

PROJECT ID: SUPER 129839

COUNTY: DOUGLAS

# CITY OF SUPERIOR DEPARTMENT OF PUBLIC WORKS

## PLAN OF PROPOSED IMPROVEMENT

# FISHER & CLOUGH STORM SEWER

## SUPERIOR, WISCONSIN

SEH PROJECT NUMBER  
**SUPER 129839**

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**RECORD DRAWINGS  
UPDATED 03/2016**

**ENGINEER**  
PROJECT ENGINEER  
RESIDENT PROJECT REP.  
SURVEYOR  
GENERAL CONTRACTOR  
SUBCONTRACTORS

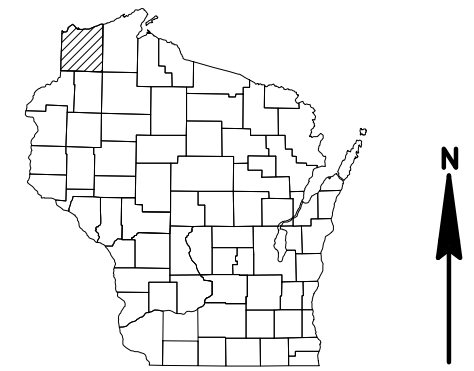
**SHORT ELLIOTT HENDRICKSON INC.**  
DAN HINZMANN  
JEROLD HALDORSON  
CONTRACTOR, KURTIS MARTIN SURVEY  
A-1 EXCAVATING, INC.

**AGC. & SEL. GRAN. BASE**  
BITUMINOUS  
EXCAVATING & GRADING  
EROSION CONTROL  
TURF ESTABLISHMENT  
UNDERGROUND UTILITIES  
(SANITARY, STORM)  
UNDERGROUND UTILITIES  
(WATER & GAS RELOCATES)  
CONCRETE CURB & WALKS  
TESTING-MATERIALS  
TESTING-UTILITIES  
TV INSPECTION-STORM  
YEAR OF CONSTRUCTION

**A-1 EXCAVATING, INC.**  
MONARCH PAVING  
A-1 EXCAVATING, INC.  
A-1 EXCAVATING, INC.  
A-1 EXCAVATING, INC.  
A-1 EXCAVATING, INC.

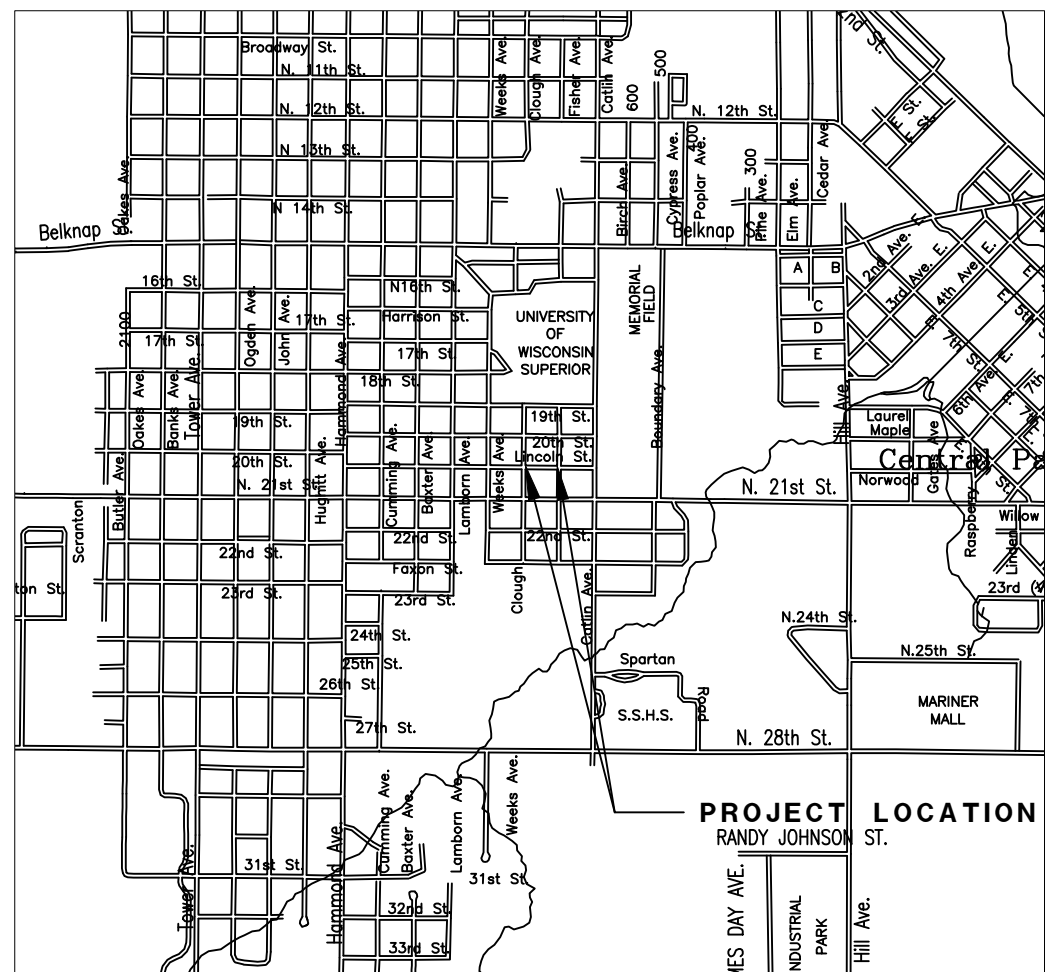
**SWLP, A-1 EXCAVATING**

**HOVLAND MASONRY**  
TWIN PORTS TESTING  
A-1, SEH, CITY-STORM  
FLOW RITE PIPE SERVICES, CITY  
2015 & 2016 (RESTORATION)



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LAYOUT  
SCALE 0 2000'  
TOTAL NET LENGTH OF CENTERLINE = 1356 FT

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, DOUGLAS COUNTY, NAD83 (YEAR), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ORIGINAL PLANS PREPARED BY:



CITY OF SUPERIOR  
DEPARTMENT OF PUBLIC WORKS

PREPARED BY  
Surveyor \_\_\_\_\_ BH \_\_\_\_\_  
Designer \_\_\_\_\_ SV \_\_\_\_\_  
Project Manager \_\_\_\_\_ DH \_\_\_\_\_

APPROVED FOR THE DEPARTMENT  
DATE: \_\_\_\_\_ (Signature)

**E**

STANDARD ABBREVIATIONS

ABUT	ABUTMENT	MIN	MINIMUM
AC	ACRE	mm	MILLIMETER
ADT	AVERAGE DAILY TRAFFIC	M/L	MATCH LINE
AEW	APRON ENDWALL	MV	MEDIUM VOLUME
AH	AHEAD	N	NORTH
APPRX	APPROXIMATELY	N	NORTH GROUND COORDINATE
ASPH	ASPHALTIC	NB	NORTHBOUND
AV	AVENUE	NO	NUMBER
BK	BACK	NOM	NOMINAL
BLDG	BUILDING	NOR	NORMAL
BLVD	BOULEVARD	OD	OUTSIDE DIAMETER
BM	BENCHMARK	OGBC	OPEN GRADED BASE COURSE
BR	BRIDGE	PAVT	PAVEMENT
C	CURVE	PC	POINT OF CURVATURE
CABC	CRUSHED AGGREGATE BASE COURSE	PCC	POINT OF COMPOUND CURVATURE
CB	CATCH BASIN	PCC	PORTLAND CEMENT CONCRETE
CC	CENTER-TO-CENTER	PCP	PIPE CATTLE PASS
CE	COMMERCIAL ENTRANCE	PE	PRIVATE ENTRANCE
C & G	CURB AND GUTTER	PI	POINT OF INTERSECTION
CL	CLASS	PK	PARKER-KALON NAIL
C/L	CENTERLINE	PL	PROPERTY LINE
CMP	CORRUGATED METAL PIPE	PLE	PERMANENT LIMITED EASEMENT
CO	COUNTY	POC	POINT ON CURVE
CONC	CONCRETE	POT	POINT ON TANGENT
CP	CULVERT PIPE	PRC	POINT OF REVERSE CURVATURE
CR	CREEK	PSD	PASSING SIGHT DISTANCE
CTH	COUNTY TRUNK HIGHWAY	PT	POINT
CWT	HUNDREDWEIGHT	PT	POINT OF TANGENT
CY	CUBIC YARD	PVC	POINT OF VERTICAL CURVATURE
D	DEGREE OF CURVE	PVC	POLYVINYL CHLORIDE
D	DIRECTIONAL DISTRIBUTION	PVI	POINT OF VERTICAL INTERSECTION
DG	DITCH GRADE	PVT	POINT OF VERTICAL TANGENT
DHV	DESIGN HOUR VOLUME	R	RADIUS
DIA	DIAMETER	R	RIVER
DR	DRIVEWAY	RCCP	REINFORCED CONCRETE CULVERT PIPE
E	EAST GROUND COORDINATE	RD	ROAD
E	EAST	RCPS	REINFORCED CONCRETE PIPE STORM SEWER
E	UNDER GROUND ELECTRIC	REQ'D	REQUIRED
EA	EACH	RES	RESIDENCE OR RESIDENTIAL
EB	EASTBOUND	RHF	RIGHT-HAND FORWARD
EBS	EXCAVATION BELOW SUBGRADE	RP	RADIUS POINT
ELEV	ELEVATION	RP	REFERENCE POINT
ESALS	EQUIVALENT SINGE AXLE LOADS	RR	RAILROAD
EW	ENDWALL	RT	RIGHT
EXIST	EXISTING	R/L	REFERENCE LINE
FE	FIELD ENTRANCE	R/W	RIGHT-OF-WAY
FERT	FERTILIZE	S	SOUTH
FF	FACE TO FACE	SAN	SANITARY SEWER
FL	FLAG LINE	SAN S	SANITARY SEWER SERVICE
F/L	FLOW LINE	SB	SOUTHBOUND
FO	FIBER OPTIC	SDD	STANDARD DETAIL DRAWINGS
FT	FEET	SF	SQUARE FEET
G	GAS	SHLDR	SHOULDER
GN	GRID NORTH	SQ	SQUARE
GRAV	GRAVEL	SS	STORM SEWER
GV	GATE VALVE	SSD	STOPPING SIGHT DISTANCE
ha	HECTARE	STA	STATION
HR	HANDICAP RAMP	STH	STATE TRUNK HIGHWAY
HV	HIGH VOLUME	SW	SIDEWALK
HYD	HYDRANT	SY	SQUARE YARD
ID	INSIDE DIAMETER	T	TANGENT
INL	INLET	T	TELEPHONE
INV	INVERT	T	TRUCKS
IP	IRON PIPE OR PIN	TC	TOP OF CURB
kg	KILOGRAM	TEMP	TEMPORARY
km	KILOMETER	TLE	TEMPORARY LIMITED EASEMENT
kPa	KILOPASCAL	TOC	TOP OF CASTING
L	LITER	TYP	TYPICAL
L	LENGTH OF CURVE	UG	UNDERGROUND CABLE
Lb	POUND	USH	UNITED STATES HIGHWAY
LC	LONG CHORD OF CURVE	V	DESIGN SPEED
LF	LINEAR FOOT	VAR	VARIABLE
LHE	LIMITED HIGHWAY EASEMENT	VC	VERTICAL CURVE
LHF	LEFT-HAND FORWARD	VP	VITRIFIED CLAY PIPE
LS	LUMP SUM	W	WEST
LT	LEFT	WB	WESTBOUND
LV	LOW VOLUME	WM	WATER MAIN
m	METER	WS	WATER SERVICE
m2	SQUARE METER	WV	WATER VALVE
m3	CUBIC METER	X	EAST GRID COORDINATE
MAX	MAXIMUM	Y	NORTH GRID COORDINATE
Mg	MEGAGRAM	YD	YARD
MH	MANHOLE		

GENERAL NOTES:

THE LOCATION OF EXISTING UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

CONTRACTOR TO VERIFY ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. ANY REQUIRED UTILITY WORK SHALL BE COORDINATED BY THE CONTRACTOR.

NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER OUTSIDE OF THOSE SPECIFIED IN THIS PLAN.

CURVE DATA IS BASED ON THE ARC DEFINITION.

A VERTICAL SAWCUT SHALL BE MADE THROUGH EXISTING DRIVEWAYS AND PAVEMENTS AT REMOVAL LIMITS.

ALL INLET STATION AND OFFSET NOTATIONS SHOWN REFER TO THE CENTER OF GRATE.

ALL STORM SEWER INVERTS, ELEVATIONS, PIPE LENGTHS AND GRADES ARE COMPUTED CENTER-TO-CENTER OF THE STRUCTURES.

ALL AREAS DISTURBED OUTSIDE OF THE PROJECT LIMITS SHALL BE RESTORED TO THE ORIGINAL CONDITION AT NO COST TO THE CITY. THIS SHALL INCLUDE AREAS DESIGNATED FOR STAGING. ANY REQUIRED SWEEPING OR DUST CONTROL SHALL BE AT NO COST TO THE CITY.

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D. THIS UTILITY QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASE 38-02. ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA."

REMOVAL OF ALL PIPE APRONS SHALL BE INCIDENTAL.

ADDITIONAL SURVEY MONUMENTATION MAY EXIST THAT IS NOT SHOWN ON THE PLAN. IF A MONUMENT IS ENCOUNTERED DURING THE PROJECT, THE CONTRACTOR SHALL PROTECT IN PLACE. IF THE MONUMENT CANNOT BE PROTECTED IN PLACE, THE CONTRACTOR SHALL NOTIFY THE ENGINEER TO LOCATE THE MONUMENT (USING SURVEY INSTRUMENTATION) PRIOR TO REMOVAL.

DESIGN CONTACT

SEH INC.  
418 WEST SUPERIOR ST  
SUITE 200  
DULUTH, MN 55802-1512  
TELEPHONE 218.279.3000  
ATTENTION: DAN HINZMANN  
EMAIL: DHINZMANN@SEHINC.COM

UTILITY CONTACTS

SUPERIOR WATER, LIGHT & POWER CO.  
2915 HILL AVENUE  
P.O. BOX 519  
SUPERIOR, WISCONSIN 54880  
TELEPHONE: 218.393.6391  
ATTENTION: JAMIE MEHLE  
EMAIL: JMEHLE@SWLP.COM

SUPERIOR WATER, LIGHT & POWER CO.  
2915 HILL AVENUE  
P.O. BOX 519  
SUPERIOR, WISCONSIN 54880  
TELEPHONE: 715.395.6315  
ATTENTION: KEVIN HABERMAN  
EMAIL: KHABERMAN@MNPPOWER.COM

CITY OF SUPERIOR  
PUBLIC WORKS  
SUPERIOR, WISCONSIN 54880  
TELEPHONE: 715.395.7334  
ATTENTION: TODD JANIGO  
EMAIL: JANIGOT@CI.SUPERIOR.WI.US

DIGGERS HOTLINE  
2040 WEST WISCONSIN AVENUE  
SUITE 10  
MILWAUKEE, WISCONSIN 53233  
TELEPHONE: 1.800.242.8511

CENTURYTEL SERVICE GROUP  
135 N. 21ST STREET  
SUPERIOR, WISCONSIN 54880  
ENGINEERING TELEPHONE: 715.392.0033  
ATTENTION: ARNOLD MILLER  
EMAIL: ARNOLD.MILLER@CENTURYTEL.COM



Know what's below.  
Call before you dig.

