DATE: April 9, 2018

ADDENDUM NO. 2

CITY OF PLYMOUTH

CONTRACT DOCUMENTS FOR KILMER PARK STREET RECONSTRUCTION PROJECT CITY PROJECT NO. ST189001.001

To Whom It May Concern:

The contract documents for this project has been modified as follows:

1. Plan Revision

- a. The Contractor shall replace Sheet 51 with "revised", attached. The following items were revised:
 - 1) Note regarding location of hydrodynamic separate for site 2 revised to be STMH 66 and/or CB 67.

2. Bid Form

- a. The Contractor shall replace Bid Form page 7 with "revised", attached. The following items were revised:
 - 1) The unit for Bid Item 131 Hydrodynamic Separator Site 1 was changed to Lump Sum (L.S.) from Each.
 - 2) The unit for Bid Item 132 Hydrodynamic Separator Site 2 was changed to Lump Sum (L.S.) from Each.

3. Supplementary Conditions

- a. The Contractor shall replace Supplementary Conditions page SC-11 with "revised", attached. The following items were revised:
 - 1) (02300.K.C.i) The location of hydrodynamic separator manufactured by Contech for Site 2 was changed to CB 67 from STMH 66.

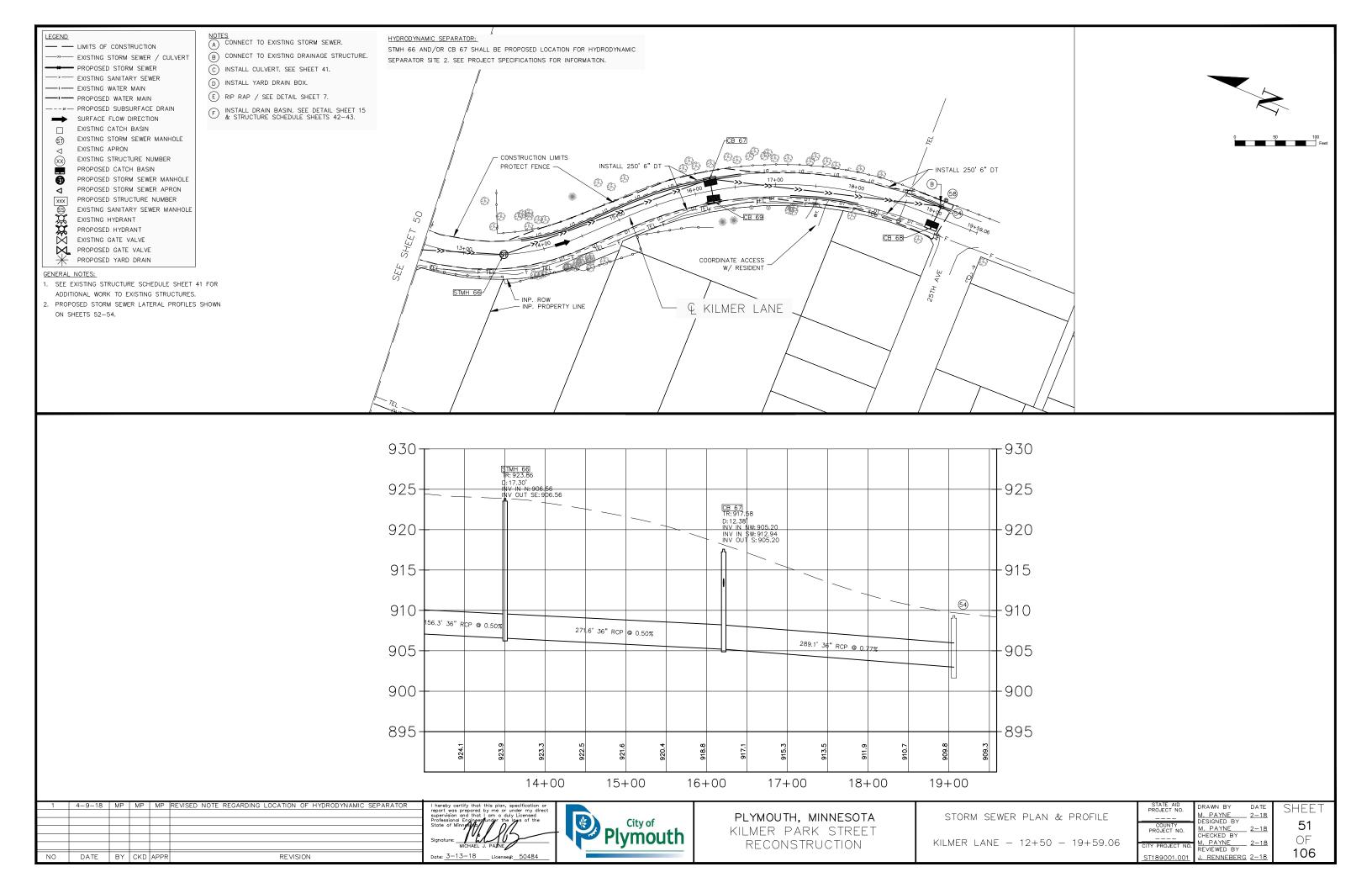
4. Appendix

- a. The Contractor shall replace Appendix B Hydrodynamic Separator (ADS) with "revised", attached. Revisions to structures at both site 1 and site 2 were made.
- b. The Contractor shall replace Appendix C Hydrodynamic Separator (Contech) with "revised", attached. The structure type for site 2 was changed and moved from STMH 66 to CB 67.

