLINE
  - S.S. - STORM SEWER
  - S.M. - SANITARY SEWER
  - C.A.P. - CORRUGATED METAL PIPE
  - R.C.P. - REINFORCED CONCRETE PIPE
  - C.C. - CONCRETE
  - S.C. - SOIL
  - T - TREE
  - PC - PROPERTY CORNER
  - CM - CONCRETE MONUMENT
  - U.P. - UNDERGROUND TELEPHONE CABLE LINE MARKER
  - OP - OPTIC CABLE MARKER
  - CL - GAS LINE MARKER
  - EB - ELECTRICAL BOX
  - TE - TELEPHONE BOX
  - MB - MAIL BOX
  - WM - WATER METER
  - WM - GAS METER
  - OF - OTHER FLOWLINE
  - TL - TELEPHONE LINE
  - TP - TELEPHONE POLE
  - BAL - BALANCE
  - FP - FENCE
  - CL - CHALK LINE
  - PC - PICKET POLE
  - CP - CUT POLE
  - SW - SOUTHWESTERN BELL MANHOLE
  - SW - SOUTHWESTERN BELL UNDERGROUND CABLE
  - SW - SOUTHWESTERN BELL OPTIC CABLE
  - TR - TRAFFIC SIGNAL
  - ES - EXISTING GAS LINE
  - ES - EXISTING STORM SEWER
  - ES - EXISTING STORM SEWER MANHOLE
  - ES - EXISTING SANITARY SEWER
  - ES - EXISTING SANITARY SEWER MANHOLE
  - ES - EXISTING WATER LINE
  - ES - EXISTING WATER VALVE
  - ES - EXISTING FIRE HYDRANT
  - ES - EXISTING APPROX. PROVISION
  - PR - PROPOSED WATER LINE
  - PR - PROPOSED WATER VALVE
  - PR - PROPOSED BLUE DYE
  - PR - PROPOSED FIRE HYDRANT

CURVE	RADIUS	DELTA	ARC	TANGENT	BEARING	CHORD
CF	502.15	27°38'31"	325.82	126.71	S 19°27'57" E	126.19
CE	470.00	23°00'00"	355.00	104.20	S 17°29'00" W	233.45
EE	470.00	23°00'00"	355.00	104.20	S 17°29'00" W	233.45
CI	350.00	49°12'21"	277.80	144.88	S 2°45'14" E	270.56

LINE	DISTANCE	BEARING
L1	784.00'	S 94°18'00" W
L2	100.00'	S 08°18'00" W
L3	858.00'	S 08°18'00" W
L4	10.00'	S 23°41'00" E
L5	40.20'	S 23°41'00" E
L6	80.20'	S 23°41'00" E
L7	87.22'	S 02°00'00" W
L10	111.00'	S 22°00'00" W
L11	120.00'	S 02°00'00" W
L12	188.27'	S 42°22'27" E

WALSH ROAD BASELINE			
CONTROL POINT	STATION	OFFSET	DESCRIPTION
TBM No. 6	8+25.0	21.4' W	SCOUR ON ROADWALL
CP-3	8+23.8	25.8' W	FOUND 2 1/2" DIA. PIPE WITH CAP
TBM No. 5	11+10.0	27.8' W	SET 800 HLL. IN POWER POLE
CP-4	12+25.3	25.8' W	FOUND 1 1/2" DIA. PIPE WITH CAP
TBM No. 3	21+25.3	27.8' W	SET 800 HLL. IN POWER POLE
CP-5	21+40.0	PLUG W	FOUND 2 1/2" DIA. PIPE
CP-6	21+41.0	21.8' W	FOUND 2 1/2" DIA. PIPE
TBM No. 1	27+40.0	71.1' W	FOUND 800 HLL. IN POWER POLE

SPUR 529 BASELINE			
CONTROL POINT	STATION	OFFSET	DESCRIPTION
CP-1	1+57.0	26.4' W	FOUND 1" DIA. PIPE WITH 2" DIA. CAP
CP-2	4+10.0	26.4' W	FOUND 1" DIA. PIPE
TBM No. 6	8+45.0	25.8' W	SCOUR ON ROADWALL

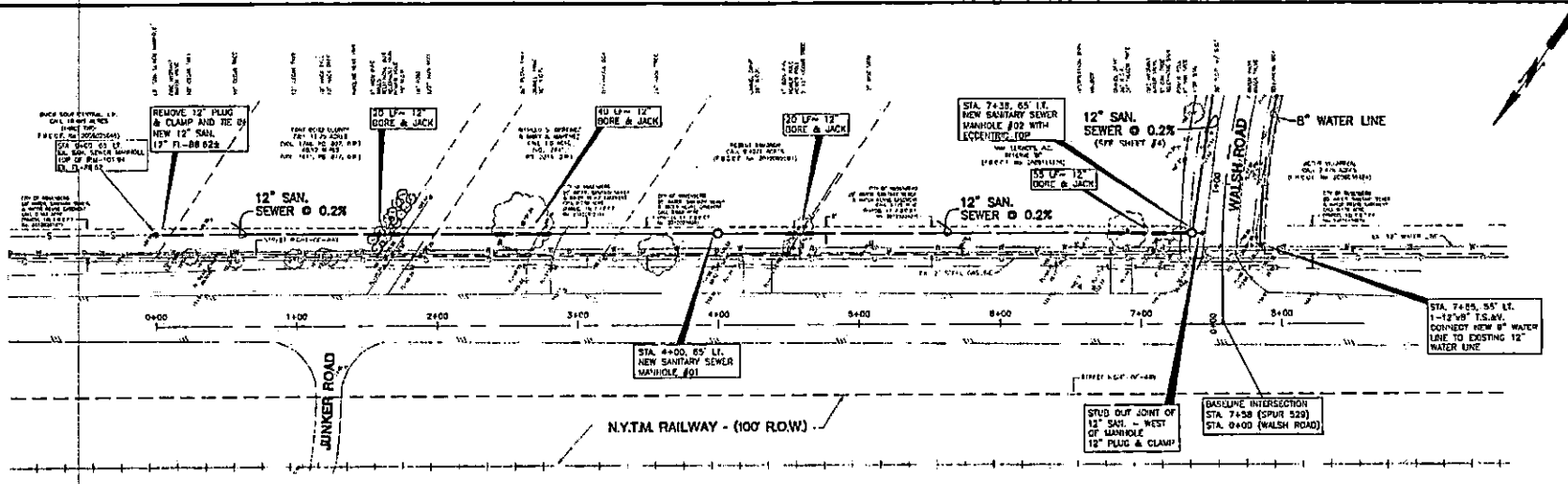


**WALSH ROAD INDUSTRIAL PARK WATER LINE EXTENSION, SANITARY SEWER, DETENTION POND, AND DRAINAGE FACILITY**

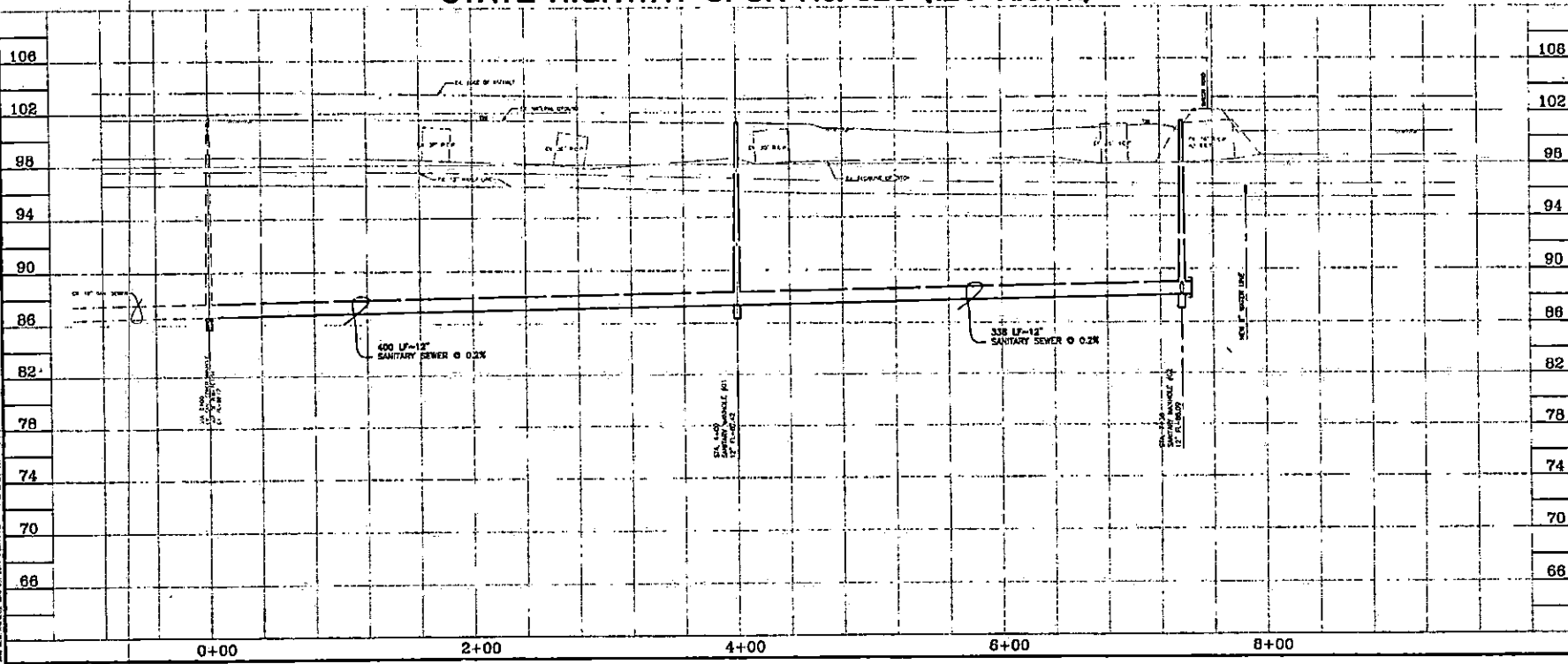
**OVERALL SITE PLAN, SHEET LAYOUT, TEMPORARY BENCHMARKS, AND SURVEY CONTROL**

**Kelly R. Kaluza & Associates, Inc.**  
 CONSULTING ENGINEERS & SURVEYORS  
 8400 WINDYBUSH DRIVE, SUITE 100  
 3014 AVENUE B  
 ROSENBERG, TEXAS 77471  
 PH 281.541.0600 FAX 281.541.0333





