

# PRIVATE PROJECTS DRAINAGE (PPD)

## COSTCO WHOLESALE WAREHOUSE WICHITA, KANSAS (258-PPD 607861)

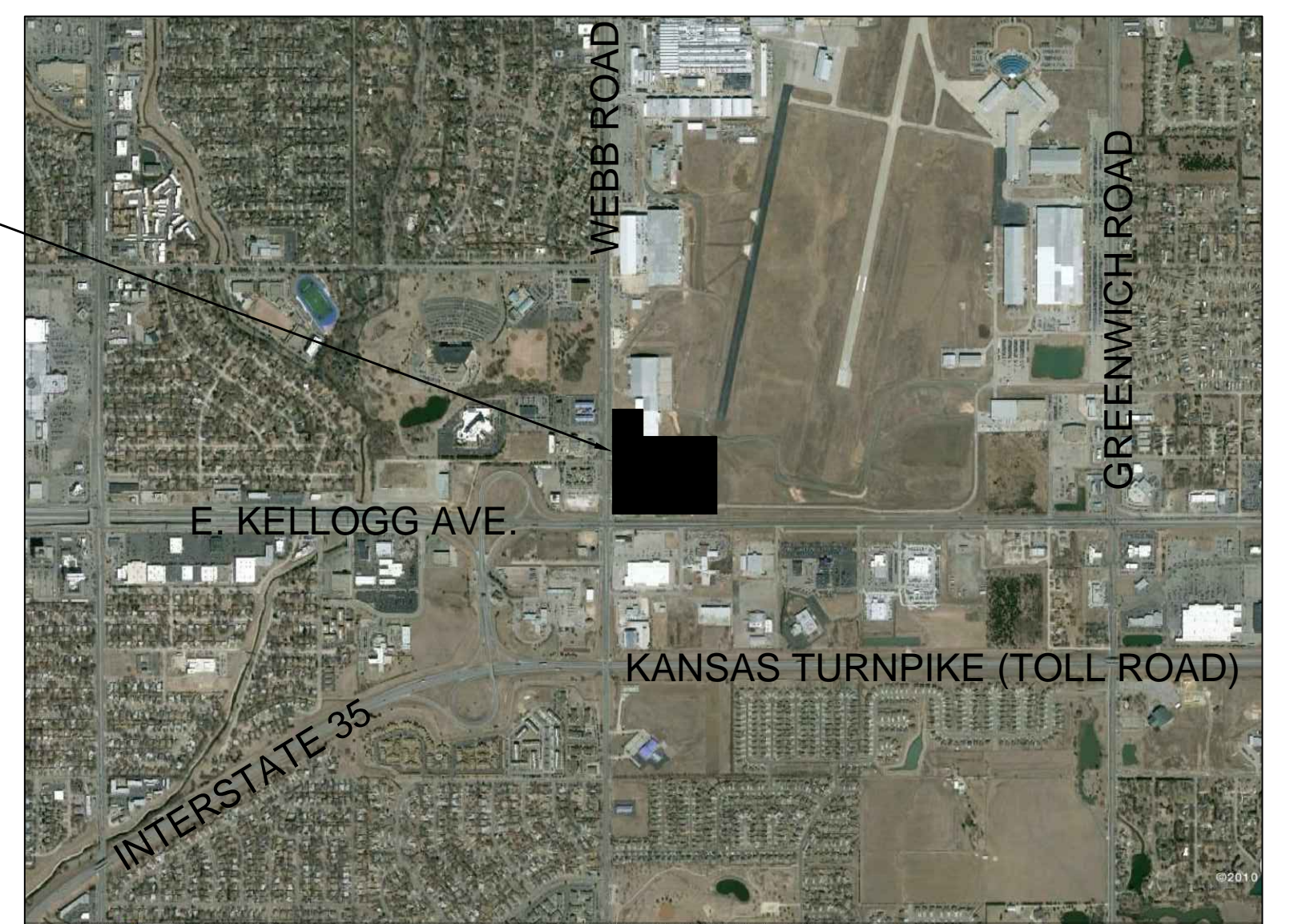
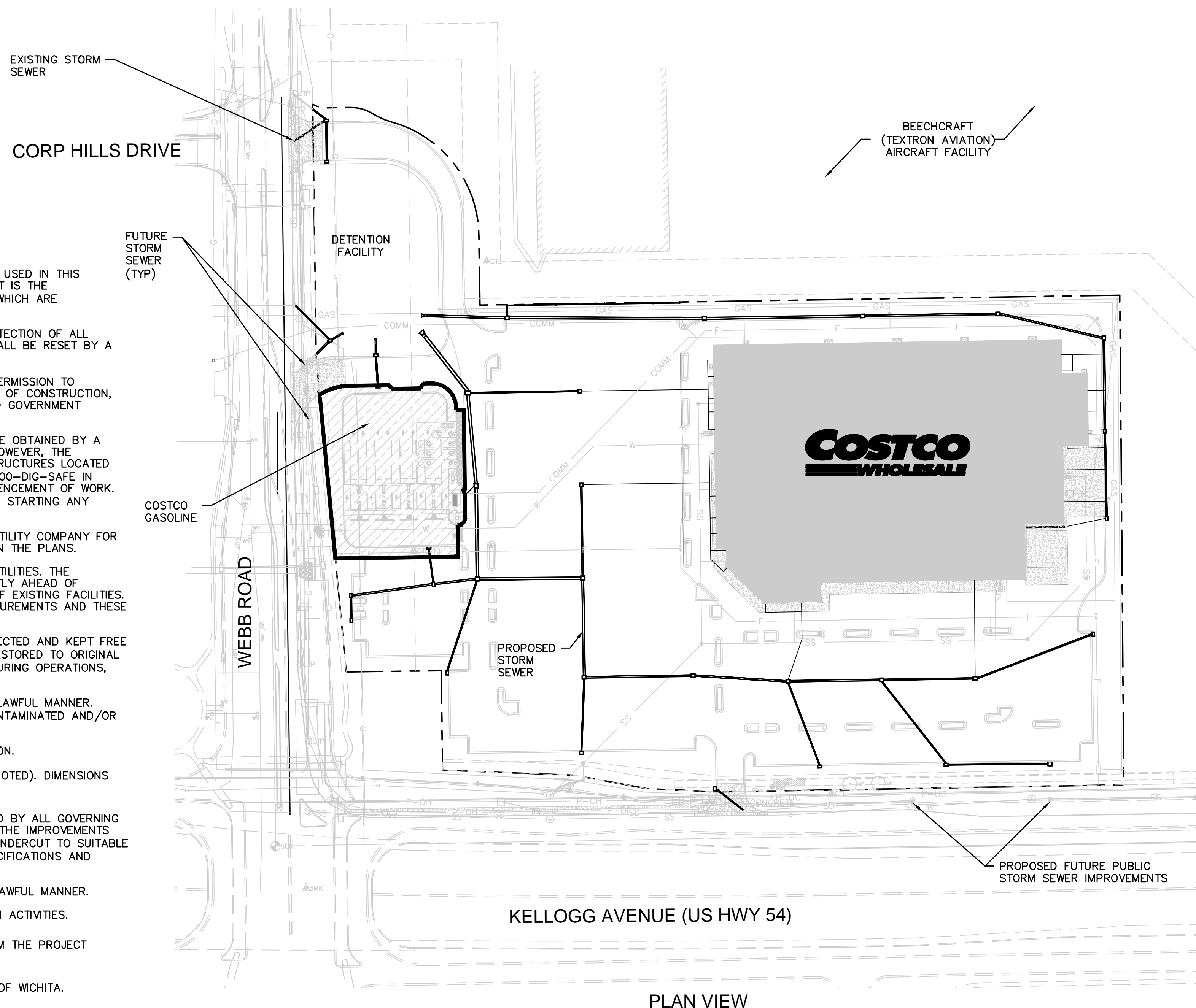
SOUTHWEST QUARTER OF SECTION 21, TOWNSHIP 27 SOUTH, RANGE 2 EAST  
WICHITA, SEDGWICK COUNTY, KANSAS

SITE INFORMATION TABLE	
LEGAL DESCRIPTION	LOT 1 - COSTCO ADDITION
CITY OF WICHITA, SEDGWICK COUNTY, KANSAS	
ADDRESS	
TO BE DETERMINED	
SITE AREA	17.18 ACRES
ZONING	L4 (LIGHT INDUSTRIAL)
BENCHMARK	SE QUAD OF WEBB ROAD & KELLOGG AVENUE 2" ALUMINUM DISK STAMPED "CON BENCHMARK ELEV= 388.36 41.0' E OF CL WEBB ROAD, 61.4' WNW OF CENTER OF FIRE HYDRANT 4.3' SSW OF CENTER OF TRAFFIC SIGNAL, 79.8' SE OF RR SPIKE IN THIMBLE

SHEET INDEX	
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PPD1	PPD COVER SHEET
PPD2	PLAT SURVEY
PPD3	PPD SITE GRADING PLAN
PPD4	STORM SEWER PLAN AND PROFILE
PPD5	STORM SEWER PLAN AND PROFILE
PPD6	STORM SEWER PLAN AND PROFILE
PPD7	STORM SEWER PLAN AND PROFILE
PPD8	STORM SEWER PLAN AND PROFILE
PPD9	DRAINAGE PATTERNS PLAN
PPD10	IMPERVIOUS SURFACE PLAN
PPD11	ROOF DRAIN PLAN
PPD12	ROOF DRAIN PLAN
PPD13	PPD DETAILS
PPD14	PPD DETAILS

### GENERAL NOTES

- IT IS THE CONTRACTOR'S RESPONSIBILITY TO BE FAMILIAR WITH AND FOLLOW THE CITY OF WICHITA'S STANDARDS USED IN THIS PROJECT. A LIST OF STANDARDS HAS BEEN PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR; HOWEVER, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FOLLOW ALL CITY OF WICHITA'S STANDARDS AND SPECIAL PROVISIONS WHICH ARE APPLICABLE TO THIS PROJECT UNLESS OTHERWISE MODIFIED BY THE CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL PRESERVE ALL SURVEY CONTROL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF ALL PROPERTY MONUMENTS. ANY PROPERTY MONUMENTS DISTURBED OR DAMAGED BY CONSTRUCTION ACTIVITIES SHALL BE RESET BY A PROFESSIONAL LAND SURVEYOR LICENSED IN THE STATE OF KANSAS AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL VERIFY THAT ALL IMPACTED GOVERNMENT AGENCIES HAVE GRANTED ALL APPLICABLE PERMISSION TO PROCEED WITH CONSTRUCTION PRIOR TO MOBILIZATION. FURTHERMORE, 48 HOURS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY APPROPRIATE PARTIES THAT WORK WILL BE PROCEEDING WITHIN EACH IMPACTED GOVERNMENT AGENCY JURISDICTIONAL BOUNDARY.
- THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITY PIPES AND STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF AVAILABLE RECORDS AND TO THE BEST OF OUR KNOWLEDGE CONSTITUTES ALL KNOWN FACILITIES. HOWEVER, THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT ANY EXISTING UTILITIES OR STRUCTURES LOCATED AT THE WORK SITE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT DIGGER'S HOTLINE OF KANSAS @ 1-800-DIG-SAFE IN ADVANCE OF ANY EXCAVATION FOR THE MARK-OUT OF THE LOCATION OF UTILITIES AND NOTIFICATION OF COMMENCEMENT OF WORK. THE CONTRACTOR SHALL ALSO HAVE ALL "PRIVATE UTILITIES" (INCLUDING IRRIGATION SYSTEMS) LOCATED BEFORE STARTING ANY CONSTRUCTION.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE OR COORDINATE WITH THE APPROPRIATE UTILITY COMPANY FOR RELOCATION OF ALL UNFORESEEN EXISTING UTILITIES CONFLICTING WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
- BEFORE EXCAVATING FOR THIS CONTRACT, THE CONTRACTOR SHALL FIELD VERIFY LOCATION OF UNDERGROUND UTILITIES. THE CONTRACTOR SHALL MAKE EXPLORATION EXCAVATIONS AND LOCATE EXISTING UNDERGROUND UTILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS TO PLANS IF REVISIONS ARE NECESSARY BECAUSE OF ACTUAL LOCATION OF EXISTING FACILITIES. THE CONTRACTOR SHALL REPORT TO THE ENGINEER OR CITY INSPECTOR ANY DISCREPANCIES BETWEEN HIS MEASUREMENTS AND THESE PLANS.
- ANY EXISTING UTILITY LINES AND STRUCTURES TO REMAIN WITHIN THE LIMITS OF CONSTRUCTION SHALL BE PROTECTED AND KEPT FREE OF DAMAGE BY THE CONTRACTOR'S OPERATIONS. IF SUCH UTILITY OR STRUCTURE IS DAMAGED, IT SHALL BE RESTORED TO ORIGINAL CONDITION OR BETTER AT THE CONTRACTOR'S EXPENSE. IF ANY UTILITY LINES OR STRUCTURES ARE DAMAGED DURING OPERATIONS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY FOR FURTHER INSTRUCTIONS.
- ALL SPOIL MATERIAL FROM THE PROJECT SHALL BE REMOVED FROM THE PROJECT SITE AND DISPOSED OF IN A LAWFUL MANNER. CONSULT WITH GEOTECHNICAL ENGINEER AND OWNER PRIOR TO ANY EARTHWORK OR EXCAVATION REGARDING CONTAMINATED AND/OR UNSUITABLE SOILS.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS PRIOR TO COMMENCING CONSTRUCTION.
- ALL DIMENSIONS ARE TO THE EDGE OF PAVEMENT, FACE OF BUILDING, OR BACK OF CURB (UNLESS OTHERWISE NOTED). DIMENSIONS ARE IN FEET UNLESS OTHERWISE NOTED.
- THE CONTRACTOR IS RESPONSIBLE FOR RELOCATION AND/OR DEMOLITION AND DISPOSAL IN A MANNER APPROVED BY ALL GOVERNING AUTHORITIES FOR ALL STRUCTURES, PADS, WALLS, PANS, FOUNDATIONS, PAVEMENT, UTILITIES, ETC., SUCH THAT THE IMPROVEMENTS SHOWN ON THE PLANS CAN BE CONSTRUCTED. ALL FACILITIES TO BE REMOVED AND/OR RELOCATED SHALL BE UNDERCUT TO SUITABLE GRADE AND BROUGHT UP TO PROPOSED GRADE WITH SUITABLE COMPACTED FILL MATERIAL PER THE PLANS/SPECIFICATIONS AND GEOTECHNICAL REPORT.
- ALL DEBRIS RESULTING FROM CONSTRUCTION OPERATIONS SHALL BE HAULED OFF SITE AND DISPOSED OF IN A LAWFUL MANNER.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ALL TRAFFIC CONTROL NECESSARY DURING CONSTRUCTION ACTIVITIES.
- THE CONTRACTOR SHALL NOT DISTURB BEYOND THE PROJECT LIMITS OF CONSTRUCTION WITHOUT APPROVAL FROM THE PROJECT ENGINEER/OWNER.
- ALL CONSTRUCTION INSPECTION AND MATERIAL TESTING SHALL BE PROVIDED TO THE ACCEPTANCE OF THE CITY OF WICHITA.
- THE CONTRACTOR SHALL REFERENCE ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF VESTIBULES, BUILDING SIDEWALKS, EXIT PORCHES, PRECISE BUILDING DIMENSIONS, AND EXACT BUILDING UTILITY ENTRANCE LOCATIONS.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO BE FAMILIAR WITH AND FOLLOW THE CITY OF WICHITA STANDARDS USED IN THIS PROJECT. A LIST OF STANDARDS HAS BEEN PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR; HOWEVER, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FOLLOW ALL CITY OF WICHITA STANDARDS WHICH ARE APPLICABLE TO THIS PROJECT UNLESS OTHERWISE MODIFIED BY THE CONTRACT DOCUMENTS.
- ALL STATIONING AND DIMENSIONS ARE TO CENTER OF STRUCTURE FOR MANHOLES AND AREA/GRATE INLETS AND CENTER OF BOX FOR CURB INLETS, UNLESS OTHERWISE NOTED.
- ALL STORM SEWER PIPE MATERIAL SHALL CONFORM TO LOCAL CODES.
- REFERENCE ARCHITECTURAL PLANS FOR EXACT ROOF DRAIN/FOUNDATION DRAIN/DOWNSPOUT CONNECTION LOCATIONS AT BUILDING.
- ALL STORM SEWER CONNECTIONS SHALL BE SOIL-TIGHT (MINIMUM).
- ALL STORM PIPE ENTERING STRUCTURES SHALL BE GROUDED TO ASSURE CONNECTION AT STRUCTURE IS WATERTIGHT.
- ROOF DRAIN CONNECTIONS TO STORM SEWER PIPE SHALL BE CONSTRUCTED USING PRE-MANUFACTURED FITTINGS (I.E. WYES, TEES, ETC.) THAT SHALL BE SOIL-TIGHT AND HAVE SMOOTH INTERIOR WALLS.
- ALL TRENCHES SHALL BE BACKFILLED AND COMPACTED PER THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT. A CERTIFIED TESTING AGENCY SHALL PROVIDE COMPACTION TESTING FOR ALL STORM SEWER TRENCHING.
- ALL STORM SEWER STRUCTURES IN PAVED AREAS SHALL BE TRAFFIC RATED FOR H-20 LOADING.
- CONTRACTOR TO INSTALL 4" PERFORATED HDPE FOUNDATION UNDERDRAINS AROUND BUILDING. CONNECT TO ADJACENT STORM SEWER AND OR ROOF DRAINS.
- STORM SEWER SHOWN ON PLANS IS PRIVATELY OWNED AND MAINTAINED.
- THIS OVERALL PROJECT SATISFIES CHAPTER 16.32 OF THE CITY CODE BY PROVIDING DETENTION AND CHANNEL PROTECTION IN THE PROPOSED COSTCO WHOLESALE FACILITIES.



LOCATION MAP  
NOT TO SCALE

### STORMWATER DESIGN INFORMATION & COMPLIANCE

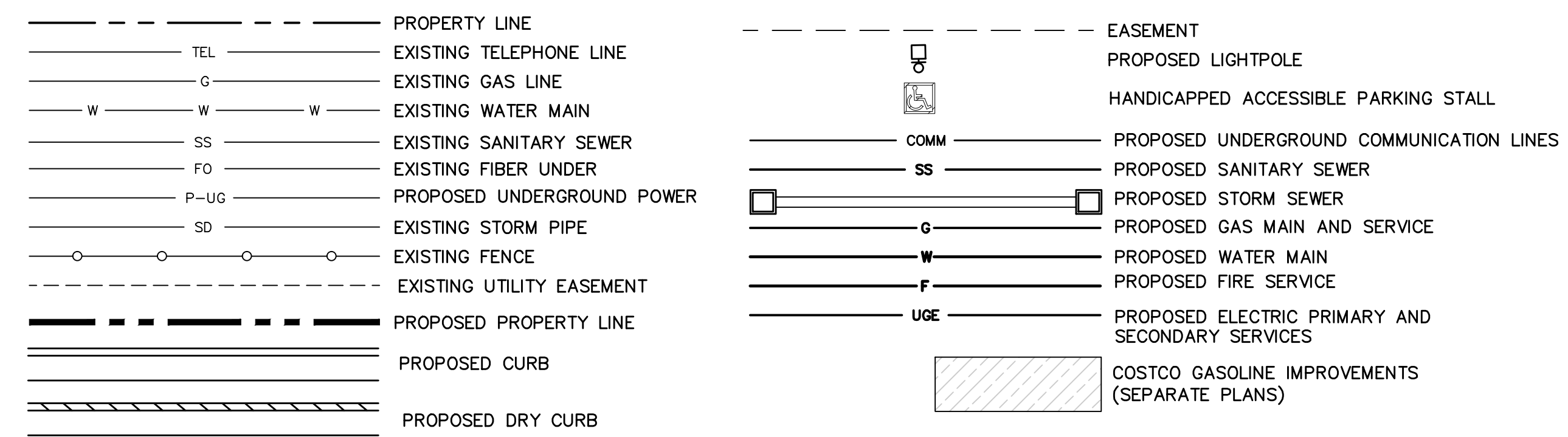
DETENTION DRAINAGE AREA=15.60 ACRES  
DISTURBED AREA=18.9 ACRES  
WQV=1.383 AC-FT  
DETENTION STORAGE=3.35 AC-FT (100 YR)  
DISTURBED AREA=18.9 AC±  
WS ELEV=1362.5 (100 YR)  
PROPOSED IMPERVIOUS AREA=593,708 SF  
PROPOSED PERVIOUS AREA=154,743 SF  
WQV=1.38  
CP=2.82

THESE CONSTRUCTION PLANS WERE PREPARED IN ACCORDANCE WITH THE CURRENT REQUIREMENTS OF SECTION 16.32 CITY OF WICHITA'S STORMWATER REGULATIONS. THE WATER QUALITY REQUIREMENT IS ACHIEVED WITH THE USE OF A SAND OIL SEPARATOR, DRY DETENTION, ROOF DRAIN PIPING. PERMANENT WELL MONITORING IS ALSO INCLUDED ON SITE. REFER TO APPROVED DRAINAGE STUDY FOR ADDITIONAL INFORMATION.

### PROJECT TEAM & UTILITY CONTACT LIST

- |   |   |  |   |
|---|---|--|---|
| <b>OWNER:</b><br>COSTCO WHOLESALE<br>999 LAKE DRIVE<br>ISSAQUAH, WA 98027<br>PHONE: 425.313.8100  | <b>GEOTECHNICAL ENGINEER:</b><br>KLEINFELDER<br>7805 MESQUITE BEND-SUITE 100<br>IRVING, TEXAS 75063<br>CONTACT: KIRK FRASER<br>PHONE: 817.505.7613                                  | <b>GAS:</b><br>KANSAS GAS<br>1021 E 26TH ST N<br>WICHITA, KS 67219<br>CONTACT: NATHAN NEISES<br>PHONE: 316.832.3123  | <b>TELEPHONE:</b><br>COX COMMUNICATIONS<br>901 SW GEORGE WASHINGTON BLVD<br>WICHITA, KANSAS 67211<br>CONTACT: MATT JACKSON<br>PHONE: 316.260.7426   |
| <b>ARCHITECT:</b><br>MULVANNY22 ARCHITECTURE<br>1110 112TH AVE NE-SUITE 500<br>BELLEVUE, WA 98004<br>CONTACT: CAROLYN SHERRILL<br>PHONE: 425.463.1501       | <b>WATER/SANITARY/STORM:</b><br>CITY OF WICHITA<br>PUBLIC WORKS & UTILITIES<br>455 N MAIN<br>WICHITA, KANSAS 67202<br>CONTACT: GREG LOLLEY<br>& SHAWN WELLES<br>PHONE: 316.268.4334 | <b>ELECTRIC:</b><br>WESTAR ENERGY<br>1900 E CENTRAL AVE<br>(K01E)<br>PO BOX 208<br>WICHITA, KANSAS 67201-0208<br>CONTACT: LADONNA VANDERFORD<br>TOPEKA, KANSAS 66612<br>CONTACT: LARRY HOOK<br>PHONE: 785.296.5549 | <b>DEPARTMENT OF ENVIRONMENTAL PROTECTION:</b><br>KANSAS DEPT OF HEALTH/ENV (K01E)<br>1000 SW JACKSON ST, SUITE 420<br>TOPEKA, KANSAS 66612<br>CONTACT: LARRY HOOK<br>PHONE: 785.296.5549 |
| <b>CIVIL ENGINEER/SURVEYOR:</b><br>OLSSON ASSOCIATES<br>201 NW 63RD-SUITE 130<br>OKLAHOMA CITY, OK 73116<br>CONTACT: BRETT LAURITSEN<br>PHONE: 405.242.6600 |   |  |   |

### PLAN LEGEND



### PROPERTY DESCRIPTION

A TRACT OF LAND LOCATED IN THE SOUTHWEST QUARTER OF SECTION 21, TOWNSHIP 27 SOUTH, RANGE 2 EAST OF THE 6TH PRINCIPAL MERIDIAN, SEDGWICK COUNTY, KANSAS, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:  
COMMENCING AT THE SOUTHWEST CORNER OF SAID QUARTER SECTION;  
THENCE ON AN ASSUMED BEARING OF N00°48'14"  
THE ABOVE DESCRIBED TRACT CONTAINS 748,451 SQUARE FEET, 17.18 ACRES, MORE OR LESS. SUBJECT TO EASEMENTS, RESERVATIONS AND RESTRICTIONS NOW OF RECORD.

### 258 PPD

APPROVED AS NOTED  
BY CITY ENGINEER OF WICHITA

ENGINEERING: *Rebecca J. J. 9/1/14*

STORMWATER: *[Signature] 10/21/14*

NOTE TO CONTRACTORS

INSPECTION AND TESTING FOR THIS PROJECT ARE TO BE PROVIDED BY A LICENSED CONSULTING ENGINEERING FIRM UNDER CONTRACT WITH THE OWNER/DEVELOPER. SAID INSPECTION TO BE IN ACCORDANCE WITH THE CITY OF WICHITA STANDARD CONSTRUCTION ENGINEERING PRACTICES AND CERTIFIED BY A LICENSED PROFESSIONAL ENGINEER. NO WORK SHALL BE PERFORMED IN DEDICATED EASEMENTS OR PUBLIC RIGHT-OF-WAY BY THE CONTRACTOR WITHOUT SUCH INSPECTION, NOR SHALL ANY WORK BE COMMENCED WITHOUT WRITTEN AUTHORIZATION BY THE CITY ENGINEER.