**RECORD DRAWINGS  
UPDATED 03/2016  
NO SHEET CHANGES**

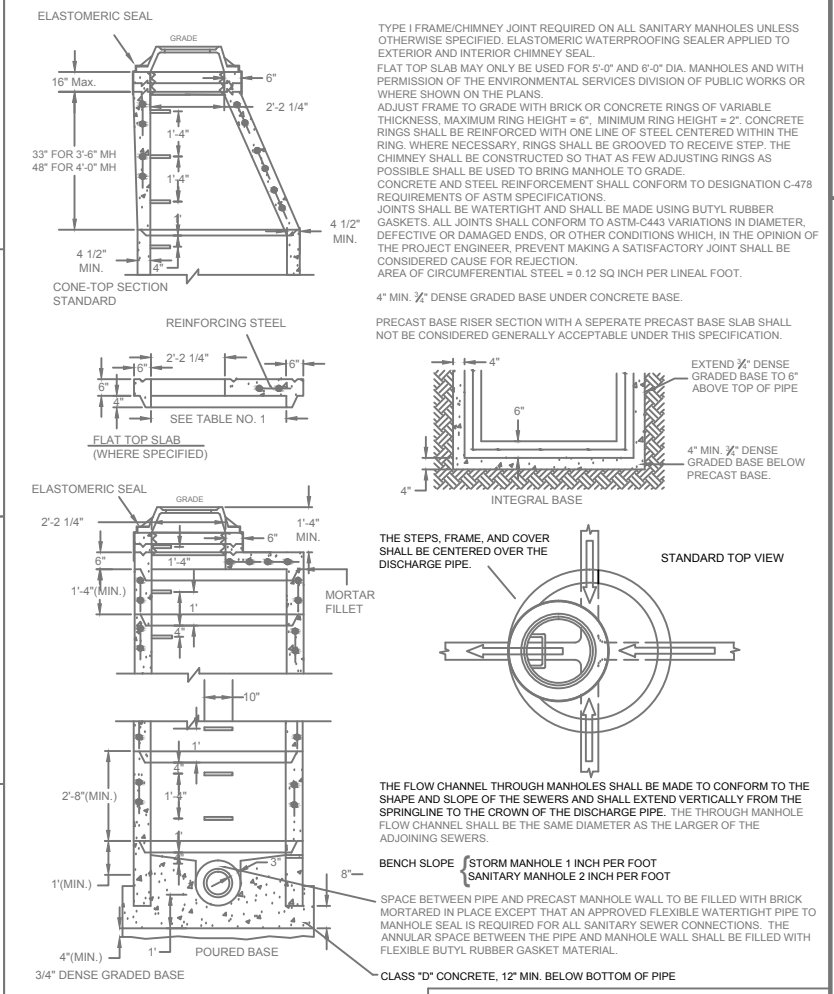
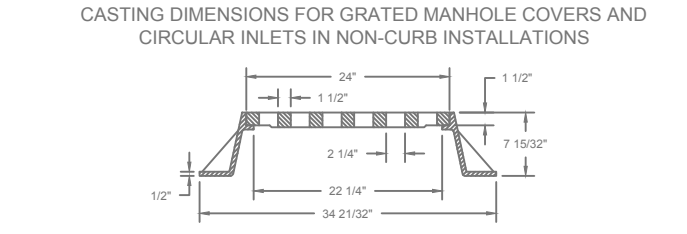
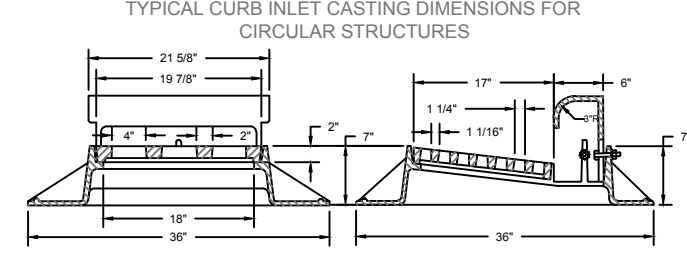
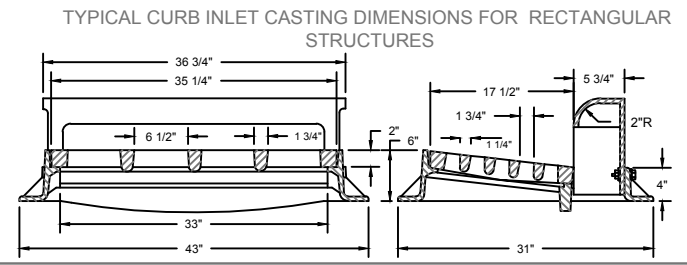
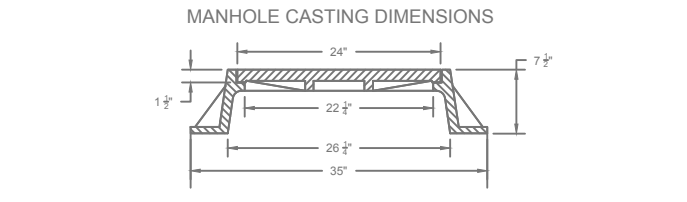
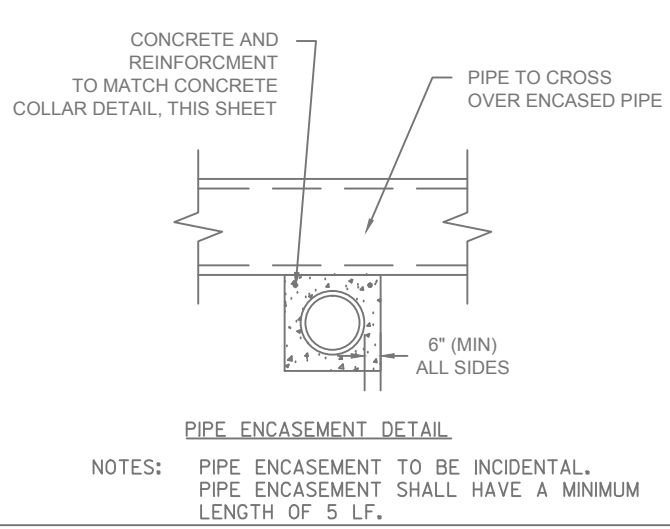
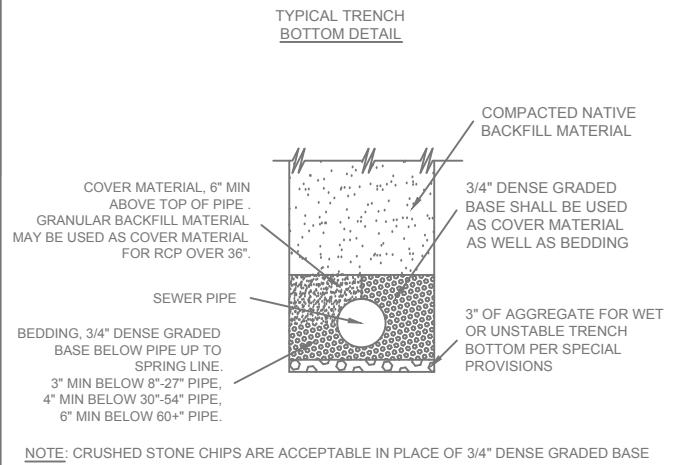
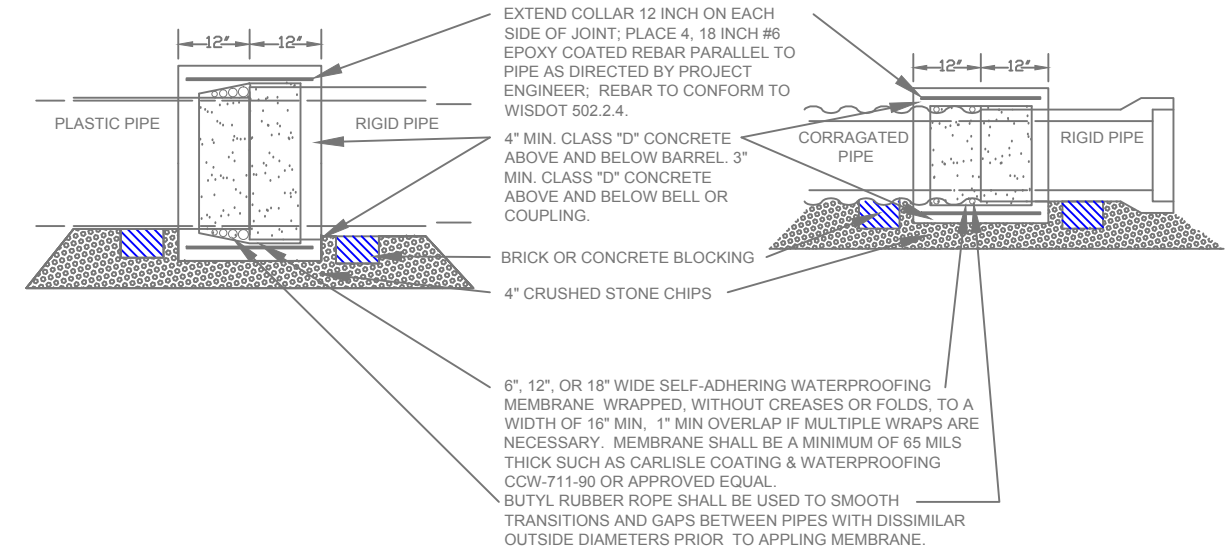
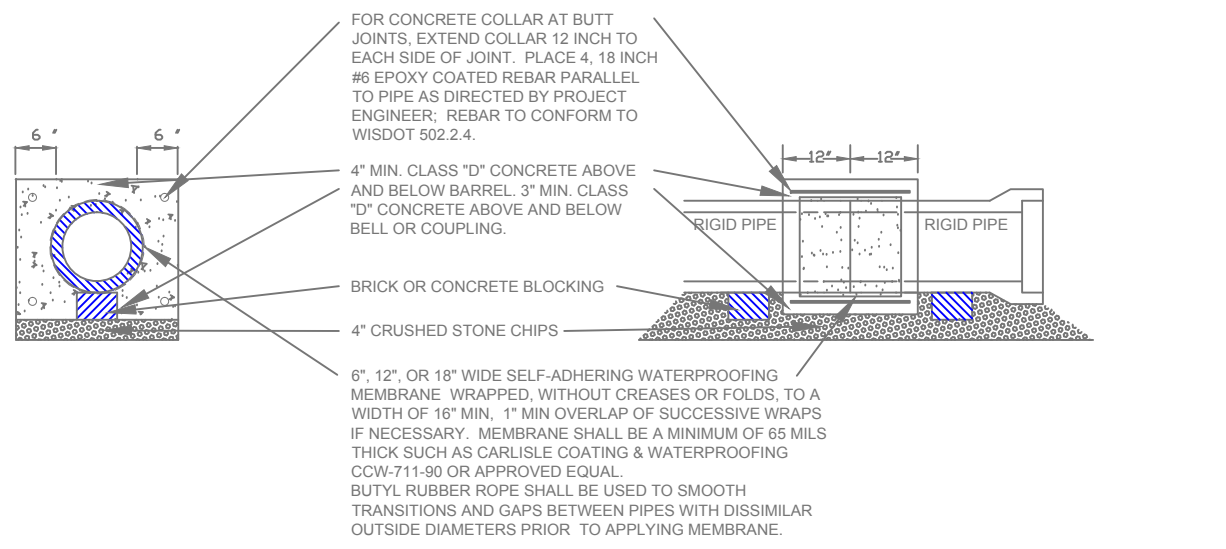


TABLE NO. 1

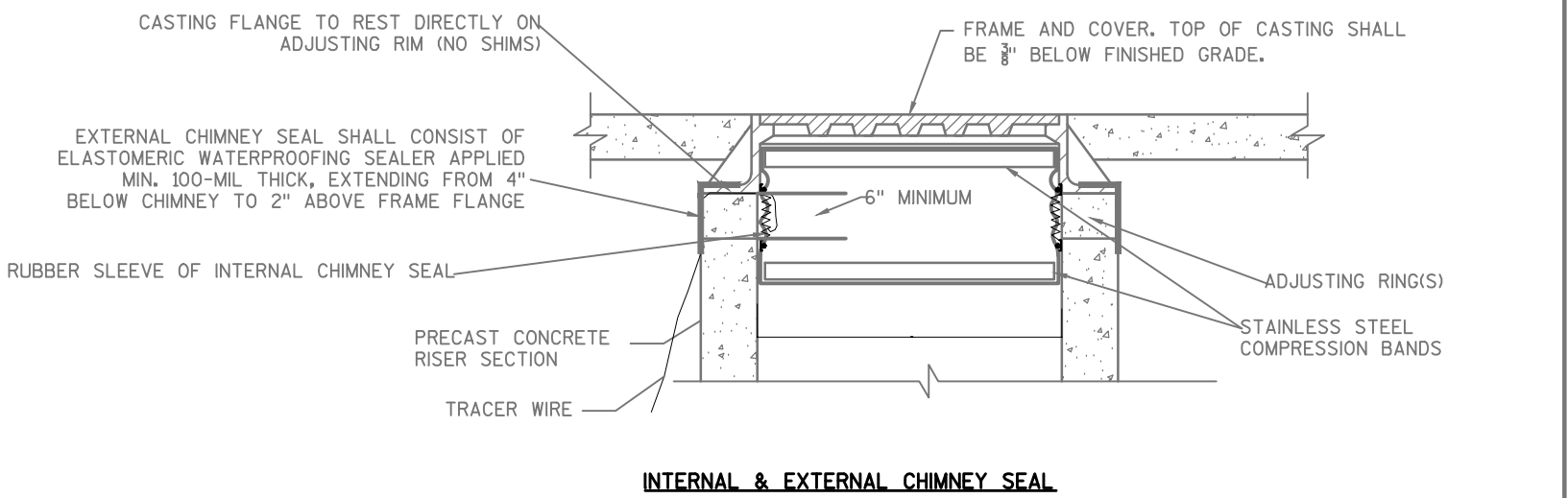
PIPE DIA	MANHOLE DIA	WALL THICKNESS
8" THRU 30"	4'-0"	5"
36"	5'-0"	6"
42"	6'-0"	7"

**CONCRETE COLLAR DETAIL**



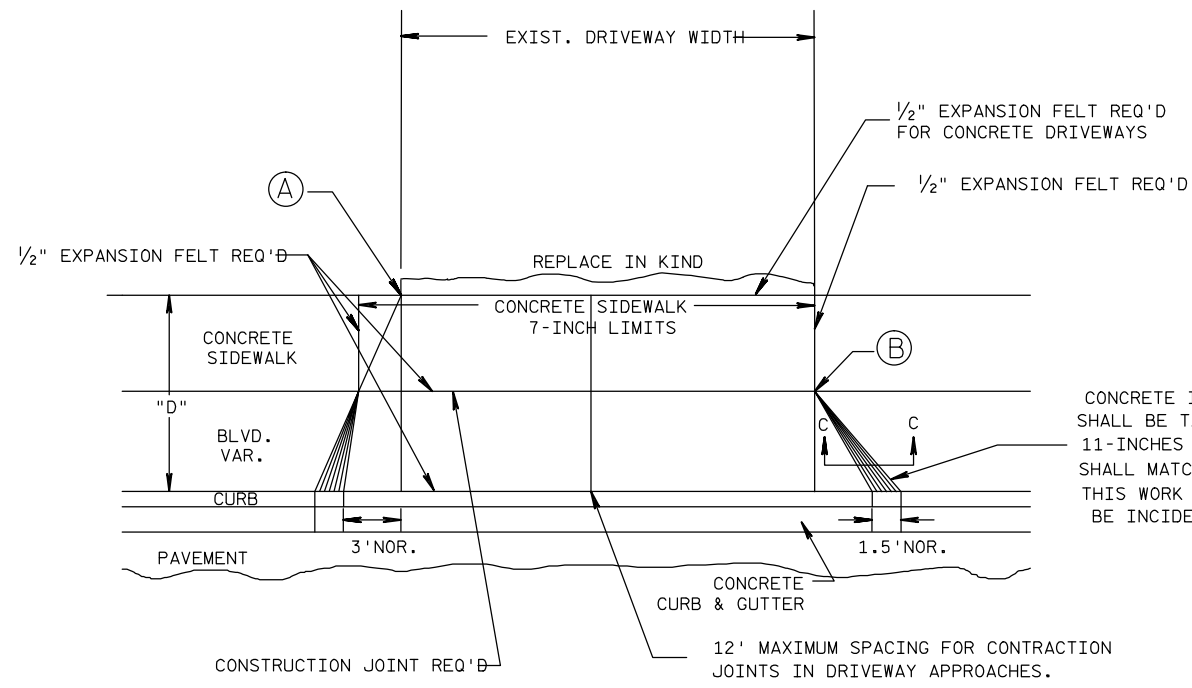
ALL MANHOLE CASTINGS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-48, CLASS NO. 30-B AND SHALL BE FREE FROM CRACKS, HOLES, SWELLS, AND COLD SHUTS.

COVERS SHALL BE "SELF-SEALING", "T-SEAL" OR "GASKET SEALED" COVERS WITH "SANITARY" OR "STORM" LABELS AS APPLICABLE, OR OTHER LABELS APPROVED AS EQUAL.



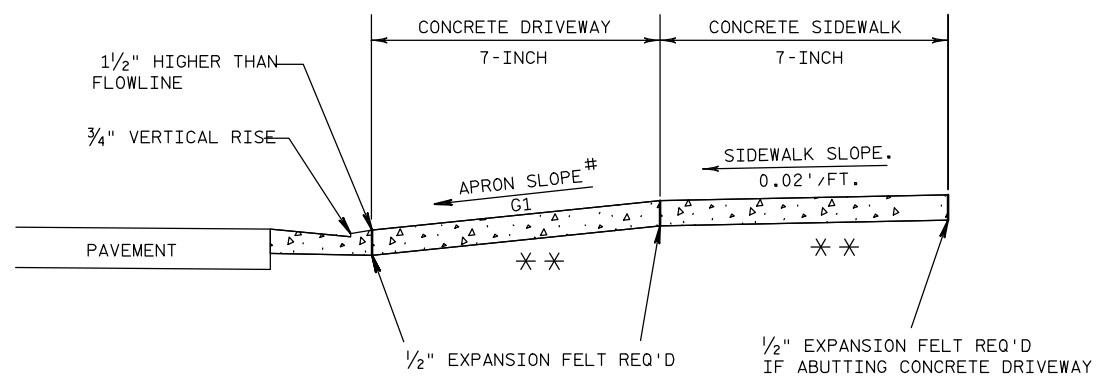
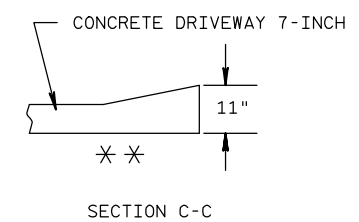
**RECORD DRAWINGS  
UPDATED 03/2016**

DRIVEWAY ENTRANCE DETAIL WITH SIDEWALK, CURB & GUTTER



PLAN VIEW

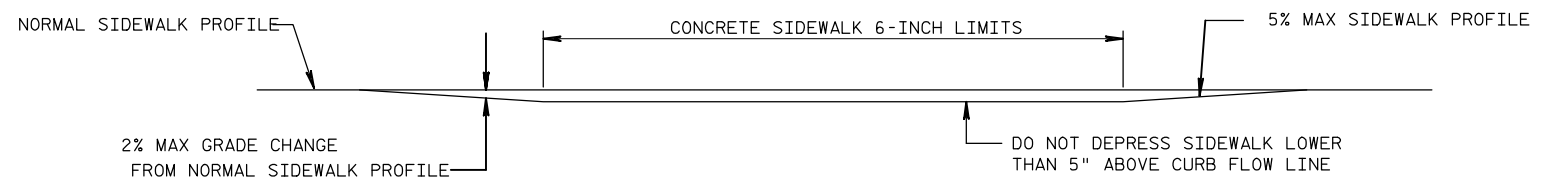
- (A) WHEN "D" IS 13' OR LESS, ALIGN TAPER WITH BACK OF SIDEWALK
- (B) WHEN "D" IS GREATER THAN 13', ALIGN TAPER WITH FRONT OF SIDEWALK



TYPICAL SIDEWALK SECTION

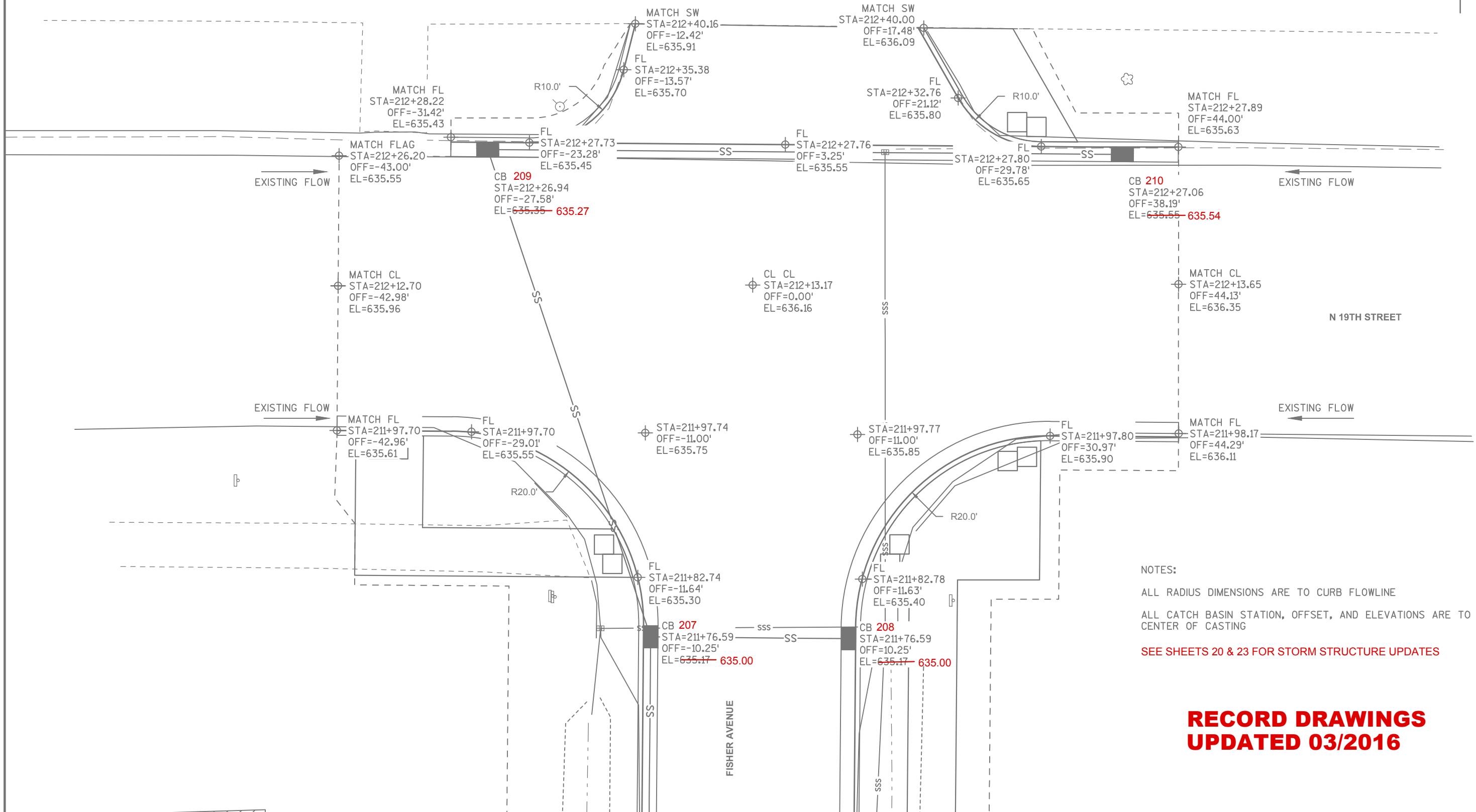
- ① - 7" CONCRETE DRIVEWAY OR H.E.S. CONCRETE DRIVEWAY
- ② - 6" BASE AGG. DENSE 1 1/4-INCH

CONCRETE IN THE 1.5' TAPER AREA SHALL BE TAPERED TO A DEPTH OF 11-INCHES AND THE EXPANSION FELT SHALL MATCH THIS DEPTH. THIS WORK AND MATERIAL WILL BE INCIDENTAL TO THE BID ITEM.