Sincerely,

Mike Payne, PE Assistant City Engineer

(763) 509-5538



ITEM NO.			ІТЕМ	UNIT	ESTIMATED QUANTITY		NIT ICE		TOTAL PRICE
	BID ALT	ERNATE	A		-				
131	HYDROD\	/NAMIC S	SEPARATOR SITE 1	L.S.	1	\$		\$_	
					TOTAL B	ID ALTERN	ATE A	\$ _	
			<u>UNIT F</u>	RICE SCHE	<u>DULE</u>				
ITEM					ESTIMATED		NIT		TOTAL
NO.	BID ALT	EDNA TE	ITEM	UNIT	QUANTITY	PR	ICE		PRICE
132			SEPARATOR SITE 2	L.S.	1	\$		\$_	
					TOTAL B	SID ALTERN	VATE B	\$_	
				TOTAL BASE	BID + BID AL	TERNATES	A & B	\$_	
	_	ER agre accord Agreer BIDDE	not guaranteed. Final payments that the Work will be substance with Paragraph 15.06 of ment. R accepts the provisions of the the Work on time.	stantially comp of the General	olete and com Conditions on	pleted and or before	the date	es in	idicated in the
	6.	The fo	llowing documents are attach	ed to and mad	de a condition	of this BID):		
		(a)	Required Bid Security in th	e form of (Bid	der's Bond) (C	Certified Ch	eck).		
		(b)	A tabulation of Subcontraction be identified in this Bid.	ctors, Supplier	s and other p	ersons and	l organiz	atio	ns required to
		(c)	Affidavit of Non-Collusion.						
		(d)	(Add other documents as p	pertinent).					
	7.	Comm	unications concerning this Bio	l shall be addr	essed to the a	ddress of	BIDDER	indic	cated below.
	8.		rms used in this Bid which ared as part of the Contract Dions.						
	SUBMI	TTED or	1	, 2018.					

- CB 67 shall constitute site 2 for hydrodynamic separator manufactured by Contech.
- ii. STMH 66 and CB 67 shall constitute site 2 for hydrodynamic separator manufactured by ADS.
- d. Manufacturer shall verify the correct installation of hydrodynamic separator.

L. Televising Storm Sewer

- a. Televising of storm sewer shall be considered incidental. This shall include initial televising and any re-televising of storm sewer lines as directed by Engineer.
- b. Storm sewer shall be televised prior to placement of wear course pavement.
- c. Engineer shall review and approve televising reports and video prior to placement of wear course pavement.
- d. Engineer shall have a minimum of 72 hours to review televising reports and video upon delivery from Contractor.

02400 - Street Construction

A. Measurement

- a. Shall be in accordance with the appropriate units on the Bid Form.
- b. Aggregate Base CL. 5 (CV)
 - i. Measurement of volume shall be compacted volume of material in place.
- c. Trail/Sidewalk Aggregate Base CL. 5 (CV)
 - i. Measurement of volume shall be compacted volume of material in place.
- d. Driveway Base, Agg. CL. 5 (CV)
 - i. Measurement of volume shall be compacted volume of material in place.
- e. Aggregate Leveling Pad CL. 5 (CV)
 - i. Measurement of volume shall be compacted volume of material in place.
- f. Select Granular Borrow (CV)
 - i. Measurement of volume shall be compacted volume of material in place.
- g. 3" Minus Recycle Material
 - i. Measurement shall be in accordance with the appropriate units on the Bid Form.

B. Materials

- a. Driveway Agg. CL. 5 (100% Crushed)
 - i. Shall be in accordance with MNDOT 3138 except that material shall be 100% crushed quarry limestone. Limestone from the Platteville formation is not acceptable.

C. Pavement Markings

- a. Measurement for items shall be in accordance with the appropriate units on the
- b. Material shall be paint with color as specified on the plans.

D. PVC Split Rail Fence

a. Includes all materials and labor necessary to install fence per detail on construction plans. Includes complete installation, excavation, sonotubes, tube backfill, compaction, posts, rails, connectors, etc.

E. Orange Construction Fence

- a. Shall be 48" orange polyethylene fence mounted on posts capable of supporting fence throughout the duration of the project.
- b. Payment shall be as shown on the bid form and includes placement, maintenance, and removal of the fence.

F. Chainlink Fence

- a. Shall include all materials and labor to remove, and replace with like materials, any chainlike fencing impacted by the project.
- b. Measurement shall be in accordance with the appropriate units on the Bid Form.

PRO	JECT INFORMATION
ENGINEERED PRODUCT MANAGER:	JIM MERCHLEWITZ 612-387-2413 JIM.MERCHLEWITZ@ADS-PIPE.COM
ADS SALES REP:	TOM ROONEY 612-756-3552 TOM.ROONEY@ADS-PIPE.COM
PROJECT NO:	S074419

APPENDIX B - HYDRONAMIC SEPARATORS

PROVED BT:	
NED:	
TE:	_
MPANY:	
ONE / EMAIL:	





THE DOWNSTREAM DEFENDER ® AND FIRST DEFENSE ® ARE DESIGNED, MANUFACTURED AND SUPPLIED BY HYDRO INTERNATIONAL PLC, AND ALL TRADEMARKS ARE THE PROPERTY OF HYDRO INTERNATIONAL PLC.