**STATE HIGHWAY SPUR No. 529 (120' R.O.W.)**

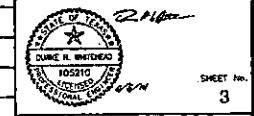


NO.	DATE	REVISION	APP.

**WALSH ROAD INDUSTRIAL PARK WATER LINE EXTENSION, SANITARY SEWER, DETENTION POND, AND DRAINAGE FACILITY**

**STATE HIGHWAY SPUR No. 529 PLAN & PROFILE STA. 0+00 TO END**

**Kelly R. Kaluza & Associates, Inc.**  
 CONSULTING ENGINEERS & SURVEYORS  
 ENGINEERING FIRM NO. F-11039  
 2014 AVENUE I  
 HOUSTON, TEXAS 77058  
 PH: 281.541.0300 FAX: 281.541.0313

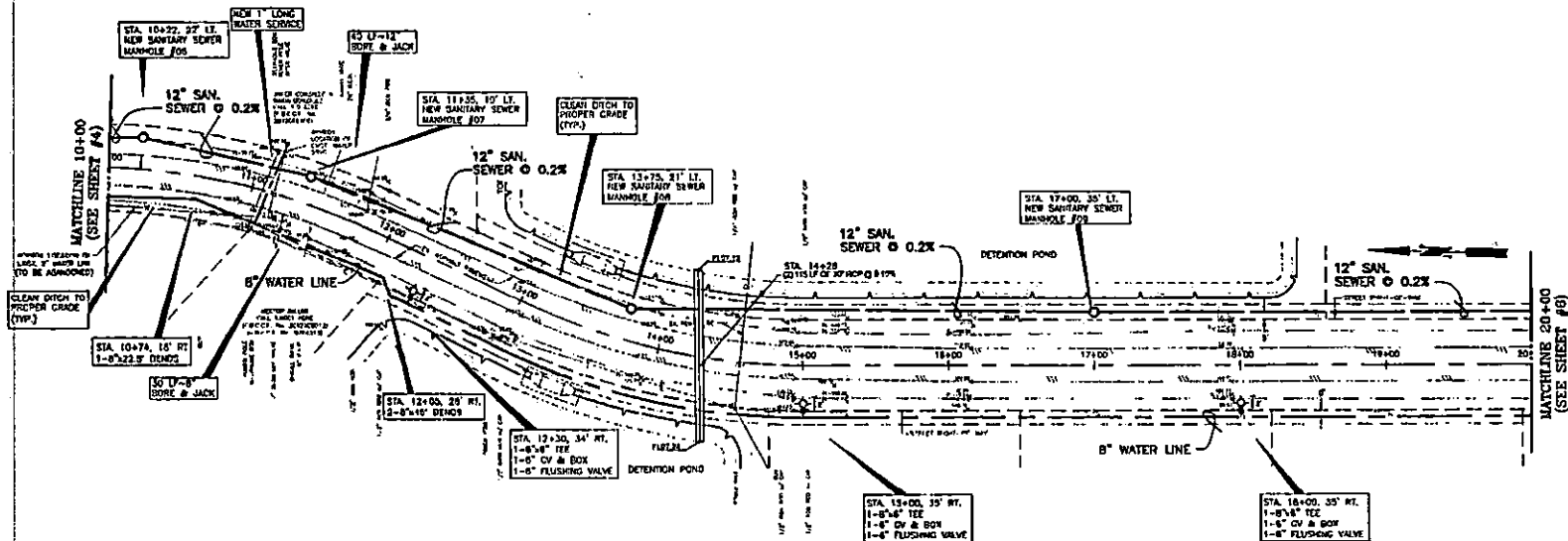


SCALE: PLAN	DATE: 12/14/11	DESIGNED BY: LK
CHECKED: TMM	DATE: 12/14/11	APP. BY: LK

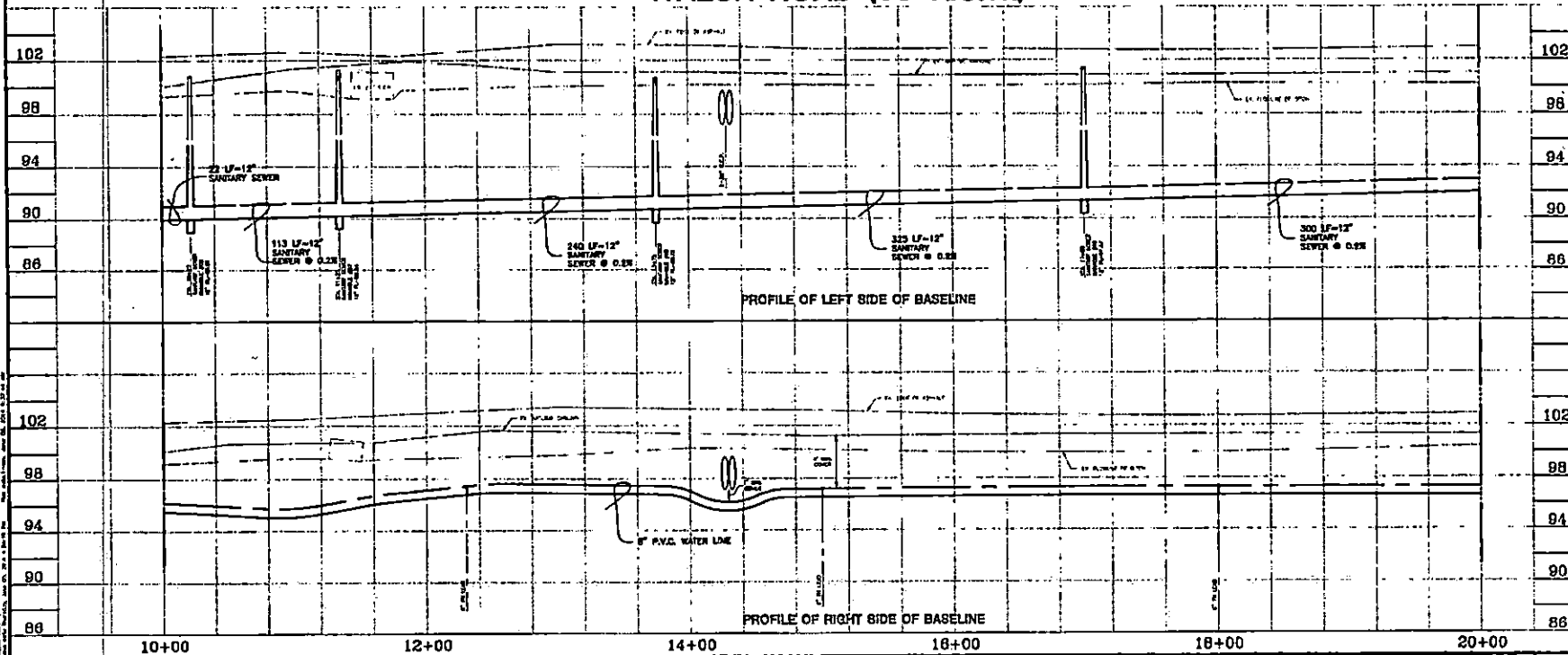
SHEET No. 3



NO.	DATE	REVISION	APP.