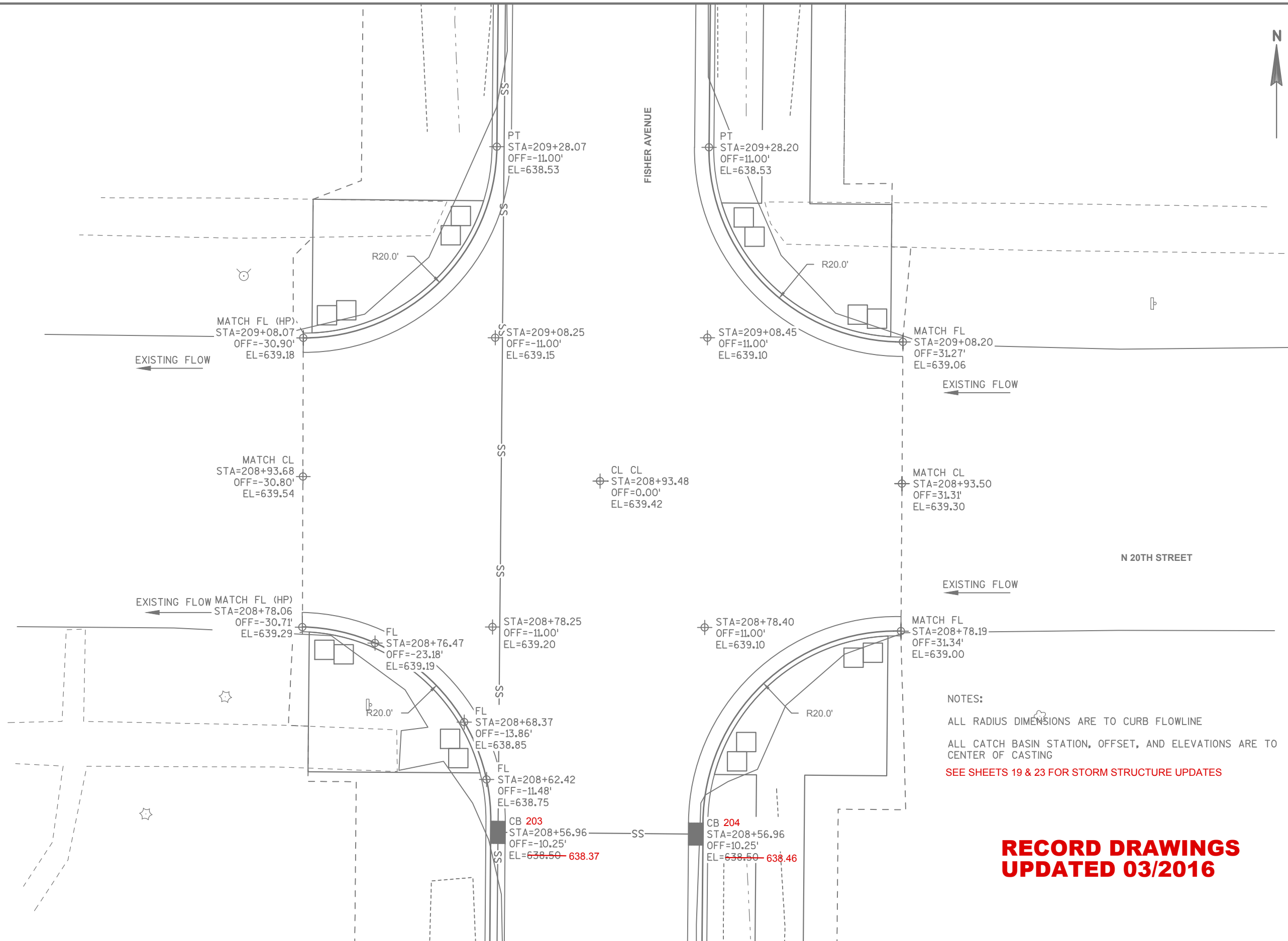
DEPRESSED SIDEWALK PROFILE DETAIL

**RECORD DRAWINGS  
UPDATED 03/2016  
NO SHEET CHANGES**

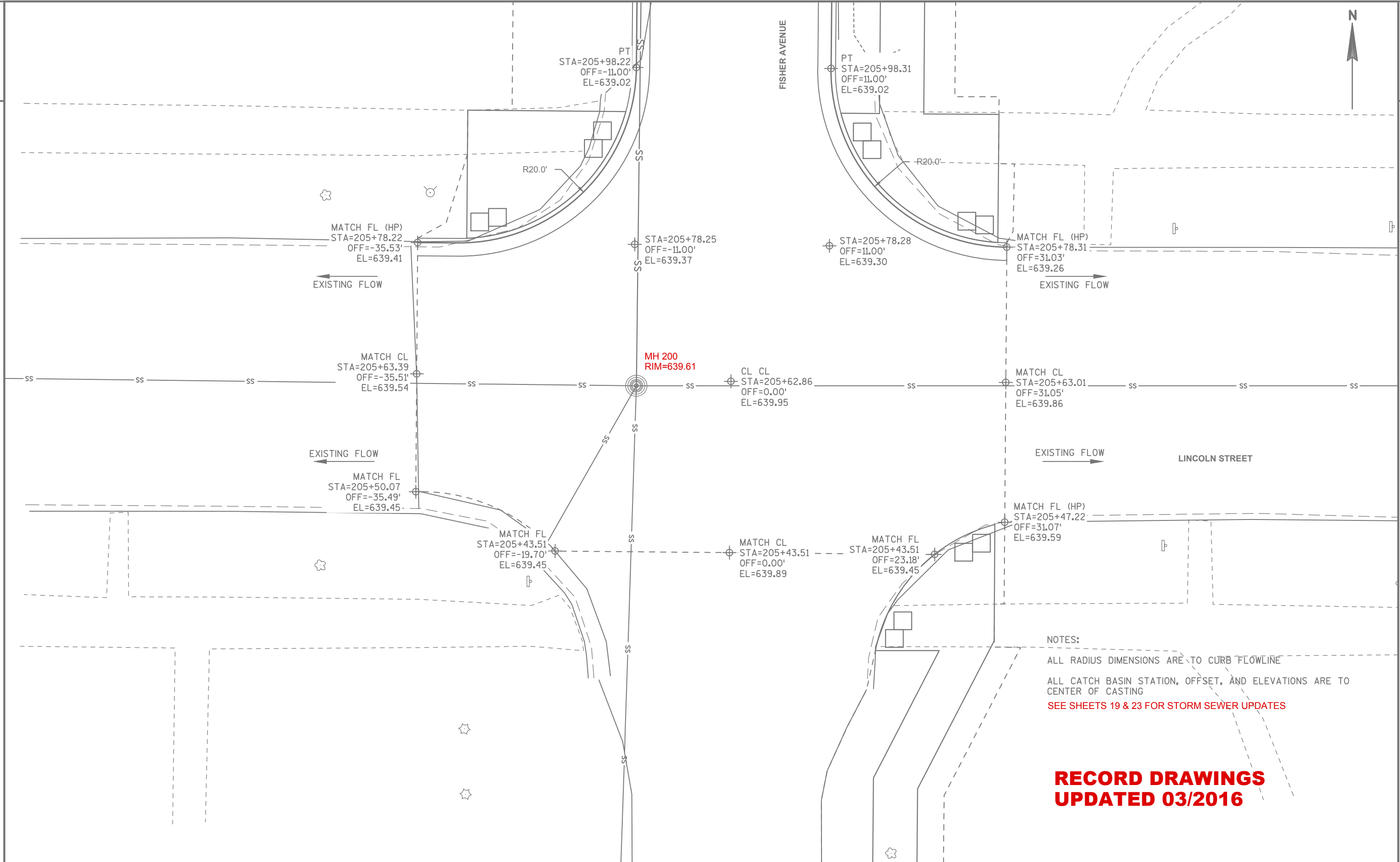


NOTES:  
 ALL RADIUS DIMENSIONS ARE TO CURB FLOWLINE  
 ALL CATCH BASIN STATION, OFFSET, AND ELEVATIONS ARE TO CENTER OF CASTING  
 SEE SHEETS 20 & 23 FOR STORM STRUCTURE UPDATES

**RECORD DRAWINGS  
 UPDATED 03/2016**

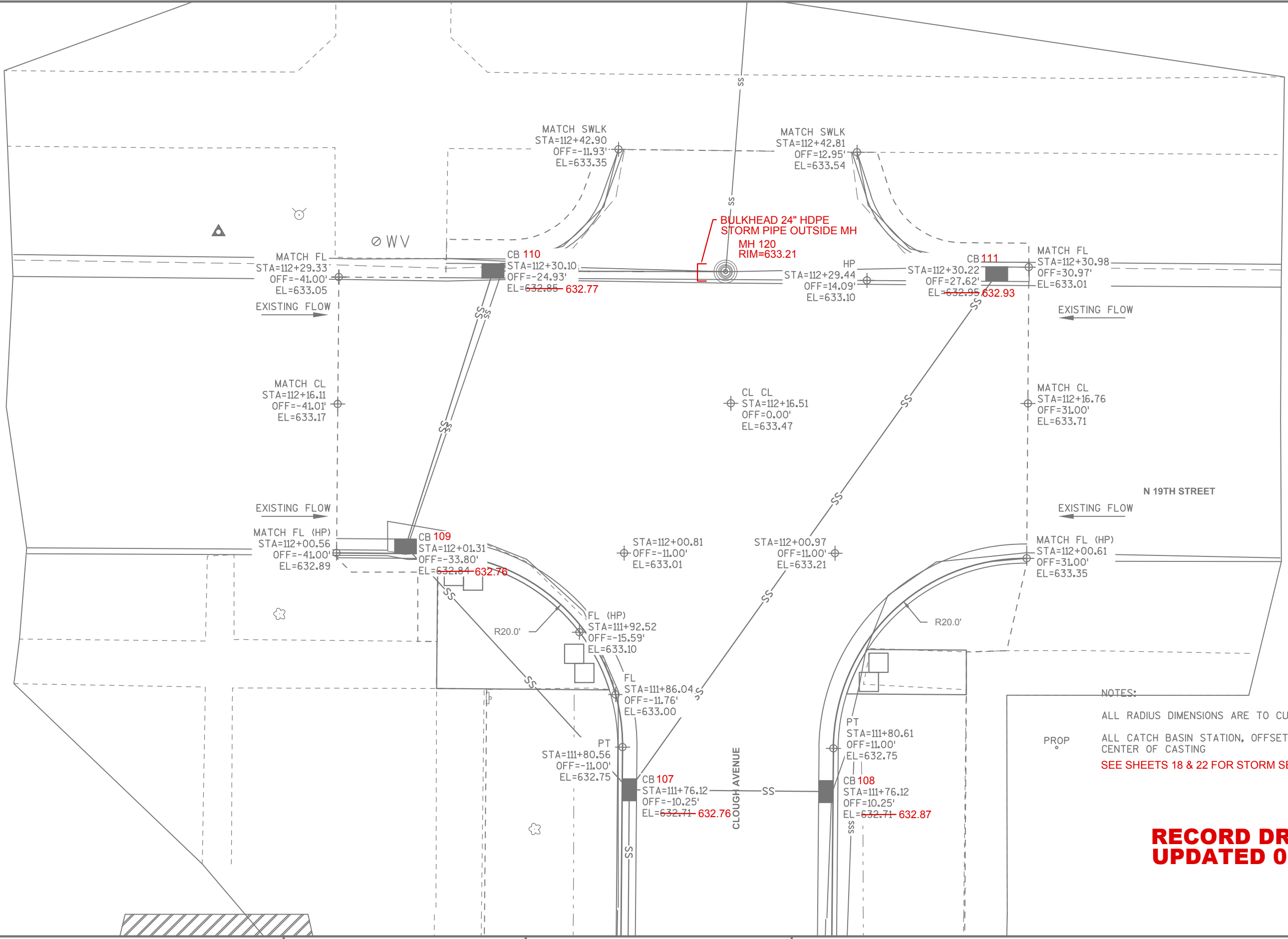


**RECORD DRAWINGS  
UPDATED 03/2016**



NOTES:  
 ALL RADIUS DIMENSIONS ARE TO CURB FLOWLINE  
 ALL CATCH BASIN STATION, OFFSET, AND ELEVATIONS ARE TO CENTER OF CASTING  
 SEE SHEETS 19 & 23 FOR STORM SEWER UPDATES