KILLMER PARK

PLYMOUTH, MN

CONTRACTOR PROVIDED DELIVERY SCHEDULE & SITE INFORMATION:

SCHEDULING INFORMATION							
SYSTEM DESIGNATION / SIZE							
SYSTEM DELIVERY DATE							
*ACTUAL DATE REQUIRED, ASAP IS NOT ACCEPTABLE AND A MINIMUM OF 4 WEEKS MUST BE PROVIDED UNLESS OTHERWISE DISCUSSED WITH A SALES REPRESENTATIVE.							
	DELIVERY INFORMATION						
JOB SITE STREET ADDRESS				CITY			
CONTACT				CONTACT PHONE			

ALTERNATE PHONE

DIRECTIONS TO JOB SITE FROM NEAREST INTERSTATE:

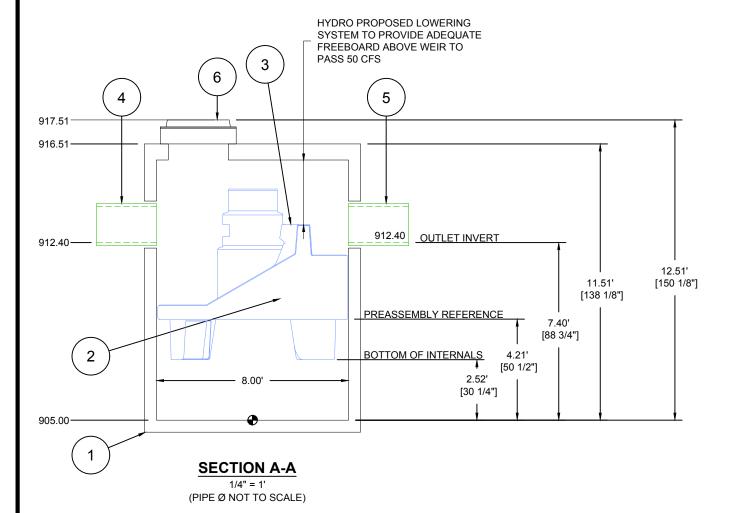
(PLEASE NO MAPS)

ALTERNATE CONTACT

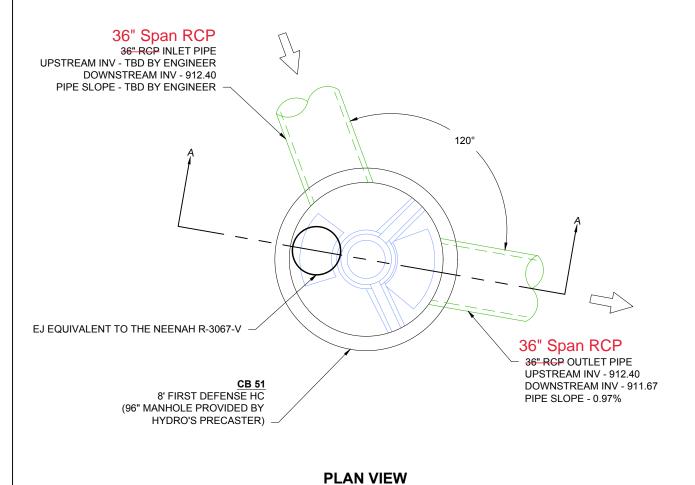
	PARTS LIST : 8' FIRST DEFENSE HC						
ITEM	SIZE (IN)	MATERIAL	DESCRIPTION				
1	96	-	I.D. PRECAST MANHOLE				
2	-	-	LEDGER SUPPORT				
3	-	-	SEPARATION MODULE				
4	36	RCP	INLET PIPE (BY OTHERS)				
5	36	RCP	OUTLET PIPE (BY OTHERS)				
6	-	-	EJ W EQUIVALENT TO THE NEENAH R-3067-V				

NOTES:

ENGINEER / CONTRACTOR TO CONFIRM PIPE MATERIAL THE CASTING SHOULD BE A 2' X 3' GRATE SUPPLIED BY CONTRACTOR PER CITY STANDARDS