**WALSH ROAD (60' R.O.W.)**



**WALSH ROAD INDUSTRIAL PARK WATER LINE EXTENSION, SANITARY SEWER, DETENTION POND, AND DRAINAGE FACILITY**

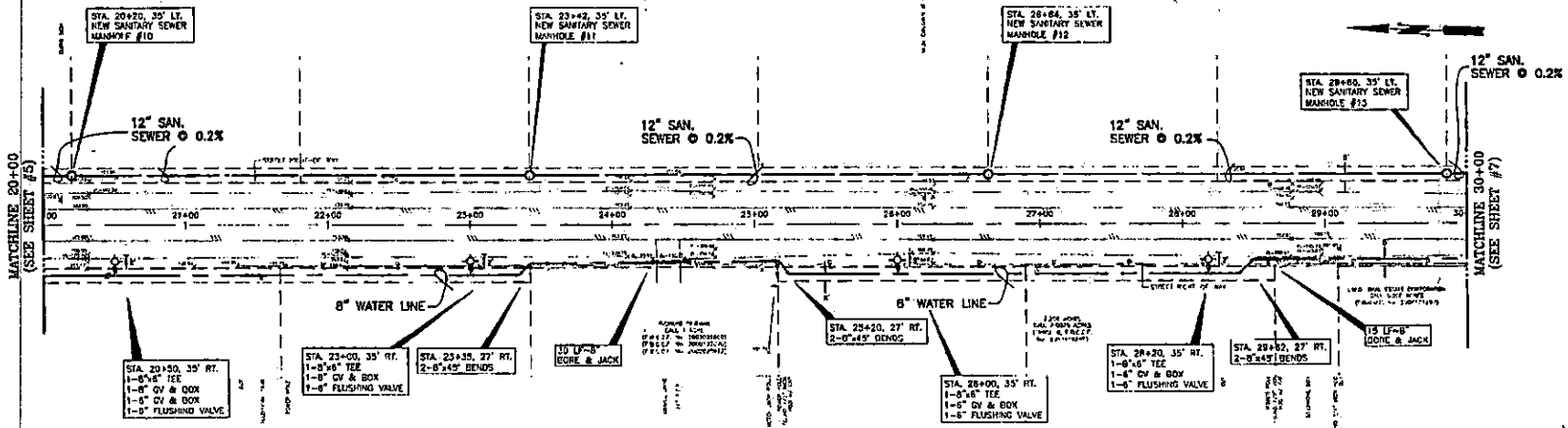
**WALSH ROAD PLAN & PROFILE STA. 10+00 TO 20+00**

**Kelly R. Kaluza & Associates, Inc.**  
 CONSULTING ENGINEERS & SURVEYORS  
 ENGINEERING FIRM NO. 91488  
 2014 AVENUE  
 HOUSTON, TEXAS 77071  
 PHONE 281.280.8208 FAX 281.841.2353

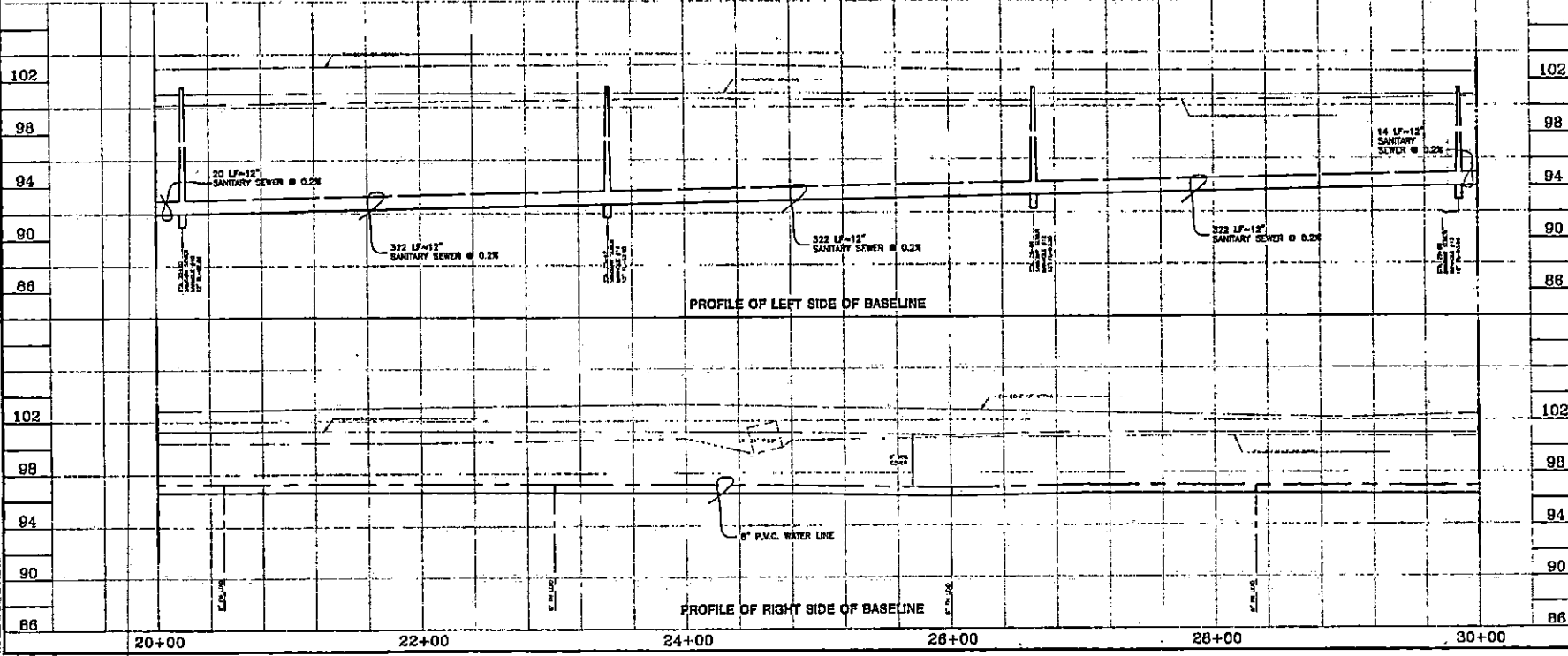
SHEET NO. 5

Kelly R. Kaluza, P.E., License No. 105210, State of Texas, Exp. 08/31/2018  
 Kelly R. Kaluza, P.E., License No. 105210, State of Texas, Exp. 08/31/2018  
 Kelly R. Kaluza, P.E., License No. 105210, State of Texas, Exp. 08/31/2018

NO.	DATE	REVISIONS	APP.




**WALSH ROAD (60' R.O.W.)**

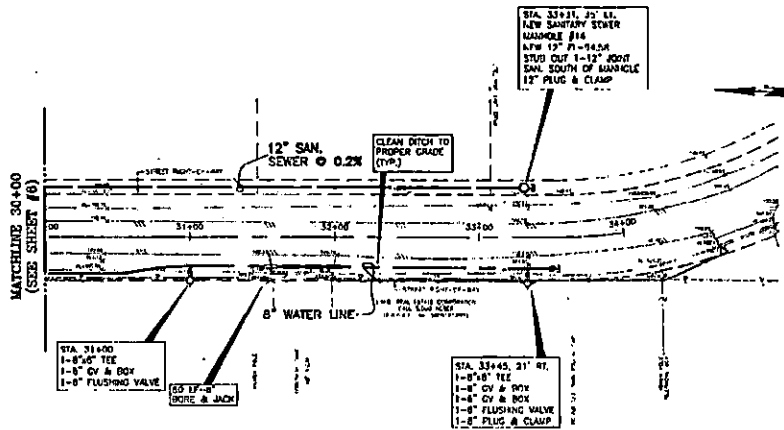


**WALSH ROAD INDUSTRIAL PARK WATER LINE EXTENSION, SANITARY SEWER DETENTION POND, AND DRAINAGE FACILITY**

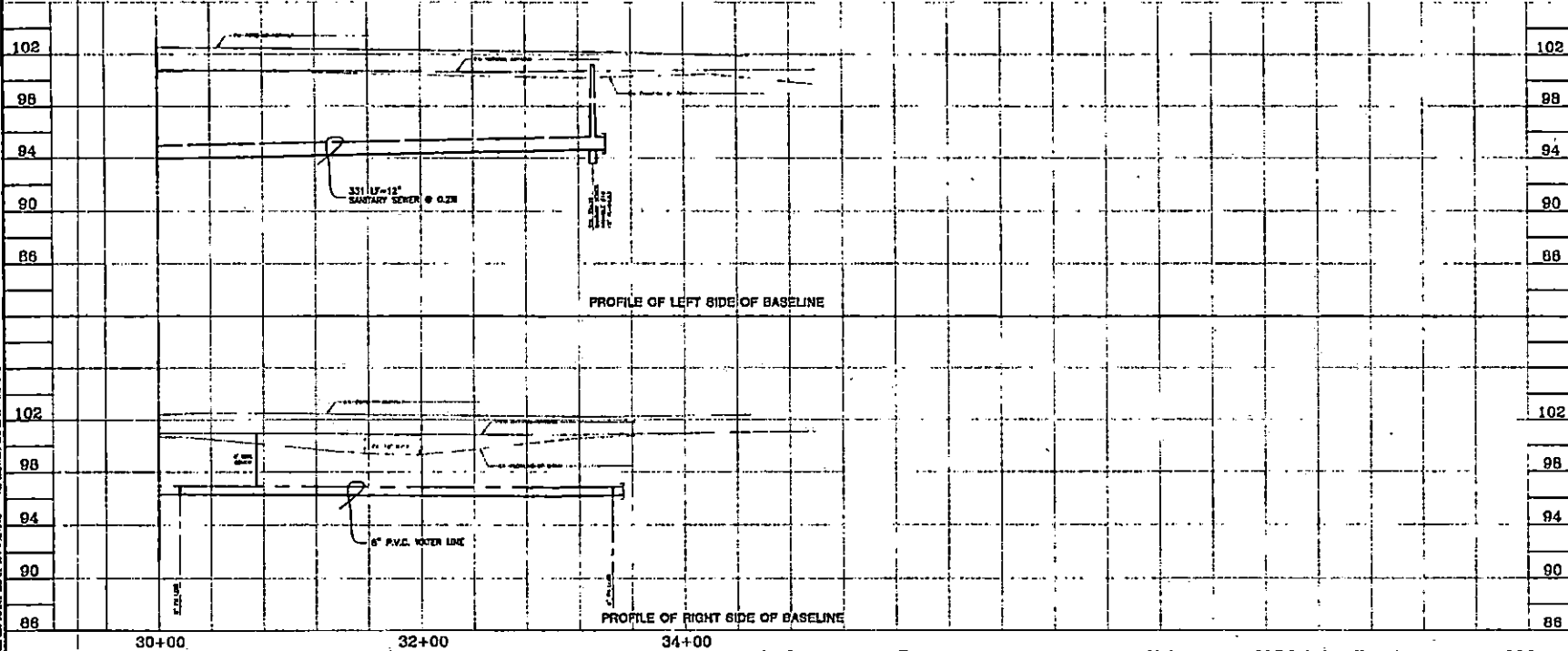
**WALSH ROAD PLAN & PROFILE STA. 20+00 TO 30+00**