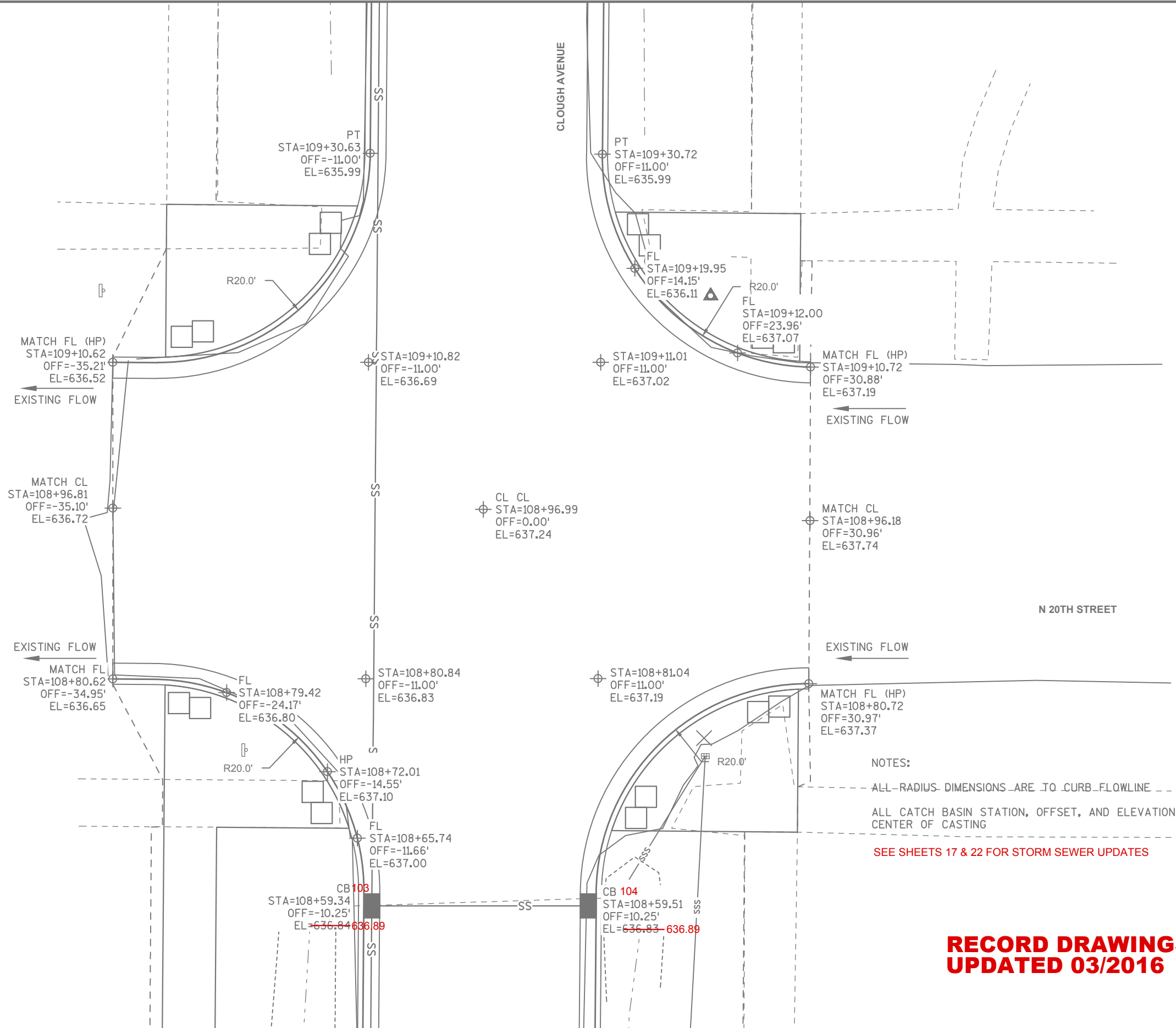
**RECORD DRAWINGS  
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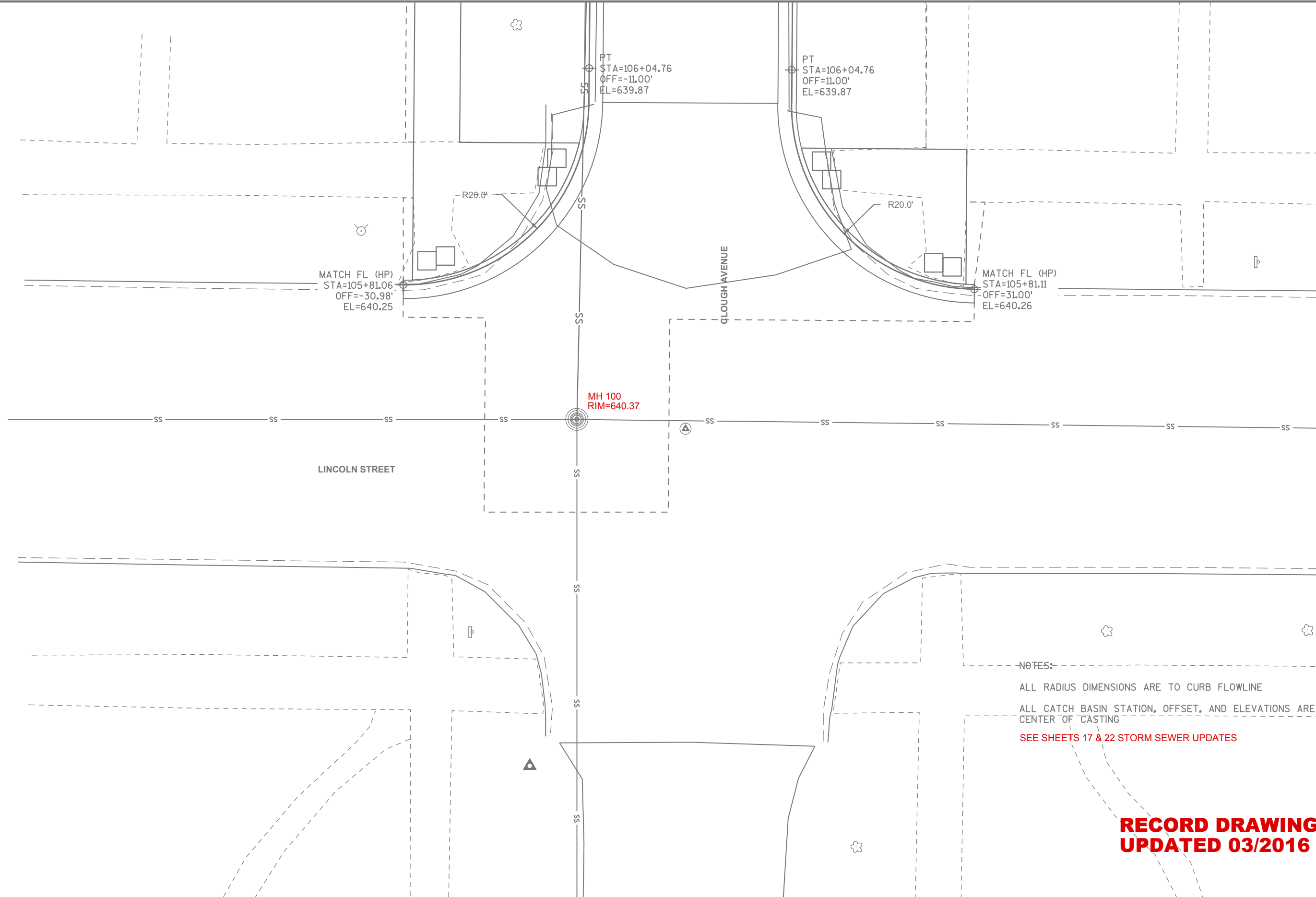
NOTES:  
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 ALL CATCH BASIN STATION, OFFSET, AND ELEVATIONS ARE TO CENTER OF CASTING  
 SEE SHEETS 18 & 22 FOR STORM SEWER UPDATES

**RECORD DRAWINGS  
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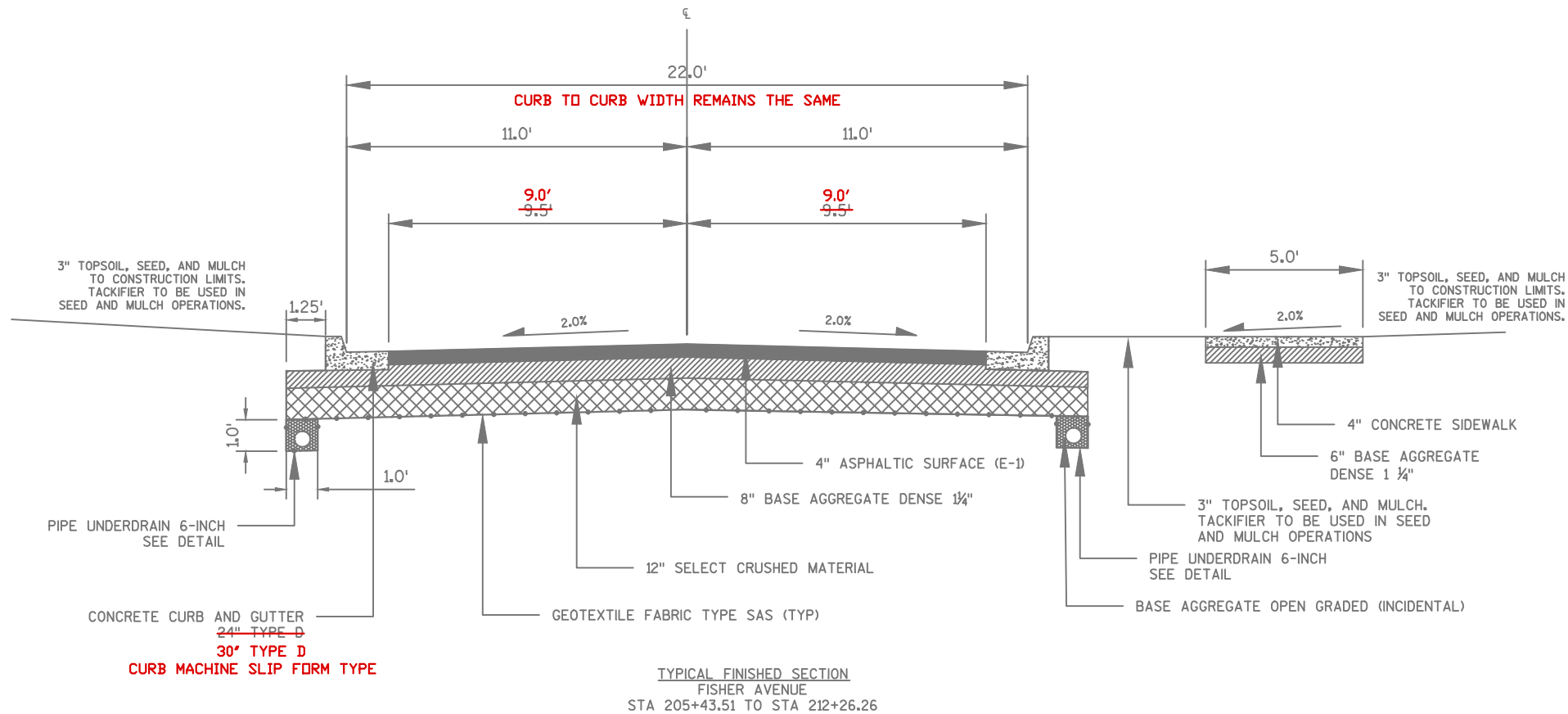
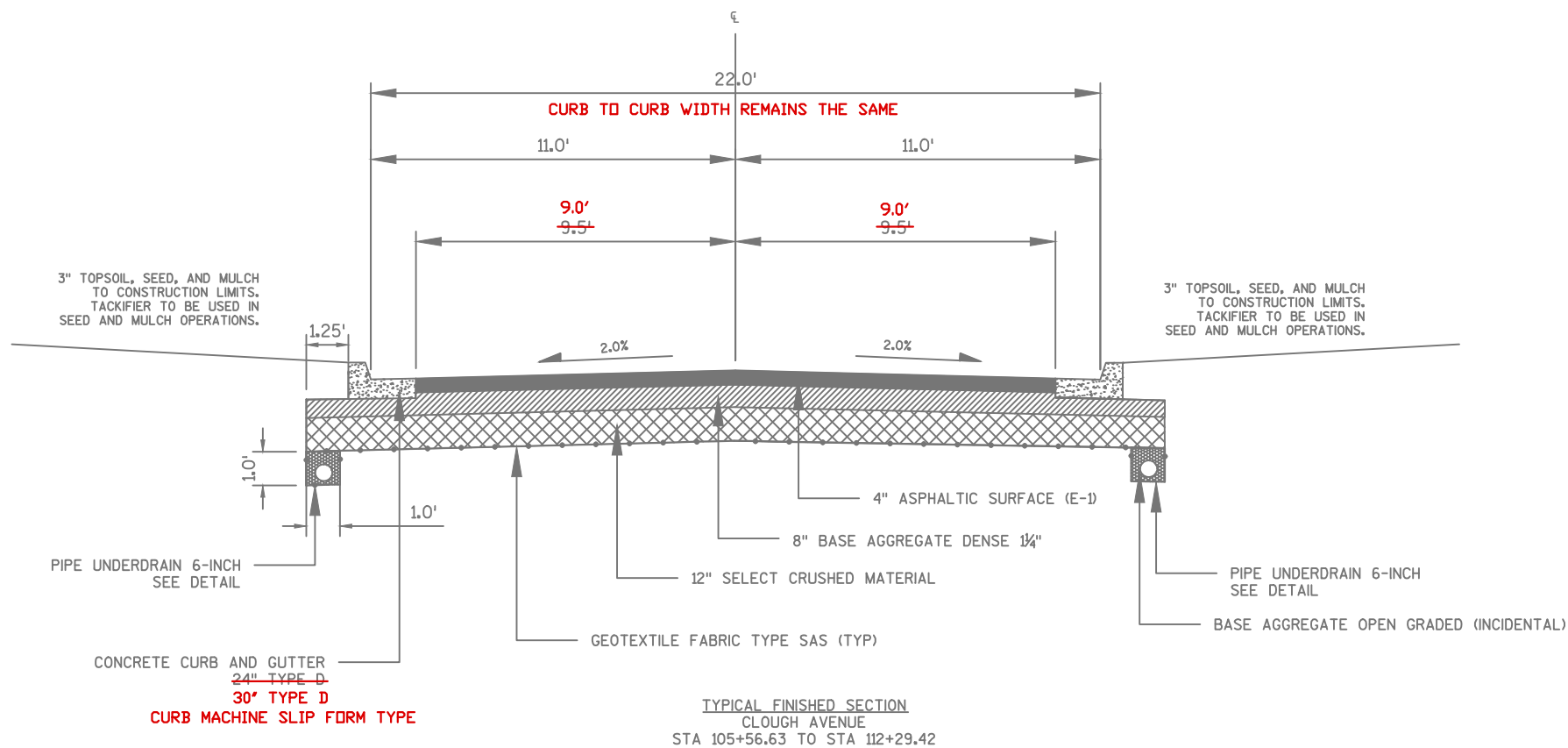


**RECORD DRAWINGS  
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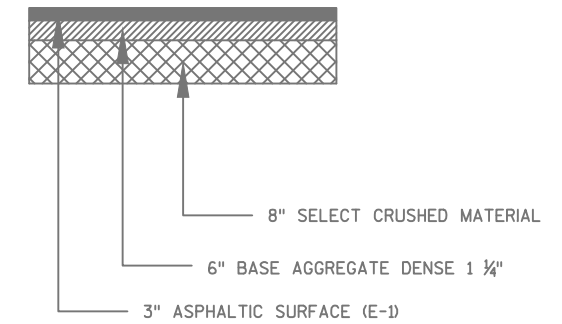


NOTES:  
 ALL RADIUS DIMENSIONS ARE TO CURB FLOWLINE  
 ALL CATCH BASIN STATION, OFFSET, AND ELEVATIONS ARE TO CENTER OF CASTING  
 SEE SHEETS 17 & 22 STORM SEWER UPDATES

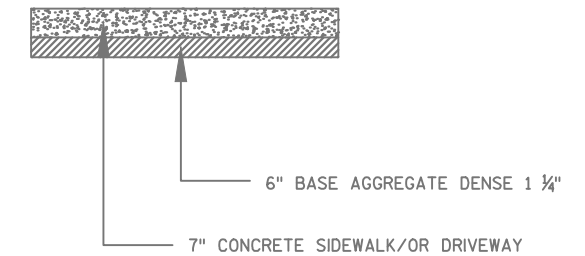
**RECORD DRAWINGS  
 UPDATED 03/2016**



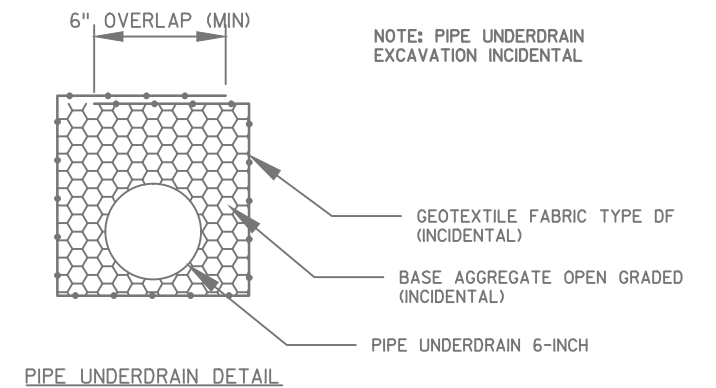
**BITUMINOUS DRIVEWAY AND ALLEY SECTION**



**7\"/>**



**RECORD DRAWINGS  
UPDATED 03/2016**



3

NOTES:	
1	QUANTITY INCLUDES ALL REMOVAL (I.E. CURB, PAVEMENT) VOLUMES
2	SHALL CONFORM TO REQUIREMENTS OF HMA PAVEMENT TYPE E-1 PG58-34
3	CALCULATED AT A RATE OF 120 LB PER SQUARE YARD-INCH
4	PAYMENT INCLUDES TACK COAT
5	PAYMENT INCLUDES BASE AGGREGATE OPEN GRADED
6	CONTRACTOR SHALL SUBMIT TRAFFIC CONTROL PLAN TO ENGINEER FOR APPROVAL
7	PAYMENT INCLUDES INTERNAL AND EXTERNAL CHIMNEY SEAL
8	QUANTITY ASSUMES PLASTIC STORM SEWER PIPE IS USED. NO ADJUSTMENT IN UNIT PRICE IF RIGID PIPE IS USED WHICH DOES NOT REQUIRE DEFLECTION TESTS.
9	SHALL BE PLACED BY METHOD B, TACKIFIER
10	TRACER WIRE INCIDENTAL
11	SEE DRAWINGS FOR CASTING DIMENSIONS
12	SUMP DEPTH SHALL BE 0' FOR ALL STORM STRUCTURES

**RECORD DRAWINGS  
UPDATED 03/2016**

3

STATEMENT OF ESTIMATED QUANTITIES				
NOTE	ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY
	201.0120	CLEARING	ID	110 <del>90</del>
	201.0220	GRUBBING	ID	110 <del>90</del>
	203.0100	REMOVING SMALL PIPE CULVERTS	EACH	16 <del>16</del>
	204.0100	REMOVING PAVEMENT	SY	424 <del>88</del>
	204.0110	REMOVING ASPHALTIC SURFACE	(P) SY	3,762 <del>3,762</del>
	204.0150	REMOVING CURB & GUTTER	(P) LF	467 <del>346</del>
	204.0155	REMOVING CONCRETE SIDEWALK	SY	493 <del>334</del>
	204.0210	REMOVING MANHOLES	EACH	4 <del>6</del>
	204.0215	REMOVING CATCH BASINS	EACH	8 <del>7</del>
1	205.0100	EXCAVATION COMMON	(P) CY	4,894 <del>4,894</del>
	208.0100	BORROW	CY	0 <del>50</del>
	305.0125	BASE AGGREGATE DENSE 1 1/4-INCH	(P) CY	1,453 <del>1,453</del>
	312.0115	SELECT CRUSHED MATERIAL	(P) CY	1,765 <del>1,765</del>
	416.0170	CONCRETE DRIVEWAY 7-INCH	SY	616 <del>774</del>
	416.0620	DRILLED DOWEL BARS	EACH	83 <del>100</del>
2,3,4	465.0105	ASPHALTIC SURFACE	TON	1,087 <del>964</del>
	601.0411.S	CONCRETE CURB & GUTTER <del>24-INCH</del> TYPE D <b>30-INCH</b>	LF	2,795 <del>2,695</del>
	602.0405	CONCRETE SIDEWALK 4-INCH	SF	13,050 <del>7,543</del>
	602.0515	CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA	SF	328 <del>352</del>
	604.0600.S.01	STORM SEWER PIPE 12-INCH <b>HDPE</b>	LF	332 <del>304</del>
	604.0600.S.02	STORM SEWER PIPE 24-INCH <b>HDPE</b>	LF	777 <del>777</del>
	604.0600.S.03	STORM SEWER PIPE 30-INCH <b>HDPE</b>	LF	588 <del>588</del>
	604.0600.S.04	STORM SEWER PIPE 48-INCH <b>RCP</b>	LF	33 <del>20</del>
7,11	611.0560	MANHOLE COVERS SPECIAL	EACH	3 <del>3</del>
7,11	611.0669	INLET COVERS TYPE SPECIAL	EACH	21 <del>21</del>
12	611.1004	CATCH BASINS 4-FT DIAMETER	EACH	5 <del>5</del>
12	611.1005	CATCH BASINS 5-FT DIAMETER	EACH	6 <del>6</del>
12	611.1230	CATCH BASINS 2X3-FT	EACH	10 <del>10</del>
	611.2005	MANHOLES 5-FT DIAMETER	EACH	1 <del>1</del>
	611.2008	MANHOLES 8-FT DIAMETER	EACH	2 <del>2</del>
7	611.8110.S	ADJUSTING MANHOLE COVERS	EACH	3 <del>3</del>
5	612.0106	PIPE UNDERDRAIN 6-INCH	LF	2,490 <del>2,712</del>
	619.1000	MOBILIZATION	EACH	1 <del>1</del>
	625.0105	TOPSOIL <b>TO BE COMPLETED IN SPRING 2016</b>	CY	0 <del>280</del>
9	627.0200	MULCHING <b>TO BE COMPLETED IN SPRING 2016</b>	SY	0 <del>3,333</del>
	628.7015	INLET PROTECTION TYPE C	EACH	28 <del>20</del>
	628.7560	TRACKING PADS	EACH	2 <del>2</del>
	630.0110	SEEDING MIXTURE NO. 10 <b>TO BE COMPLETED IN SPRING 2016</b>	LB	0 <del>45</del>
6	643.0100	TRAFFIC CONTROL (PROJECT)	EACH	1 <del>1</del>
	645.0140	GEOTEXTILE FABRIC TYPE SAS	(P) SY	5,033 <del>5,033</del>
	690.0150	SAWING ASPHALT	LF	635 <del>426</del>
	690.0250	SAWING CONCRETE	LF	221 <del>347</del>
7,11	SPV.0060.01	SANITARY SEWER CASTING	EACH	1 <del>1</del>
	SPV.0060.02	SANITARY MANHOLE, 48-INCH	EACH	1 <del>1</del>
	SPV.0060.03	CONNECT TO EXISTING SEWER, 8-INCH TO 12-INCH	EACH	5 <del>4</del>
	SPV.0060.04	CONNECT TO EXISTING SEWER, 15-INCH TO 24-INCH	EACH	1 <del>1</del>
	SPV.0060.05	CONNECT TO EXISTING SEWER, 48-INCH	EACH	4 <del>4</del>
	SPV.0060.06	BULKHEAD	EACH	9 <del>4</del>
	SPV.0060.07	SALVAGE AND REINSTALL SIGN	EACH	25 <del>16</del>
	SPV.0060.08	SALVAGE AND REINSTALL CATCH BASIN	EACH	1 <del>1</del>
	SPV.0090.01	REMOVE SEWER, 6-INCH TO 18-INCH	LF	394 <del>698</del>
	SPV.0090.02	REMOVE SEWER, 48-INCH	LF	24 <del>20</del>
10	SPV.0090.03	SANITARY SEWER MAIN 10-INCH	LF	4 <del>5</del>
<del>10</del>	<del>SPV.0090.04</del>	<del>SANITARY SEWER MAIN 12-INCH</del> <b>NOT IN BID TAB</b>	<del>LF</del>	<del>50</del>
	SPV.0090.05	SEWER FIELD QUALITY CONTROL - TELEVISIONING	LF	1,781 <del>1,744</del>
8	SPV.0090.06	SEWER FIELD QUALITY CONTROL - DEFLECTION TEST	LF	1,744 <del>1,744</del>
	SPV.0105.01	CONSTRUCTION STAKING	LUMP SUM	1 <del>1</del>