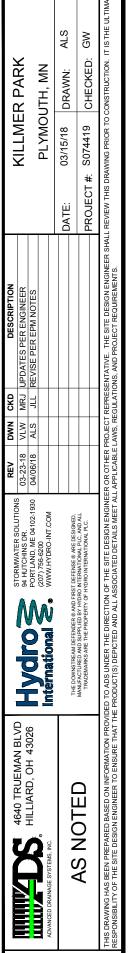


BID ALTERNATE A - SITE 1



PRODUCT SPECIFICATIONS

- A. THE TREATMENT SYSTEM SHALL USE AN INDUCED VORTEX TO SEPARATE POLLUTANTS FROM STORMWATER RUNOFF.
- B. THE TREATMENT SYSTEM SHALL FIT WITHIN THE LIMITS OF EXCAVATION (AREA AND DEPTH) AS SHOWN IN THE PROJECT PLANS AND WILL NOT EXCEED THE DIMENSIONS FOR THE DESIGN FLOW RATES SPECIFIED HEREIN.
- C. THE TREATMENT SYSTEM SHALL CONVEY THE PEAK ON-LINE FLOW RATES OF UP TO 50 CFS WITHOUT CAUSING UPSTREAM SURCHARGE CONDITIONS. FULL-SCALE INDEPENDENT LABORATORY SCOUR TESTING SHALL DEMONSTRATE EFFLUENT CONTROL OF LESS THAN OR EQUAL TO 5 MG/L FOR ALL FLOWS UP TO 200% OF MTFR-106.
- D. THE TREATMENT SYSTEM SHALL BE CAPABLE OF CAPTURING AND RETAINING FINE SILT AND SAND SIZE PARTICLES. ANALYSIS OF CAPTURED SEDIMENT FROM FULL-SCALE FIELD INSTALLATIONS SHALL DEMONSTRATE PARTICLE SIZES PREDOMINATELY IN THE 20-MICRON RANGE

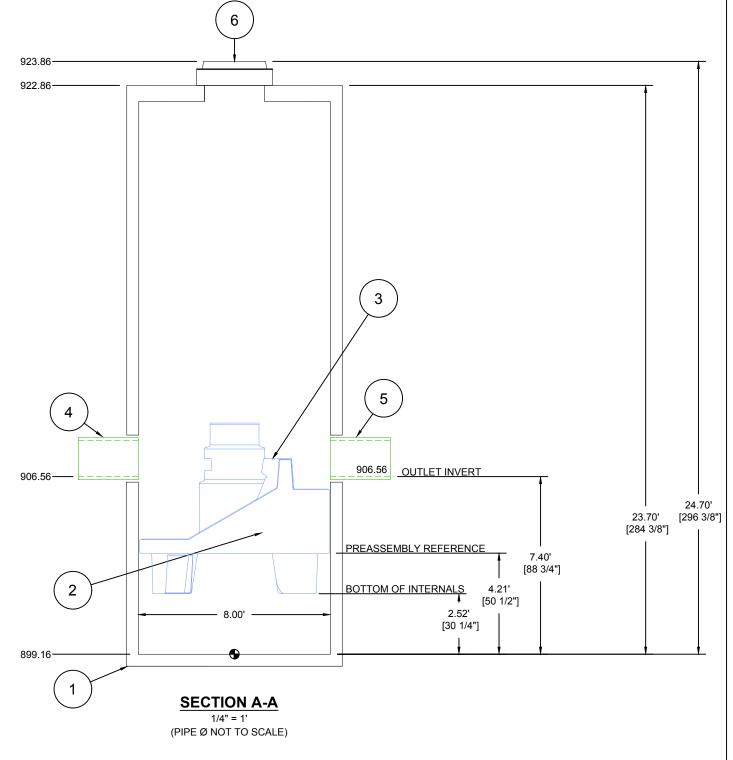


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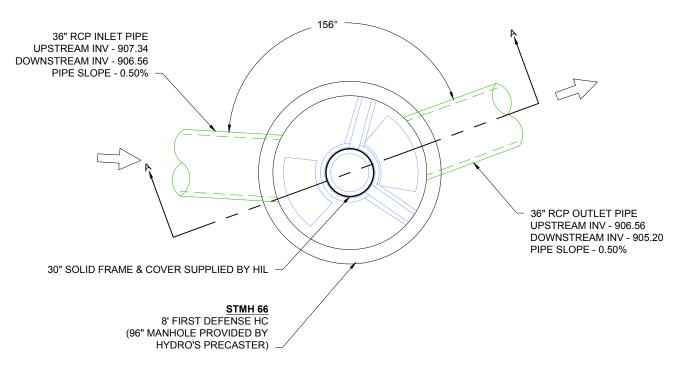
	PARTS LIST : 8' FIRST DEFENSE HC						
ITEM	SIZE (IN)	MATERIAL	DESCRIPTION				
1	96	-	I.D. PRECAST MANHOLE				
2	-	-	LEDGER SUPPORT				
3	-	-	SEPARATION MODULE				
4	36	RCP	INLET PIPE (BY OTHERS)				
5	36	RCP	OUTLET PIPE (BY OTHERS)				
6	30	-	SOLID FRAME & COVER				

NOTES:

ENGINEER / CONTRACTOR TO CONFIRM PIPE MATERIAL



BID ALTERNATE B - SITE 2



PLAN VIEW

PRODUCT SPECIFICATIONS

- A. THE TREATMENT SYSTEM SHALL USE AN INDUCED VORTEX TO SEPARATE POLLUTANTS FROM STORMWATER RUNOFF.
- B. THE TREATMENT SYSTEM SHALL FIT WITHIN THE LIMITS OF EXCAVATION (AREA AND DEPTH) AS SHOWN IN THE PROJECT PLANS AND WILL NOT EXCEED THE DIMENSIONS FOR THE DESIGN FLOW RATES SPECIFIED HEREIN.
- C. THE TREATMENT SYSTEM SHALL CONVEY THE PEAK ON-LINE FLOW RATES OF UP TO 50 CFS WITHOUT CAUSING UPSTREAM SURCHARGE CONDITIONS. FULL-SCALE INDEPENDENT LABORATORY SCOUR TESTING SHALL DEMONSTRATE EFFLUENT CONTROL OF LESS THAN OR EQUAL TO 5 MG/L FOR ALL FLOWS UP TO 200% OF MTFR-106.
- D. THE TREATMENT SYSTEM SHALL BE CAPABLE OF CAPTURING AND RETAINING FINE SILT AND SAND SIZE PARTICLES. ANALYSIS OF CAPTURED SEDIMENT FROM FULL-SCALE FIELD INSTALLATIONS SHALL DEMONSTRATE PARTICLE SIZES PREDOMINATELY IN THE 20-MICRON RANGE

