PLAIN CITY CORPORATION

PUBLIC WORKS STANDARDS

JUNE 2008
UPDATED: FEBRUARY 2020

SUBMITTED & RECOMMENDED

PAUL J. TAYLOR P.E. *CITY ENGINEER* *DATE*
J-U-B ENGINEERS, INC.

APPROVALS

JON BEESLEY *DATE*
MAYOR

DIANE HIRSCHI *DATE*
CITY RECORDER

DANIIEL SCHULER *DATE*
PUBLIC WORK DIRECTOR

PLAIN CITY
Utah

J-U-B
Engineers • Surveyors • Planners

THE LANGDON GROUP
GATEWAY MAPPING INC.

OTHER J-U-B COMPANIES

466 North 900 West, Kaysville, Utah 84037
Phone: 801.547.0393 www.jub.com

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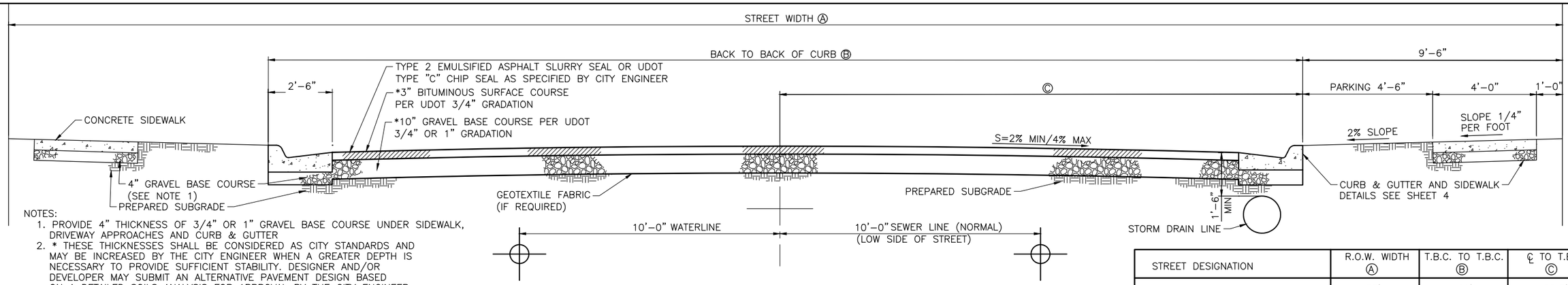


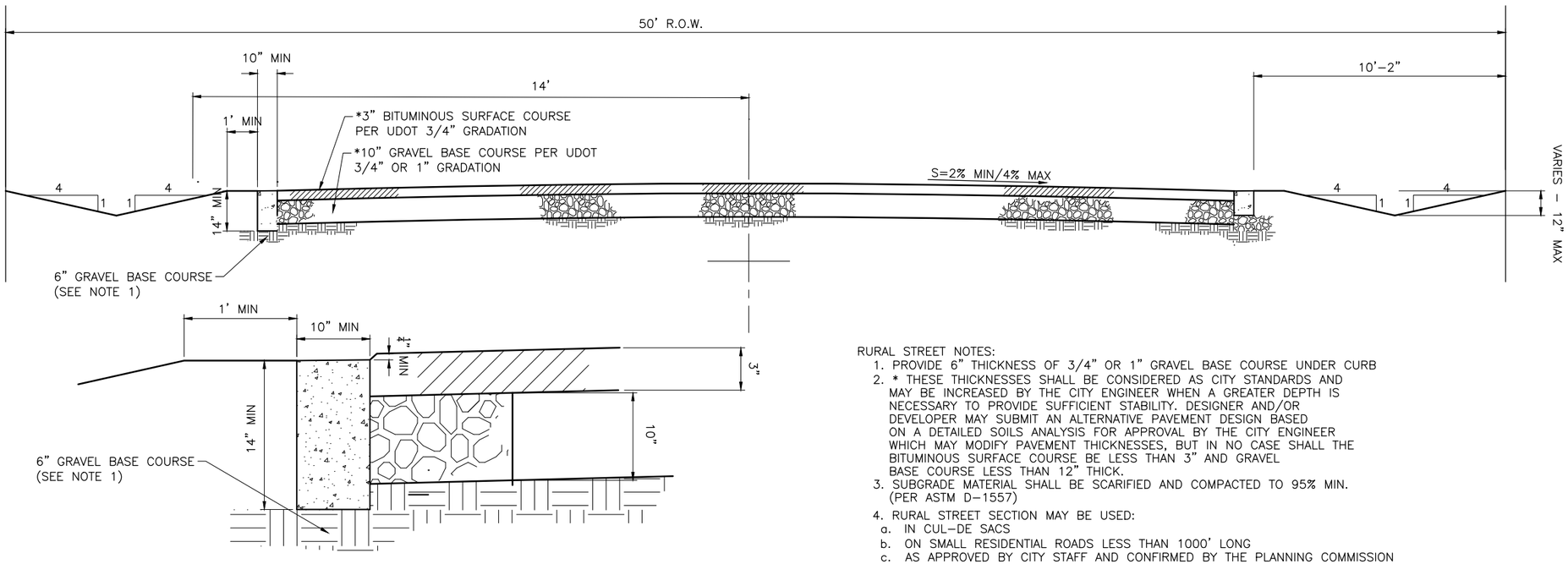
NOTES:
1. PROVIDE 4" THICKNESS OF 3/4" OR 1" GRAVEL BASE COURSE UNDER SIDEWALK, DRIVEWAY APPROACHES AND CURB & GUTTER
2. * THESE THICKNESSES SHALL BE CONSIDERED AS CITY STANDARDS AND MAY BE INCREASED BY THE CITY ENGINEER WHEN A GREATER DEPTH IS NECESSARY TO PROVIDE SUFFICIENT STABILITY. DESIGNER AND/OR DEVELOPER MAY SUBMIT AN ALTERNATIVE PAVEMENT DESIGN BASED ON A DETAILED SOILS ANALYSIS FOR APPROVAL BY THE CITY ENGINEER WHICH MAY MODIFY PAVEMENT THICKNESSES, BUT IN NO CASE SHALL THE BITUMINOUS SURFACE COURSE BE LESS THAN 3" AND GRAVEL BASE COURSE LESS THAN 12" THICK.
3. SUBGRADE MATERIAL SHALL BE SCARIFIED AND COMPACTED TO 95% MIN. (PER ASTM D-1557)

1 STANDARD PLAIN CITY ROADWAY SECTION
SCALE: N.T.S.

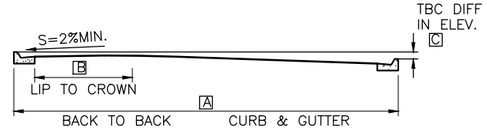
STREET DESIGNATION	R.O.W. WIDTH Ⓐ	T.B.C. TO T.B.C. Ⓑ	℄ TO T.B.C. Ⓒ
STANDARD RESIDENTIAL	60'	41'	20.5'
COLLECTOR	66'	47'	23.5'
MINOR ARTERIAL	84'	65'	32.5'
MAJOR ARTERIAL	100'	81'	40.5'

NOTES:
1. MAXIMUM DIFFERENCE IN ELEVATION BETWEEN CURBS ON OPPOSITE SIDES OF THE STREET SHALL NOT EXCEED THOSE SHOWN IN DETAIL & TABLE BELOW
2. ON ARTERIAL STREETS AND CERTAIN STREETS APPROVED BY THE CITY COUNCIL THE CITY ENGINEER WILL PROVIDE A PAVEMENT DESIGN LOCATION OF SIDEWALK AND CURB + GUTTER MAY VARY ON INDIVIDUAL ARTERIAL STREETS PER DIRECTION OF THE CITY ENGINEER

2 TYPICAL RURAL STREET
SCALE: N.T.S.



RURAL STREET NOTES:
1. PROVIDE 6" THICKNESS OF 3/4" OR 1" GRAVEL BASE COURSE UNDER CURB
2. * THESE THICKNESSES SHALL BE CONSIDERED AS CITY STANDARDS AND MAY BE INCREASED BY THE CITY ENGINEER WHEN A GREATER DEPTH IS NECESSARY TO PROVIDE SUFFICIENT STABILITY. DESIGNER AND/OR DEVELOPER MAY SUBMIT AN ALTERNATIVE PAVEMENT DESIGN BASED ON A DETAILED SOILS ANALYSIS FOR APPROVAL BY THE CITY ENGINEER WHICH MAY MODIFY PAVEMENT THICKNESSES, BUT IN NO CASE SHALL THE BITUMINOUS SURFACE COURSE BE LESS THAN 3" AND GRAVEL BASE COURSE LESS THAN 12" THICK.
3. SUBGRADE MATERIAL SHALL BE SCARIFIED AND COMPACTED TO 95% MIN. (PER ASTM D-1557)
4. RURAL STREET SECTION MAY BE USED:
   a. IN CUL-DE SACS
   b. ON SMALL RESIDENTIAL ROADS LESS THAN 1000' LONG
   c. AS APPROVED BY CITY STAFF AND CONFIRMED BY THE PLANNING COMMISSION



CROWN LOCATION TABLE

Ⓐ	Ⓑ	Ⓒ
41'	20.5'	0.00
41'	12'	0.50
41'	10'	1.00
47'	23.5'	0.00
47'	10.5'	0.50
47'	10.5'	1.00

CROWN LOCATION FOR VARIOUS CROSS SLOPES

NOTE:
ALL OTHER PROPOSED STREET X-SECTIONS SHALL BE AS APPROVED BY THE PLAIN CITY ENGINEER

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AGENCY REVIEW

FILE: CITY STANDARDS
JUB PROJ. # : ----
DRAWN BY: DTJ
DESIGN BY: PJT
CHECKED BY: PJT

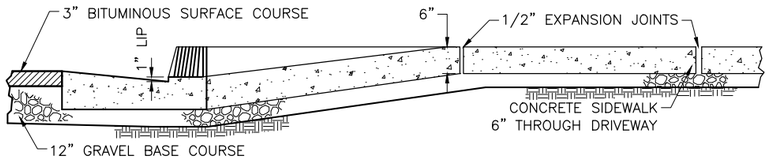
ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY

PUBLIC WORKS STANDARDS PLAIN CITY CORPORATION

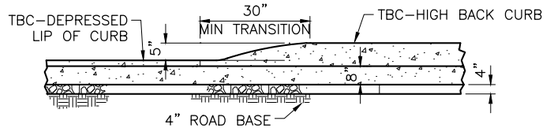
ROADWAY SURFACE IMPROVEMENTS

LAST UPDATED: 4/16/2020
SHEET NUMBER: 2

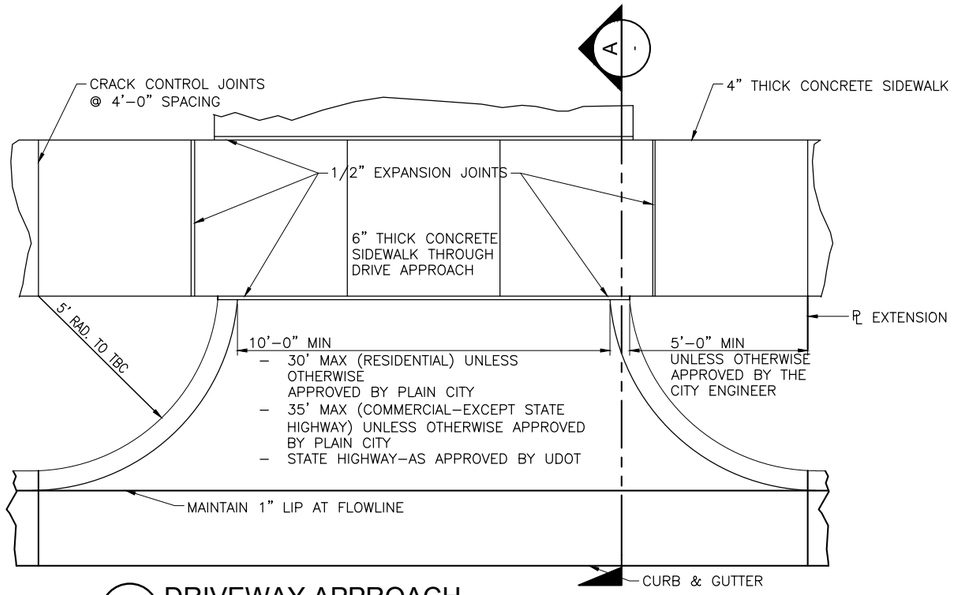
Plot Date:4/16/2020 1:40 PM Plotted By: Daniel Johnson
Date Created:2/27/2020 \\KAYSP\PUBLIC\PROJECTS\JUBPLAIN CITY\STANDARDS\2020\CITY STANDARDS.DWG



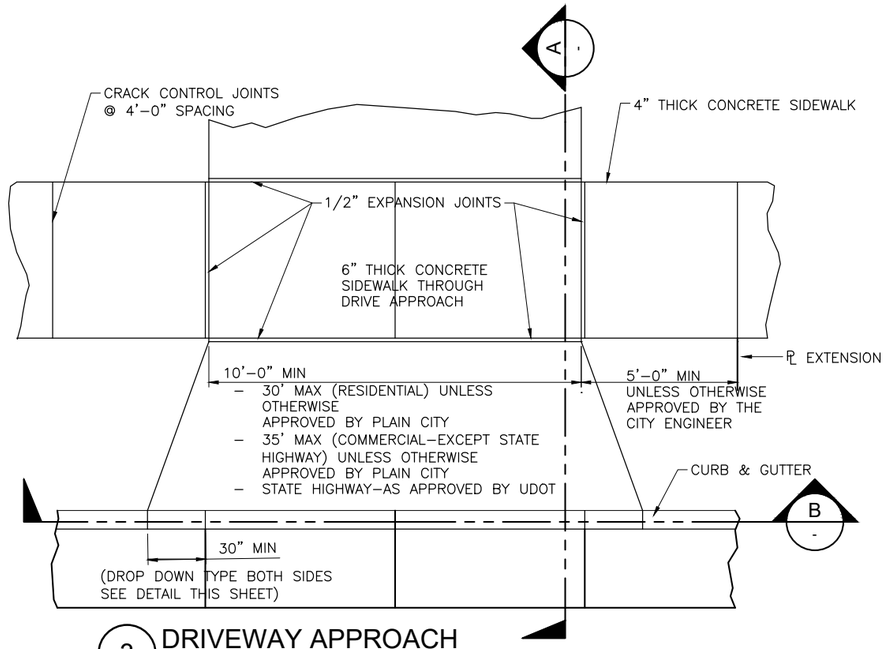
A **SECTION A**
SCALE: N.T.S.



B **SECTION B**
SCALE: N.T.S.



2 **DRIVEWAY APPROACH**
CURB RADIUS STYLE (SPECIAL CASE APPROVAL REQUIRED)
SCALE: N.T.S.



3 **DRIVEWAY APPROACH**
DROP DOWN STYLE
SCALE: N.T.S.

NOTE:
IN NEW SUBDIVISIONS WHERE FUTURE DRIVEWAY LOCATIONS ARE UNKNOWN, THE DRIVEWAY APPROACH SHALL BE MADE BY SAW CUTTING THE BACK OF THE EXISTING CURB TO THE REQUIRED DRIVEWAY WIDTH. ALL SAW CUTTING SHALL BE ACCOMPLISHED BY A CITY APPROVED LICENSED CONTRACTOR

IF THE SIDEWALK HAS BEEN PREVIOUSLY INSTALLED WHEN THE NEW DRIVEWAY IS CONSTRUCTED, THE 4" THICK SIDEWALK SHALL BE REMOVED AND REPLACED WITH 6" THICK SIDEWALK THROUGH THE NEW APPROACH, AT THE OWNERS OR DEVELOPERS EXPENSE

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JUB PROJ. #: ----
DRAWN BY: DTJ
DESIGN BY: PJT
CHECKED BY: PJT

ONE INCH
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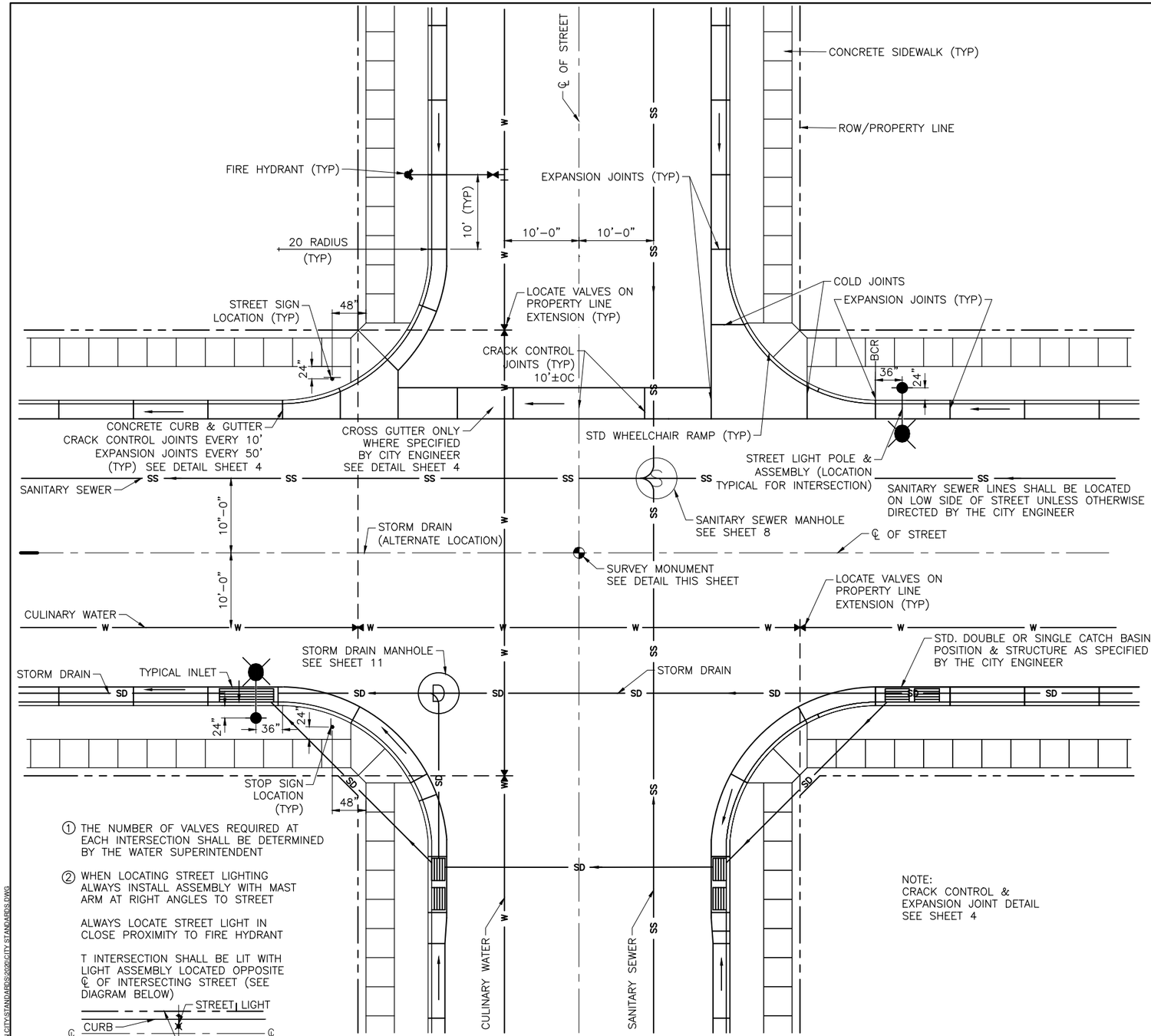
PUBLIC WORKS STANDARDS
PLAIN CITY CORPORATION

DRIVEWAY APPROACHES

LAST UPDATED: 4/16/2020
SHEET NUMBER: 3

Plot Date:4/16/2020 1:41 PM Plotted By: Daniel Johnson
Date Created:2/27/2020 \\KAYSPUBLIC\PROJECTS\JUB\PLAIN CITY\STANDARDS\2020\CITY STANDARDS.DWG

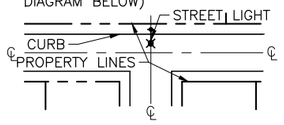


① THE NUMBER OF VALVES REQUIRED AT EACH INTERSECTION SHALL BE DETERMINED BY THE WATER SUPERINTENDENT

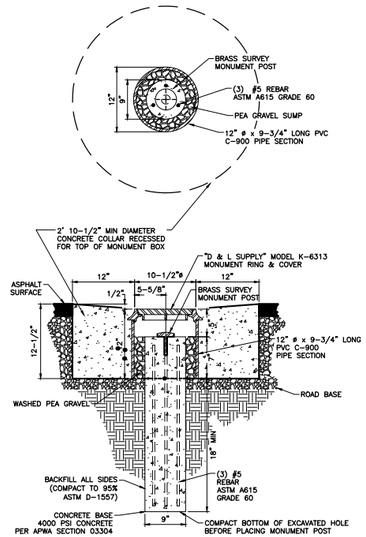
② WHEN LOCATING STREET LIGHTING ALWAYS INSTALL ASSEMBLY WITH MAST ARM AT RIGHT ANGLES TO STREET

ALWAYS LOCATE STREET LIGHT IN CLOSE PROXIMITY TO FIRE HYDRANT

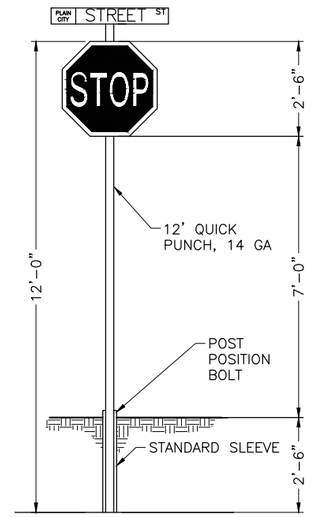
T INTERSECTION SHALL BE LIT WITH LIGHT ASSEMBLY LOCATED OPPOSITE ℄ OF INTERSECTING STREET (SEE DIAGRAM BELOW)



1 STREET INTERSECTION DETAIL
SCALE: N.T.S.



2 SURVEY MONUMENT DETAIL
SCALE: N.T.S.



TRAFFIC SIGN & POST

NOTES:

1 BACKGROUND SHALL BE GREEN, HIGH INTENSITY REFLECTIVE SHEETING 9FP-85 TYPE IIIA)
2 LEGEND SHALL BE WHITE LETTERS, HIGH INTENSITY REFLECTIVE SHEETING 9FP-85 IIIA)
3 SIGN BLANK SHALL BE 6081-T6 HEAT TREATED HIGH TENSILE DEGREASED ALUMINUM W/ALODINE 1200 FINISH-THICKNESS SHALL BE 0.08"
4 EACH SIGN SHALL BE DOUBLE FACED WITH CROSS AND CAP
5 SIGN ON PRIVATE ROADS SHALL MEET ALL SPECIFICATIONS FOR STANDARD SIGNS, EXCEPT BACKGROUND SHALL BE BLUE
6 ALL STREETS WITH NAMES MUST ALSO SHOW LOCATIONS COORDINATE DESIGNATION
7 ADDRESS COORDINATE MUST BE CONTACTED PRIOR TO MAKING SIGNS TO VERIFY PROPER NAMES AND COORDINATES

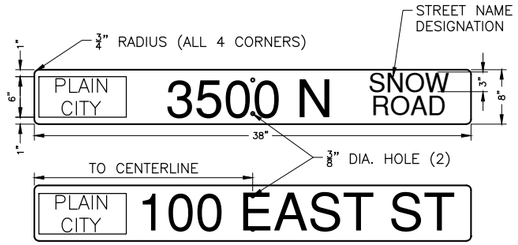
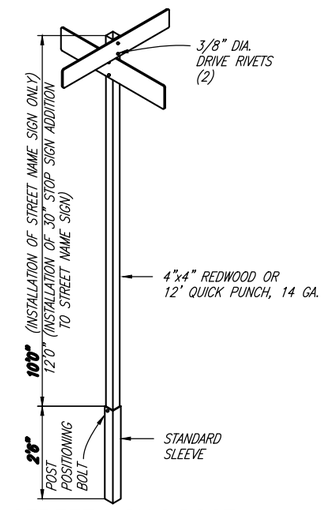


PLATE DETAIL

3 SIGN DETAILS
SCALE: N.T.S.



STREET SIGN & POST

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JUB PROJ. # : ----
DRAWN BY: DTJ
DESIGN BY: PJT
CHECKED BY: PJT

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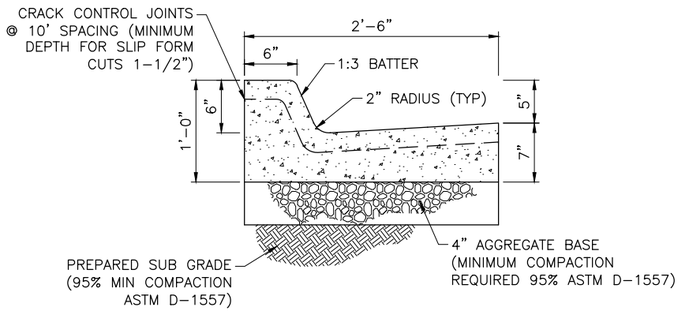
PUBLIC WORKS STANDARDS
PLAIN CITY CORPORATION

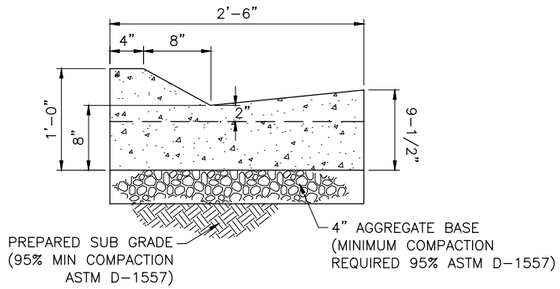
STREET INTERSECTION, MONUMENT DETAIL, & STREET SIGN DETAILS

LAST UPDATED: 4/16/2020
SHEET NUMBER: 4

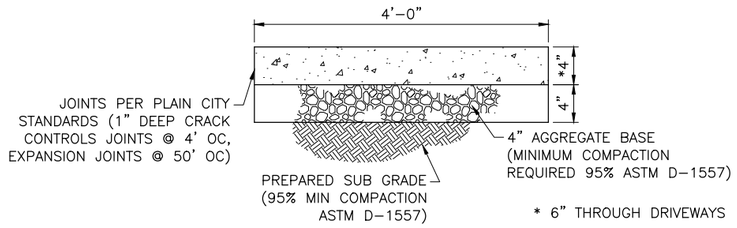
Plot Date:4/16/2020 1:41 PM Plotted By: Daniel Johnson
Date Created:2/27/2020 \\KAYS\PUBLIC\PROJECTS\JUB\PLAIN CITY\STANDARDS\2020\CITY STANDARDS.DWG



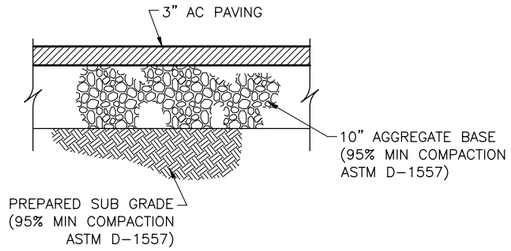
1 TYPICAL HIGHBACK CURB & GUTTER SECTION
SCALE: N.T.S.



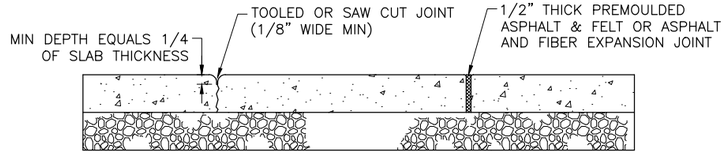
2 TYPICAL LOWBACK CURB & GUTTER SECTION
SCALE: N.T.S.



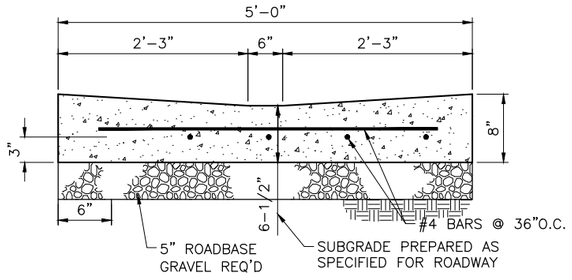
3 TYPICAL SIDEWALK
SCALE: N.T.S.



4 TYPICAL ASPHALT PAVING SECTION
SCALE: N.T.S.



5 JOINT DETAIL
SCALE: N.T.S.



6 CROSS DRAIN SECTION
SCALE: N.T.S.

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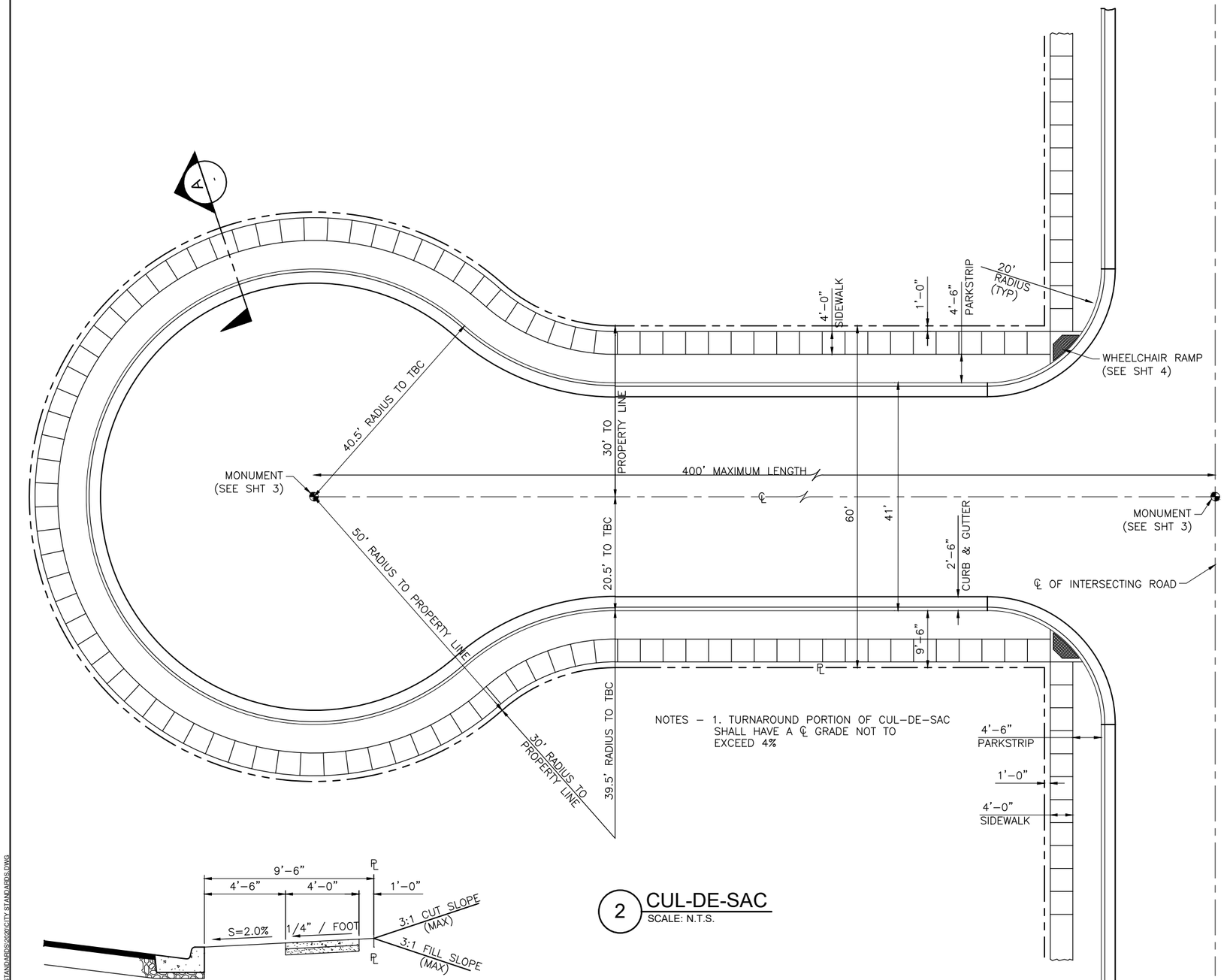
PUBLIC WORKS STANDARDS
PLAIN CITY CORPORATION

CURB AND SIDEWALK DETAILS

LAST UPDATED: 4/16/2020

SHEET NUMBER:
5

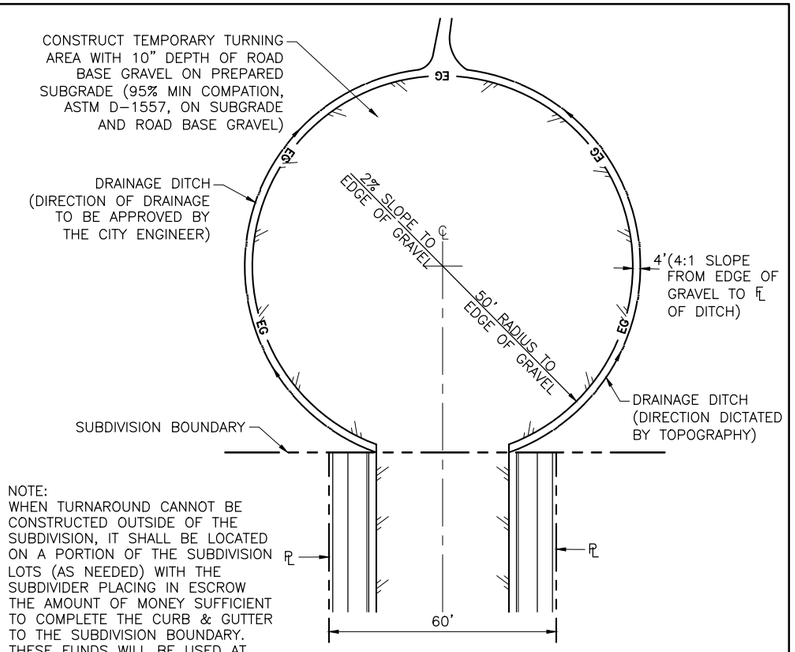
Plot Date:4/16/2020 1:41 PM Plotted By: Daniel Johnson
Date Created:2/27/2020 \\KAYSPUBLIC\PROJECTS\JUB\PLAIN CITY\STANDARDS\2020\CITY STANDARDS.DWG



A REQUIRED GRADING BETWEEN TBC AND PROPERTY LINE
SCALE: N.T.S.

2 CUL-DE-SAC
SCALE: N.T.S.

NOTE: THE CIRCULAR CUL-DE-SAC LAYOUT SHOWN ON THIS SHEET IS TO BE CONSIDERED AS THE CITY STANDARD DESIGN. OTHER ALTERNATE DESIGNS MAY BE CONSIDERED AS APPROVED BY THE CITY ENGINEER.



NOTE:
WHEN TURNAROUND CANNOT BE CONSTRUCTED OUTSIDE OF THE SUBDIVISION, IT SHALL BE LOCATED ON A PORTION OF THE SUBDIVISION LOTS (AS NEEDED) WITH THE SUBDIVIDER PLACING IN ESCROW THE AMOUNT OF MONEY SUFFICIENT TO COMPLETE THE CURB & GUTTER TO THE SUBDIVISION BOUNDARY. THESE FUNDS WILL BE USED AT SUCH TIME THAT THE STREET IS EXTENDED.

1 GRAVEL TEMPORARY TURNAROUND
SCALE: N.T.S.

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DRAWN BY: DTJ
DESIGN BY: PJT
CHECKED BY: PJT

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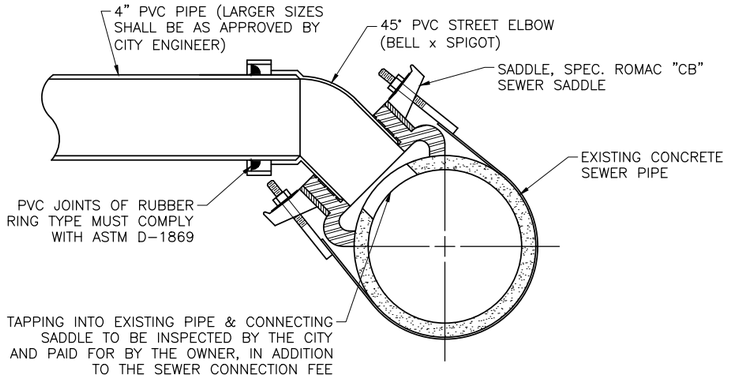
PLAIN CITY CORPORATION

CUL-DE-SAC DETAILS

LAST UPDATED: 4/16/2020
SHEET NUMBER: 6

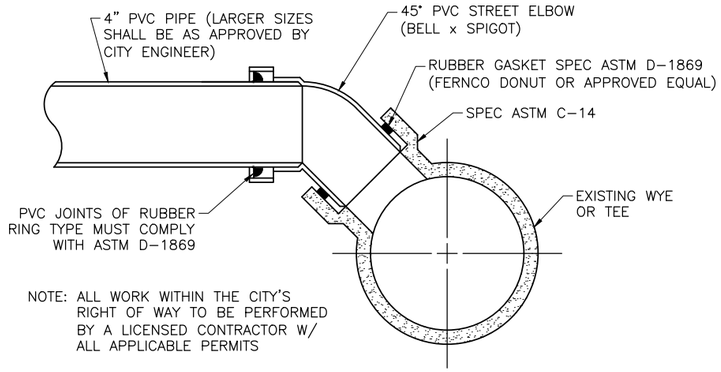
Plot Date:4/16/2020 1:41 PM Plotted By: Daniel Johnson
Date Created:2/27/2020 \\KAYS\PUBLIC\PROJECTS\JUBP\PLAIN CITY\STANDARDS\2020\CITY STANDARDS.DWG

NOTE:
PVC PIPE FITTINGS ASTM D-3034
WITH AN SDR OF 35



1 TAPPING INTO EXISTING CONCRETE PIPE
SCALE: N.T.S.

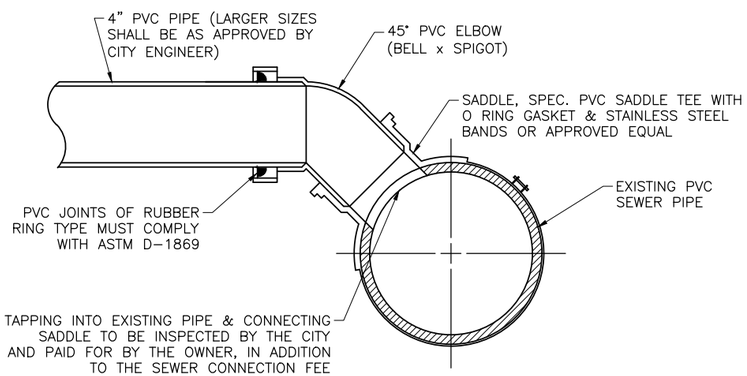
NOTE:
PVC PIPE FITTINGS ASTM D-3034
WITH AN SDR OF 35



NOTE: ALL WORK WITHIN THE CITY'S RIGHT OF WAY TO BE PERFORMED BY A LICENSED CONTRACTOR W/ ALL APPLICABLE PERMITS

2 CONNECTING INTO EXISTING WYE OR TEE
SCALE: N.T.S.

NOTE:
PVC PIPE FITTINGS ASTM D-3034
WITH AN SDR OF 35



3 TAPPING INTO EXISTING PVC PIPE
SCALE: N.T.S.

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DESIGN BY: PJT
CHECKED BY: PJT

ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY

PUBLIC WORKS STANDARDS
PLAIN CITY CORPORATION

SANITARY SEWER CONNECTION DETAILS

LAST UPDATED: 4/16/2020

SHEET NUMBER:
7

Plot Date:4/16/2020 1:41 PM Plotted By: Daniel Johnson
Date Created:2/27/2020 \\KAYSPUBLIC\PROJECTS\JUB PLAIN CITY\STANDARDS\2020\CITY STANDARDS.DWG

NOTES:

1. ALL SANITARY SEWER CONNECTIONS ON SEWER MAINS IN NEW SUBDIVISIONS SHALL BE MADE WITH IN–LINE PRE–FORMED WYES OR TEES UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER

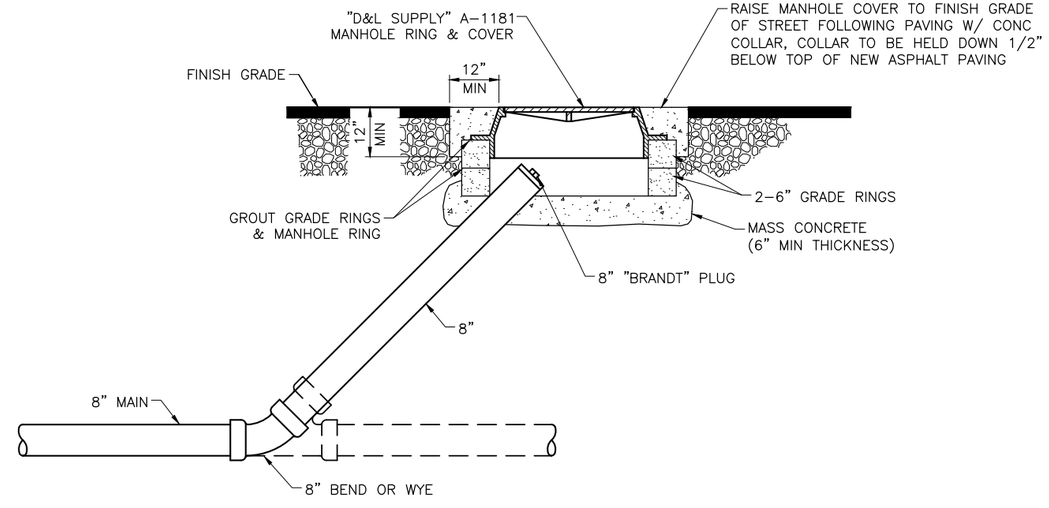
2. FLOWLINE ELEVATION OF LATERALS SHALL EQUAL THE INSIDE TOP OF PIPE ON MAINLINE AT THE CONNECTING POINT

3. SANITARY SEWER PIPE LINES SHALL BE "WHITE" IN COLOR SUB–SURFACE DRAIN LINES SHALL BE "GREEN" IN COLOR

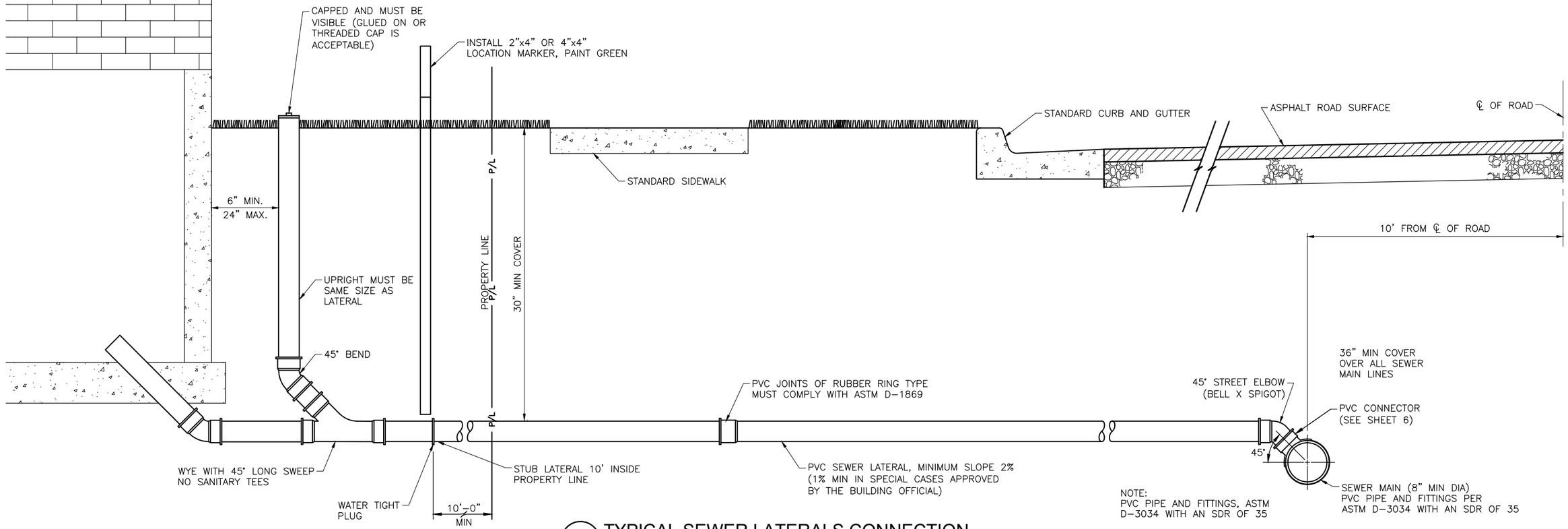
4. ALL SANITARY SEWER LINES SHALL BE INSPECTED BY MEANS OF VIDEO CAMERA, FOLLOWING CONSTRUCTION. PRIOR TO VIDEO, PIPE SHALL BE FLUSHED WITH A PRESSURIZED CLEANING TRUCK. ALL WATER & DEBRIS SHALL BE REMOVED FROM THE LOW END MANHOLE. CONNECTIONS TO EXISTING SEWER LINES SHALL BE BLOCKED TO PREVENT FLUSHED DEBRIS FROM ENTERING SEWER. CLEAN WATER SHALL BE ADDED TO LINE PRIOR TO VIDEOING. ALL PROBLEMS FOUND AND CORRECTED TO BE RE–INSPECTED BY THE SAME PROCEDURE VIDEOS TO BE RETAINED BY CITY

5. ALL WORK WITHIN THE CITY'S RIGHT–OF–WAY TO BE PERFORMED BY A LICENSED CONTRACTOR WITH ALL APPLICABLE PERMITS

6. ALL SEWER SERVICE LATERALS SHALL INCLUDE A BACKFLOW PREVENTION DEVICE AS REQUIRED BY THE PLAIN CITY BUILDING OFFICIAL



1 DRAIN/SEWER MAINLINE CLEANOUT
SCALE: N.T.S.



2 TYPICAL SEWER LATERALS CONNECTION
SCALE: N.T.S.

REVISION

NO.	DESCRIPTION	BY	APR.	DATE

J-U-B ENGINEERS, INC.
466 North 900 West
Kaysville, Utah 84037
Phone: 801.547.0393
Fax: 801.547.0397
www.jub.com
J-U-B ENGINEERS, INC.

