© POGUE ENGINEERING & DEVELOPMENT COMPANY, INC. 2006, ALL RIGHTS RESERVED THE ENGINEERING DESIGN, DETAIL AND ENGINEERING DRAWINGS FOR THIS PROJECT AND/OR OVERALL PROJECT ARE THE LEGAL PROPERTY OF POGUE ENGINEERING & DEVELOPMENT COMPANY, INC. THEIR USE FOR REPRODUCTION, CONSTRUCTION, OR DISTRIBUTION IS PROHIBITED UNLESS AUTHORIZED IN WRITING BY POGUE ENGINEERING & DEVELOPMENT COMPANY, INC.

BCOX 05/01/2008 - 5:00PM
N:\JOBS\1300-1399\1312-06-094\DWG\1312-06-094-07A.DWG

SPR PACKAGING

SCALE
1"=40' H
1"=5' V

LINE 'ST-1'

STA: 8+72.94 LINE 'ST-1' END & PLUG 36" STORM LINE
STA: 8+57.94 LINE 'ST-1'= STA: 0+00 LINE 'ST-1E' INSTALL 36"X30" 45° WYE
STA: 5+41.11 LINE 'ST-1' INSTALL STANDARD JUNCTION PIPE SIZE CHANGE RIM=571.45
STA: 5+07.03 LINE 'ST-1' POINT OF TANGENCY
STA: 4+38.49 LINE 'ST-1' POINT OF CURVATURE
STA: 3+82.21 LINE 'ST-1'= STA: 0+00 LINE 'ST-1D' INSTALL 36"X18° 45° WYE
STA: 2+93.89 LINE 'ST-1' POINT OF TANGENCY
STA: 2+71.08 LINE 'ST-1'= STA: 0+00 LINE 'ST-1C' INSTALL 36"X18° 45° WYE
STA: 2+14.23 LINE 'ST-1' POINT OF CURVATURE
STA: 1+55.77 LINE 'ST-1' INSTALL 1-36"x15° 45° CONNECTION
STA: 0+77.81 LINE 'ST-1' INSTALL 1-36"x8° 45° CONNECTION
STA: 0+50.81 LINE 'ST-1'= STA: 0+00 LINE 'ST-1B' INSTALL 36"X18° 45° WYE
STA: 0+06.00 LINE 'ST-1'= STA: 0+00 LINE 'ST-1A' INSTALL 36"X18° 45° WYE
STA: 0+00 LINE 'ST-1' BEGIN STORM LINE
INSTALL STANDARD RIP-RAP INSTALL 14 CY DRY ROCK RIP-RAP (TYPE A, 2.1.6(B)(1-3)), C.T.C.O.G. LIMITS. 60% SHALL BE GREATER THAN OR EQUAL TO A WEIGHT OF 100 POUNDS. INDIVIDUAL RIP-RAP SHALL HAVE A MINIMUM THICKNESS OF 12" BY 24". SMALLER DIMENSIONS OF 12" BY 24". FRAGMENTS MAY BE USED ONLY TO FILL THE VOIDS BETWEEN THE ABOVE MINIMUM SIZED RIP-RAP MATERIALS

PROPOSED GROUND LINE @ C.L. PIPE
PROPOSED MANHOLE
EXISTING GROUND LINE @ C.L. PIPE
COMPACTED FILL
PROPOSED HGL
36" PLUG
PROPOSED 36" STORM @ 0.50%
EXISTING 8" SS TO BE REMOVED
329.33 LF OF 36" STORM LINE
538.61 LF OF 36" STORM LINE
PROPOSED HEADWALL
PROPOSED ROCK RIP-RAP

LINE 'ST-1' (36" @ 0.50%) Q100=20.08 cfs V=2.84 fps v²/2g=0.13 ft Sf=0.0009 ft/ft n=0.013 C=47.16 cfs

LINE 'ST-1' (36" @ 0.50%) Q100=20.08 cfs V=2.84 fps v²/2g=0.13 ft Sf=0.0009 ft/ft n=0.013 C=47.16 cfs

LINE 'ST-1' (36" @ 0.50%) Q100=27.14 cfs V=3.84 fps v²/2g=0.23 ft Sf=0.0017 ft/ft n=0.013 C=47.16 cfs

LINE 'ST-1' (36" @ 0.50%) Q100=32.96 cfs V=4.66 fps v²/2g=0.34 ft Sf=0.0024 ft/ft n=0.013 C=47.16 cfs

LINE 'ST-1' (36" @ 0.50%) Q100=36.49 cfs V=5.16 fps v²/2g=0.41 ft Sf=0.0030 ft/ft n=0.013 C=47.16 cfs

LINE 'ST-1' (36" @ 0.50%) Q100=37.37 cfs V=5.29 fps v²/2g=0.43 ft Sf=0.0031 ft/ft n=0.013 C=47.16 cfs

LINE 'ST-1' (36" @ 0.50%) Q100=43.10 cfs V=6.10 fps v²/2g=0.58 ft Sf=0.0042 ft/ft n=0.013 C=47.16 cfs