OTHER EXTRA WORK ITEMS - CHANGE ORDER 1 (SANITARY SEWER), CHANGE ORDER 2 (STORM SEWER), CHANGE ORDER 3 (ADDITIONAL SIDEWALK, FAXON REALIGNMENT), AND LIQUIDATED DAMAGES

**SUMMARY/OVERVIEW:**

THIS SITE-SPECIFIC EROSION CONTROL PLAN HAS BEEN DEVELOPED TO ADDRESS THE REQUIREMENTS OF THE GENERAL PERMIT TO DISCHARGE UNDER THE WISCONSIN POLLUTANT DISCHARGE ELIMINATION SYSTEM (WPDES) PERMIT NO. WI-S067831-4.

**PROJECT INFORMATION:**

LOCATION:	FISHER AVENUE & CLOUGH AVENUE SPANNING FROM LINCOLN STREET TO NORTH 19TH STREET
LONGITUDE/LATITUDE:	46.7152140, -92.0897800
PROJECT DESCRIPTION:	STREET AND STORM SEWER RECONSTRUCTION
LAND DISTURBING ACTIVITIES:	EXCAVATION AND GRADING

**CONTACTS:**

OWNER:	CITY OF SUPERIOR
CONTACT:	STEVE ROBERTS
ADDRESS:	51 EAST FIRST STREET
PHONE:	(715) 394-0392
EMAIL:	ROBERTSS@CI.SUPERIOR.WI.US

ENGINEER:	SHORT ELLIOTT HENDRICKSON INC. (SEH)
CONTACT:	DAN HINZMANN, PE
PHONE:	(218) 279-3010
EMAIL:	DHINZMANN@SEHINC.COM
PROJECT NO.	SUPER 129839

**PROJECT SUMMARY:**

TOTAL PROJECT AREA:	1.97 AC
TOTAL DISTURBED AREA:	1.97 AC

**IMPLEMENTATION:**

EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE CONSTRUCTED OR INSTALLED BEFORE LAND DISTURBING CONSTRUCTION ACTIVITIES BEGIN AND IN ACCORDANCE WITH THE PLAN DEVELOPED.

EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE MAINTAINED UNTIL FINAL STABILIZATION.

FINAL STABILIZATION ACTIVITY SHALL COMMENCE WHEN LAND DISTURBING ACTIVITIES CEASE AND FINAL GRADE HAS BEEN REACHED ON ANY PORTION OF THE SITE.

TEMPORARY STABILIZATION ACTIVITIES SHALL COMMENCE WHEN LAND DISTURBING CONSTRUCTION ACTIVITIES HAVE TEMPORARILY CEASED AND WILL NOT RESUME FOR A PERIOD EXCEEDING 14 CALENDAR DAYS.

BMPS THAT ARE NO LONGER NECESSARY FOR EROSION AND SEDIMENT CONTROL SHALL BE REMOVED BY THE RESPONSIBLE PARTY.

**IMPLEMENTATION SEQUENCE:**

1.	INSTALL ROCK CONSTRUCTION ENTRANCE(S)
2.	INSTALL PERIMETER CONTROL AND STABILIZE DOWN GRADIENT BOUNDARIES
3.	COMPLETE SITE GRADING
4.	INSTALL UTILITIES, STORM SEWER, INLET PROTECTION, CURB & GUTTER, PAVING
5.	COMPLETE FINAL GRADING AND STABILIZE DISTURBED SOILS
6.	REMOVE ANY ACCUMULATED SEDIMENT AND TEMPORARY BMPS

**COMPLIANCE WITH OTHER APPLICABLE REGULATIONS:**

(DOCUMENTATION OF OTHER APPLICABLE MUNICIPAL REGULATORY PROVISIONS, COMPLIANCE WITH WHICH WILL ALSO MEET THE REQUIREMENTS OF THIS PERMIT.)

TYPE OF PERMIT/REVIEW	REQUIRED ACTIONS/HOW COMPLIANCE WILL BE ACHIEVED:
N/A	N/A

**SITE SOIL INFORMATION:**

(SITE SOIL INFORMATION PROVIDED IS FOR WPDES PERMIT INFORMATION ONLY. SOIL INFORMATION WAS OBTAINED FROM THE USGS WEB SOIL SURVEY. THE CONTRACTOR SHALL NOT RELY ON THIS SOIL INFORMATION FOR CONSTRUCTION PURPOSES.)

SOIL NAME:	HYDROLOGIC CLASSIFICATION:
AMNICON-CUTTRE COMPLEX	D

**RECEIVING WATERS:**

ID	NAME	TYPE	IMPAIRMENTS	TMDL
2751220	SUPERIOR	LAKE	ASNRI ENDANGERED THREATENED OR SPECIAL CONCERN AREA, CONTAMINATED FISH TISSUE	NO
2843800	ST. LOUIS	RIVER	CONTAMINATED FISH TISSUE, CHRONIC AQUATIC TOXICITY, CONTAMINATED SEDIMENT	IN TMDL DEVELOPMENT STAGE
2843700	FAXON	CREEK	NONE	NO

POLLUTANTS OF CONCERN ARE NOT RELATED TO CONSTRUCTION ACTIVITIES.

CONSTRUCTION SITE PHASING AND SILT FENCE (WDNR TECHNICAL STANDARD 1056), AT A MINIMUM, WILL BE USED TO REDUCE WITH THE GOAL OF ELIMINATING, THE STORMWATER DISCHARGE OF POLLUTANT(S) TO WATER BODIES.

DOES THE PROJECT DISCHARGE TO AN ORW OR ERW?	NO
--	----

DOES THE PROJECT DISCHARGE TO A FISH AND AQUATIC LIFE WATER?	NO
--	----

**INSPECTIONS AND MAINTENANCE:**

ALL INSPECTIONS, MAINTENANCE, REPAIRS, REPLACEMENTS, AND REMOVAL OF EROSION AND SEDIMENT CONTROLS ARE TO BE CONSIDERED INCIDENTAL TO THE BMP BID ITEMS.

EROSION AND SEDIMENT CONTROLS SHALL BE INSPECTED WEEKLY BY THE CONTRACTOR AND WITHIN 24 HOURS AFTER A RAINFALL EVENT OF 0.5 INCHES OR GREATER.

REPAIR OR REPLACEMENT OF EROSION AND SEDIMENT CONTROLS AS NECESSARY WILL OCCUR WITHIN 24 HOURS OF AN INSPECTION OR NOTIFICATION INDICATING THAT THAT REPAIR OR REPLACEMENT IS NEEDED.

INSPECTIONS SHALL BE DOCUMENTED AND DOCUMENTATION SHALL INCLUDE:

- <sup>4</sup>/<sub>64</sub> THE DATE, TIME AND EXACT LOCATION OF THE INSPECTION
- <sup>4</sup>/<sub>64</sub> THE NAME OF THE INDIVIDUAL WHO PERFORMED THE INSPECTION
- <sup>4</sup>/<sub>64</sub> AN ASSESSMENT OF THE CONDITION OF EROSION AND SEDIMENT CONTROLS
- <sup>4</sup>/<sub>64</sub> A DESCRIPTION OF ANY EROSION AND SEDIMENT CONTROL INSTALLATION OR MAINTENANCE PERFORMED IN RESPONSE TO THE INSPECTION
- <sup>4</sup>/<sub>64</sub> A DESCRIPTION OF THE PRESENT PHASE OF THE CONSTRUCTION AT THE SITE

**EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES:**

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL THE EROSION AND SEDIMENT CONTROL MEASURES IN CONFORMANCE WITH THE WDNR TECHNICAL STANDARDS. WDNR TECHNICAL STANDARDS SHALL BE REVIEWED AND FOLLOWED FOR EROSION AND SEDIMENT CONTROL MEASURES SUCH AS DUST CONTROL (WDNR TECHNICAL STANDARD 1068), MULCHING (WDNR TECHNICAL STANDARD 1058), OR OTHER STANDARD PRACTICES AS NEEDED.

STONE TRACKING PADS SHALL BE THE FULL WIDTH OF THE EGRESS POINT, A MINIMUM OF 50-FEET LONG AND 12-INCH DEPTH (3"-6" CLEAR STONE). STONE TRACKING PADS SHALL BE PLACED IN LOCATIONS AS REQUIRED BY CONTRACTOR ACCESS NEEDS AND STAGING OR AS DIRECTED BY ENGINEER. WDNR TECHNICAL STANDARD 1057 SHALL BE FOLLOWED FOR THE MAINTENANCE OF THE STONE TRACKING PADS.

DISTURBED SOILS SHALL BE STABILIZED IMMEDIATELY AFTER FINAL GRADING IS COMPLETE. ANY DISTURBED SOIL NOT ANTICIPATED TO BE REMOVED OR GRADED WITHIN 7 DAYS SHALL BE TEMPORARY SEEDED OR OTHERWISE PROTECTED.

EXISTING VEGETATION SHALL BE PRESERVED WHERE ATTAINABLE AND DISTURBED PORTIONS OF THE CONSTRUCTION SITE SHALL BE STABILIZED FOLLOWING COMPLETION OF ANY SEQUENCE.

EROSION AND SEDIMENT CONTROL MEASURES SHALL BE USED TO PREVENT OR REDUCE ALL OF DISCHARGE OF SEDIMENT FROM DRAINAGE WAYS THAT FLOW OFF SITE AND SEDIMENT FROM EROSION FLOWS AT OUTLETS AND IN DOWNSTREAM CHANNELS.

EROSION AND SEDIMENT CONTROL MEASURES SHALL BE USED AT ALL DOWNSLOPE DRAINAGE INLETS.

EROSION AND SEDIMENT CONTROL MEASURES SHALL BE USED TO MANAGE ALL OVERLAND FLOW AT ALL AREAS OF THE CONSTRUCTION SITE, UNLESS OTHERWISE CONTROLLED BY OUTFALL CONTROLS.

RAPID STABILIZATION AND EROSION AND SEDIMENT CONTROL MEASURES SHALL BE USED TO LIMIT RUNOFF AND THE DISCHARGE OR POLLUTANTS FROM THE CONSTRUCTION SITE.

ALL OFFSITE SEDIMENT DEPOSITS OCCURRING AS A RESULT OF CONSTRUCTION WORK OR A STORM EVENT SHALL BE CLEANED UP BY THE END OF EACH DAY. FLUSHING SHALL NOT BE ALLOWED.

ANY SOIL EROSION THAT OCCURS AFTER FINAL GRADING AND/OR THE APPLICATION OF STABILIZED MEASURES MUST BE REPAIRED AND THE WORK REDONE.

ALL TEMPORARY EROSION CONTROL INSTALLATIONS SHALL BE MAINTAINED UNTIL THE SITE IS STABILIZED WITH 70% VEGETATION AND A NOTICE OF TERMINATION HAS BEEN APPROVED BY THE WDNR. CONTRACTOR SHALL BE RESPONSIBLE FOR EROSION CONTROL MEASURES UNTIL FINAL SITE STABILIZATION.

WIND EROSIONS SHALL BE KEPT TO A MINIMUM DURING CONSTRUCTION. WATERING, MULCH, OR A TACKING AGENT MAY NEED TO BE UTILIZED TO PROTECT NEARBY RESIDENCES/WATER RESOURCES.

CONTRACTOR SHALL REMOVE TEMPORARY EROSION CONTROL BMPS UPON PROJECT ACCEPTANCE AND ESTABLISHED (70% MIN) TURF.

CONTRACTOR SHALL COORDINATE WITH ENGINEER ON TEMPORARY STOCKPILE LOCATIONS. IF STOCKPILE IS TO REMAIN IN PLACE FOR MORE THAN 7 DAYS EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE USED TO PREVENT OR REDUCE THE DISCHARGE OF SEDIMENT.

FOR DORMANT SEEDING (NOV. 1 TO MAY 15), SEED WITH SPECIFIED MIX AT A RATE OF 150% IF WHAT IS SPECIFIED. ALL AREAS SEEDED IN LATE FALL/WINTER SHALL BE RE-SEEDED AFTER THE THREAT OF FROST IN THE SPRING PASSES.

**POLLUTION PREVENTION:**

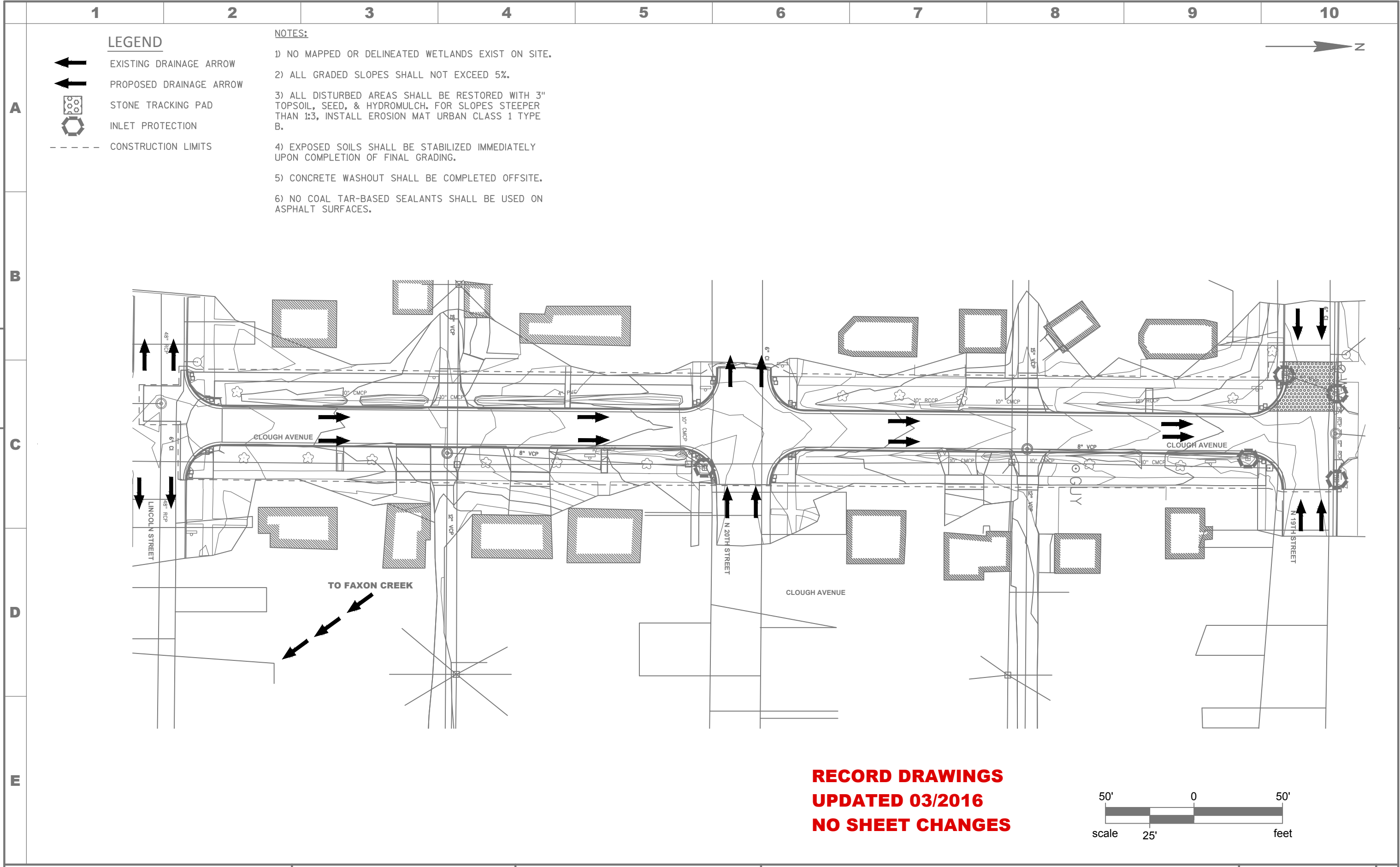
ALL WASTE, AND UNUSED BUILDING MATERIALS (INCLUDING GARBAGE, DEBRIS, CLEANING WASTES, WASTEWATER, OR TOXIC MATERIALS) SHALL BE PROPERLY DISPOSED OF AND NOT ALLOWED TO BE CARRIED OFFSITE BY RUNOFF OR WIND.