AGENCY REVIEW

FILE:	CITY STANDARDS
JUB PROJ. # :	----
DRAWN BY:	DTJ
DESIGN BY:	PJT
CHECKED BY:	PJT

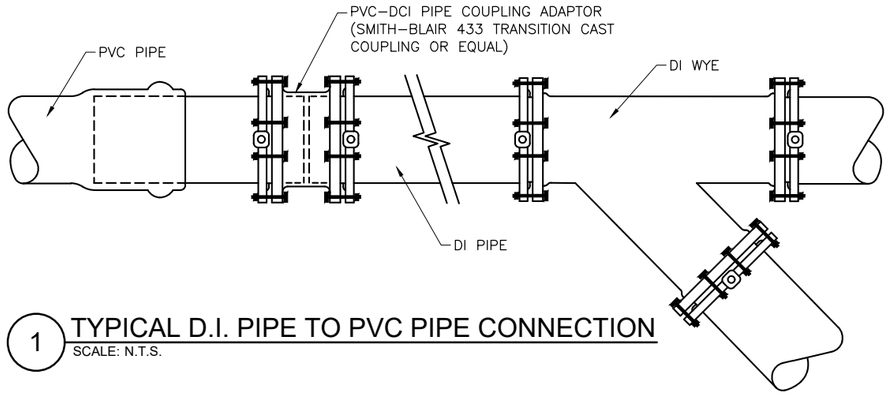
ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY

PUBLIC WORKS STANDARDS
PLAIN CITY CORPORATION

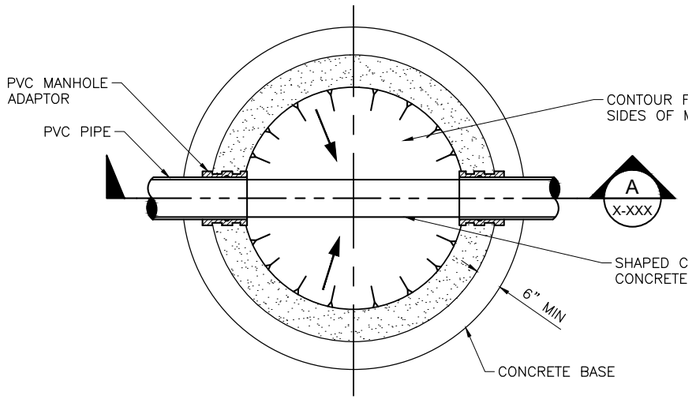
SANITARY SEWER LATERAL & CLEANOUT DETAILS

LAST UPDATED: 4/16/2020
SHEET NUMBER: 8

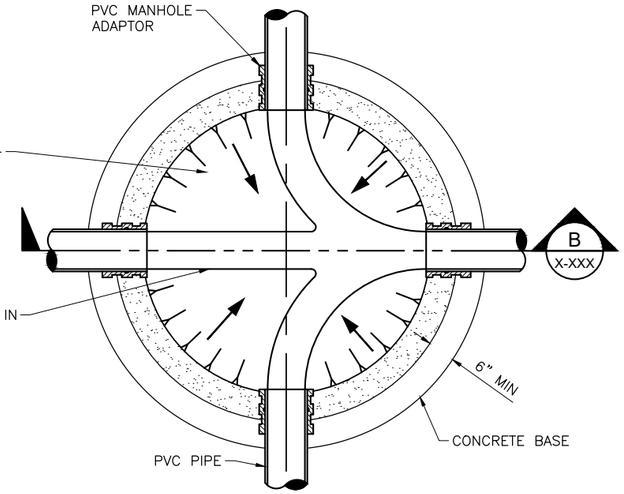
Plot Date:4/16/2020 1:41 PM Plotted By: Daniel Johnson
Date Created:2/27/2020 \\KAYS\PUBLIC\PROJECTS\JUB\PLAIN CITY\STANDARDS\2020\CITY STANDARDS.DWG



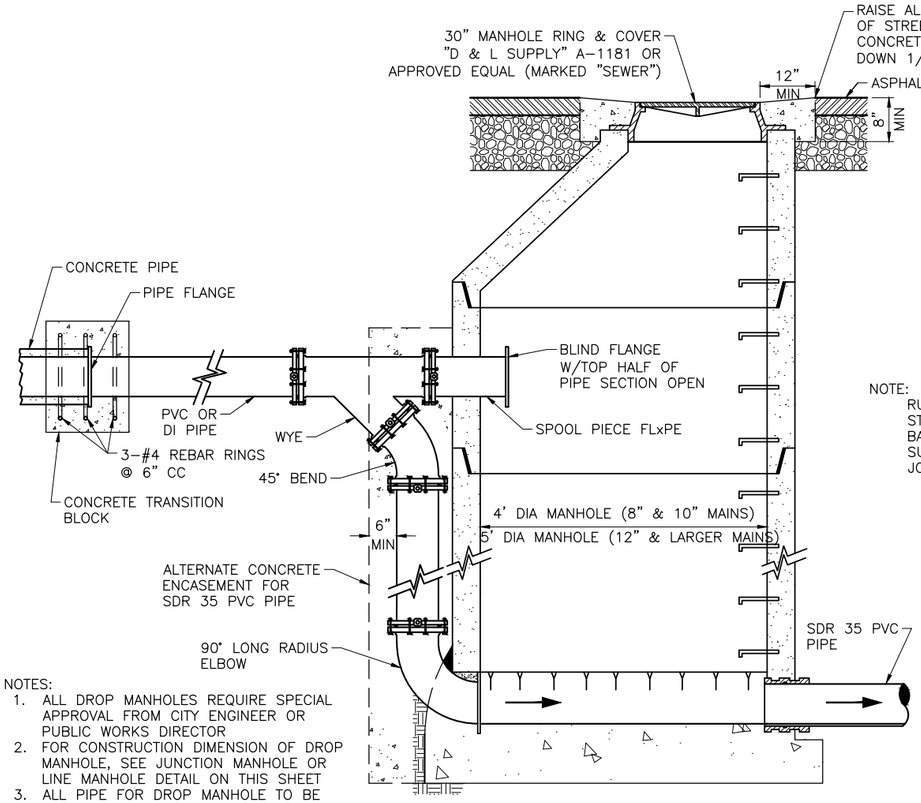
1 TYPICAL D.I. PIPE TO PVC PIPE CONNECTION
SCALE: N.T.S.



LINE MANHOLE PLAN



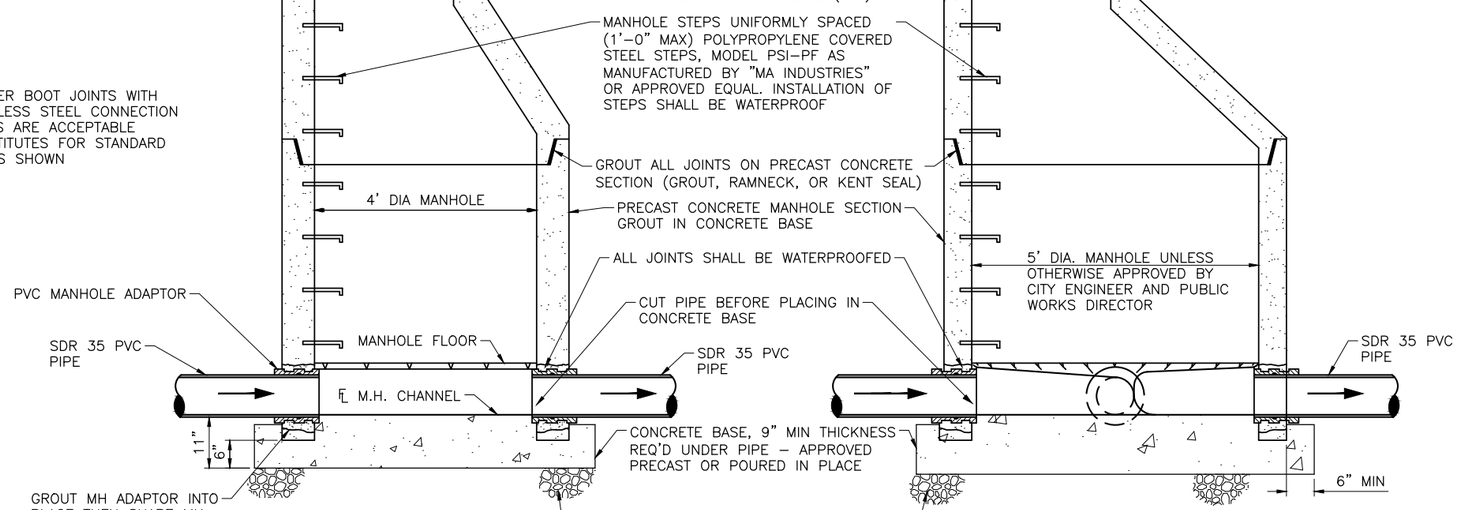
JUNCTION MANHOLE PLAN



NOTES:
1. ALL DROP MANHOLES REQUIRE SPECIAL APPROVAL FROM CITY ENGINEER OR PUBLIC WORKS DIRECTOR
2. FOR CONSTRUCTION DIMENSION OF DROP MANHOLE, SEE JUNCTION MANHOLE OR LINE MANHOLE DETAIL ON THIS SHEET
3. ALL PIPE FOR DROP MANHOLE TO BE DUCTILE IRON PIPE, OR ALTERNATE SDR 35 PVC ENCASED IN CONCRETE FITTINGS TO BE MECHANICAL JOINT WITH MEGA LUG RESTRAINTS

2 OUTSIDE DROP MANHOLE
TYPICAL D.I. PIPE TO CONCRETE PIPE CONNECTION
SCALE: N.T.S.

NOTE:
RUBBER BOOT JOINTS WITH STAINLESS STEEL CONNECTION BANDS ARE ACCEPTABLE SUBSTITUTES FOR STANDARD JOINTS SHOWN



A LINE MANHOLE
SCALE: N.T.S.

B JUNCTION MANHOLE
SCALE: N.T.S.

REVISION

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AGENCY REVIEW

FILE:	CITY STANDARDS
JUB PROJ. # :	----
DRAWN BY:	DTJ
DESIGN BY:	PJT
CHECKED BY:	PJT

ONE INCH
AT FULL SIZE. IF NOT ONE INCH, SCALE ACCORDINGLY

PUBLIC WORKS STANDARDS
PLAIN CITY CORPORATION

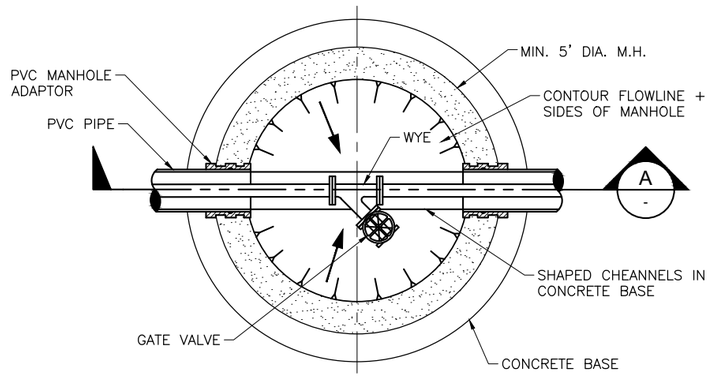
SANITARY SEWER MANHOLE DETAILS

LAST UPDATED: 4/16/2020
SHEET NUMBER: 9

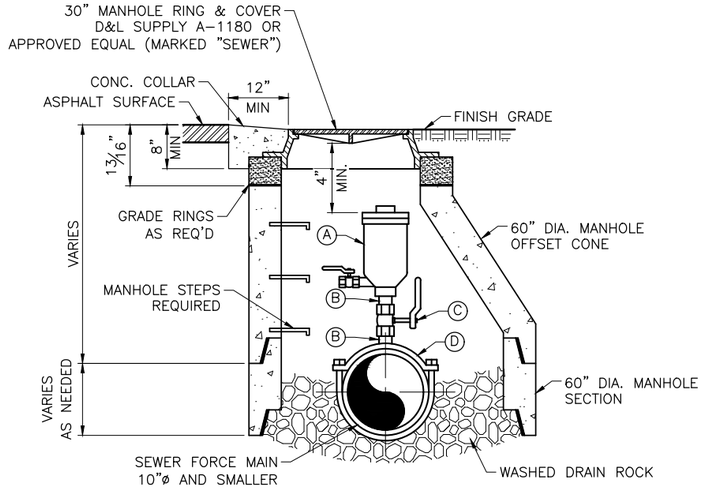
Plot Date:4/16/2020 1:41 PM Plotted By: Daniel Johnson
Date Created:2/27/2020 \\KAYSPUBLIC-PROJECTS\JUB\PLAIN CITY\STANDARDS\2020\CITY STANDARDS.DWG

PIPE & FITTING SCHEDULE		
NO.	DESCRIPTION	FITTING
A	2" WASTEWATER AIR RELEASE VALVE, VAL MATIC MODEL #49A W/ OPTIONAL VACUUM CHECK ON THE OUTLET	THR.
B	2" BRASS PIPE	THR.
C	2" BALL VALVE (1/4 TURN 200 PSI MIN.	THR.
D	2" NYLON COATED SERVICE SADDLE W/ STEEL STRAPS ROMAC MODEL #202 NS	–

NOTE:
WHERE SEWAGE WATER QUALITY IS ADEQUATE AS DICTATED BY THE CITY ENGINEER, AN A.R.I. DO40 OR APPROVED EQUAL VALVE MAY BE SPECIFIED.

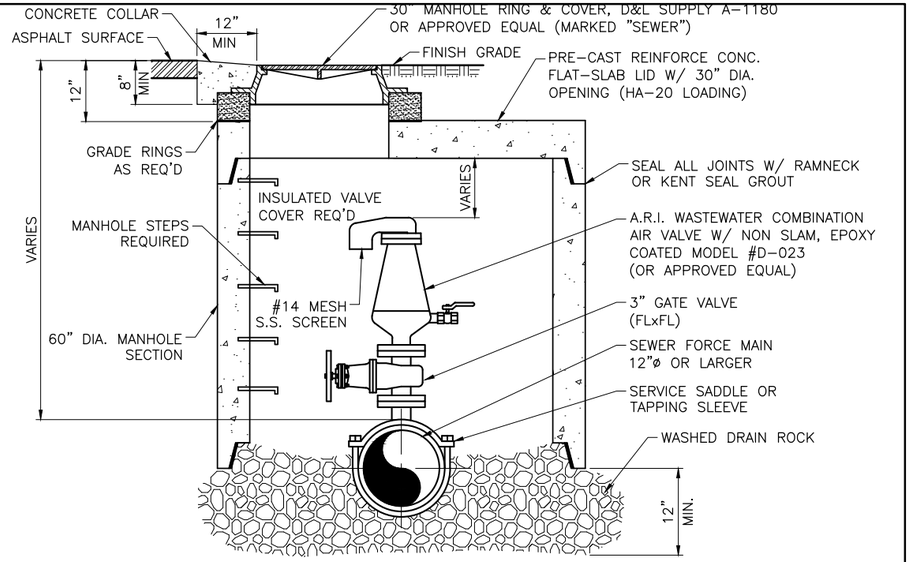


PLAN



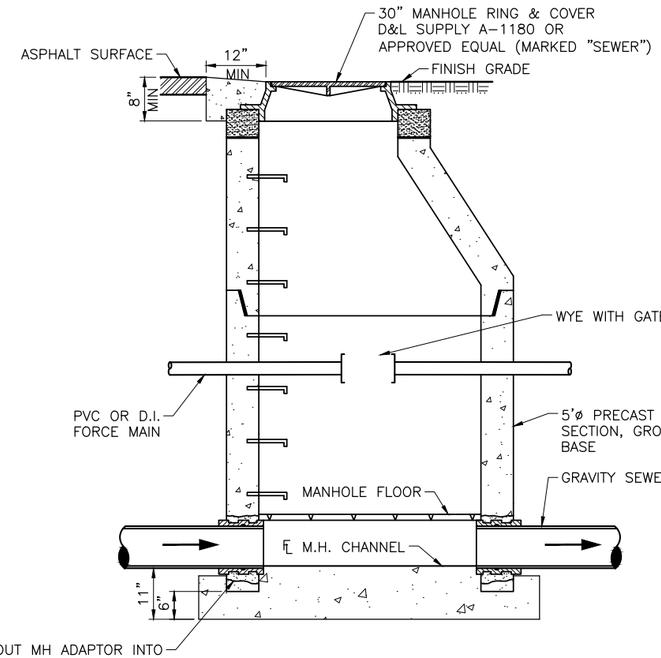
2" WASTEWATER AIR RELEASE VALVE

10" Ø MAINS AND UNDER



3" WASTEWATER AIR/VACUUM RELIEF VALVE

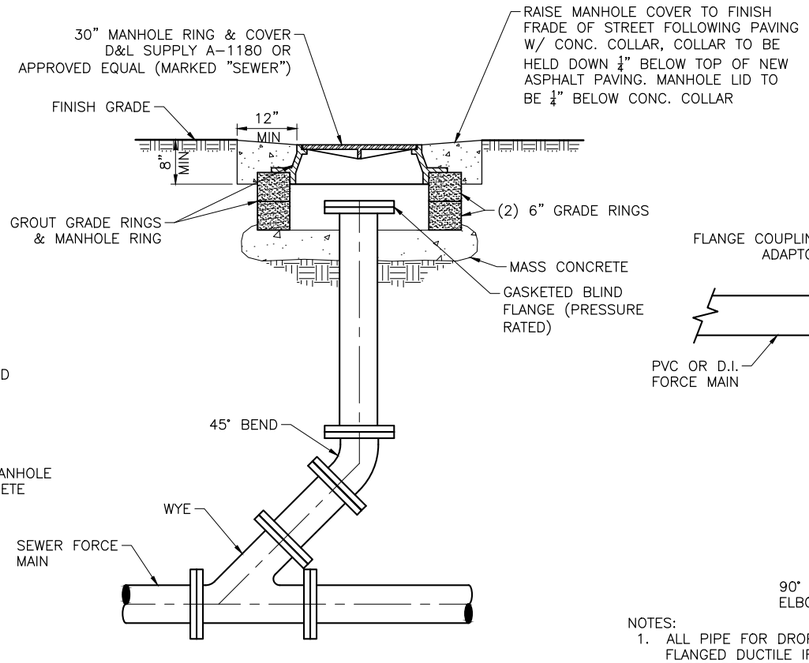
12"Ø MAINS AND LARGER



A

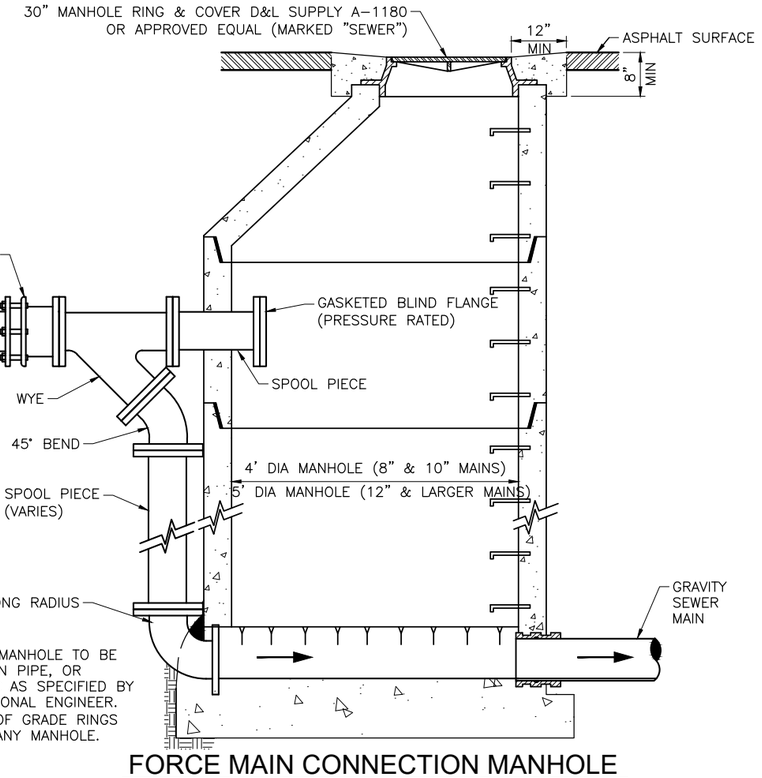
FORCE MAIN CLEANOUT MANHOLE

WHERE SPECIFIED BY THE WASTEWATER TREATMENT MANGER



STANDARD FORCE MAIN CLEANOUT

4"Ø TO 12"Ø MAINS



NOTES:
1. ALL PIPE FOR DROP MANHOLE TO BE FLANGED DUCTILE IRON PIPE, OR PRESSURE RATED PVC AS SPECIFIED BY A LICENSED PROFESSIONAL ENGINEER.
2. NO MORE THAN 12" OF GRADE RINGS TO BE ALLOWED ON ANY MANHOLE.

FORCE MAIN CONNECTION MANHOLE

FORCE MAIN CONNECTION TO GRAVITY SEWER

REVISION				
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Kaysville, Utah 84037
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Fax: 801.547.0397
www.jub.com
J-U-B ENGINEERS, INC.

AGENCY REVIEW

FILE: CITY STANDARDS
JUB PROJ. # : ----
DRAWN BY: DTJ
DESIGN BY: PJT
CHECKED BY: PJT

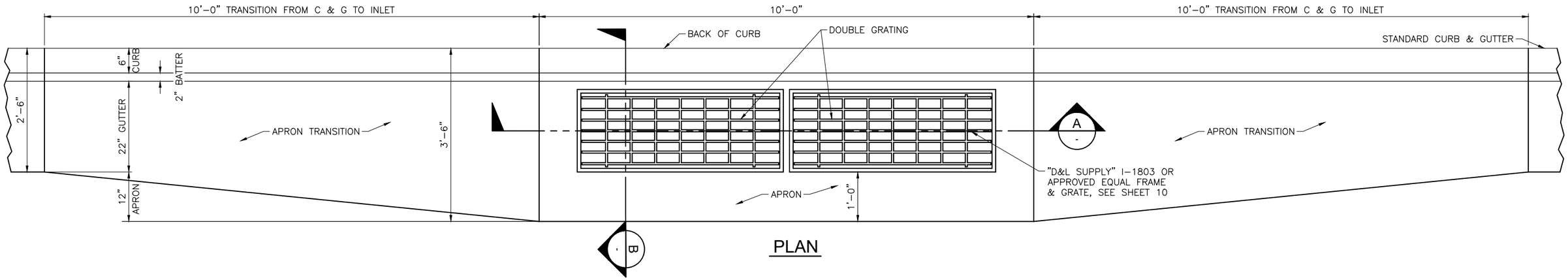
ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY

PUBLIC WORKS STANDARDS
PLAIN CITY CORPORATION

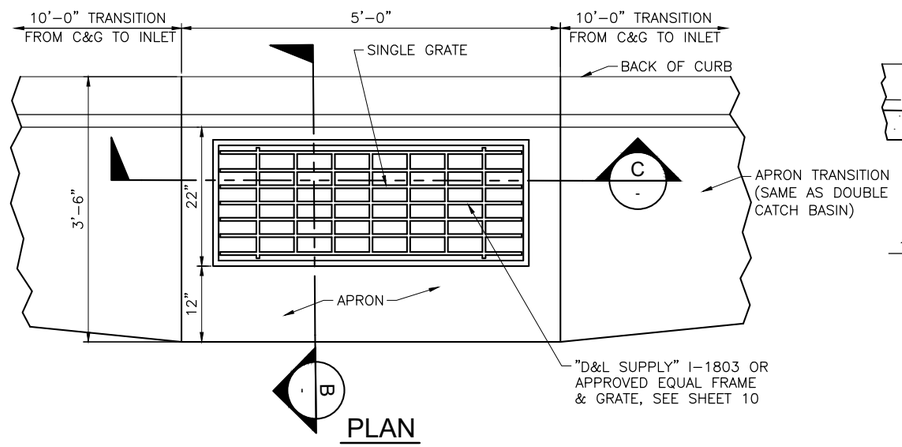
SANITARY SEWER FORCE MAIN DETAILS

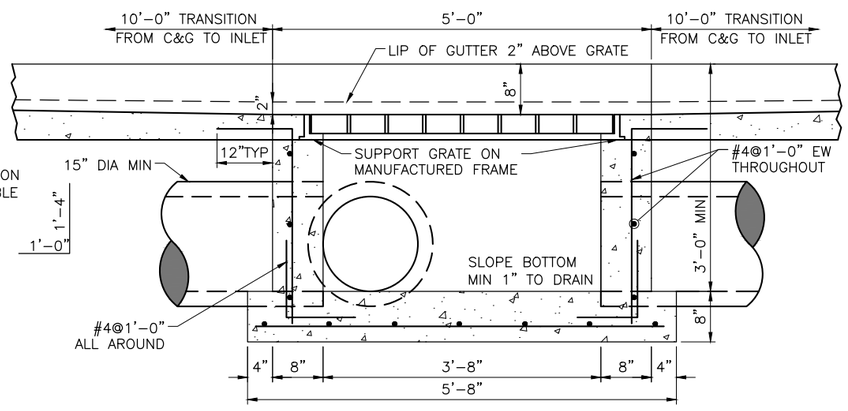
LAST UPDATED: 4/16/2020
SHEET NUMBER: 10

Plot Date:4/16/2020 1:41 PM Plotted By: Daniel Johnson
Date Created:2/27/2020 \\KAYSPUBLIC\PROJECTS\JUB\PLAIN CITY\STANDARDS\2020\CITY STANDARDS.DWG

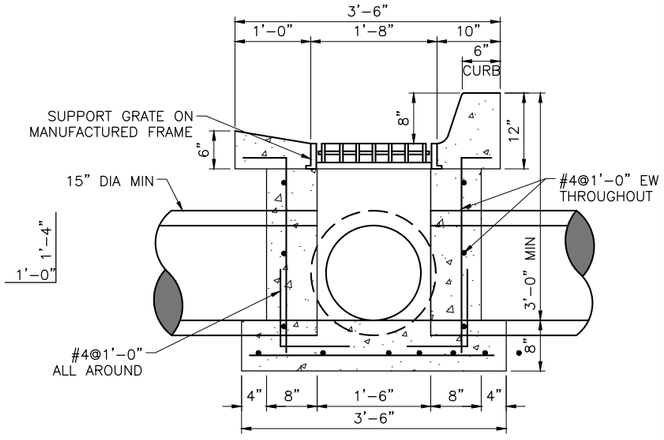


A DOUBLE CATCH BASIN
SCALE: N.T.S.





C SINGLE CATCH BASIN
SCALE: N.T.S.



B SECTION B
SCALE: N.T.S.

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466 North 900 West
Kaysville, Utah 84037
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J-U-B ENGINEERS, INC.

AGENCY REVIEW

FILE: CITY STANDARDS
JUB PROJ. # : ----
DRAWN BY: DTJ
DESIGN BY: PJT
CHECKED BY: PJT

ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY

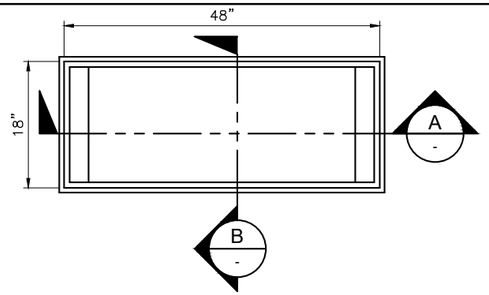
PUBLIC WORKS STANDARDS
PLAIN CITY CORPORATION

DOUBLE & SINGLE CATCH BASIN DETAILS

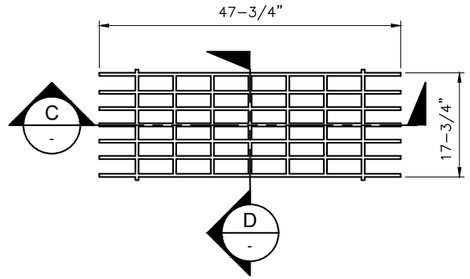
LAST UPDATED: 4/16/2020

SHEET NUMBER: 11

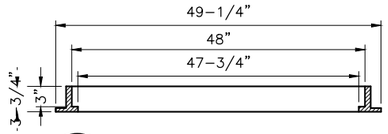
Plot Date:4/16/2020 1:41 PM Plotted By: Daniel Johnsen
Date Created:2/27/2020 \\KAYSPUBLIC\PROJECTS\JUBPLAIN CITY\STANDARDS\2020\CITY STANDARDS.DWG



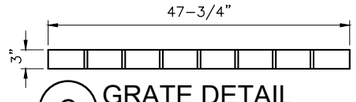
1 FRAME DETAIL
SCALE: N.T.S.



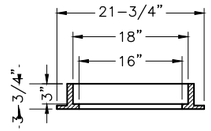
2 GRATE DETAIL
SCALE: N.T.S.



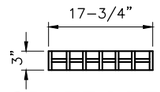
A FRAME DETAIL
SCALE: N.T.S.



C GRATE DETAIL
SCALE: N.T.S.

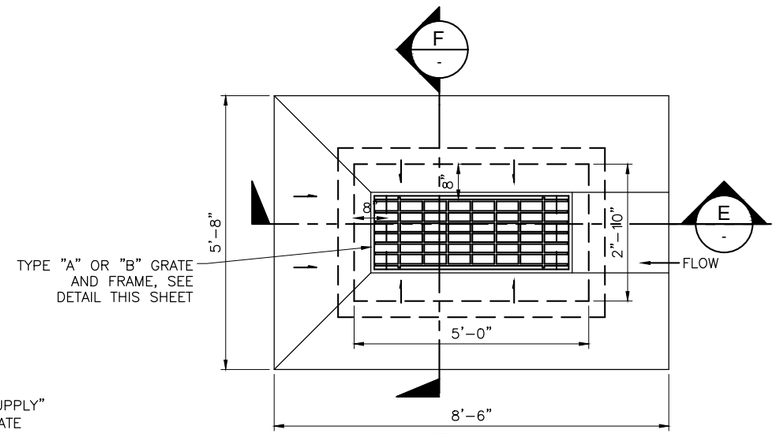


B FRAME DETAIL
SCALE: N.T.S.



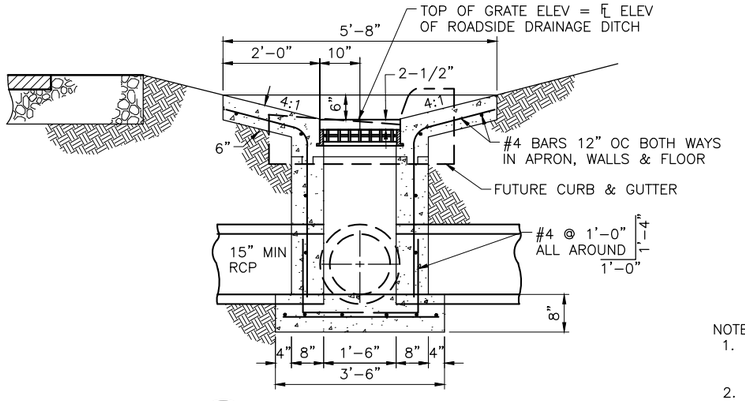
D GRATE DETAIL
SCALE: N.T.S.

NOTE:
1. TYPE "A" FRAME & GRATE SHALL BE "D&L SUPPLY" 1-1803 OR OPTIONAL TYPE "B" FRAME & GRATE SHALL BE UDOT BICYCLE-SAFE (STANDARD DRAWING #1703) AS APPROVED BY CITY ENGINEER
2. BICYCLE-SAFE GRATE REQUIRED
3. FRAME & GRATE SHALL BE PRE-FABRICATED AND GALVANIZED IN ACCORDANCE WITH ASTM A-123 SPECIFICATIONS



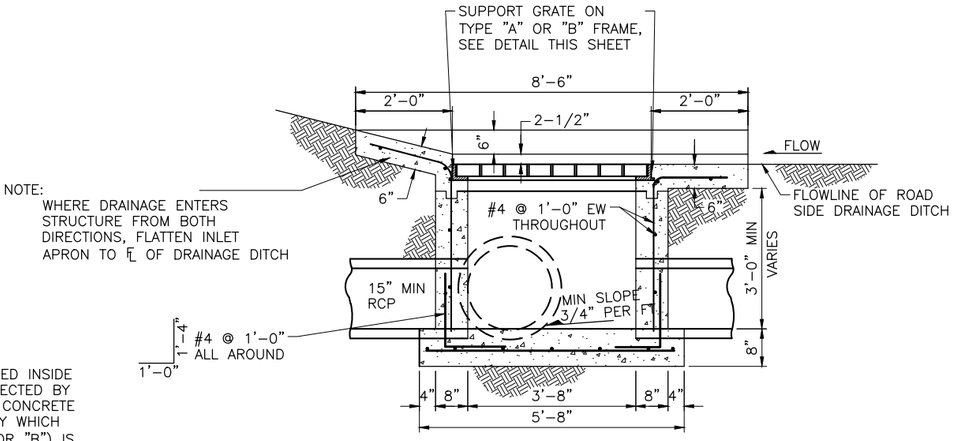
PLAN

3 STANDARD FRAME & GRATE
SCALE: N.T.S.



F CURBLESS INLET
SCALE: N.T.S.

NOTES:
1. ALL BOXES ARE TO BE FORMED INSIDE & OUT AND ARE TO BE INSPECTED BY THE CITY PRIOR TO PLACING CONCRETE
2. CITY ENGINEER SHALL SPECIFY WHICH STANDARD GRATE (TYPE "A" OR "B") IS TO BE INSTALLED IN EACH INDIVIDUAL CATCH BASIN STRUCTURE



E INLET
SCALE: N.T.S.