LINE 'ST-1' (36" @ 0.50%) Q100=40.28 cfs V=5.70 fps v²/2g=0.50 ft Sf=0.0036 ft/ft n=0.013 C=47.16 cfs

LINE 'ST-1A'

STA: 0+00 LINE 'ST-1A'= STA: 0+06.00 LINE 'ST-1' INSTALL 36"X18° 45° WYE
STA: 0+15.56 LINE 'ST-1A' INSTALL 18" CURB INLET TC=564.70

EXISTING GROUND LINE @ C.L. PIPE
COMPACTED FILL
PROPOSED GROUND LINE @ C.L. PIPE
PROPOSED HGL
PROPOSED INLET
PROPOSED 18" STORM @ 17.48%
15.56 LF OF 18" STORM LINE

LINE 'ST-1A' (18" @ 17.48%) Q100=2.82 cfs V=1.60 fps v²/2g=0.04 ft Sf=0.0007 ft/ft n=0.013 C=43.92 cfs

LINE 'ST-1B'

STA: 0+00 LINE 'ST-1B'= STA: 0+50.81 LINE 'ST-1' INSTALL 36"X18° 45° WYE
STA: 0+32.87 LINE 'ST-1B' INSTALL STANDARD 4' DROP INLET (TYPE 'A' W/ 4'-0"X3'-0" OPENING) TOP EL=562.50 CONCRETE OR BRICK THROAT EL=561.50

EXISTING GROUND LINE @ C.L. PIPE
PROPOSED GROUND LINE @ C.L. PIPE
PROPOSED HGL
PROPOSED INLET
PROPOSED 18" STORM @ 0.91%
32.97 LF OF 18" STORM LINE

LINE 'ST-1B' (18" @ 0.91%) Q100=2.91 cfs V=1.65 fps v²/2g=0.04 ft Sf=0.0008 ft/ft n=0.013 C=10.02 cfs

LINE 'ST-1C'

STA: 0+32.96 LINE 'ST-1C' INSTALL STANDARD 10' CURB INLET TC=568.65
STA: 0+00 LINE 'ST-1C'= STA: 2+93.89 LINE 'ST-1' INSTALL 36"X18° 45° WYE

EXISTING GROUND LINE @ C.L. PIPE
PROPOSED GROUND LINE @ C.L. PIPE
PROPOSED INLET
COMPACTED FILL
PROPOSED HGL
PROPOSED 18" STORM @ 16.23%
32.96 LF OF 18" STORM LINE

LINE 'ST-1C' (18" @ 16.23%) Q100=5.82 cfs V=3.29 fps v²/2g=0.17 ft Sf=0.0031 ft/ft n=0.013 C=42.32 cfs Vd=16.80 fps d=0.38 FT

LINE 'ST-1D'

STA: 0+08.57 LINE 'ST-1D' INSTALL STANDARD 10' CURB INLET TC=567.60
STA: 0+00 LINE 'ST-1D'= STA: 3+82.21 LINE 'ST-1' INSTALL 36"X18° 45° WYE

EXISTING GROUND LINE @ C.L. PIPE
PROPOSED GROUND LINE @ C.L. PIPE
PROPOSED INLET
PROPOSED HGL
PROPOSED 18" STORM @ 47.14%
8.57 LF OF 18" STORM LINE

LINE 'ST-1D' (18" @ 47.14%) Q100=7.06 cfs V=3.99 fps v²/2g=0.25 ft Sf=0.0045 ft/ft n=0.013 C=72.12 cfs

LINE 'ST-1E'

STA: 0+13.44 LINE 'ST-1E' INSTALL 10' CURB INLET OPEN ON TOP TC=567.55
STA: 0+00 LINE 'ST-1E'= STA: 8+67.94 LINE 'ST-1' INSTALL 36"X30° 45° WYE

EXISTING GROUND LINE @ C.L. PIPE
PROPOSED GROUND LINE @ C.L. PIPE
PROPOSED INLET
PROPOSED HGL
PROPOSED 30" STORM @ 11.46%
13.44 LF OF 30" STORM LINE

LINE 'ST-1E' (30" @ 11.46%) Q100=20.08 cfs V=4.09 fps v²/2g=0.26 ft Sf=0.0024 ft/ft n=0.013 C=138.85 cfs

LINE 'ST-2'

STA: 2+00.93 LINE 'ST-2' END & PLUG 48" STORM LINE
STA: 1+90.93 LINE 'ST-2'= STA: 0+00 LINE 'ST-2E' INSTALL 48"X42° 45° WYE
STA: 1+37.00 LINE 'ST-2'= STA: 0+00 LINE 'ST-2B' INSTALL 48"X18° 45° WYE
STA: 1+00.85 LINE 'ST-2' POINT OF TANGENCY
STA: 0+90.85 LINE 'ST-2' POINT OF CURVATURE
STA: 0+06.00 LINE 'ST-2'= STA: 0+00 LINE 'ST-2E' INSTALL 48"X18° 45° WYE
STA: 0+00 LINE 'ST-2' BEGIN STORM LINE
INSTALL STANDARD RIP-RAP INSTALL 13 CY DRY ROCK RIP-RAP (TYPE A, 2.1.6(B)(1-3)), C.T.C.O.G. LIMITS. 60% SHALL BE GREATER THAN OR EQUAL TO A WEIGHT OF 100 POUNDS. INDIVIDUAL RIP-RAP SHALL HAVE A MINIMUM THICKNESS OF 12" BY 24". SMALLER DIMENSIONS OF 12" BY 24". FRAGMENTS MAY BE USED ONLY TO FILL THE VOIDS BETWEEN THE ABOVE MINIMUM SIZED RIP-RAP MATERIALS