**ALERT TO CONTRACTOR:**

- THE SITEWORK FOR THIS PROJECT SHALL MEET OR EXCEED THE PROJECT PLANS, NOTES, SPECIFICATIONS, AND/OR DETAILS. IN CASE OF DISCREPANCY THE MORE STRINGENT SHALL APPLY.
- ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO CONTRACT COMPLETION AND THE FINAL CONNECTION OF SERVICES.
- THE INFORMATION HEREIN IS OF PROPRIETARY NATURE AND IS SUBMITTED IN CONFIDENCE FOR THE USE OF OUR CLIENTS ONLY. UNAUTHORIZED REPRODUCTION, DISTRIBUTION, OR DISSEMINATION, IN WHOLE OR IN PART IS PROHIBITED. THE INFORMATION CONTAINED HEREIN IS AND REMAINS THE PROPERTY OF OLSSON ASSOCIATES AND RECEIPT OR POSSESSION OF THIS INFORMATION CONFERS NO RIGHT IN OR LICENSE TO DISCLOSE TO OTHERS THE SUBJECT MATTER CONTAINED HEREIN FOR ANY BUT AUTHORIZED PURPOSES. ALL RIGHTS RESERVED.

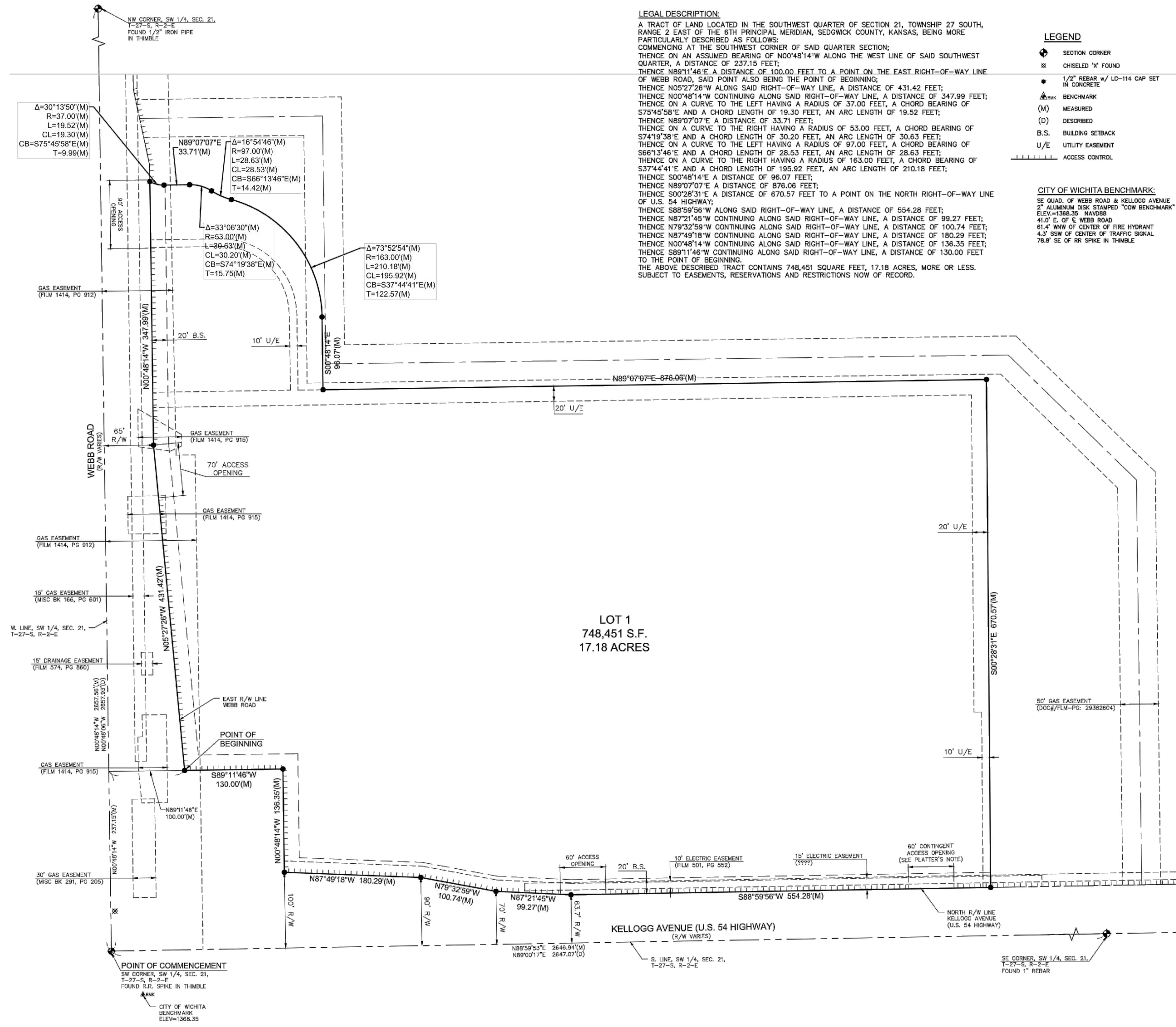
**AS-BUILT DRAWINGS**  
Contractor: Mies Construction  
Inspector: Dakota G. Zimmerman  
Ruggles & Bohm, P.A.  
PDF's Made By: DGZ 06/02/15

CALL BEFORE YOU DIG  
1-800-344-7233  
STATEWIDE (DIG SAFE)

**KANSAS ONE-CALL SYSTEM, INC.**

KANSAS CALL BEFORE YOU DIG:  
1-800-DIG-SAFE (1-800-344-7233)

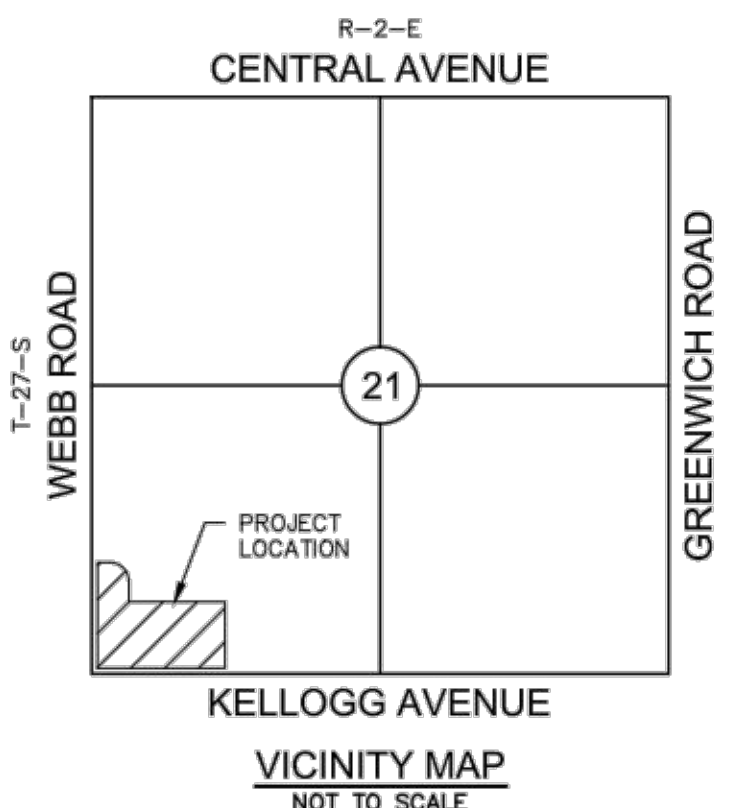
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 DATE: Oct 23, 2014 10:40am XREFS: 121744\_CD.TBLK BRETT LAURITSEN\_PL\_KS



**LEGAL DESCRIPTION:**  
 A TRACT OF LAND LOCATED IN THE SOUTHWEST QUARTER OF SECTION 21, TOWNSHIP 27 SOUTH, RANGE 2 EAST OF THE 6TH PRINCIPAL MERIDIAN, SEDGWICK COUNTY, KANSAS, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:  
 COMMENCING AT THE SOUTHWEST CORNER OF SAID QUARTER SECTION;  
 THENCE ON AN ASSUMED BEARING OF N00°48'14"W ALONG THE WEST LINE OF SAID SOUTHWEST QUARTER, A DISTANCE OF 237.15 FEET;  
 THENCE N89°11'46"E A DISTANCE OF 100.00 FEET TO A POINT ON THE EAST RIGHT-OF-WAY LINE OF WEBB ROAD, SAID POINT ALSO BEING THE POINT OF BEGINNING;  
 THENCE N05°27'26"W ALONG SAID RIGHT-OF-WAY LINE, A DISTANCE OF 431.42 FEET;  
 THENCE N00°48'14"W CONTINUING ALONG SAID RIGHT-OF-WAY LINE, A DISTANCE OF 347.99 FEET;  
 THENCE ON A CURVE TO THE LEFT HAVING A RADIUS OF 37.00 FEET, A CHORD BEARING OF S75°45'58"E AND A CHORD LENGTH OF 19.30 FEET, AN ARC LENGTH OF 19.52 FEET;  
 THENCE N89°07'07"E A DISTANCE OF 33.71 FEET;  
 THENCE ON A CURVE TO THE RIGHT HAVING A RADIUS OF 53.00 FEET, A CHORD BEARING OF S74°19'38"E AND A CHORD LENGTH OF 30.20 FEET, AN ARC LENGTH OF 30.63 FEET;  
 THENCE ON A CURVE TO THE LEFT HAVING A RADIUS OF 97.00 FEET, A CHORD BEARING OF S66°13'46"E AND A CHORD LENGTH OF 28.53 FEET, AN ARC LENGTH OF 28.63 FEET;  
 THENCE ON A CURVE TO THE RIGHT HAVING A RADIUS OF 163.00 FEET, A CHORD BEARING OF S37°44'41"E AND A CHORD LENGTH OF 195.92 FEET, AN ARC LENGTH OF 210.18 FEET;  
 THENCE S00°48'14"E A DISTANCE OF 96.07 FEET;  
 THENCE N89°07'07"E A DISTANCE OF 876.06 FEET;  
 THENCE S00°28'31"E A DISTANCE OF 670.57 FEET TO A POINT ON THE NORTH RIGHT-OF-WAY LINE OF U.S. 54 HIGHWAY;  
 THENCE S88°59'56"W ALONG SAID RIGHT-OF-WAY LINE, A DISTANCE OF 554.28 FEET;  
 THENCE N87°21'45"W CONTINUING ALONG SAID RIGHT-OF-WAY LINE, A DISTANCE OF 99.27 FEET;  
 THENCE N79°32'59"W CONTINUING ALONG SAID RIGHT-OF-WAY LINE, A DISTANCE OF 100.74 FEET;  
 THENCE N87°49'18"W CONTINUING ALONG SAID RIGHT-OF-WAY LINE, A DISTANCE OF 180.29 FEET;  
 THENCE N00°48'14"W CONTINUING ALONG SAID RIGHT-OF-WAY LINE, A DISTANCE OF 136.35 FEET;  
 THENCE S89°11'46"E CONTINUING ALONG SAID RIGHT-OF-WAY LINE, A DISTANCE OF 130.00 FEET TO THE POINT OF BEGINNING.  
 THE ABOVE DESCRIBED TRACT CONTAINS 748,451 SQUARE FEET, 17.18 ACRES, MORE OR LESS. SUBJECT TO EASEMENTS, RESERVATIONS AND RESTRICTIONS NOW OF RECORD.

- LEGEND**
- ⊕ SECTION CORNER
  - ⊗ CHISELED "X" FOUND
  - 1/2" REBAR w/ LC-114 CAP SET IN CONCRETE
  - ⊕ BENCHMARK
  - (M) MEASURED
  - (D) DESCRIBED
  - B.S. BUILDING SETBACK
  - U/E UTILITY EASEMENT
  - ▬▬▬ ACCESS CONTROL

**CITY OF WICHITA BENCHMARK:**  
 SE QUAD. OF WEBB ROAD & KELLOGG AVENUE  
 2" ALUMINUM DISK STAMPED "COW BENCHMARK"  
 ELEV.=1368.35 NAVD88  
 41.0' E. OF E WEBB ROAD  
 61.4' WNW OF CENTER OF FIRE HYDRANT  
 4.3' SSW OF CENTER OF TRAFFIC SIGNAL  
 78.8' SE OF RR SPIKE IN THIMBLE



**PLATTER'S NOTE:**  
 EASTERN ACCESS TO KELLOGG AVENUE IS CONTINGENT UPON COMPLETION OF CONSTRUCTION OF FRONTAGE ROAD

**LOT 1**  
 748,451 S.F.  
 17.18 ACRES

# COSTCO ADDITION

AN ADDITION TO THE CITY OF WICHITA, SEDGWICK COUNTY, KANSAS

**PLAT NOTE**  
 FOR INFORMATIONAL PURPOSES ONLY. NOT TO SCALE.

CALL BEFORE YOU DIG  
 1-800-344-7233  
 STATEWIDE (DIG SAFE)

drawn by: MTC  
 checked by: BHE  
 approved by: BHE  
 SA/DC by: BHE  
 project no.: 012-1744  
 drawing no.:  
 date: 07.15.14

KANSAS CALL BEFORE YOU DIG:  
 1-800-DIG-SAFE (1-800-344-7233)

**SHEET**  
 PPD2

**MOLSSON ASSOCIATES**  
 101 N.W. 10th Street, Suite 130  
 Columbia, MO 65201  
 TEL: 656.245.8879  
 FAX: 656.242.8869  
 www.molssonassociates.com

**COSTCO WHOLESALE**  
 WICHITA, KANSAS

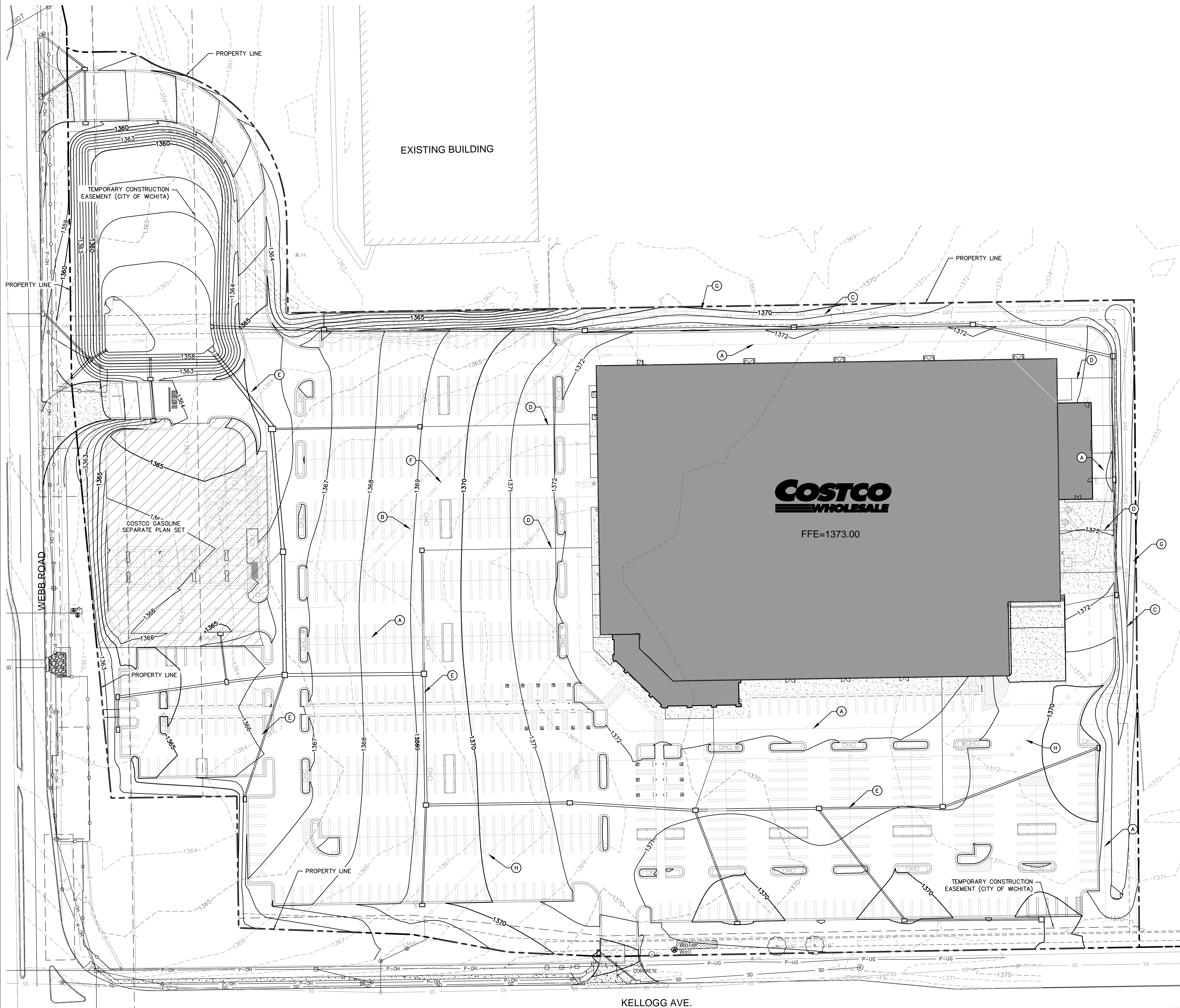


REV. NO.	DATE	DESCRIPTION
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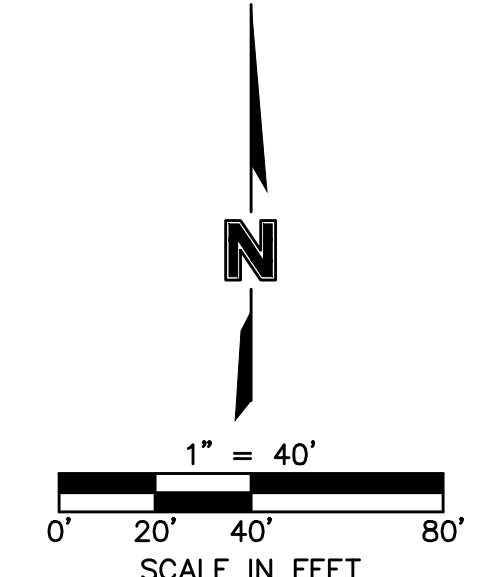
PLAT SURVEY  
 COSTCO WHOLESALE WAREHOUSE & GASOLINE  
 EAST KELLOGG AVENUE & WEBB RD  
 WICHITA, KANSAS

REVISIONS

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 121744\_CD\_XBASE  
 121744\_CD\_PBASE\_GASOLINE  
 BRETT\_LAURITSEN\_PE\_KS



- LEGEND NOTES:**
- (A) PROPOSED FIRE SERVICE
  - (B) PROPOSED DOMESTIC WATER SERVICE
  - (C) PROPOSED GAS MAIN
  - (D) PROPOSED STORM SERVICE
  - (E) PROPOSED STORM SEWER
  - (F) PROPOSED COMMUNICATION LINE
  - (G) PROPOSED ELETRIC SERVICE
  - (H) PROPOSED SANITARY SERVICE



CALL BEFORE YOU DIG  
 1-800-344-7233  
 STATEWIDE (DIG SAFE)

KANSAS ONE-CALL SYSTEM, INC.

drawn by: MTC  
 checked by: BHE  
 approved by: BHE  
 G.A.D.C. by: BHE  
 project no.: 012-1744  
 drawing no.:  
 date: 07.15.14

REV. NO.	DATE	REVISIONS DESCRIPTION
1	10/23/14	PPR #1

PPD SITE GRADING PLAN  
 COSTCO WHOLESALE WAREHOUSE & GASOLINE  
 EAST KELLOGG AVENUE & WEBB RD  
 WICHITA, KANSAS

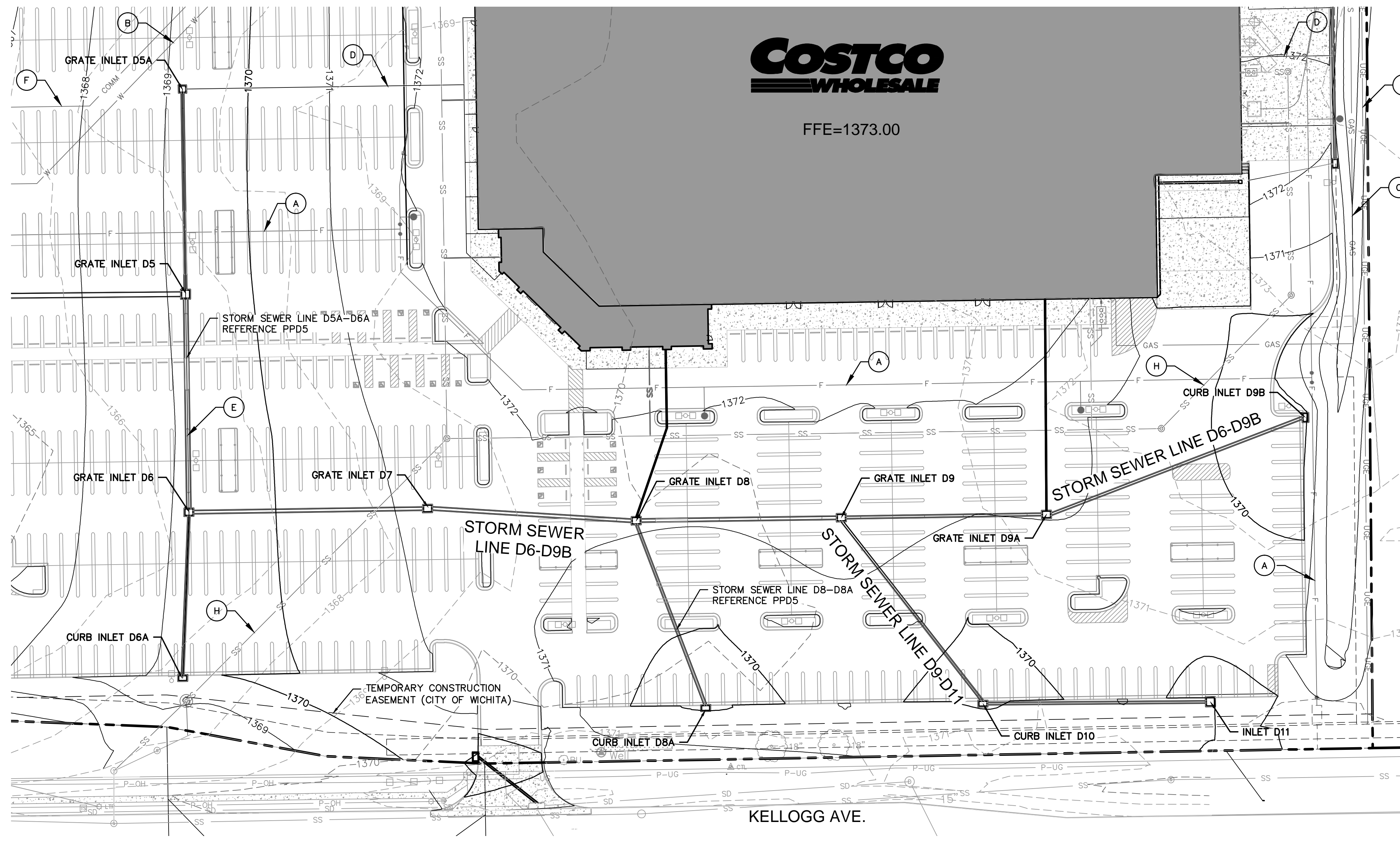
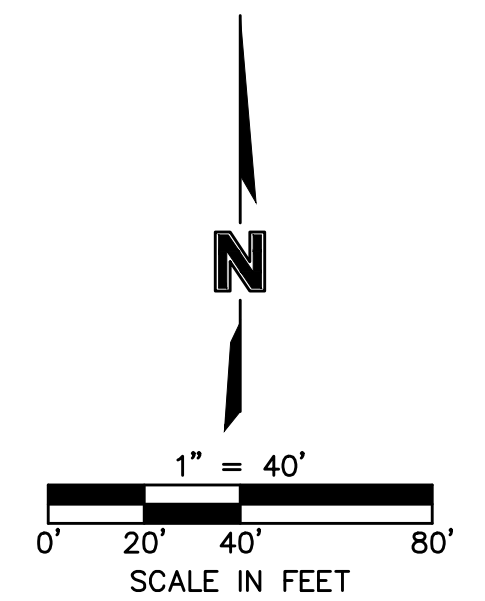
SHEET  
 PPD3

**COSTCO WHOLESALE**  
 WICHITA, KANSAS



**MOLSSON ASSOCIATES**  
 201 N.W. 10th Street, Suite 130  
 Columbia, MO, 65201-9118  
 TEL: 656-245-8879  
 FAX: 656-242-8891  
 www.molssonassociates.com

**AS-BUILT DRAWINGS**  
 Contractor: Mies Construction  
 Inspector: Dakota G. Zimmerman  
 Ruggles & Bohm, P.A.  
 PDF's Made By: DGZ 06/02/15