REVISION

NO.	DESCRIPTION	BY	APR	DATE

J-U-B ENGINEERS, INC.
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AGENCY REVIEW

FILE: CITY STANDARDS
JUB PROJ. # : ----
DRAWN BY: DTJ
DESIGN BY: PJT
CHECKED BY: PJT

ONE INCH
AT FULL SIZE. IF NOT ONE INCH, SCALE ACCORDINGLY

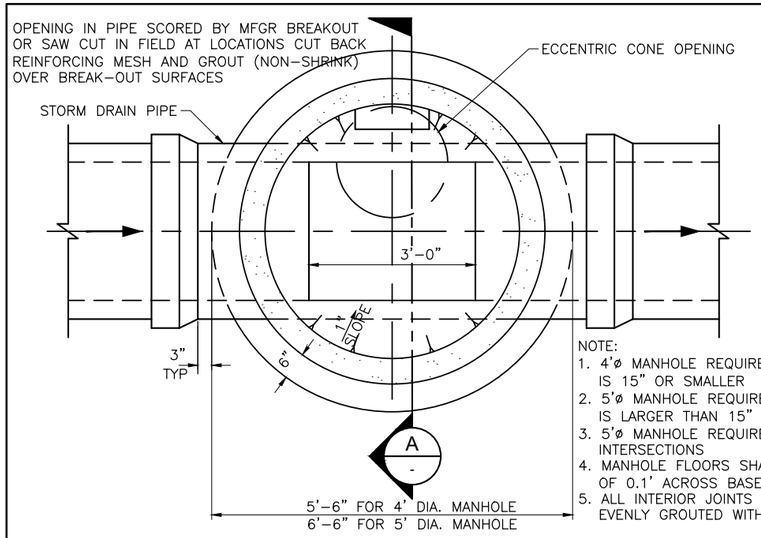
PUBLIC WORKS STANDARDS
PLAIN CITY CORPORATION

CURBLESS INLET AND FRAME & GRATE DETAILS

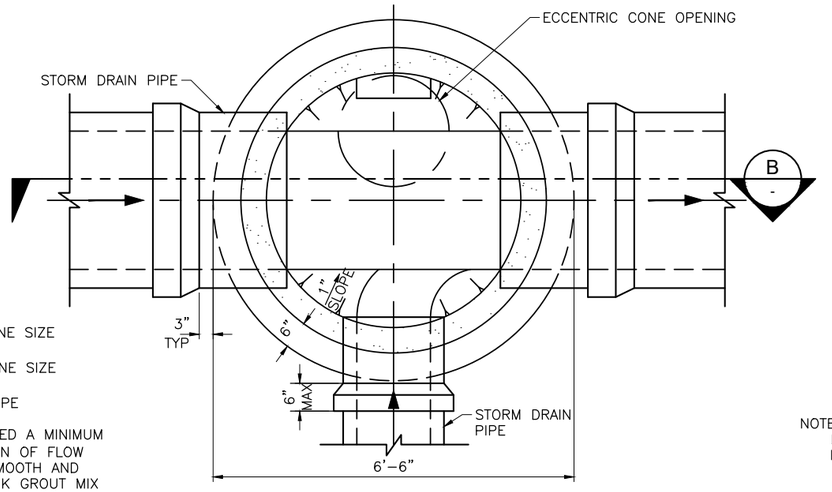
LAST UPDATED: 4/16/2020

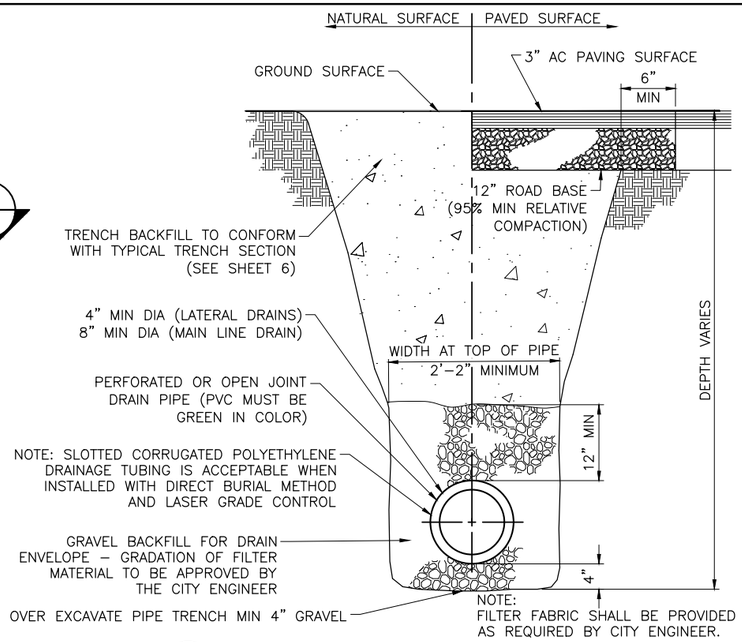
SHEET NUMBER:
12

Plot Date:4/16/2020 1:41 PM Plotted By: Daniel Johnson
Date Created:2/27/2020 \\KAYSVR\PUBLIC\PROJECTS\JUB\PLAIN CITY\STANDARDS\2020\CITY STANDARDS.DWG

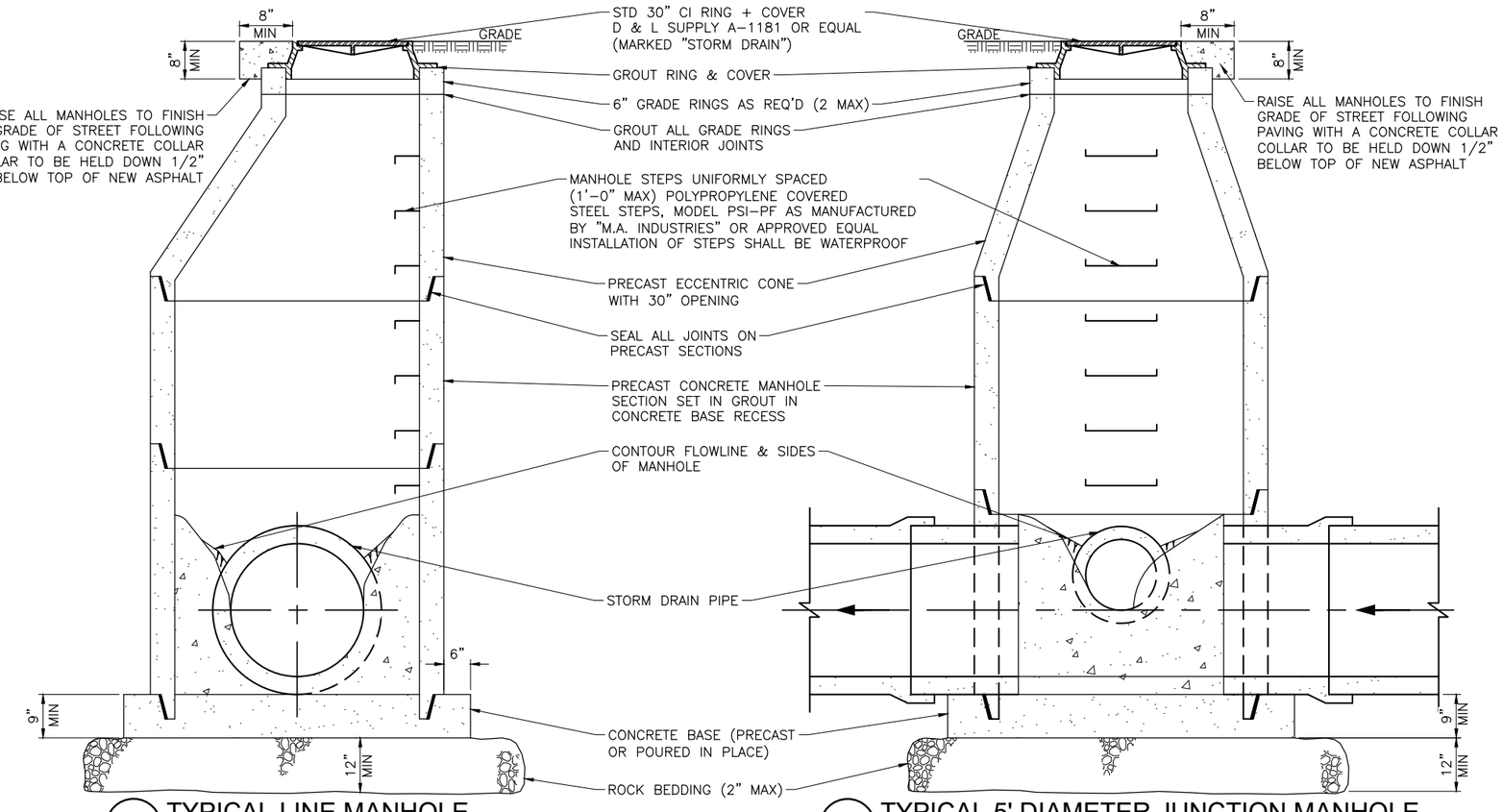


NOTE:
1. 4'ø MANHOLE REQUIRED WHERE LINE SIZE IS 15" OR SMALLER
2. 5'ø MANHOLE REQUIRED WHERE LINE SIZE IS LARGER THAN 15"
3. 5'ø MANHOLE REQUIRED AT ALL PIPE INTERSECTIONS
4. MANHOLE FLOORS SHALL BE SLOPED A MINIMUM OF 0.1' ACROSS BASE IN DIRECTION OF FLOW
5. ALL INTERIOR JOINTS SHALL BE SMOOTH AND EVENLY GROUTED WITH NON-SHRINK GROUT MIX



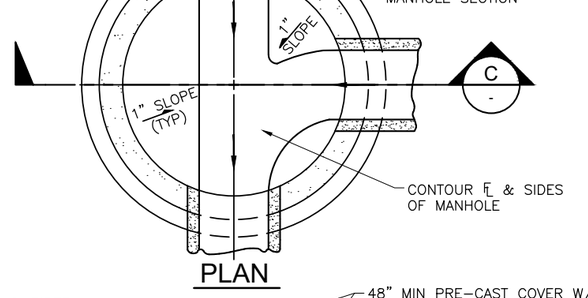


D TYPICAL LAND DRAIN PIPE SECTION
SCALE: N.T.S.

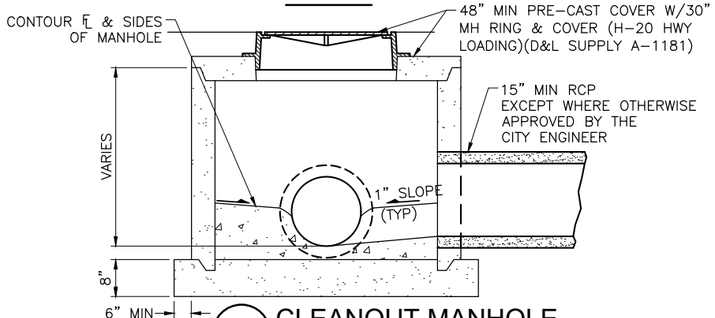


A TYPICAL LINE MANHOLE
SCALE: N.T.S.

B TYPICAL 5' DIAMETER JUNCTION MANHOLE
SCALE: N.T.S.



PLAN



C CLEANOUT MANHOLE
SCALE: N.T.S.

REVISION

NO.	DESCRIPTION	BY	APR	DATE

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466 North 900 West
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J-U-B ENGINEERS, INC.

AGENCY REVIEW

FILE: CITY STANDARDS
JUB PROJ. # :---
DRAWN BY: DTJ
DESIGN BY: PJT
CHECKED BY: PJT

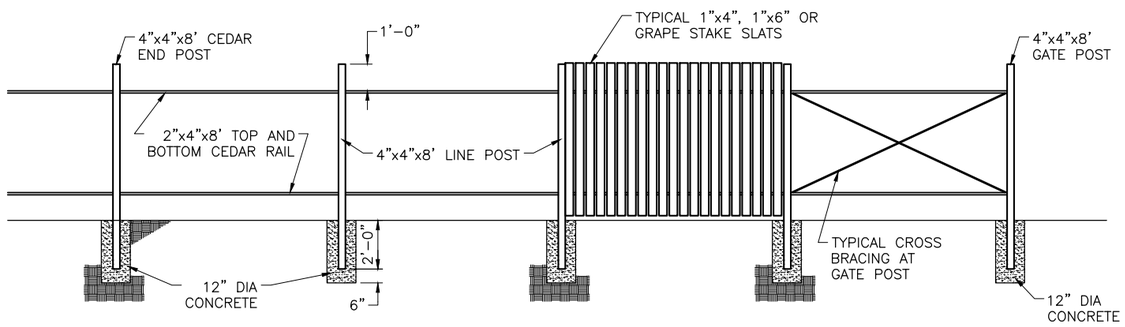
ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY

PUBLIC WORKS STANDARDS
PLAIN CITY CORPORATION

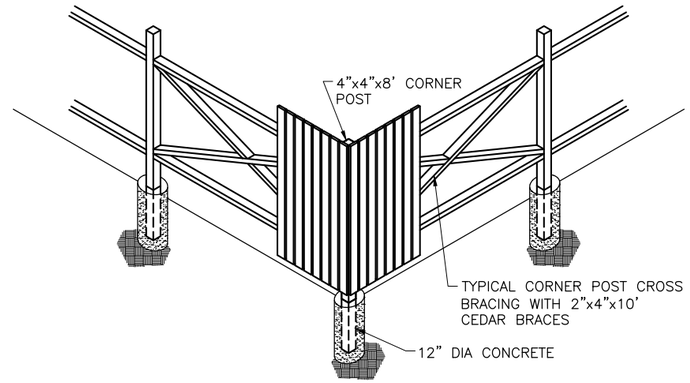
STORM DRAIN MANHOLE & LAND DRAIN DETAILS

LAST UPDATED: 4/16/2020
SHEET NUMBER: 13

Plot Date:4/16/2020 1:41 PM Plotted By: Daniel Johnson
Date Created:2/27/2020 \\KAYSPUBLIC\PROJECTS\JUB\PLAIN CITY\STANDARDS\2020\CITY STANDARDS.DWG

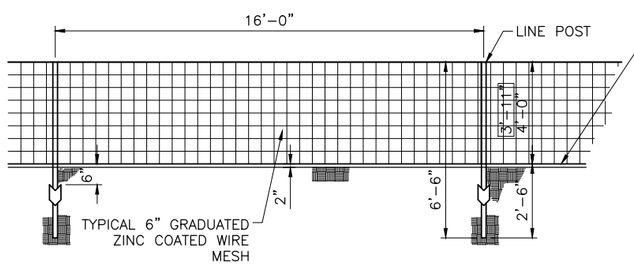


1 TYPICAL WOOD FENCE
SCALE: N.T.S.

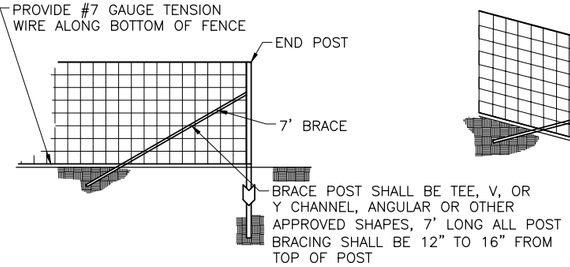


2 CORNER POST DETAIL
SCALE: N.T.S.

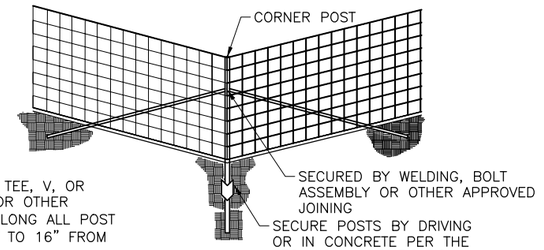
NOTE:
THIS SHEET SPECIFIES VARIOUS FENCING TYPES TO BE CONSTRUCTED WHEN CALLED FOR BY THE CITY ENGINEER



3 TYPICAL WIRE FENCE
SCALE: N.T.S.

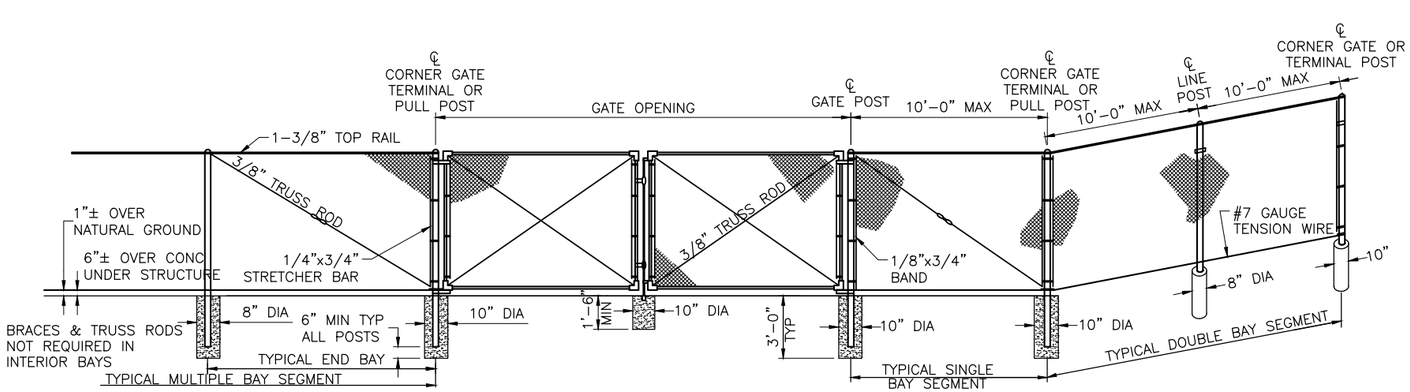


END POST BRACING DETAIL

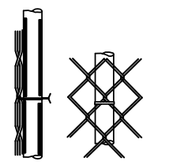


CORNER POST DETAIL

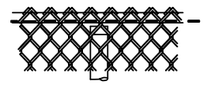
GATES			
GATE POST AND GATE FRAMES			
HEIGHT	GATE OPENING	GATE POST	GATE FRAME
6 FEET AND OVER	SINGLE TO 6' OR DOUBLE TO 12'	2-5/8"	1-1/2"
	SINGLE OVER 6' TO 13' OR DOUBLE OVER 12' TO 24'	3-1/2"	
	SINGLE OVER 13' TO 18' OR DOUBLE OVER 24' TO 36'	6"	
	SINGLE TO 18' OR DOUBLE OVER 36'	8"	



4 TYPICAL CHAIN LINK FENCE
SCALE: N.T.S.

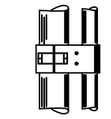


TYPICAL TIE DETAIL

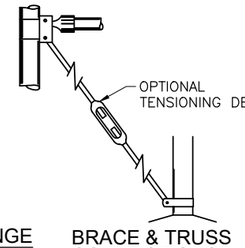


KNUCKLED SELVAGE

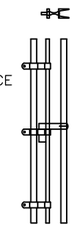
NOTE
1. ALL FABRIC SHALL BE 6' HIGH CHAIN LINK OF 2" GALVANIZED MESH OF 9 GAUGE
2. ALL STEEL PIPE MEMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM DESIGNATION A-120 SCHEDULE 40, HOT DIPPED ZINC COATED STEEL PIPE
3. ALL POST SHALL BE SET IN CONCRETE AND SHALL BE TOPPED WITH BALL TYPE OR OTHER APPROVED ORNAMENT
4. ALL END, CORNER OR PULL POST SHALL BE 9' IN LENGTH WITH A MIN DIA OF 2-7/8"; ALL LINE POST SHALL BE 8'-8" IN LENGTH WITH A MIN DIA OF 1-7/8"



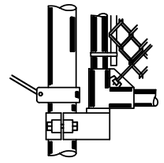
TOP GATE HINGE



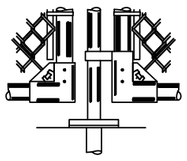
BRACE & TRUSS CONNECTIONS



DROP ROD ASSEMBLY



BOTTOM GATE HINGE



CENTER GATE STOP

NOTE:
ALL FENCING SHALL CONFORM TO LOCATION AND HEIGHT LIMITATIONS AS STATED IN THE PLAIN CITY FENCING ORDINANCE

REVISION

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J-U-B ENGINEERS, INC.

AGENCY REVIEW

FILE: CITY STANDARDS
JUB PROJ. # : ----
DRAWN BY: DTJ
DESIGN BY: PJT
CHECKED BY: PJT

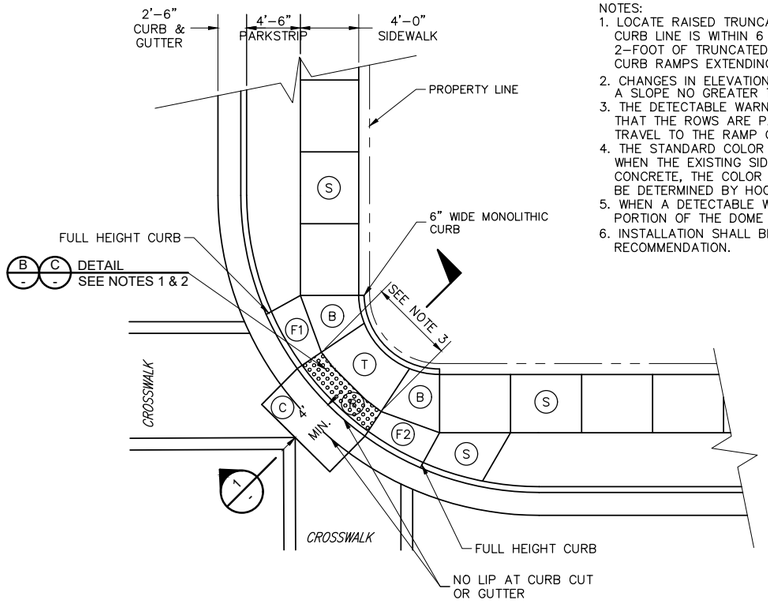
ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY

PUBLIC WORKS STANDARDS
PLAIN CITY CORPORATION

FENCING STANDARDS & DETAILS

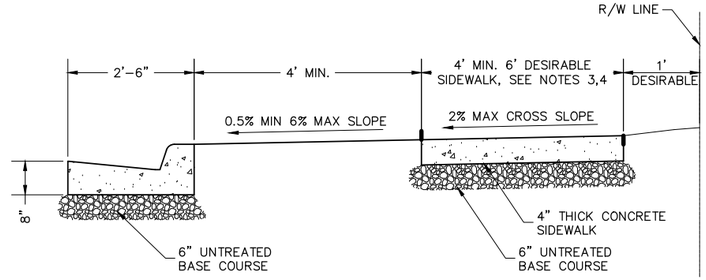
LAST UPDATED: 4/16/2020
SHEET NUMBER: 14

Plot Date: 4/16/2020 1:41 PM Plotted By: Daniel Johnson
Date Created: 2/27/2020 \\KAYSP\PUBLIC\PROJECTS\JUBPLAIN CITY\STANDARDS\2020\CITY STANDARDS.DWG



A A.D.A. WHEELCHAIR RAMP DETAIL

NOTES:
1. LOCATE RAISED TRUNCATED DOMES SO THAT THE EDGE NEAREST THE CURB LINE IS WITHIN 6 TO 8 INCHES FROM THE CURB LINE. PROVIDE 2-FOOT OF TRUNCATED DOME PATTERN AT THE LOWER END OF ALL CURB RAMPS EXTENDING THE FULL WIDTH OF THE CURB RAMP.
2. CHANGES IN ELEVATION GREATER THAN ¼" SHALL BE BEVELED WITH A SLOPE NO GREATER THAN 2:1
3. THE DETECTABLE WARNING SURFACE DOMES SHALL BE ORIENTED SUCH THAT THE ROWS ARE PARALLEL WITH THE DIRECTION OF PEDESTRIAN TRAVEL TO THE RAMP ON THE OPPOSITE SIDE OF THE STREET.
4. THE STANDARD COLOR FOR THE DETECTABLE WARNING SHALL BE YELLOW. WHEN THE EXISTING SIDEWALK COLOR IS NOT STANDARD CONCRETE, THE COLOR OF THE DETECTABLE WARNING SURFACE SHALL BE DETERMINED BY HOOPER CITY.
5. WHEN A DETECTABLE WARNING SURFACE DOME IS CUT, THE REMAINING PORTION OF THE DOME SHALL BE BEVELED TO A MAXIMUM SLOPE OF 1:2.
6. INSTALLATION SHALL BE DONE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION.

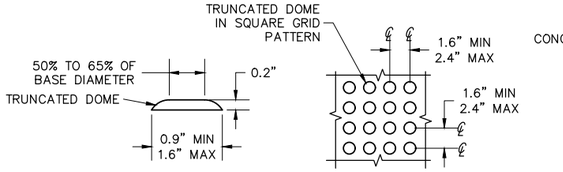


NOTES:
1. INSTALL 8:1 OR FLATTER TAPER WHEN CHANGING THE WIDTH OF SIDEWALK.
2. PROVIDE A 5 FT X 5 FT PASSING SPACE ON PEDESTRIAN ACCESS ROUTES LESS THAN 5 FT WIDE AT INTERVALS OF 200 FT MAXIMUM.
3. SIDEWALK CROSS SLOPE DIMENSIONS SHOWN ARE NOT SUBJECT TO CONVENTIONAL INDUSTRY TOLERANCES. CONSTRUCT SIDEWALKS AND RAMPS SUCH THAT THE MINIMUM AND MAXIMUM VALUES ARE EXCEEDED. WORK THAT EXCEEDS THOSE VALUES WILL NOT BE ACCEPTED.
4. PROVIDE A 5 FT X 5 FT PASSING AREA ON SIDEWALKS OF LESS THAN 5 FT WIDE WHEN THERE IS NOT A HARD SURFACE PASSING AREA OF 5 FT MINIMUM WIDTH IN A 200 FT SEGMENT.
5. A MINIMUM OF 7 FT IS REQUIRED AT BACK OF SIDEWALK AT DRIVEWAY LOCATIONS TO MEET GRADING REQUIREMENTS.

D PARK STRIP DETAIL

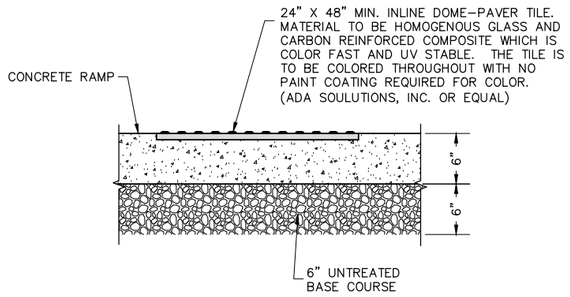
GENERAL NOTES:

1. DIMENSIONS SHOWN IN THE SLOPE TABLE ARE NOT SUBJECT TO CONVENTIONAL INDUSTRY TOLERANCES. CONSTRUCT SIDEWALK S AND RAMPS SUCH THAT THE MAXIMUM OR MINIMUM VALUES ARE NOT EXCEEDED. WORK THAT EXCEEDS THOSE VALUES WILL NOT BE ACCEPTED.
2. SITE CONDITIONS WILL VARY, CONFIGURATION OF RAMP, BLENDED TRANSITION, TURNING SPACE AND CLEAR SPACE MAY BE CHANGED, BUT THEY MUST MEET DIMENSIONS AND SLOPES SHOWN HERE. THE USE OF ITEMS SUCH AS FLARES AND CURB WALL ARE AT THE DISCRETION OF THE ENGINEER.
3. RAMP GRADE BREAK MUST BE PERPENDICULAR TO THE RUNNING SLOPE.
4. TURNING SPACE WIDTH: USE THE LARGER OF THE CURB CUT WIDTH OR A 4 FT MINIMUM WIDTH X 4 FT MINIMUM DEPTH.
5. TURNING SPACE DEPTH: USE A 4 FT MINIMUM DEPTH WHEN THE TURNING SPACE IS UNCONSTRAINED. USE A 5 FT MINIMUM DEPTH WHEN THE TURNING SPACE IS CONSTRAINED.
6. CONSTRUCT BLENDED TRANSITIONS WITHOUT A TURNING SPACE ONLY WHEN TECHNICAL INFEASIBILITY PREVENTS THE INSTALLATION OF A TURNING SPACE.
7. LOCATE CURB CUT WITHIN CROSSWALK.
8. USE A 4 FT MINIMUM CURB CUT. USE A 8 FT MINIMUM CURB CUT FOR BI-DIRECTIONAL CROSSWALKS.
9. PROVIDE DIRECTIONAL WARNING SURFACE ACCORDING TO MANUFACTURER'S RECOMMENDATIONS FOR FULL WIDTH OF CURB CUT AND 2 FT MINIMUM IN THE DIRECTION OF PEDESTRIAN TRAVEL. SEE DETECTABLE WARNING SURFACE DETAIL B FOR DIMENSIONS.
10. LOCATE DETECTABLE WARNING SURFACE SO THE OUTSIDE CORNER NEAREST THE STREET IS WITHIN 1 INCH OF THE BACK OF CURB.
11. PLACE DETECTABLE WARNING SURFACE PANELS ON A RADIUS IN A STRAIGHT LINE OR ACCORDING TO DETAIL X. TOP CORNERS OF ADJACENT PANELS TO TOUCH, BOTTOM CORNERS OF ADJACENT PANELS TO HAVE A 2 INCH MAXIMUM GAP.
12. GRIND OFF REMAINING PORTION OF ANY CUT DOMES WHEN DETECTABLE WARNING SURFACE IS CUT. SEAL ALL CUT PANEL EDGES TO PREVENT WATER DAMAGE.
13. PROVISE DETECTABLE WARNING SURFACE COLOR THAT CONTRASTS WITH ADJACENT WALKING SURFACE, GUTTER, STREET, AND PEDESTRIAN ACCESS ROUTE, EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT.
14. CLEAR SPACE SIZE: USE A 4 FT MINIMUM DEPTH AND THE LARGER OF THE CURB CUT WIDTH OR A 4 FT MINIMUM WIDTH.



DETECTABLE WARNING SURFACE

B DETAIL



C INLINE DOME PAVER TILE

SLOPE TABLE			
	ITEM	MAX RUNNING SLOPE *	MAX CROSS SLOPE *
T	TURNING SPACE	2%	2% (d)
R	RAMP	8.3% (a) 5.1% MIN	2%
B	BLENDED TRANSITION	5%	2% (d)
C	CLEAR SPACE/GUTTER	5% (b)	2% (d)
S	SIDEWALK	–	2%
F1	FLARE WITHIN SIDEWALK	10% (c)	–
F2	FLARE NOT IN SIDEWALK	25% (C)	–
	CROSSWALK	5%	2% (e) (F)

* RUNNING SLOPE IS IN THE DIRECTION OF PEDESTRIAN TRAVEL.
** CROSS SLOPE IS PERPENDICULAR TO PEDESTRIAN TRAVEL. SEE CLEAR SPACE/GUTTER DETAIL C

(a) LENGTH OF RUNNING SLOPE FOR RAMPS IS NOT REQUIRED TO EXCEED 15 FT.

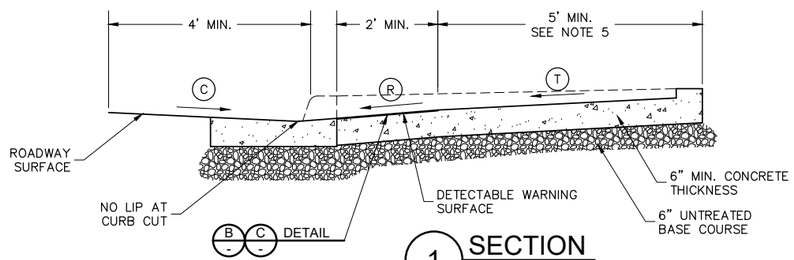
(b) MAINTAIN CONSISTENCY OF CLEAR SPACE RUNNING SLOPE ACROSS ENTIRE CURB CUT. WARP GUTTER PAN TO MEET REQUIRED CLEAR SPACE SLOPE AT CURB CUT.

(c) MEASURE FLARE SLOPE PARALLEL TO CURB LINE.

(d) DO NOT EXCEED THE ROADWAY PROFILE GRADE FOR THE CROSS SLOPE AT CROSSWALKS WITHOUT A STOP OR YIELD SIGN AND AT MID-BLOCK CROSSWALKS.

(e) DO NOT EXCEED 5 PERCENT CROSS SLOPE AT CROSSWALKS AT INTERSECTIONS WITHOUT A STOP OR YIELD SIGN.

(f) DO NOT EXCEED A CROSS SLOPE EQUAL TO THE STREET OR HIGHWAY GRADE AT MID BLOCK CROSSWALKS.



1 SECTION

REVISION

NO.	DESCRIPTION	BY	APR	DATE

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AGENCY REVIEW

FILE: CITY STANDARDS
JUB PROJ. # :---
DRAWN BY: DTJ
DESIGN BY: PJT
CHECKED BY: PJT

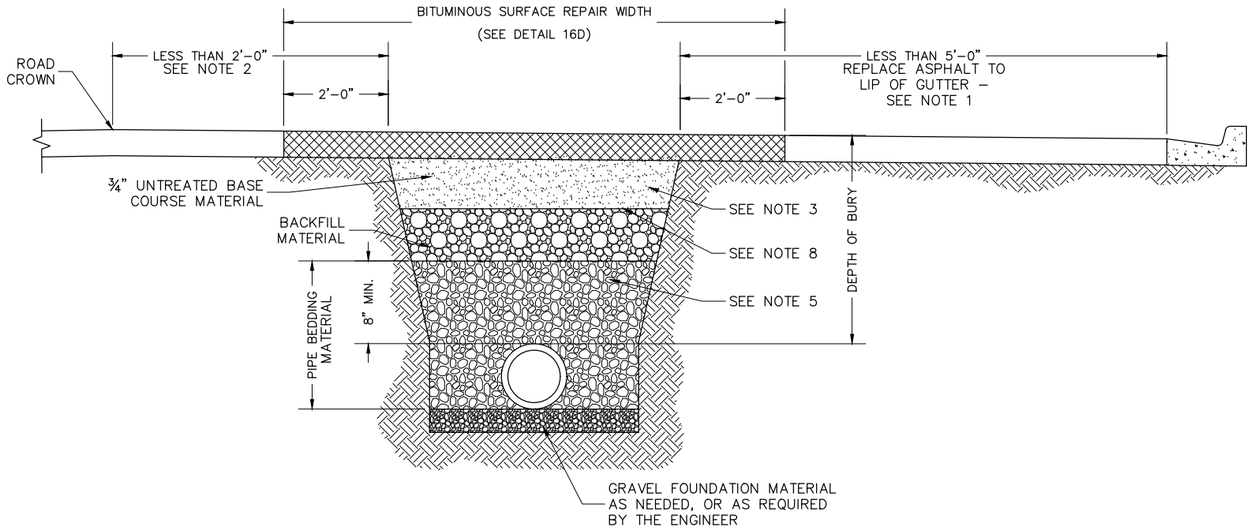
ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY

PUBLIC WORKS STANDARDS
PLAIN CITY CORPORATION

A.D.A. WHEELCHAIR RAMP

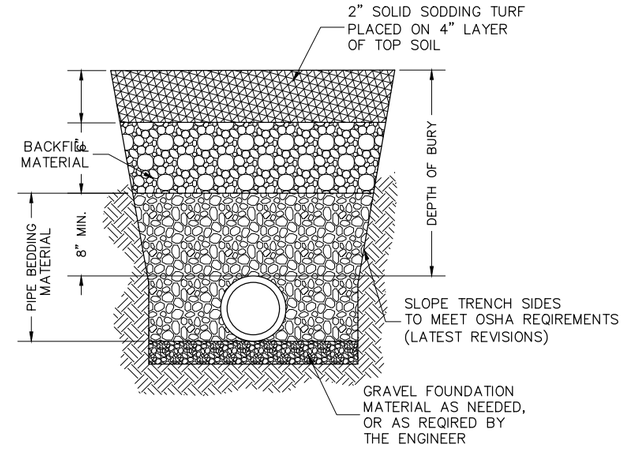
LAST UPDATED: 4/16/2020
SHEET NUMBER: 15

Plot Date:4/16/2020, 1:42 PM Plotted By: Daniel Johnson
Date Created:2/27/2020 \\KAYSPUBLIC\PROJECTS\JUBPLAIN CITY\STANDARDS\2020\CITY STANDARDS.DWG

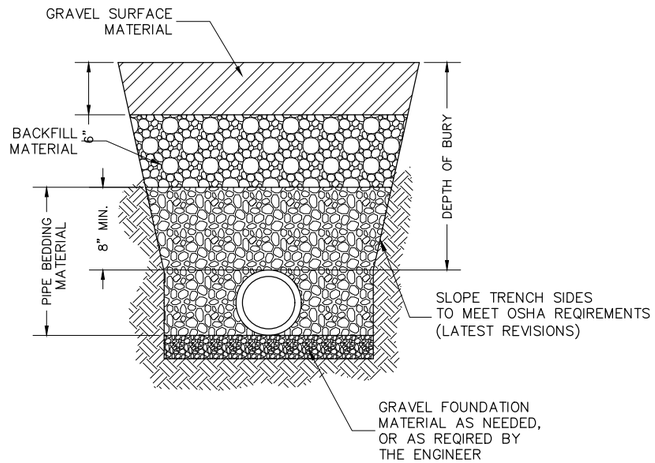


NOTES:
1. WHERE NO CURB & GUTTER EXISTS AND THE EDGE OF THE TRENCH IS LESS THAN 5'–0" FROM THE EXISTING EDGE OF ASPHALT, REPLACE ENTIRE SECTION OF PAVEMENT FROM EDGE OF TRENCH TO EXISTING EDGE OF ASPHALT.
2. WHERE THE EDGE OF THE TRENCH IS LESS THAN 2'–0" FROM THE EXISTING CROWN OF THE ROAD, SAW CUT AT EXISTING CROWN AND REPLACE AFFECTED LANE FULL DEPTH.
3. SAW CUT BITUMINOUS ASPHALT SURFACE WIDER THAN TRENCH ON EACH SIDE FOR FINAL TRENCH REPAIR WHERE BITUMINOUS SURFACE EXISTS. (DETAIL 16D).
4. BITUMINOUS SURFACE IS TO BE 6" OR TO MATCH EXISTING THICKNESS, WHICHEVER IS GREATER FOR STATE ROADS & 3" OR MATCH EXISTING THICKNESS, WHICHEVER IS GREATER FOR OTHER ROADS.
5. FOR TRENCH REPAIR, 3/4" UNTREATED BASE COURSE MATERIAL IS TO BE 12" OR TO MATCH EXISTING THICKNESS, WHICHEVER IS GREATER. FOR NEW ROAD CONSTRUCTION, 3/4" UNTREATED BASE COURSE MATERIAL IS TO BE 10" MIN. OR AS DIRECTED BY THE ENGINEER. BASE COURSE TO BE COMPACTED TO 96% ASTM D–1557.
6. SLOPE TRENCH SIDES TO MEET OSHA SAFETY REGULATIONS. (LATEST REV.)
7. BACKFILL TO BE COMPACTED TO 96% ASTM D–1557.
8. USE GEOTEXTILE FABRIC TO MATCH EXISTING OR WHERE REQUIRED.

1 BITUMINOUS SURFACE REPAIR & TYPICAL TRENCH SECTION
SCALE: N.T.S.



TURF SURFACE TRENCH SECTION



GRAVEL SURFACE TRENCH SECTION

NOTES:
1. SLOPE TRENCH SIDES TO MEET OSHA SAFETY REGULATIONS. (LATEST REV.)
2. BACKFILL TO BE COMPACTED TO 96% ASTM D–1557 IN ROADWAYS AND 90% IN LANDSCAPED AREAS.

2 NON-BITUMINOUS SURFACE REPAIR - TYPICAL TRENCH SECTION
SCALE: N.T.S.

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AGENCY

REVIEW

FILE: CITY STANDARDS
JUB PROJ. # :---
DRAWN BY: DTJ
DESIGN BY: PJT
CHECKED BY: PJT

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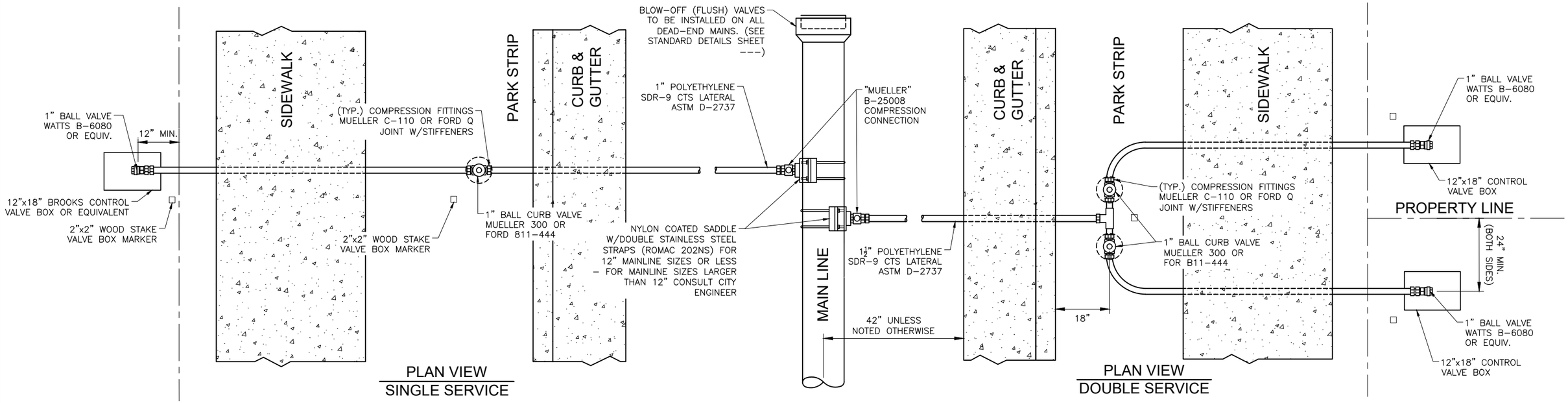
PUBLIC WORKS STANDARDS
PLAIN CITY CORPORATION

TYPICAL TRENCH SECTIONS

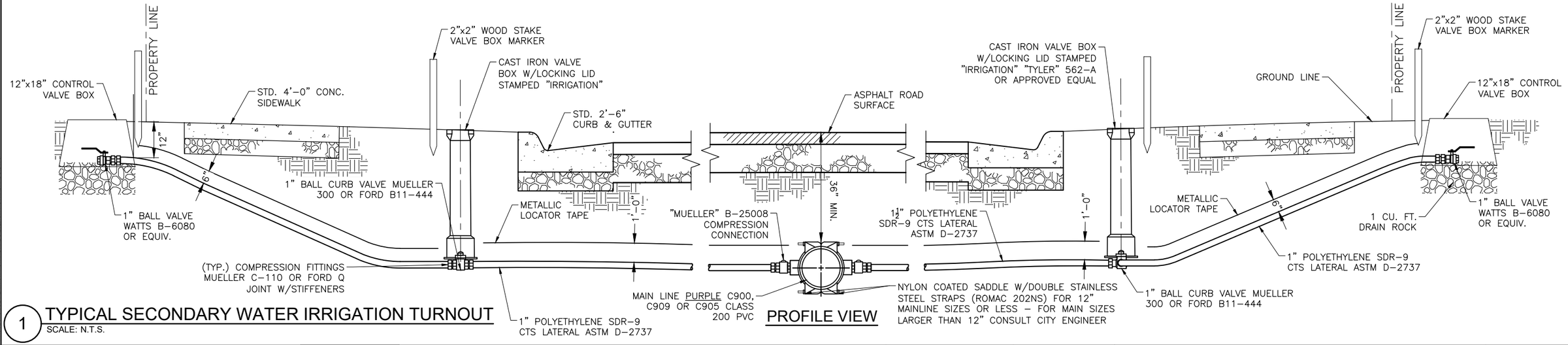
LAST UPDATED: 4/16/2020
SHEET NUMBER:
16

Plot Date:4/16/2020, 1:42 PM Plotted By: Daniel Johnson
Date Created:2/27/2020 \\KAYSPUBLIC\PROJECTS\JUBP\PLAIN CITY\STANDARDS\2020\CITY STANDARDS.DWG



NOTES:

1. 1½" & 1" PIPE SHALL BE POLYETHYLENE SDR-9 CTS, ASTM D-2737 W/PURPLE 14 GAUGE TRACER WIRE.
2. VALVE BOX MARKERS MUST BE SET ADJACENT TO EVERY VALVE.
3. SERVICE PIPE SHALL MAINTAIN A MINUIMUM BURY DEPTH OF 36" UP TO CURB STOP; 12" MINIMUM AT CONTROL VALVE BOX.
4. FITTINGS SHALL BE STAINLESS UNLESS SPECIFIED OTHERWISE.
5. ALL VALVE LIDS SHALL BE STAMPED "IRRIGATION"
6. CONCRETE COLLARS SHALL BE SQUARE.
7. SERVICE LINES ARE TO BE TAPPED LEVEL.
8. ALL MAIN LINES ARE TO BE PURPLE C900 W/PURPLE 14 GAUGE TRACER WIRE & INSTALLED TO LIMITS OF SUBDIVISION (OR STREET) & PLUGGED UNTIL FUTURE CONNECTION TO CITY IRRIGATION SYSTEM.
9. PLUG ALL OPEN ENDS OF PIPE UNTIL FUTURE CONNECTION TO CITY SECONDARY WATER SYSTEM.
10. ALL SECONDARY WATER SYSTEM PRESSURES SHALL BE A MINIMUM OF 10 PSI BELOW THE CULINARY WATER SYSTEM PRESSURES AT COMMON LOCATIONS.
11. ALL SPECIFIED BRANDS OF MATERIALS SHOWN ON THESE DRAWINGS ARE "CITY STANDARDS." OTHER EQUIVALENT BRANDS MAY BE USED WITH THE PRIOR APPROVAL OF THE CITY ENGINEER AND THE CITY WATER DIVISION SUPERVISOR.