**Kelly R. Kaluza & Associates, Inc.**  
 CONSULTING ENGINEERS & SURVEYORS  
 ENGINEERING FIRM No. F-1939  
 8014 AVENUE I  
 ROSENBERG, TEXAS 77471  
 PRELIMINARY PLAN 241-0000


 SHEET No. **6**  
 DRAWN BY: JLD  
 CHECKED BY: [Signature]  
 DATE: 8/17/18



WALSH ROAD (60' R.O.W.)



NO.	DATE	REVISION	APP.

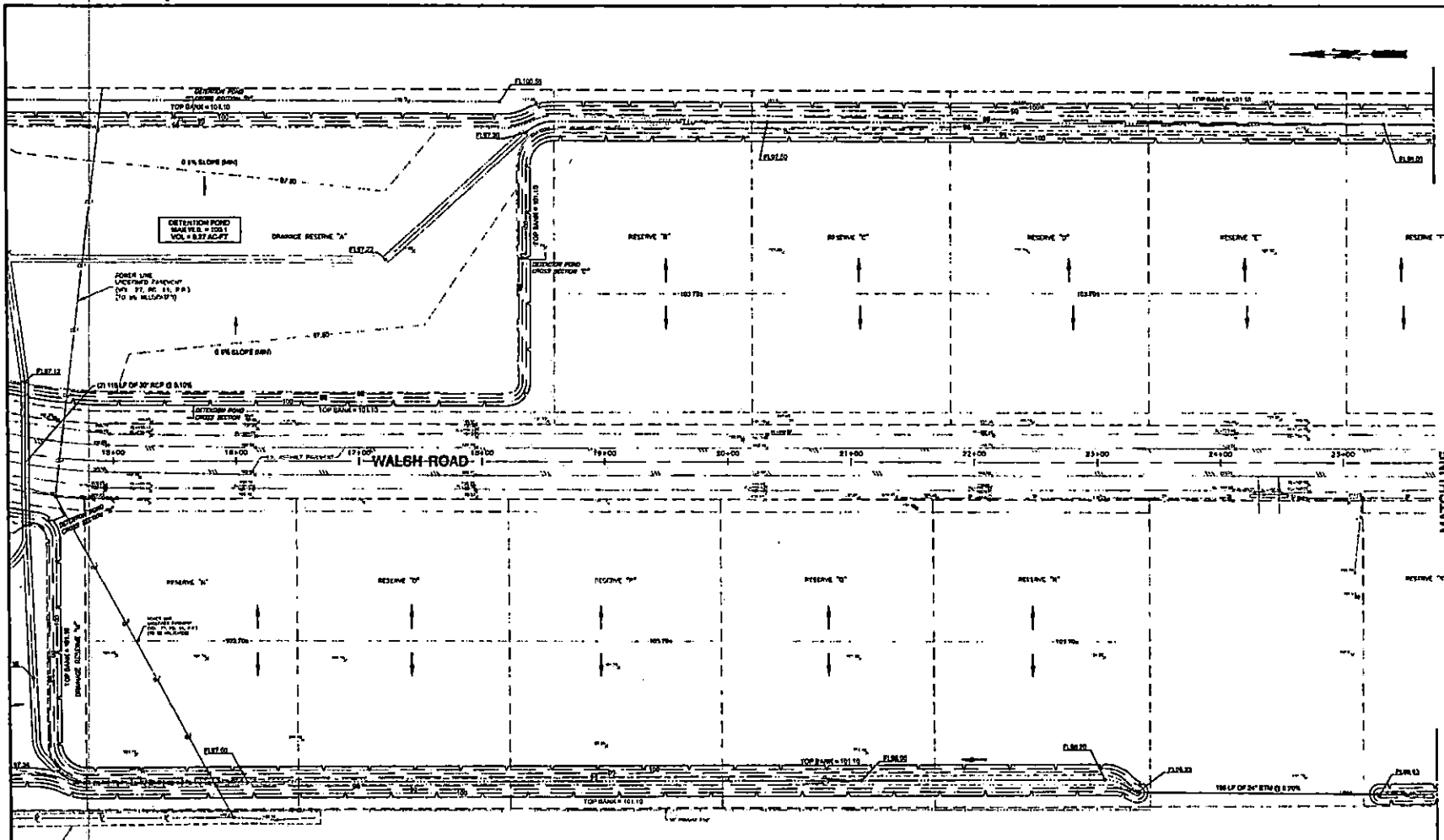
WALSH ROAD INDUSTRIAL PARK WATER LINE EXTENSION, SANITARY SEWER, DETENTION POND, AND DRAINAGE FACILITY

WALSH ROAD PLAN & PROFILE STA. 30+00 TO END

Kelly R. Kaluza & Associates, Inc.  
CONSULTING ENGINEERS & SURVEYORS  
PROFESSIONAL ENGINEER NO. 10336  
2111 AVENUE I  
HOUSTON, TEXAS 77058  
PH 832 944 0020 FAX 832 944 8335

SHEET NO. 7

Kelly R. Kaluza & Associates, Inc. (Professional Engineer) License No. 10336  
 2111 Avenue I, Houston, Texas 77058  
 P.O. Box 900, Houston, Texas 77001  
 Tel: 832-944-0020 Fax: 832-944-8335



NO.	DATE	REVISIONS	APP.

MATCHLINE  
(SEE SHEET #7C)

**WALSH ROAD  
INDUSTRIAL PARK  
WATER LINE EXTENSION,  
SANITARY SEWER, DETENTION  
POND, AND DRAINAGE FACILITY**

**LOT GRADING PLAN  
1 of 2**

**Kelly R. Kaluza & Associates, Inc.**  
CONSULTING ENGINEERS & SURVEYORS  
ENGINEERING FIRM NO. F-1329  
5015 AVENUE I  
BOZEMAN, TEXAS 77801  
PH: 817.241.0000 FAX: 817.241.0003