FUELING AND VEHICLE MAINTENANCE AREAS SHALL HAVE BMPS DESIGNED, INSTALLED, AND MAINTAINED TO REDUCE PETROLEUM WITHIN RUNOFF, SO THAT THE RUNOFF THAT ENTERS WATERS OF THE STATE CONTAINS NO VISIBLE PETROLEUM SHEEN, OR TO THE MAXIMUM EXTENT PRACTICABLE.

THE CONTRACTOR SHALL DEVELOP AND IMPLEMENT SITE SPECIFIC SPILL PREVENTION AND RESPONSE PROCEDURES.

NO COAL TAR-BASED SEALANTS SHALL BE USED ON ASPHALT SURFACES.

**RECORD DRAWINGS  
UPDATED 03/2016  
NO SHEET CHANGES**



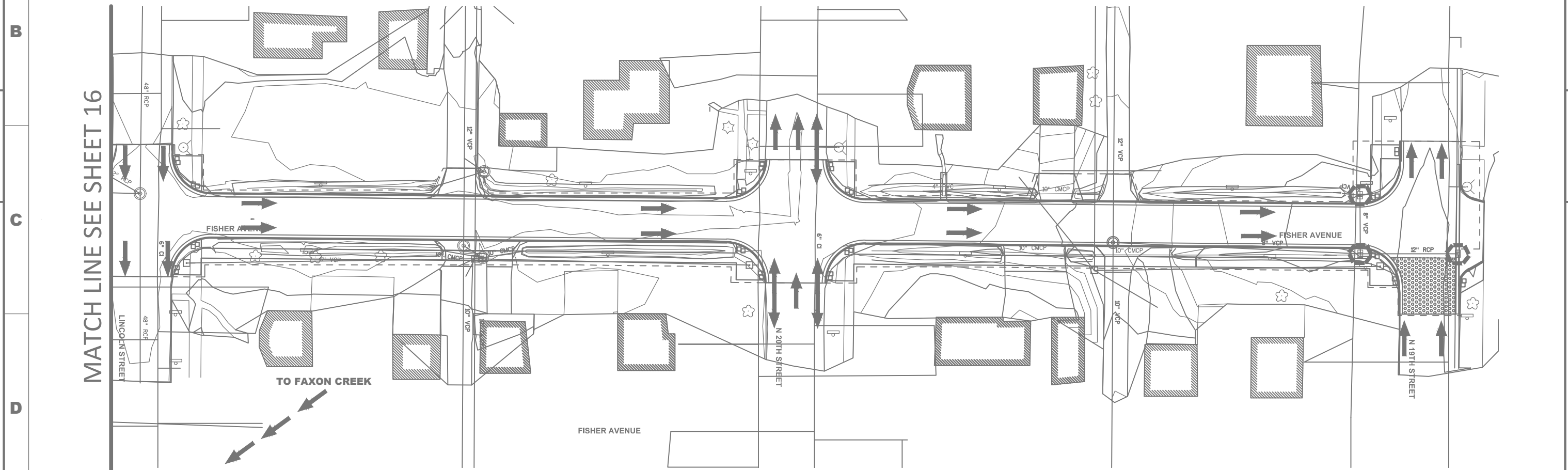
1 2 3 4 5 6 7 8 9 10

**LEGEND**

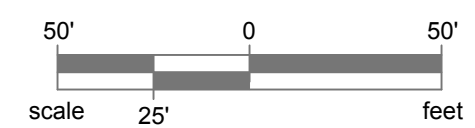
- EXISTING DRAINAGE ARROW
- PROPOSED DRAINAGE ARROW
- STONE TRACKING PAD
- INLET PROTECTION
- CONSTRUCTION LIMITS

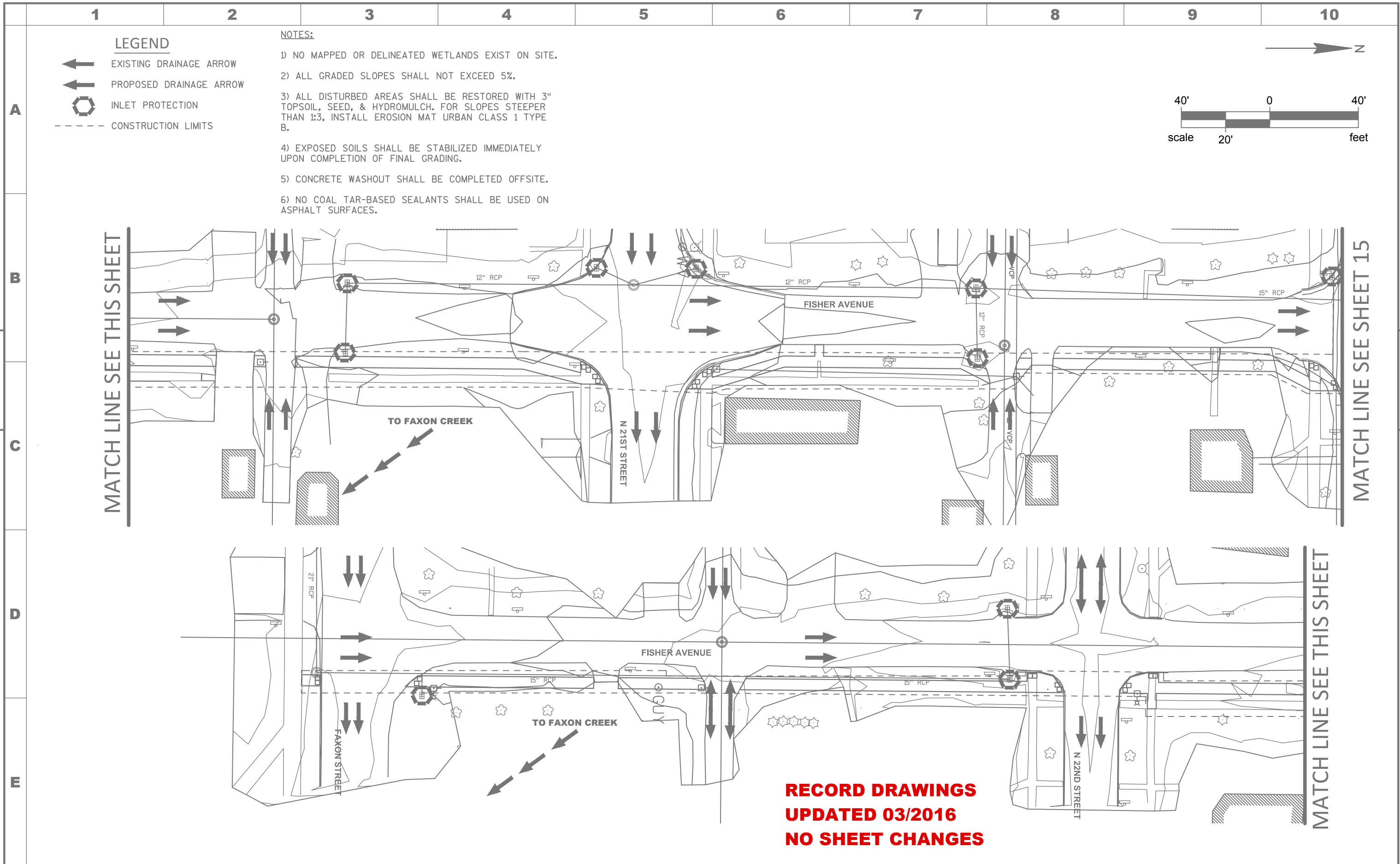
**NOTES:**

- 1) NO MAPPED OR DELINEATED WETLANDS EXIST ON SITE.
- 2) ALL GRADED SLOPES SHALL NOT EXCEED 5%.
- 3) ALL DISTURBED AREAS SHALL BE RESTORED WITH 3" TOPSOIL, SEED, & HYDROMULCH. FOR SLOPES STEEPER THAN 1:3, INSTALL EROSION MAT URBAN CLASS 1 TYPE B.
- 4) EXPOSED SOILS SHALL BE STABILIZED IMMEDIATELY UPON COMPLETION OF FINAL GRADING.
- 5) CONCRETE WASHOUT SHALL BE COMPLETED OFFSITE.
- 6) NO COAL TAR-BASED SEALANTS SHALL BE USED ON ASPHALT SURFACES.



**RECORD DRAWING  
 UPDATED 03/2016  
 NO SHEET CHANGES**

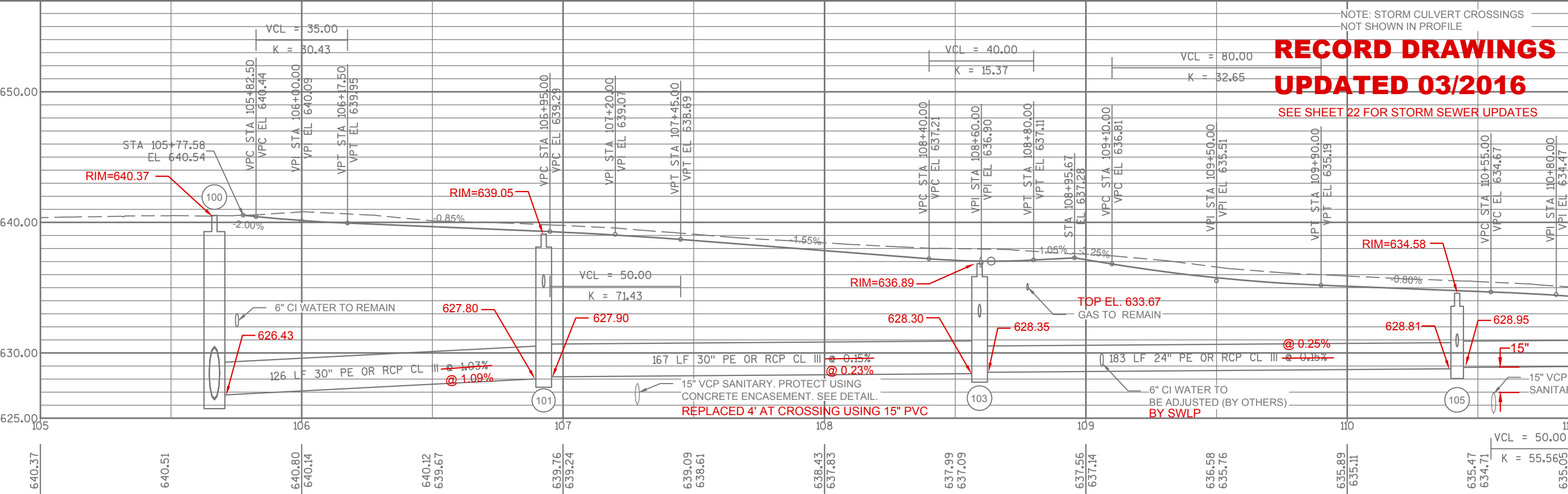
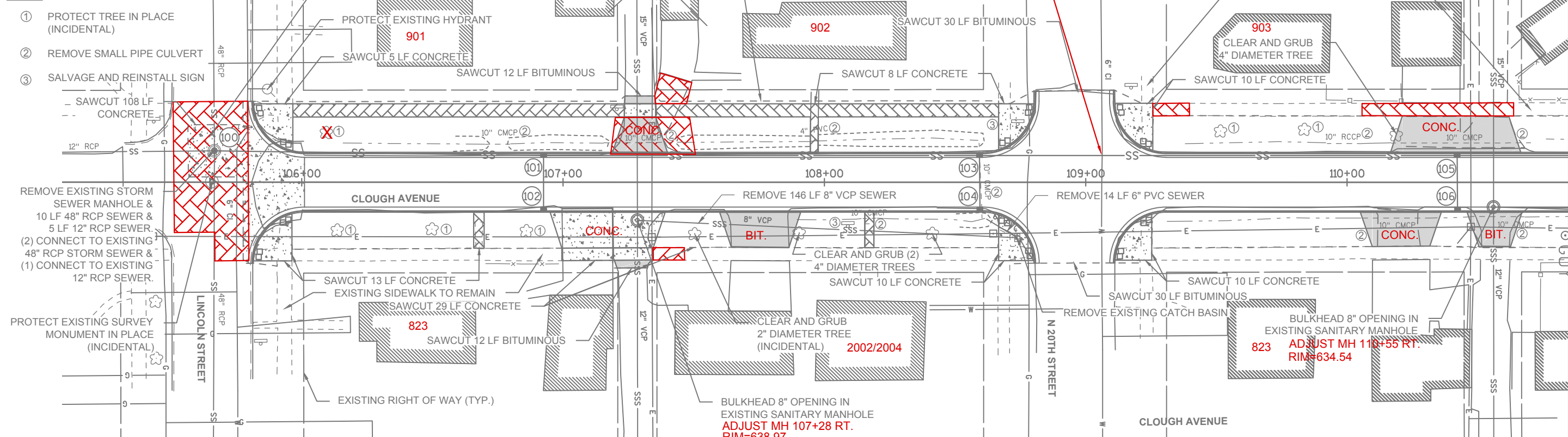




**RECORD DRAWINGS  
UPDATED 03/2016  
NO SHEET CHANGES**






- LEGEND**
- 4" CONCRETE
  - 7" CONCRETE
  - BITUMINOUS DRIVE
  - ① PROTECT TREE IN PLACE (INCIDENTAL)
  - ② REMOVE SMALL PIPE CULVERT
  - ③ SALVAGE AND REINSTALL SIGN

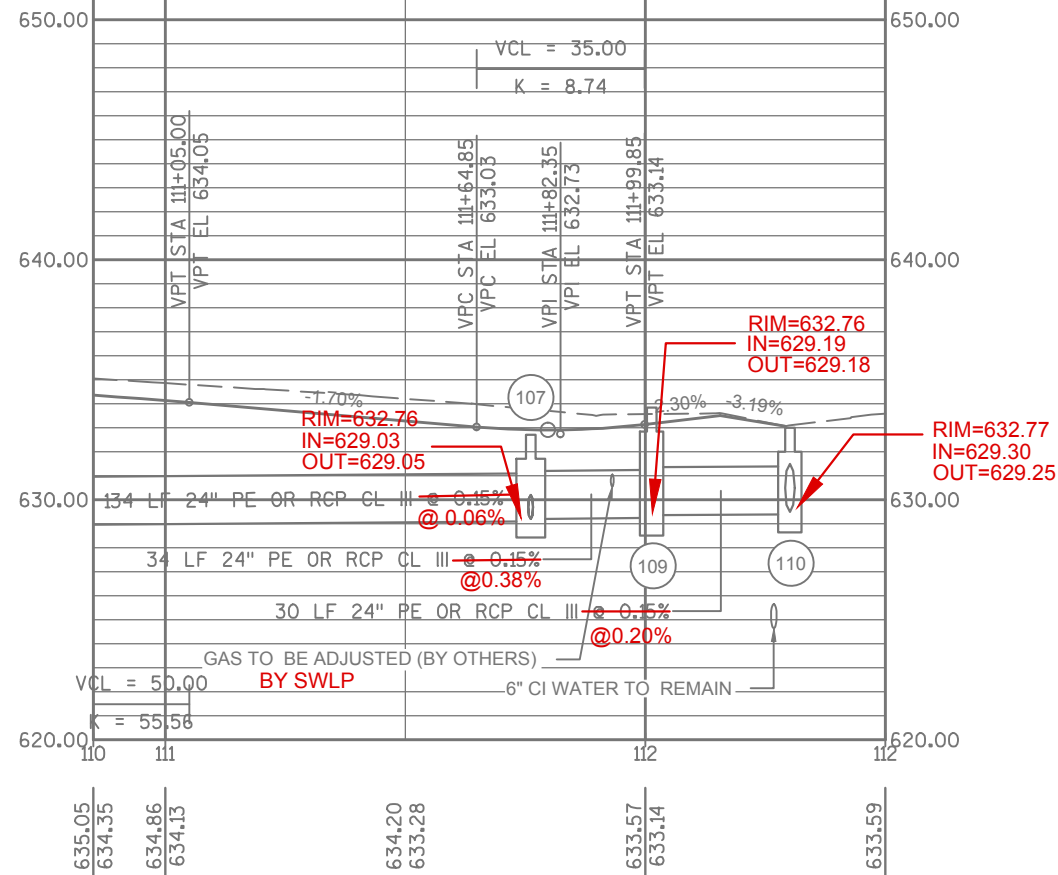
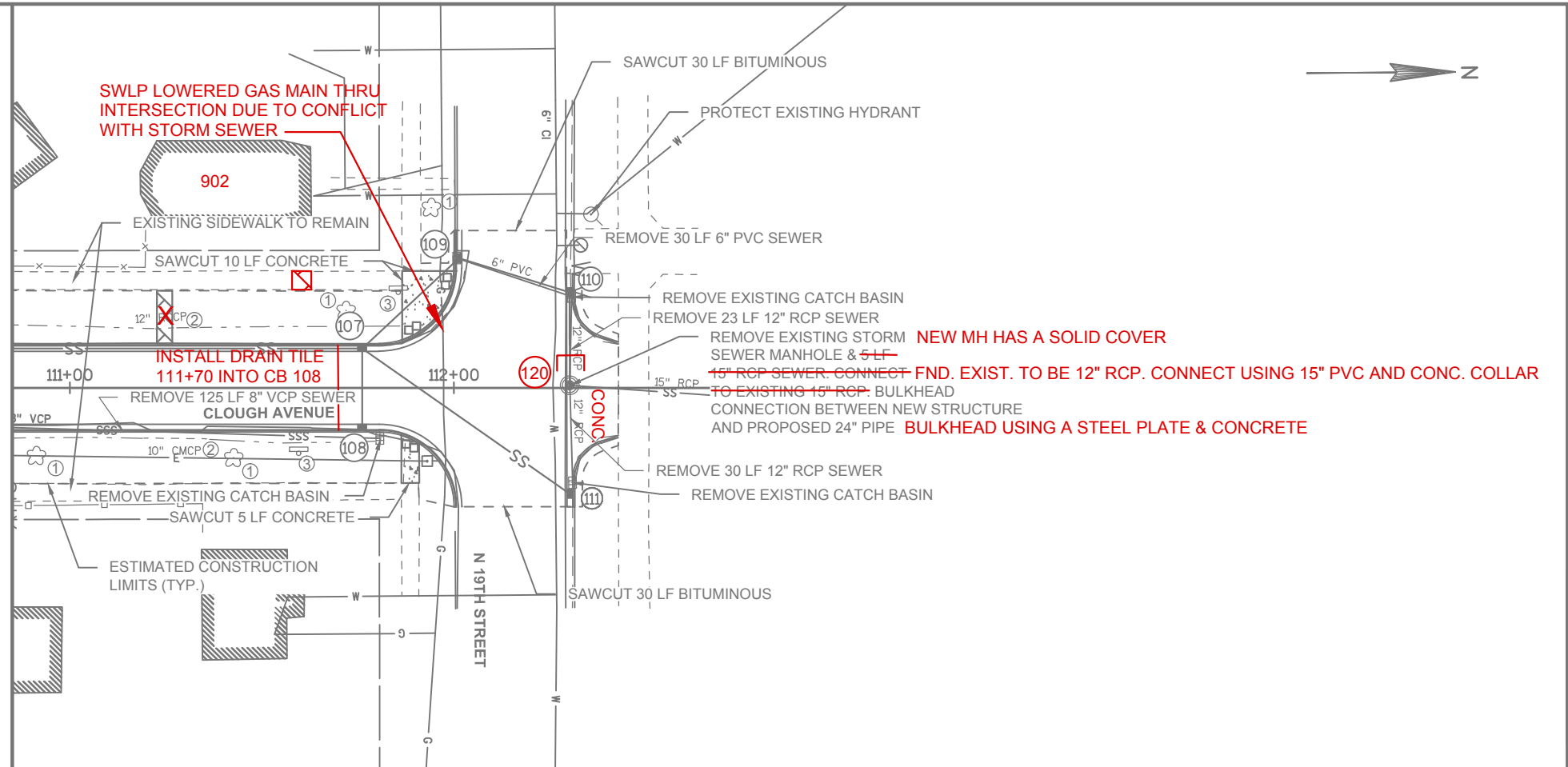