1 TYPICAL SECONDARY WATER IRRIGATION TURNOUT
SCALE: N.T.S.

REVISION

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466 North 900 West
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AGENCY REVIEW

FILE: CITY STANDARDS
JUB PROJ. # : ----
DRAWN BY: DTJ
DESIGN BY: PJT
CHECKED BY: PJT

ONE INCH
AT FULL SIZE. IF NOT ONE INCH, SCALE ACCORDINGLY

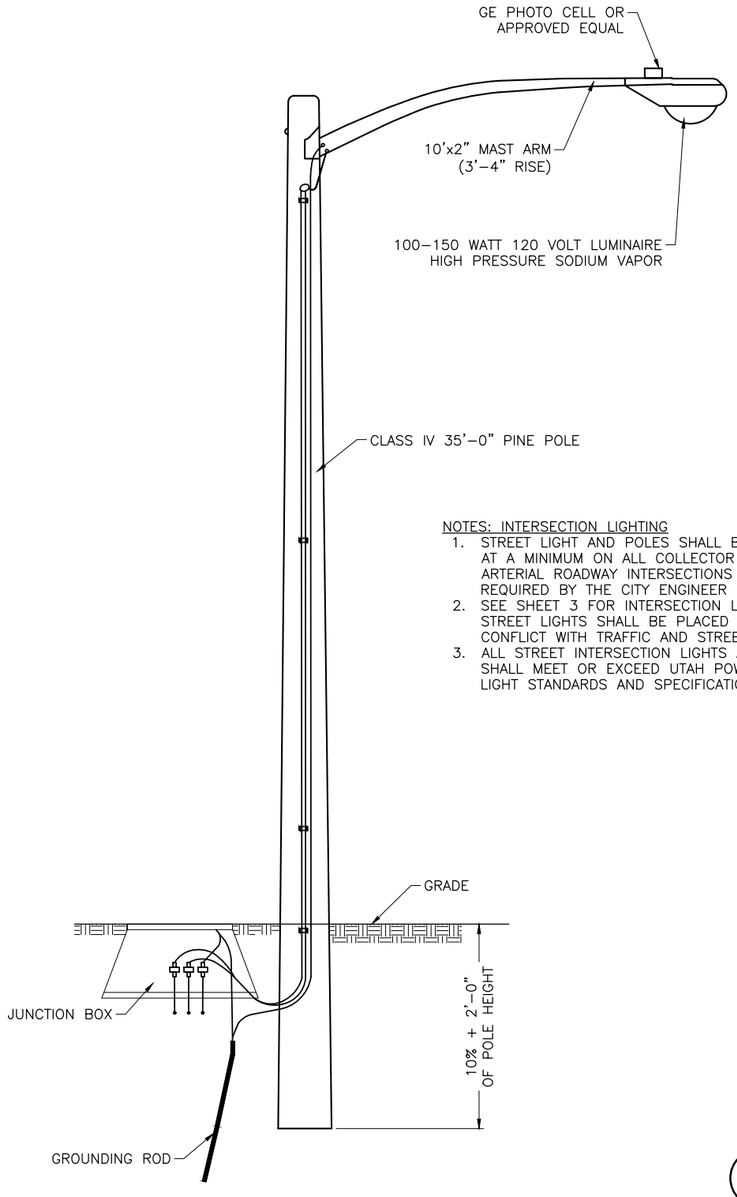
PUBLIC WORKS STANDARDS
PLAIN CITY CORPORATION

TYPICAL SECONDARY WATER IRRIGATION TURNOUT

LAST UPDATED: 4/16/2020

SHEET NUMBER: 17

Plot Date:4/16/2020 1:42 PM Plotted By: Daniel Johnson
Date Created:2/27/2020 \\KAYSVILBUILIC\PROJECTS\JUBPLAIN CITY\STANDARDS\2020\CITY STANDARDS.DWG

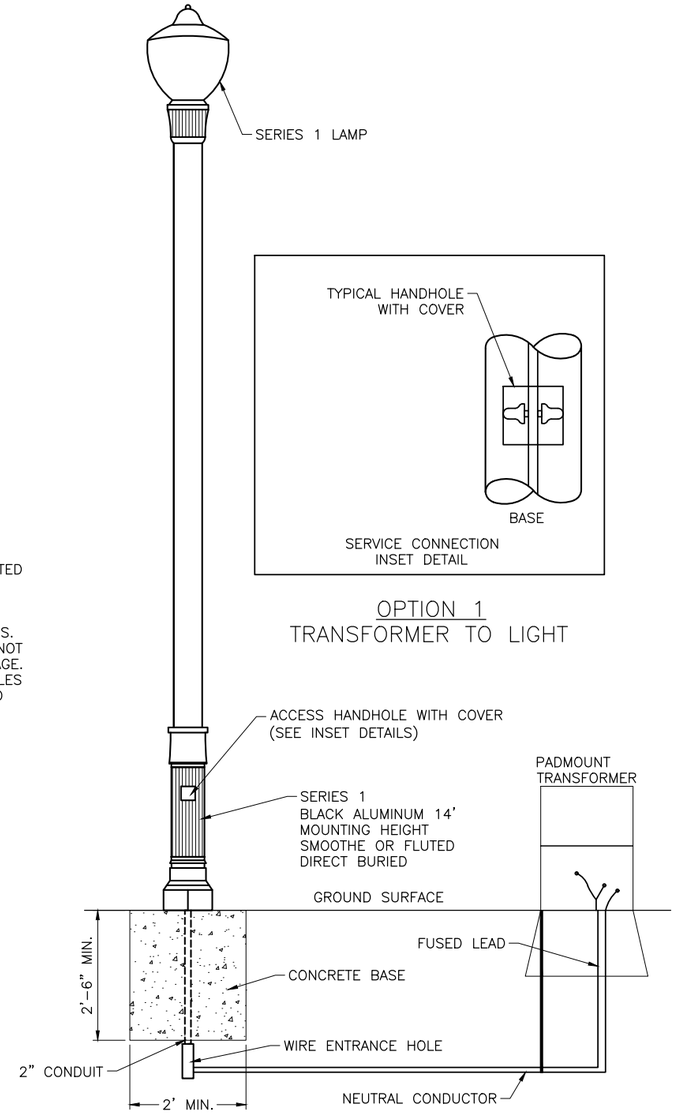


NOTES: INTERSECTION LIGHTING

1. STREET LIGHT AND POLES SHALL BE LOCATED AT A MINIMUM ON ALL COLLECTOR AND ARTERIAL ROADWAY INTERSECTIONS OR AS REQUIRED BY THE CITY ENGINEER
2. SEE SHEET 3 FOR INTERSECTION LOCATIONS. STREET LIGHTS SHALL BE PLACED AS TO NOT CONFLICT WITH TRAFFIC AND STREET SIGNAGE.
3. ALL STREET INTERSECTION LIGHTS AND POLES SHALL MEET OR EXCEED UTAH POWER AND LIGHT STANDARDS AND SPECIFICATIONS.

1 STREET INTERSECTION LIGHT POLE DETAIL

SCALE: N.T.S.

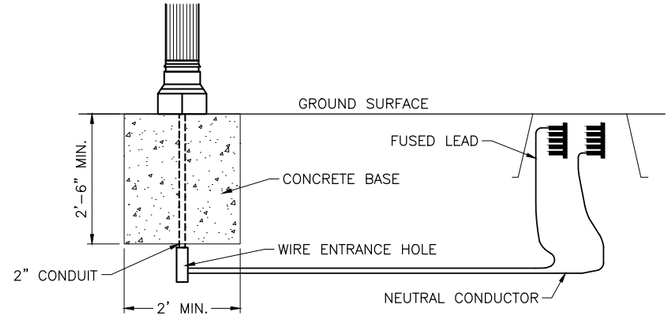


OPTION 1
TRANSFORMER TO LIGHT

2 STREET LIGHTING LUMINAIRE AND POLE ASSEMBLY DETAIL

SCALE: N.T.S.

OPTION 2
SECONDARY BOX TO TO LIGHT



3 STREET LIGHTING BELOW GRADE ELECTRICAL CONNECTION

SCALE: N.T.S.

NOTES: STREET LIGHTING

1. STREET LIGHT AND POLES SHALL BE LOCATED AS REQUIRED AND/OR APPROVED BY THE CITY ENGINEER. STREET LIGHTING POLE LOCATIONS SHALL NOT CONFLICT WITH TRAFFIC AND STREET SIGNAGE
2. ALL STREET LIGHTS AND POLES SHALL MEET OR EXCEED UTAH POWER AND LIGHT STANDARDS AND SPECIFICTIONS.
3. STREET LIGHTING SHALL BE DIRECTED DOWN TOWARDS THE RIGHT OF WAY AND NOT AT ONCOMING TRAFFIC.
4. STREET LIGHTING WATTAGE SHALL BE LOW ENOUGH AS TO NOT CAUSE GLARING OR OBSTRUCT VEHICLE DRIVER VISION.

PROFILE VIEW

REVISION

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AGENCY REVIEW

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DRAWN BY: DTJ
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ONE INCH
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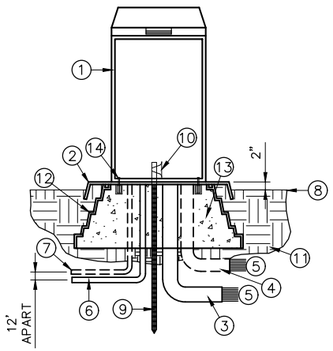
PUBLIC WORKS STANDARDS
PLAIN CITY CORPORATION

STREET LIGHTING DETAILS

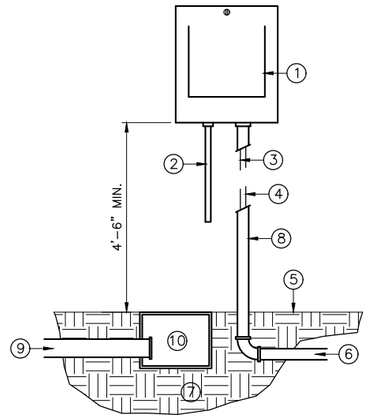
LAST UPDATED: 4/16/2020
SHEET NUMBER:
18

Plot Date:4/16/2020, 1:42 PM Plotted By: Daniel Johnson
Date Created:2/27/2020 \\KAYSPUBLIC\PROJECTS\JUB\PLAIN CITY\STANDARDS\2020\CITY STANDARDS.DWG



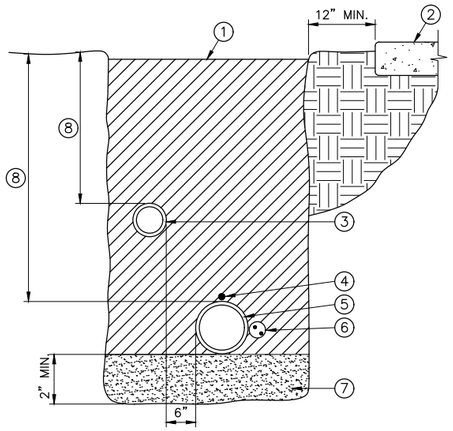
1. CONTROLLER AND CONTROLLER ENCLOSURE
2. QUICKPAD 3⁄16" MIN. THICKNESS ALUMINUM POWDER COATED PREFORMED PAD
3. PVC SWEEP ELL STATIONS 1–24
4. PVC SWEEP ELL STATIONS 25–48 (IF APPLICABLE)
5. DIRECT BURIAL CONTROL WIRES TO CONTROL VALVES
6. 110–VOLT SERVICE IN CONDUIT
7. EV–CAB–COM CABLE 1" CONDUIT (IF APPLICABLE)
8. FINISH GRADE
9. 5⁄8"x8' COPPER CLAD GROUND ROD
10. CADWELD CLAMP CONNECTED TO CONTROLLER GROUND WIRE
11. SUBGRADE COMPACTED TO 90%
12. PREFORMED PAD SUPPORT BASE
13. FILL INSIDE BASE WITH PEA GRAVEL
14. QUICKPAD FASTENING BRACKET (2)

PEDESTAL-MOUNT CONTROLLER



1. CONTROLLER ENCLOSURE WITH CONTROLLER
2. 120–VOLT WIRE IN RIGID CONDUIT
3. COMMON WIRE
4. CONTROL WIRES
5. FINISH GRADE
6. UF DIRECT–BURIAL WIRES TO REMOTE CONTROL VALVES
7. SUBGRADE COMPACTED TO 95% MIN.
8. CONDUIT TO MAINLINE
9. 3" CONDUIT FOR FUTURE EXPANSION
10. ELECTRICAL PULL BOX

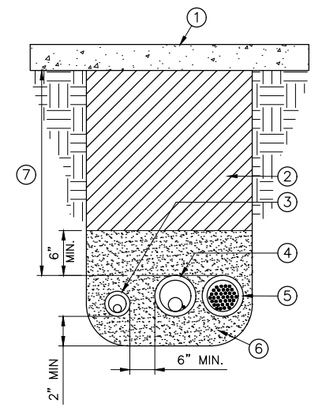
WALL-MOUNT CONTROLLER



1. BACKFILL MATERIAL – SEE NOTES, COMPACT TO 90% MIN.
2. ADJACENT HARD SURFACE
3. NON–PRESSURE LATERAL LINE
4. MAIN LINE LOCATOR WIRE. BURIED WITH ALL MAINLINES
5. PRESSURE MAIN LINE
6. DIRECT BURIAL, LOW VOLTAGE CONTROL WIRES; TO BE BURIED AND TAPED AT 10' INCREMENTS. LOCATE DIRECTLY ADJACENT TO MAIN LINE
7. BEDDING MATERIAL
8. PIPE DEPTHS:
   MAIN LINE 18"
   LATERAL 12"

NOTE:
SEE SLEEVING DETAIL FOR TRENCHING IN PAVED AREAS.

TRENCH DETAIL



1. HARDSCAPE SURFACE
2. BACKFILL MATERIAL
3. LATERAL LINE WITH SLEEVE
4. PRESSURE MAIN LINE AND LOCATOR WIRE WITH SLEEVE
5. CONTROL WIRE SLEEVE (SEE PLANS FOR SIZE)
6. BEDDING MATERIAL – SEE NOTES
7. MINIMUM COVER:
   12" UNDER WALKS
   18" UNDER STREETS

NOTES:
1) SLEEVES 4" AND SMALLER USE PVC SCH. 40 PIPE.
2) SLEEVES >4" USE PVC CLASS 200 PIPE.
3) ALL SLEEVES SHALL BE TWO (2) TIMES LARGER THAN DIAMETER OF PIPE TO BE SLEEVED, UNLESS NOTED OTHERWISE ON THE PLANS.
4) INSTALL SLEEVES AT A DEPTH SUFFICIENT TO AVOID CONFLICT WITH OTHER UTILITIES AND MAINS.

SLEEVE DETAIL

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466 North 900 West
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J-U-B ENGINEERS, INC.

AGENCY REVIEW

FILE: CITY STANDARDS
JUB PROJ. # : ----
DRAWN BY: DTJ
DESIGN BY: PJT
CHECKED BY: PJT

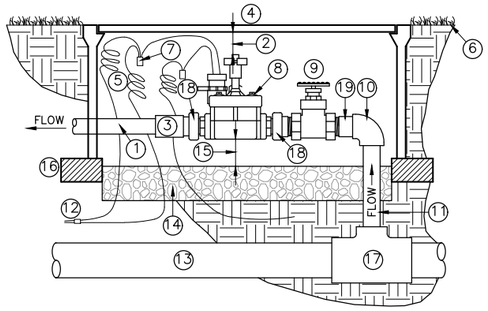
ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY

PUBLIC WORKS STANDARDS
PLAIN CITY CORPORATION

MUNICIPAL SPRINKLER SYSTEM DETAILS

LAST UPDATED: 4/16/2020
SHEET NUMBER: 19

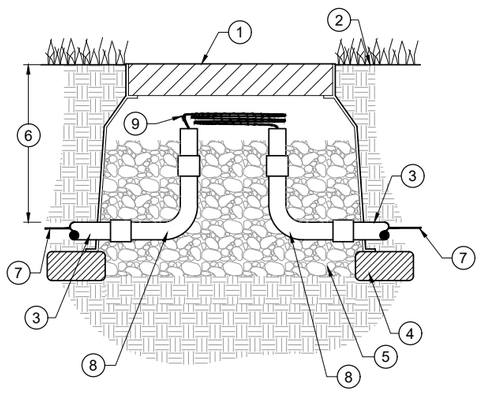
Plot Date:4/16/2020 1:42 PM Plotted By: Daniel Johnsen
Date Created:2/27/2020 \\KAYS\PUBLIC\PROJECTS\JUBPLAIN CITY\STANDARDS\2020\CITY STANDARDS.DWG



NOTES:
1. ONLY ONE VALVE PER BOX.
2. PLACE BOXES A MINIMUM OF 2' APART.
3. USE BOX EXTENSIONS AS REQUIRED.

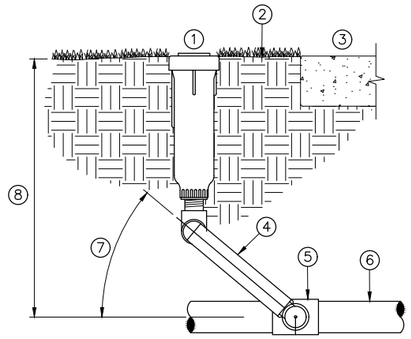
1. PVC LATERAL LINE
2. 3" MIN. 6" MAX. CLEARANCE
3. COUPLER SCH. 80 SLIP TO SLIP
4. PLASTIC VALVE BOX W/ BOLT LOCK (CARSON OR APPROVED EQUAL) SIZE AS PER VALVE SIZE: 1" VALVE = 18" STANDARD 1419 BOX; 1½"–2" VALVE = 18" JUMBO 1220 BOX
5. PROVIDE 24" EXPANSION LOOP AT EACH WIRE CONNECTOR IN BOX
6. FINISH GRADE
7. WATER TIGHT WIRE CONNECTORS (TYP)
8. VALVE – RAIN BIRD PESB VALVE
9. BRASS GATE VALVE (MUELLER, MATCO, NIBCO) WITH NON–RISING STEM
10. PVC SCH. 80 ELL
11. PVC SCH. 80 PIPE, SOLVENT WELDED, LENGTH AS REQUIRED
12. WIRES TO CONTROLLER, TAPE AND BUNDLE EVERY 10' – SEE TRENCH DETAIL
13. MAIN LINE
14. 4" MIN. DEPTH ¾" WASHED GRAVEL
15. 4" MIN. CLEARANCE REQUIRED
16. CONCRETE PAVERS ONLY
17. PVC SCH. 80 TEE (OR ELL OR DUCTILE IRON SERVICE TEE)
18. ACTION UNION – PART 18010–XX
    PART 18011–XX
    PART 18012–XX
19. PVC TOE NIPPLE

CONTROL VALVE ASSEMBLY



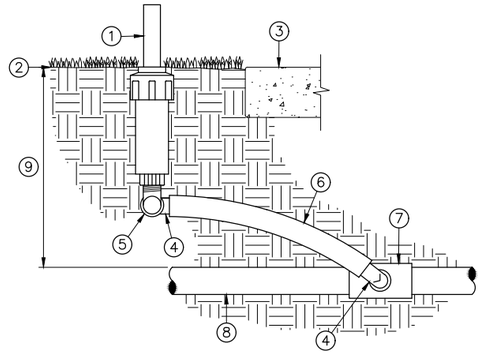
1. 18" GREEN JUMBO 1220 VALVE BOX W/ BOLT LOCK (CARSON OR APPROVED EQUAL). USE BOX EXTENSIONS AS NEEDED.
2. FINISHED GRADE
3. SCH. 40 PVC SLEEVE/CONDUIT (SEE IRRIGATION PLANS FOR SIZE)
4. CONCRETE PAVERS ONLY
5. PEA GRAVEL
6. DEPTH – 18" MIN.
7. 14 GAUGE IRRIGATION CONTROL WIRE
8. 90 DEGREE SWEEP ELL
9. 36" LOOP

IRRIGATION CONTROL WIRE PULL BOX



1. POP–UP ROTOR SPRINKLER LEGEND
2. TOP OF SPRINKLER WILL BE FLUSH WITH GRADE
3. NOTE: ALL SPRAY HEADS TO BE PLACED 2" CLEAR OF ALL HARDSCAPE SURFACES
4. LASCO UNITIZED SWING JOINT OR SPEARS SWING JOINT RISER ASSEMBLY; 12" MIN. LENGTH; SIZE AS REQUIRED
5. PVC SCH 40 SxSxT TEE OR (ELL)
6. PVC LATERAL LINE, SIZE AS NOTED ON PLAN
7. SWING JOINT ARM INSTALLED AT ANGLE BETWEEN 30 AND 45 DEG. OF LATERAL PIPE
8. DEPTH – SEE NOTES & TRENCH DETAIL

POP-UP GEAR DRIVE ROTOR SPRINKLER



1. POP–UP SPRAY HEAD
2. TOP OF SPRINKLER WILL BE FLUSH WITH GRADE
3. NOTE: ALL SPRAY HEADS TO BE PLACED 2" CLEAR OF ALL HARDSCAPE SURFACES
4. SWING PIPE ELL WITH SPIRAL BARB FITTING (TYP.)
5. MARLEX STREET ELL
6. FLEXIBLE SWING PIPE, 12" MIN., 36" MAX. LENGTH
7. PVC SCH 40 SxSxT TEE (OR ELL)
8. PVC LATERAL LINE, SIZE AS NOTED ON PLAN
9. DEPTH – SEE TRENCH DETAIL & SPECIFICATIONS

POP-UP SPRAY/ROTORY SPRINKLER

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PLAIN CITY CORPORATION

MUNICIPAL SPRINKLER SYSTEM DETAILS

LAST UPDATED: 4/16/2020
SHEET NUMBER: 20

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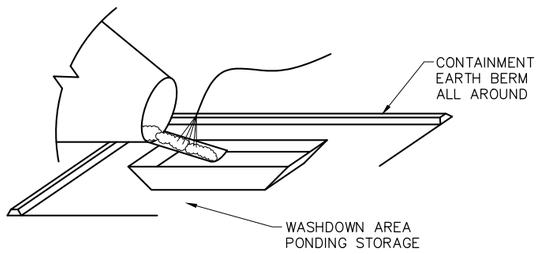
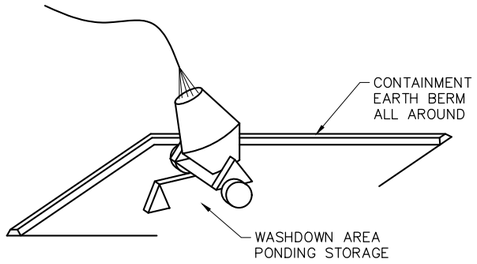
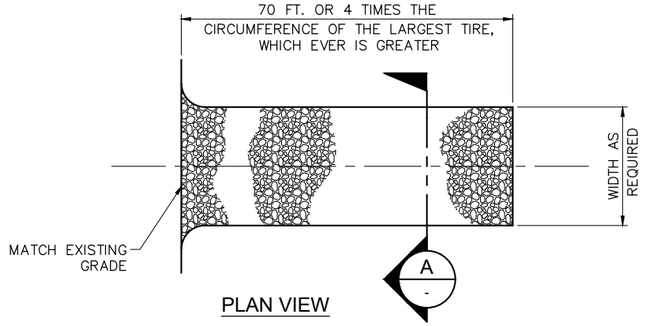


OPTION A

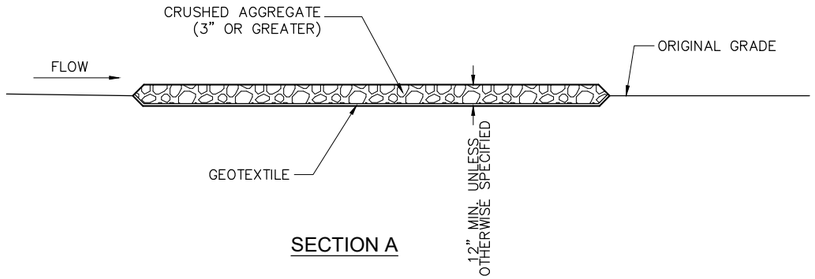


OPTION B

CONCRETE WASTE MANAGEMENT

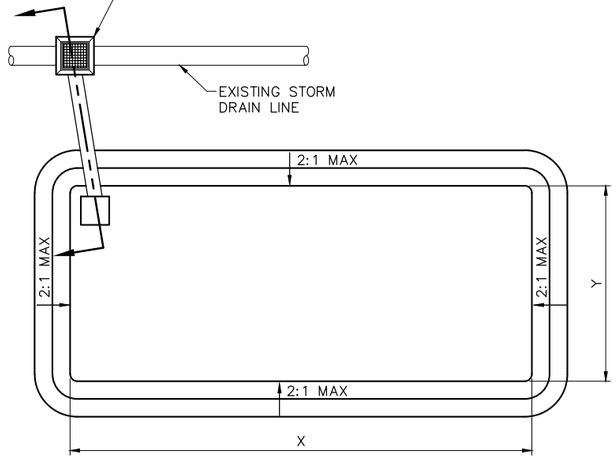


PLAN VIEW

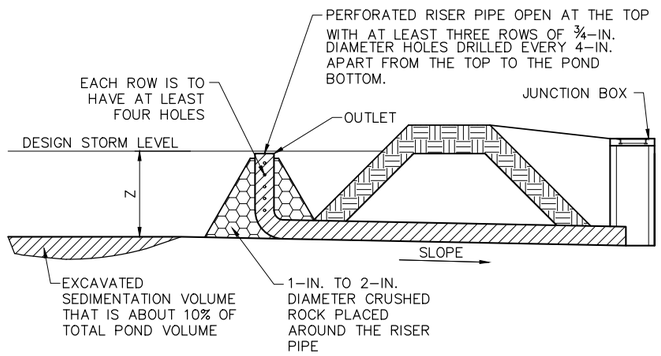


SECTION A

CONTROLLED ACCESS DETAIL



PLAN VIEW



SECTION VIEW

SEDIMENT BASIN					
No.	X (min.)	Y (min.)	Z (depth min.)	OUTLET TYPE	DRAINAGE AREA
1	60'	20'	3'	RISER PIPE	6.6 ACRES±

SEDIMENT BASIN DETAIL

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SWPPP DETAILS

LAST UPDATED: 4/16/2020
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21

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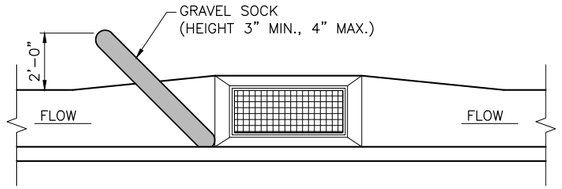
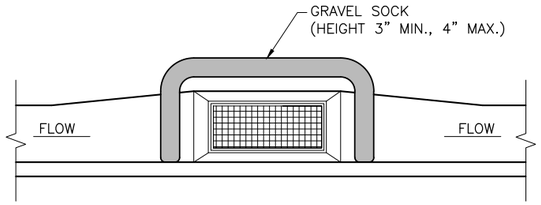
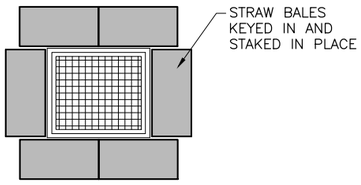


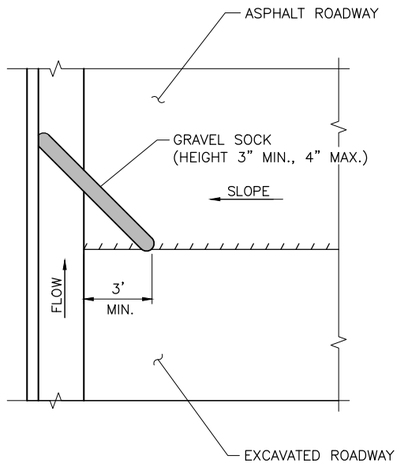
ON-GRADE INLET PROTECTION DETAIL



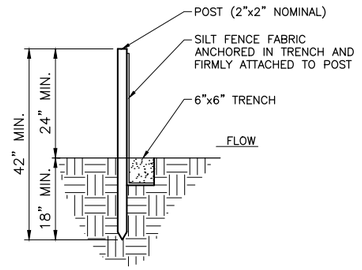
LOW POINT INLET PROTECTION DETAIL

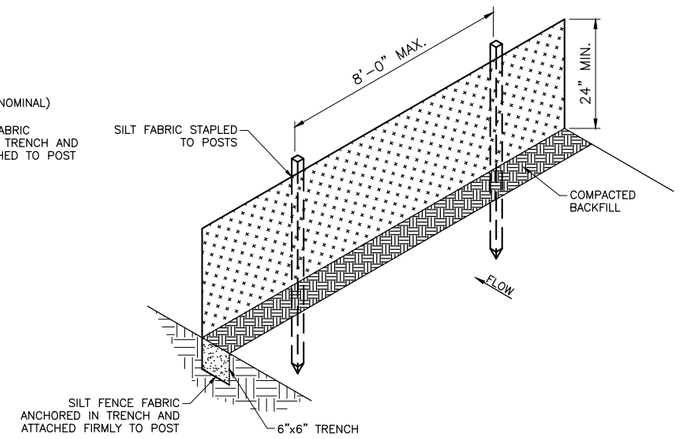


CENTER LOW POINT INLET PROTECTION DETAIL



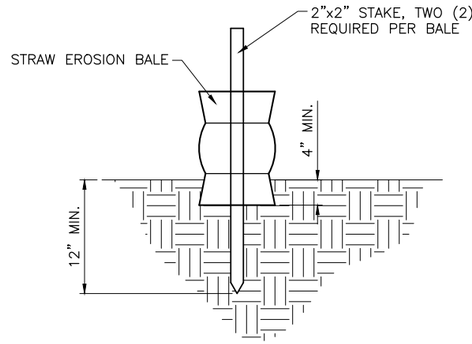
EXCAVATED ROADWAY TO ASPHALT ROADWAY TRANSITION DETAIL





NOTES:
1. MINIMUM FILTER FABRIC HEIGHT SHALL BE 24".
2. POSTS FOR SILT FENCES SHALL BE METAL OR HARD WOOD WITH A MINIMUM LENGTH OF 36". WOOD POSTS SHALL HAVE A MINIMUM DIAMETER OR CROSS SECTION OF 2". METAL POSTS SHALL BE "STUDDED TEE" OR "U" TYPE WITH MINIMUM WEIGHT OF 1.33 LBS/FOOT.
3. DRIVE POSTS VERTICALLY INTO THE GROUND TO A MINIMUM DEPTH OF 18", AND EXCAVATE A TRENCH APPROXIMATELY 6" WIDE AND 6" DEEP ALONG THE LINE OF POSTS AND UPSLOPE FROM THE BARRIER. NO LESS THAN THE BOTTOM 1 FOOT OF THE FABRIC SHALL BE BURIED INTO THIS TRENCH.
4. THE FILTER FABRIC MATERIALS SHALL BE FASTENED SECURELY TO METAL OR WOOD POSTS USING WIRE TIES, OR TO THE WOOD POSTS WITH ¾" LONG #9 HEAVY DUTY STAPLES.
5. POSTS SHALL BE SPACED A MAXIMUM OF 8 FEET APART.

SILT FENCE DETAIL



STRAW BAIL DETAIL

REVISION

NO.	DESCRIPTION	BY	APR.	DATE

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AGENCY

REVIEW

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PUBLIC WORKS STANDARDS
PLAIN CITY CORPORATION

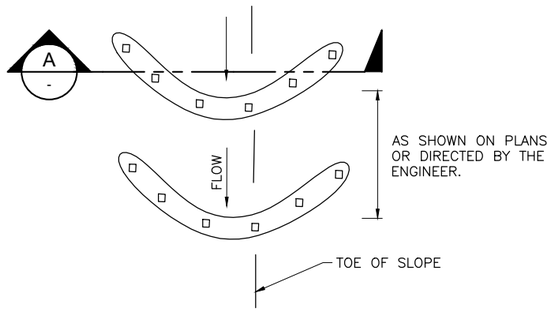
SWPPP DETAILS

LAST UPDATED: 4/16/2020

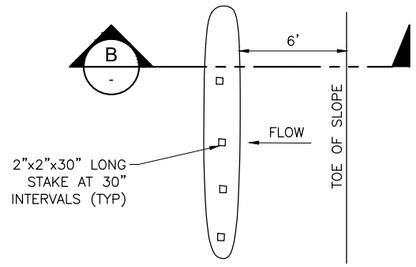
SHEET NUMBER:
22

Plot Date:4/16/2020 1:42 PM Plotted By: Daniel Johnson
Date Created:2/27/2020 \\KAYSPUBLIC\PROJECTS\JUB\PLAIN CITY\STANDARDS\2020\CITY STANDARDS.DWG

EMBANKMENT INSTALLATION

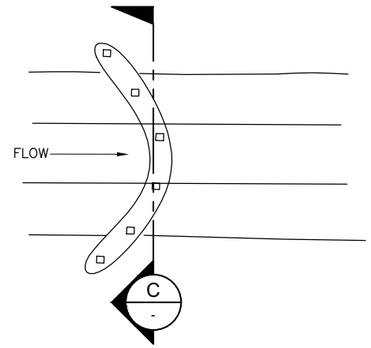


TYPE "A" - PLAN VIEW

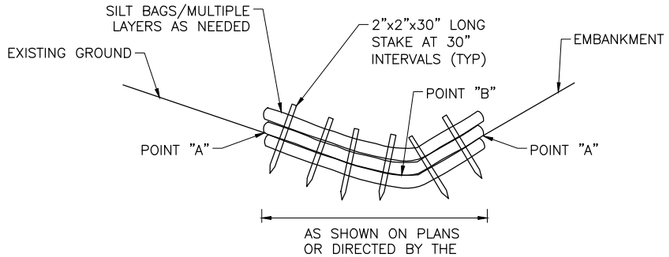


TYPE "B" - PLAN VIEW

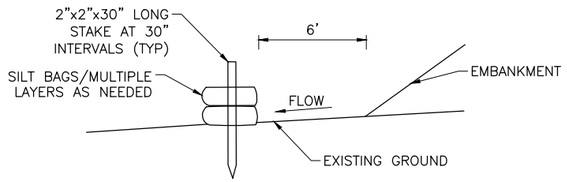
CHANNEL INSTALLATION



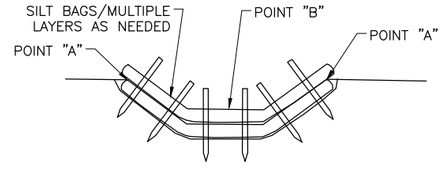
TYPE "C" - PLAN VIEW



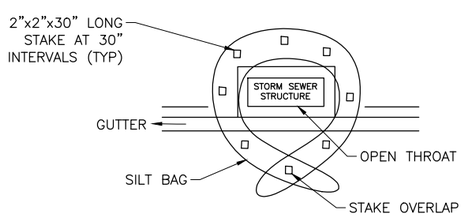
A SECTION



B SECTION



C SECTION



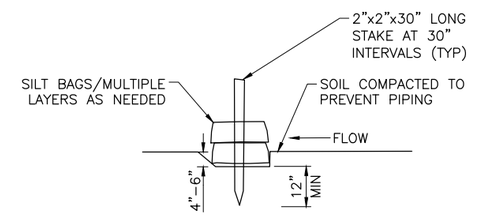
TEMPORARY BARRIER

SILT BAG CHECK DAMS:

1. DEFINITION: SILT BAGS USED AS MEANS OF CONTROLLING POLLUTION AND EROSION.
2. PURPOSE: TO OBSTRUCT THE FLOW OF WATER TO ALLOW DEPOSIT OF SEDIMENT AND/OR DIVERT WATER TO A SLOPE DRAIN, SEDIMENT BASIN, SEDIMENT TRAP, OR OTHER EROSION CONTROL STRUCTURE.
3. CONDITIONS WHERE APPLICABLE:

A. USE AT THE BOTTOM OF EMBANKMENT SLOPES TO DIVERT RUNOFF FROM SHEET FLOW AND ALSO CATCH SOME OF THE SEDIMENT PICKED UP IN THE SHEET FLOW.
B. AS CHECK DAMS IN SMALL DITCHES AND DRAINAGE AREAS.
C. ON THE LOWER SIDE OF CLEARED AREAS TO CATCH SEDIMENT FROM SHEET FLOW.
D. AS WATERPROOF CORES FOR STONE SEDIMENT DAMS.

4. CONSTRUCTION METHODS: SILT BAGS ARE UTILIZED TO CONTROL EROSION, TRAP SEDIMENT, AND DIVERT RUNOFF. SILT BAGS MUST BE BRACED FROM BEHIND WHEN CONDITIONS REQUIRE.
5. POINTS "A" MUST BE HIGHER THAN POINT "B".
6. SILT BAG CHECK DAMS MAY BE USED IN SERIES WHEN SITE CONDITIONS REQUIRE OR AS DIRECTED BY CITY ENGINEER.



TYPICAL BALE INSTALLATION

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SWPPP DETAILS

LAST UPDATED: 4/16/2020
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SANITARY SEWER:
1. PIPELINE INSPECTION – ALIGNMENT, GRADE, BEDDING & CLASS OF PIPE.
2. MANHOLE INSPECTION – CONTOUR FLOWLINE, BEDDING, STEPS, LIDS MARKED AND VENTED.
3. LOW PRESSURE AIR TEST OR INFILTRATION TEST.
4. DISPLACEMENT TEST & VIDEO RECORDING SHOWING DISTANCE, VIDEO SEWER FOR INITIAL ACCEPTANCE AND TO FIX ANY ISSUES THAT NEED TO BE FIXED. (LEADER WITH TIME, DATE & CONSTRUCTION COMPANY).
5. TO RELEASE SUBDIVISION FROM WARRANTY PHASE, SEWER MAIN MUST BE RE–VIDEOED AND APPROVED BY CITY REPRESENTATIVE.
6. THE PIPELINE MUST HAVE CLEAN WATER FLUSHED DOWN THE PIPES PRIOR TO VIDEOTAPING IN ORDER TO DETECT AND IDENTIFY ALL LOW SPOTS AND/OR BELLIES. FAILURE TO RUN WATER PRIOR TO VIDEOTAPING WILL RESULT IN REJECTION OF THE VIDEO TAPE TESTING.

STORM DRAINAGE
1. PIPELINE INSPECTION – ALIGNMENT, GRADE & CLASS OF PIPE, BEDDING.
2. CATCH BASIN BOXES INSPECTION – DEPTH, PLACEMENT AND REBAR.
3. PIPE INSPECTION – VIDEO RECORDING SHOWING DISTANCE, VIDEO STORM DRAIN FOR INITIAL ACCEPTANCE AND TO FIX ANY ISSUES THAT NEED TO BE FIXED (LEADER WITH TIME, DATE & CONSTRUCTION COMPANY).
4. THE PIPELINE MUST HAVE CLEAN WATER FLUSHED DOWN THE PIPES PRIOR TO VIDEOTAPING IN ORDER TO DETECT AND IDENTIFY ALL LOW SPOTS AND/OR BELLIES. FAILURE TO RUN WATER PRIOR TO VIDEOTAPING WILL RESULT IN REJECTION OF THE VIDEO TAPE TESTING.
5. MANHOLE INSPECTION – CONTOUR FLOWLINE, BEDDING, STEPS, LIDS MARKED AND VENTED.
6. TO RELEASE SUBDIVISION FROM WATRRANTY PHASE, STORM DRAIN MUST BE RE–VIDEOED, ALL STORM DRAIN BOXES NEED TO BE CLEANED OUT FROM SWPPP AND CONSTRUCTION DEBRIS.