EXISTING GROUND LINE @ C.L. PIPE
COMPACTED FILL
PROPOSED GROUND LINE @ C.L. PIPE
PROPOSED HGL
PROPOSED HEADWALL
48" PLUG
PROPOSED 48" STORM @ 0.50%
PROPOSED ROCK RIP-RAP
200.93 LF OF 48" STORM LINE

LINE 'ST-2' (48" @ 0.50%) Q100=63.58 cfs V=5.06 fps v²/2g=0.40 ft Sf=0.0020 ft/ft n=0.013 C=101.57 cfs

LINE 'ST-2' (48" @ 0.50%) Q100=66.31 cfs V=5.28 fps v²/2g=0.43 ft Sf=0.0021 ft/ft n=0.013 C=101.57 cfs

LINE 'ST-2' (48" @ 0.50%) Q100=71.95 cfs V=5.73 fps v²/2g=0.51 ft Sf=0.0025 ft/ft n=0.013 C=101.57 cfs

NOTE:
ALL STORM PIPE TO BE RCP

BENCH MARK LIST:

BENCHMARK #1
X-CUT FOUND ON THE TOP OF CURB OF THE SOUTHERN CURB RETURN AT EAST SIDE OF INDUSTRIAL BLVD. 590'± SOUTH FROM CENTERLINE OF RAILROAD
ELEVATION = 564.27

BENCHMARK #2
X-CUT FOUND ON THE TOP OF CURB OF THE SOUTHERN CURB RETURN AT EAST SIDE OF INDUSTRIAL BLVD. 330'± SOUTH FROM CENTERLINE OF RAILROAD
ELEVATION = 568.39

RECORD DRAWINGS:

IT WAS THE INTENT THAT THE IMPROVEMENTS SHOWN BE CONSTRUCTED ACCORDING TO THESE PLANS AS APPROVED BY THE CITY. THE LINES AND GRADES WERE SET ON THE GROUND FOR CONSTRUCTION ACCORDING TO SAID PLANS. THE CITY INSPECTED THE CONSTRUCTION. THE ENGINEER DID NOT VERIFY LINES OR GRADES AFTER CONSTRUCTION. WE ARE NOT AWARE OF ANY CHANGES OR REVISIONS TO THESE PLANS DURING CONSTRUCTION OTHER THAN THOSE SHOWN.

RANDALL P. POGUE, P.E. DATE: FEBRUARY 28, 2008
TX LIC. NO. 84780 (A)

NO.	DATE	REVISION / DESCRIPTION
A	02-25-08	RECORD DRAWINGS
4	04-12-07	FIRE HYDRANT DETAILS REVISIONS
3	03-12-07	CITY WATER MAIN RELOCATION
2	02-26-07	SITE PLAN REVISIONS
1	02-09-07	NORTHERNMOST ACCESS DRIVE & FIRE HYDRANT REVISIONS

DESIGN	DRAWN	DATE	SCALE	NOTES
RPP	BEC	01-29-2007	AS SHOWN	–

OWNER
THE WHITMORE MANUFACTURING COMPANY
P.O. BOX 9300
ROCKWALL, TEXAS 75083
MR. RAY SCHWERTNER
(972) 771-1000 PHONE
(972) 722-2108 FAX

DEVELOPER
SPR VENTURE, INC.
5720 SPERLING, SUITE 630
DALLAS, TEXAS 75240
MR. STEVEN ROSENBERG
(214) 862-8680 PHONE
(972) 385-0279 FAX

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY RANDALL P. POGUE, P.E. 84780 ON 01-29-2007. ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT.

STATE OF TEXAS · RANDALL P. POGUE · 84780 · LICENSED · PROFESSIONAL ENGINEER

POGUE ENGINEERING & DEVELOPMENT COMPANY, INC.
1515 HERITAGE DRIVE
SUITE 105
McKINNEY, TEXAS 75069
(214) 544-8880 PHONE
(214) 544-8882 FAX
www.PogueEngineering.com

STORM SEWER PROFILES (1 of 2)

SPR PACKAGING
BLOCK A, LOT 1, SPR PACKAGING ADDITION
NWC OF INDUSTRIAL BLVD. @ JUSTIN ROAD
CITY OF ROCKWALL, TEXAS

SHEET NO. C5.02

PI NO: 1312-06-094
DWG NO: 1312-06-094-07A.DWG