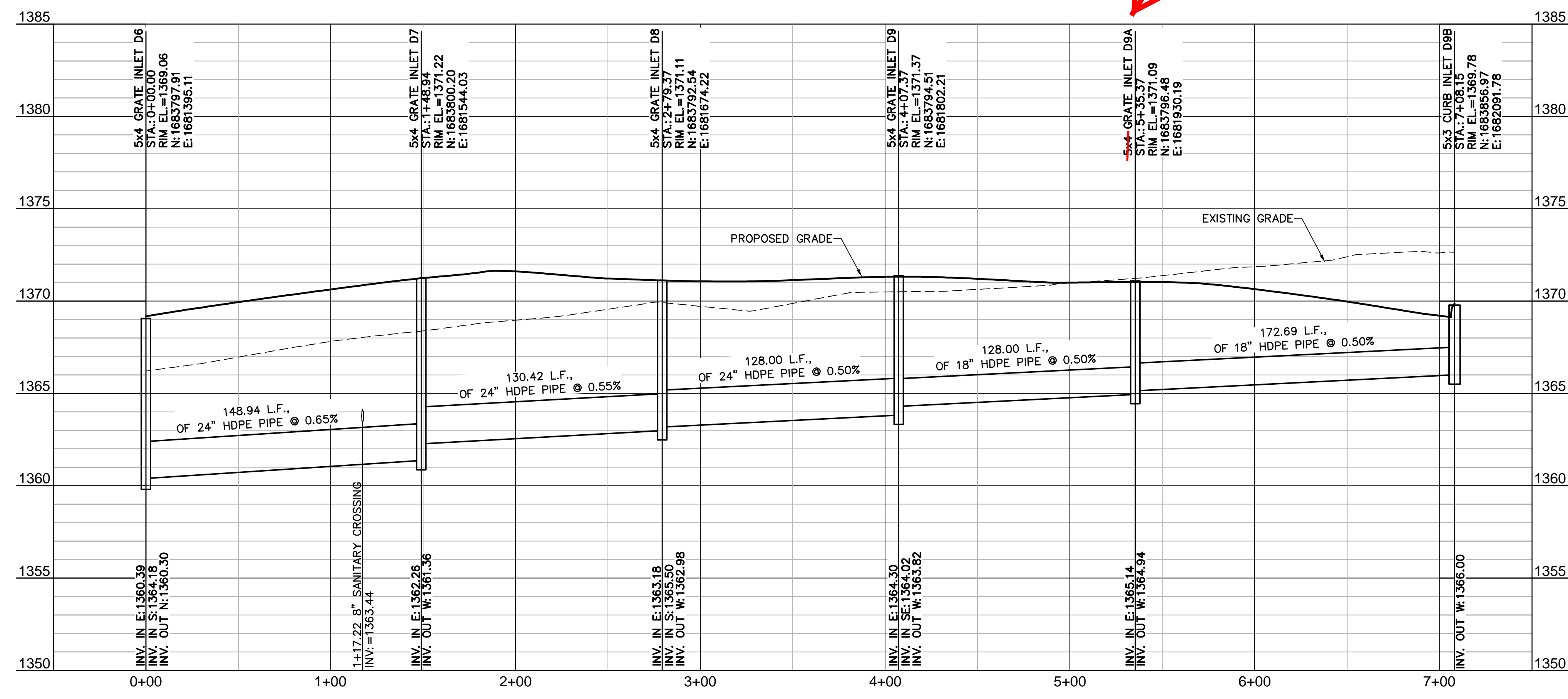
**LEGEND NOTES:**

- (A) PROPOSED FIRE SERVICE
- (B) PROPOSED DOMESTIC WATER SERVICE
- (C) PROPOSED GAS MAIN
- (D) PROPOSED STORM SERVICE
- (E) PROPOSED STORM SEWER
- (F) PROPOSED COMMUNICATION LINE
- (G) PROPOSED ELETRIC SERVICE
- (H) PROPOSED SANITARY SERVICE

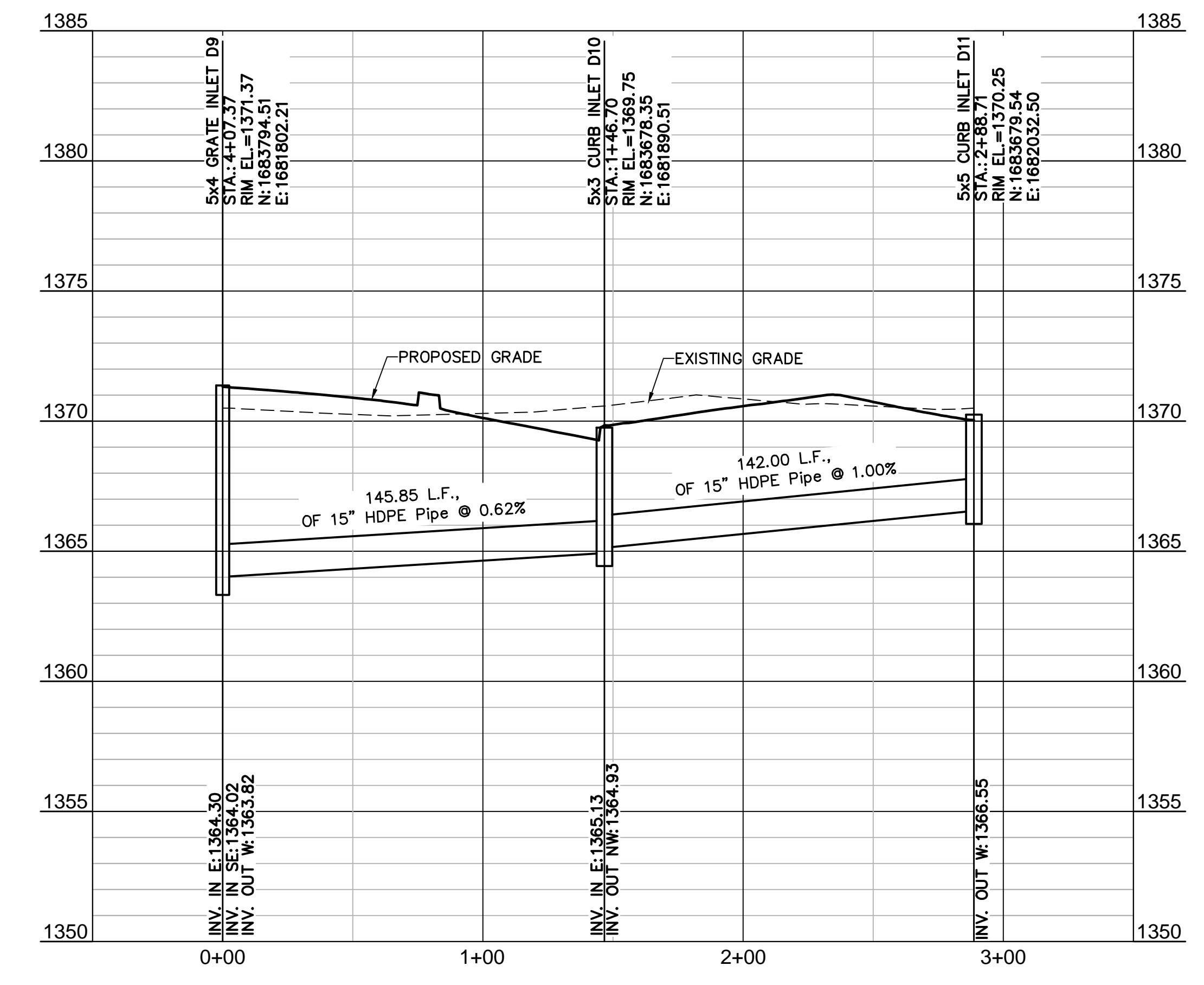
**ALL SWS PIPE IS RCP**

**CAUTION!!!**  
 STORM SEWER AND SANITARY SEWER CROSSING BETWEEN STRUCTURES D7 AND D6 IN CLOSE PROXIMITY. SEE PPS PLANS.

**STORM SEWER LINE D6-D9B**



**STORM SEWER LINE D9-D11**



**PROFILE SCALE**  
 HORIZONTAL: 1" = 40'  
 VERTICAL: 1" = 4'

CALL BEFORE YOU DIG  
 1-800-344-7233  
 STATEWIDE (DIG SAFE)

**KANSAS ONE-CALL SYSTEM, INC.**

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 XREFS: 121744\_CD\_PBASE 121744\_CD\_XBASE 121744\_CD\_TBLK 121744\_CD\_PBASE\_GASOLINE

BRETT LAURITSEN, P.E.  
 LICENSED PROFESSIONAL ENGINEER  
 22530  
 KANSAS

**MOLSSON ASSOCIATES**  
 WICHITA, KANSAS

REVISIONS DESCRIPTION

REV. NO.	DATE	REV. BY	DESCRIPTION
1	10/23/14	BL	

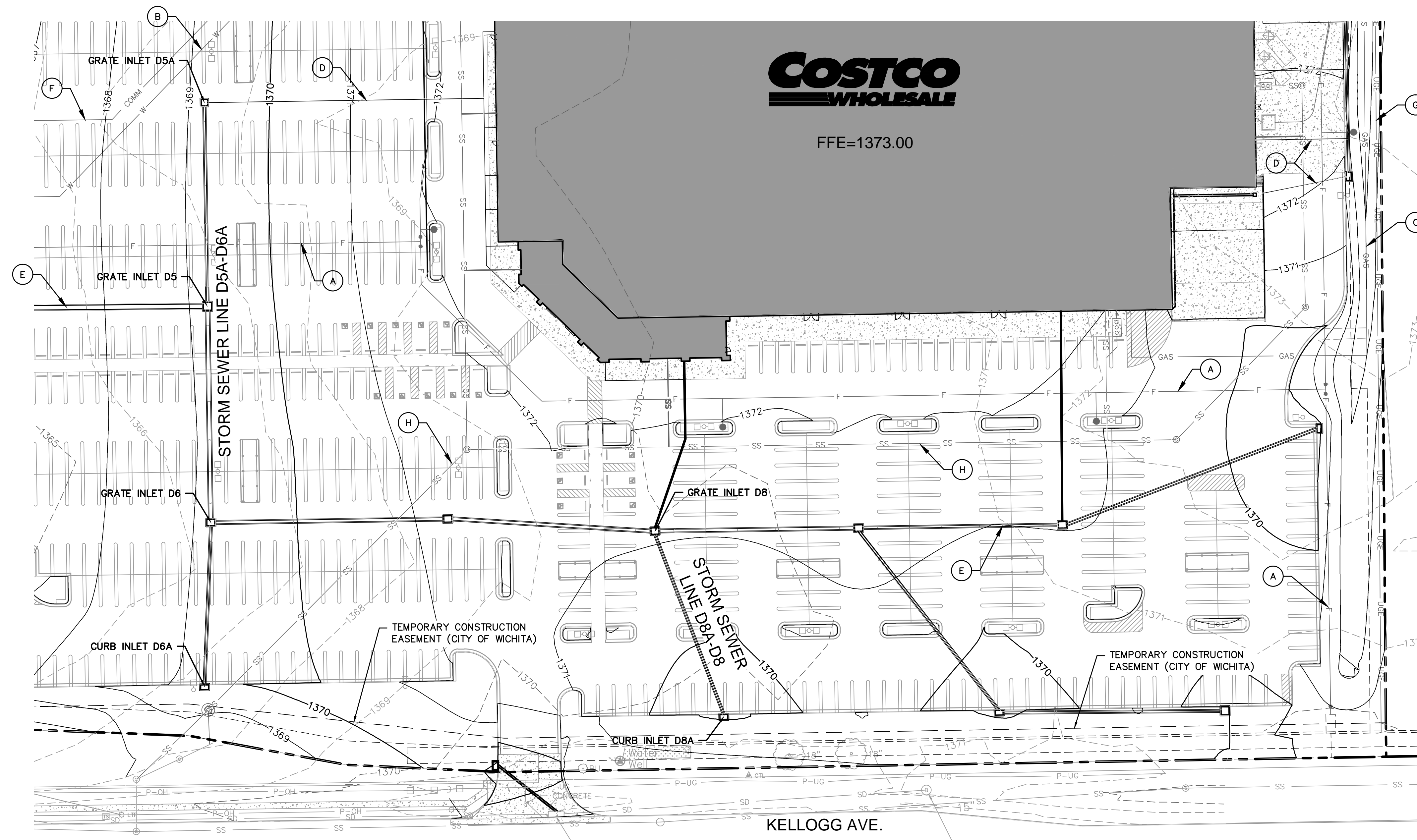
STORM SEWER PLAN AND PROFILE

COSTCO WHOLESALE WAREHOUSE & GASOLINE  
 EAST KELLOGG AVENUE & WEBB RD

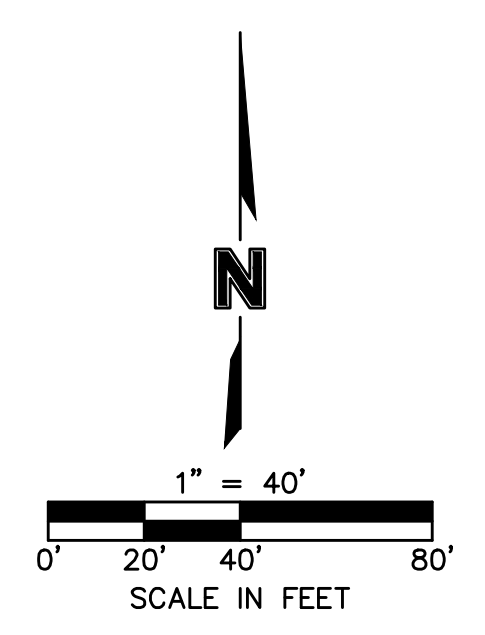
WICHITA, KANSAS

SHEET PPD4

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 USER: blauritsen  
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 BRETT LAURITSEN, PE, LKS



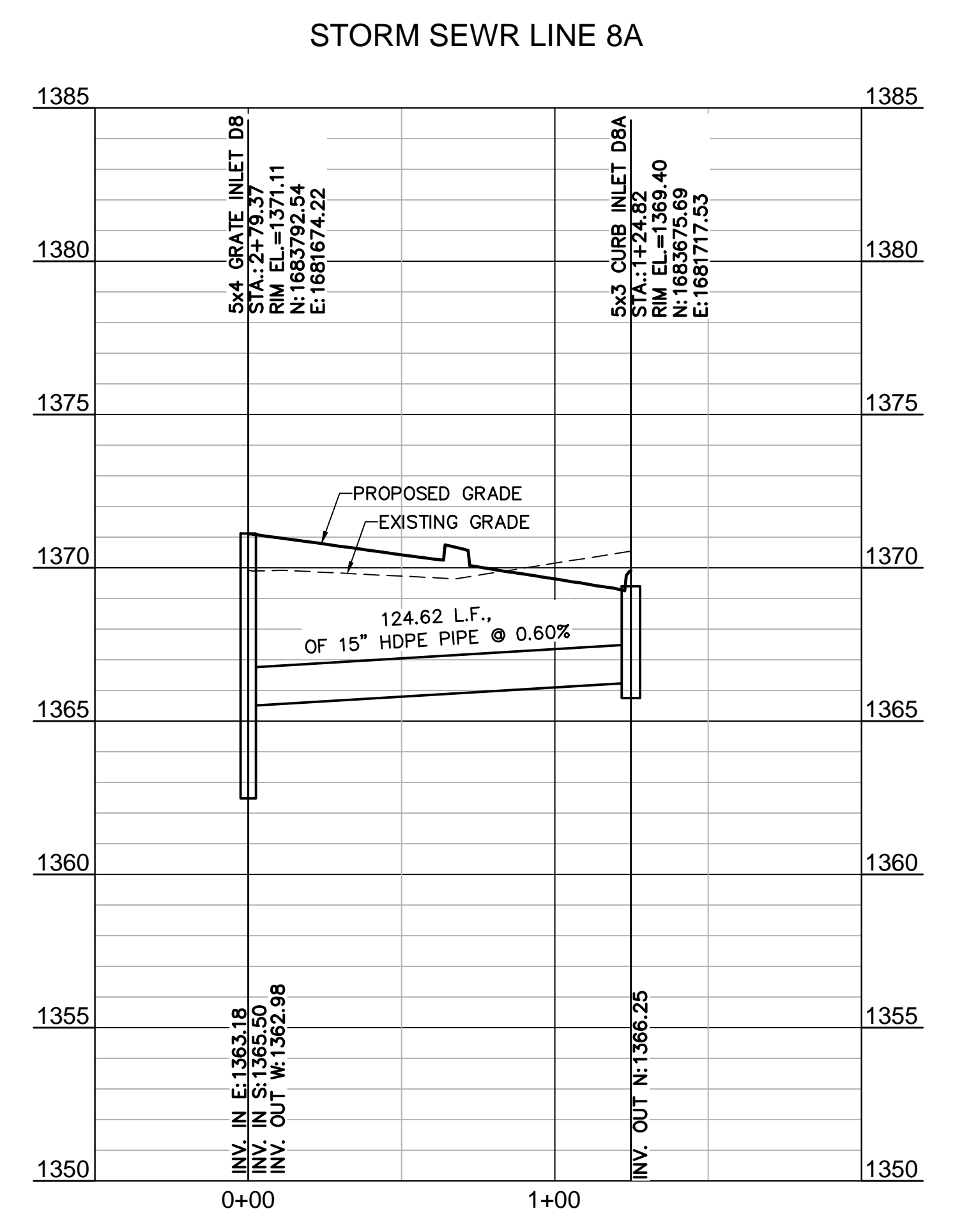
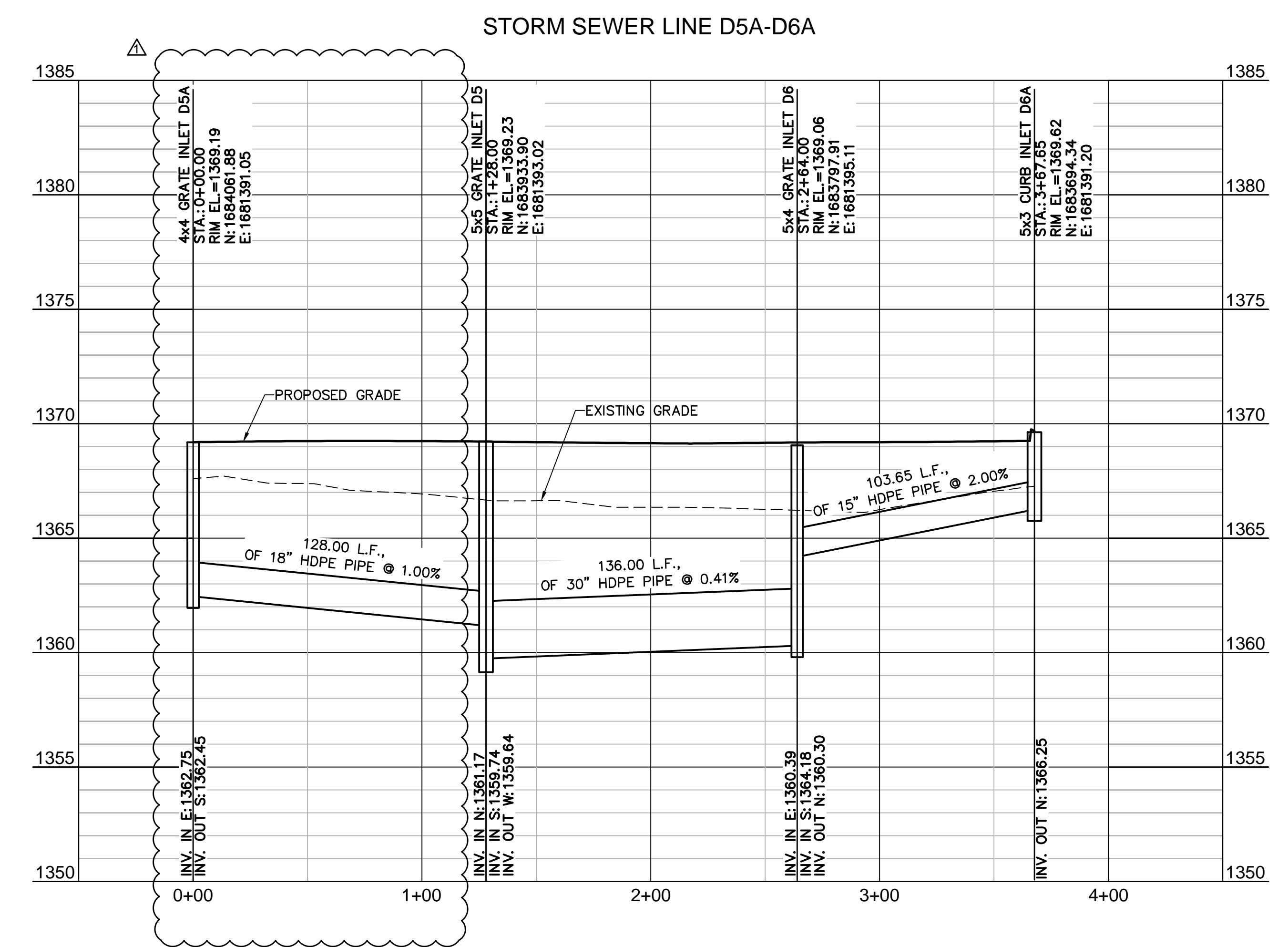
**AS-BUILT DRAWINGS**  
 Contractor: Mies Construction  
 Inspector: Dakota G. Zimmerman  
 Ruggles & Bohm, P.A.  
 PDF's Made By: DGZ 06/02/15



**LEGEND NOTES:**

- (A) PROPOSED FIRE SERVICE
- (B) PROPOSED DOMESTIC WATER SERVICE
- (C) PROPOSED GAS MAIN
- (D) PROPOSED STORM SERVICE
- (E) PROPOSED STORM SEWER
- (F) PROPOSED COMMUNICATION LINE
- (G) PROPOSED ELETRIC SERVICE
- (H) PROPOSED SANITARY SERVICE

**ALL SWS PIPE IS RCP**



**PROFILE SCALE**  
 HORIZONTAL: 1" = 40'  
 VERTICAL: 1" = 4'

CALL BEFORE YOU DIG  
 1-800-344-7233  
 STATEWIDE (DIG SAFE)

**KANSAS ONE-CALL SYSTEM, INC.**

KANSAS CALL BEFORE YOU DIG:  
 1-800-DIG-SAFE (1-800-344-7233)

**MOLSSON ASSOCIATES**  
 WICHITA, KANSAS

**COSTCO WHOLESALE**  
 WICHITA, KANSAS

BRETT LAURITSEN  
 LICENSED PROFESSIONAL ENGINEER  
 22556

REV. NO.	DATE	DESCRIPTION
1	10/23/14	PR. #1

STORM SEWER PLAN AND PROFILE  
 COSTCO WHOLESALE WAREHOUSE & GASOLINE  
 EAST KELLOGG AVENUE & WEBB RD  
 WICHITA, KANSAS

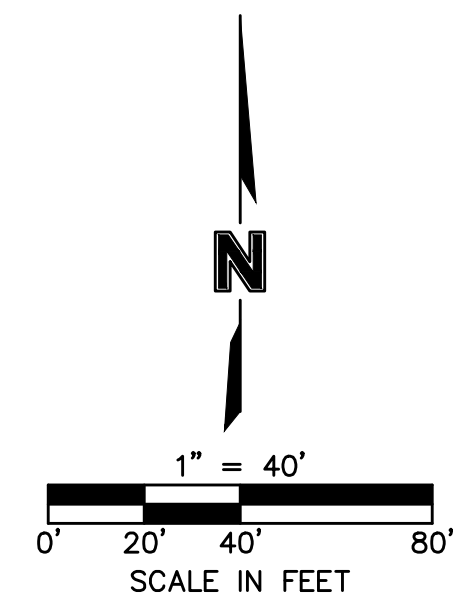
drawn by: MTC  
 checked by: BHL  
 approved by: BHL  
 SA/DC by: BHL  
 project no.: 012-1744  
 drawing no.:  
 date: 07.15.14

**SHEET PPD5**

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 121744\_CD\_TBLK  
 BRETT LAURITSEN\_PJ\_KS