ROADWAYS
1. ROADWAY INSPECTION, DEPTH & COMPACTION.
2. BEFORE ROAD BASE PLACEMENT ALL UTILITY LINES MUST BE INSTALLED TO CITY STANDARDS.
3. ROAD BASE DENSITY TEST – DEPTH=12" MINIMUM & COMPACTION 95% (CONTRACTOR RESPONSIBLE TO GIVE ROAD BASE DENSITY RESULTS TO CITY – PRIOR TO ASPHALT PLACEMENT), (ALL COMPACTION TEST MUST HAVE CURRENT PROCTOR ON SOILS).
4. ALL NEW ROADS REQUIRE MAT/FABRIC TO BE INSTALLED UNDER ROADWAYS (SEE DETAIL).
5. ASPHALT PLACEMENT – DEPTH=3" OR MATCH EXISTING, COMPACTION TEST – 95% & TEMPERATURE 50 AND RISING.

CURB & GUTTER AND SIDEWALK
1. CURB & GUTTER AND SIDEWALK INSPECTION – DEPTH & COMPACTION.
2. WATER FLOW CURB & GUTTERS TO VERIFY SURFACE FLOW.
3. CURB & GUTTER AND SIDEWALK INSPECTION – AESTHETICS, CHIPS, CRACKS AND WORKMANSHIP WALK THROUGH.

*ALL UTILITY TRENCHES WITHIN THE ROADWAYS MUST HAVE IMPORTED MATERIAL WITH UPDATED PROCTOR, UNLESS SPECIFIED BY PLAIN CITY REPRESENTATIVE

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AGENCY

REVIEW

FILE : CITY STANDARDS
JUB PROJ. # : ----
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DESIGN BY: PJT
CHECKED BY: PJT

ONE INCH
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PUBLIC WORKS STANDARDS
PLAIN CITY CORPORATION

TESTING AND INSPECTION

LAST UPDATED: 4/16/2020

SHEET NUMBER:
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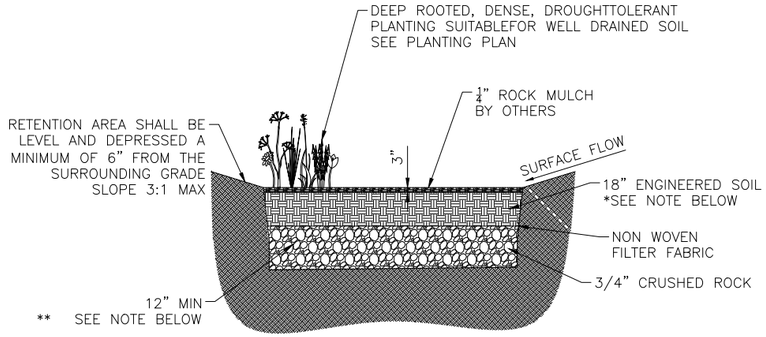
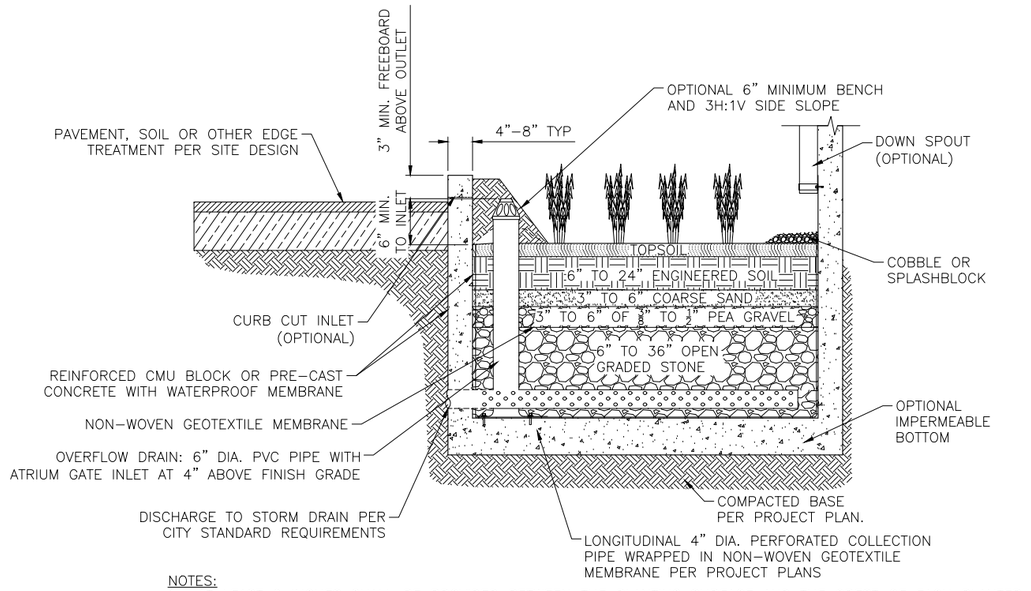
Date Created:2/27/2020 \\KAYSPUBLIC\PROJECTS\JUB PLAIN CITY\STANDARDS\2020\CITY STANDARDS.DWG



*BIORETENTION "ENGINEERED SOIL" LAYER SHALL BE MINIMUM 18" DEEP "SANDY LOAM" SOIL MIX WITH NO MORE THAN 5% CLAY CONTENT. THE MIX SHALL CONTAIN 50–60% SAND, 20–30% COMPOST OR HARDWOOD MULCH, AND 20–30% TOPSOIL.

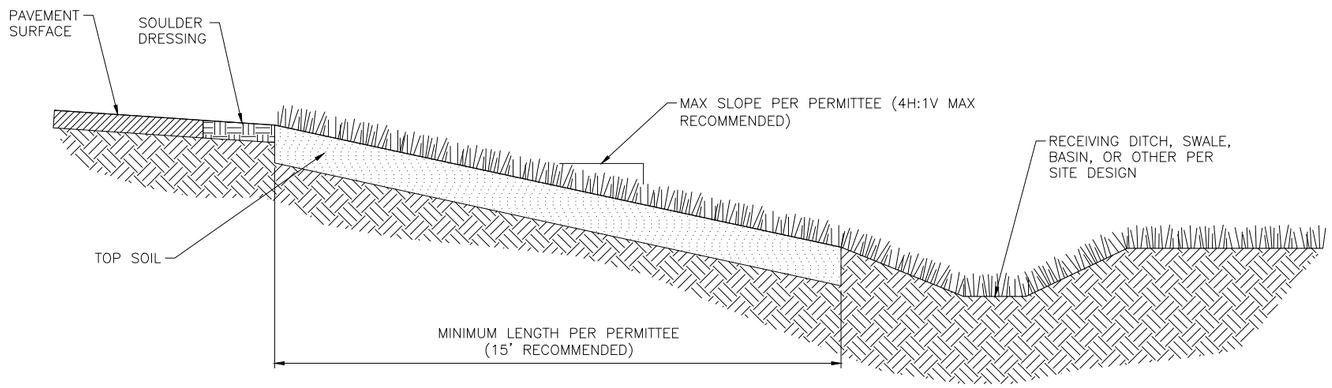
**3/4" CRUSHED ROCK LAYER SHALL BE A MINIMUM 12" BUT MAY BE DEEPENED TO INCREASE THE INFILTRATION AND STORAGE ABILITY OF THE BASIN.

1 RAIN GARDEN
SCALE: N.T.S.



NOTES:
1. AT LEAST 9 INCHES SHALL BE PROVIDED BETWEEN THE PLANTING SURFACE AND THE CREST OF EACH PLANTER.
2. PLANTERS SHALL NOT BE LOCATED ON UNEVEN OR SLOPED SURFACES.
3. TOP SOIL/PLANTING MIX IS AT LEAST 18" DEEP.
4. TOP SOIL CONTAINS NO MORE THAN 30% COMPOST.
5. DIRECT OVERFLOW DISCHARGE CITY STANDARD REQUIREMENTS.
6. SEE BIORETENTION CELL FACT SHEET FOR MORE INFORMATION.

2 BIORETENTION CELL
SCALE: N.T.S.



NOTES:
1. DIMENSIONS SHOWN MAY VARY BASED ON SITE CONDITIONS

3 VEGETATED STRIP
SCALE: N.T.S.

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PUBLIC WORKS STANDARDS
PLAIN CITY CORPORATION

LID DETAILS

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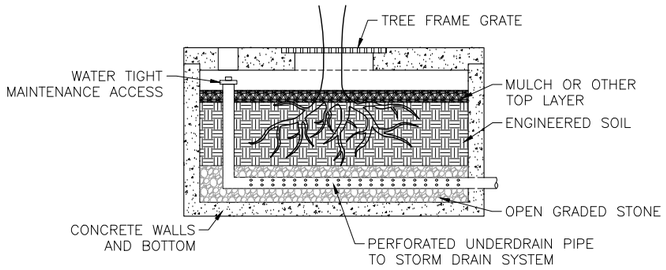

4 TREE BOX FILTER
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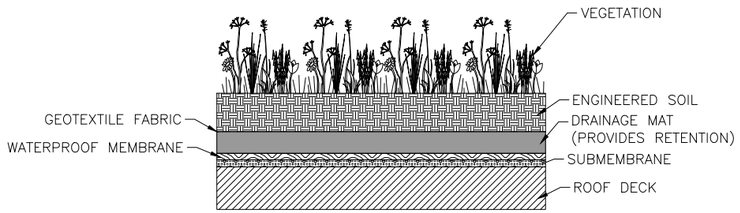
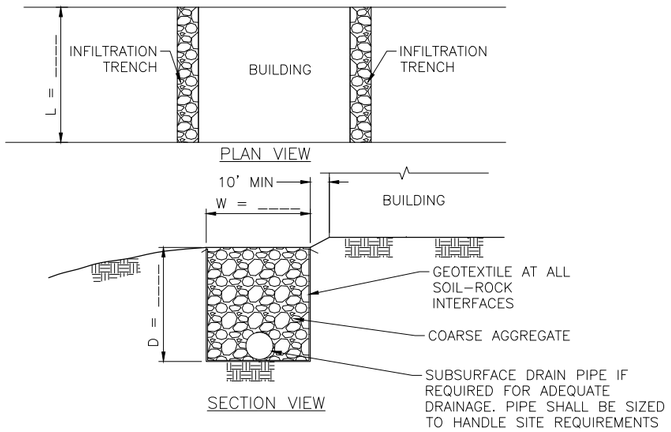


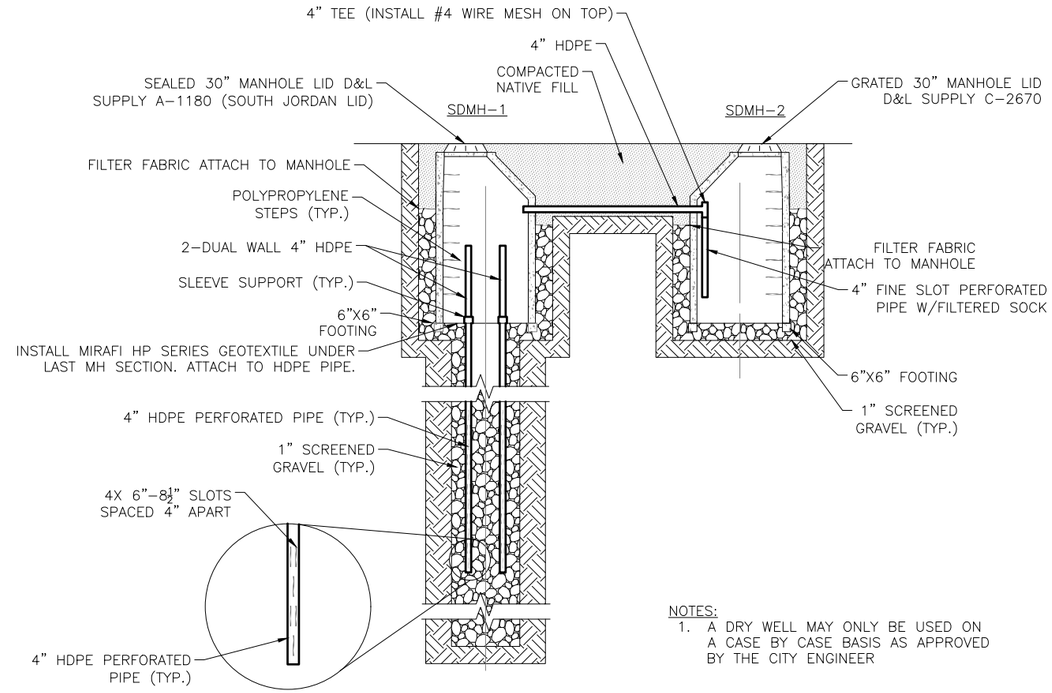
NOTES:
1. DIMENSIONS SHOWN MAY VARY BASED ON SITE CONDITIONS

5 GREEN ROOF
SCALE: N.T.S.



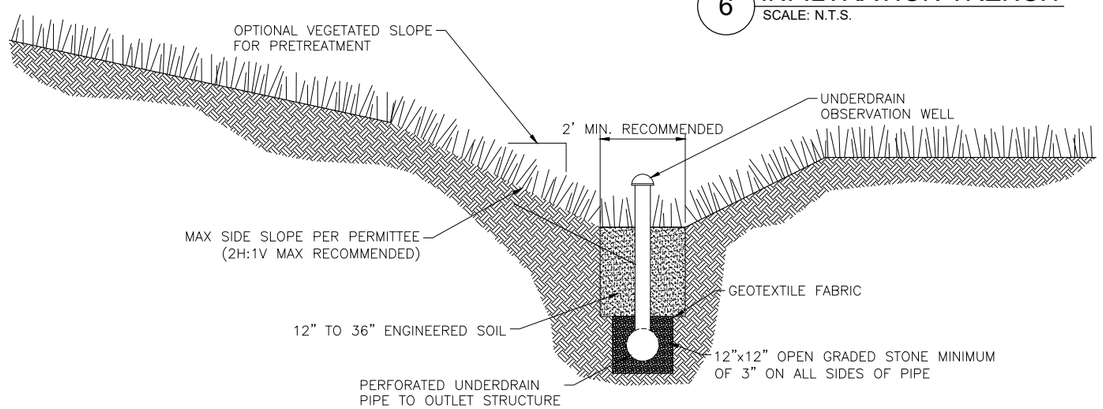
NOTES:
1. COARSE AGGREGATES SHALL BE WELL GRADED 6" MINUS WITH NO MORE THAN 20% SMALLER THAN A #4 SIEVE.
2. INFILTRATION TRENCH SHALL PROVIDE ADEQUATE STORAGE FOR THE DESIGN STORM.
3. THE VOLUME OF RUNOFF WATER TEMPORARILY STORED IN THE TRENCH IS APPROXIMATELY 40% OF THE TOTAL VOLUME OF THE INFILTRATION TRENCH INCLUDING AGGREGATE.
4. SUBSURFACE DRAIN PIPE REQUIRED UNLESS ADEQUATE SOIL PERMEABILITY CAN BE VERIFIED.
5. GEOTEXTILE (NON–WOVEN, NEEDLE PUNCHED) MIN. CRITERIA:
   - GRAB TEXTILE STRENGTH (LB) ASTM D 4632_____202
   - ELONGATION AT FAILURE (%) ASTM D 4632_____≥50
   - TRAPEZOIDAL TEAR STRENGTH (LB) ASTM D 6241_____79
   - PUNCTURE STRENGTH (LB) ASTM D 6241_____433
   - ULTRAVIOLET LIGHT (% RETAINED STRENGTH) ASTM 4355_____MIN 50
   - APPARENT OPENING SIZE (AOS) ASTM D 4751___MAX 0.2 MM (US SIEVE SIZE 70)
   - PERMITTIVITY SEC^{-1} ASTM D 4491_____MIN 0.7
6. GEOTEXTILE SPLICES SHALL OVERLAP 18 INCH MINIMUM.

6 INFILTRATION TRENCH
SCALE: N.T.S.



NOTES:
1. A DRY WELL MAY ONLY BE USED ON A CASE BY CASE BASIS AS APPROVED BY THE CITY ENGINEER

7 DRYWELL
SCALE: N.T.S.



NOTES:
1. ENGINEERED SOIL WILL IMPROVE FILTRATION
2. UNDERDRAIN RECOMMENDED FOR LONGITUDINAL SLOPES <1%
3. DIMENSIONS SHOWN MAY VARY BASED ON SITE CONDITIONS

8 BIOSWALE
SCALE: N.T.S.

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CHECKED BY:	PJT

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PUBLIC WORKS STANDARDS
PLAIN CITY CORPORATION

LID DETAILS

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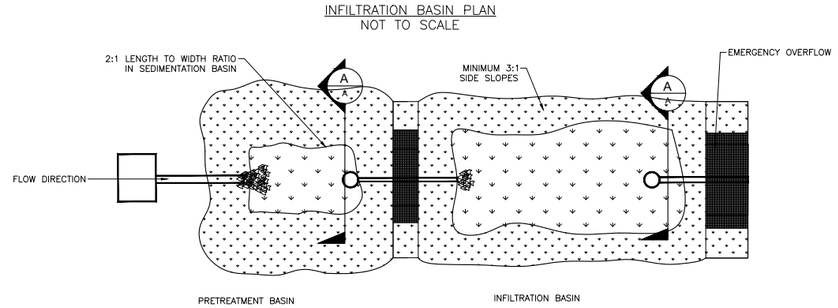
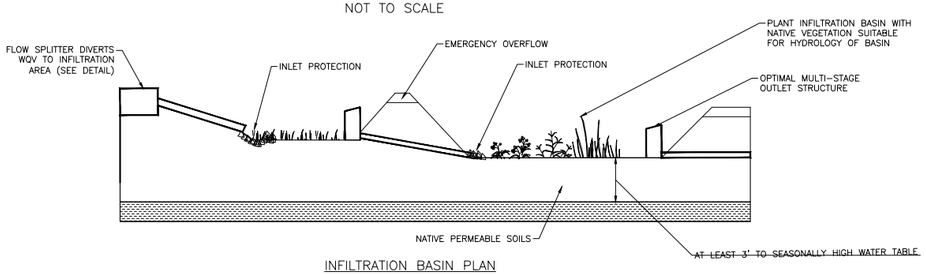


INFILTRATION BASIN PLAN
NOT TO SCALE



INFILTRATION BASIN PLAN
NOT TO SCALE

CONSTRUCTION SEQUENCING:

1. PERFORM CONTINUOUS INSPECTIONS OF EROSION CONTROL PRACTICES.
2. INSTALL SILT FENCE ALONG THE PERIMETER OF THE SITE TO PREVENT SEDIMENT FROM LEAVING THE SITE DURING THE CONSTRUCTION PROCESS.
3. ALL DOWNGRADIENT PERIMETER SEDIMENT-CONTROL BMPS MUST BE IN PLACE BEFORE ANY UP GRADIENT LAND-DISTURBING ACTIVITY BEGINS.
4. REMOVE TOPSOIL FROM THE SITE AND PLACE IN TEMPORARY STOCKPILE LOCATION. TEMPORARY SEED THE STOCKPILE.
5. INSTALL UNDERGROUND UTILITIES (WATER, SANITARY SEWER, ELECTRIC AND PHONES) TAKING THE LOCATION AND FUNCTION OF STORM WATER BMPS INTO CONSIDERATION.
6. SEED AND MULCH DISTURBED AREAS ON SITE.
7. CONSTRUCT THE ROADS TAKING THE LOCATION AND FUNCTION OF STORM WATER BMPS INTO CONSIDERATION.
8. PERFORM ALL OTHER SITE IMPROVEMENTS TAKING THE LOCATION AND FUNCTION OF THE STORM WATER BMPS INTO CONSIDERATION.
9. FINAL GRADE THE SITE.
10. STABILIZE THE SITE BY IMPLEMENTING THE NATIVE SEEDING AND PLANTING PORTION OF THE LANDSCAPING PLAN.
11. INSTALL THE EROSION CONTROL BLANKET.
12. REMOVE THE SILT FENCE AFTER THE SITE IS STABILIZED PER PROJECT ENGINEER APPROVAL.

GENERAL NOTES:

1. INSTALL ALL TEMPORARY EROSION CONTROL MEASURES PRIOR TO THE START OF ANY CONSTRUCTION OPERATION THAT MAY CAUSE ANY SEDIMENTATION OR SILTATION AT THE SITE.
2. INSTALL STORM DRAIN INLET PROTECTION TO PREVENT CLOGGING OF THE STORM SEWER AND SEDIMENT LOADS TO DOWNSTREAM STORM WATER FACILITIES OR WATERBODIES.
3. IF THE STORMWATER BMP IS BEING DESIGNED TO SERVE AS A TEMPORARY SEDIMENT BASIN, GRADE THE BMP TO WITHIN THREE (3) FEET OF FINAL GRADE TO PROTECT THE UNDERLYING MATERIAL FROM CLOGGING. ONCE CONSTRUCTION IN THE CONTRIBUTING DRAINAGE AREA HAS BEEN COMPLETED AND THE SITE IS STABILIZED, EXCAVATE THE INFILTRATION BASIN TO FINAL GRADE AND COMPLETE CONSTRUCTION OF THE BMP.
4. GRADING OF THE INFILTRATION BASIN SHALL BE ACCOMPLISHED USING LOW-IMPACT EARTH-MOVING EQUIPMENT TO PREVENT COMPACTION OF THE UNDERLYING SOILS. SMALL TRACKED DOZERS AND BOBCATS WITH RUNNER TRACKS ARE RECOMMENDED.
5. EXCAVATE THE INFILTRATION BASIN TO THE SPECIFIED DEPTH (ELEVATION). IT IS RECOMMENDED THAT ALL SUB MATERIAL BELOW THE SPECIFIED ELEVATION SHALL BE LEFT UNDISTURBED, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
6. GRADE TO THE DEPTH (ELEVATION) SPECIFIED IN THE CONSTRUCTION DOCUMENTS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
7. IN THE EVENT THAT SEDIMENT IS INTRODUCED INTO THE BMP DURING OR IMMEDIATELY FOLLOWING EXCAVATION, THIS MATERIAL WILL NEED TO BE REMOVED FROM THE BASIN PRIOR TO INITIATING THE NEXT STEP IN THE CONSTRUCTION PROCESS. SEDIMENT THAT HAS BEEN WASHED INTO THE BASIN DURING THE EXCAVATION PROCESS CAN SEAL THE PERMEABLE MATERIAL, SIGNIFICANTLY REDUCING THE INFILTRATION CAPACITY OF THE SOILS.
8. SEEDING AND INSTALLATION OF EROSION CONTROL BLANKET SHALL BE COMPLETED WITHIN 48 HOURS OF FINAL GRADING.
9. INFILTRATION AREA SHALL BE STAKED OFF DURING CONSTRUCTION TO RESTRICT HEAVY EQUIPMENT TRAFFIC FROM COMPACTING NATIVE SOILS.

9 INFILTRATION BASIN
SCALE: N.T.S.

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PLAIN CITY CORPORATION

LID DETAILS

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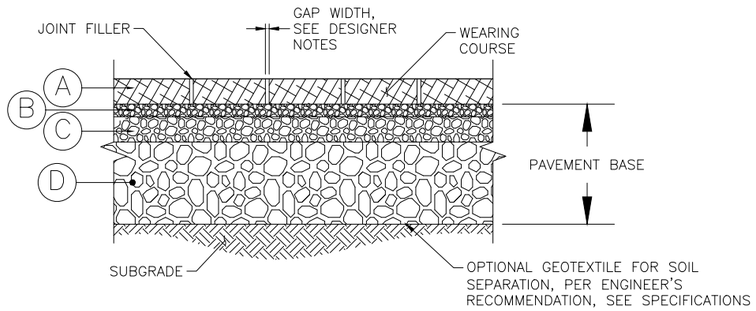


DETAIL – PERMEABLE UNIT PAVERS

MINIMUM MATERIAL THICKNESS (IN):

LAYER	MATERIAL TYPE*	MODERATE VEHICULAR		LIGHT VEHICULAR		PEDESTRIAN	
		GOOD SOILS**	POOR SOILS**	GOOD SOILS**	POOR SOILS**	GOOD SOILS**	POOR SOILS**
A	PERMEABLE UNIT PAVERS	3 1/8	3 1/8	3 1/8	3 1/8	3 1/8	3 1/8
B	GRAVEL LEVELING COURSE ASTM NO. 8	2	2	2	2	2	2
C	GRAVEL BASE COURSE ASTM NO. 57	6	6	6	4	4	4
D	GRAVEL RESERVOIR COURSE ASTM NO. 2, 3, OR 57	22	28	–	10	–	–

* MATERIAL FINER THAN NO. 100 SIEVE SHALL NOT EXCEED 2 PERCENT FOR ANY GRAVEL LAYER.

** "GOOD" AND "POOR" SOIL CLASSIFICATIONS BASED ON AASHTO GUIDE FOR DESIGN OF PAVEMENT STRUCTURES. SEE DESIGNER NOTES FOR SUBGRADE ASSUMPTIONS.

TYPICAL JOINT FILLER AGGREGATE SIZE:

GAP WIDTH (IN)	JOINT FILLER AGGREGATE
3/8 OR 1/2	ASTM NO. 8 *
1/4	ASTM NO. 8/9 *
1/8	ASTM NO. 10 *

* PROVIDED FOR REFERENCE ONLY, FOLLOW MANUFACTURER'S RECOMMENDATIONS

GENERAL NOTES:

1. PAVEMENT SECTION MUST BE DESIGNED BY A LICENSED PROFESSIONAL CIVIL ENGINEER.
2. THICKER GRAVEL RESERVOIR COURSE (BEYOND STRUCTURAL DEPTH) AND SUBSURFACE CHECK DAMS MAY BE REQUIRED TO MEET PROJECT HYDROLOGIC PERFORMANCE GOALS.

GENERAL UTILITY NOTES:

1. UTILITY CONFLICTS SHALL BE MITIGATED PER CITY REQUIREMENTS. INCLUDE MEASURES TO PREVENT PREFERENTIAL FLOW INTO UTILITY TRENCHES (E.G., WATER STOP, TRENCH BLOCK, OR TRENCH COLLAR). PROPOSED UTILITY LINES TO BE LOCATED OUTSIDE OF FACILITY.
2. ABANDONED UTILITIES WITHIN FOOTPRINT OF FACILITY AND OBSERVED DURING CONSTRUCTION MUST BE REMOVED. COORDINATE WITH MUNICIPAL OR PRIVATE OWNER AND ENGINEER.

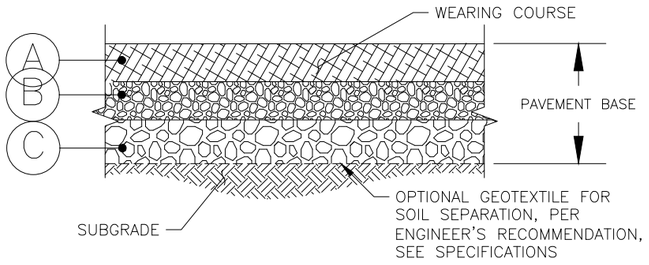
CONSTRUCTION NOTES:

1. COMPACT SUBGRADE TO 90% OF MAXIMUM DENSITY PER STANDARD PROCTOR TEST (ASTM D698) FOR PEDESTRIAN APPLICATIONS, 95% OF MAXIMUM DENSITY PER MODIFIED PROCTOR TEST (ASTM D1557) FOR VEHICULAR APPLICATIONS, OR PER GEOTECHNICAL ENGINEER'S RECOMMENDATION.
2. PROOF–ROLL PREPARED SUBGRADE, REMOVE SOFT SPOTS, AND REPLACE WITH PERMEABLE STRUCTURAL FILL AS DIRECTED BY ENGINEER TO ACHIEVE UNIFORM SUBGRADE.
3. AFTER COMPACTION, SCARIFY SUBGRADE 1/4 TO 1/2 INCH DEEP BY HAND RAKE.
4. PLACE GEOTEXTILE, IF REQUIRED, ON SCARIFIED SUBGRADE.
5. PROVIDE FLOW DIVERSION AND EROSION CONTROL MEASURES TO PROTECT THE PERMEABLE PAVEMENT AREA FROM SEDIMENTATION UNTIL UPSTREAM CATCHMENT AREA IS THOROUGHLY STABILIZED.

10 PERMEABLE PAVEMENT
SCALE: N.T.S.

RELATED COMPONENTS:

EDGE TREATMENTS:	PC 1.1	PC 1.6
SUBSURFACE CHECK DAMS:	PC 2.1	PC 2.2
SUBSURFACE OUTLETS:	PC 3.1	PC 3.2



DETAIL – PERVIOUS CONCRETE

MINIMUM MATERIAL THICKNESS (IN):

LAYER	MATERIAL TYPE*	MODERATE VEHICULAR		LIGHT VEHICULAR		PEDESTRIAN	
		GOOD SOILS**	POOR SOILS**	GOOD SOILS**	POOR SOILS**	GOOD SOILS**	POOR SOILS**
A	PERVIOUS CONCRETE	9	9.5	6.5	7	4.5	5
B	GRAVEL BASE COURSE ASTM NO. 3 OR 57	6	6	6	6	6	6
C	OPTIONAL GRAVEL RESERVOIR COURSE ASTM NO. 2, 3, OR 57	–	–	–	–	–	–

* MATERIAL FINER THAN NO. 100 SIEVE SHALL NOT EXCEED 2 PERCENT FOR ANY GRAVEL LAYER.

** "GOOD" AND "POOR" SOIL CLASSIFICATIONS BASED ON AASHTO GUIDE FOR DESIGN OF PAVEMENT STRUCTURES. SEE DESIGNER NOTES FOR SUBGRADE ASSUMPTIONS.

GENERAL NOTES:

1. PAVEMENT SECTION MUST BE DESIGNED BY A LICENSED PROFESSIONAL CIVIL ENGINEER.
2. THICKER GRAVEL RESERVOIR COURSE (BEYOND STRUCTURAL DEPTH) AND SUBSURFACE CHECK DAMS MAY BE REQUIRED TO MEET PROJECT HYDROLOGIC PERFORMANCE GOALS. SEE DESIGNER NOTES, PP 1.1 THROUGH PP 1.2.
3. SEE DESIGNER NOTES FOR SPECIFICATIONS, PP 1.1 THROUGH PP 1.2.

GENERAL UTILITY NOTES:

1. UTILITY CONFLICTS SHALL BE MITIGATED PER SAN FRANCISCO PUC SURFACE IMPROVEMENT STANDARDS [PENDING COMPLETION]. INCLUDE MEASURES TO PREVENT PREFERENTIAL FLOW INTO UTILITY TRENCHES (E.G., WATER STOP, TRENCH BLOCK, OR TRENCH COLLAR). PROPOSED UTILITY LINES TO BE LOCATED OUTSIDE OF FACILITY.
2. ABANDONED UTILITIES WITHIN FOOTPRINT OF FACILITY AND OBSERVED DURING CONSTRUCTION MUST BE REMOVED. COORDINATE WITH MUNICIPAL OR PRIVATE OWNER AND ENGINEER.

CONSTRUCTION NOTES:

1. COMPACT SUBGRADE TO 90% OF MAXIMUM DENSITY PER STANDARD PROCTOR TEST (ASTM D698) FOR PEDESTRIAN APPLICATIONS, 95% OF MAXIMUM DENSITY PER MODIFIED PROCTOR TEST (ASTM D1557) FOR VEHICULAR APPLICATIONS, OR PER GEOTECHNICAL ENGINEER'S RECOMMENDATION.
2. PROOF–ROLL PREPARED SUBGRADE, REMOVE SOFT SPOTS, AND REPLACE WITH PERMEABLE STRUCTURAL FILL AS DIRECTED BY ENGINEER TO ACHIEVE UNIFORM SUBGRADE.
3. AFTER COMPACTION, SCARIFY SUBGRADE 1/4 TO 1/2 INCH DEEP BY HAND RAKE.
4. PLACE GEOTEXTILE, IF REQUIRED, ON SCARIFIED SUBGRADE.
5. PROVIDE FLOW DIVERSION AND EROSION CONTROL MEASURES TO PROTECT THE PERMEABLE PAVEMENT AREA FROM SEDIMENTATION UNTIL UPSTREAM CATCHMENT AREA IS THOROUGHLY STABILIZED.

11 PERVIOUS CONCRETE
SCALE: N.T.S.

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ABBREVIATIONS

&	AND
∠	ANGLE
A.B.	ANCHOR BOLT
A.F.F.	ABOVE FINISHED FLOOR
ALUM.	ALUMINUM
APPROX.	APPROXIMATE
B.A.	BEGIN CURVE
BD.	BOARD
BLDG.	BUILDING
BOT.	BOTTOM
BRG.	BEARING
C.A.	CATCH BASIN
C.I.	CAST IRON
CL./℄	CENTERLINE
CLG.	CEILING
C.A.	CONSTRUCTION JOINT
C.M.U.	CONCRETE MASONRY UNIT
COL.	COLUMN
CONC.	CONCRETE
CONT.	CONTINUOUS
CONTR.	CONTRACTOR
D.B.E.	DECK BEARING ELEVATION
DIA./ø	DIAMETER
DD.	DECK DRAIN
DET.	DETAIL
D.F.	DRINKING FOUNTAIN
DN.	DOWN
DWGS.	DRAWINGS
E.	EAST
EA.	EACH
E.C.	END CURVE
E.G.	EXISTING GRADE
E.J.	EXPANSION JOINT
ELEC.	ELECTRICAL
EL./ELEV.	ELEVATION
EQ.	EQUIPMENT
E.W.C.	ELECTRICAL WATER COOLER
EXIST.	EXISTING
FND.	FOUNDATION
F.D.	FLOOR DRAIN
F.E.	FIRE EXTINGUISHER
F.E.C.	FIRE EXTINGUISHER CABINET
F.F.	FINISHED FLOOR
F.G.	FINISHED GRADE
FIN.	FINISH
F.S.	FINISHED SURFACE
FL.	FLOOR
F.L.	FLOW LINE
FTG.	FOOTING
GA.	GAUGE
GALV.	GALVANIZED
G.I.	GALVANIZED IRON
GYP.	GYPSUM
HM.	HOLLOW METAL
HORIZ.	HORIZONTAL
HT.	HEIGHT
H.W.	HOT WATER
I.D.	INSIDE DIAMETER
IMBED.	IMBEDDED/IMBEDMENT
IN.	INCH
INV.	INVERT
INSUL	INSULATION
J-BOX	JUNCTION BOX
JAN.	JANITOR
JT.	JOINT
L.F.	LINEAR FEET
LAV.	LAVATORY
LOC.	LOCATION
MAX.	MAXIMUM
MECH.	MECHANICAL
MEZZ.	MEZZANINE
MFG.	MANUFACTURER
MH.	MANHOLE
MIN.	MINIMUM
MISC.	MISCELLANEOUS
M.O.	MASONRY OPENING
MON.	MONUMENT
MTD.	MOUNTED
N.	NORTH
N.I.C.	NOT IN CONTRACT
NO.	NUMBER
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
O.D.	OUTSIDE DIAMETER
OPP.	OPPOSITE
P.I.	POINT OF INTERSECTION
PL.	PLATE
P. LAM.	PLASTIC LAMINATE
R.	RADIUS
R.D.	ROOF DRAIN
REF.	REFRIGERATOR
REINF.	REINFORCING
REQ'D.	REQUIRED
REV.	REVISED
RM.	ROOM
R.O.	ROUGH OPENING
S.	SLOPE
S.C.	SOLID CORE
SCHED.	SCHEDULE
SDMH	STORM DRAIN MANHOLE
SHT.	SHEET
SIM.	SIMILAR
SPEC'S	SPECIFICATIONS
SQ.	SQUARE
S.S.	STAINLESS STEEL
STA.	STATION
STD.	STANDARD
STL.	STEEL
STOR.	STORAGE
STRUCT.	STRUCTURAL/STRUCTURE
SUSP.	SUSPENDED
T	TANGENT
TEL.	TELEPHONE
TEMP.	TEMPORARY
T.G.	TOP OF GRATE
T.&G.	TONGUE AND GROOVE
T.O.	TOP OF
T.R.	TOP OF RIM
TYP.	TYPICAL
VERT.	VERTICAL
VEST.	VESTIBULE
W.	WEST/WATER
W/	WITH
W.C.	WATER CLOSET
W.H.	WATER HEATER
W/O	WITHOUT
W.R.	WATER RESISTANT

SYMBOL LEGEND

ACOUSTICAL TILE
FINISH LUMBER
METAL STUD
RIGID INSULATION
BATT INSULATION
GLASS
PARTICLE BOARD
PLYWOOD
STEEL
CERAMIC TILE
GYPSUM BOARD
WOOD FRAMING

A / HEIGHT — CEILING TYPE / CEILING HEIGHT
ROOM NAME / 101 — ROOM NAME / ROOM NUMBER
101–A — DOOR NUMBER
1 — WINDOW NUMBER
1 — GLASS TYPE
DETAIL MARK / SHEET NUMBER
A / B / C / D — ELEVATION MARK / SHEET NUMBER
TOS 100'–0" / 5039.00 — ARCH ELEVATION / CIVIL ELEVATION
A — GRID LINE INDICATOR
SECTION MARK / SHEET NUMBER

BUILDING CODE DATA

APPLICABLE CODES:

BUILDING CODE:	2015 INTERNATIONAL BUILDING CODE
ELECTRICAL CODE:	2014 NATIONAL ELECTRICAL CODE
PLUMBING CODE:	2015 INTERNATIONAL PLUMBING CODE
MECHANICAL CODE:	2015 INTERNATIONAL MECHANICAL CODE
ENERGY CODE:	2015 INTERNATIONAL ENERGY CONSERVATION CODE
ACCESSIBILITY CODE:	2015 INTERNATIONAL BUILDING CODE (ICC/ANSI A117.1–2003)
FIRE CODE:	2015 INTERNATIONAL FIRE CODE

GENERATOR BUILDING

OCCUPANCY:	U	IBC 312
CONSTRUCTION TYPE:	Vb	IBC 601
FIRE SPRINKLERS:	NONE	IBC 903
STORIES:	1	
STORIES ALLOWED:	1	IBC 504.4
BUILDING AREA:	216 SF	
BUILDING AREA ALLOWED:	5,500 SF	IBC 506.2
BUILDING HEIGHT:	11'–10" TOP OF ROOF RIDGE	
BUILDING HEIGHT ALLOWED:	40'–0"	IBC 504.3
OCCUPANT LOAD:	216 SF/300 = 1 OCCUPANTS	
DRINKING FOUNTAINS REQUIRED:	0	IBC 2902.1
DRINKING FOUNTAINS PROVIDED:	0	
TOILETS REQUIRED:	0	IBC 2902.1
TOILETS PROVIDED:	0	
SERVICE SINKS REQUIRED:	0	IBC 2902.1
SERVICE SINKS PROVIDED:	0	

EXTERIOR COLOR SCHEDULE

TAG	MATERIAL	MANUFACTURER	FINISH	COLOR	REMARKS
EX–1	CONCRETE	---	SMOOTH FORM FINISH	NATURAL WITH DAMP PROOF COATING	CONCRETE STEM WALLS BELOW GRADE
EX–2	CONCRETE	---	SACK RUBBED FINISH	NATURAL	CONCRETE STEM WALLS ABOVE GRADE
EX–3	CMU 8" HIGH	AMCOR	SPLIT FACE	CHESTER	FIELD COLOR, CMU MORTAR TO MATCH CMU
EX–4	STANDING SEAM	MBCI	PRE–FINISHED	FERN GREEN	METAL ROOF, FASCIA, SOFFIT
EX–5	LOUVER/VENT	---	PRE–FINISHED	MATCH ROOF COLOR	LOUVERS, VENTS, GUTTERS
EX–6	DOOR & FRAME	---	PRE–FINISHED	MATCH ROOF COLOR	DOOR & FRAME

NOTES:
1. CONTRACTOR TO VERIFY ALL COLOR SELECTIONS WITH OWNER & ARCHITECT. PROVIDE SAMPLES TO VERIFY COLOR.
2. CONCRETE SEALER TO BE "SHERWIN–WILLIAMS" REXTHANE B65C60 OR ARMOSEAL HS POLY B65C220 (CATALYZED 2:1 SYSTEM OR EQUIVALENT.)
3. ALL EQUIPMENT HOUSE KEEPING PADS THROUGHOUT PROJECT SHALL BE THE SAME FINISH AS THE ADJACENT FLOOR FINISH.

INTERIOR COLOR SCHEDULE

MARK	MATERIAL	MANUFACTURER	COLOR	STYLE NUMBER	REMARKS
SM–1	SEALED MASONRY	----	CLEAR	----	CLEAR SEAL MASONRY
SC–1	SEALED CONCRETE	----	CLEAR	----	CLEAR SEAL CONCRETE, SMOOTH FORM FINISH
P1	PAINT	SHERWIN WILLIAMS	STUCCO SW7569	SEMI–GLOSS	WALLS
P2	PAINT	SHERWIN WILLIAMS	WESTHIGHLAND WHITE SW7566	SEMI–GLOSS	WALLS & CEILINGS

FINISH AND FLOOR SCHEDULE

ROOM NUMBER 000	ROOM NAME	FLOOR	WALLS, WAINSCOTS, BASES, DOORS														
			NORTH			EAST			SOUTH			WEST			CEILING		DOOR JAMBS
			WALL	WAINSCOT	BASE	WALL	WAINSCOT	BASE	WALL	WAINSCOT	BASE	WALL	WAINSCOT	BASE	TYPE	HEIGHT	
101	GENERATOR ROOM	SC–1	SM–1	–	–	SM–1	–	–	SM–1	–	–	SM–1	–	–	GYP BD P2	8'–2"	P1

REVISION

NO.	DESCRIPTION	BY	APR.	DATE

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466 North 900 West
Kaysville, Utah 84037
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Fax: 801.547.0397
www.jub.com
J-U-B ENGINEERS, INC.