SHEET NO.  
**7B**

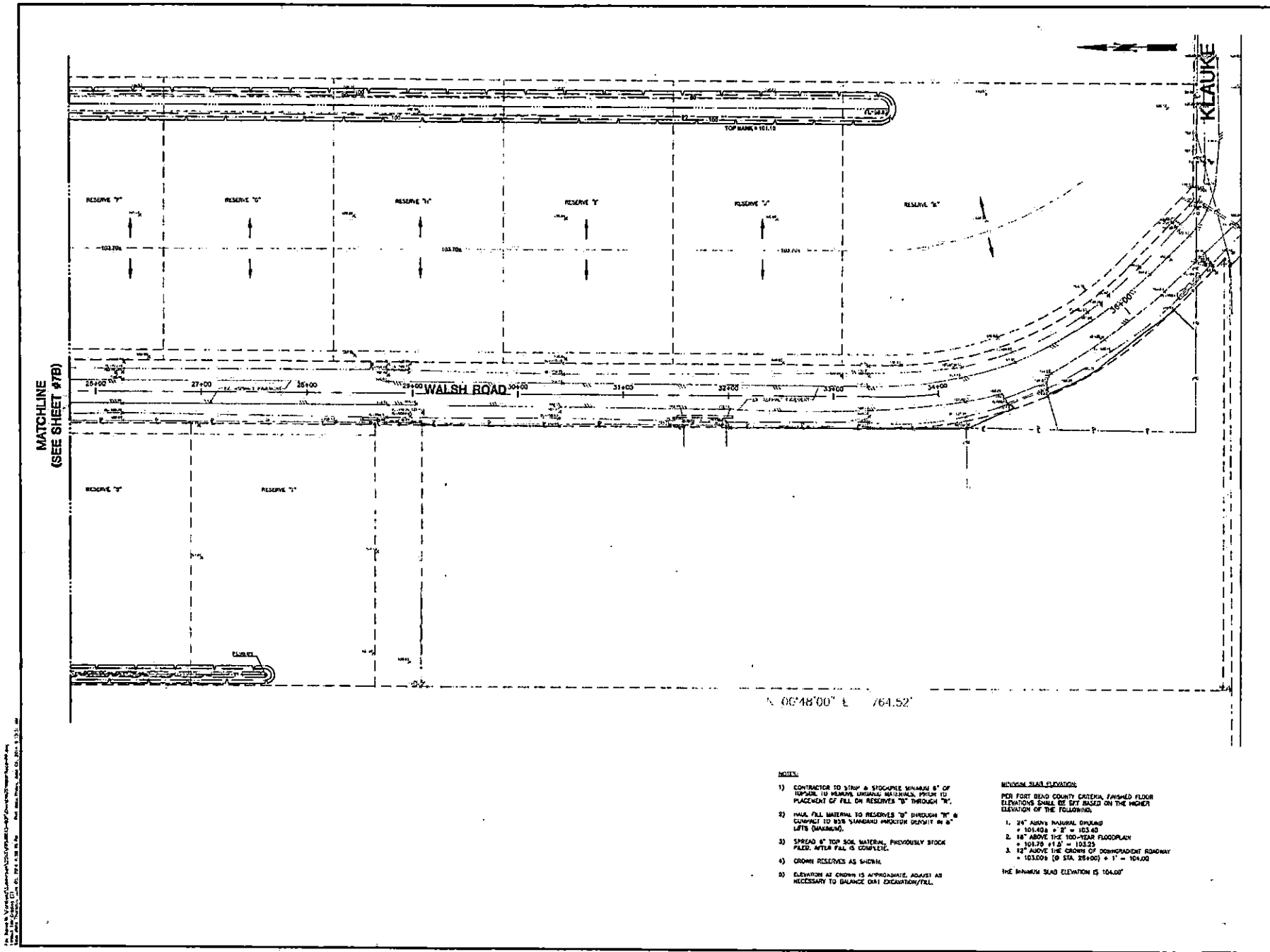
- NOTES:**
- CONTRACTOR TO STRIP & STOCKPILE APPROX 6" OF TOPSOIL TO REMOVE ORGANIC MATERIALS, PRIOR TO PLACEMENT OF FILL OR RESERVES "B" THROUGH "E".
  - RAIL FILL MATERIAL TO RESERVES "B" THROUGH "E" & COMPACT AS PER STANDARD PROCTOR DENSITY IN 6" LAYS (MINIMUM).
  - SPREAD 6" TOP SOIL MATERIAL PREVIOUSLY STOCK PILED, AFTER FILL IS COMPLETE.
  - CROWN RESERVES AS SHOWN.
  - ELEVATION AT CROWN IS APPROXIMATE, ADJUST AS NECESSARY TO BALANCE DIRT EXCAVATION/FILL.

**MINIMUM SLAB ELEVATION**  
PER FORT BEND COUNTY CRITERIA, FINISHED FLOOR ELEVATIONS SHALL BE SET BASED ON THE HIGH WATER ELEVATION OF THE FOLLOWING:

- 24" ABOVE NATURAL GROUND = 101.402 + 2' = 103.40
- 18" ABOVE THE 100-YEAR FLOODPLAIN = 101.78 + 1.5' = 103.23
- 12" ABOVE THE CROWN OF GOVERNMENT HIGHWAY = 103.003 (+0 STA. 18+00) + 1' = 104.00

THE MINIMUM SLAB ELEVATION IS 104.00'

Kelly R. Kaluza & Associates, Inc. is an Equal Opportunity Employer. Minorities and women are encouraged to apply.



MATCHLINE  
(SEE SHEET #7B)

N. 06°48'00" E 764.52'

**NOTES:**

- 1) CONTRACTOR TO STRIP & STOCKPILE MINIMUM 6" OF TOPSOIL TO BE REUSED UNLESS OTHERWISE SPECIFIED. PLACEMENT OF FILL ON RESERVES "B" THROUGH "T".
- 2) HAUL FILL MATERIAL TO RESERVES "D" THROUGH "T" & COMPACT TO 90% STANDARD PROCTOR DENSITY IN 6" LIFTS (BANKING).
- 3) SPREAD 6" TOP SOIL MATERIAL, PREVIOUSLY STOCK PILED, AFTER FILL IS COMPLETE.
- 4) CROWN RESERVES AS SHOWN.
- 5) ELEVATION AT CROWN IS APPROXIMATE, ADJUST AS NECESSARY TO BALANCE DRAIN EXCAVATION/FILL.

**MINIMUM SLAB ELEVATION**

- PER FOOT BEAM COUNTY CRITERIA, FINISHED FLOOR ELEVATIONS SHALL BE SET BASED ON THE HIGHER ELEVATION OF THE FOLLOWING:
1. 24" ABOVE NATURAL GROUND = 104.40 ± 2" = 102.40
  2. 18" ABOVE THE 100-YEAR FLOODPLAIN = 101.70 ± 1.0' = 100.70
  3. 12" ABOVE THE CROWN OF DOWNSPREAD ROADWAY = 103.00 ± (0 STA. 28+00) ± 1' = 104.00
- THE MINIMUM SLAB ELEVATION IS 104.00'

NO.	DATE	REVISION	APP.

**WALSH ROAD INDUSTRIAL PARK WATER LINE EXTENSION, SANITARY SEWER, DETENTION POND, AND DRAINAGE FACILITY**

**LOT GRADING PLAN**  
2 of 2

**Kelly R. Kaluza & Associates, Inc.**  
CONSULTING ENGINEERS & SURVEYORS  
ENGINEERING FIRM NO. F-1030  
11111 103210717E  
2014 AVENUE B  
ROSENBERG, TEXAS 77471  
PH: 281.241.2800 FAX: 281.241.8330



SHEET No.  
**7C**

DATE: 06/11/11	SCALE: AS SHOWN	DRAWN BY: GJM	APP. BY: GJM

The State of Texas, Department of Transportation, Texas Department of Transportation, 1000 Ross Avenue, Austin, Texas 78702-1099  
 This drawing was prepared by Kelly R. Kaluza & Associates, Inc., 11111 103210717E, 2014 Avenue B, Rosenberg, Texas 77471.



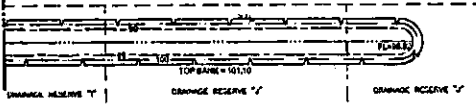
MATCHLINE 'A'  
(SEE SHEET #8)

MATCHLINE 'B'



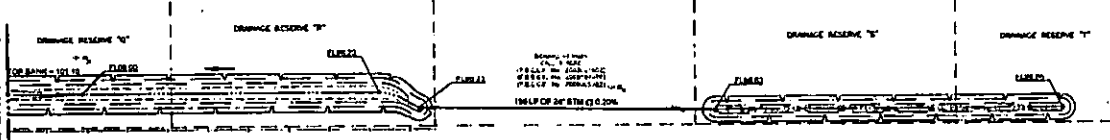
SEE TYPICAL CROSS SECTION 1

MATCHLINE 'B'



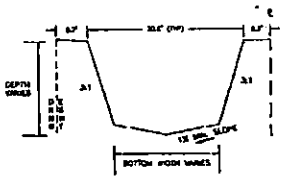
SEE TYPICAL CROSS SECTION 1

MATCHLINE 'C'  
(SEE SHEET #8)

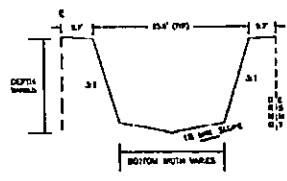


SEE TYPICAL CROSS SECTION 2

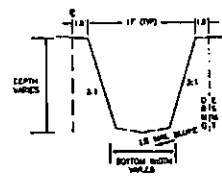
SEE TYPICAL CROSS SECTION 3



TYPICAL CROSS SECTION 1  
SCALE: N.T.S.



TYPICAL CROSS SECTION 2  
SCALE: N.T.S.



TYPICAL CROSS SECTION 3  
SCALE: N.T.S.

WALSH ROAD  
INDUSTRIAL PARK  
WATER LINE EXTENSION,  
SANITARY SEWER, DETENTION  
POND, AND DRAINAGE FACILITY

DRAINAGE & DETENTION  
2 of 2

Kelly R. Kaluza  
& Associates, Inc.  
CONSULTING ENGINEERS & SURVEYORS  
REGISTRATION #176 867-1828  
8014 AVENUE F  
ROSELAND, TEXAS 75087  
PH 817 341-0808 FAX 817 341-6333



DATE: 11/10/07  
DRAWN BY: M.D.  
CHECKED BY: M.D.  
SCALE: AS SHOWN

SHEET NO.  
9

Kelly R. Kaluza, Professional Engineer, License No. 105270, State of Texas, Mechanical. Kelly R. Kaluza & Associates, Inc., 8014 Avenue F, Roseland, Texas 75087. Phone: 817-341-0808, Fax: 817-341-6333.