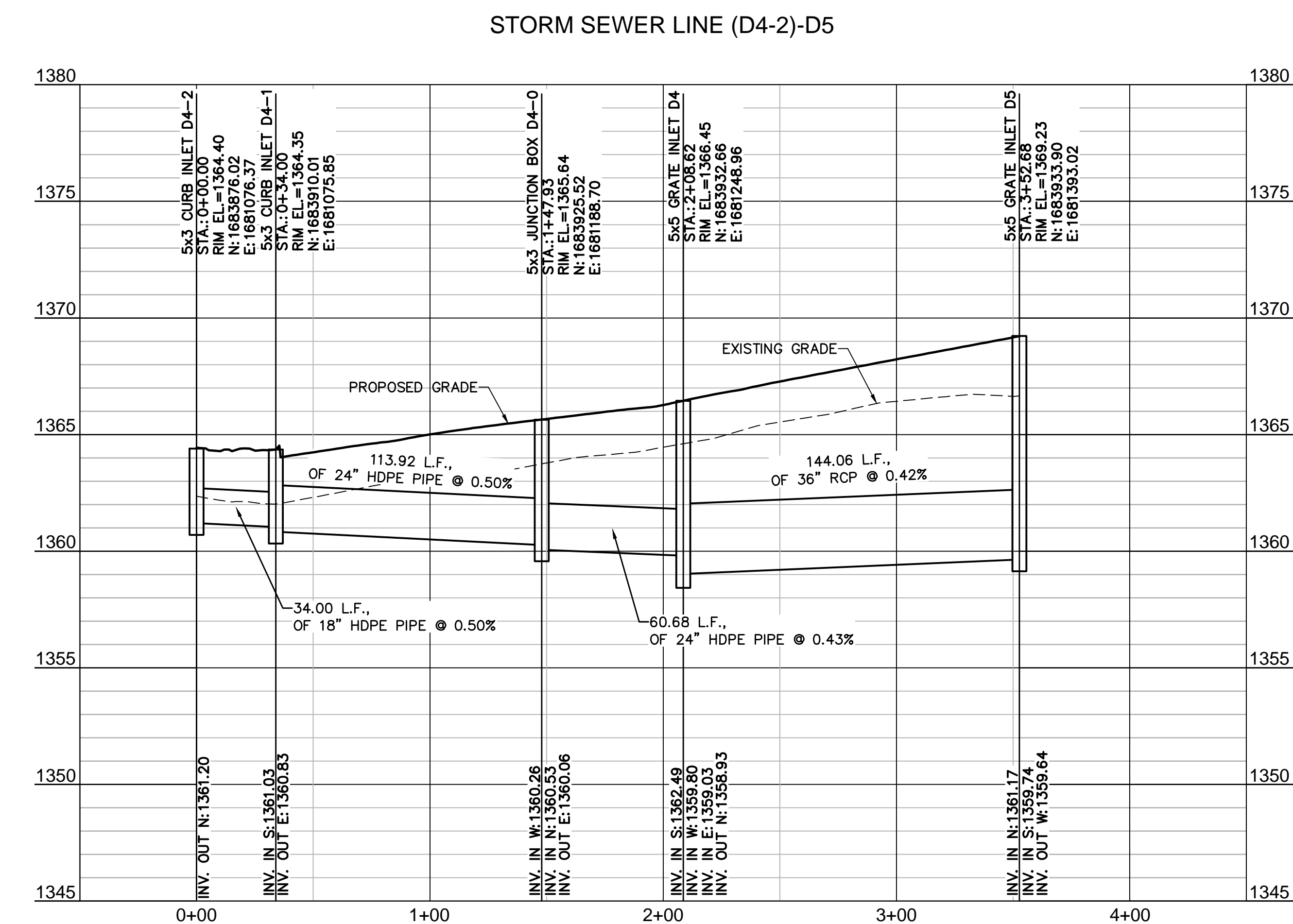
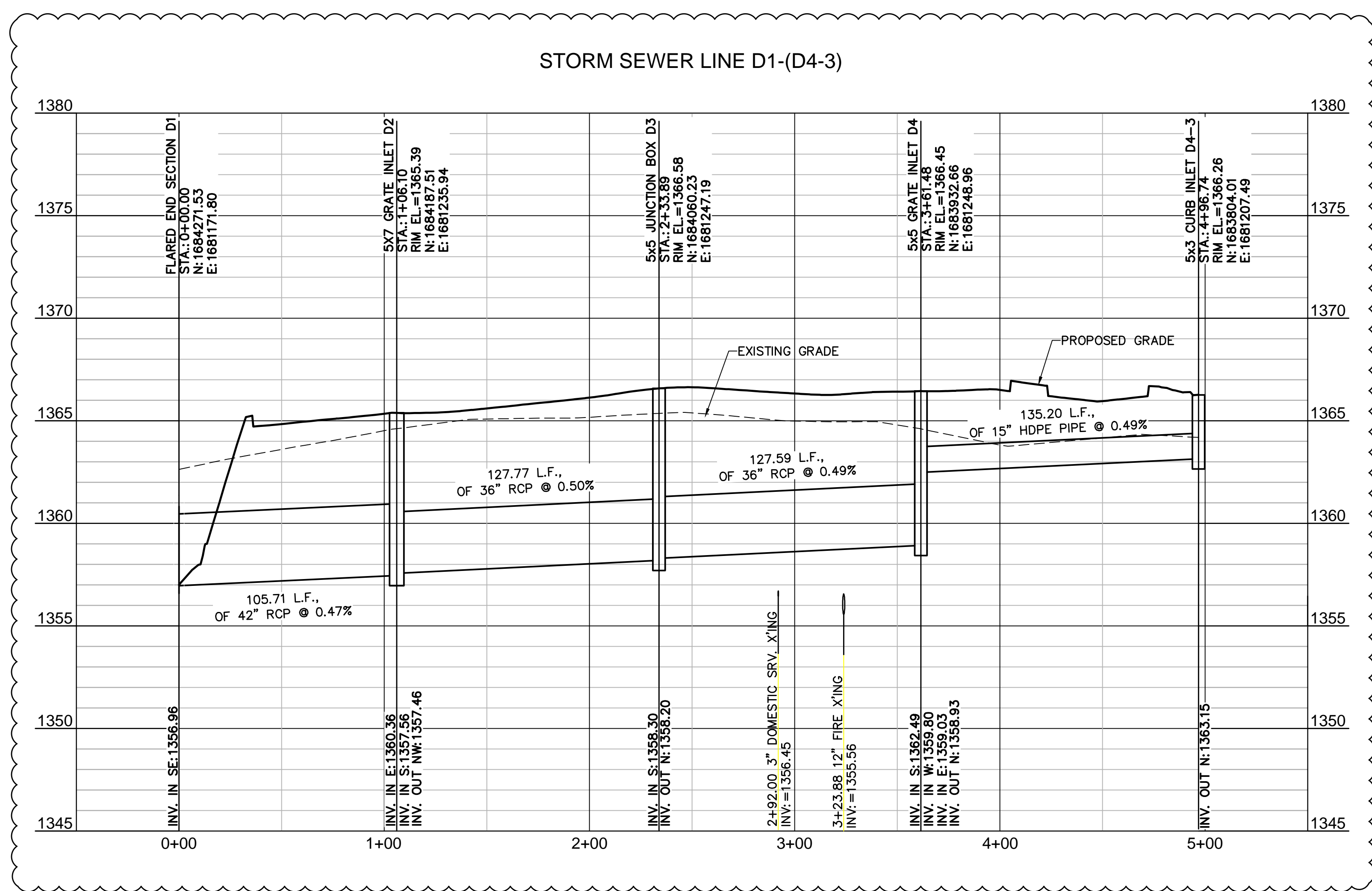
**AS-BUILT DRAWINGS**  
 Contractor: Mies Construction  
 Inspector: Dakota G. Zimmerman  
 Ruggles & Bohm, P.A.  
 PDF's Made By: DGZ 06/02/15



**LEGEND NOTES:**

- (A) PROPOSED FIRE SERVICE
- (B) PROPOSED DOMESTIC WATER SERVICE
- (C) PROPOSED GAS MAIN
- (D) PROPOSED STORM SERVICE
- (E) PROPOSED STORM SEWER
- (F) PROPOSED COMMUNICATION LINE
- (G) PROPOSED ELECTRIC SERVICE
- (H) PROPOSED SANITARY SERVICE

ALL SWS PIPE IS RCP



**PROFILE SCALE**  
 HORIZONTAL: 1" = 40'  
 VERTICAL: 1" = 4'

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 1001 N.W. 16th Street, Suite 130  
 Columbia, MO, 65201-9196  
 TEL: 656-242-8879  
 FAX: 656-242-8890  
 www.molssonassociates.com

**COSTCO WHOLESALE**  
 WICHITA, KANSAS

**BRETT LAURITSEN**  
 LICENSED PROFESSIONAL ENGINEER  
 22530  
 KANSAS

REV. NO.	DATE	DESCRIPTION
1	10/23/14	PR. #1

STORM SEWER PLAN AND PROFILE  
 COSTCO WHOLESALE WAREHOUSE & GASOLINE  
 EAST KELLOGG AVENUE & WEBB RD  
 WICHITA, KANSAS

drawn by: MTC  
 checked by: BHL  
 approved by: BHL  
 project no.: 012-1744  
 drawing no.:  
 date: 07.15.14

**SHEET PPD6**

**AS-BUILT DRAWINGS**  
**Contractor: Mies Construction**  
**Inspector: Dakota G. Zimmerman**  
**Ruggles & Bohm, P.A.**  
**PDF's Made By: DGZ 06/02/15**

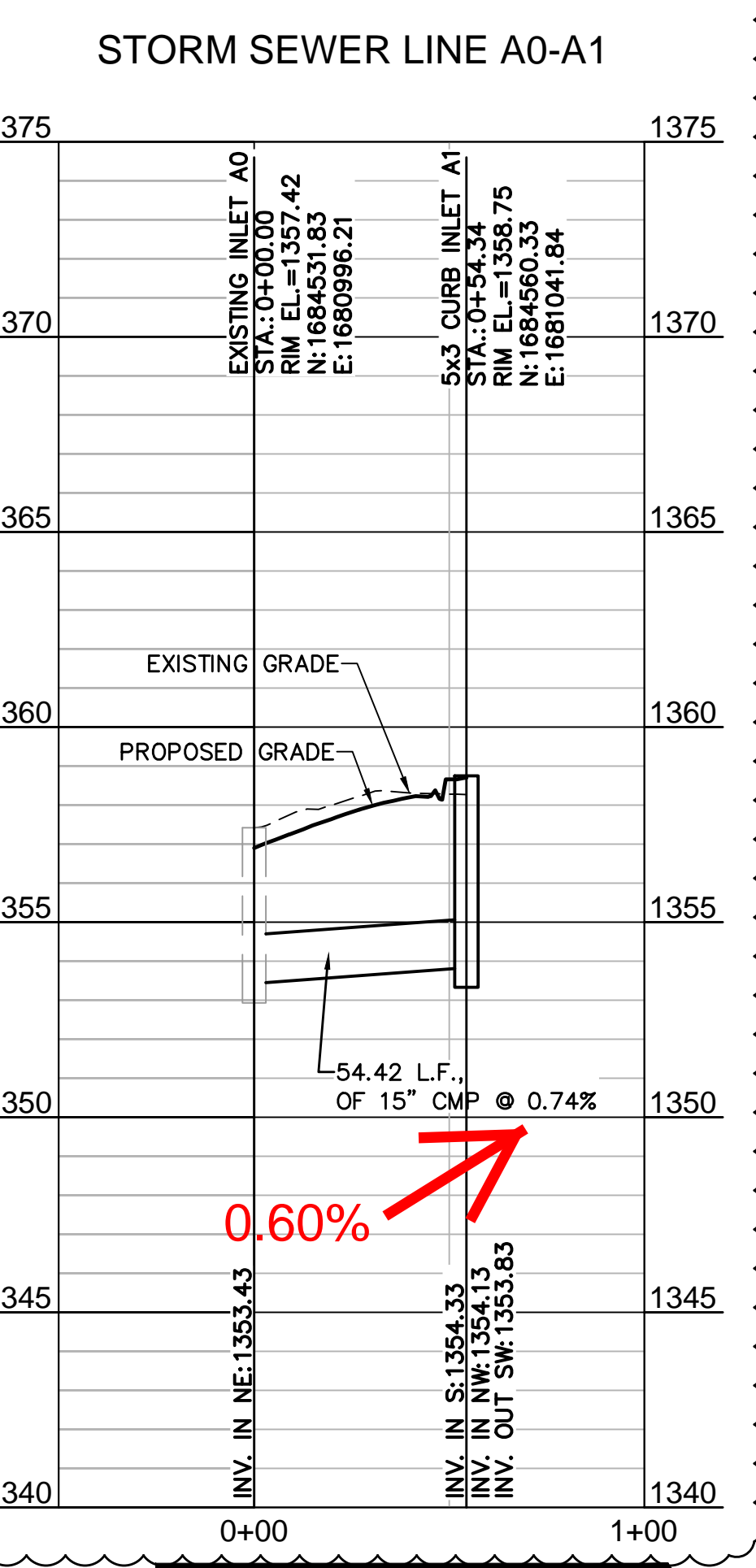
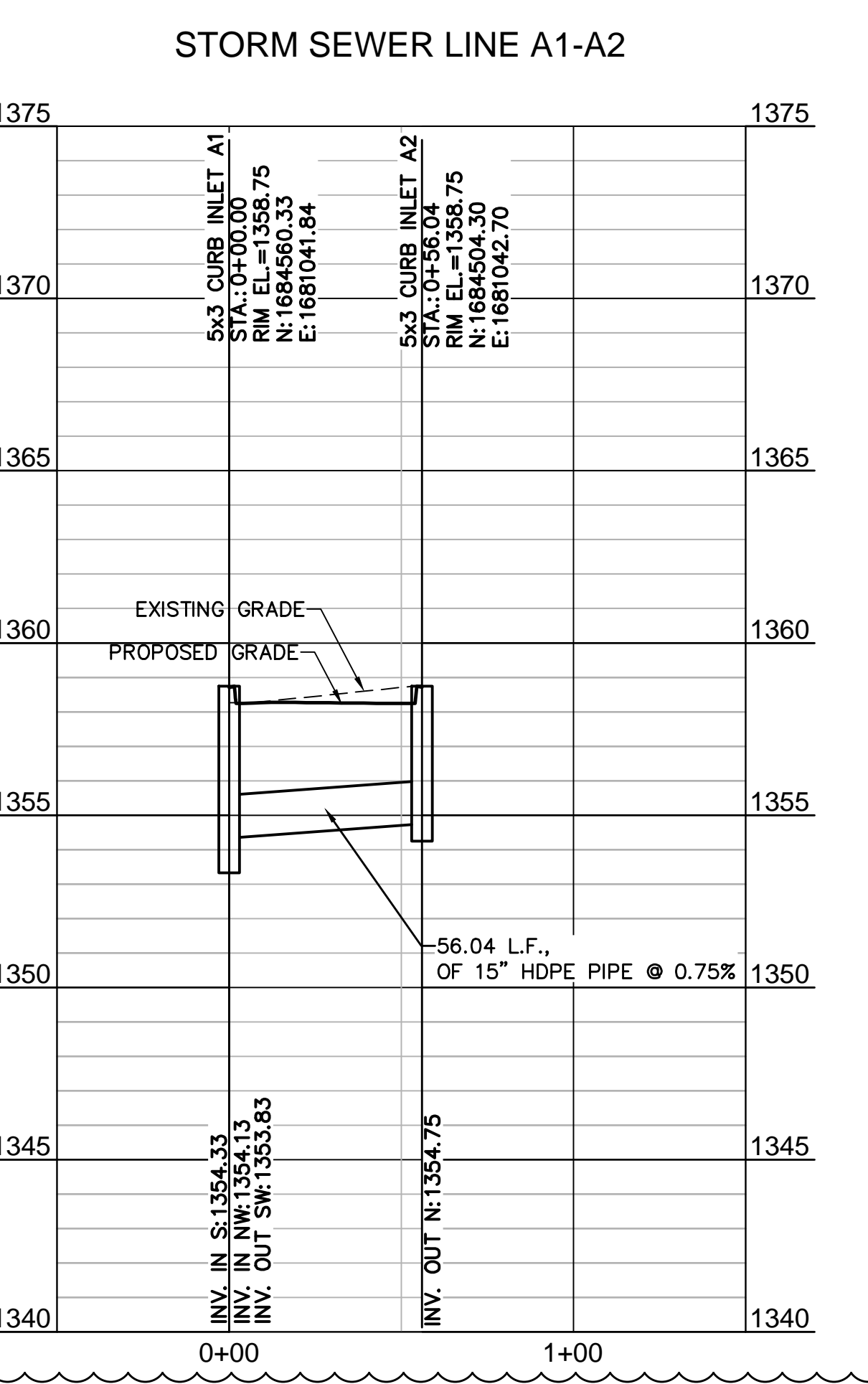
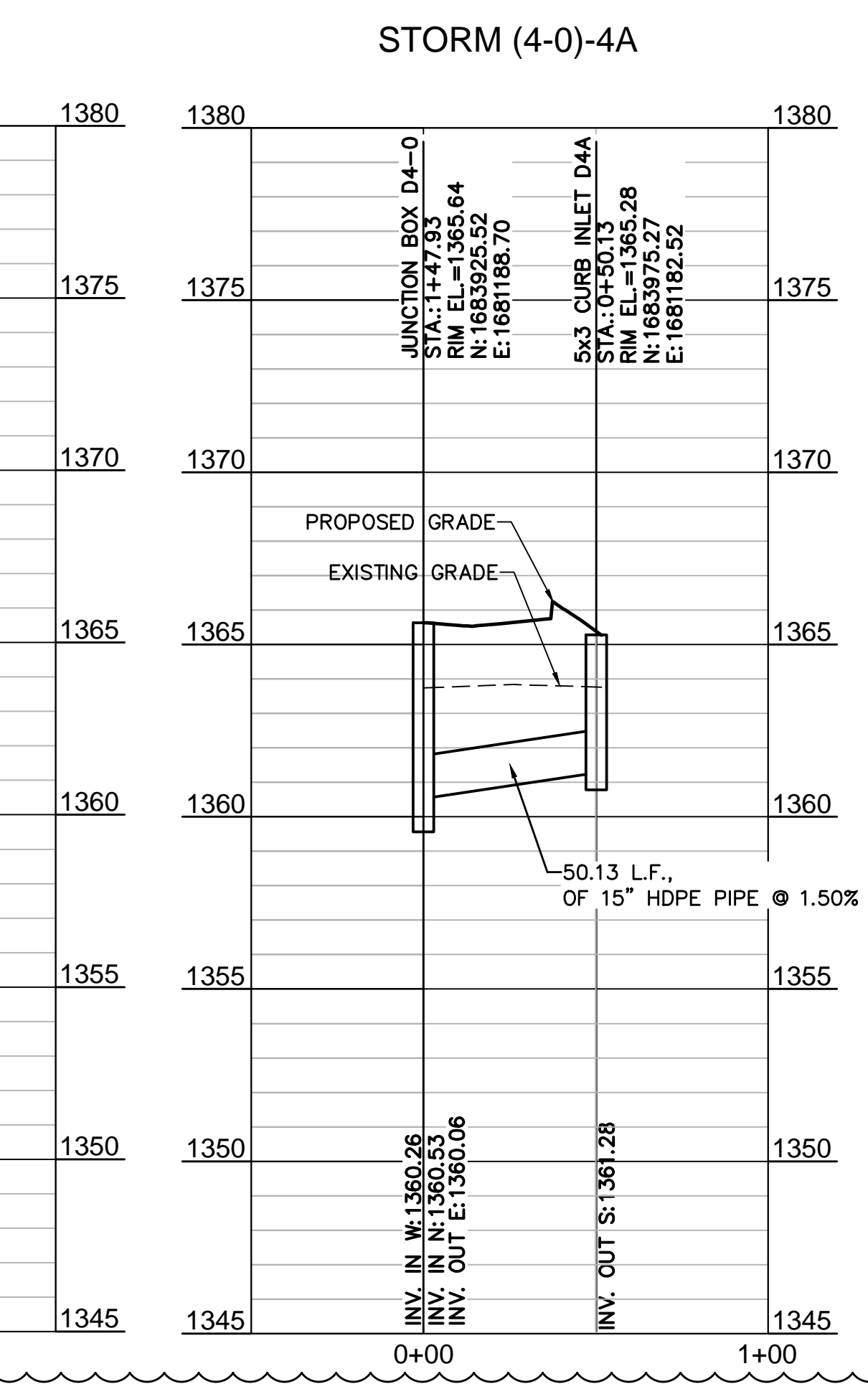
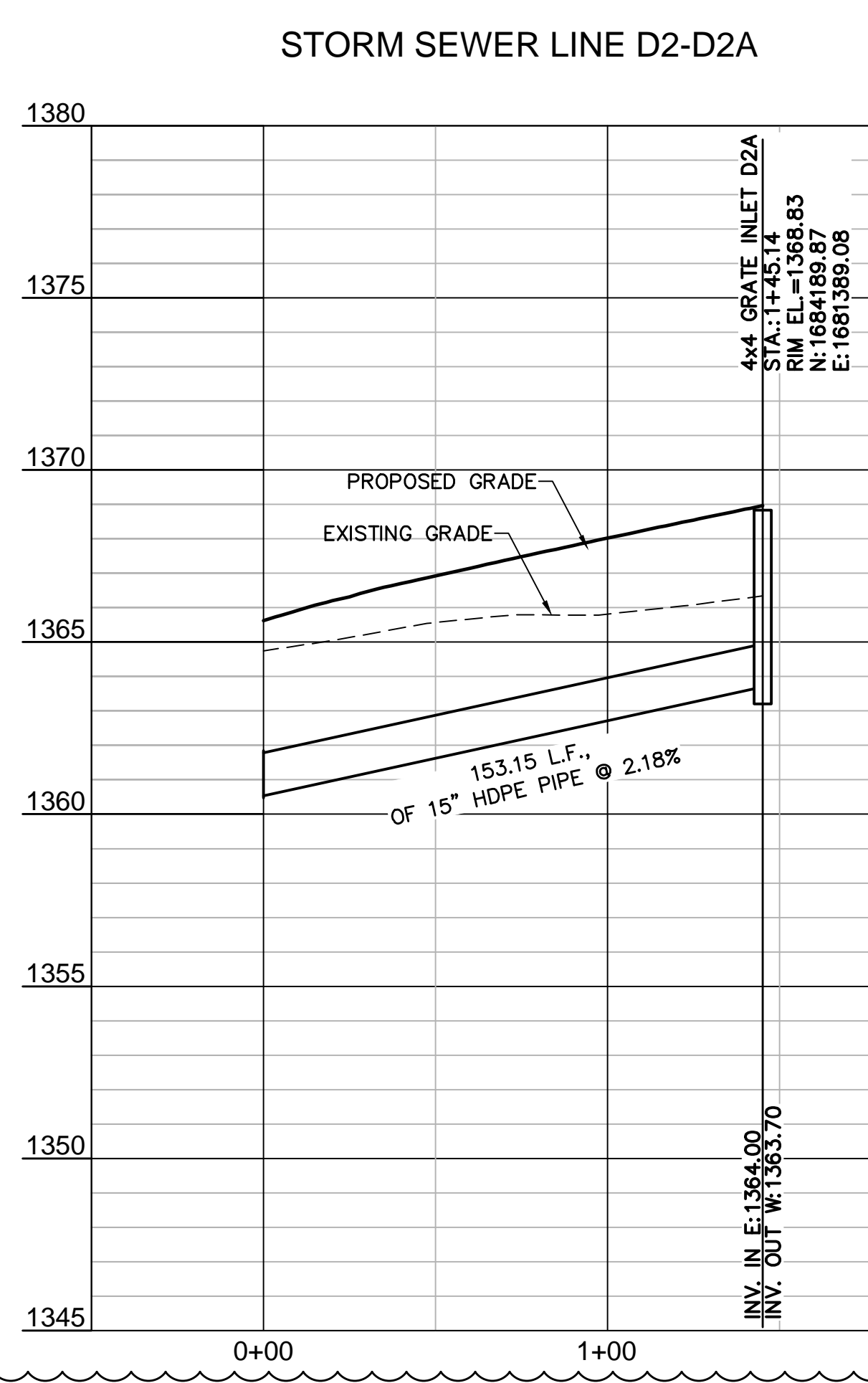
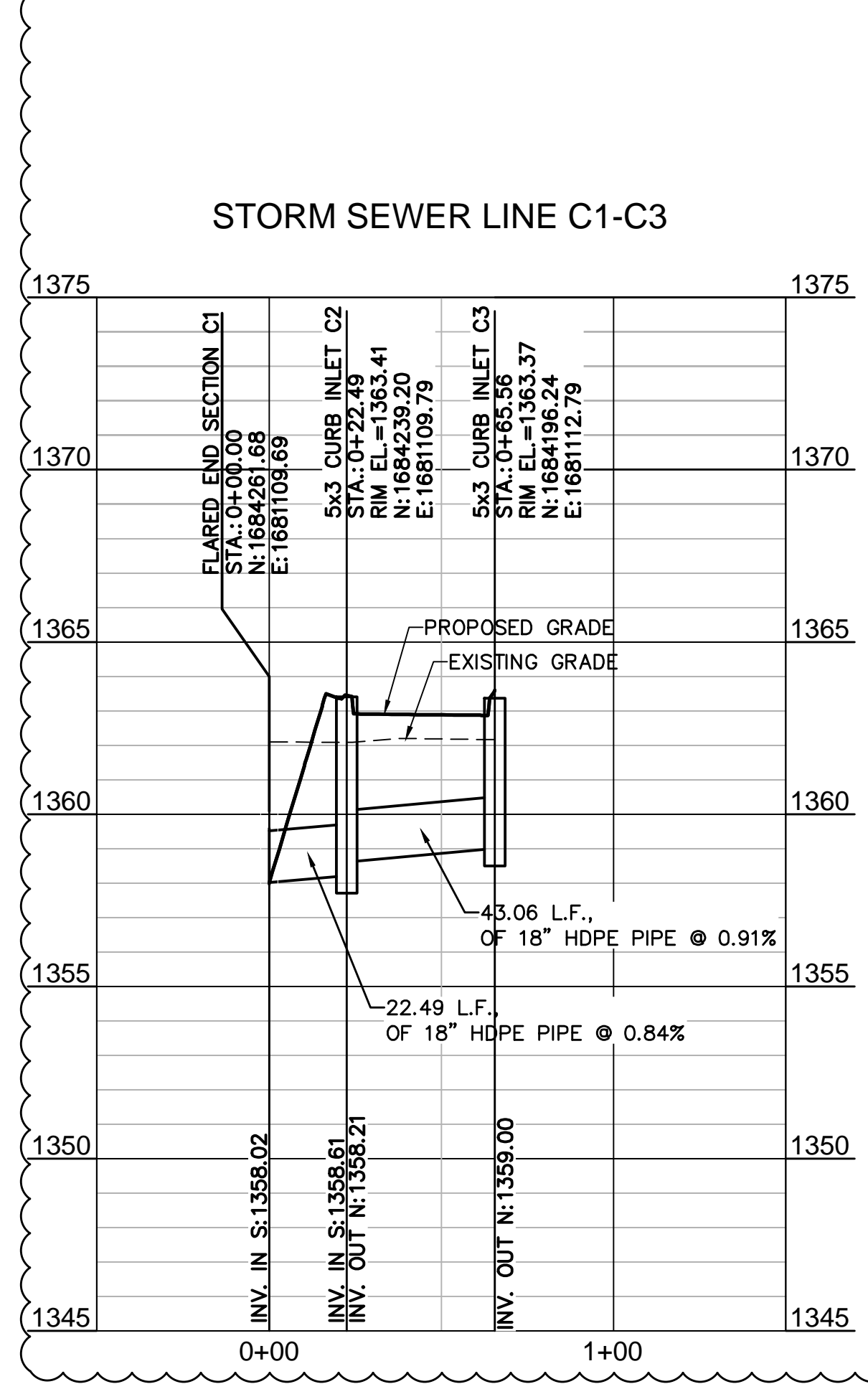
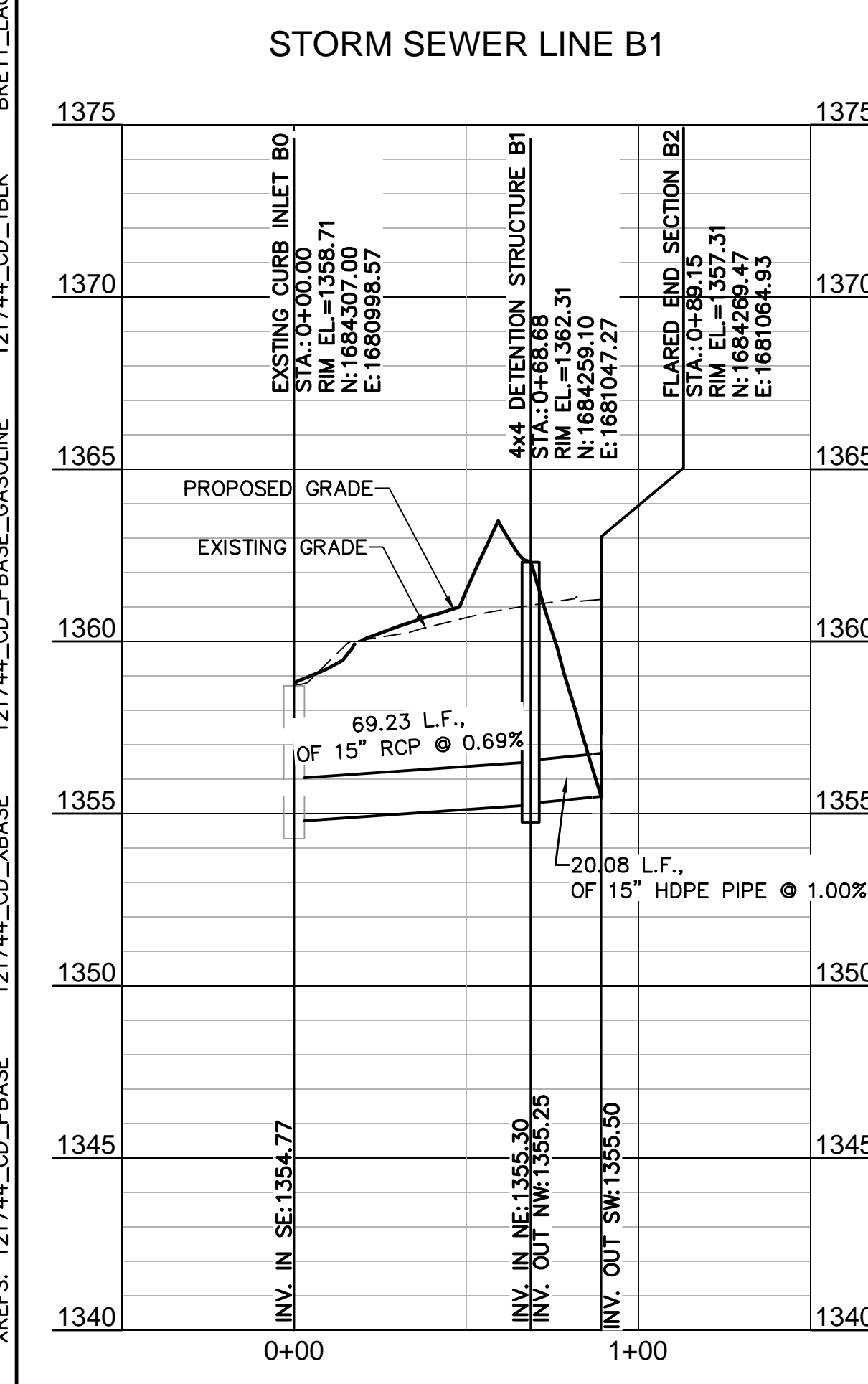
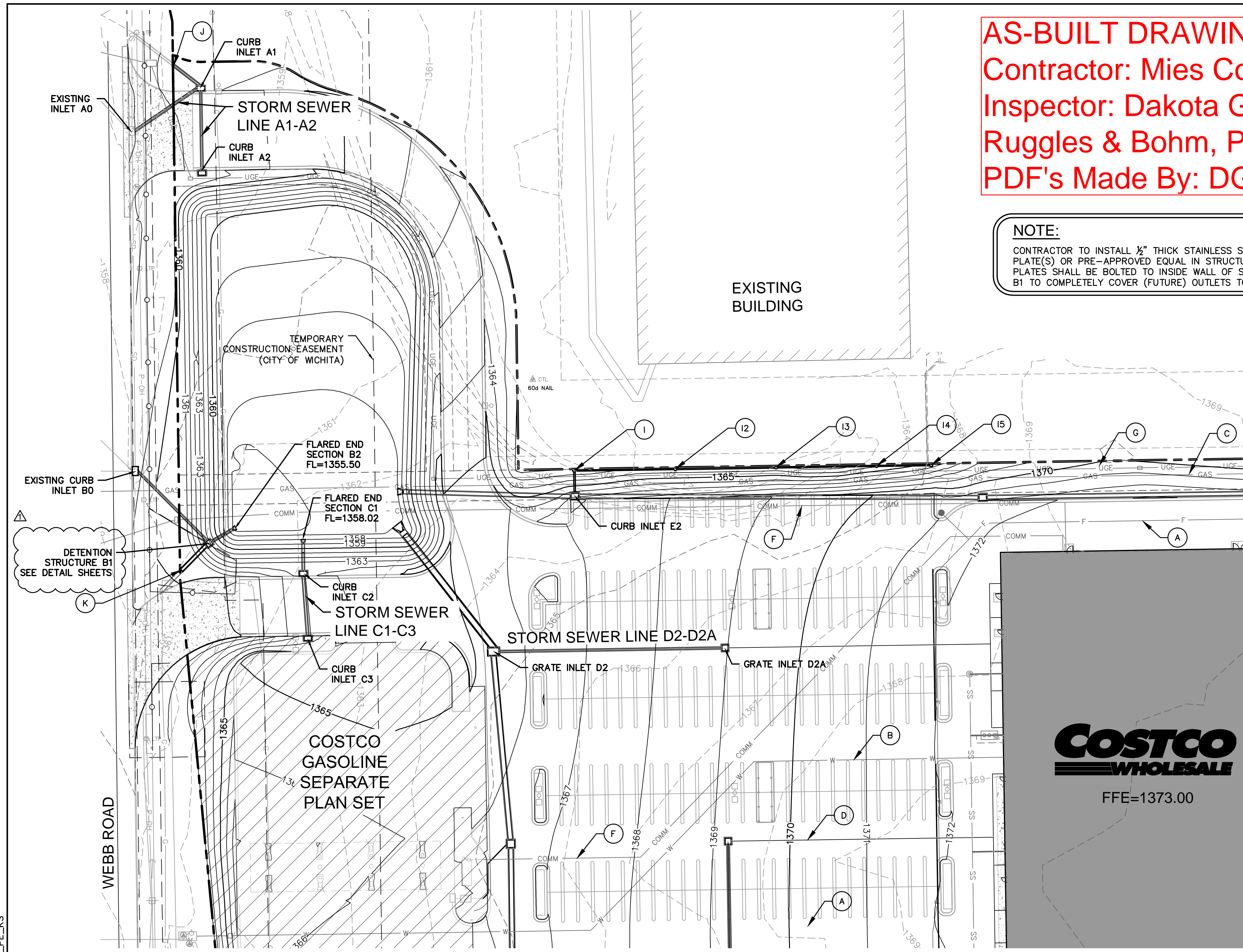
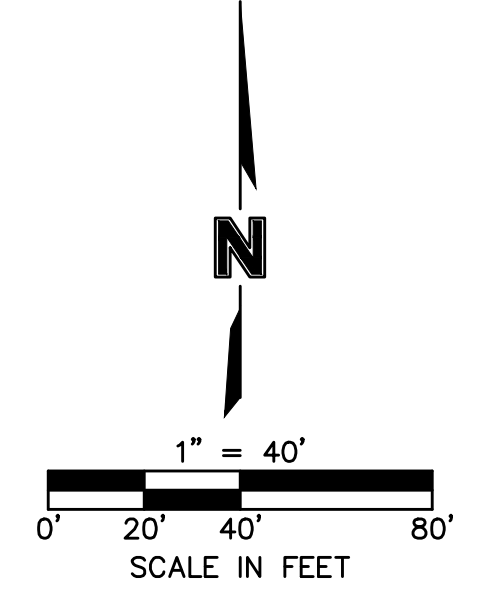
**NOTE:**  
 CONTRACTOR TO INSTALL 1/2" THICK STAINLESS STEEL RECTANGULAR PLATE(S) OR PRE-APPROVED EQUAL IN STRUCTURES B1 AND A1. PLATES SHALL BE BOLTED TO INSIDE WALL OF STRUCTURES A1 AND B1 TO COMPLETELY COVER (FUTURE) OUTLETS TO CAPPED PIPES.