**RECORD DRAWINGS  
UPDATED 03/2016**  
SEE SHEET 22 FOR STORM SEWER UPDATES

MATCH LINE SEE SHEET 18

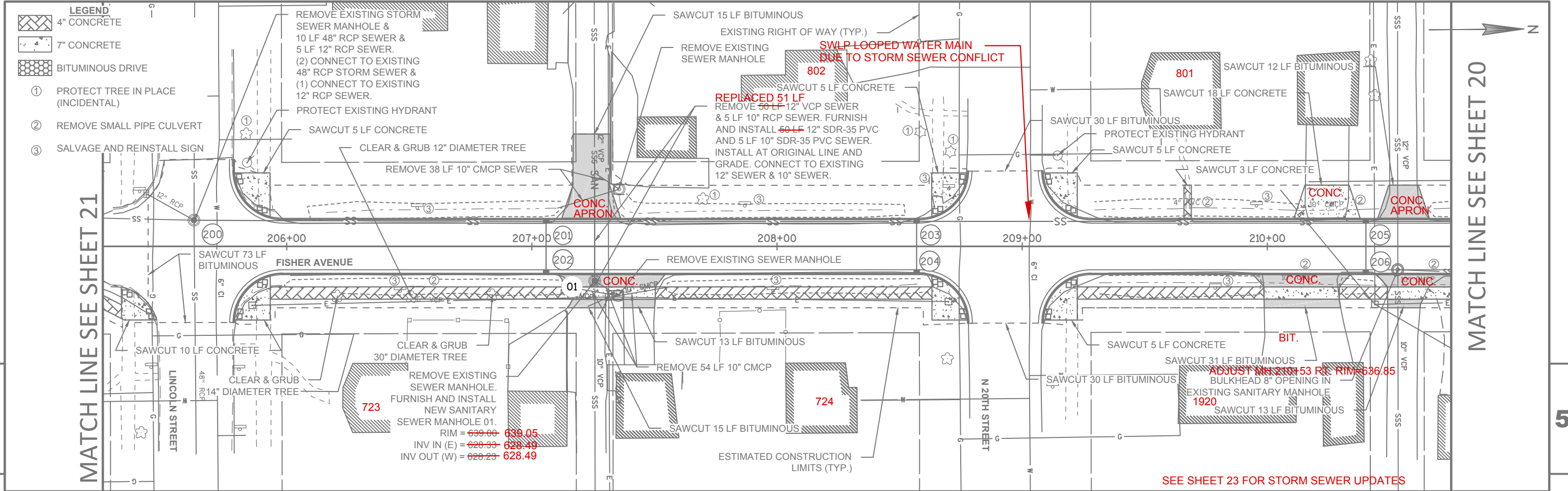
- LEGEND**
-  4" CONCRETE
  -  7" CONCRETE
  -  BITUMINOUS DRIVE
  - ① PROTECT TREE IN PLACE (INCIDENTAL)
  - ② REMOVE SMALL PIPE CULVERT
  - ③ SALVAGE AND REINSTALL SIGN

MATCH LINE SEE SHEET 17



SEE SHEET 22 FOR STORM SEWER UPDATES

**RECORD DRAWINGS  
UPDATED 03/2016**



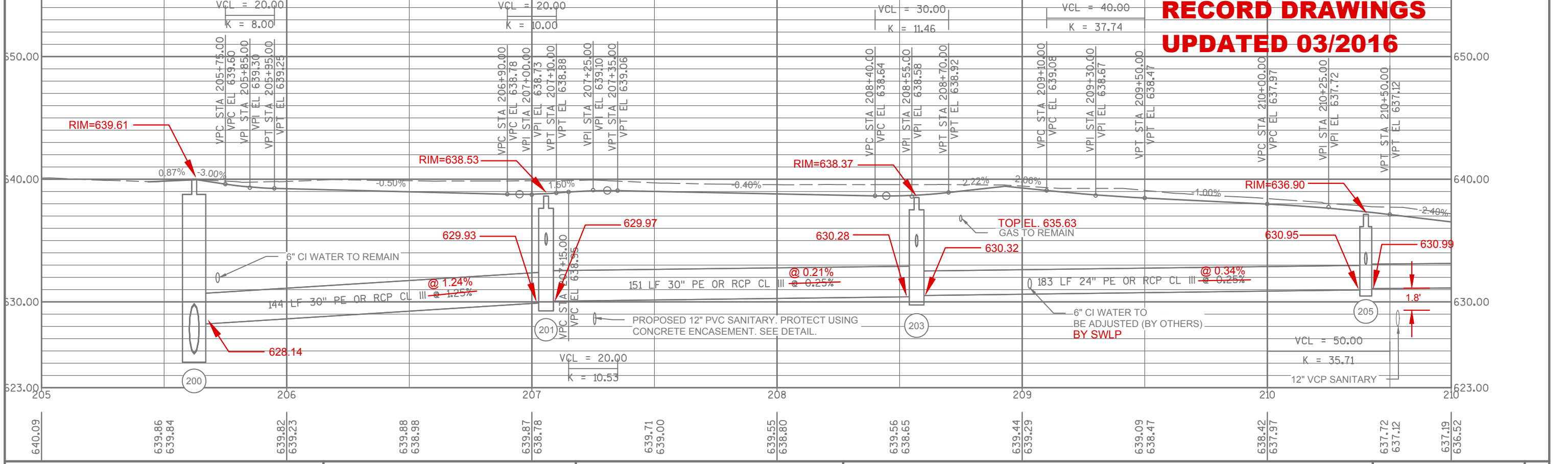
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5




MATCH LINE SEE SHEET 21

MATCH LINE SEE SHEET 20

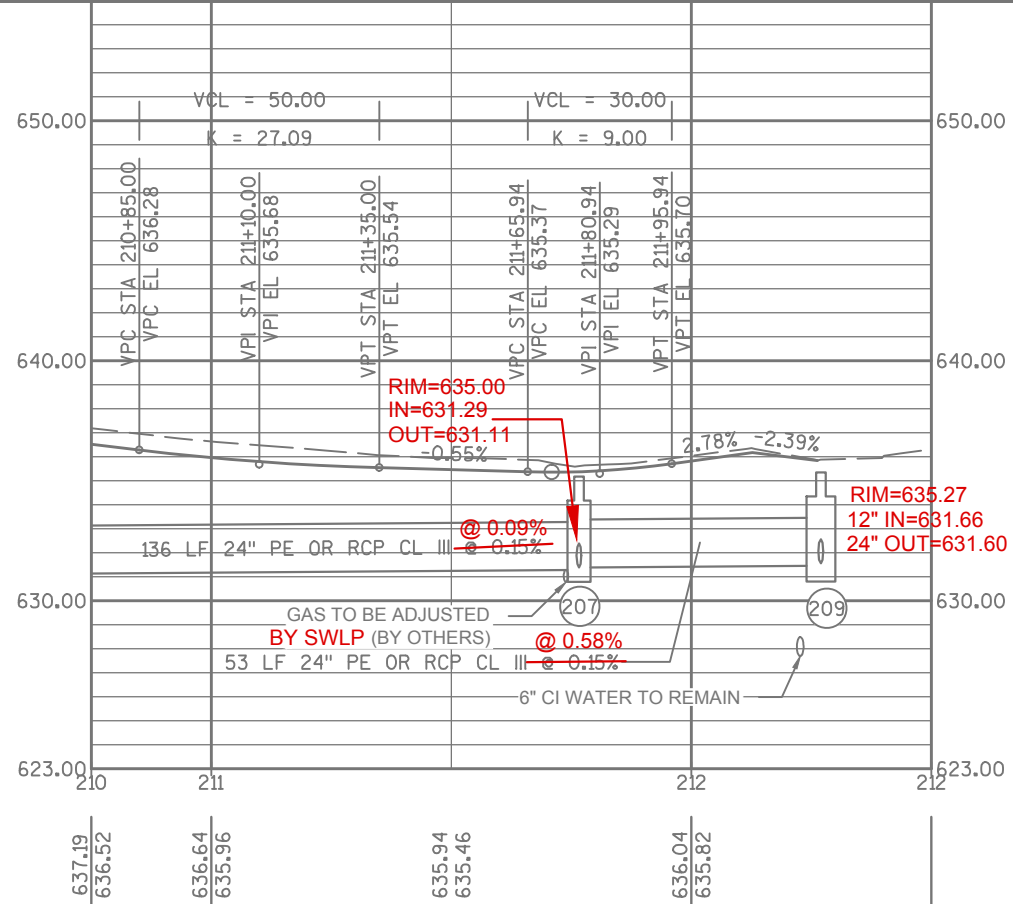
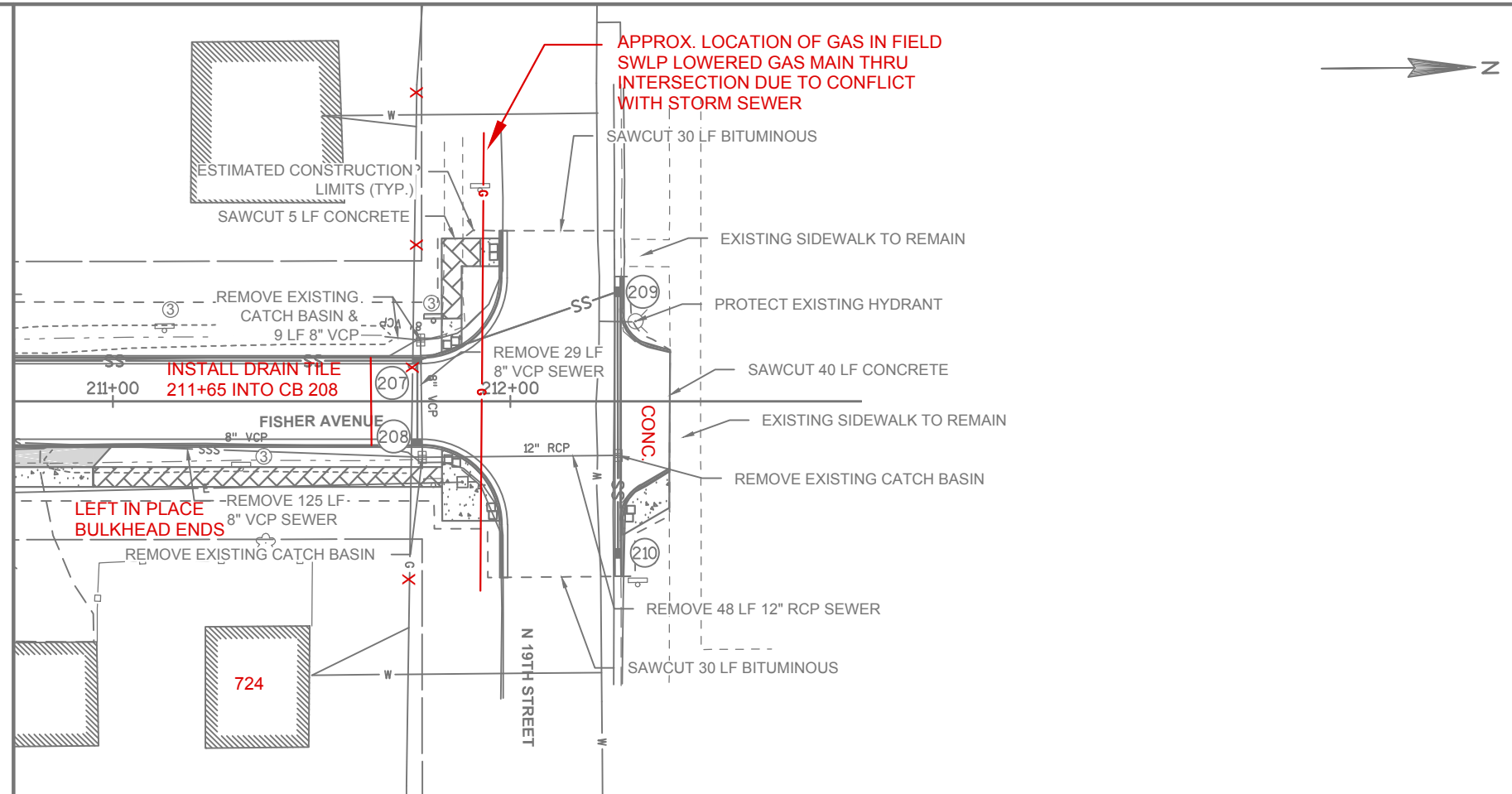
**RECORD DRAWINGS  
UPDATED 03/2016**



PROJECT NO: SUPER 129839	FISHER & CLOUGH AVENUE	CITY OF SUPERIOR	PLAN & PROFILE FISHER AVENUE
			SHEET 19 OF 51




- LEGEND**
-  4" CONCRETE
  -  7" CONCRETE
  -  BITUMINOUS DRIVE
  - ① PROTECT TREE IN PLACE (INCIDENTAL)
  - ② REMOVE SMALL PIPE CULVERT
  - ③ SALVAGE AND REINSTALL SIGN

MATCH LINE SEE SHEET 19



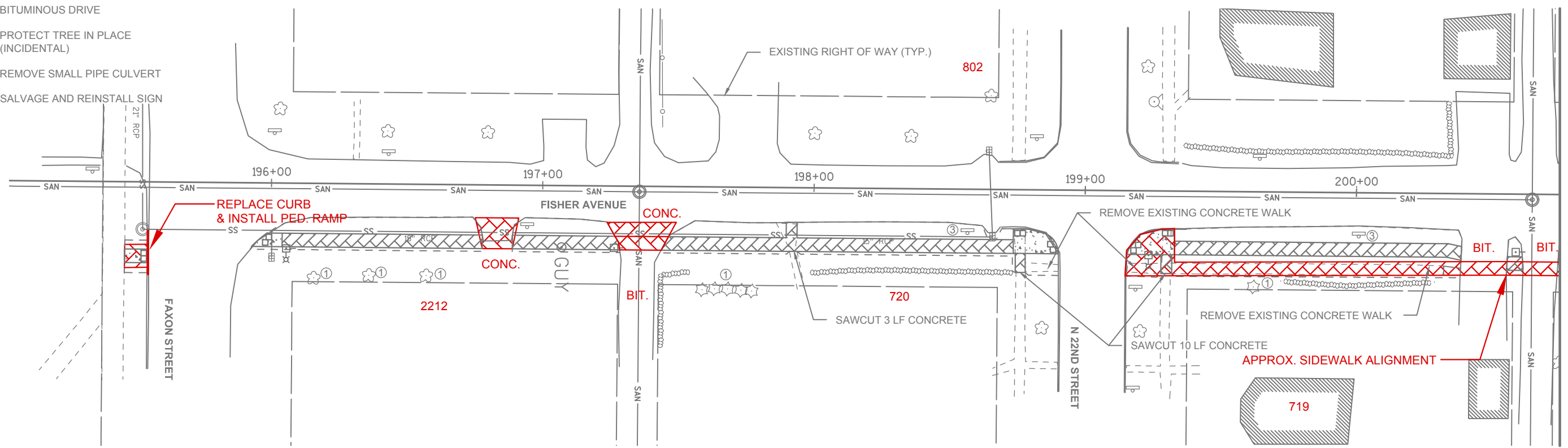
SEE SHEET 23 FOR STORM SEWER UPDATES

**RECORD DRAWINGS  
UPDATED 03/2016**

- LEGEND**
-  4" CONCRETE
  -  7" CONCRETE
  -  BITUMINOUS DRIVE
  - ① PROTECT TREE IN PLACE (INCIDENTAL)
  - ② REMOVE SMALL PIPE CULVERT
  - ③ SALVAGE AND REINSTALL SIGN



REPLACE WALK NEAR 802  
11' x 5'



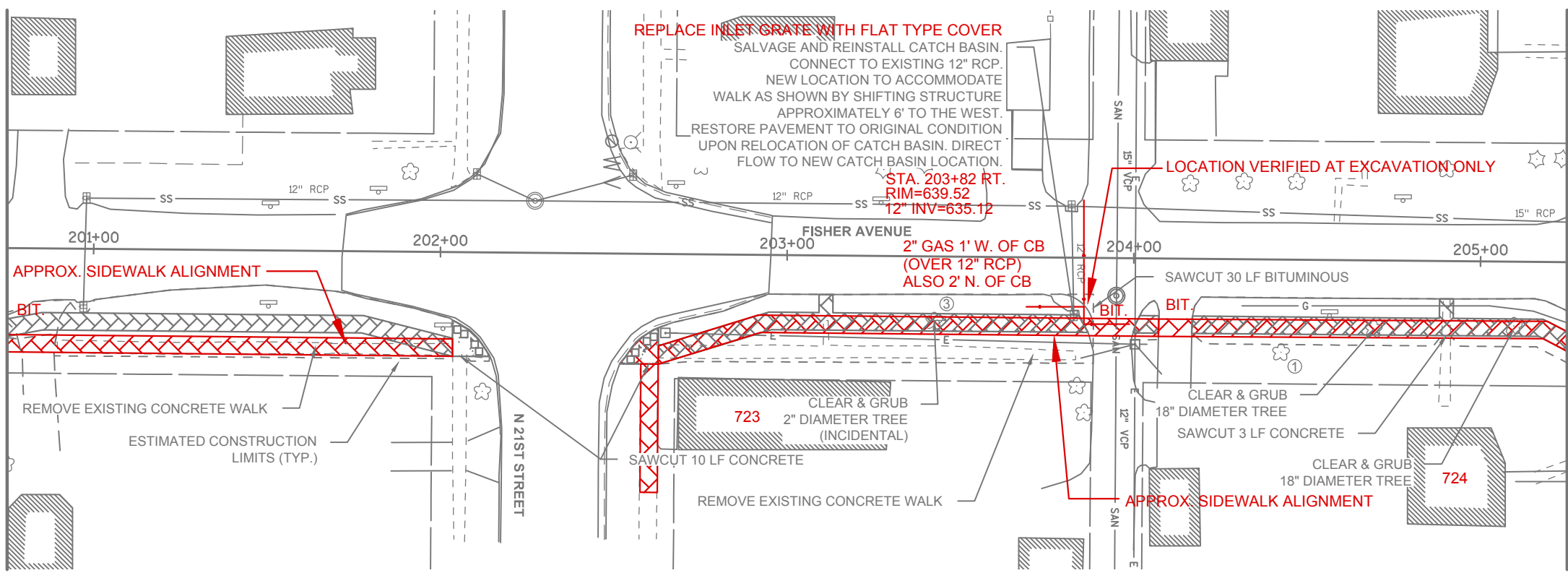
5

5

MATCH LINE THIS SHEET

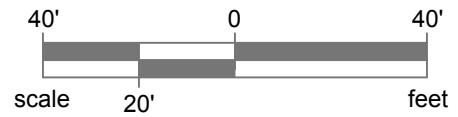
MATCH LINE SEE THIS SHEET

MATCH LINE SEE SHEET 19



NOTE: FIELD ADJUSTMENTS TO WALK ALIGNMENT (IN ORDER TO MISS TREES / EXISTING UTILITIES OR ASSURE PROPER DRAINAGE) MAY BE REQUIRED. ALL CHANGES SHALL BE APPROVED BY THE ENGINEER. THE INTENT OF THIS PLAN IS TO PROVIDE A 5' GRASSED BOULEVARD AND 5' CONCRETE SIDEWALK ALONG THE LENGTH OF THE AREA SHOWN ON THIS SHEET.