Maning's Equation for Open Channel Flow

$$Q = \frac{1.49}{n} A R^{2/3} S^{1/2}$$

Manning's n = 0.012  
 Bottom width (B) = 10  
 depth (D) = 1  
 water slope (S) = 0.0008  
 Slope in direction of flow (S<sub>1</sub>) = 0.0008  
 Area (A) = 14.200  
 Wetted Perimeter = 12.125  
 Hydraulic Radius (R) = 0.749  
 Q (cfs) = 67.89  
 Q (MGD) = 1.548

CHOKER CALCULATIONS

$$Q = C \sqrt{2gh^3}$$

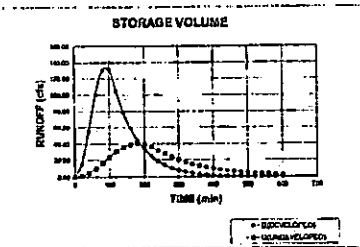
Existing Q = 43.08 cfs  
 C<sub>1</sub> = 0.8  
 pipe diam = 36" dia  
 h = 6.00 ft  
 Choked Flow = 89.56 cfs  
 Top of Pipe = 86.50 ft  
 Max W/S Elev = 80.00 ft  
 h = 1.10 ft  
 100 year Q = 42.48 cfs

Detention Provided - Minus					Detention Provided - Equal				
Flow Rate	Area (SF)	Area (Ac)	Volume (cu-ft)	Volume (cu-ft)	Flow Rate	Area (SF)	Area (Ac)	Volume (cu-ft)	Volume (cu-ft)
101.1	117243	3.04	Flowboard	0.00	101.1	117243	3.04	Flowboard	0.00
100.1	118063	2.72	0.27	0.05	100.1	118782	2.88	0.26	0.27
100.0	118664	2.72	2.60	0.76	99.0	118226	2.27	2.58	7.81
99.0	120643	2.46	2.28	3.19	98.0	119645	2.26	2.58	4.48
98.0	121691	2.11	0.74	0.81	97.0	120041	1.90	1.10	1.64
97.0	123072	0.78	0.10	0.18	97.0	0	0.00	0.44	0.44
97.0	0	0.00							
Total 0.00 Ac-Ft					Total 0.27 Ac-Ft				
					Total 14.32 Ac-Ft				
					Required 14.32 Ac-Ft				

**PROJ.:** Walsh Road Improvement  
 City of Rosenberg, Fort Bend County, Texas  
**DESIGNER:** Kelly R. Kaluza & Associates, Inc.  
**DATE:** 08/15/2011  
**SCALE:** 1" = 20' (Horizontal), 1" = 4' (Vertical)  
**PROJECT NO.:** 103210-01  
**REVISIONS:**  
 1. Initial Design  
 2. Final Design  
**DESIGNER:** Kelly R. Kaluza  
**CHECKER:** [Name]  
**DATE:** 08/15/2011  
**SCALE:** 1" = 20' (Horizontal), 1" = 4' (Vertical)  
**PROJECT NO.:** 103210-01  
**REVISIONS:**

**DESIGNER:** Kelly R. Kaluza  
**CHECKER:** [Name]  
**DATE:** 08/15/2011  
**SCALE:** 1" = 20' (Horizontal), 1" = 4' (Vertical)  
**PROJECT NO.:** 103210-01  
**REVISIONS:**

**DESIGNER:** Kelly R. Kaluza  
**CHECKER:** [Name]  
**DATE:** 08/15/2011  
**SCALE:** 1" = 20' (Horizontal), 1" = 4' (Vertical)  
**PROJECT NO.:** 103210-01  
**REVISIONS:**

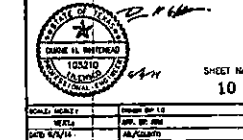


NO.	DATE	BY/CHKD	APP.

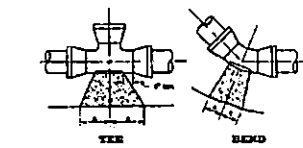
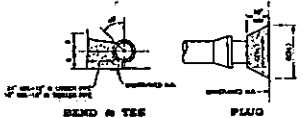
**WALSH ROAD INDUSTRIAL PARK WATER LINE EXTENSION, SANITARY SEWER, DETENTION POND, AND DRAINAGE FACILITY**

**DRAINAGE CALCULATIONS**

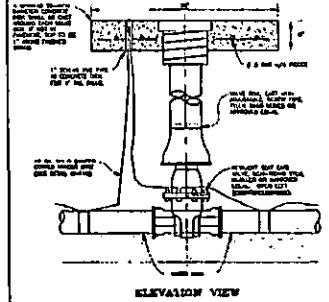
**Kelly R. Kaluza & Associates, Inc.**  
 CONSULTING ENGINEERS & SURVEYORS  
 8014 AVENUE I  
 HOUSTON, TEXAS 77041  
 P1181 281-9928 FAX 281-581-6333



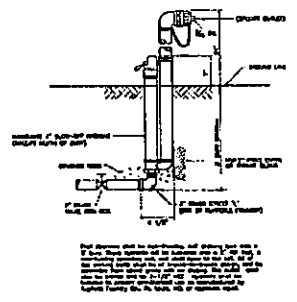




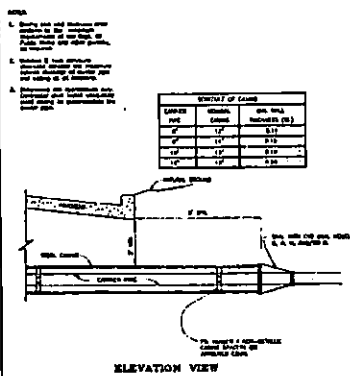
SIZE	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	3 1/2"	4"	4 1/2"	5"	6"	8"	10"
1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"
3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
1"	1"	1"	1"	1"	1"	1"	1"	1"	1"	1"	1"	1"	1"	1"	1"
1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/4"
1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"
2"	2"	2"	2"	2"	2"	2"	2"	2"	2"	2"	2"	2"	2"	2"	2"
2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"
3"	3"	3"	3"	3"	3"	3"	3"	3"	3"	3"	3"	3"	3"	3"	3"
3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"
4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"
4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/2"
5"	5"	5"	5"	5"	5"	5"	5"	5"	5"	5"	5"	5"	5"	5"	5"
6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"
8"	8"	8"	8"	8"	8"	8"	8"	8"	8"	8"	8"	8"	8"	8"	8"
10"	10"	10"	10"	10"	10"	10"	10"	10"	10"	10"	10"	10"	10"	10"	10"



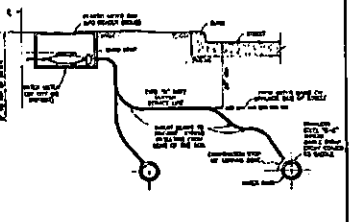
GATE VALVE & BOX



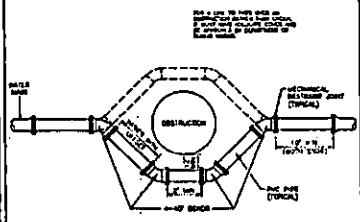
MAINGUARD NO. 77 BLOW-OFF HYDRANT



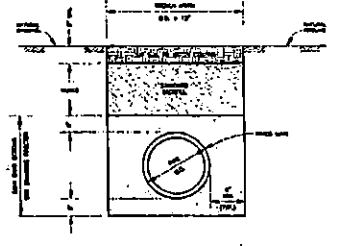
WATER LINE ENCASUREMENT



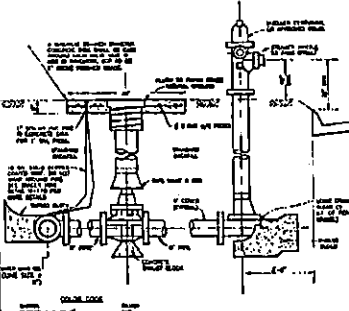
TYPICAL SECTION SERVICE LINE



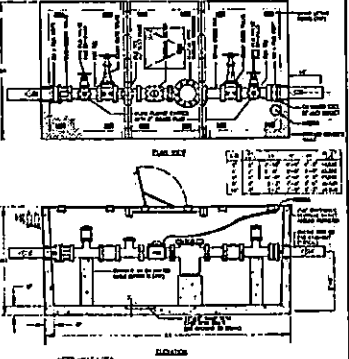
WATER PIPE OFFSET ASSEMBLY



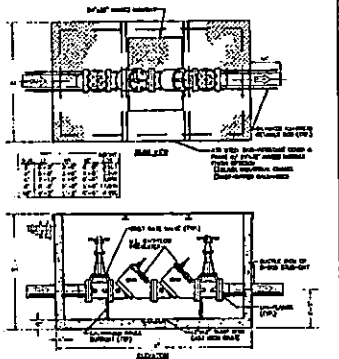
WATER MAIN BEDDING & BACKFILL



FIRE HYDRANT ASSEMBLY



3" - 16" FLANGE METER



DETECTOR CHECK VALVE

NO.	DATE	REVISION	APP.