AGENCY REVIEW

FILE: CITY STANDARDS_A-101X
JUB PROJ. # : ----
DRAWN BY: DTJ
DESIGN BY: PJT
CHECKED BY: PJT

ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY

PUBLIC WORKS STANDARDS
PLAIN CITY CORPORATION

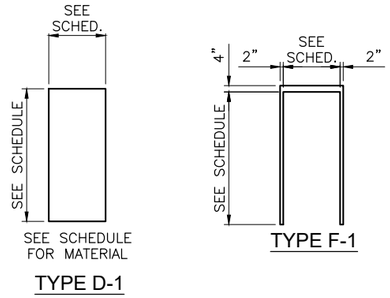
TYPICAL LIFT STATION
BUILDING CODE DATA

LAST UPDATED: 4/16/2020
SHEET NUMBER:
A-001

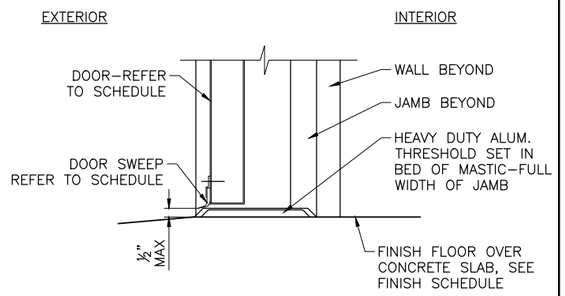
DOOR SCHEDULE

TAG (000–X)	DOOR SIZE			DOOR TYPE	DOOR MATERIAL	DOOR FINISH	OPENING DETAILS				FRAME DETAILS			FIRE RATING	COMMENTS	HINGES						LOCKSETS[1]									STOPS		DOOR SEAL					MISCELLANEOUS						
	WIDTH	HEIGHT	THICKNESS				HEAD	RIGHT JAMB	LEFT JAMB	SILL THRESHOLD	TYPE	MATERIAL	FINISH			NUMBER	PIVOTS	BALL BEARING	BRONZE / BRASS	STAINLESS STEEL	N.R. PINS	ENTRANCE	EXIT DEVICE	OFFICE	PASSAGE	PRIVACY	STORE ROOM	FLUSH BOLTS	DUST PROOF STRIKE	SURFACE BOLTS	WALL STOP	FLOOR STOP	SMOKE STRIP	WEATHER STRIP	ASTRAGAL	SWEEP	THRESHOLD	CLOSER	PUSH/PULL	COORDINATOR	KICK PLATE	ARMOR PLATE	PANIC BAR
101–A	2'–6"	7'–0"	1 3/4"	D–1	HM	P1	D2/A–002	D3/A–002	D3/A–002	D1/A–002	F–1	HM	P1	––	PAIR OF DOORS	6		X		X	X						X	X	X					X	X	X	X	X		X		X	X

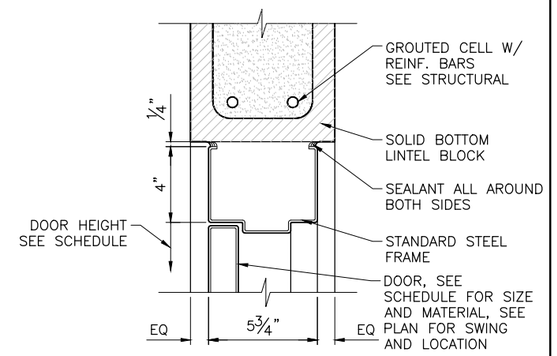
NOTES:
1. SECURE ALL DOOR HARDWARE SCREWS WITH "LOC–TIGHT" COMPOUND.
2. KEYING INFORMATION: MATCH OWNERS MASTER KEYS AND CYLINDER CORE, COORDINATE WITH CONSTRUCTION MANAGER.



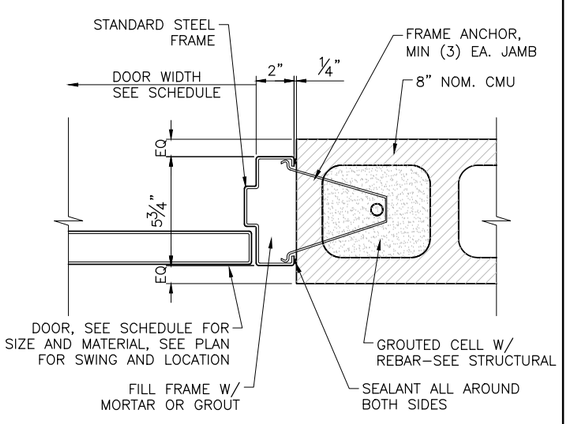
C4 DOOR & FRAME TYPES
SCALE: 1/4" = 1'-0"



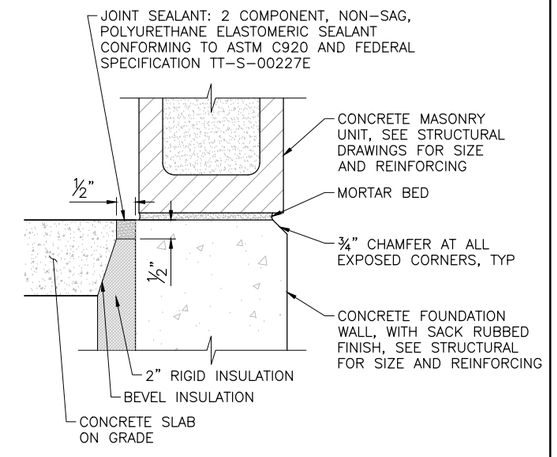
D1 DOOR THRESHOLD - CMU
SCALE: NOT TO SCALE



D2 DOOR HEAD - CMU
SCALE: NOT TO SCALE



D3 DOOR JAMB - CMU
SCALE: NOT TO SCALE



D4 CMU AT FOUNDATION WALL
SCALE: NOT TO SCALE

REVISION

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AGENCY REVIEW

FILE: CITY STANDARDS_A-101X
JUB PROJ. # : ----
DRAWN BY: DTJ
DESIGN BY: PJT
CHECKED BY: PJT

ONE INCH
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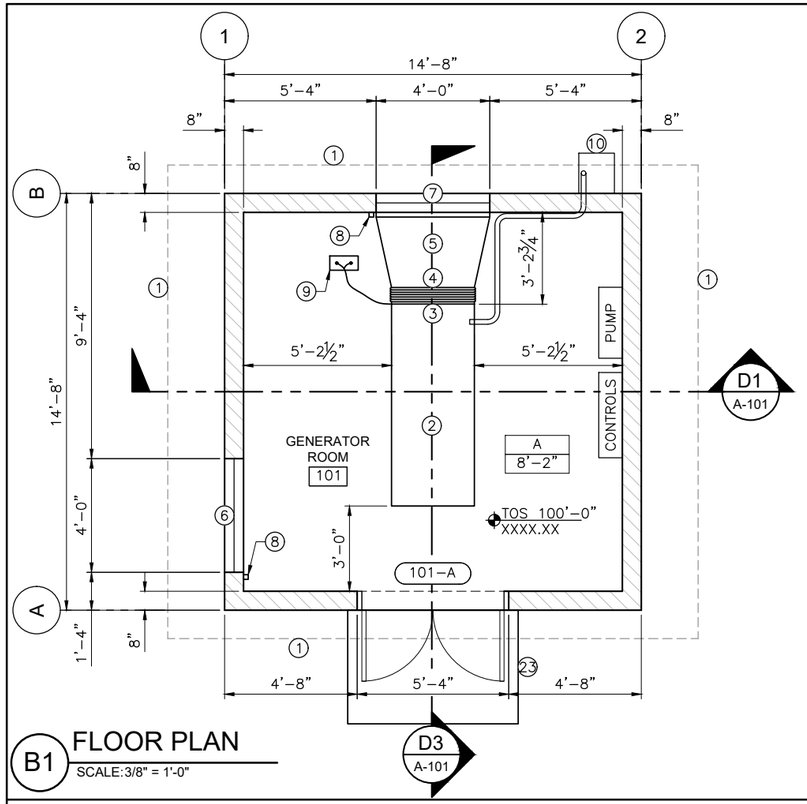
PUBLIC WORKS STANDARDS
PLAIN CITY CORPORATION

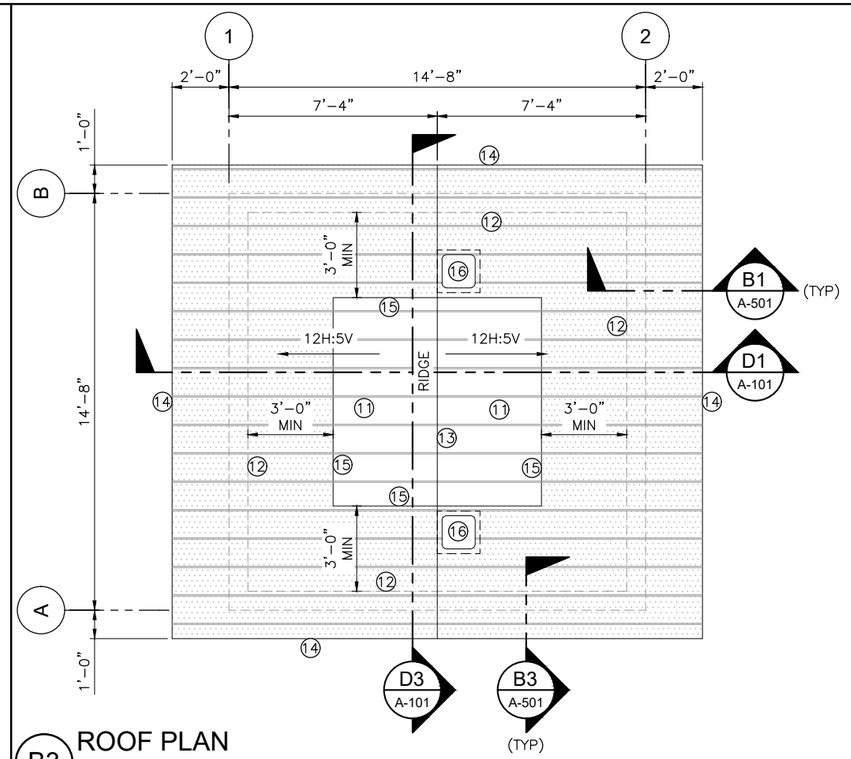
TYPICAL LIFT STATION
ARCHITECTURAL SCHEDULES

LAST UPDATED: 4/16/2020
SHEET NUMBER:
A-002

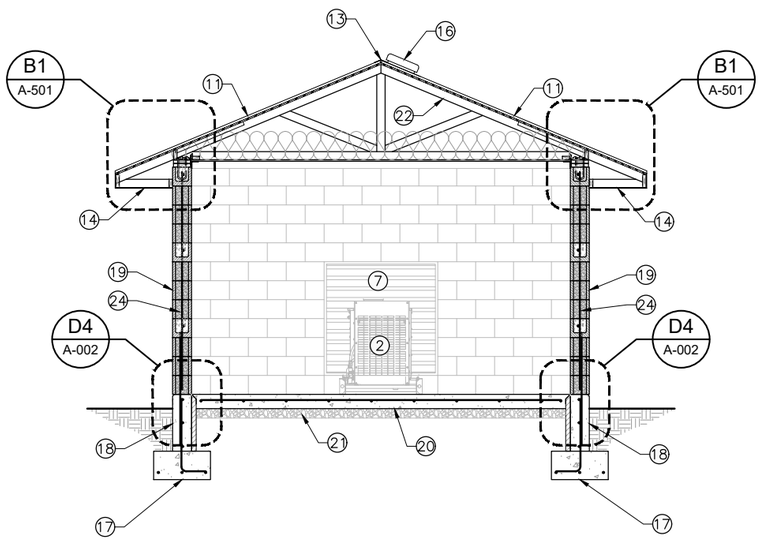
Plot Date:4/16/2020 1:43 PM Plotted By: Daniel Johnsen
Date Created:4/16/2020 \\KAYS\PUBLIC\PROJECTS\JUBPLAIN CITY\STANDARDS\2020\CITY STANDARDS_A-101X.DWG



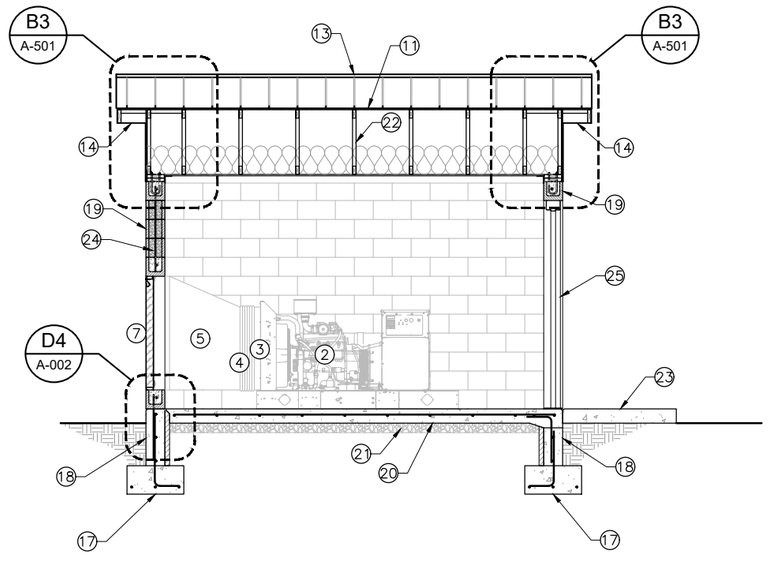
B1 FLOOR PLAN
SCALE:3/8" = 1'-0"



B3 ROOF PLAN
SCALE:3/8" = 1'-0"



D1 BUILDING SECTION
SCALE:3/8" = 1'-0"



D3 BUILDING SECTION
SCALE:3/8" = 1'-0"

GENERAL NOTES

1. ANY CONFLICTS BETWEEN ARCHITECTURAL DRAWINGS AND EXISTING CONDITIONS AND/OR DRAWINGS OF OTHER DISCIPLINES SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER.
2. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS PRIOR TO ANY WORK.
3. THE CONTRACTOR SHALL SUBMIT ANY PROPOSED CHANGES OR MODIFICATIONS OF THE CONTRACT DOCUMENTS, IN WRITING, TO THE ENGINEER BEFORE PROCEEDING WITH ANY ACTION.
4. WHERE SPECIFIC DETAILS ARE NOT PROVIDED, TYPICAL OR SIMILAR INDUSTRY STANDARD DETAILS SHALL APPLY. IF FURTHER DETAIL IS REQUIRED CONTACT THE ENGINEER.
5. DETAILS ARE PROVIDED FOR VISUAL REPRESENTATION OF DESIGN INTENT. OFTEN THE DETAILS ARE BASED ON A BASIS–OF–DESIGN PRODUCT AND/OR MATERIAL AND MAY BE DIAGRAMMATIC IN NATURE.
6. IF A DIFFERENT PRODUCT OR MATERIAL FROM THE INDICATED PRODUCT OR MATERIAL ON THE DRAWINGS OR SPECIFICATIONS IS SUBSTITUTED, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ALTERNATE DETAILS AS REQUIRED FOR THE ARCHITECT/ENGINEER TO REVIEW.
7. GENERALLY, DIMENSIONS SHOWN ON ARCHITECTURAL DRAWINGS ARE TAKEN FROM THE CORE STRUCTURE FACE (IE. CONCRETE WALL=FACE OF WALL; STUD WALL=FACE OF STUD).
8. ANY ADDITIONAL BLOCKING, BRACING, TRIM, FLASHING, SEALANTS, ETC. REQUIRED FOR INSTALLATION OF COMPLETE SYSTEMS PERTAINING TO DOORS, WINDOWS, OPENINGS, PENETRATIONS, ETC. ARE EXPECTED TO BE PROVIDED AND INSTALLED BY THE CONTRACTOR.
9. PROVIDE SEALANT OR TRIM AS APPROPRIATE WHERE DISSIMILAR MATERIALS COME IN CONTACT.
10. PAINT ALL MISCELLANEOUS SURFACES, SUPPORTS, METALS, ETC. IF PERMANENTLY ATTACHED TO PAINTED SURFACE OR EXPOSED TO THE ELEMENTS.

KEY NOTES

1. LINE OF ROOF ABOVE
2. SMITH POWER PRODUCTS 30kw 3 PHASE NATURAL GAS GENERATOR
3. RADIATOR TRANSITION FLANGE
4. FLEXIBLE DISCHARGE DUCT CONNECTION
5. DUCTED EXHAUST
6. AIR INLET VENTILATOR, 4'x4' "AMERICAN WARMING" EXTRUDED ALUMINUM LOUVER WITH BIRD SCREEN, AND 4'x4' "AMERICAN WARMING" AUTO DAMPER WITH EDGE AND END SEALS INTERLOCKED WITH GENERATOR TO OPEN AT START–UP
7. RADIATOR DISCHARGE, 4'x4' "AMERICAN WARMING" EXTRUDED ALUMINUM LOUVER WITH BIRD SCREEN, AND 4'x4' "AMERICAN WARMING" AUTO DAMPER WITH EDGE AND END SEALS INTERLOCKED WITH GENERATOR TO OPEN AT START–UP
8. DAMPER ACTUATOR
9. GENERATOR STARTUP BATTERY
10. NATURAL GAS METER
11. STANDING SEAM METAL ROOF SYSTEM, OVER 30# FELT, MECHANICALLY FASTENED TO ROOF SHEATHING
12. LINE OF EXTERIOR WALL BELOW
13. METAL RIDGE CAP
14. METAL VENTED SOFFIT & FASCIA MECHANICALLY FASTENED TO STRUCT
15. SHADED AREA INDICATES: ICE & WATERSHIELD WATER PROOFING MEMBRANE, EXTEND 3'–0" MIN. FROM INTERIOR SIDE OF EXTERIOR WALL
16. SLANT BACK ROOF VENT, SEE (D1/A–501)
17. CONCRETE FOOTING, SEE STRUCTURAL DRAWINGS
18. CONCRETE FOUNDATION WALL, SEE STRUCTURAL DRAWINGS
19. CONCRETE MASONRY WALL, SEE STRUCTURAL DRAWINGS
20. CONCRETE SLAB ON GRADE, SEE STRUCTURAL DRAWINGS
21. 4" GRAVEL BASE
22. PRE–ENGINEERED WOOD TRUSS, SEE STRUCTURAL DRAWINGS
23. 6'–0" x 4'–0" CONCRETE LANDING PAD x 6" THICK, SEE CIVIL
24. LOOSE FILL INSULATION IN ALL UNGROUTED CELLS, TYP
25. DOOR AND FRAME, SEE SCHEDULE ON (A–002)

CEILING TYPE

A / HEIGHT	GYPSUM BOARD, PAINTED

WALL TYPE

EXTERIOR CMU MASONRY WALL: REFER TO EXTERIOR ELEVATIONS FOR COLOR AND FINISH. RUNNING BOND, REFER TO STRUCTURAL FOR SIZE AND REINFORCING, WITH INTEGRAL WATER REPELLENT IN BLOCK AND MORTAR. EXTERIOR CLEAR SEALER AND INTERIOR PAINTED, SEE FINISH SCHEDULE.

REVISION

NO.	DESCRIPTION	BY	APR.	DATE

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AGENCY

REVIEW

FILE: CITY STANDARDS_A-101X
JUB PROJ. # : ----
DRAWN BY: DTJ
DESIGN BY: PJT
CHECKED BY: PJT

ONE INCH
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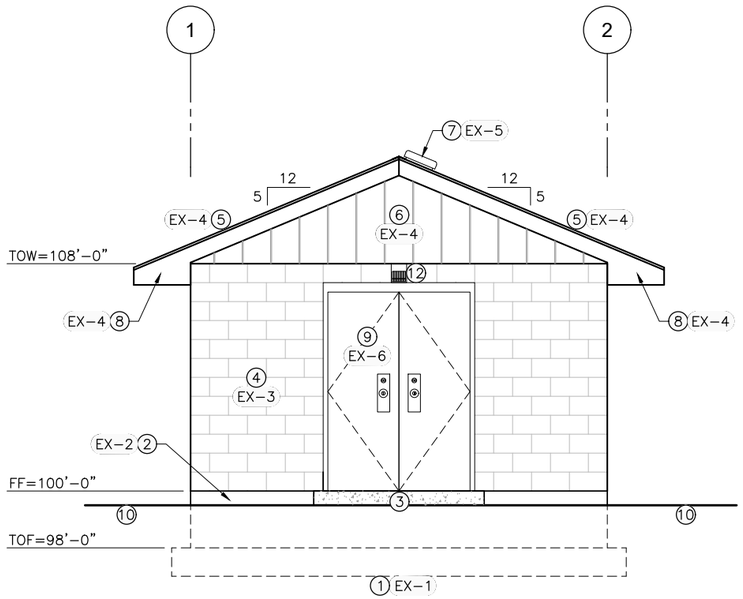
PUBLIC WORKS STANDARDS
PLAIN CITY CORPORATION

TYPICAL LIFT STATION
ARCHITECTURAL FLOOR PLANS

LAST UPDATED: 4/16/2020

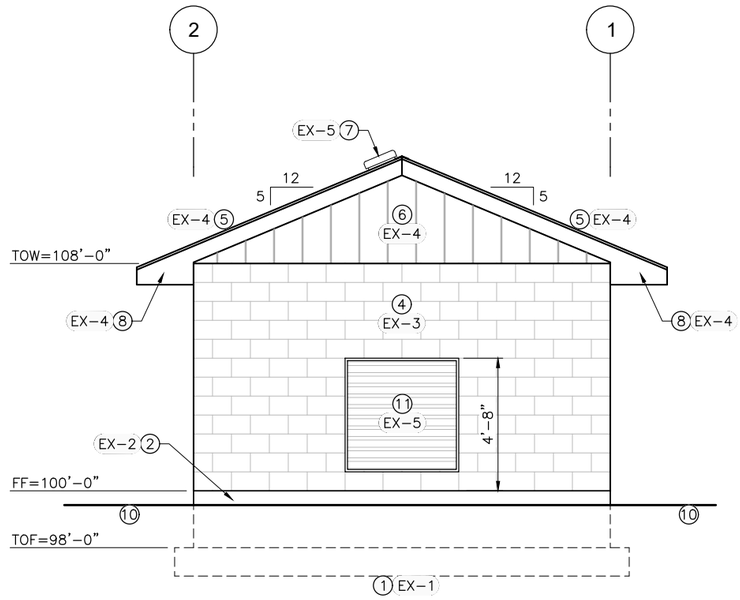
SHEET NUMBER:
A-101

Plot Date:4/16/2020 1:43 PM Plotted By: Daniel Johnsen
Date Created:4/16/2020 \\KAYSPUBLIC\PROJECTS\JUBPLAIN CITY\STANDARDS\2020\CITY STANDARDS_A-101X.DWG



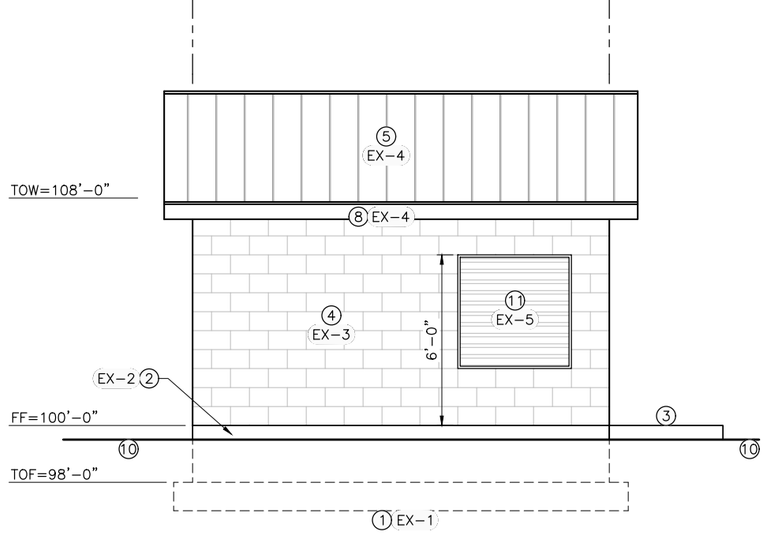
B1 SOUTH ELEVATION

SCALE:3/8" = 1'-0"



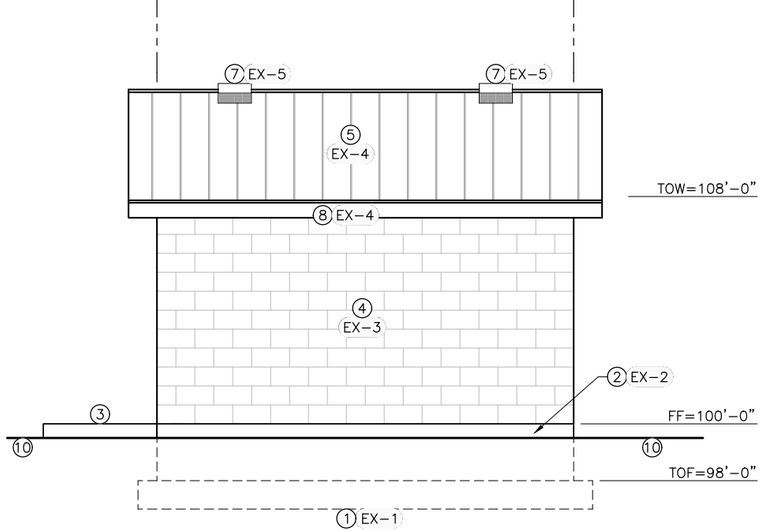
B3 NORTH ELEVATION

SCALE:3/8" = 1'-0"



D1 WEST ELEVATION

SCALE:3/8" = 1'-0"



D3 EAST ELEVATION

SCALE:3/8" = 1'-0"

GENERAL NOTES

1. CONTRACTOR SHALL FURNISH AND INSTALL TRIMS, FLASHING, AND FINISH PIECES TO PRESENT A FINISHED APPEARANCE.
2. EX-X INDICATES EXTERIOR COLOR, SEE EXTERIOR COLOR SCHEDULE.
3. CONTRACTOR SHALL FURNISH AND INSTALL A SCADA SYSTEM COMPATIBLE WITH THE CITY'S CURRENT SYSTEM AS APPROVED BY THE CITY.

KEY NOTES

1. LINE OF FOOTING AND FOUNDATION, SEE STRUCTURAL DRAWINGS
2. ARCHITECTURAL CONCRETE FOUNDATION WALL
3. EXTERIOR CONCRETE FLATWORK, SEE CIVIL DRAWINGS
4. SPLIT-FACE CONCRETE MASONRY (FIELD). REFER TO WALL TYPES ON FLOOR PLAN.
5. ROOF WITH STANDING SEAM SYSTEM, SEE ROOF PLAN
6. SIDING WITH STANDING SEAM SYSTEM
7. SLANT BACK ROOF VENT
8. METAL VENTED SOFFIT AND FACIA (MBCI FLUSH SEAM PANEL SYSTEM OR APPROVED EQUAL) MECHANICALLY FASTEN TO STRUCTURE
9. DOOR AND FRAME, REFER TO DOOR SCHEDULE
10. APPROXIMATE FINISHED GRADE, SEE CIVIL DRAWINGS
11. LOUVER, SEE HVAC DRAWINGS
12. EXTERIOR LIGHT, SEE ELEC DRAWINGS

REVISION

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AGENCY REVIEW

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JUB PROJ. # : ----
DRAWN BY: DTJ
DESIGN BY: PJT
CHECKED BY: PJT

ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY

PUBLIC WORKS STANDARDS
PLAIN CITY CORPORATION

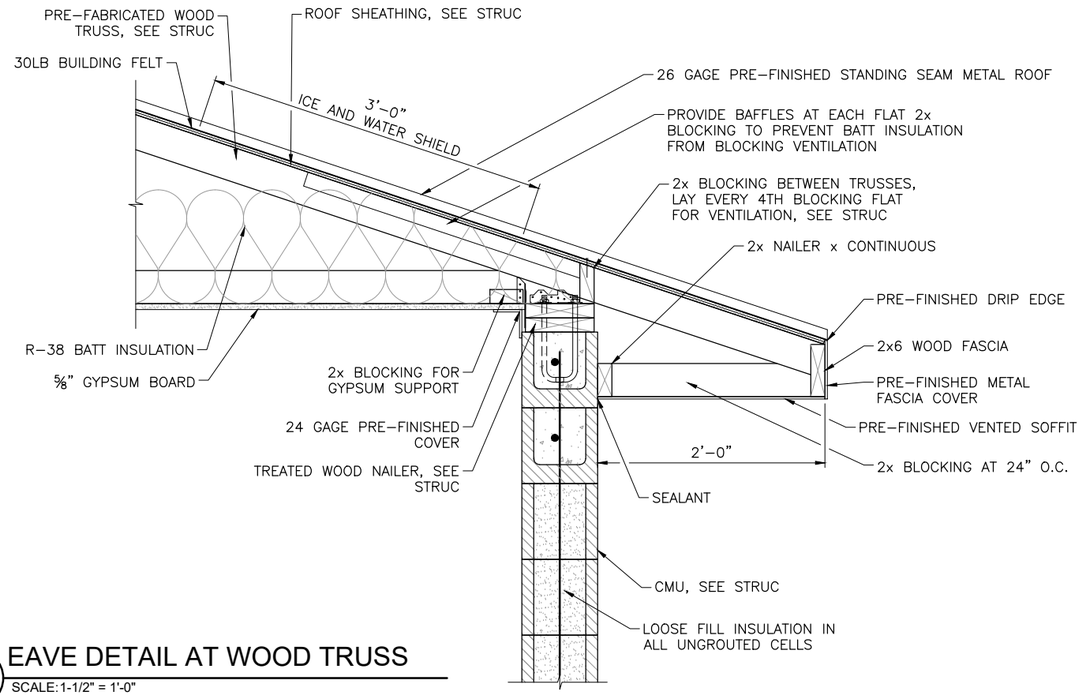
TYPICAL LIFT STATION ARCHITECTURAL ELEVATIONS

LAST UPDATED: 4/16/2020

SHEET NUMBER:

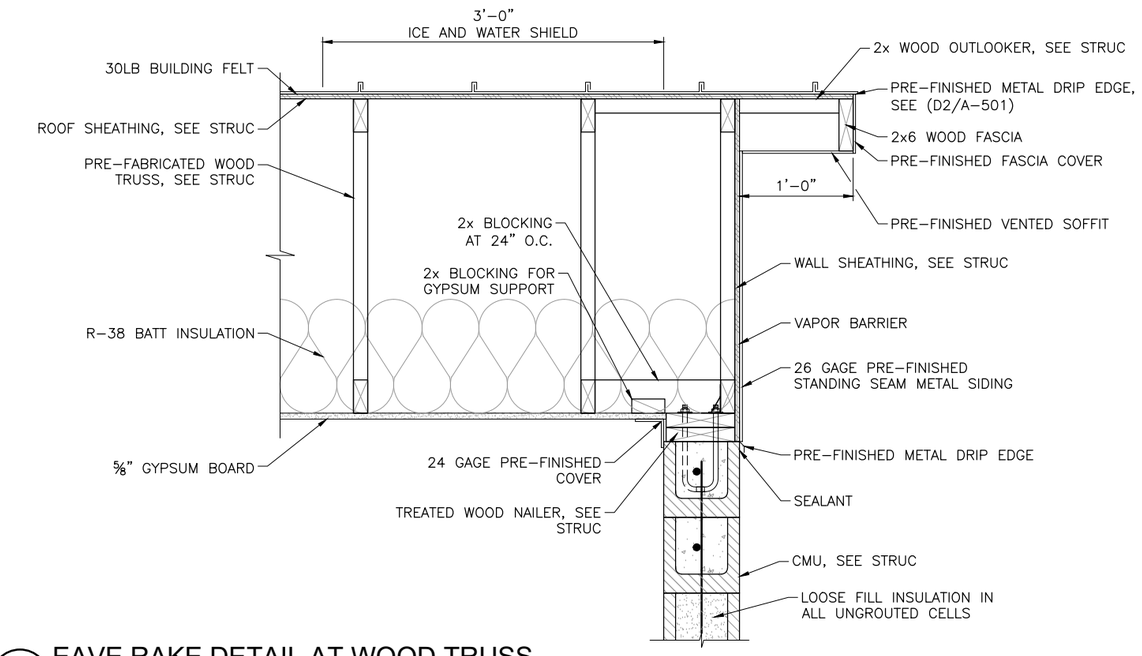
A-201

Plot Date:4/16/2020 1:44 PM Plotted By: Daniel Johnson
Date Created:4/16/2020 \\KAYS\PUBLIC\PROJECTS\JUB\PLAIN CITY\STANDARDS\2020\CITY STANDARDS_A-101X.DWG



B1 EAVE DETAIL AT WOOD TRUSS

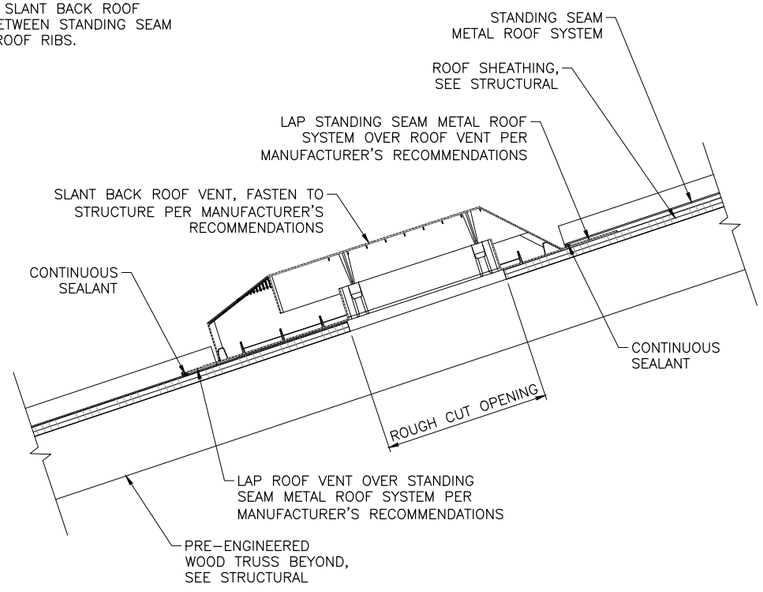
SCALE:1-1/2" = 1'-0"



B3 EAVE RAKE DETAIL AT WOOD TRUSS

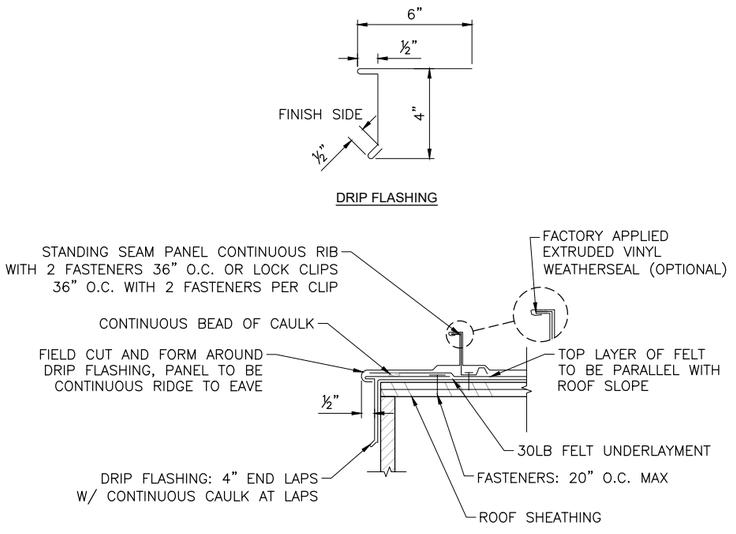
SCALE:1-1/2" = 1'-0"

NOTE:
INSTALL SLANT BACK ROOF VENT BETWEEN STANDING SEAM METAL ROOF RIBS.



D1 SLANT BACK ROOF VENT DETAIL

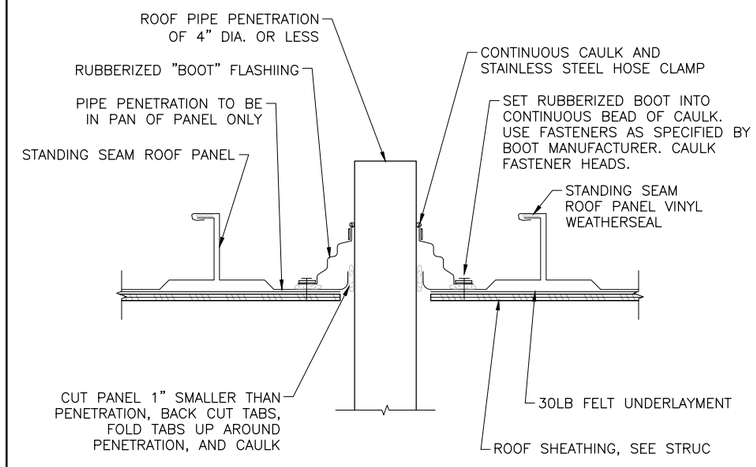
SCALE:N.T.S.



NOTES:
1. FIELD CUT AND FORM LAST PANEL AROUND DRIP FLASHING. PANEL MUST BE CONTINUOUS FROM RIDGE TO EAVE.

D2 GABLE TURNDOWN DETAIL

SCALE:N.T.S.



NOTES:
1. CUT HOLE TO ALLOW FOR THERMAL MOVEMENT IF PANELS ARE 30'–0" OR LONGER.
2. IF PIPE IS MADE OF METAL, IT MUST BE PAINTED TO PREVENT RUST RUN–OFF FROM STAINING PANELS.
3. POSITION SQUARE BASED BOOTS IN A DIAMOND ORIENTATION WHERE POSSIBLE TO AID IN DIVERTING WATER.