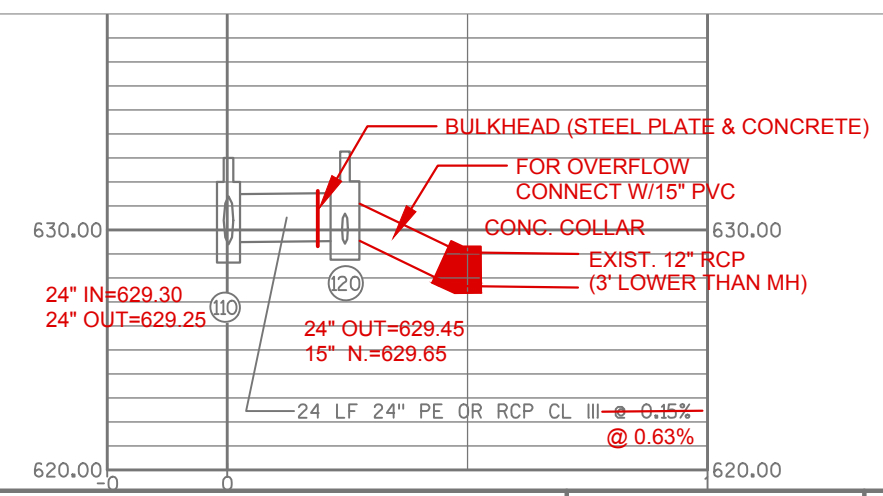
**RECORD DRAWINGS  
UPDATED 03/2016**



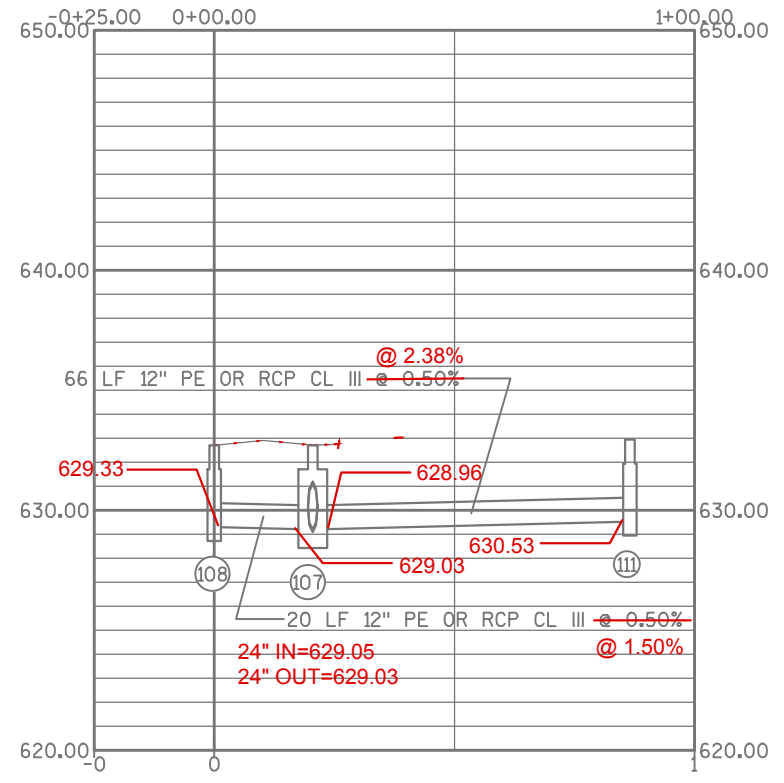
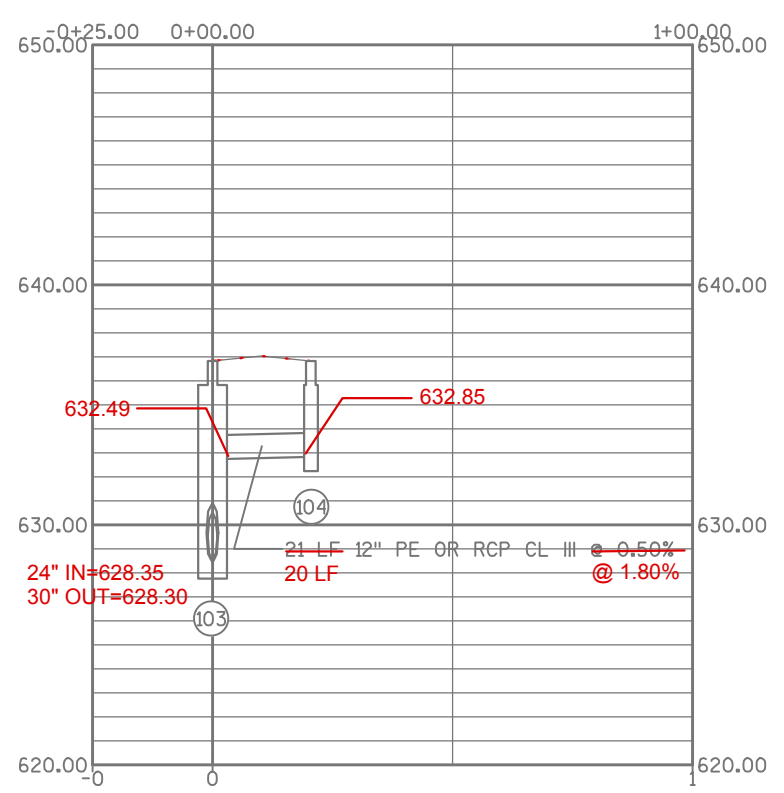
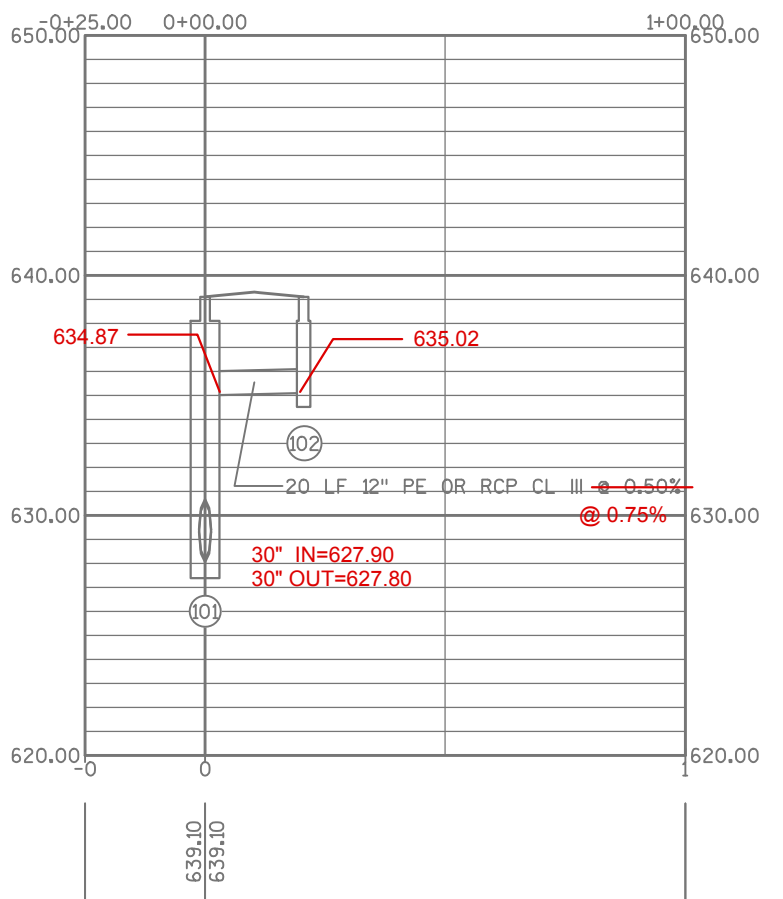
NOTE: SEE DETAILS FOR ACTUAL CASTING TYPES AND DIMENSIONS

Structure Name	Structure Details	Structure Type
100	12" RCP (S) = 634.83 RIM = 640.53 640.37 30" RCP OR HDPE INV IN (N) = 626.75 626.43 48" RCP OR HDPE INV IN (W) = 626.50 626.26 48" RCP OR HDPE INV OUT (E) = 626.40 626.23	MANHOLES 8-J
101	RIM = 639.10 30" RCP OR HDPE INV IN (N) = 628.18 12" RCP OR HDPE INV IN (E) = 635.00 30" RCP OR HDPE INV OUT (S) = 628.05	CATCH BASINS 5-H
102	RIM = 639.10 12" RCP OR HDPE INV OUT (SW) = 630.01 635.10	CATCH BASINS 2x3-H
103	RIM = 636.84 24" RCP OR HDPE INV IN (N) = 635.02 12" RCP OR HDPE INV IN (E) = 628.52 30" RCP OR HDPE INV OUT (S) = 632.73 628.35	CATCH BASINS 5-H
104	RIM = 636.83 12" RCP OR HDPE INV OUT (W) = 632.83	CATCH BASINS 2x3-H
105	RIM = 634.57 24" RCP OR HDPE INV IN (N) = 632.85 12" RCP OR HDPE INV IN (E) = 634.58 630.47 24" RCP OR HDPE INV OUT (S) = 628.80 628.95	CATCH BASINS 4-H
106	RIM = 634.57 12" RCP OR HDPE INV OUT (W) = 630.51 628.81	CATCH BASINS 2x3-H
109	RIM = 633.84 634.48 24" RCP OR HDPE INV IN (N) = 629.35 24" RCP OR HDPE INV OUT (SE) = 630.75	CATCH BASINS 4-H
111	RIM = 632.95 12" RCP OR HDPE INV OUT (SW) = 629.53 629.18	CATCH BASINS 2x3-H
110	RIM = 633.00 24" RCP OR HDPE INV IN (N) = 629.50 24" RCP OR HDPE INV OUT (S) = 629.40 630.53	CATCH BASINS 4-H
107	RIM = 632.71 632.77 12" RCP OR HDPE INV IN (E) = 629.20 12" RCP OR HDPE INV IN (NE) = 629.20 629.25 24" RCP OR HDPE INV IN (NW) = 629.20 24" RCP OR HDPE INV OUT (S) = 629.10	CATCH BASINS 5-H
108	RIM = 632.71 12" RCP OR HDPE INV OUT (W) = 629.30 629.03 629.05	CATCH BASINS 2x3-H
120	RIM = 633.27 15" RCP OR HDPE INV IN (N) = 629.43 24" RCP OR HDPE INV OUT (S) = 632.87 629.53	MANHOLES 5-J

12" RCP = 626.65 - 8' N. PVC  
633.21  
629.65  
629.45

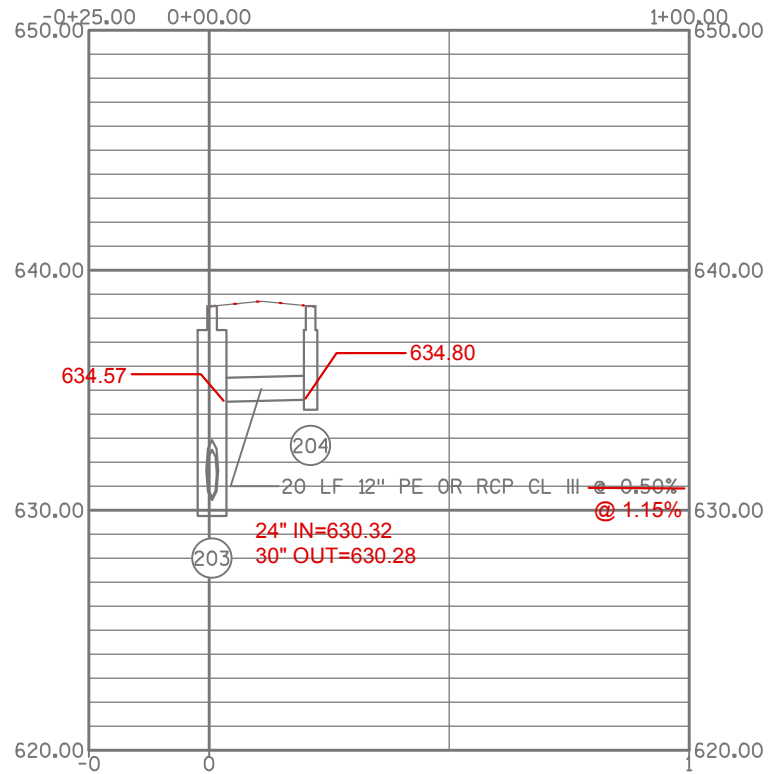
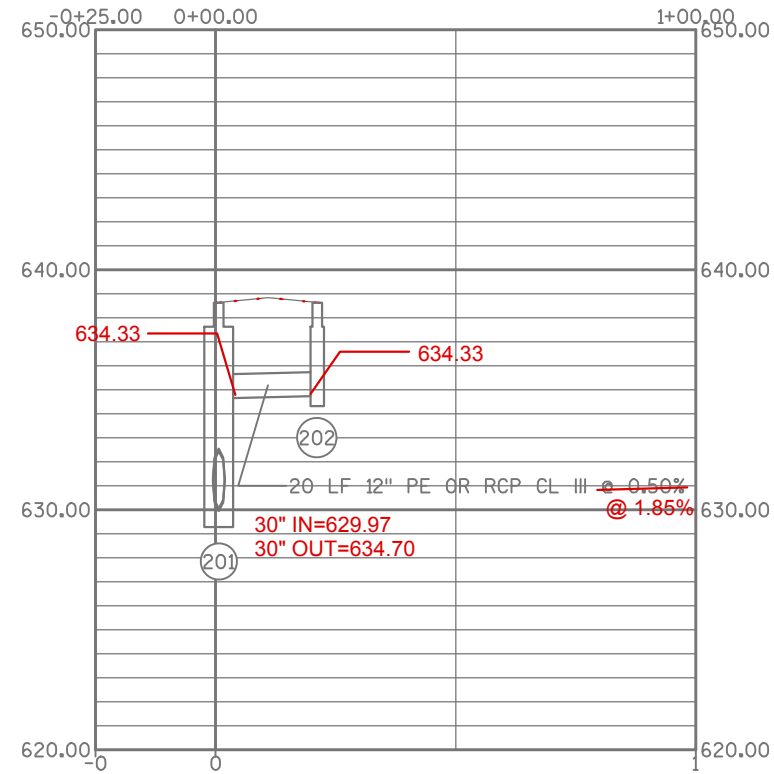


**RECORD DRAWINGS  
UPDATED 03/2016**



NOTE: SEE DETAILS FOR ACTUAL CASTING TYPES AND DIMENSIONS

Structure Table		
Structure Name	Structure Details	Structure Type
200	12" RCP (SW) = 634.80 15" RCP (S) = 632.00 RIM = 639.99 30" RCP OR HDPE INV IN (N) = 628.45 48" RCP OR HDPE INV IN (W) = 625.85 48" RCP OR HDPE INV OUT (E) = 625.75	MANHOLES 8-J
201	RIM = 638.63 30" RCP OR HDPE INV IN (N) = 630.04 12" RCP OR HDPE INV IN (E) = 634.63 30" RCP OR HDPE INV OUT (S) = 629.94	CATCH BASINS 5-H
202	RIM = 638.63 12" RCP OR HDPE INV OUT (W) = 634.73	CATCH BASINS 2x3-H
203	RIM = 638.50 24" RCP OR HDPE INV IN (N) = 630.52 12" RCP OR HDPE INV IN (E) = 634.50 30" RCP OR HDPE INV OUT (S) = 630.42	CATCH BASINS 5-H
204	RIM = 638.50 12" RCP OR HDPE INV OUT (W) = 634.60	CATCH BASINS 2x3-H
206	RIM = 637.14 12" RCP OR HDPE INV OUT (W) = 634.30	CATCH BASINS 2x3-H
205	RIM = 637.14 24" RCP OR HDPE INV IN (N) = 631.08 12" RCP OR HDPE INV IN (E) = 633.03 24" RCP OR HDPE INV OUT (S) = 630.98	CATCH BASINS 4-H
210	RIM = 635.55 12" RCP OR HDPE INV OUT (W) = 631.89	CATCH BASINS 2x3-H
208	RIM = 635.17 12" RCP OR HDPE INV OUT (W) = 631.49	CATCH BASINS 2x3-H
209	RIM = 635.35 12" RCP OR HDPE INV IN (N) = 631.56 24" RCP OR HDPE INV OUT (S) = 631.46	CATCH BASINS 5-H
207	RIM = 635.17 12" RCP OR HDPE INV IN (E) = 631.38 24" RCP OR HDPE INV IN (N) = 631.38 24" RCP OR HDPE INV OUT (S) = 631.28	CATCH BASINS 4-H



**RECORD DRAWINGS  
UPDATED 03/2016**