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	4640 IRUEMAN BLVD	4040 I RUEINIAN BLVD	94 HUTCHINS DR.	03-23-18	۸۲M	MRJ	03-23-18 VLW MRJ UPDATES PER ENGINEER	YILLIMIE VILLIMIE	VICLMER PARK	
	HILLIARD, OH 43026		PORTLAND, ME 04102-1930	04/06/18	ALS	1	PORTLAND, ME 04102-1930 04/06/18 ALS JLL REVISE PER EPM NOTES			
		International	(207) 756-6200					PLYMO	PLYMOUTH, MN	
ADVANCED DRAINAGE SYSTEMS, INC.			MOO. MI-OROTE WWWW						`	
			•					DATE: 03/15/18	03/15/18 DRAWN: ALS	ALS
		THE DOWNSTREAM DEFENDER ® AND FIRST DEFENSE ® ARE DESIGNED.	ST DEFENSE ® ARE DESIGNED,							
AS NOIED	הר	MANUFACTURED AND SUPPLIED BY HYDRO INTERNATIONAL PLC, AND ALL TRADEMARKS ARE THE PROPERTY OF HYDRO INTERNATIONAL PLC.	J INTERNATIONAL PLC, AND ALL HYDRO INTERNATIONAL PLC.					DBO IECT #: S074419 CHECKED: GW	. כולטום	WE
								# 10H00A1	CHECKED.	;
THIS DRAWING HAS BEEN PREPARED BASED ON INFORMATION PROVIDED TO ADS UNDER THE DIRECTION OF THE SITE DESIGN ENGINE OR OTHER PROJECT REPRESENTATIVE. THE SITE DESIGN ENGINE REQUIATIONS, AND PROJECT REQUIREMENTS. RESPONSIBILITY OF THE SITE DESIGN ENGINER TO ENSURE THAT THE PRODUCT(S) DEPICTED AND ALL ASSOCIATED DETAILS MEET ALL APPLICABLE LAWS, REGULATIONS, AND PROJECT REQUIREMENTS.	BASED ON INFORMATION PROVI.	DED TO ADS UNDER THE DIRECTION (IE PRODUCT(S) DEPICTED AND ALL AS	OF THE SITE DESIGN ENGINEE SSOCIATED DETAILS MEET ALL	R OR OTHER F. APPLICABLE L	ROJECT F	REPRESI	HIS DRAWING HAS BEEN PREPARED BASED ON INFORMATION PROVIDED TO ADS UNDER THE DIRECTION OF THE SITE DESIGN ENGINEER PROJECT REPRESENTATIVE. THE SITE DESIGN ENGINEER SHALL REVIEW THIS DRAWING PRIOR TO CONSTRUCTION. IT IS THE ULTING SECULATIONS, AND PROJECT REQUIREMENTS.	LL REVIEW THIS DRAWING PRIOR TO	CONSTRUCTION. I'	r is the ultip