D3 PENETRATION IN PAN (PREFERRED)

SCALE:N.T.S. (CALL ARCHITECT IF PENETRATION IS NOT IN PAN)

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AGENCY

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DESIGN BY: PJT
CHECKED BY: PJT

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PUBLIC WORKS STANDARDS
PLAIN CITY CORPORATION

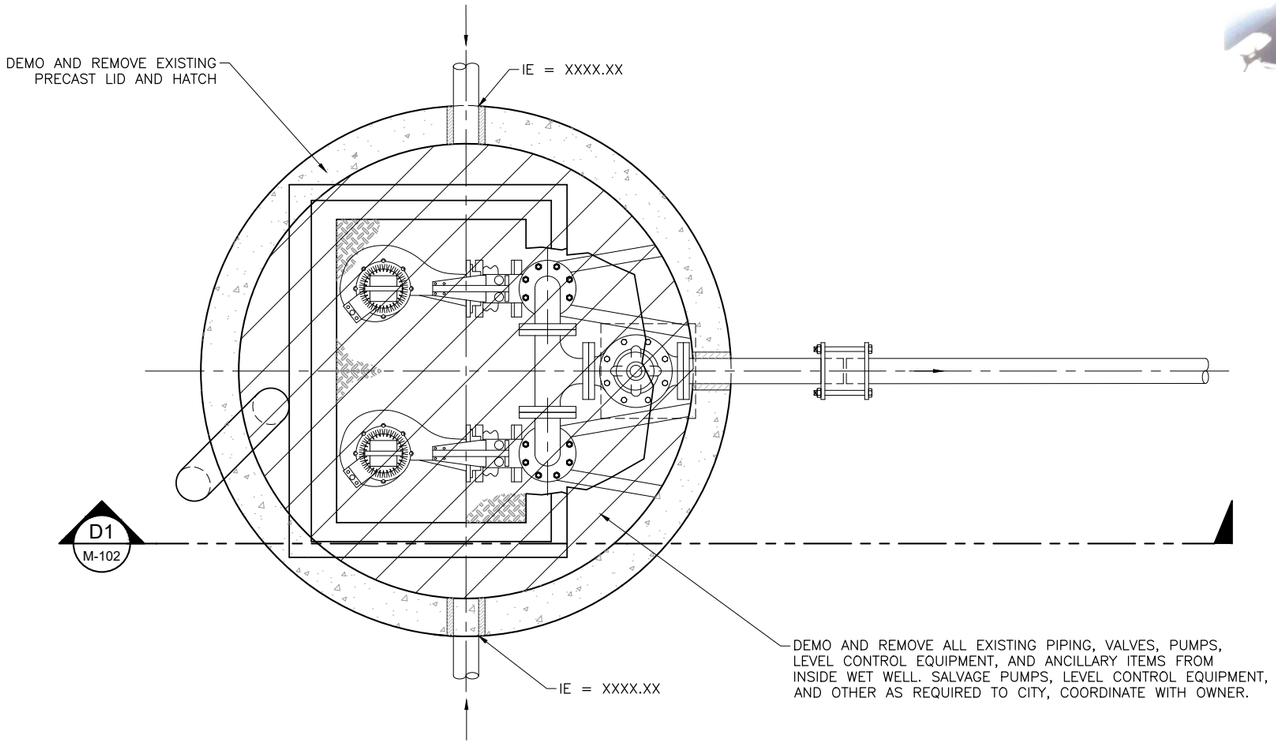
TYPICAL LIFT STATION ARCHITECTURAL DETAILS

LAST UPDATED: 4/16/2020

SHEET NUMBER:

A-501

Plot Date:4/16/2020 1:44 PM Plotted By: Daniel Johnson
Date Created:4/16/2020 \\KAYS\PUBLIC\PROJECTS\JUB\PLAIN CITY\STANDARDS\2020\CITY STANDARDS_A-101X.DWG



D1 DEMOLITION PLAN VIEW

SCALE: 1"=1'-0"

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PUBLIC WORKS STANDARDS
PLAIN CITY CORPORATION

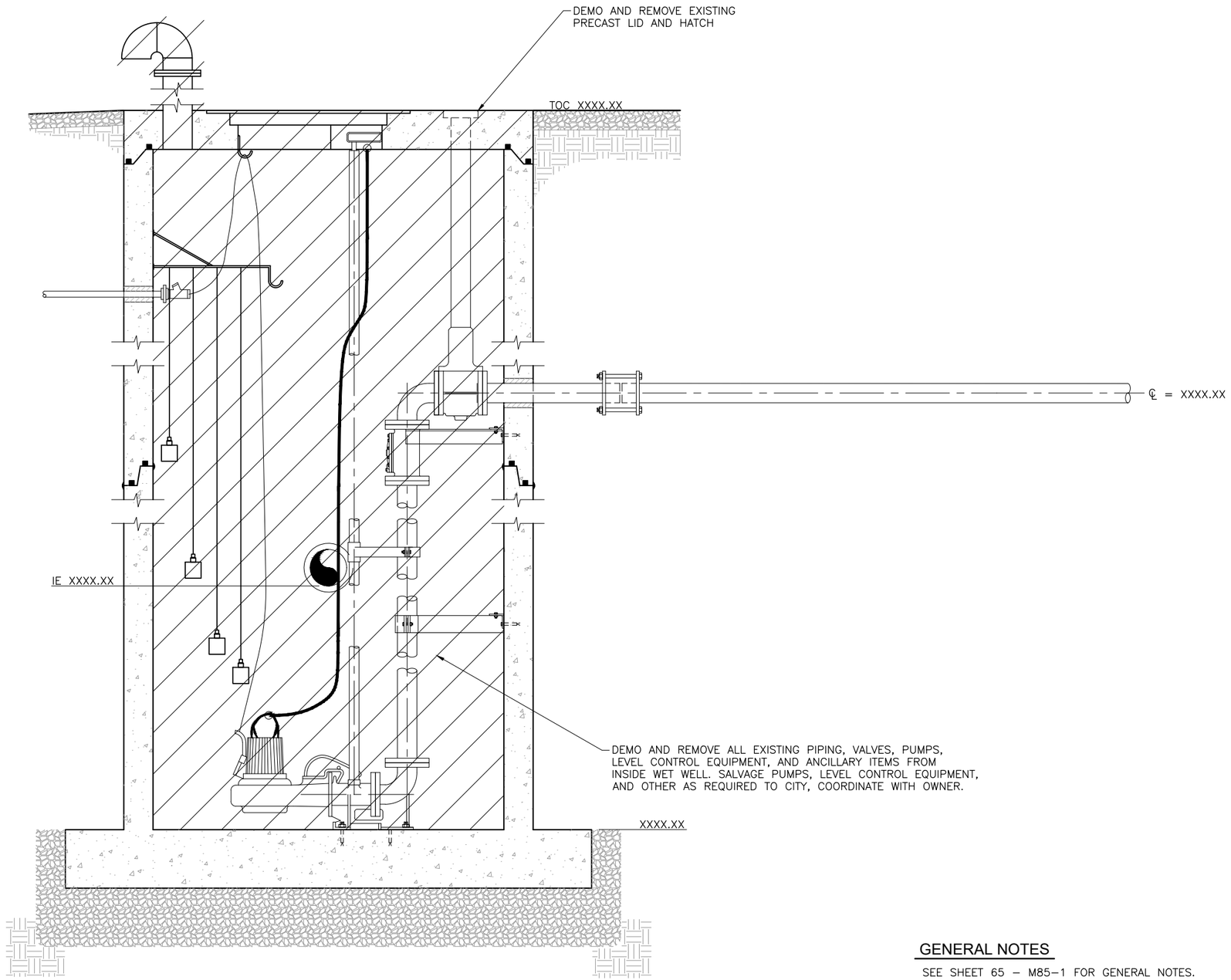
TYPICAL LIFT STATION
DEMOLITION - PLAN VIEW

LAST UPDATED: 2/21/2020

SHEET NUMBER:

M-101

Plot Date: 4/16/2020 1:44 PM Plotted By: Daniel Johnson
Date Created: 2/20/2020 \\KAYS\PUBLIC\PROJECTS\JUB\PLAIN CITY\STANDARDS\2019\CITY STANDARDS_M101X.DWG



D1 DEMOLITION SECTION VIEW

SCALE: 1"=1'-0"

GENERAL NOTES

SEE SHEET 65 – M85–1 FOR GENERAL NOTES.

KEYED NOTES

SEE SHEET 65 – M85–1 FOR KEY NOTES.

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PUBLIC WORKS STANDARDS
PLAIN CITY CORPORATION

TYPICAL LIFT STATION
DEMOLITION - SECTION VIEW

LAST UPDATED: 2/21/2020

SHEET NUMBER:

M-102

Plot Date: 4/16/2020, 1:44 PM Plotted By: Daniel Johnson
Date Created: 2/20/2020 \\KAYSPUBLIC\PROJECTS\JUB\PLAIN CITY\STANDARDS\2019\CITY STANDARDS_M101X.DWG

CONSTRUCTION NOTES:

1. PUMP STATION MECHANICAL EQUIPMENT SHOWN IS SCHEMATIC. CONTRACTOR IS RESPONSIBLE FOR CORRECT QUANTITIES AND PIPE SPOOL LENGTHS AS REQUIRED FOR A FULLY FUNCTIONAL INSTALLATION. VERIFY ALL DIMENSIONS (BOTH VERTICAL AND HORIZONTAL). VERIFY MANUFACTURERS CONNECTION DETAILS AND INSTALLATION REQUIREMENTS. PROVIDE A DIMENSIONED DRAWING SHOWING ALL VALVES, FITTINGS, PIPE SPOOLS, AND PUMP CONNECTIONS WITH SHOP DRAWING SUBMITTAL. COORDINATE ALL WORK WITH RELATED TRADES TO AVOID CONFLICTS. CONFIGURATION MAY VARY DEPENDING UPON SITE.
2. REUSE EXISTING FLOAT SWITCHES AND MATCH EXISTING LEVEL CONTROL SETTINGS (FIELD ADJUST TO OPTIMIZE PERFORMANCE AS REQUIRED):
3. INSTALL PUMP AND ALL RELATED PUMP EQUIPMENT IN STRICT ACCORDANCE WITH THE DRAWINGS, SPECIFICATIONS, AND MANUFACTURERS RECOMMENDATIONS.
4. PROTECT BUILDINGS, FENCES, CURBS, AND SIDEWALKS ADJACENT TO THE SITE, UNLESS NOTED OTHERWISE. DAMAGE BY CONTRACTORS OPERATIONS SHALL BE REPAIRED AT CONTRACTORS EXPENSE.
5. UNLESS NOTED OTHERWISE, ALL PIPING AND FITTINGS FROM THE PUMPS THROUGH THE VALVE VAULT SHALL BE DUCTILE IRON CLASS 53 AND HAVE A 2–PART HIGH BUILD COAL TAR EPOXY COATING (40 MIL THICKNESS) ON INTERIOR AND EXTERIOR SURFACES.
6. ALL BOLTS, NUTS, WASHERS, FASTENERS, ETC. SHALL BE STAINLESS STEEL, TYPE 304 OR 316.
7. INSTALL FLEXIBLE SLEEVE–TYPE COUPLINGS ADJACENT TO CONCRETE STRUCTURES.
8. NOT ALL FEATURES ARE SHOWN IN BOTH PLAN AND SECTION VIEWS FOR CLARITY.

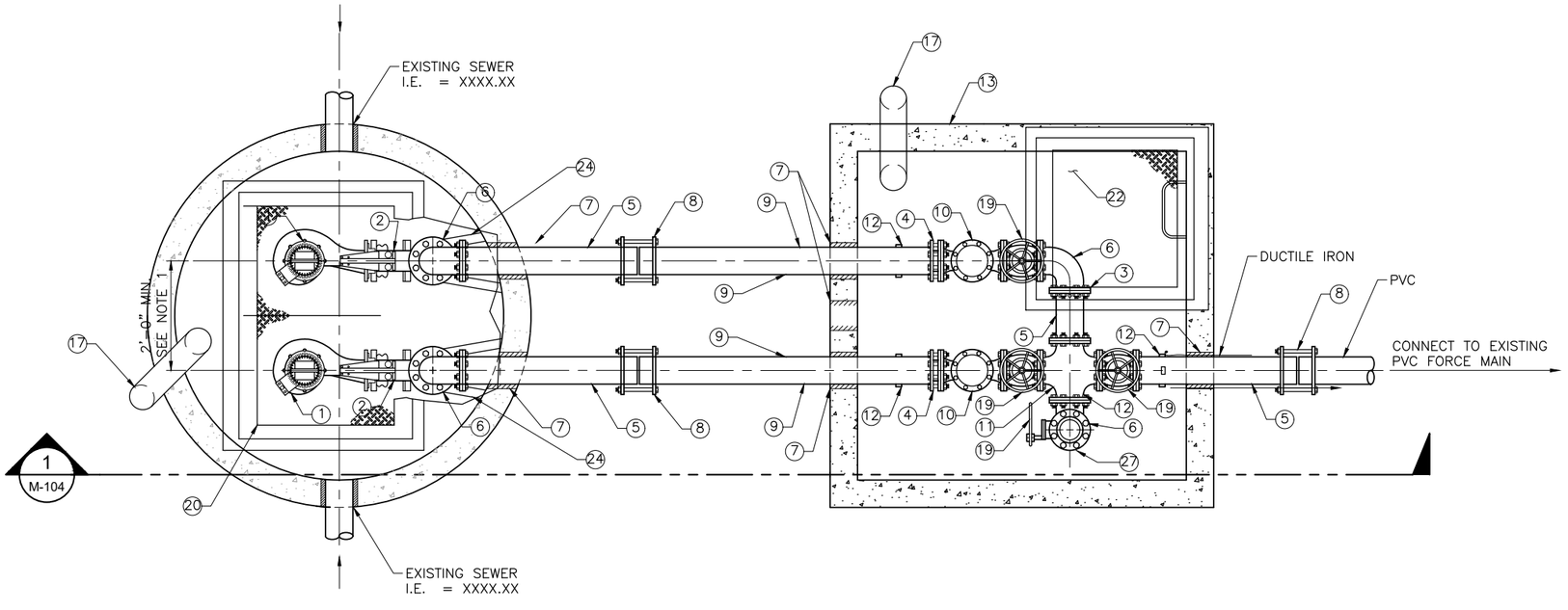
KEYED NOTES:

1. 5HP FLYGT SUBMERSIBLE PUMP MODEL 3102, PROVIDEDBY OWNER AND INSTALLED BY CONTRACTOR.
2. 4" PUMP QUICK DISCONNECT DISCHARGE ELBOW AND MOUNTING BASE WITH EPOXY–SET ST.ST. ANCHOR BOLTS, VERIFY SIZE WITH PUMP MFTR. PROVIDED BY OWNER AND INSTALLED BY CONTRACTOR.
3. 4" UNI–FLANGE (MEGA–LUG)
4. 4" RESTRAINED FLANGE COUPLING ADAPTER
5. 4" DI PIPE SPOOL (FLxPE)
6. 4" DI 90° LONG RADIUS ELBOW (FLGxFLG)
7. CORE DRILL AND LINK SEAL, SEE DETAIL. FIELD VERIFY AND MATCH CONNECTION ELEVATION.
8. 4" FLEXIBLE SLEEVE–TYPE PIPE COUPLING
9. 4" DI PIPE SPOOL (PExPE)
10. 4" SWING CHECK VALVE (FLGxFLG)
11. 4"x4" DI CROSS (FLG)
12. VALVE/PIPE SUPPORT, SEE DETAIL
13. 6'–0"x6'–0"x6'–6" HIGH PRECAST CONCRETE VALVE VAULT WITH PLASTIC COATED STEPS. 6" MIN. WALL THICKNESS. HS–20 RATED. MODIFY OPENINGS AS REQ'D TO ACCOMMODATE PIPING AND ACCESS HATCH AS SHOWN. COAT EXTERIOR WITH WATERPROOFING TREATMENT.
14. 6FT DIAMETER HS–20 RATED PRECAST LID WITH SCREENED VENT AND ACCESS HATCH. FIELD VERIFY DIMENSIONS.
15. EXISTING 6FT DIAMETER PRECAST CONCRETE WETWELL.
16. STAINLESS STEEL PUMP REMOVAL SYSTEM, COMPLETE WITH MOUNTING BRACKETS AND INTERMEDIATE SUPPORT BRACES. PROVIDED BY OWNER AND INSTALLED BY CONTRACTOR.
17. SCREENED VENT, SEE DETAIL
18. GROUT PLUG (WATER TIGHT)
19. 4" PLUG VALVE WITH HAND WHEEL (FLGxFLG)
20. 30"x48" MIN. ALUMINUM DOUBLE LEAF ACCESS DOOR WITH STAINLESS STEEL HARDWARE AND ORANGE SAFETY GRATE – OPENING DIMENSIONS AND DOOR LOCATION SHALL BE IN ACCORDANCE WITH PUMP MANUFACTURERS REQUIREMENTS. HATCH SHALL BE HS–20 TRAFFIC RATED AND WATER–TIGHT. PROVIDE RECESSED, LOCKABLE HASP COVERED WITH HINGED LID FLUSH WITH SURFACE. INSTALL DOOR SUCH THAT ENTRY SYSTEM IS NOT IN CONFLICT WITH DOOR.
21. STAINLESS STEEL CABLE SUPPORT BRACKET FOR POWER CABLES AND FLOAT SWITCHES, THE BRACKET IS SHOWN SCHEMATICALLY IN THESE DRAWINGS. THE SUPPORT BRACKET NEEDS TO BE LOCATED SO THE CABLES AND FLOATS ARE EASILY ACCESSIBLE FROM THE ACCESS HATCH. FIELD ADJUST TO AVOID CONFLICTS WITH PUMP REMOVAL AND TO OPTIMIZE FLOAT SWITCH PERFORMANCE.
22. 30"x30" MIN. ALUMINUM SINGLE LEAF ACCESS DOOR WITH STAINLESS STEEL HARDWARE. HATCH SHALL BE HS–20 TRAFFIC RATED AND WATER–TIGHT. PROVIDE RECESSED, LOCKABLE HASP COVERED WITH HINGED LID FLUSH WITH SURFACE. INSTALL DOOR SUCH THAT ENTRY SYSTEM IS NOT IN CONFLICT WITH DOOR.
23. STAINLESS STEEL LIFTING CHAIN OR CABLE (MIN. STRENGTH 6,000 LBS.) WITH S.S. CLEVIS FITTING AT EACH END. PROVIDED BY OWNER AND INSTALLED BY CONTRACTOR.
24. THRUST RESTRAINT PIPE SUPPORT, SEE DETAIL.
25. MANHOLE JOINT WITH EXTRUDED BUTYL RUBBER SEAL OR EQUIVALENT. GROUT JOINT INSIDE AND OUT OR VULLCEM 16 JOINT SEALANT CAULKING, TYP.
26. CRUSHED AGGREGATE (¾" MINUS) COMPACTED TO 95% ASTM D–698 OR MODIFIED PROCTOR UNLESS INDICATED OTHERWISE IN GEOTECH REPORT.
27. 4" ALUM. LOCKING CAM–LOCK FITTING WITH PRESSURE CAP.

NOTE

THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES IS SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES

CALL 48 HOURS BEFORE YOU DIG
811



1 MECHANICAL PLAN
SCALE:N.T.S.

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AGENCY REVIEW

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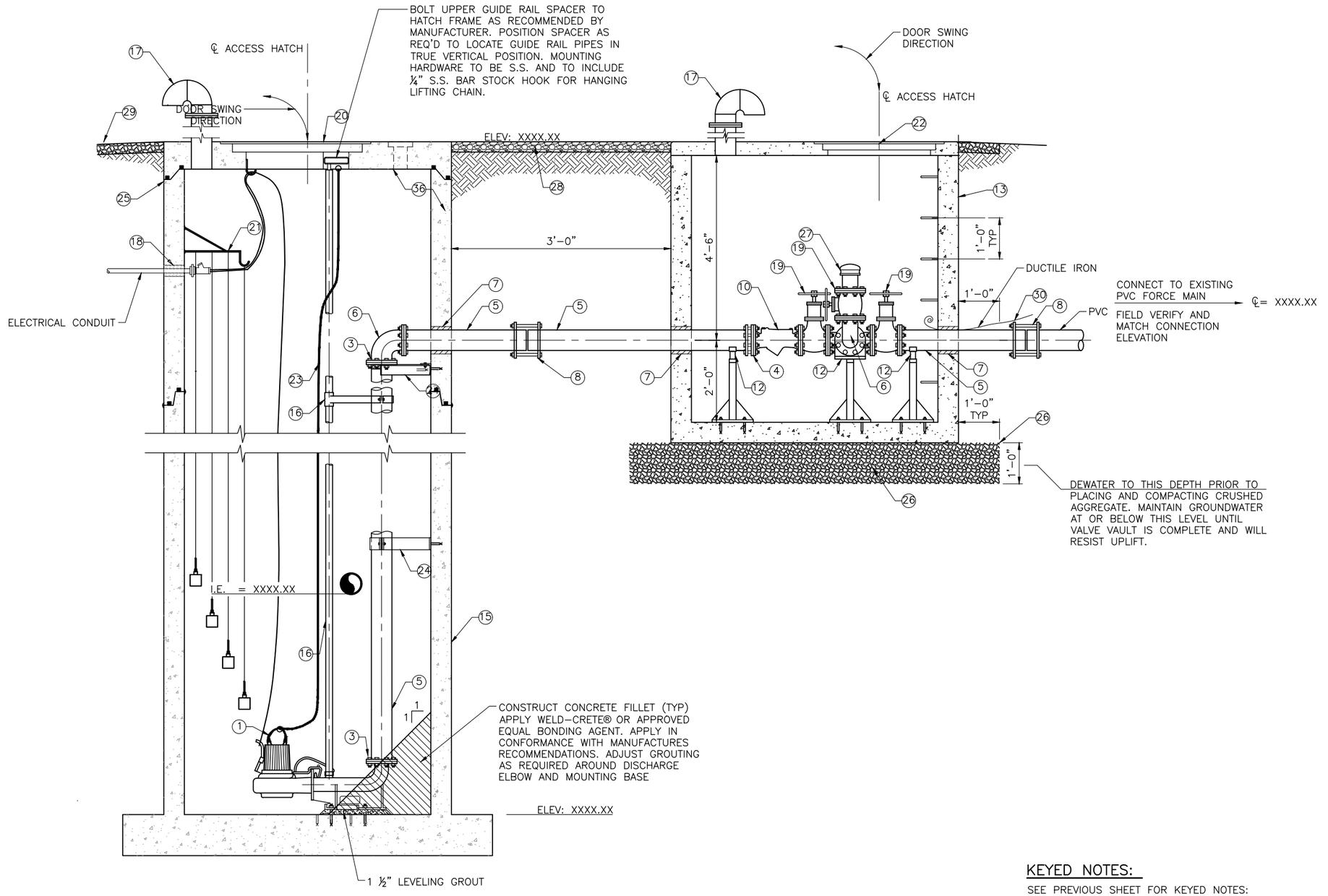
PLAIN CITY CORPORATION

TYPICAL LIFT STATION
MECHANICAL PLAN

LAST UPDATED: 2/21/2020

SHEET NUMBER:
M-103

Plot Date=4/16/2020 1:44 PM Plotted By: Daniel Johnson
Date Created2/20/2020 \\KAYSPUBLIC\PROJECTS\JUB\PLAIN CITY\STANDARDS\2019\CITY STANDARDS_M101X.DWG



KEYED NOTES:

SEE PREVIOUS SHEET FOR KEYED NOTES:
SHEET M-101

1 MECHANICAL SECTION

SCALE: 1"=1'-0"

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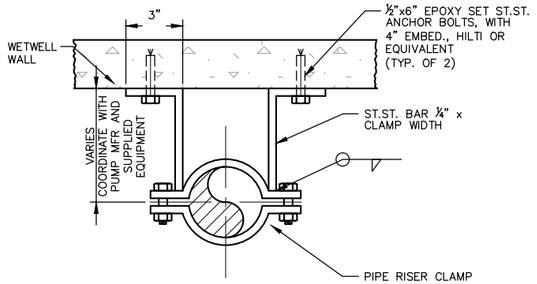
PUBLIC WORKS STANDARDS
PLAIN CITY CORPORATION

TYPICAL LIFT STATION
MECHANICAL SECTION

LAST UPDATED: 2/21/2020

SHEET NUMBER:
M-104

Plot Date: 4/16/2020 1:45 PM Plotted By: Daniel Johnson
Date Created: 2/20/2020 \\KAYSPUBLIC\PROJECTS\JUB\PLAIN CITY\STANDARDS\2019\CITY STANDARDS_M101X.DWG

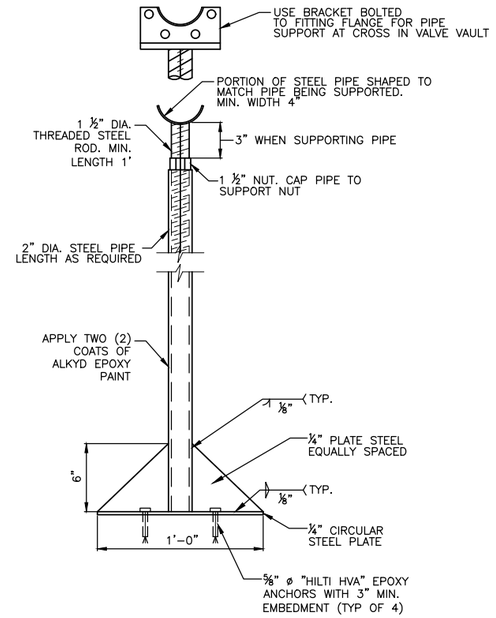


PLAN VIEW

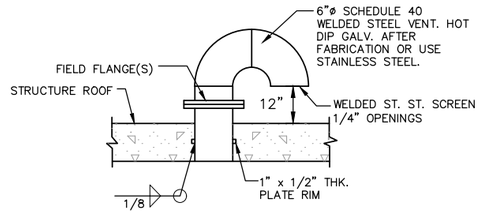
NOTES:

1. MATERIALS TO BE STAINLESS STEEL
2. USE WHERE REQUIRED THRUST RESTRAINT IS MINIMAL.

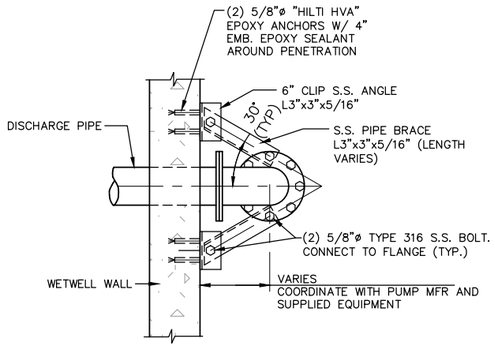
1 PIPE BRACE DETAIL
SCALE:N.T.S.



2 TYP. STEEL PIPE SUPPORT DETAIL
SCALE:N.T.S.



3 SCREENED VENT DETAIL
SCALE:N.T.S.

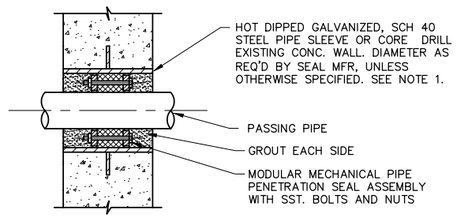


PLAN VIEW

NOTES:

1. MATERIALS TO BE STAINLESS STEEL
2. TOP SUPPORT MUST PROVIDE THRUST RESTRAINT.

4 THRUST RESTRAINT PIPE SUPPORT DETAIL
SCALE:N.T.S.



NOTES:

1. PVC SLEEVE WITHOUT SEEP COLLAR MAY BE ALLOWED IN SPECIFIC INSTANCES WITH ENGINEERS WRITTEN APPROVAL IN NON-WATER CONTAINING STRUCTURES, OR WHERE GROUNDWATER IS NOT OF CONCERN.

5 MECHANICAL SEAL DETAIL
SCALE:N.T.S.

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TYPICAL LIFT STATION DETAILS

LAST UPDATED: 2/21/2020

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Plot Date=4/16/2020 1:45 PM Plotted By: Daniel Johnson
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GENERAL STRUCTURAL NOTES

1. GENERAL

   A. These general structural notes and specifications supplement the project written technical specifications and the project structural drawings.
   B. The contractor is responsible for all construction bracing, temporary shoring, and other site safety controls required during construction in accordance with all applicable local, state and federal regulations, to insure the stability and safety of all construction until it is completed and self–supporting.
   C. The contractor is responsible for all water, both above and below ground, runoff and other environmental controls required during construction to insure the site is maintained in compliance with all applicable local, state and federal regulations.
   D. Details on these plans are intended to depict the general construction details and methods for this structure. connection details and conditions not specifically shown that are similar in nature to those that are specified shall be assumed one and the same. if questions regarding the application of details are encountered, notify the engineer for clarification or instruction.
   E. Prior to implementing any changes to these plans, the engineer shall be notified in writing for their written approval. changes implemented without the engineers written approval shall relieve the engineer of any claim or liability resulting from that portion of the structure changed or affected by the change.

2. CONTRACTOR RESPONSIBILITY FOR COORDINATION

   A. It is the Contractors Prime responsibility to coordinate the work shown on all of the Project Drawings, general, special and technical specifications.
   B. The Contractor is responsible to verify all existing construction material types dimensions, elevations and conditions.
   C. The Contractor shall verify and coordinate the dimensions among all drawings and in the field prior to proceeding with any work or fabrication, any discrepancy shall be immediately reported to the Engineer.
   D. It is the Contractor's responsibility to carefully study and coordinate the construction requirements shown on the Architectural, Civil, Mechanical, Electrical, and the Structural Drawings. When conflicts or discrepancies are found between these plan sets and/or within these drawings, the Contractor shall report them immediately to the project Engineer for direction and/or clarification.
   E. Any construction work done by the Contractor before obtaining such clarification from the Project Engineer shall be at the Contractor's own risk and cost. Furthermore; any work required to correct, replace and/or restore the work as directed by the Engineer shall be at the Contractor's own risk and cost.

3. CODES

   A. International Building Code, IBC 2015 Edition.
   B. Minimum Design Loads for Buildings and Other Structures, ASCE 7; current edition.
   C. American Concrete Institute, ACI 318, Building Code Requirements for Structural Concrete; current edition.
   D. American Concrete Institute, ACI 530, Building Code Requirements and Specifications for Masonry Structures; current edition.
   E. American Concrete Institute, ACI 301, Specifications for Structural Concrete.
   F. National Design Specifications, NDS For Wood Construction; current edition.

4. SPECIAL INSPECTIONS. Special Inspections per IBC Chapter 17 are required for the following items: C indicates Continuous, P indicates Periodic.

		Frequency
A. Soils.	By Geotechnical Engineer.	
A.1.	Site preparation:	P
A.2.	Fill material verification:	C
A.3.	Fill placement and compaction:	C
A.4.	Lift thickness:	C
B. Concrete.		
B.1.	Reinforcement placement:	P
B.2.	Placement of cast–in–place anchors:	P
B.3.	Verification of use of required mix:	P
B.4.	Concrete placement:	C
B.5.	Verification of in–situ concrete prior to removal of forms and shores from elevated slabs:	P
C. Post Installed Concrete Anchors.		
C.1.	Installation:	C
D. Structural Masonry.		
D.1.	Verification of site proportioned mortar & grout:	P
D.2.	Observation of prism preparation:	C
D.3.	Placement of masonry units & mortar joints:	P
D.4.	Verification of size and location of structural elements:	P
D.5.	Anchorage of masonry to structural members and diaphragms including type, size and location of anchors	P
D.6.	Type, grade and size of reinforcing steel:	P
D.7.	Reinforcing steel and connector placement:	P
D.8.	Cold/Hot weather masonry protection:	P
D.9.	Verify use of grout mix design:	P
D.10.	Verify grout space is clean prior to grouting:	C
D.11.	Grout placement:	C
E. Wood.		
E.1.	Fabrication of pre–fabricated structural elements:	P
E.2.	Material verification of structural panels and nails for diaphragms and shear walls with edge nailing:	P
E.3.	Verification of framing size at diaphragm and shear wall panel edges with edge nailing less than or equal to 4":	P

   F. All special inspection shall be performed by ICBO certified inspectors.

5. SUBMITTALS

   A. Submit required copies, four (4) minimum, of product or material design information to the Engineer for review for the following items:
      A.1. Concrete mix designs and admixtures.
      A.2. Non–shrink grout.
      A.3. Expansion bolts.
      A.4. Epoxy Anchors.
      A.5. Structural masonry grout and mortar mix designs.
   B. The following items to be designed by others are considered "Deferred Submittals". Deferred submittals shall be accompanied by design drawings, shop drawings and structural calculations, stamped and signed by a Professional Structural Engineer currently registered in the State of Utah.
      B.1. Pre–engineered and shop fabricated wood joists and trusses.
   C. Submit required copies of shop drawings, four (4) minimum, to the Engineer for review prior to fabrication of the following items:
      C.1. Reinforcing steel for all concrete.
      C.2. Reinforcing steel for masonry walls.

6. DESIGN CRITERIA

A. Floor Load		
A.1.	Floor Live Load	150 psf
B. Roof Snow Load		
B.1.	Ground Snow Load	Pg = 43 psf
B.2.	Flat Roof Snow Load	Pf = 33 psf
B.3.	Importance Factor	Is = 1.10
B.4.	Snow Exposure Factor	Ce = 0.9
B.5.	Thermal Factor	Ct = 1.1
C. Wind Load		
C.1.	Basic Wind Speed	V = 120 mph
C.2.	Wind Importance Factor	Iw = 1.0
C.3.	Wind Exposure	C
D. Seismic Load		
D.1.	Occupancy Category	III
D.2.	Seismic Importance Factor	Ieq = 1.25
D.3.	Mapped Spectral Response Acceleration	
D.3.1.	Short Period Acceleration	Ss = 1.45
D.3.2.	1–Second Acceleration	S1 = 0.48
D.4.	Site Class (Soil Profile)	D
D.5.	Spectral Response Coefficients	
D.5.1.	Short Period Acceleration	Sds = 0.97
D.5.2.	1–Second Acceleration	Sd1 = 0.49
D.6.	Seismic Design Category	D
D.7.	Basic Seismic Force Resisting System	Special Reinforced Masonry Shear Walls
D.7.1.	Response Modification Coef.	R = 5.0
D.7.2.	System Overstrength Factor	Ωo = 2.5
D.7.3.	Deflection Amplification Factor	Cd = 3.5
D.8.	Analysis Procedure	Equivalent Lateral Force

7. FOUNDATIONS

   A. All footings to be placed entirely on 24 inches of compacted structural fill. Proof roll sub–grade prior to placing structural fill where the material has been disturbed by the excavating equipment.
   B. All piers and footings outside or at the perimeter of the structure, or in other unheated areas shall be set to a depth of at least 30" below finish grade, unless other wise noted on the plans.
   C. Net allowable bearing pressure Qa = 1,500 psf.
   D. Local areas of soft and/or unacceptable material encountered at bottom of footing elevations indicated on the plans must be over–excavated and brought up to design grade with compacted "structural fill" or "lean concrete fill".
   E. See specifications for structural fill requirements.
   F. Design for the mitigation of subsurface water shall be the responsibility of the Contractor.
   G. The Engineer shall be notified in writing if any clay type soils, debris or unconsolidated materials are encountered during excavations for foundations.

8. CONCRETE

   A. GENERAL. Concrete shall be proportioned to provide an average compressive strength, fc, as prescribed in ACI 318 Section 26.4.3 and shall satisfy the durability criteria of ACI 318 Chapter 19.
   B. PROJECT CONCRETE MIX TYPES: Concrete shall be proportioned and furnished for the various project uses as indicated on the plans and as follows:
      B.1. M1: Footings: fc = 3,000 psi, Absolute water–cement ratio by weight = 0.45, Air Content = 4–6%.
      B.2. M2: Foundation walls, slab on grade, and all other miscellaneous concrete: fc = 4,000 psi, Absolute water–cement ratio by weight = 0.45, Air Content = 4–6%.
   C. CONCRETE MIX COMPONENTS.
      C.1. A water–reducing admixture conforming to ASTM C494, used in strict conformance with the manufacturer's instructions, shall be incorporated in all concrete mix designs. At Contractor's option, a high–range water–reducing (HRWR) admixture conforming to ASTM C494, Type F or G, may be used provided the total slump is less than 10".
      C.2. Fly–ash conforming to ASTM C618 Type F or C, may replace up to 20% of the cement content, provided that the mix strength is substantiated by test data.
      C.3. Cement: ASTM C150 Type II.
      C.4. Water: Clean & Potable.
      C.5. Air entraining agent: ASTM C260. Except where noted non–air entrained.
      C.6. Aggregate: 0.75–inch Maximum aggregate per ASTM C33. Unless noted otherwise.
      C.7. Mix Proportioning: ACI 211.1.
   D. CONCRETE ACCESSORIES:
      D.1. REINFORCING STEEL: Reinforcing steel shall conform to ASTM A615 Grade 60; #3 bars may be Grade 40.
      D.2. EXPANSION BOLTS: Bolts noted on the plans as Expansion Bolts shall be HILTI Kwik Bolt–II, stud anchors; size and embedment as noted on the drawings, installed per the manufacturers recommendations; or an approved equal.
      D.3. EPOXY SET BOLTS & REBAR: Bolts and reinforcing steel bars noted on the plans as Epoxy or Construction Adhesive Set Bolts or Rebar shall be set in place utilizing the SIMPSON SET High Strength Epoxy system; size and embedment as noted on the drawings, installed per the manufacturers recommendations; or an approved equal.
   E. CONCRETE PROPORTIONS. Concrete mix proportioning shall be in accordance with ACI 211.1; Standard Practice for Selecting Proportions for Normal, Heavyweight, and Mass Concrete.
   F. CONCRETE MIX VERIFICATION: Concrete mix designs shall be verified by standard 28–day cylinder tests per ASTM C39.
   G. EVALUATION AND ACCEPTANCE OF CONCRETE. Concrete shall be tested in accordance with the requirements of ACI 318 Section 26.12.
   H. MIXING & PLACING CONCRETE. Concrete shall be prepared, mixed, placed and consolidated in accordance with ACI 318 Section 26.5 and as follows:
      H.1. ACI 304; Guide for Measuring, Mixing, Transporting, and Placing Concrete.
      H.2. ACI 309; Guide for Consolidation of Concrete.
   I. CONCRETE CURING. Concrete shall be maintained above 50–degrees F and in a moist condition for at least 7 days after placement, except when cured in accordance with ACI 318 Section 26.5.3.
      I.1. Curing of concrete shall be per the recommendations given in ACI 308; Guide to Curing Concrete.
   J. COLD WEATHER REQUIREMENTS. Adequate equipment shall be provided for heating concrete materials and protecting concrete during freezing or near–freezing weather. The recommended procedures listed in ACI 306; Cold Weather Concreting shall be followed.
      J.1. Cold weather is defined as a period when, for more than 3 consecutive days, the following conditions exist:
         J.1.1. The average daily air temperature is less than 40–degrees F and
         J.1.2. The air temperature is not greater than 50–degrees F for more than one–half of any 24–hour period.
   K. HOT WEATHER REQUIREMENTS. During hot weather, proper attention shall be given to ingredients, production methods, handling, placing, protection, and curing to prevent excessive concrete temperatures or water evaporation that could impair required strength or serviceability of the member or structure. The recommended procedures listed in ACI 305; Hot Weather Concreting shall be followed.
      K.1. Hot weather is any combination of the following conditions that tends to impair the quality of freshly mixed or hardened concrete by accelerating the rate of moisture loss and rate of cement hydration, or otherwise causing detrimental results:
         K.1.1. High ambient temperature.
         K.1.2. High concrete temperature.
         K.1.3. Low relative humidity.
         K.1.4. Wind speed.
         K.1.5. Solar radiation.

9. FORMWORK AND FINISHING

   A. Forms shall result in a final structure that conforms to shapes, lines, and dimensions of the members as required by the design drawings and specifications.
      A.1. Design of formwork shall be in accordance with ACI 318 Section 26.11.1.
      A.2. Formwork shall be in accordance with ACI 347; Guide to Formwork for Concrete.
   B. Tolerances for finished concrete surfaces shall meet the following requirements from ACI 347, class of surface is per Table 3.1:
      B.1. Footings: Class C
      B.2. Foundation walls: Class B
      B.3. Above grade concrete not visible to sight: Class B
      B.4. Above–grade concrete visible to sight: Class A
   C. REMOVAL OF FORMS.
      C.1. Concrete forms shall not be removed until the retained concrete has reached the following minimum percentage of the required 28 day compressive strength:
         C.1.1. Footings and base slabs on grade: 50% of f'c.
         C.1.2. Foundation walls and columns: 67% of f'c.
      C.2. Where concrete cylinder tests are not available for strength verification the following guide may be used when permitted by the Project Engineer:
         C.2.1. Footings and base slabs on grade: 12 hours.
         C.2.2. Foundation walls and columns: 24 hours.
   D. EMBEDMENTS IN CONCRETE.
      D.1. Conduits, pipes, and sleeves of any material not harmful to concrete and within limitations of ACI 318 Sections 20.7 and 26.8 shall be permitted to be embedded in concrete with approval of the Project Engineer, provided they are not considered to replace structurally the displaced concrete.
      D.2. Conduits and pipes of aluminum shall not be embedded in structural concrete unless effectively coated or covered to prevent aluminum–concrete reaction or electrolytic action between aluminum and steel.
   E. CONSTRUCTION JOINTS.
      E.1. Construction joints shall only be placed where indicated on the project drawings or as approved by the Project Engineer.
      E.2. Construction joints shall be constructed in accordance with ACI 318 Section 26.5.6.
      E.3. Sawed contraction joints. Conform to ACI 301 Section 5.3.5.
   F. CONCRETE FINISHING. All concrete surfaces shall be finished in accordance with ACI 301.
   G. Formed Concrete Surfaces. After removal of forms, give each formed surface one or more of the following finishes:
      G.1. Non–liquid Retaining Concrete Structures:
         G.1.1. Concrete footings and foundations not exposed to view. Provide a surface finish SF–1.0 per Section 5.3.3.3a.
         G.1.2. Foundation wall and other surfaces below grade and not exposed to view. Provide a surface finish SF–2.0 per Section 5.3.3.3.b.
         G.1.3. Interior, exterior and top surfaces exposed to view to 6–inches below grade. Provide a surface finish per Section 5.3.3.3.c.
      G.2. Unformed Concrete Surfaces. Unformed concrete surfaces including the top surface of all concrete floor slabs shall be finished in accordance with ACI 301 Section 5.3.4 and ACI 302 Chapter 8.
         G.2.1. For the top surfaces of walls, provide a "Scratched finish" per Section 5.3.4.2.a.
         G.2.2. Interior floor surfaces shall receive a Troweled finish per Section 5.3.4.2c.
      G.3. Provide a Nonslip finish for exterior surfaces and where indicated on the plans.

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AGENCY REVIEW

FILE: CITY STANDARDS_S-001X
JUB PROJ. # : ----
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DESIGN BY: PJT
CHECKED BY: PJT

ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY

PUBLIC WORKS STANDARDS
PLAIN CITY CORPORATION

TYPICAL LIFT STATION
GENERAL STRUCTURAL NOTES

LAST UPDATED: 2/21/2020
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GENERAL STRUCTURAL NOTES CONTINUED

10. DETAILS OF REINFORCEMENT

A. Placement of all reinforcing steel within concrete structures shall be in conformance with ACI 318 Chapter 25.
B. Reinforcing steel hooks, bends, ties, splices and other reinforcement details shall be in accordance with ACI 315; Details and Detailing of Concrete Reinforcement.
C. Spacing limits for reinforcement shall be in conformance with ACI 318 Section 25.2.
D. Concrete protection for reinforcement. Unless noted elsewhere on the drawings, all reinforcing steel shall have the following concrete cover:
  D.1. For non-liquid containing concrete structures; per ACI 318 Section 20.6.1.3:
    D.1.1. Concrete cast against earth: 3.00-inch
    D.1.2. Concrete exposed to earth, or weather:
      D.1.2.1. No. 5 or smaller bars: 1.50-inch
      D.1.2.2. No. 6 or larger bars: 2.00-inch
    D.1.3. Concrete not exposed to earth or weather;
      D.1.3.1. No. 11 or smaller bars: 0.75-inch
      D.1.3.2. No. 14 or larger bars: 1.50-inch
E. Concrete blocks or plastic-coated bar chairs shall be provided for support of all slab reinforcing steel, sufficient in number to prevent settlement or sagging, but in no case shall such support be continuous. Metal clips or supports shall not be placed in contact with the forms or the sub-grade.
F. Dowels and anchor bolts shall be wired or otherwise held in correct position prior to placing concrete. Care shall be taken to insure that dowels and anchor bolts remain plum after concrete is poured and vibrated. In no case shall dowels or anchor bolts be stabbed into freshly poured concrete!
G. Provide dowels in footings and at construction joints to match vertical reinforcing bar size and spacing, unless otherwise noted on the drawings.
H. Coordinate placement of dowels into masonry or brick walls with the masonry shop drawings.
I. Where drilled in anchors are to be post-installed into concrete surfaces take care to locate reinforcing steel so that it will not interfere with the drilling operations. Move bars plus or minus 1 to 2 inches in order to avoid drilling conflicts.
J. All bar bends, hooks, splices and other reinforcing steel details shall conform to the requirements of ACI 315.
K. Unless otherwise noted on the plans all bars shall be spliced with a minimum Class A lap splice; lap splices of deformed bars and deformed wire in tension zones shall be Class B splices.
L. At all corners and wall intersections provide bent bars to match the horizontal reinforcing steel and in accordance with the typical corner reinforcing details.
M. Chamfer all exposed corners and fillet entrant angles 3/4" unless otherwise noted on the drawings.