WALSH ROAD INDUSTRIAL PARK WATER LINE EXTENSION, SANITARY SEWER, DETENTION POND, AND DRAINAGE FACILITY

WATER LINE CONSTRUCTION DETAILS

Kelly R. Kaluza & Associates, Inc. CONSULTING ENGINEERS & SURVEYORS  
 ENGINEERING FIRM No. P-1088  
 5018 AVENUE I  
 HOUSTON, TEXAS 77471  
 PH: 281.541.0808 FAX: 281.541.8333



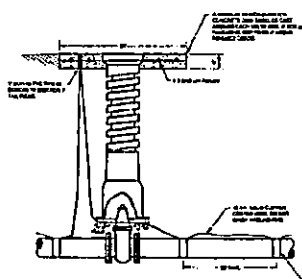
THE CITY OF HOUSTON, TEXAS  
 OFFICIAL STANDARD WATER DETAILS  
 PAGE 1 OF 2



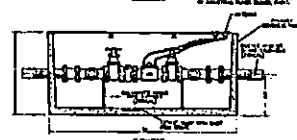
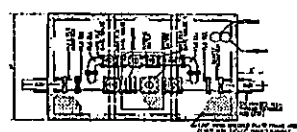
SHEET No. 12

SCALE: HORIZONTAL	AS SHOWN
SCALE: VERTICAL	AS SHOWN

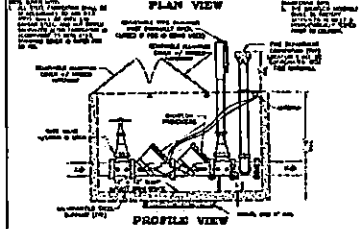
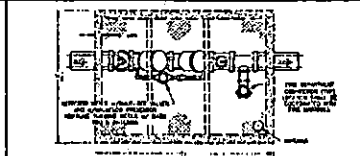
Kelly R. Kaluza, Professional Engineer, License No. 105210, State of Texas, Mechanical Engineering, expires 12/31/2024.



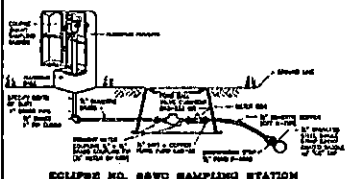
**TRACER WIRE FOR PLASTIC WATER PIPING**



**DOMESTIC 4-10" COMPOUND WATER METER ASSEMBLY**



**FIRE SERVICE CONNECTION WITH FLOW BREAKER ASSEMBLY**



**ECLIPSE NO. 88WC SAMPLING STATION**

NO.	DATE	REVISION	APP.

WALSH ROAD INDUSTRIAL PARK WATER LINE EXTENSION, SANITARY SEWER, DETENTION POND, AND DRAINAGE FACILITY

WATER LINE CONSTRUCTION DETAILS

**Kelly R. Kaluza & Associates, Inc.**  
CONSULTING ENGINEERS & SURVEYORS  
ENGINEERING FIRM NO. F-1039  
8014 AVENUE I  
ROSENBERG, TEXAS 77471  
PH 281.241.0000 FAX 281.241.9328

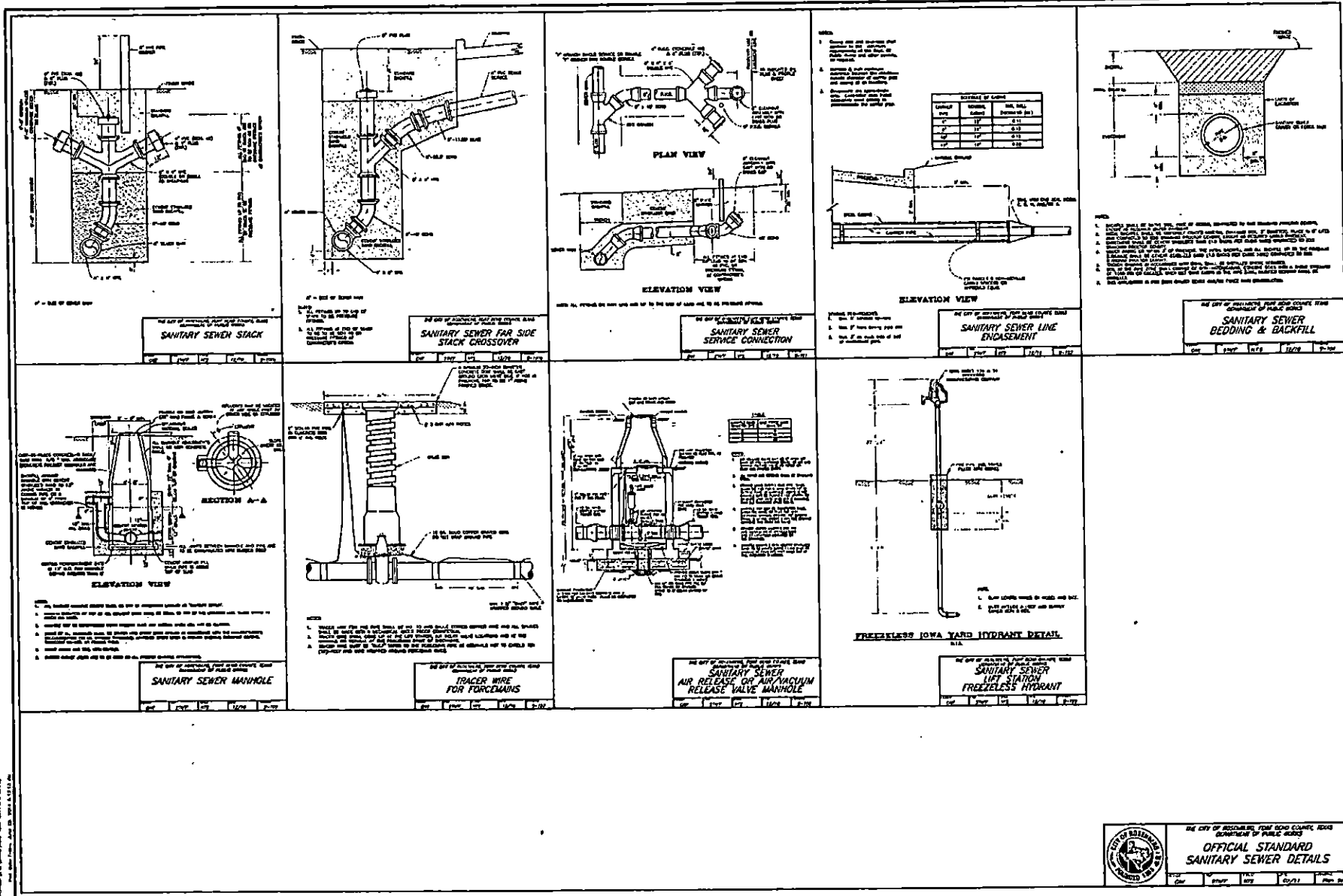
THE CITY OF HOUSTON, FOR BOND COUNTY, TEXAS  
COMMISSIONER OF PUBLIC WORKS  
**OFFICIAL STANDARD WATER DETAILS**  
PAGE 2 OF 4

DATE	BY	CHKD	APP'D
07/21	JYF	WY	AW



SHEET No. 13

DATE: 11/20/22	SCALE: AS SHOWN
DATE: 4/2/18	SCALE: AS SHOWN



NO.	DATE	REVISIONS	APP.

WALSH ROAD INDUSTRIAL PARK WATER LINE EXTENSION, SANITARY SEWER, DETENTION POND, AND DRAINAGE FACILITY

SANITARY SEWER CONSTRUCTION DETAILS

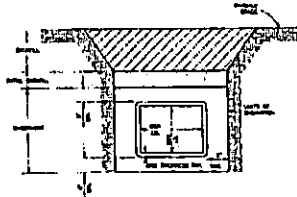
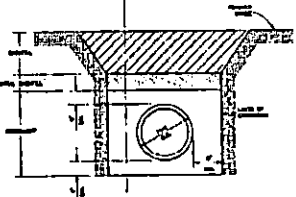
Kelly R. Kaluza & Associates, Inc.  
CONSULTING ENGINEERS & SURVEYORS  
2016 AVENUE I  
BOONVILLE, TEXAS 77411  
PH 817.841.0808 FAX 817.841.8333



THE CITY OF BOONVILLE, TEXAS  
OFFICIAL STANDARD  
SANITARY SEWER DETAILS

Scale: None  
Sheet No. 14  
Date: 08/17/11  
City: Boonville, TX

NO.	DATE	REVISION



1. This detail is for use with the standard type 12" inlet with slope paving.

2. The inlet shall be set in concrete curb and gully.

3. The inlet shall be set in concrete curb and gully.

4. The inlet shall be set in concrete curb and gully.

5. The inlet shall be set in concrete curb and gully.

STORM SEWER  
CURBING & BACKFILL

1. This detail is for use with the standard type 12" inlet with slope paving.

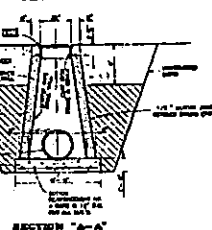
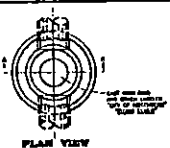
2. The inlet shall be set in concrete curb and gully.

3. The inlet shall be set in concrete curb and gully.

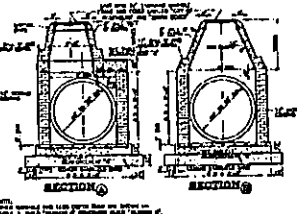
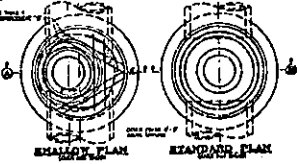
4. The inlet shall be set in concrete curb and gully.