**LEGEND NOTES:**

- (A) PROPOSED FIRE SERVICE
- (B) PROPOSED DOMESTIC WATER SERVICE
- (C) PROPOSED GAS MAIN
- (D) PROPOSED STORM SERVICE
- (E) PROPOSED STORM SEWER
- (F) PROPOSED COMMUNICATION LINE
- (G) PROPOSED ELETRIC SERVICE
- (H) PROPOSED SANITARY SERVICE

- (I) N:1684309.34, E:1681289.23  
 INSTALL 24" DIAMETER ADS DRAIN BASIN AND 17.0 LF 12" HDPE PIPE @ 2.0% TO STORM STRUCTURE E2. COORDINATE INSTALLATION WITH BEECHCRAFT CORPORATION, KANSAS GAS AND WESTAR ENERGY FOR CROSSINGS.  
 TOP ELEV=1355.00  
 FL 12" OUT=1358.92  
 FL 12" @ E2= 1358.58
- (J) N:1684308.35, E:1681356.09  
 INSTALL 24" DIAMETER ADS DRAIN BASIN AND 67 LF 10" HDPE PIPE @ 0.75% TO STORM DRAIN I1. COORDINATE INSTALLATION WITH BEECHCRAFT CORPORATION AND ADJACENT UTILITY CONSTRUCTION.  
 TOP ELEV=1363.00  
 FL 10"=1359.50
- (K) N:1684309.39, E:1681422.75  
 INSTALL 24" DIAMETER ADS DRAIN BASIN AND 67 LF 10" HDPE PIPE @ 0.75% TO STORM DRAIN I2. COORDINATE INSTALLATION WITH BEECHCRAFT CORPORATION AND ADJACENT UTILITY CONSTRUCTION.  
 TOP ELEV=1363.00  
 FL 10"=1360.00
- (L) N:1684310.41, E:1681489.42  
 INSTALL 24" DIAMETER ADS DRAIN BASIN AND 67 LF 10" HDPE PIPE @ 0.75% TO STORM DRAIN I3. COORDINATE INSTALLATION WITH BEECHCRAFT CORPORATION AND ADJACENT UTILITY CONSTRUCTION.  
 TOP ELEV=1363.50  
 FL 10"=1360.50
- (M) N:1684310.97, E:1681525.58  
 INSTALL 24" DIAMETER ADS DRAIN BASIN AND 36 LF 10" HDPE PIPE @ 0.75% TO STORM DRAIN I4. COORDINATE INSTALLATION WITH BEECHCRAFT CORPORATION AND ADJACENT UTILITY CONSTRUCTION.  
 TOP ELEV=1365.50  
 FL 10"=1362.00
- (N) N:1684575.61, E:1681023.98  
 INSTALL 15" RCP WATERPROOF CAP WITH SEAL AND 22.8 LF 15" RCP UPWARD @ 1.00% TO STORM STRUCTURE A1. COORDINATE INSTALLATION, CAP LOCATION, AND MARKER WITH CITY OF WICHITA FOR FUTURE CONNECTION (BY OTHERS).  
 FL 15"=1353.90  
 FL 15" @ A1= 1354.13
- (O) N:1684243.31, E:1681029.21  
 INSTALL 24" RCP WATERPROOF CAP WITH SEAL AND 23.5 LF 24" RCP UPWARD @ 0.70% TO DETENTION STRUCTURE B1. COORDINATE INSTALLATION, CAP LOCATION, AND MARKER WITH CITY OF WICHITA FOR FUTURE CONNECTION (BY OTHERS).  
 FL 24"=1355.08  
 FL 24" @ B1= 1355.25

**ALL SWS PIPE IS RCP**



DWG: F:\Projects\012-1744\LOVP\Design\PPD (Storm Drainage)\121744\_STM.dwg  
 DATE: Oct 23, 2014 10:44am  
 USER: bauritsen  
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 121744\_CD\_PBASE  
 BRETT LAURITSEN\_PEL\_KS  
 121744\_CD\_TBLK

**PROFILE SCALE**  
 HORIZONTAL: 1" = 40'  
 VERTICAL: 1" = 4'

CALL BEFORE YOU DIG  
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KANSAS ONE-CALL SYSTEM, INC.

**MOLSSON ASSOCIATES**  
 TEL: (620) 245-8879  
 COLLEEN, KS 67516  
 FAX: (620) 242-8860  
 www.molssonassociates.com

**COSTCO WHOLESALE**  
 WICHITA, KANSAS

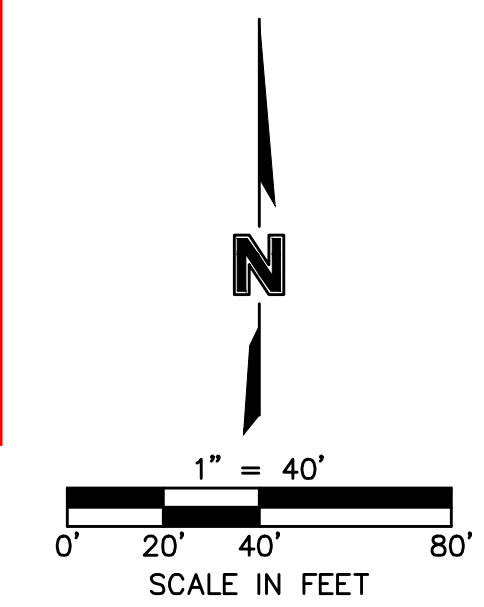
BRETT LAURITSEN  
 LICENSED PROFESSIONAL ENGINEER  
 22530  
 KANSAS

REV. NO.	DATE	DESCRIPTION
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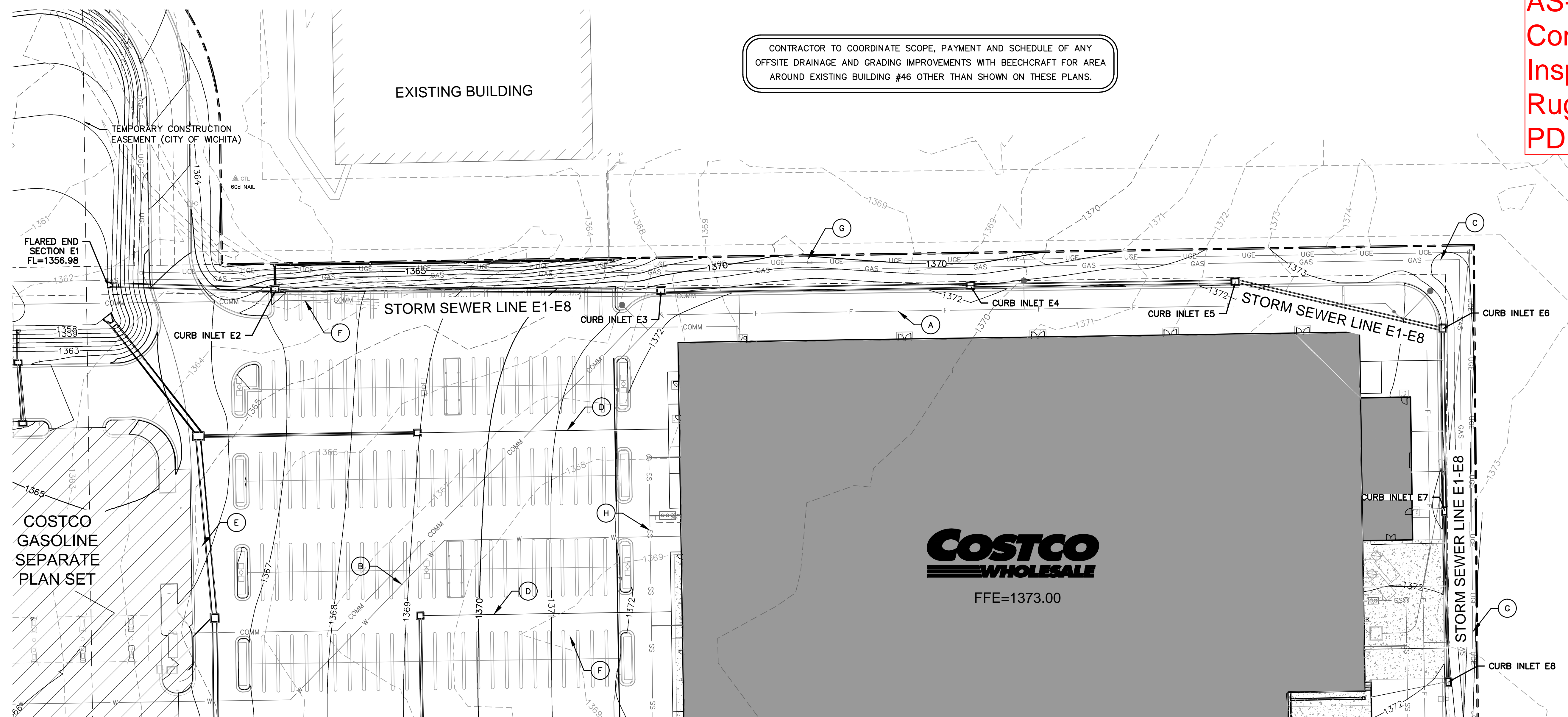
STORM SEWER PLAN AND PROFILE  
 COSTCO WHOLESALE WAREHOUSE & GASOLINE  
 EAST KELLOGG AVENUE & WEBB RD  
 WICHITA, KANSAS

SHEET PPD7

**AS-BUILT DRAWINGS**  
 Contractor: Mies Construction  
 Inspector: Dakota G. Zimmerman  
 Ruggles & Bohm, P.A.  
 PDF's Made By: DGZ 06/02/15



CONTRACTOR TO COORDINATE SCOPE, PAYMENT AND SCHEDULE OF ANY OFFSITE DRAINAGE AND GRADING IMPROVEMENTS WITH BEECHCRAFT FOR AREA AROUND EXISTING BUILDING #46 OTHER THAN SHOWN ON THESE PLANS.

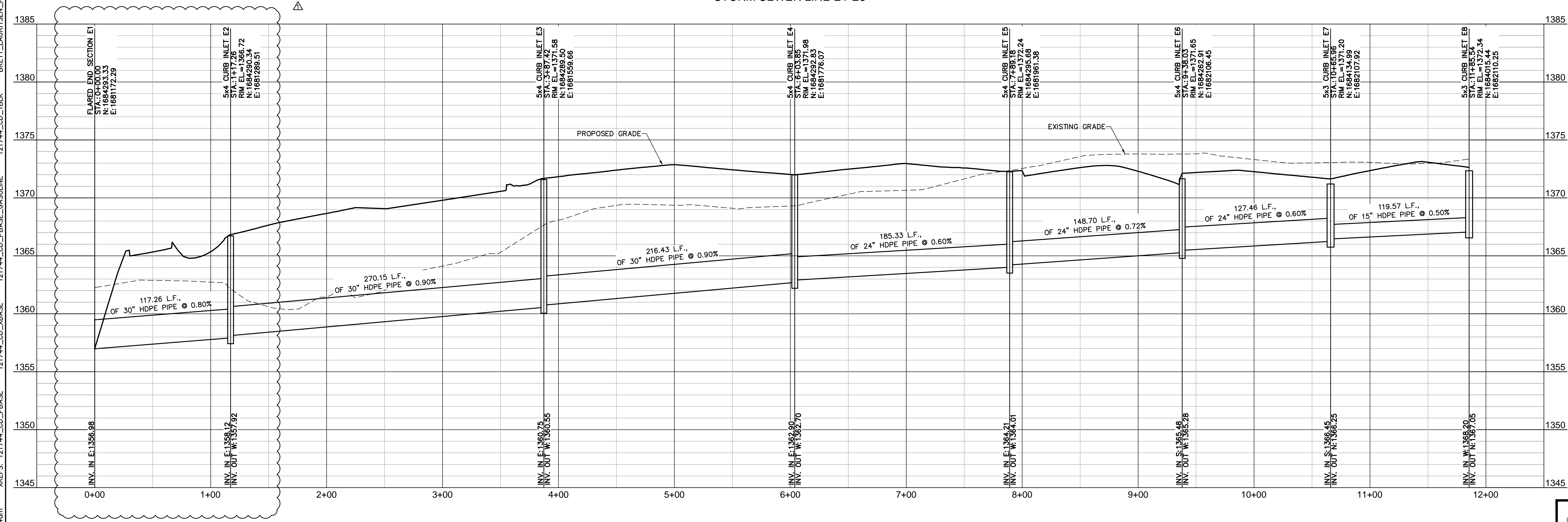


**LEGEND NOTES:**

- (A) PROPOSED FIRE SERVICE
- (B) PROPOSED DOMESTIC WATER SERVICE
- (C) PROPOSED GAS MAIN
- (D) PROPOSED STORM SERVICE
- (E) PROPOSED STORM SEWER
- (F) PROPOSED COMMUNICATION LINE
- (G) PROPOSED ELETRIC SERVICE
- (H) PROPOSED SANITARY SERVICE

ALL SWS PIPE IS RCP

**STORM SEWER LINE E1-E8**



PROFILE SCALE  
 HORIZONTAL: 1" = 40'  
 VERTICAL: 1" = 4'

CALL BEFORE YOU DIG  
 1-800-344-7233  
 STATEWIDE (DIG SAFE)

KANSAS ONE-CALL SYSTEM, INC.