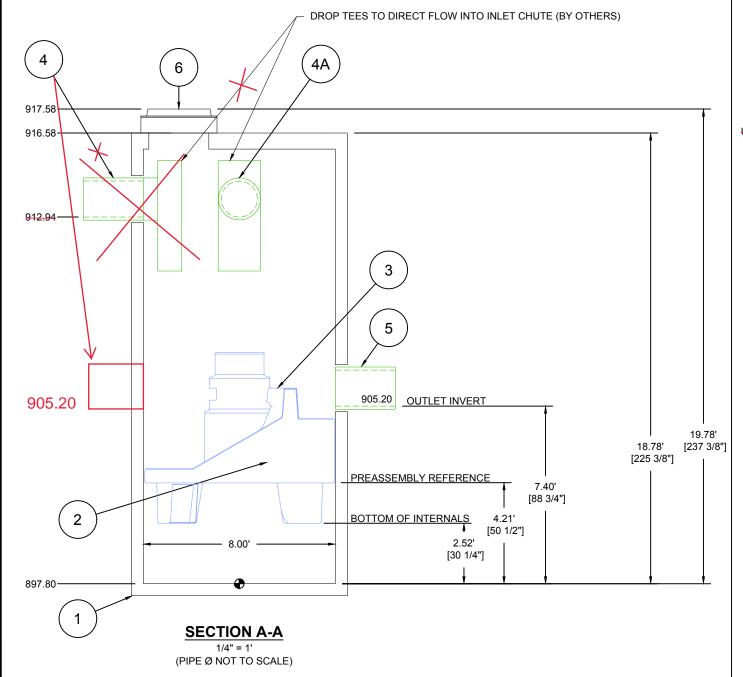
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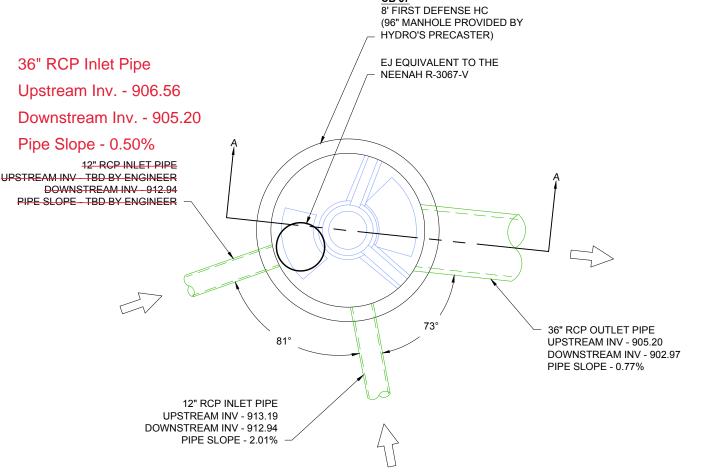
	PART	'S LIST : <u>8</u>	' FIRST DEFENSE HC
ITEM	SIZE (IN)	MATERIAL	DESCRIPTION
1	96	ı	I.D. PRECAST MANHOLE
2	-	-	LEDGER SUPPORT
3	-	=	SEPARATION MODULE
4	12 36	RCP	INLET PIPE (BY OTHERS)
4A	12	RCP	INLET PIPE (BY OTHERS)
5	36	RCP	OUTLET PIPE (BY OTHERS)
6	-	-	EJ W EQUIVALENT TO THE NEENAH R-3067-V

NOTES:

ENGINEER / CONTRACTOR TO CONFIRM PIPE MATERIAL THE CASTING SHOULD BE A 2' X 3' GRATE SUPPLIED BY CONTRACTOR PER CITY STANDARDS



BID ALTERNATE B - SITE 2

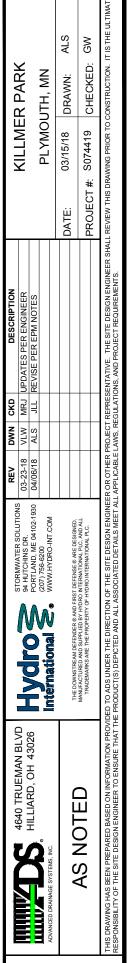


PRODUCT SPECIFICATIONS

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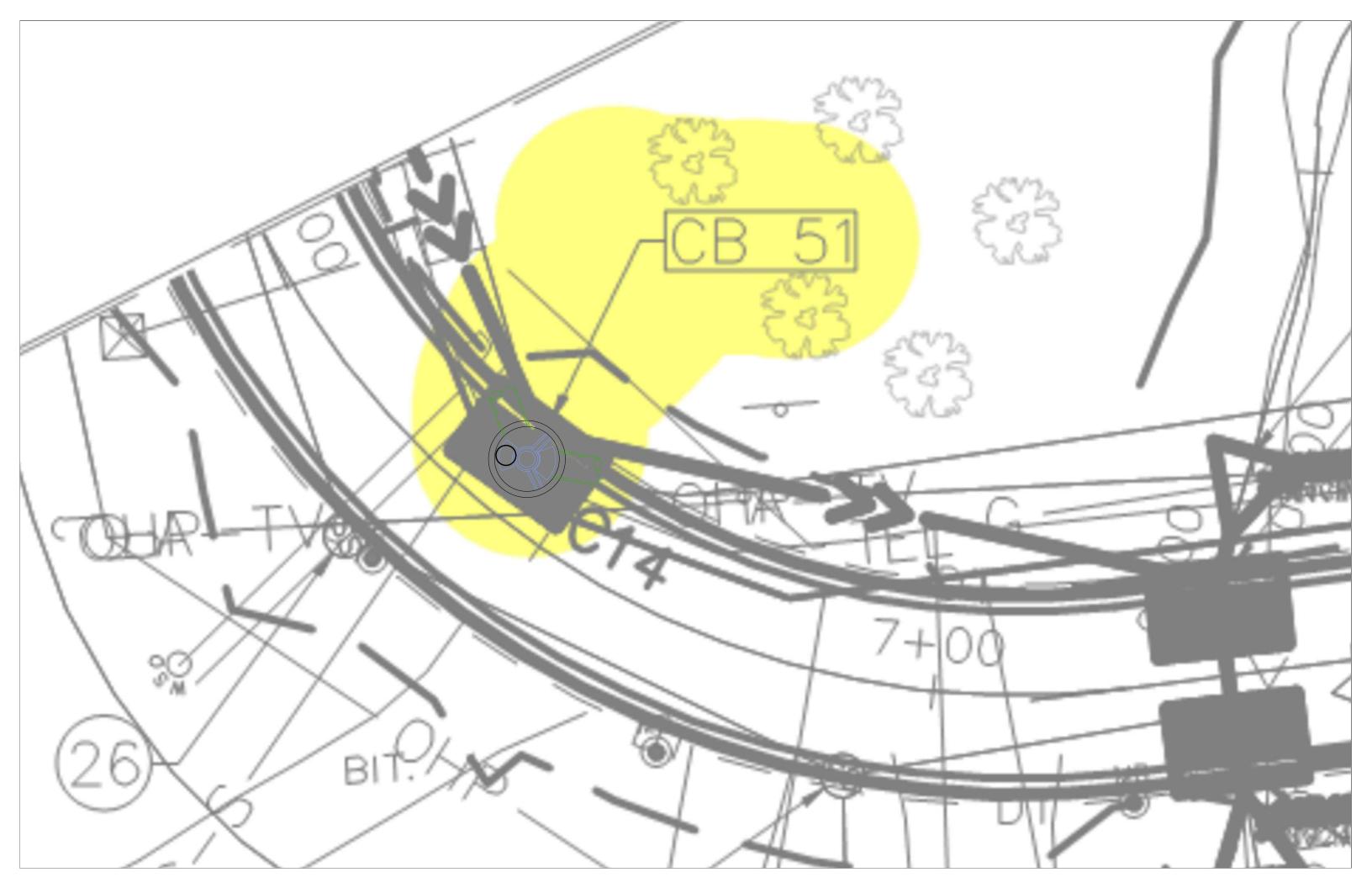
PLAN VIEW