5. The inlet shall be set in concrete curb and gully.

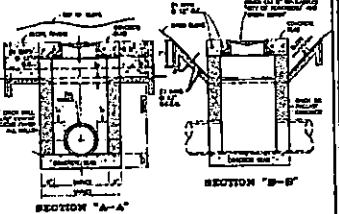
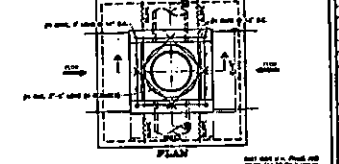
STORM SEWER  
BEDDING & BACKFILL



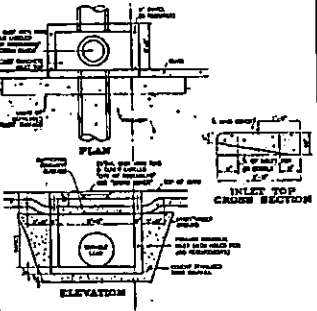
BRICK  
TYPE 12" MANHOLE 18" - 42"



STORM SEWER  
MANHOLE TYPE 12" FOR 18" TO 12" DIAMETER ROP



STANDARD TYPE 12" INLET  
WITH SLOPE PAVING



1. This detail is for use with the standard type 12" inlet with slope paving.

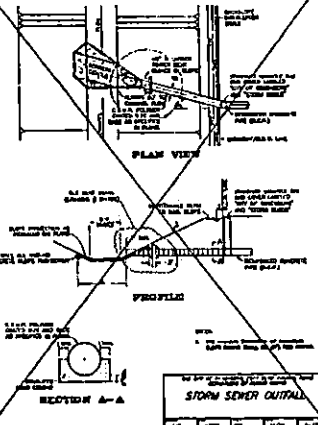
2. The inlet shall be set in concrete curb and gully.

3. The inlet shall be set in concrete curb and gully.

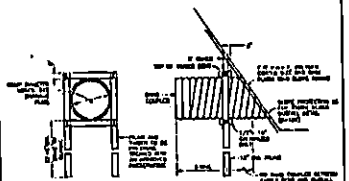
4. The inlet shall be set in concrete curb and gully.

5. The inlet shall be set in concrete curb and gully.

TYPE H-2 INLET



STORM SEWER  
OUTFALL

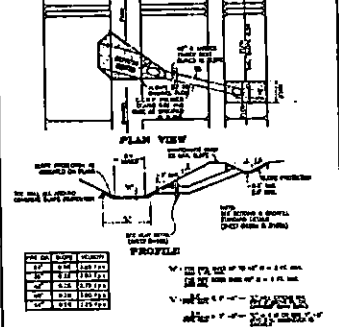


RUBBER GIRTH FOR  
C.G.M.P. OUTFALL



NO DUMPING  
DRAINS TO RIVER

ITEM NO. 800-4  
STANDARD A.C.C. OF  
STEEL PIPE



TYPICAL BACKSLOPE DRAIN

WALSH ROAD  
INDUSTRIAL PARK  
WATER LINE EXTENSION,  
SANITARY SEWER, DETENTION  
POND, AND DRAINAGE FACILITY

STORM SEWER  
CONSTRUCTION DETAILS

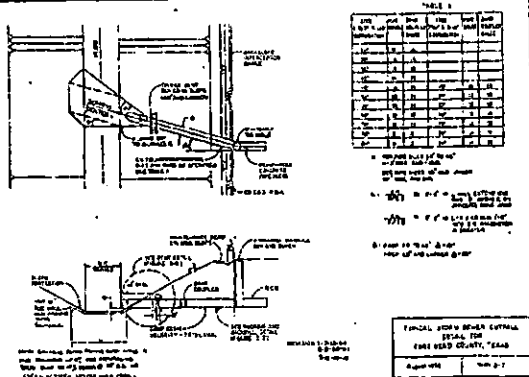
Kelly R. Kaluza  
& Associates, Inc.  
CONSULTING ENGINEERS & SURVEYORS  
ENGINEERING FIRM NO. P-1200  
8014 AVENUE I  
ROCKFORD, TEXAS 75781  
PH: 817-241-0800 FAX: 817-241-8555

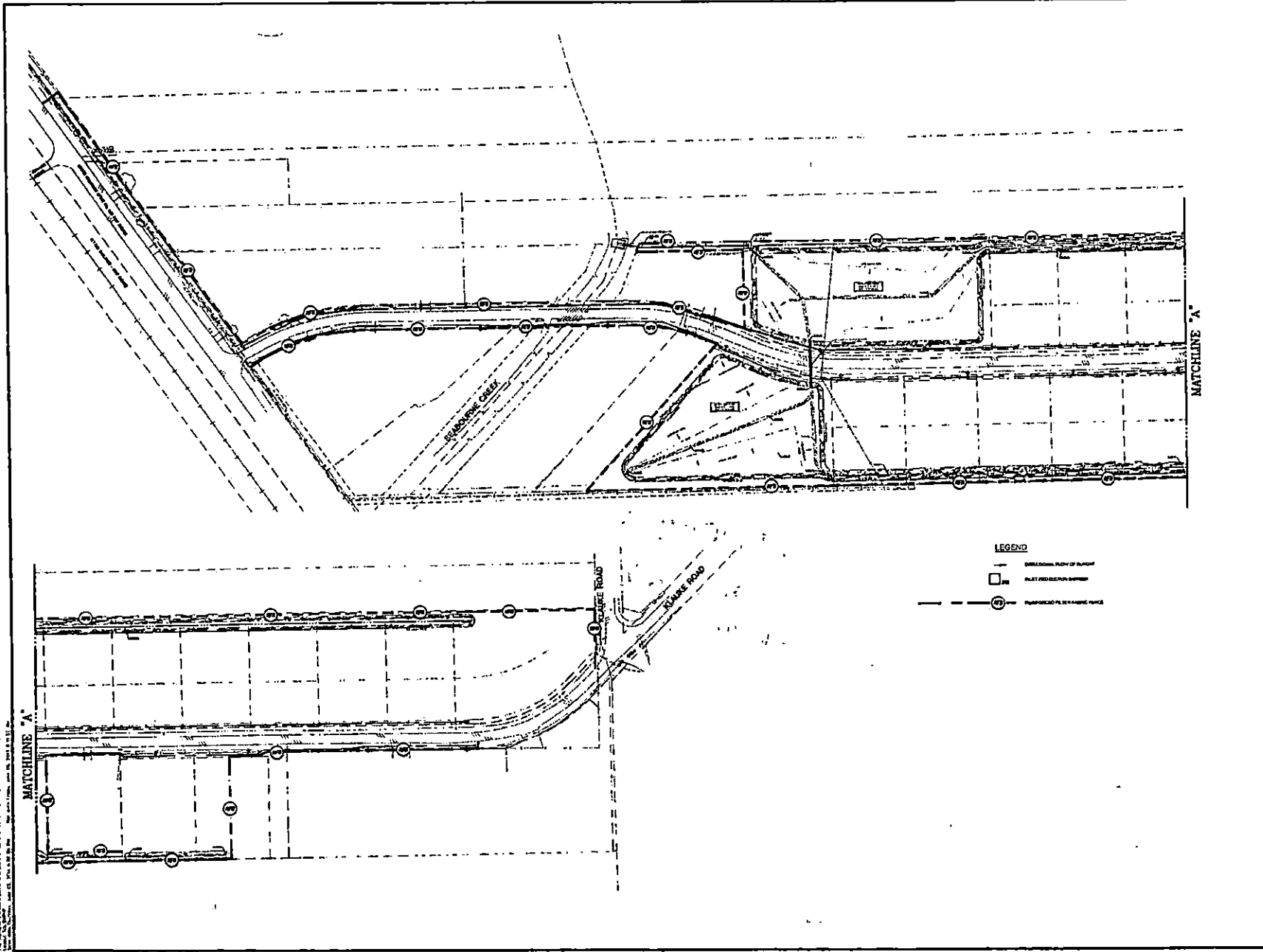
THE CITY OF ROCKFORD, TEXAS  
OFFICIAL STANDARD  
STORM SEWER DETAILS

DUANE W. SWITZER  
105310  
STATE OF TEXAS  
REGISTERED PROFESSIONAL ENGINEER

SHEET No  
16

DATE	BY	CHKD BY





NO.	DATE	REVISION	BY

SCALE: 1" = 100'



WALSH ROAD INDUSTRIAL PARK  
 WATER LINE EXTENSION,  
 SANITARY SEWER, DETENTION  
 POND, AND DRAINAGE FACILITY

STORM WATER  
 POLLUTION PREVENTION  
 PLAN

**Kelly R. Kaluza & Associates, Inc.**  
 CONSULTING ENGINEERS & SURVEYORS  
 ENGINEERING FIRM No. P-1576  
 2014 AVENUE I  
 HOUSTON, TEXAS 77057  
 PH: 281.241.0200 FAX: 281.241.0325



*[Signature]*  
 SHEET No.  
**18**

DATE: 08/11/11  
 DRAWN BY: [Name]  
 CHECKED BY: [Name]  
 DATE: 11/11/11

**RECEIVED**  
**JAN 23 2016**  
**FBC DRAINAGE DIST.**