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 USER: blauritsen  
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 121744\_CD\_PHASE\_GASOLINE  
 121744\_CD\_PHASE  
 BRETT LAURITSEN\_PJ\_KS

TEL: 616.245.8879  
 FAX: 616.242.8891  
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WICHITA, KANSAS

REV. NO.	DATE	DESCRIPTION
1	10/23/14	PR. #1

STORM SEWER PLAN AND PROFILE

COSTCO WHOLESALE WAREHOUSE & GASOLINE  
 EAST KELLOGG AVENUE & WEBB RD

STORM SEWER PLAN AND PROFILE

WICHITA, KANSAS

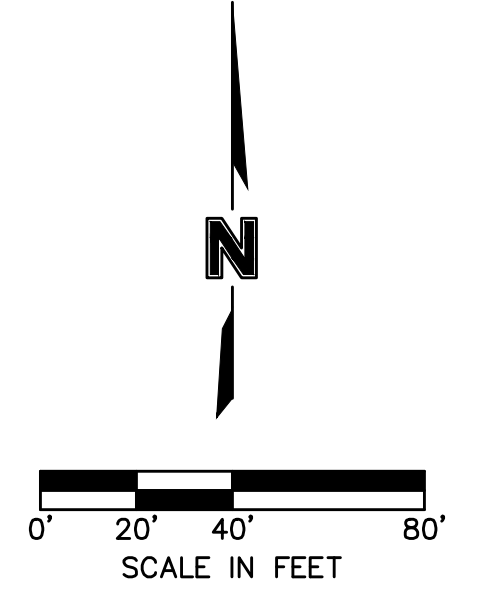
DRAWN BY: MTC

checked by: BHE  
 approved by: BHE  
 SA/DC by: BHE  
 project no.: 012-1744  
 drawing no.:  
 date: 07.15.14

SHEET PPD8

KANSAS CALL BEFORE YOU DIG:  
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**AS-BUILT DRAWINGS**  
 Contractor: Mies Construction  
 Inspector: Dakota G. Zimmerman  
 Ruggles & Bohm, P.A.  
 PDF's Made By: DGZ 06/02/15



- LEGEND**
- PROPOSED DRAINAGE BOUNDARY
  - EXISTING CONTOUR LINE
  - PROPOSED CONTOUR LINE
  - PROPOSED FUTURE IMPROVEMENTS

- KEY**
- 1 TEMPORARY DETENTION OUTFALL  
18" STORM SEWER ON WEBB ROAD  
ROUTING DRAINAGE NORTH ALONG  
WEBB ROAD.
  - 2 PERMANENT (FUTURE) DETENTION OUTFALL  
30" STORM SEWER ON WEBB ROAD  
INSTALLED WITH PUBLIC IMPROVEMENTS
  - 3 FUTURE STORM STRUCTURE
  - 4 UNDETAINED DRAINAGE  
WEBB ROAD (NW)  
TOTAL 0.25 ACRES
  - 5 UNDETAINED DRAINAGE  
WEBB ROAD - TOTAL 1.22 ACRES
  - 6 PROPOSED OIL/WATER SEPARATOR
  - 7 PROPOSED ROOF DRAINS
  - 8 ROOF CANOPY TO STORM INLET C3
  - 9 PROPOSED DETENTION FACILITY
- A B C D E** PROPOSED  
STORM  
STRUCTURES

**COSTCO WHOLESALE**  
 WICHITA, KANSAS



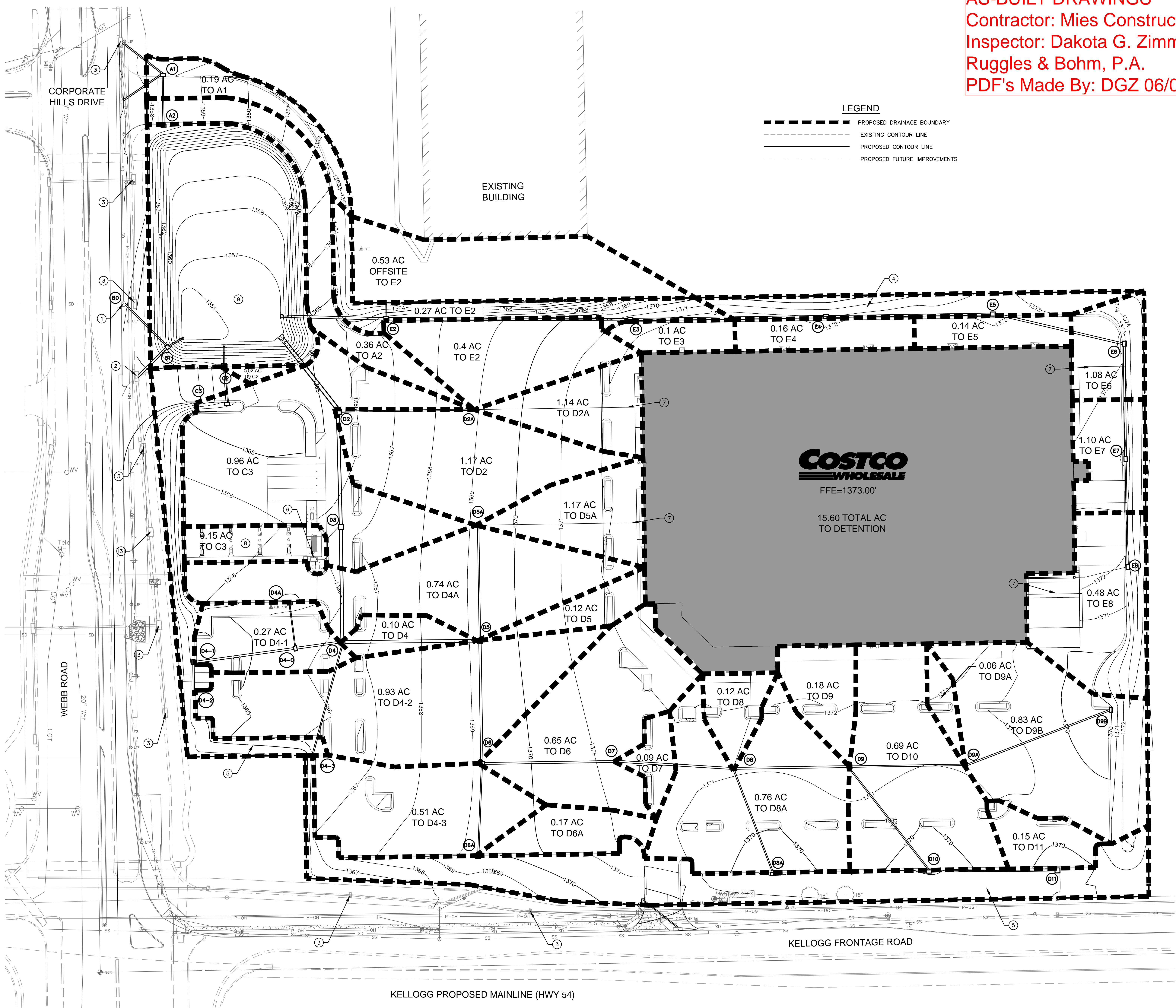
REV. NO.	DATE	REVISIONS DESCRIPTION
1	09/18/14	PERMIT REVIEW COMMENTS

**DRAINAGE PATTERNS PLAN**  
 COSTCO WHOLESALE WAREHOUSE & GASOLINE  
 EAST KELLOGG AVENUE & WEBB RD  
 WICHITA, KANSAS

**REVISIONS**

DATE	DESCRIPTION

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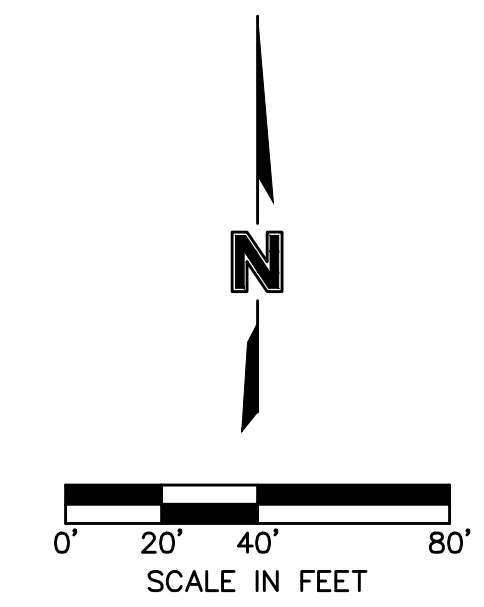
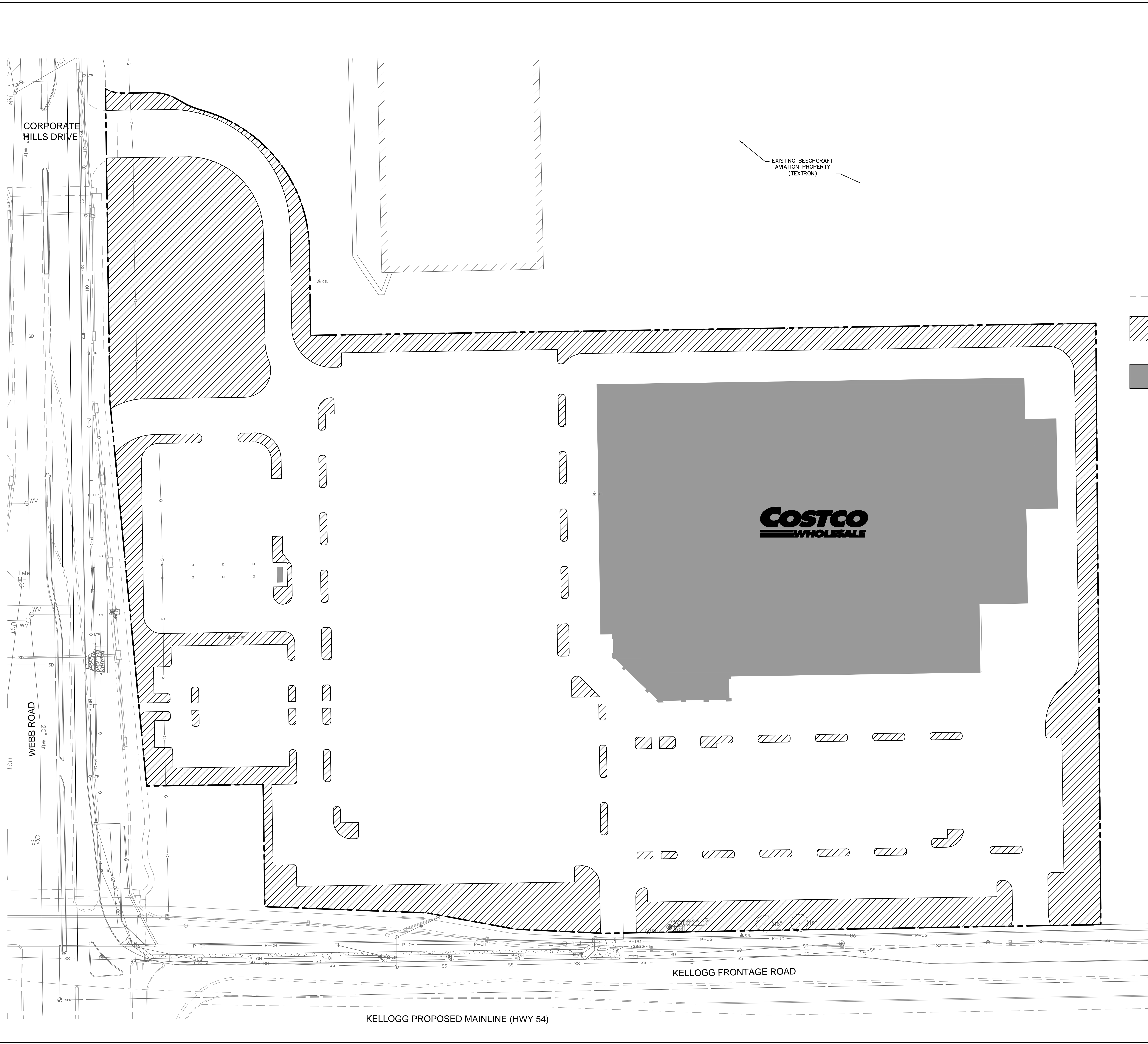
KANSAS  
 ONE-CALL  
 SYSTEM, INC.

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drawn by: MTC  
 checked by: BHE  
 approved by: GAO  
 project no: 012-1744  
 drawing no: 07.15.14

**SHEET**  
 PPD9

DWG: F:\Projects\012-1744\LDVP\Design\PPD (Storm Drainage)\121744\_DRN\_IMP.dwg  
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 BRETT\_LAURITSEN\_PE\_KS



EXISTING BEECHCRAFT AVIATION PROPERTY (TEXTRON)

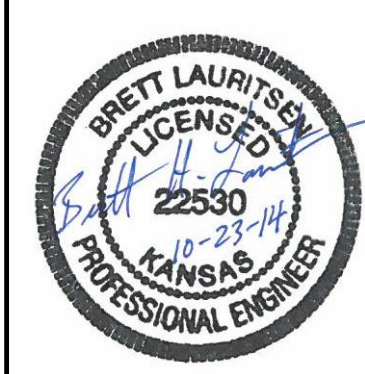
**LEGEND**

- PROPOSED FUTURE IMPROVEMENTS
- PROPOSED SITE PERVIOUS AREA  
 154,743 SF PROPOSED PERVIOUS  
 593,708 SF PROPOSED IMPERVIOUS  
 748,451 SF TOTAL SITE (17.18 AC)
- BUILDING FOOTPRINT (INCLUDED ABOVE)

**NOTE:**  
 FOR DRAINAGE CALCULATIONS AND DETENTION FACILITY DESIGN, SEE DRAINAGE REPORT.

**MOLSSON ASSOCIATES**  
 TEL: 605-242-8870  
 FAX: 605-242-8861  
 www.molssonassociates.com

**COSTCO WHOLESALE**  
 WICHITA, KANSAS



REV. NO.	DATE	DESCRIPTION
1	10/23/14	PR #1

IMPERVIOUS SURFACE PLAN  
 COSTCO WHOLESALE WAREHOUSE & GASOLINE  
 EAST KELLOGG AVENUE & WEBB RD  
 WICHITA, KANSAS

**REVISIONS**

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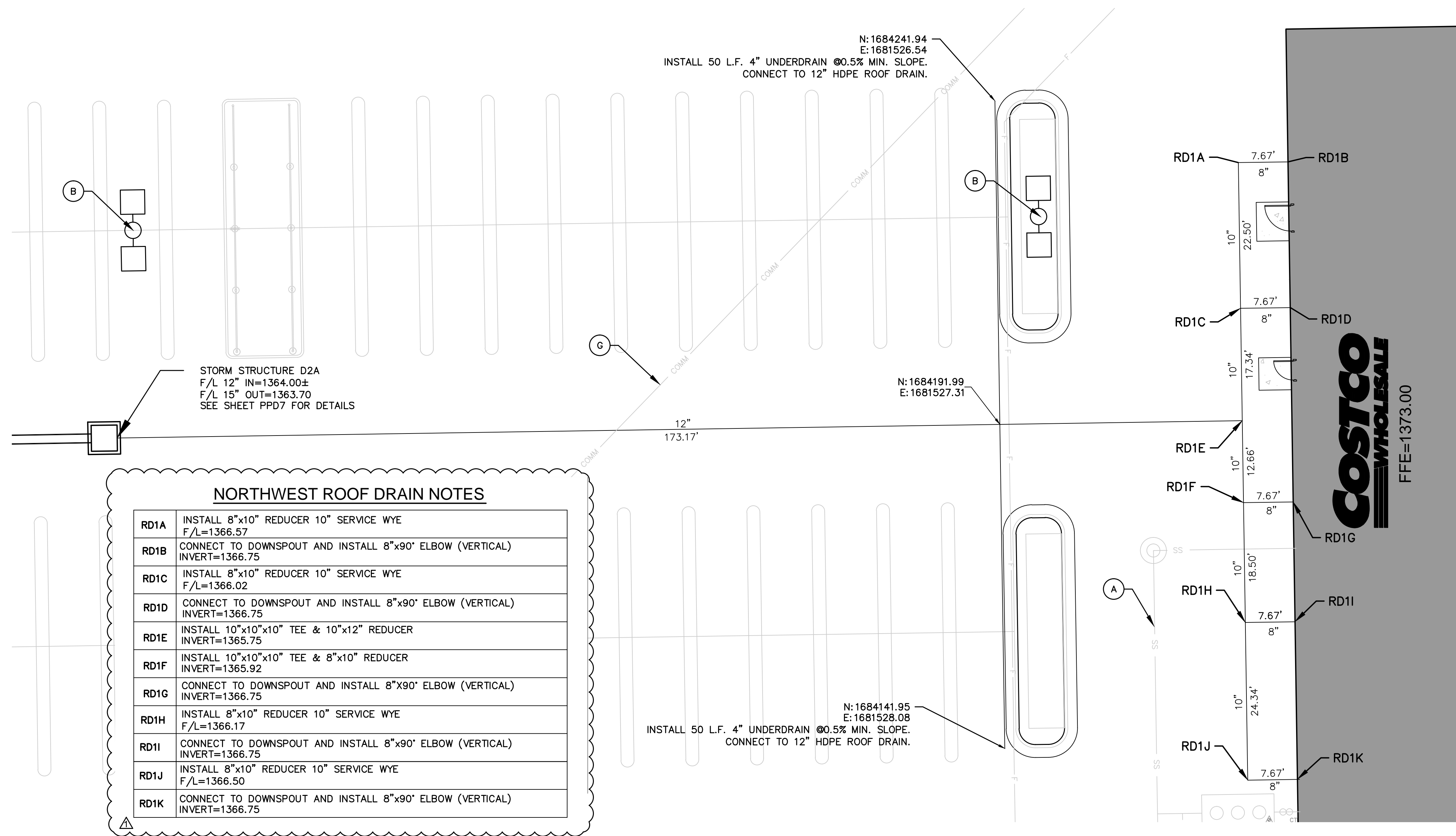
**KANSAS ONE-CALL SYSTEM, INC.**

KANSAS CALL BEFORE YOU DIG:  
 1-800-DIG-SAFE (1-800-344-7233)

drawn by: MTC  
 checked by: BHL  
 approved by: BHL  
 SA/DC by: BHL  
 project no.: 012-1744  
 drawing no.:  
 date: 07.15.14

**SHEET PPD10**

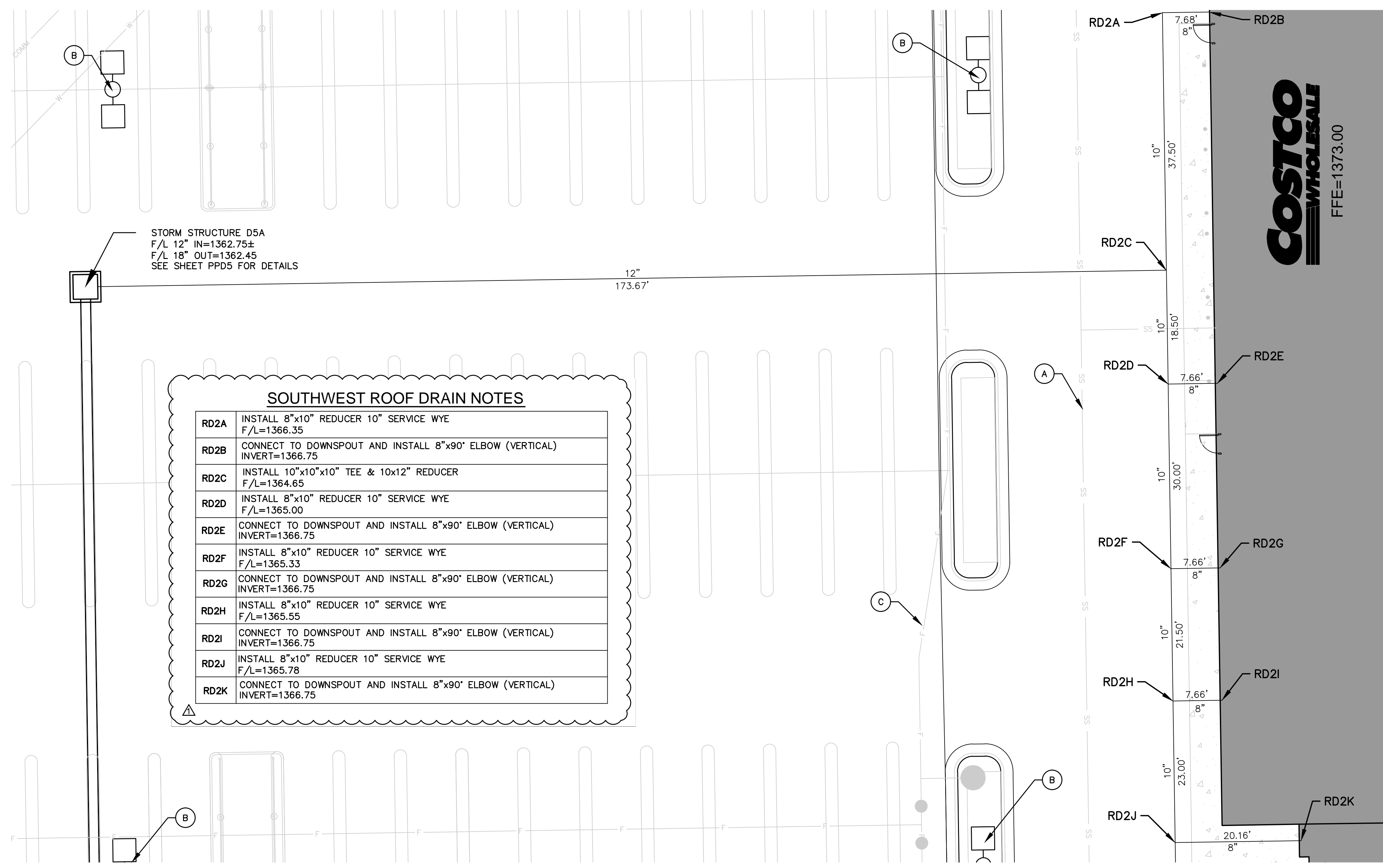
**NORTHWEST ROOF DRAIN DETAIL**



**NORTHWEST ROOF DRAIN NOTES**

RD1A	INSTALL 8"x10" REDUCER 10" SERVICE WYE F/L=1366.57
RD1B	CONNECT TO DOWNSPOUT AND INSTALL 8"x90" ELBOW (VERTICAL) INVERT=1366.75
RD1C	INSTALL 8"x10" REDUCER 10" SERVICE WYE F/L=1366.02
RD1D	CONNECT TO DOWNSPOUT AND INSTALL 8"x90" ELBOW (VERTICAL) INVERT=1366.75
RD1E	INSTALL 10"x10"x10" TEE & 10"x12" REDUCER INVERT=1365.75
RD1F	INSTALL 10"x10"x10" TEE & 8"x10" REDUCER INVERT=1365.92
RD1G	CONNECT TO DOWNSPOUT AND INSTALL 8"x90" ELBOW (VERTICAL) INVERT=1366.75
RD1H	INSTALL 8"x10" REDUCER 10" SERVICE WYE F/L=1366.17
RD1I	CONNECT TO DOWNSPOUT AND INSTALL 8"x90" ELBOW (VERTICAL) INVERT=1366.75
RD1J	INSTALL 8"x10" REDUCER 10" SERVICE WYE F/L=1366.50
RD1K	CONNECT TO DOWNSPOUT AND INSTALL 8"x90" ELBOW (VERTICAL) INVERT=1366.75

**SOUTHWEST ROOF DRAIN DETAIL**



**SOUTHWEST ROOF DRAIN NOTES**

RD2A	INSTALL 8"x10" REDUCER 10" SERVICE WYE F/L=1366.35
RD2B	CONNECT TO DOWNSPOUT AND INSTALL 8"x90" ELBOW (VERTICAL) INVERT=1366.75
RD2C	INSTALL 10"x10"x10" TEE & 10x12" REDUCER F/L=1364.65
RD2D	INSTALL 8"x10" REDUCER 10" SERVICE WYE F/L=1365.00
RD2E	CONNECT TO DOWNSPOUT AND INSTALL 8"x90" ELBOW (VERTICAL) INVERT=1366.75
RD2F	INSTALL 8"x10" REDUCER 10" SERVICE WYE F/L=1365.33
RD2G	CONNECT TO DOWNSPOUT AND INSTALL 8"x90" ELBOW (VERTICAL) INVERT=1366.75
RD2H	INSTALL 8"x10" REDUCER 10" SERVICE WYE F/L=1365.55
RD2I	CONNECT TO DOWNSPOUT AND INSTALL 8"x90" ELBOW (VERTICAL) INVERT=1366.75
RD2J	INSTALL 8"x10" REDUCER 10" SERVICE WYE F/L=1365.78
RD2K	CONNECT TO DOWNSPOUT AND INSTALL 8"x90" ELBOW (VERTICAL) INVERT=1366.75

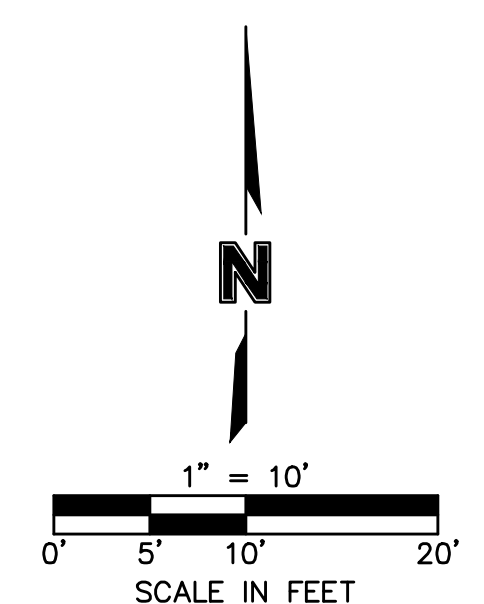
**GENERAL NOTES:**

- ALL ROOF DRAINS SHALL BE PVC PIPE.
- SEE PPS AND PPW PLAN SET FOR ROOF DRAIN ELEVATION CROSSINGS WITH SANITARY SEWER AND FIRE LINES.