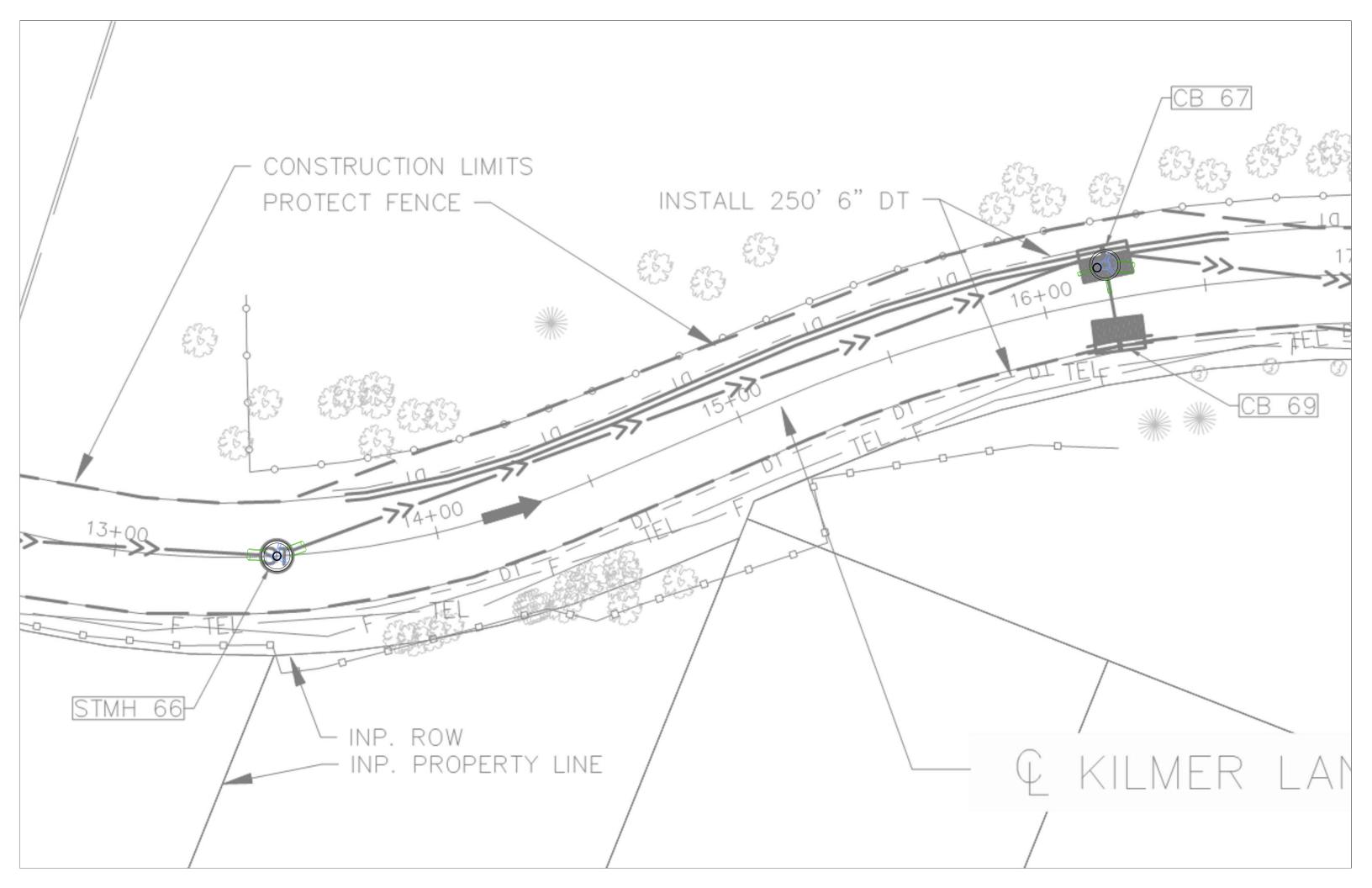
- CONDITIONS. FULL-SCALE INDEPENDENT LABORATORY SCOUR TESTING SHALL DEMONSTRATE EFFLUENT CONTROL OF LESS THAN OR EQUAL TO 5 MG/L FOR ALL FLOWS UP TO 200% OF MTFR-106.
- D. THE TREATMENT SYSTEM SHALL BE CAPABLE OF CAPTURING AND RETAINING FINE SILT AND SAND SIZE PARTICLES. ANALYSIS OF CAPTURED SEDIMENT FROM FULL-SCALE FIELD INSTALLATIONS SHALL DEMONSTRATE PARTICLE SIZES PREDOMINATELY IN THE 20-MICRON RANGE



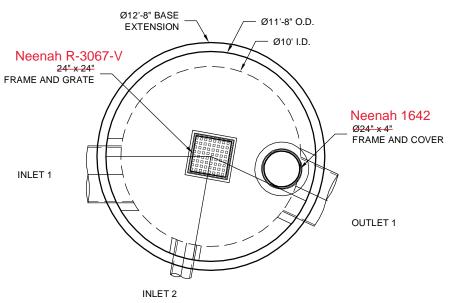
THE TREATMENT SYSTEM SHALL CONVEY THE PEAK ON-LINE FLOW RATES OF UP TO 50 CFS WITHOUT CAUSING UPSTREAM SURCHARGE

OF





Appendix C - Hydrodynamic Separator (Contech)



POSITION DEFLECTOR PAN OPEN SIDE OVER INLET TRAY CENTER OF CDS STRUCTURE SCREEN AND SUMP OPENING FIBERGLASS INLET, AND CYLINDER FLOW <u>-</u>0-6" OFFSET -

PLAN VIEW

• INTERNAL COMPONENTS TO BE INSTALLED BY CONTECH FIELD CONSULTANT ON SITE

SECTION A-A

MATERIAL LIST (PROVIDED BY CONTECH)

COUNT	DESCRIPTION	INSTALLED BY
1	FIBERGLASS INLET AND CYLINDER	CONTECH
1	2400 micron, 5.6' O.D. x 7.08' SEP. SCREEN	CONTECH
1	CYLINDER EXTENSION	CONTRACTOR
1	DEFLECTOR PAN	CONTRACTOR
1	SEALANT FOR JOINTS (BY PRECASTER)	CONTRACTOR
1	24" x 24" FRAME & GRATE, EJ#45624002, OR EQUIV.	CONTRACTOR
1	Ø 24" x 4" FRAME & COVER, EJ#41600389 , OR EQUIV.	CONTRACTOR

SITE DESIGN DATA

WATER QUALITY FLOW RATE	17.51 CFS
PEAK FLOW RATE	47 CFS
RETURN PERIOD OF PEAK FLOW	100 YRS

Neenah R-3067-V Neenah 1642

1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.

- 2. FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
- 3. CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
- 4. STRUCTURE SHALL MEET AASHTO HS-20 LOAD RATING, ASSUMING EARTH COVER OF 0' 2', AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 AND BE CAST WITH THE CONTECH LOGO.
- 5. IF REQUIRED, PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER
- REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.
- 6. CDS STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-478 AND AASHTO LOAD FACTOR DESIGN METHOD.

- A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
- B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE
- C. CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE
- D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET AND OUTLET PIPE(S). MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE CENTERLINES TO MATCH PIPE OPENING CENTERLINES.
- E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

STRUCTURE WEIGHT
APPROXIMATE HEAVIEST PICK = 37000 LBS. STRUCTURE IS DELIVERED IN 6 PIECES

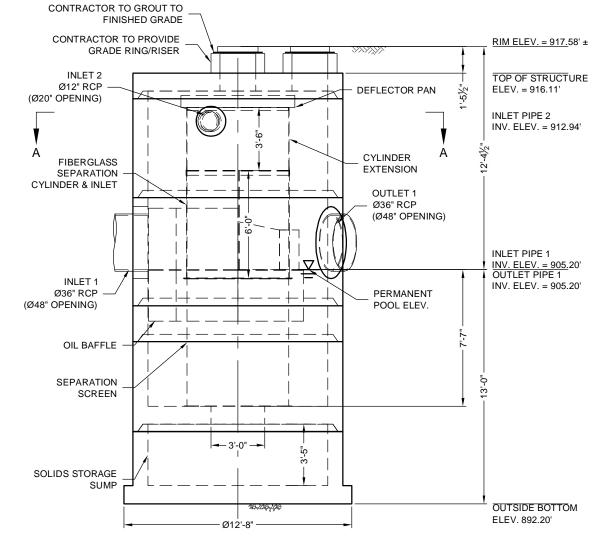
MAX FOOTPRINT = Ø12'-8"

CONTECH **PROPOSAL** DRAWING

CDS5668-10-C - 585878-20 KILMER PARK STREET RECONSTRUTION MINNEAPOLIS, MN for SYSTEM: CB67

04/08/18	SCALE: 3/16" = 1'-0"
DESIGNED: CMF	DRAWN: CMF
CHECKED: XXX	APPROVED:
PROJECT No.: 585878	SEQUENCE No.: 20
SHEET:	OF 1

LAYOUT 1A 5668-10-FGIS 5883 / 1041



ELEVATION VIEW