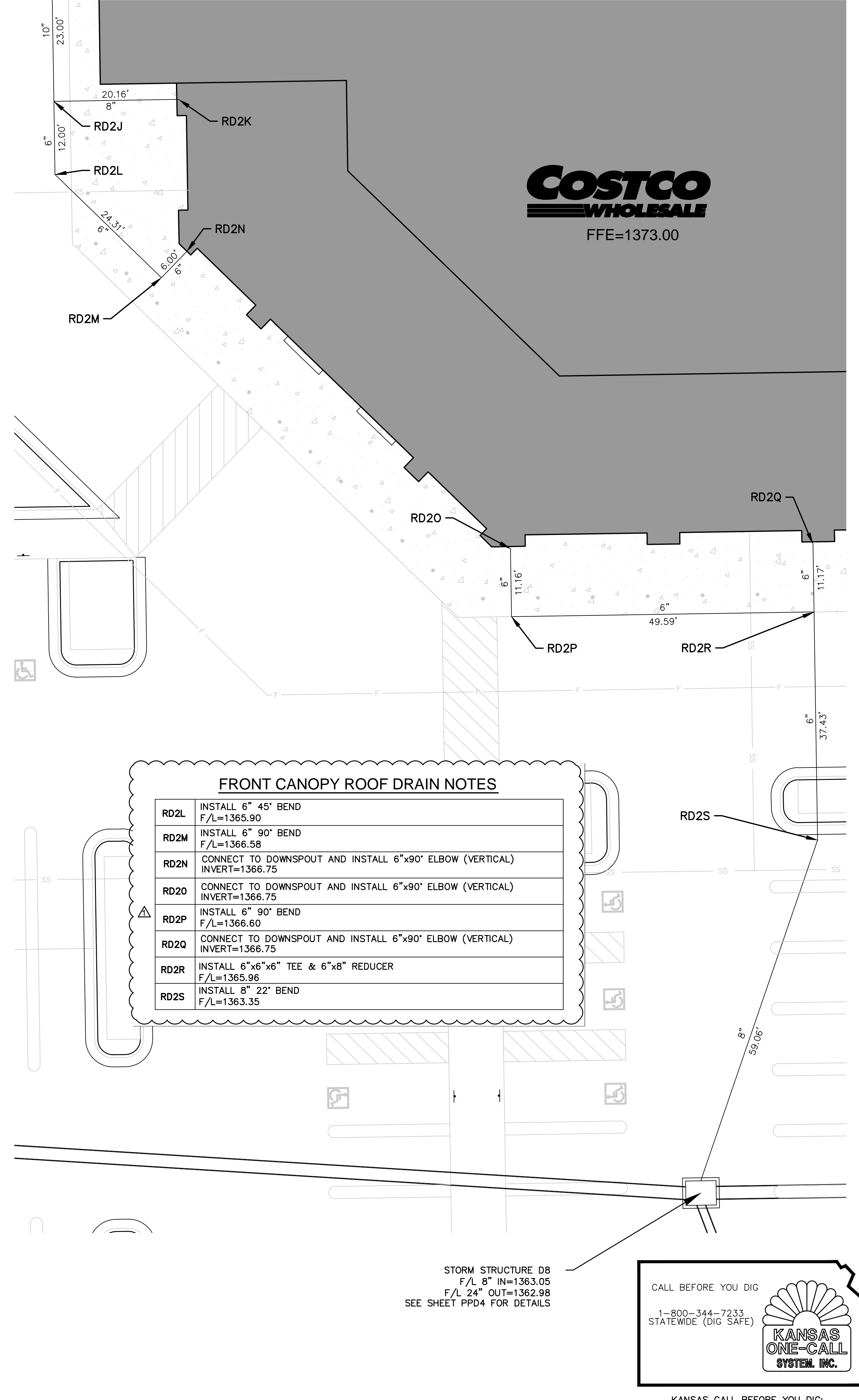
CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR PRECISE FACILITY DIMENSIONS AND EXACT ROOF DRAIN CONNECTION LOCATIONS.

**LEGEND NOTES**

- (A) PROPOSED SANITARY SEWER.
- (B) PARKING LOT LIGHTING.
- (C) PROPOSED FIRE SERVICE.
- (D) APPROXIMATE GAS SERVICE ROUTING.
- (E) APPROXIMATE ELECTRIC SERVICE ROUTING.
- (F) PROPOSED TRANSFORMER PAD.
- (G) PROPOSED COMMUNICATION LINE.
- (H) GAS METER.
- (I) PROPOSED COMPACTION UNIT.



**FRONT CANOPY ROOF DRAIN DETAIL**



**FRONT CANOPY ROOF DRAIN NOTES**

RD2L	INSTALL 6" 45' BEND F/L=1365.90
RD2M	INSTALL 6" 90' BEND F/L=1366.58
RD2N	CONNECT TO DOWNSPOUT AND INSTALL 6"x90" ELBOW (VERTICAL) INVERT=1366.75
RD2O	CONNECT TO DOWNSPOUT AND INSTALL 6"x90" ELBOW (VERTICAL) INVERT=1366.75
RD2P	INSTALL 6" 90' BEND F/L=1366.80
RD2Q	CONNECT TO DOWNSPOUT AND INSTALL 6"x90" ELBOW (VERTICAL) INVERT=1366.75
RD2R	INSTALL 6"x6"x6" TEE & 6"x8" REDUCER F/L=1365.96
RD2S	INSTALL 8" 22' BEND F/L=1363.35

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KANSAS ONE-CALL SYSTEM, INC.

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 BRETT LAURITSEN, PE\_LKS  
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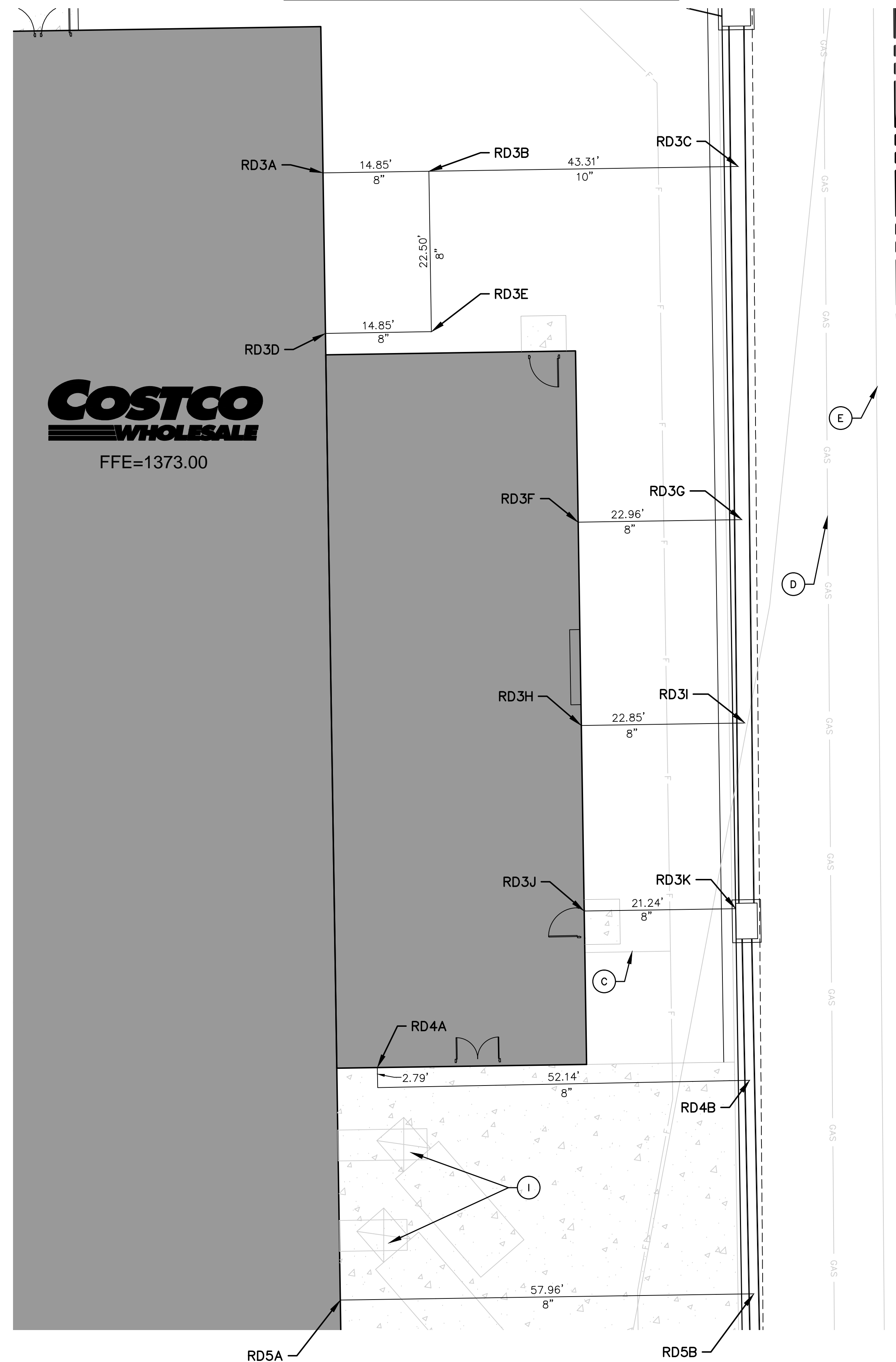
COSTCO WHOLESALE WAREHOUSE & GASOLINE  
 EAST KELLOGG AVENUE & WEBB RD  
 WICHITA, KANSAS

REVISIONS

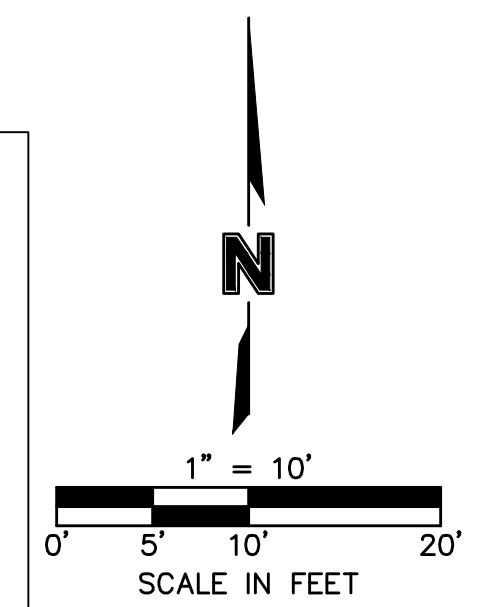
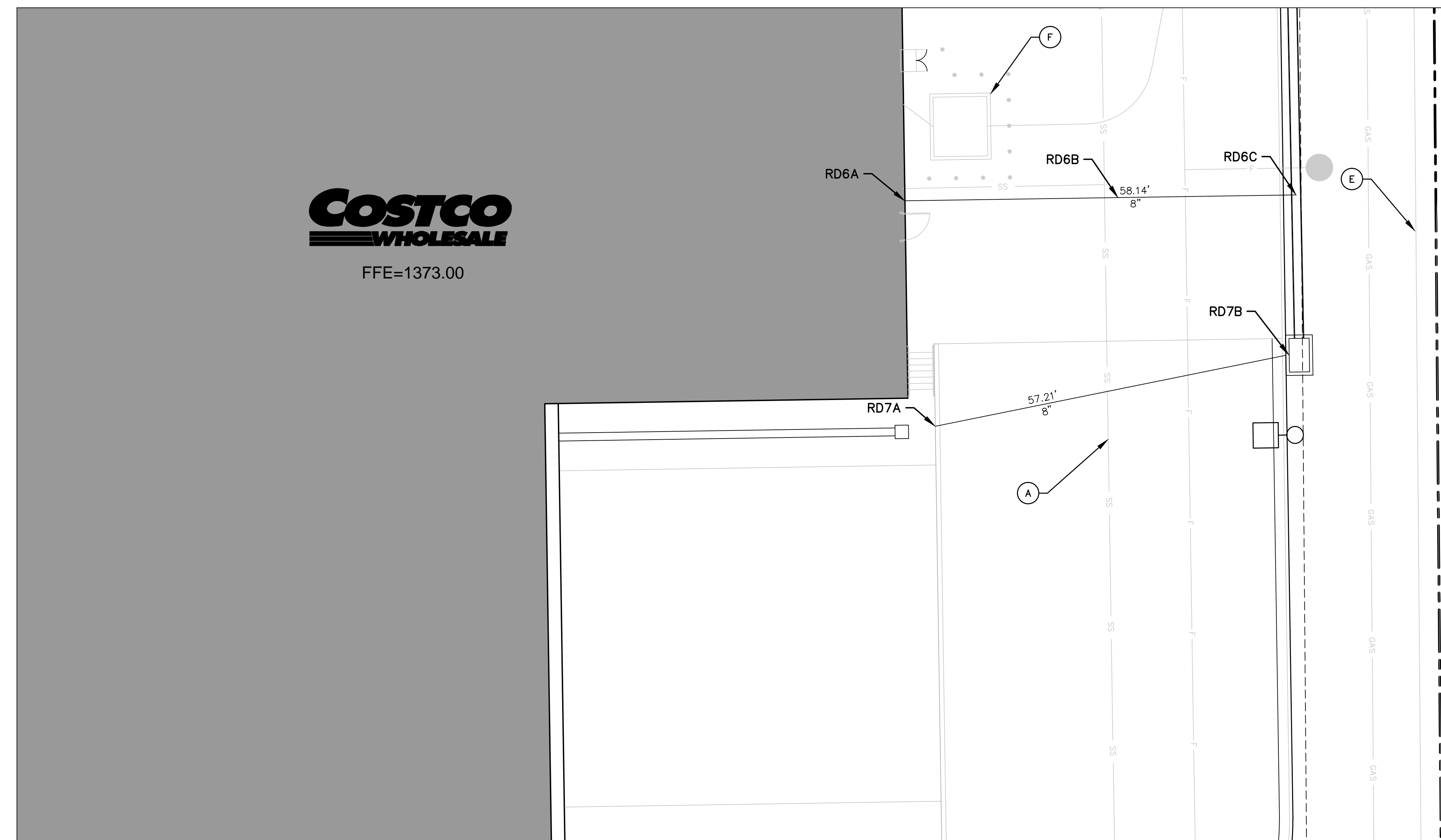
drawn by: MTC  
 checked by: BHE  
 approved by: BHE  
 SA/DC by: BHE  
 project no.: 012-1744  
 drawing no.:  
 date: 07.15.14

SHEET  
 PPD11

NORTHEAST ROOF DRAIN DETAIL



SOUTHEAST ROOF DRAIN DETAIL



**ROOF DRAIN NOTES:**

RD3A	CONNECT TO DOWNSPOUT AND INSTALL 8"x90" ELBOW (VERTICAL) INVERT=1366.75
RD3B	INSTALL 8"x8"x8" SERVICE TEE AND 8"x10" REDUCER. F/L=1366.20
RD3C	INSTALL 24"x24"x10" SERVICE TEE F/L=1365.61
RD3D	CONNECT TO DOWNSPOUT AND INSTALL 8"x90" ELBOW (VERTICAL) INVERT=1366.75
RD3E	INSTALL 8" 90° ELBOW F/L=1366.54
RD3F	CONNECT TO DOWNSPOUT AND INSTALL 8"x90" ELBOW (VERTICAL) INVERT=1366.75
RD3G	INSTALL 24"x24"x8" SERVICE TEE F/L=1365.91
RD3H	CONNECT TO DOWNSPOUT AND INSTALL 8"x90" ELBOW (VERTICAL) INVERT=1366.75
RD3I	INSTALL 24"x24"x8" SERVICE TEE F/L=1366.08
RD3J	CONNECT TO DOWNSPOUT AND INSTALL 8"x90" ELBOW (VERTICAL) INVERT=1366.75
RD3K	CONNECT ROOF DRAIN TO STRUCTURE E7 F/L=1366.50
RD4A	CONNECT TO DOWNSPOUT FROM PLUMBING PLANS INVERT=1366.90
RD4B	INSTALL 15"x15"x8" SERVICE TEE F/L=1366.56
RD5A	CONNECT TO DOWNSPOUT AND INSTALL 8"x90" ELBOW (VERTICAL) INVERT=1367.00
RD5B	INSTALL 15"x15"x8" SERVICE TEE F/L=1366.71

**ROOF DRAIN NOTES:**

RD6A	CONNECT TO DOWNSPOUT AND INSTALL 8"x90" ELBOW (VERTICAL) INVERT=1368.40
RD6B	2'40"43" VERTICAL DEFLECTION F/L=1368.24
RD6C	INSTALL 15"x15"x8" SERVICE TEE F/L=1366.93
RD7A	INSTALL GRATE AT FACE OF RETAINING WALL F/L=1368.75
RD7B	CONNECT ROOF DRAIN TO STORM STRUCTURE E8 INVERT=1367.50
RD8A	CONNECT TO DOWNSPOUT AND INSTALL 8"x90" ELBOW (VERTICAL) INVERT=1367.50
RD8B	SANITARY SEWER CROSSING (SEE SANITARY MAIN PLANS FOR INFORMATION) F/L 8" STORM=1367.00
RD8C	CONNECT ROOF DRAIN TO STORM STRUCTURE D9A F/L=1366.50

- LEGEND NOTES**
- (A) PROPOSED SANITARY SEWER.
  - (B) PARKING LOT LIGHTING.
  - (C) PROPOSED FIRE SERVICE.
  - (D) APPROXIMATE GAS SERVICE ROUTING.
  - (E) APPROXIMATE ELECTRIC SERVICE ROUTING.
  - (F) PROPOSED TRANSFORMER PAD
  - (G) PROPOSED COMMUNICATION LINE
  - (H) GAS METER.
  - (I) PROPOSED COMPACTION UNIT.

- GENERAL NOTES:**
- ALL ROOF DRAINS SHALL BE PVC PIPE.
  - SEE PPS AND PPW PLAN SET FOR ROOF DRAIN ELEVATION CROSSINGS WITH SANITARY SEWER AND FIRE LINES.

CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR PRECISE FACILITY DIMENSIONS AND EXACT ROOF DRAIN CONNECTION LOCATIONS.

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KANSAS ONE-CALL SYSTEM, INC.

KANSAS CALL BEFORE YOU DIG:  
1-800-DIG-SAFE (1-800-344-7233)

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 121744\_CD\_TBLK  
 BRETT LAURITSEN\_PELKS  
 121744\_CD\_PBASE

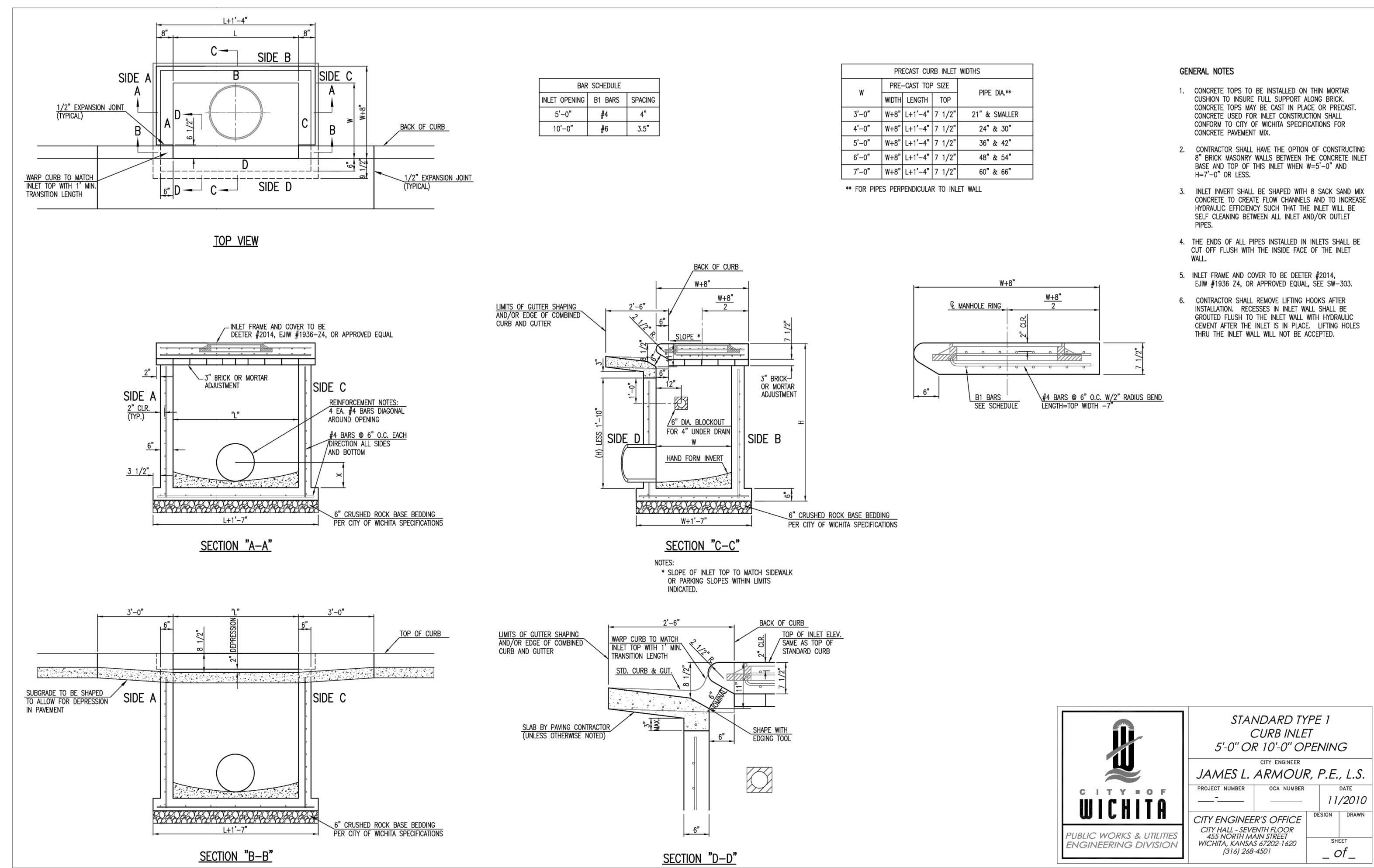
**MOLSSON ASSOCIATES**  
 201 N.W. 10th Street, Suite 130  
 Columbia, MO, 65201-9191  
 TEL: 656-242-8879  
 FAX: 656-242-8891  
 www.molssonassociates.com

**COSTCO WHOLESALE**  
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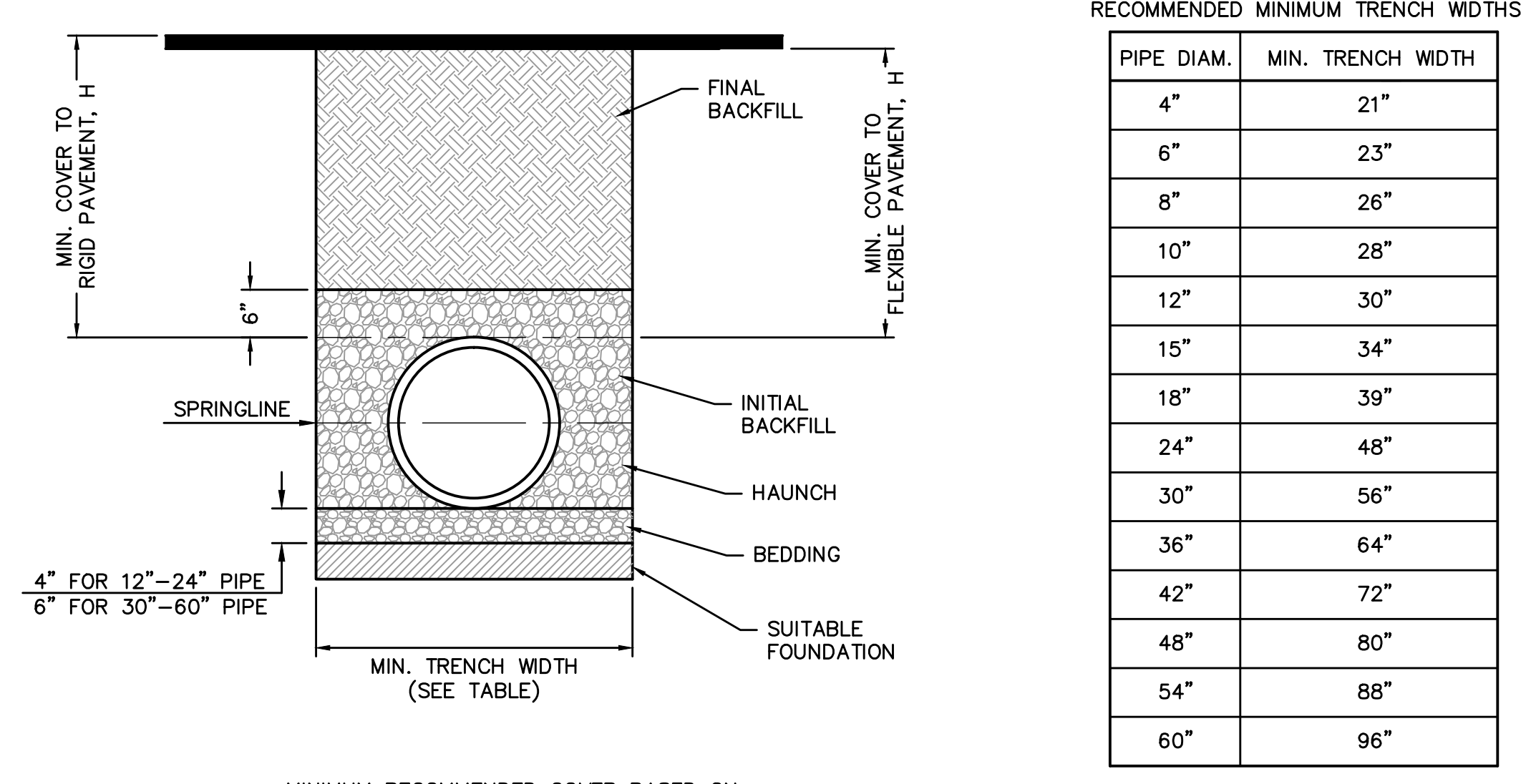
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1	10/23/14	PR #1

ROOF DRAIN PLAN  
 COSTCO WHOLESALE WAREHOUSE & GASOLINE  
 EAST KELLOGG AVENUE & WEBB RD  
 WICHITA, KANSAS

SHEET  
 PPD12

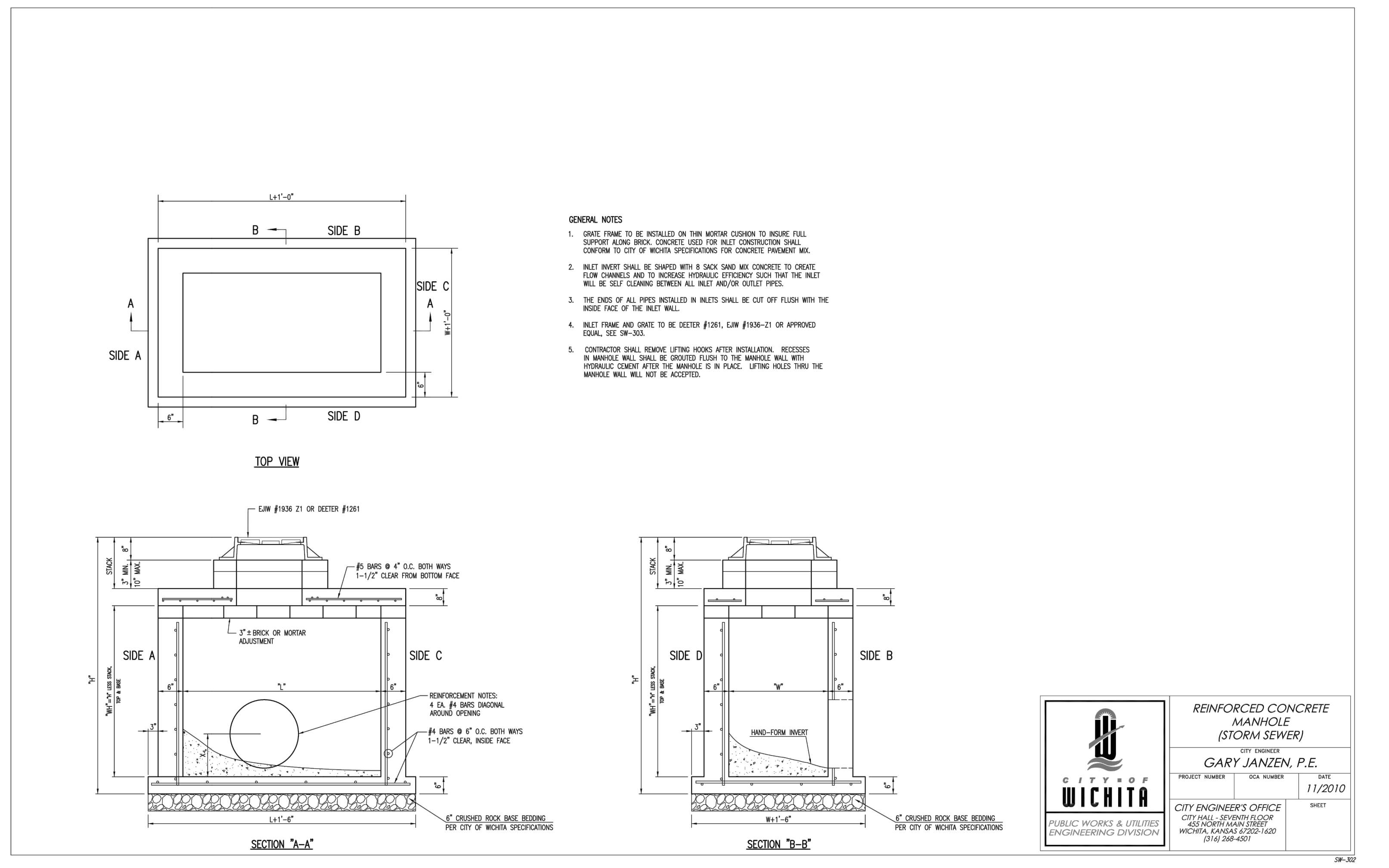
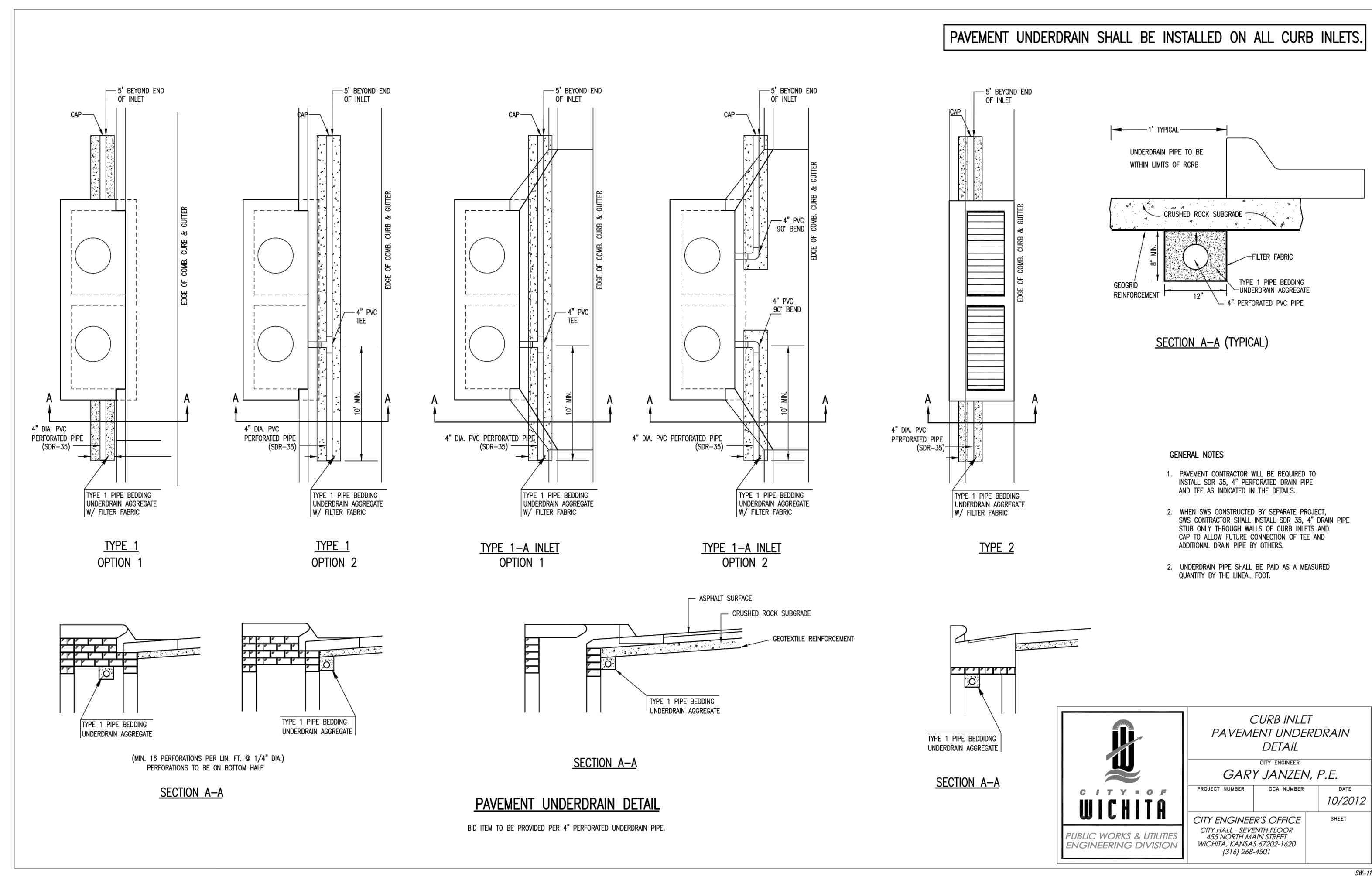


**STANDARD TYPE 1 CURB INLET**  
 5'-0" OR 10'-0" OPENING  
 JAMES L. ARMOUR, P.E., L.S.  
 PROJECT NUMBER: 121744 CD XBASE DATE: 11/2010  
 CITY ENGINEER'S OFFICE  
 CITY OF WICHITA, KANSAS  
 PUBLIC WORKS & UTILITIES ENGINEERING DIVISION



**HDPE TRENCHING DETAIL**  
 NOT TO SCALE

- NOTES:**
- ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST ADDITION.
  - MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.
  - FOUNDATION:** WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER, AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
  - BEDDING:** SUITABLE MATERIAL SHALL BE CLASS I, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER, UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 4"-24" (100mm-600mm); 6" (150mm) FOR 30"-60" (750mm-900mm).
  - INITIAL BACKFILL:** SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER, MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.
  - MINIMUM COVER:** MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOATATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR 54"-60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.



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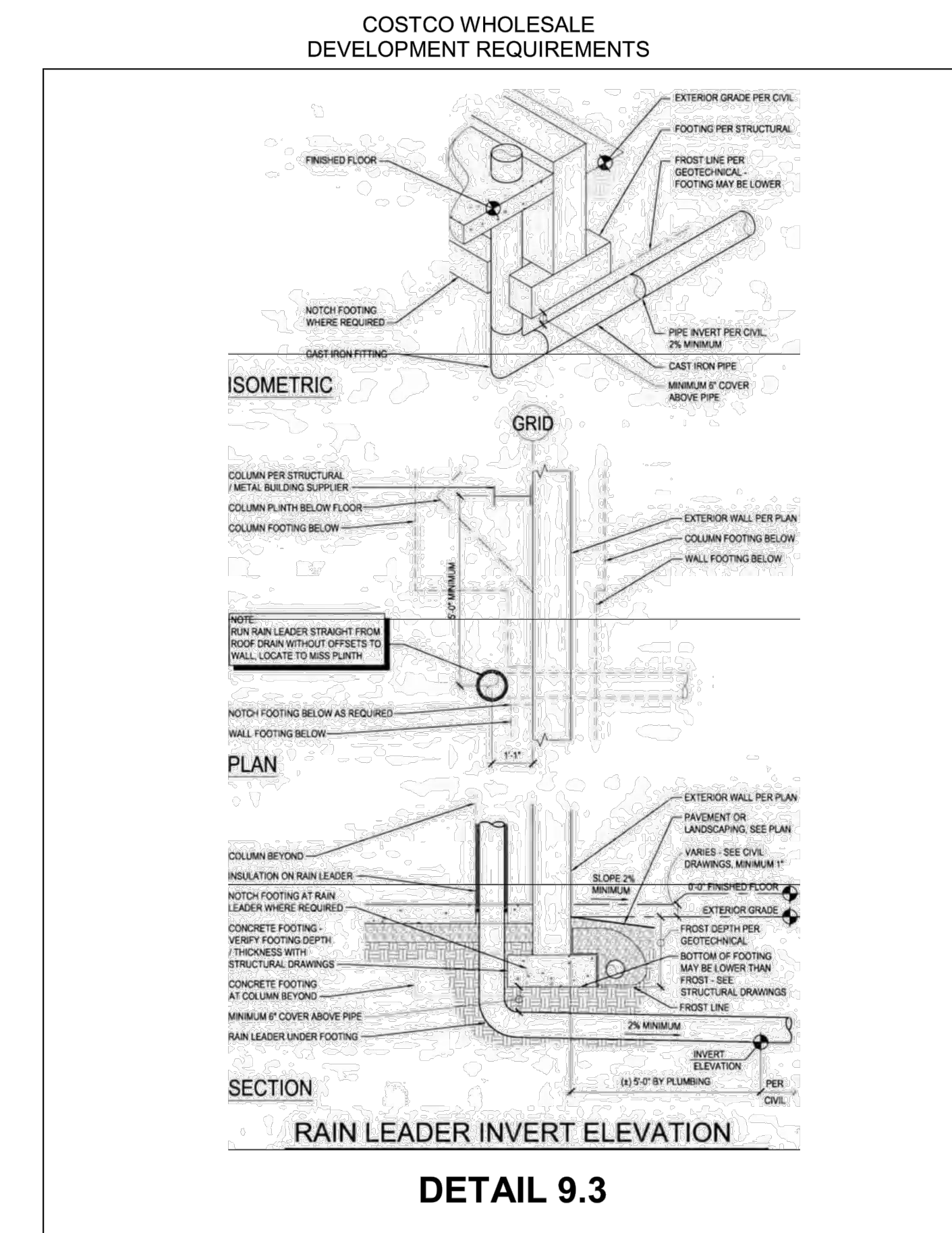
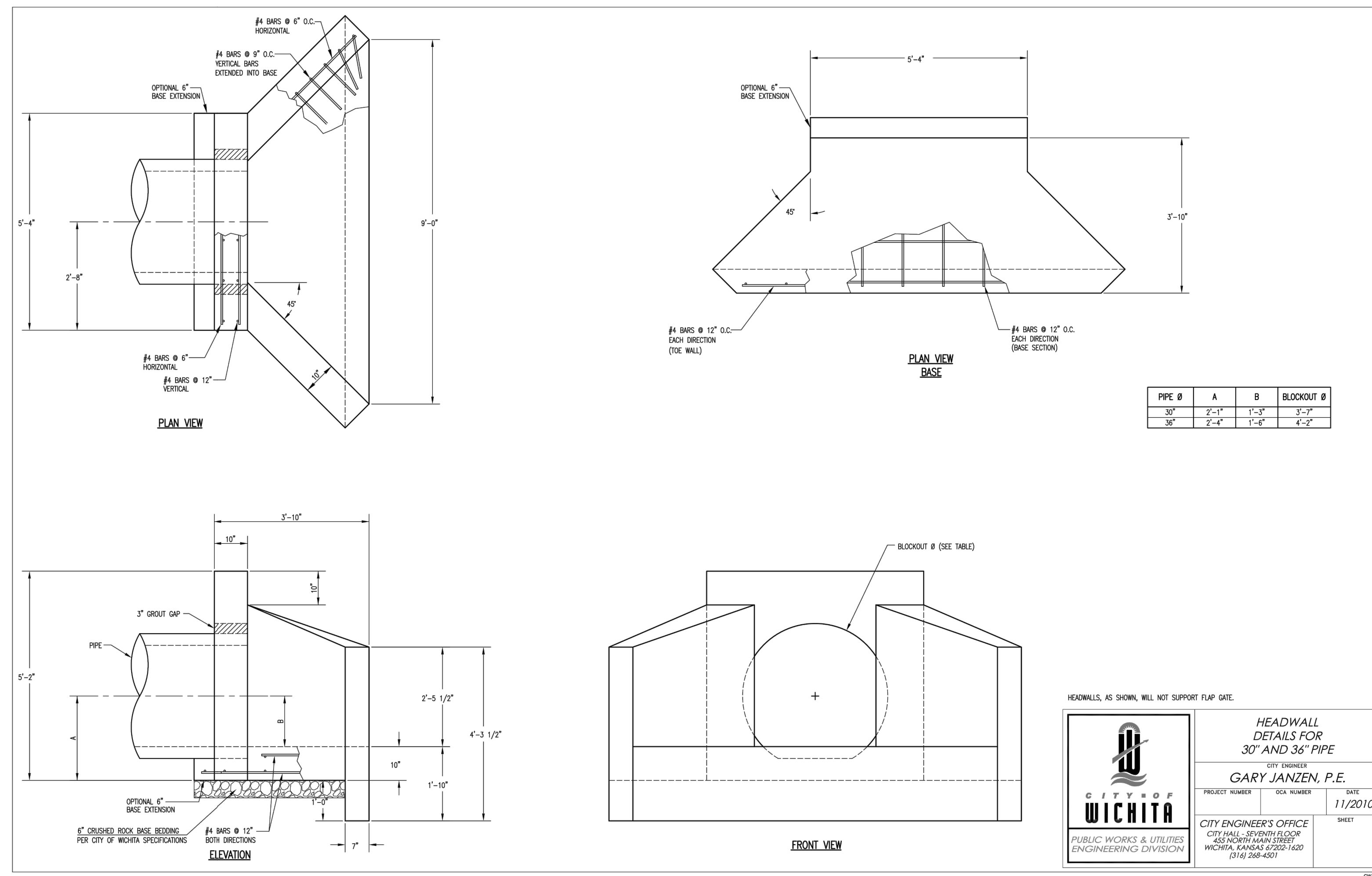
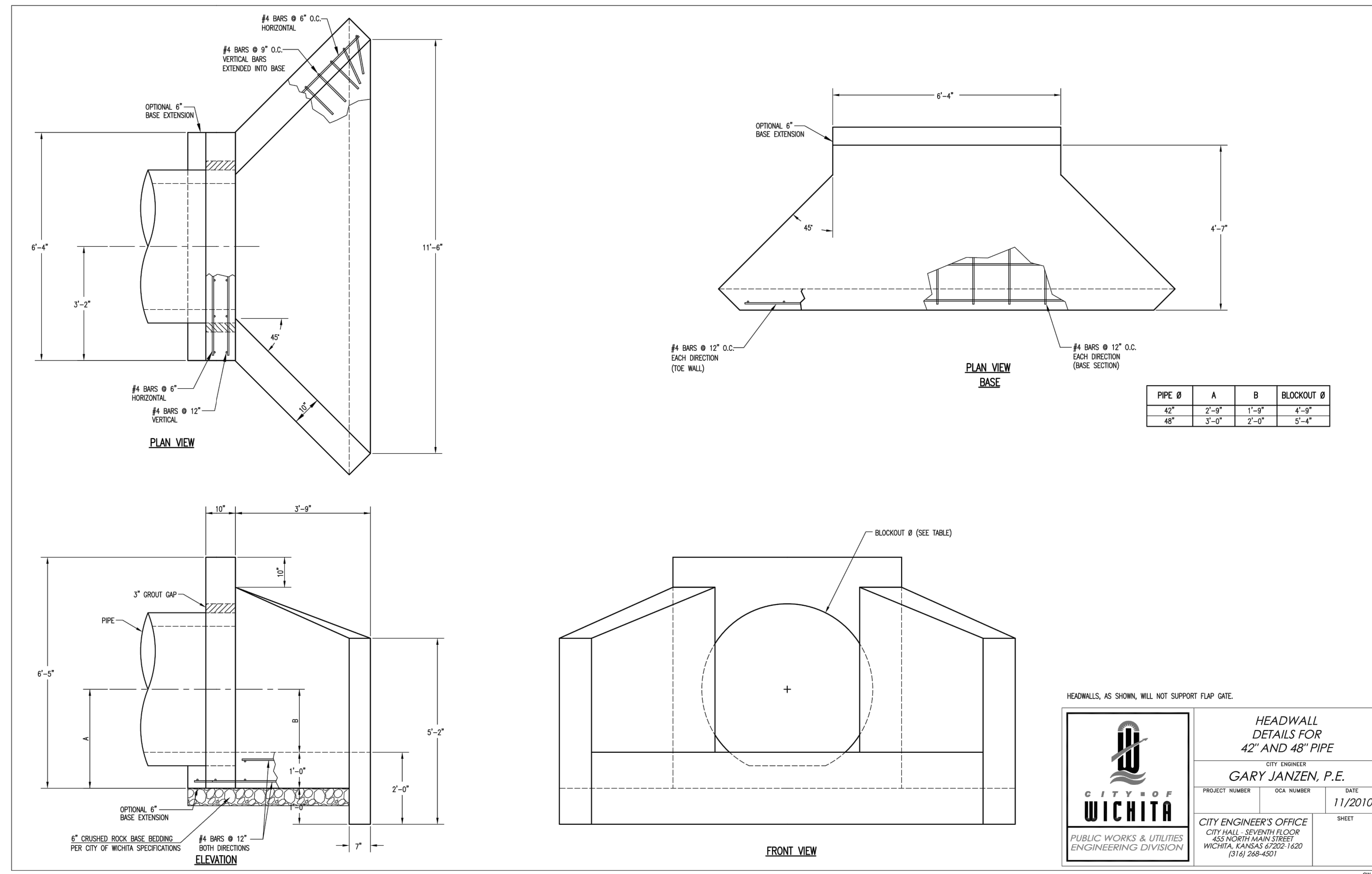
**BRETT LAURITSEN**  
 LICENSED PROFESSIONAL ENGINEER  
 22530  
 KANSAS

REVISIONS DESCRIPTION  
 REV. NO. DATE  
 1 10/23/14

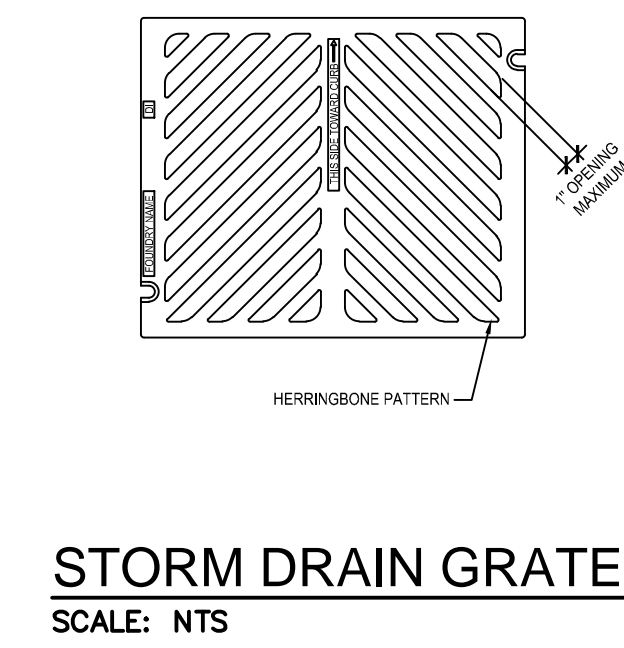
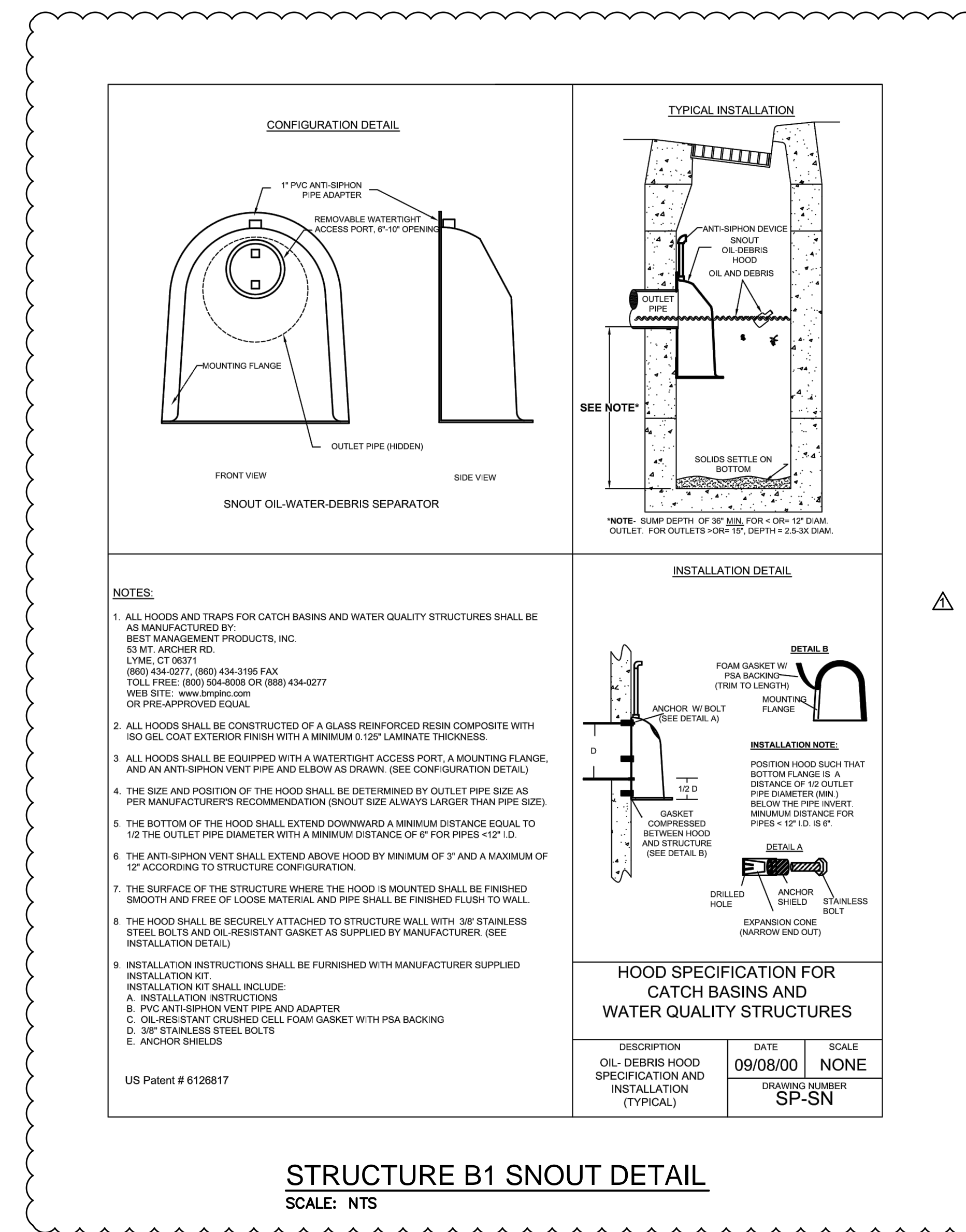
PPD DETAILS  
 COSTCO WHOLESALE WAREHOUSE & GASOLINE  
 EAST KELLOGG AVENUE & WEBB RD  
 WICHITA, KANSAS

drawn by: MTC  
 checked by: BHL  
 approved by: GJC  
 project no.: 012-1744  
 drawing no.:  
 date: 07.15.14

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Version 2012 - Revised 7.18.2012 150



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