11. STRUCTURAL MASONRY REQUIREMENTS

A. GENERAL. All structural masonry construction shall be in accordance with ACI 530.1, Specifications for Masonry Structures; current edition.
B. MASONRY: The masonry assemblage shall have a minimum 28 day compressive strength of 1,500 psi. Assembly shall be verified per IBC standards.
C. STRUCTURAL MASONRY UNITS:
  C.1. CONCRETE MASONRY UNITS: All concrete masonry units (CMU) shall conform to ASTM C-90, Grade N, with a minimum net area compressive strength of 1,900 psi.
  C.2. All block shall be laid up with a standard running bond unless specifically noted otherwise on the drawings.
  C.3. Place masonry units in accordance with ACI 530.1 Section 3.3, Masonry Erection.
D. MORTAR:
  D.1. All mortar for use with structural masonry units shall conform to ASTM C270, Class S and have a minimum 28 day compressive strength of 1,800 psi.
  D.2. Mortar shall be in accordance with ACI 530.1, Section 2.1 - Mortar materials.
E. GROUT:
  E.1. All grout for use with structural masonry units shall conform to ASTM C476 and have a minimum 28 day compressive strength of 2,500 psi.
  E.2. Grout shall be in accordance with ACI 530.1, Section 2.2 - Grout materials.
  E.3. Place grout in accordance with ACI 530.1, Section 3.5 - Grout placement.
  E.4. Grout Pour Height. Do not exceed the maximum grout pour height listed in ACI 530.1, Table 7.
  E.5. Grout Lift Height. Do not exceed the maximum grout lift heights as defined by ACI 530.1, Section 3.5 D.
F. CELLS: Fill all cells containing reinforcing steel and as directed on the drawings solid full height with grout.
G. BOND BEAMS: All bond beams shall be grouted solid to a minimum height of 8-inches.
H. LINTELS: All masonry lintels (units over wall openings greater than 8-inches in length) shall be grouted solid from the bottom of the lintel to a total structural depth as indicated on the plans, or 16" minimum. Extend the length of solid grouting past the edge of each opening as indicated on the plans or 8" minimum.
I. REINFORCING:
  I.1. REINFORCING STEEL: Reinforcing steel shall conform to ASTM A615 Grade 60; #3 bars may be Grade 40.
  I.2. Fabricate bars used in masonry reinforcement in accordance with the fabricating tolerances of ACI 315, and in accordance with ACI 530.1, Section 2.7.
  I.3. Place reinforcement in accordance with ACI 530.1, Section 3.4 B.
  I.4. All reinforcing steel shall be in place and secured against displacement prior to grouting with wire ties, spacers or other suitable devices at tops and bottoms and intervals not exceeding 192 bar diameters nor 10-feet.
  I.5. BAR PLACEMENT: Where one vertical bar is called for in each vertical core the bar is to be placed in the center of the masonry core. Where two vertical bars are called for they shall be placed near each wall face with 1/5-inch of clearance for fine grout and 1/2" of clearance for course grout.
  I.6. LAPS: Lab all masonry reinforcing per bar size as follows:
    I.6.1. Required lap lengths for single bars centered in each cell:

#3 = 16"	#6 = 43"	#9 = 82"
#4 = 22"	#7 = 60"	
#5 = 26"	#8 = 72"	

    I.6.2. Required lap lengths for flush wall pilaster/column, 2 bars per cell with 2.5" cover:

#3 = 16"	#6 = 54"	#9 = 82"
#4 = 22"	#7 = 63"	
#5 = 32"	#8 = 72"	

J. ANCHOR BOLTS: Anchor bolts shall be accurately set with templates or by approved equivalent means and held in place to prevent movement. Conform to ACI 530.1, Section 3.4 D.
K. WALL TIES: Install wall ties in accordance with ACI 530.1, Section 3.4 C.
L. FOUNDATION DOWELS: It is the Contractor's responsibility to coordinate placement of dowels projecting from concrete foundations into reinforced masonry or brick walls.
M. Bond beams with one (1) #5 bars horizontally shall be provided at all floor and roof lines and at the top of walls. Provide a bond beam with one (1) #5 bars horizontally above and below all openings, and extend these bars 2'-0" past the opening edge. Provide full height vertical reinforcement, matching typical vertical reinforcing, each side of openings, at wall ends and intersections.
N. COLD-WEATHER CONSTRUCTION. When ambient air temperature is below 40-degrees F, implement Cold Weather procedures in accordance with ACI 530.1, Section 1.8 C.
O. FIELD QUALITY CONTROL: Provide special inspection and verification in accordance with ACI 530.1, Section 3.7.
P. CLEANING: Clean all exposed masonry surfaces in accordance with ACI 530.1, Section 3.8.

10. WOOD

A. LUMBER: Grading shall be to the Standard Grading Rules of the WWPA. Typical structural lumber shall be Number 2 Douglas-Fir/Larch or better. Members noted as wood beams, posts or columns shall be Number 1 Douglas-Fir/Larch or better. Studs for interior non-bearing walls may be stud grade lumber. Lumber to be left exposed, without other finish and lumber in contact with concrete shall be pressure treated.
B. TREATED LUMBER: Lumber, including wood sheathing, to be left exposed without other finish, located within 8" of finish grade, or in contact with concrete shall be pressure treated material. Contractor shall coordinate and verify that all steel items in contact with the treated material, including steel hangars, connectors and fasteners have a galvanized finish of sufficient thickness, or other type of protection, that is compatible with the specific treatment type selected.
C. BOLTS & LAG SCREWS FOR WOOD CONSTRUCTION: Conform to ANSI/ASME Standards B18.2.1-1981 and the National Design Specification for Wood Construction (NDS) 1991 Edition Part VIII for Bolts and Part IX for Screws.
D. WOOD SCREWS: Conform to ANSI/ASME Standards B18.6.1-1981 and the National Design Specification for Wood Construction (NDS) 1991 Edition Part XI.
E. NAILS & SPIKES: Conform to Federal Specification FF-N-105B and the National Design Specification (NDS) 1991 Edition Part XII.
F. NAILING: Where not otherwise specified on the plans, nailing shall conform to IBC Table 2304.10.1, Fastening Schedule. All nails shall be common wire nails or pneumatically driven nails with an equivalent cross-section and penetration, unless noted otherwise.
G. LUMBER HARDWARE: Wood construction connectors shall be as manufactured by Simpson Strong-Tie Company; current catalog, or an approved equal. Hardware exposed to weather or view, in unheated portions of the structure, or as indicated on the drawings or in the specifications shall be hot-dipped galvanized with galvanized fasteners.
H. ROOF SHEATHING: All roof sheathing shall be 7/16" nominal, Exterior APA rated Sheathing {24/16} installed with ply-clips.
I. EXTERIOR WALL SHEATHING: All exterior wall sheathing shall be 1/2" nominal APA rated Exterior sheathing.
J. All wood framing, blocking and nailing shall conform to the current local building code.
K. All rafters, trusses and joists shall have full depth blocking, unless noted otherwise on the plans and details, at bearing supports, shear transfer supports, intermediate and cantilever supports and at mid-span, and as required by the building code or product supplier.
L. All framing hardware including column caps and bases, joist hangers, truss anchors, straps, etc. shall be approved (i.e. Simpson Co. or equivalent) or custom fabricated specifically as detailed on the plans. They shall be installed with nails, screws or bolts exactly as called for by the manufacturer or as noted on the plans.
M. WOOD SHEATHED ROOF DIAPHRAGMS:
  M.1. Unless otherwise noted on the drawings, orient roof sheathing with face-grain perpendicular to supporting members, with joints in adjacent rows staggered 1/2 panel length.
  M.2. Provide 2x4 flat blocking at unsupported panel edges in areas noted as "Blocked Roof Diaphragm".
  M.3. Nail sheathing per roof sheathing schedule shown on drawings.
N. WOOD SHEATHED SHEAR WALLS:
  N.1. Shear wall sheathing to be oriented vertically.
  N.2. All unsupported edges to be backed with 2x solid blocking.
  N.3. Nail sheathing as shown on drawings.
  N.4. Minimum nailing where not noted otherwise shall be 10d nails @ 6" o.c. to all panel edges and 12" o.c. at intermediate supporting members.

13. PRE-ENGINEERED/FABRICATED WOOD TRUSSES

A. All pre-engineered/fabricated wood (PFT) trusses indicated on the drawings shall be metal press-plate connected wood trusses designed by a Professional Engineer registered in the State of Utah per these notes and the specifications.
B. Design PFT trusses to the following deflection limits:
  B.1. Roof Dead + Live Load: Span/240 or 1 in maximum
  B.2. Roof Live Load only: Span/360 or 1/2-in maximum
C. Design PFT trusses to support the concentrated and other distributed loads as shown on the plans in addition to the following loads:
  C.1. Dead Load (Top Chord) = 10 psf
  C.2. Dead Load (Bottom Chord) = 10 psf
  C.3. Snow Laod* (Top Chord) = 33 psf
  C.4. Live Load** (Bottom Chord) = 10 psf
  53 psf Max Total Load
  * Does not include loads caused by drifting, unblanced or sliding snow
  ** Does not occur concurrently with top chord live load
D. Design all PFT trusses and bearing attachments for wind uplift, assuming a dead load of 8 psf to resist uplift.
E. Shop drawings and design calculations signed and stamped by the Design Engineer shall be submitted to the Engineer for review prior to fabrication.
F. All necessary bridging, blocking, pre-notched or beveled plates, hangers, etc. shall be detailed or specified on the shop drawings and furnished by the truss manufacturer.
G. Truss manufacturer shall verify all setbacks, dimensions, overhangs, vertical controls and dimensions prior to fabrication.
H. Alteration of the truss layout shown on the plans may require supporting structural and foundation changes, therefore, prior approval by the Engineer is required for any proposed layout change.
I. Trusses shall not be field modified without written authorization from the truss manufacturer's Engineer of Record.
J. Trusses shall be handled, erected and braced as directed by the truss manufacturer and per the requirements of the Truss Plate Institute Manual HIB-91 or current edition.

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AGENCY REVIEW

FILE: CITY STANDARDS_S-001X
JUB PROJ. # : ----
DRAWN BY: DTJ
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CHECKED BY: PJT

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PUBLIC WORKS STANDARDS
PLAIN CITY CORPORATION

TYPICAL LIFT STATION
GENERAL STRUCTURAL NOTES

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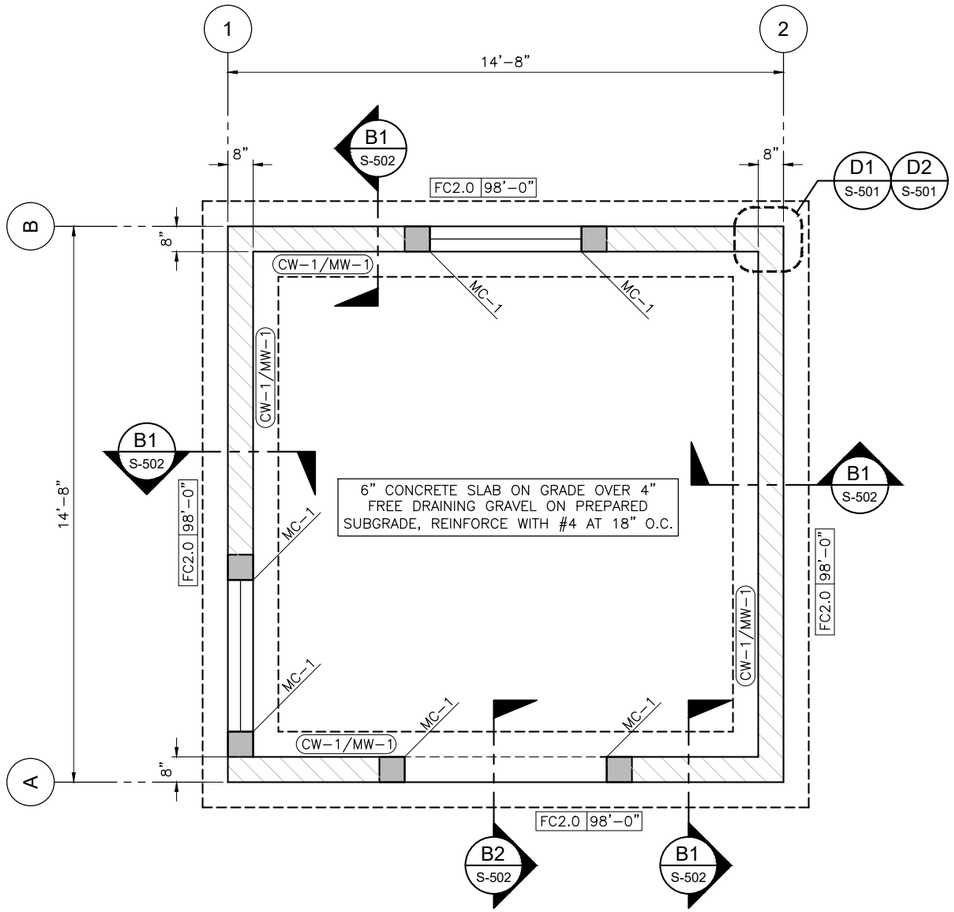
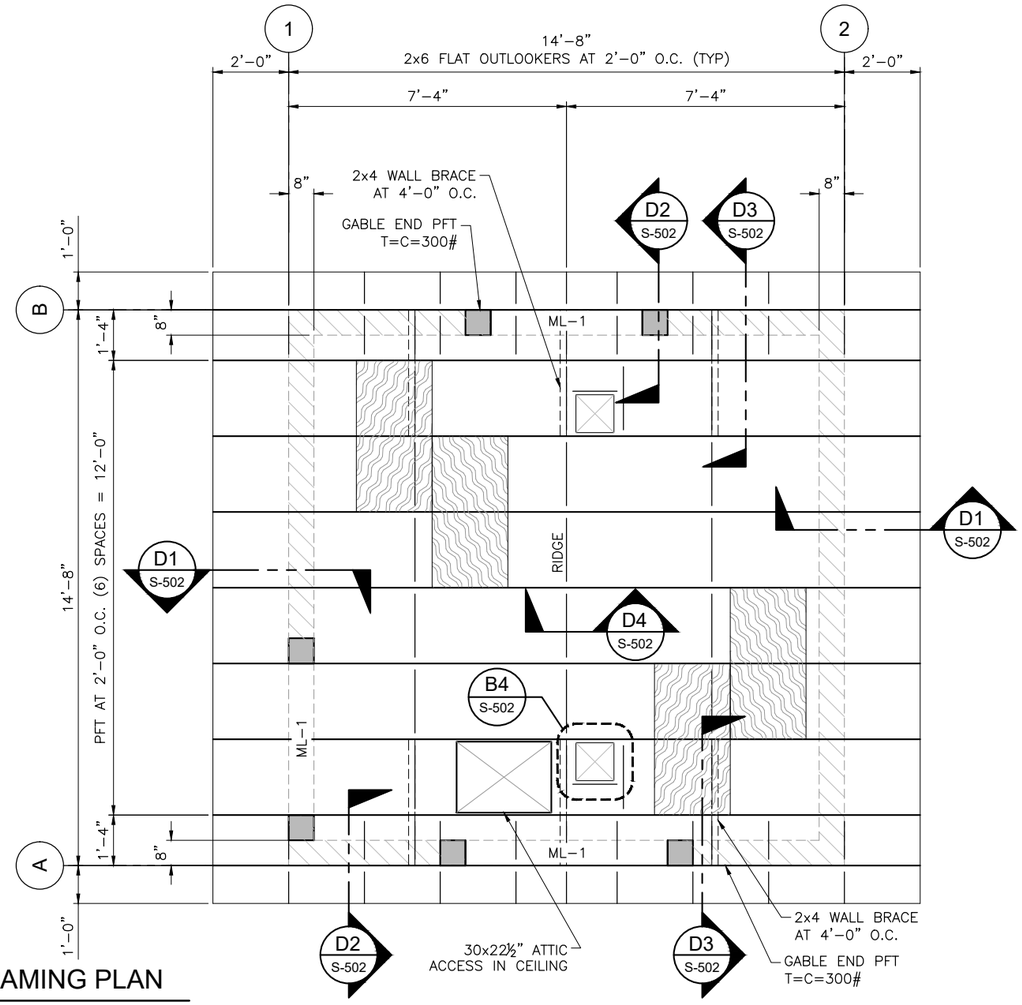


C1 FOOTING AND FOUNDATION PLAN

SCALE: 1/2" = 1'-0"



C3 ROOF FRAMING PLAN

SCALE: 1/2" = 1'-0"

FOUNDATION AND ROOF FRAMING PLAN NOTES

1. SEE ARCHITECTURAL DRAWINGS FOR ALL BUILDING DIMENSIONS. VERIFY FLOOR, CEILING AND SOFFIT ELEVATIONS WITH ARCHITECTURAL ELEVATIONS.
2. COORDINATE LOCATION OF ALL PIPE PENETRATIONS AND DUCT PENETRATIONS WITH MECHANICAL AND ELECTRICAL DRAWINGS.
3. SEE ELECTRICAL DRAWINGS FOR ALL LIGHTING, ELECTRICAL APPARATUS, AND CONDUIT SIZE AND LOCATION.
4. SEE CIVIL DRAWINGS FOR BUILDING LAYOUT AND EXTERIOR CONCRETE WORK AT DOORS, SIDEWALKS, ETC.
5. SEE (B2/S–501) FOR COMPACTED STRUCTURAL FILL BENEATH FOOTINGS IF REQUIRED BY SITE SOIL CONDITIONS, SEE GENERAL STRUCTURAL NOTES.
6. SEE (B1/S–501) FOR TYPICAL CONCRETE REINFORCING LAP SPLICE SCHEDULE.
7. SEE FOOTING AND FOUNDATION DETAILS ON (S–501) FOR BURIED PIPES RUNNING PARALLEL AND PERPENDICULAR TO FOOTINGS.
8. SEE (D4/S–501) FOR REINFORCING AROUND MISCELLANEOUS OPENINGS IN MASONRY WALLS.
9. SEE (D3/S–501) FOR TERMINATION OF HORIZONTAL WALL REINFORCING AT ENDS OF WALLS AND OPENINGS.
10. VERIFY ROOF SLOPES, DRAINS, AND DECK BEARING ELEVATIONS WITH ARCHITECTURAL ELEVATIONS.
11. ALL ROOF SHEATHING SHALL HAVE FACE GRAIN PERPENDICULAR TO FRAMING MEMBERS, UNLESS NOTED OTHERWISE. SEE SCHEDULE ON SHEET (S–301) FOR SHEATHING TYPE AND NAILING REQUIREMENTS.
12. WEIGHTS AND LOCATIONS OF MECHANICAL EQUIPMENT SHALL BE SUBMITTED TO ENGINEER IN WRITING FOR REVIEW PRIOR TO PLACEMENT OF ROOF FRAMING.
13. TRUSS MANUFACTURER TO SUBMIT SHOP DRAWINGS FOR REVIEW OF ALL FRAMING WORK.
14. SEE GENERAL STRUCTURAL NOTES ON SHEET (S00–2) FOR DESIGN LOADS OF PREFABRICATED WOOD TRUSSES.
15. ALL TRUSS DETAILS, AND TRUSS TO GIRDER TRUSS DETAILS SHALL BE PROVIDED BY THE TRUSS MANUFACTURER.
16. TRUSS MANUFACTURER SHALL VERIFY ALL CEILING ELEVATIONS AND SPECIAL CONDITIONS PRIOR TO FABRICATION.
17. CONTRACTOR SHALL BE RESPONSIBLE TO PROPERLY BRACE BEAMS, TRUSSES, ETC. AS REQUIRED DURING CONSTRUCTION.
18. SEE (B4/S–502) FOR TYPICAL ROOF OPENINGS LESS THAN 24" SQUARE.

MARKS & SYMBOLS LEGEND

MARK	DESCRIPTION
FTG | ELEV	FOOTING MARK TOP OF FOOTING ELEVATION
FC–X	CONTINUOUS FOOTING SEE SCHEDULE ON (S–301)
	DEPRESSED FOUNDATION WALL, POUR SLAB OVER, SEE (B2/S–502)
	CONCRETE WALL, SEE SCHEDULE ON (S–301)
	MASONRY WALL, SEE SCHEDULE ON (S–301)
CW–x/MW–x	CONCRETE WALL BELOW AND MASONRY WALL ABOVE, SEE SCHEDULES ON (S–301)

MARK	DESCRIPTION
	MASONRY COLUMN, SEE SCHEDULE ON (S–301)
MC–x	MASONRY COLUMN, SEE SCHEDULE ON (S–301)
ML–x	MASONRY LINTEL, SEE SCHEDULE ON (S–301)
T=C=x#	PFT TOP CHORD SHALL BE DESIGNED FOR AN ADDITIONAL LOAD OF "x"# IN TENSION AND COMPRESSION. LOADS PROVIDED ARE AT SERVICE LEVEL.
	ROOF SHEATHING ORIENTATION, SEE SCHEDULE ON (S–301)

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AGENCY

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PLAIN CITY CORPORATION

TYPICAL LIFT STATION
FOOTING AND FOUNDATION PLAN AND ROOF FRAMING PLAN

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CONC REINFORCING LAP SCHEDULE

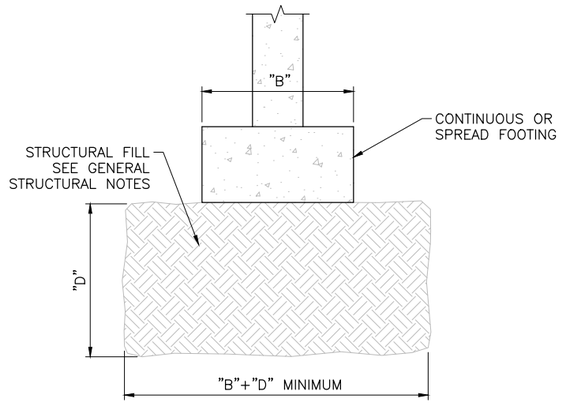
BAR SIZE	LAP CLASS	f'_c = 3,000 psi		f'_c = 4,000 psi		f'_c = 4,500 psi		f'_c = 5,000 psi	
		CAT. 1	CAT. 2	CAT. 1	CAT. 2	CAT. 1	CAT. 2	CAT. 1	CAT. 2
#4	A	22"	33"	19"	28"	18"	27"	17"	25"
	B	28"	43"	25"	37"	24"	35"	22"	33"
#5	A	27"	41"	24"	36"	23"	34"	21"	32"
	B	36"	53"	31"	46"	30"	44"	28"	41"
#6	A	33"	49"	28"	43"	27"	41"	25"	38"
	B	43"	64"	37"	55"	36"	53"	33"	50"
#7	A	48"	72"	42"	62"	40"	59"	37"	56"
	B	62"	93"	54"	81"	51"	77"	48"	72"
#8	A	55"	82"	47"	71"	45"	68"	42"	64"
	B	71"	106"	61"	92"	58"	88"	55"	83"
#9	A	62"	92"	53"	80"	51"	76"	48"	72"
	B	80"	120"	69"	104"	66"	99"	62"	93"
#10	A	80"	120"	61"	92"	57"	86"	54"	81"
	B	90"	135"	79"	119"	74"	111"	70"	105"

CONCRETE REINFORCING LAP NOTES:

1. FOR GRADE 60 REINFORCING BARS.
2. ALL LAP SPLICES SHALL BE CLASS B, UNLESS NOTED OTHERWISE.
3. CATEGORY 1: CLEAR COVER >= db & CLR. SPACING >= db, AND STIRRUPS OR TIES THROUGHOUT Ld ARE PROVIDED.
   CATEGORY 1: CLEAR COVER >= db & CLR. SPACING >= 2db.
   CATEGORY 2: CLEAR COVER < db OR CLR. SPACING < 2db.
4. FOR TOP BARS MULTIPLY LAP LENGTH LISTED BY 1.30. TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12" OF CONCRETE CAST BELOW THE BARS.

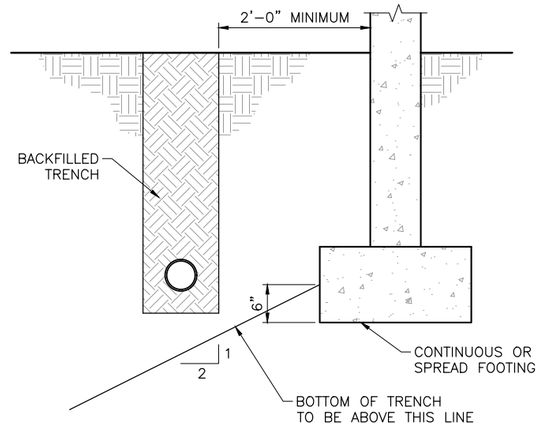
B1 CONCRETE REINFORCING LAP SCHEDULE

SCALE:NOT TO SCALE



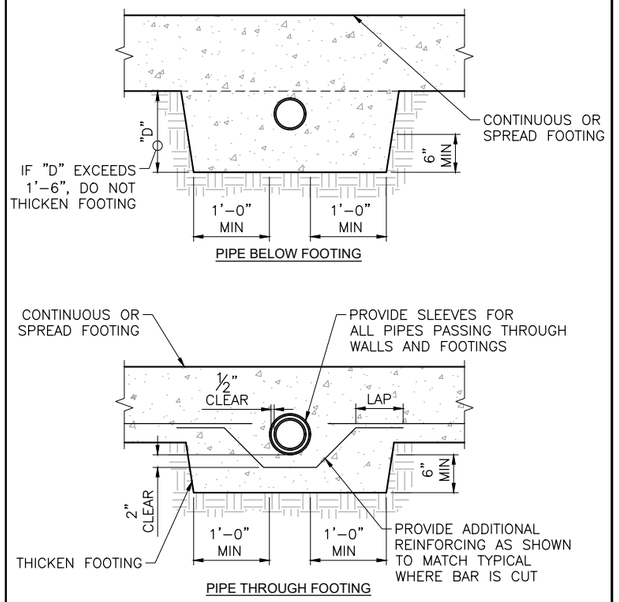
B2 TYPICAL COMPACTED STRUCTURAL FILL

SCALE:NOT TO SCALE



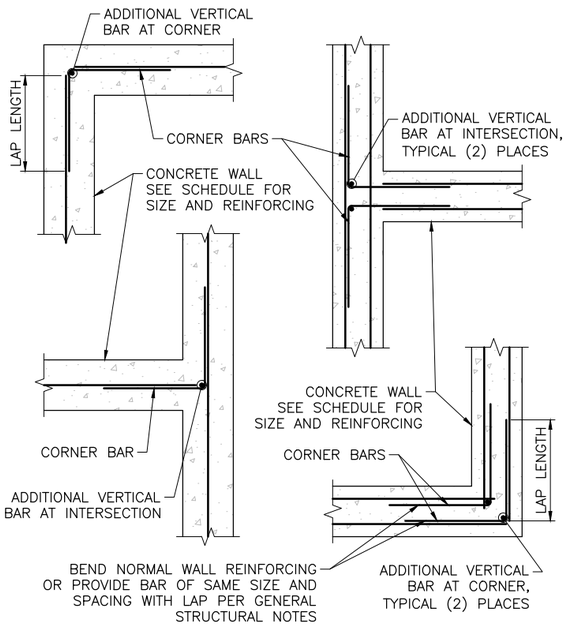
B3 PIPE PARALLEL TO FOOTING DETAIL

SCALE:NOT TO SCALE



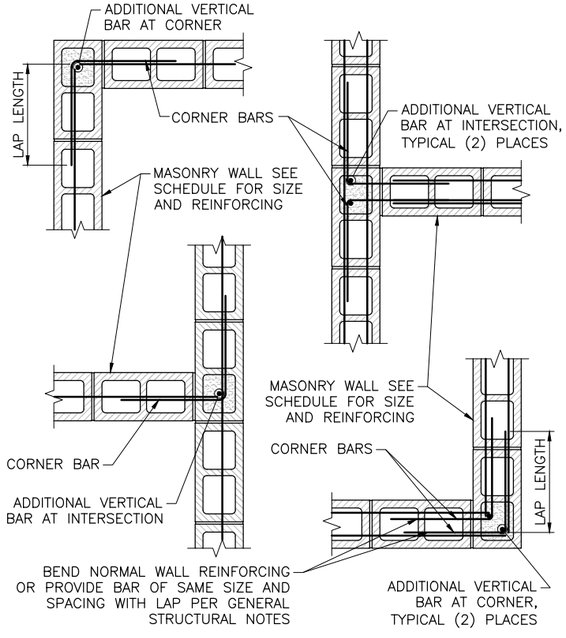
B4 PIPE PERPENDICULAR TO FOOTING DETAIL

SCALE:NOT TO SCALE



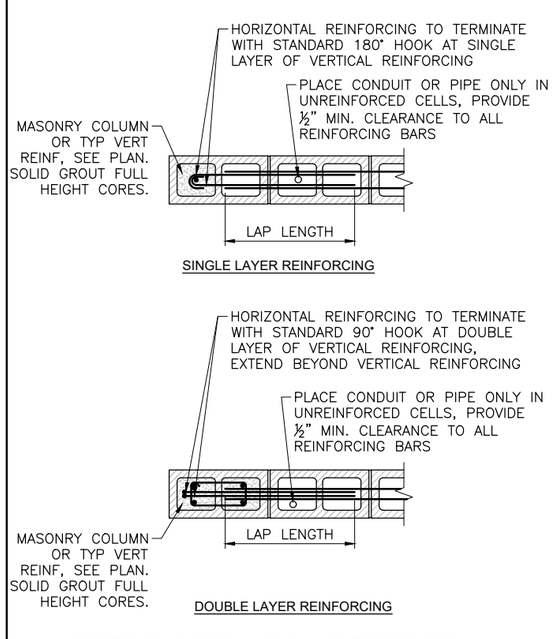
D1 CORNER REINFORCEMENT DETAIL FOR CONCRETE WALLS

SCALE:NOT TO SCALE



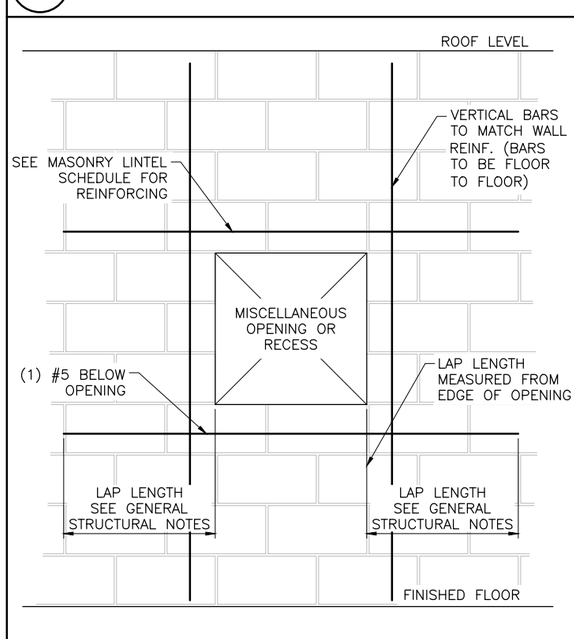
D2 CORNER REINFORCEMENT DETAIL FOR MASONRY WALLS

SCALE:NOT TO SCALE



D3 TERMINATION OF HORIZONTAL REINFORCING IN MASONRY WALLS

SCALE:NOT TO SCALE



D4 REINFORCING FOR MISCELLANEOUS OPENINGS IN MASONRY WALLS

SCALE:NOT TO SCALE

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AGENCY REVIEW

FILE: CITY STANDARDS_S-101X
JUB PROJ. #: ----
DRAWN BY: DTJ
DESIGN BY: PJT
CHECKED BY: PJT

ONE INCH
AT FULL SIZE. IF NOT ONE INCH, SCALE ACCORDINGLY

PUBLIC WORKS STANDARDS
PLAIN CITY CORPORATION

TYPICAL LIFT STATION
FOOTING AND FOUNDATION DETAILS

LAST UPDATED: 2/21/2020

SHEET NUMBER:

S-501

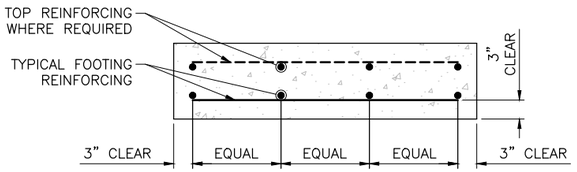
Plot Date:4/16/2020 1:45 PM Plotted By: Daniel Johnson
Date Created:2/20/2020 \\KAYSPUBLIC\PROJECTS\JUB\PLAIN CITY\STANDARDS\2019\CITY STANDARDS_S-101X.DWG

CONCRETE FOOTING SCHEDULE

FOOTING MARK	WIDTH	LENGTH	DEPTH	REINFORCING CROSSWISE				REINFORCING LENGTHWISE				REMARKS
				NO.	SIZE	LENGTH	SPACING	NO.	SIZE	LENGTH	SPACING	
FC2.0	2'-0"	CONT	12"	–	–	–	–	3	#4	CONT	EQ	

CONCRETE FOOTING NOTES:

1. PLACE ALL FOOTING REINFORCING IN BOTTOM OF FOOTING WITH 3" CLEAR CONCRETE COVER UNLESS OTHERWISE NOTED.
2. TOP REINFORCING, WHERE SPECIFIED, SHALL BE PLACED IN THE TOP OF THE FOOTING WITH 2" MINIMUM CONCRETE COVER.
3. IF FOOTINGS ARE EARTH FORMED, FOOTING WIDTH AND LENGTH SHALL BE 6" WIDER AND LONGER THAN SCHEDULED.
4. NOT ALL FOOTINGS ARE USED, SEE FOUNDATION PLAN FOR FOOTING MARKS.
5. RUN CONTINUOUS BARS IN "FC" FOOTING THROUGH INTERSECTED "FS" FOOTINGS.
6. SEE GENERAL STRUCTURAL NOTES FOR ALL OTHER REQUIREMENTS.
7. CENTER SPOT FOOTINGS AT COLUMN LOCATIONS.



TYPICAL FOOTING SECTION

B1 CONCRETE FOOTING SCHEDULE
SCALE:NOT TO SCALE

CONCRETE WALL SCHEDULE

WALL MARK	THICKNESS	REINFORCING		WALL TYPE	REMARKS
		VERTICAL	HORIZONTAL		
CW-1	8"	(1) #5 AT 16"oc	(1) #4 AT 12"oc	A	

CONCRETE WALL NOTES:

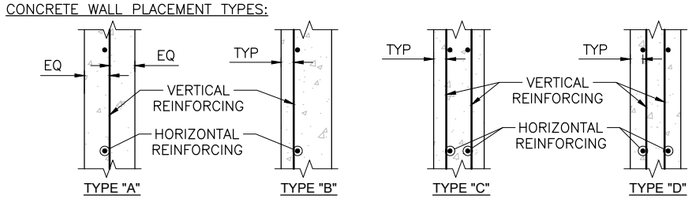
1. SEE GENERAL STRUCTURAL NOTES FOR REQUIREMENTS NOT SHOWN IN SCHEDULE.
2. CONCRETE WALLS NOT DESIGNATED ON THE PLANS SHALL BE REINFORCED AS FOLLOWS:

THICKNESS	VERTICAL REINFORCING	HORIZONTAL REINFORCING
6"	#4 AT 18"oc	#4 AT 16"oc
8"	#4 AT 18"oc	#4 AT 12"oc
10"	#4 AT 16"oc	#5 AT 15"oc
12"	#4 AT 18"oc EACH FACE	#4 AT 16"oc EACH FACE

2.1. PLACE STEEL IN THE CENTER OF THE WALL (EXCEPT TYPE "B" AND RETAINING WALLS). WALLS THICKER THAN 10" SHALL HAVE TWO CURTAINS OF REINFORCEMENT (PLACED NEAR EACH FACE OF THE WALL) UNLESS NOTED OTHERWISE ON THE STRUCTURAL DRAWINGS.

2.2. FOR WALLS 10" AND THINNER (1) #7 (OR (2) #5) x CONTINUOUS HORIZONTAL BAR SHALL BE PLACED AT THE BOTTOM OF THE WALL (NEAR THE FOOTING) AT EACH FLOOR LEVEL, AT THE ROOF LEVEL, AND AT THE TOP OF WALL. FOR WALLS THICKER THAN 10" (2) #5 BARS SHALL BE PLACED AT THESE LOCATIONS.

CONCRETE WALL PLACEMENT TYPES:



B2 CONCRETE WALL SCHEDULE
SCALE:NOT TO SCALE

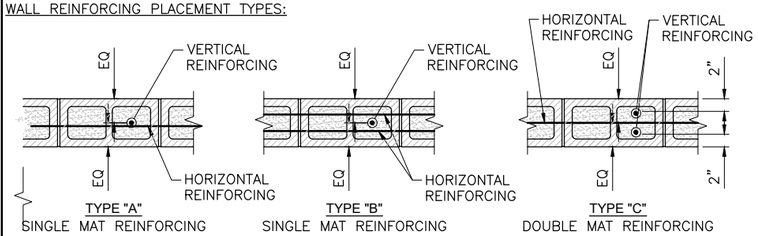
MASONRY WALL SCHEDULE

WALL MARK	THICKNESS	f'm (psi)	SOLID GROUT	REINFORCING			SPECIAL INSPECTION
				VERTICAL	HORIZONTAL	TYPE	
MW-1	8"	1500	NO	(1) #5 AT 32"oc	(1) #5 AT 32"oc	A	YES

MASONRY WALL NOTES:

1. DO NOT SOLID GROUT WALLS UNLESS NOTED OTHERWISE.
2. INSTALL LOOSE FILL INSULATION IN ALL UNGROUTED CELLS WHERE NOTED.
3. ALL MASONRY BELOW GRADE SHALL BE SOLID GROUTED.
4. VERTICAL REINFORCING SHALL BE CENTERED IN THE WALL UNLESS NOTED OTHERWISE.
5. (1) VERTICAL BARS MINIMUM AT ALL CORNERS AND END OF WALLS.
6. HORIZONTAL WALL REINFORCING SHALL BE PLACED BETWEEN VERTICAL MASONRY COLUMN REINFORCING BARS.
7. HORIZONTAL WALL REINFORCING SHALL CONTINUE THROUGH MASONRY LINTELS. WHERE BOTH HORIZONTAL WALL REINFORCING AND LINTEL REINFORCING OCCUR IN THE SAME COURSE, USE THE LARGER REINFORCING.
8. SEE GENERAL STRUCTURAL NOTES FOR ALL OTHER REQUIREMENTS.

WALL REINFORCING PLACEMENT TYPES:



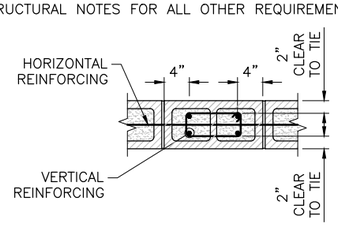
B3 MASONRY WALL SCHEDULE
SCALE:NOT TO SCALE

MASONRY COLUMN SCHEDULE

COLUMN MARK	COLUMN SIZE	REINFORCING			REMARKS
		VERTICAL	TIES	CONFIGURATION	
MC-1	8"x8"	(1) #5	NONE	•	

MASONRY COLUMN NOTES:

1. THE CENTERLINE OF VERTICAL BARS SHALL BE LOCATED 2½" FROM THE FACE OF THE MASONRY. HORIZONTAL WALL REINFORCING SHALL BE LOCATED TO THE INSIDE OF THE VERTICAL BARS.
2. UNLESS NOTED OTHERWISE, VERTICAL REINFORCING AND TIES SHALL EXTEND TO FULL WALL HEIGHT.
3. VERTICAL MASONRY COLUMN REINFORCING SHALL EXTEND INTO THE FOOTING AND TERMINATE WITH A STANDARD 90° HOOK.
4. IN CONCRETE FOUNDATION WALLS, VERTICAL MASONRY COLUMN REINFORCING SHALL BE TIED WITH #3 TIES AT THE SAME SPACING AND CONFIGURATION AS MASONRY COLUMNS ABOVE.
5. SEE GENERAL STRUCTURAL NOTES FOR ALL OTHER REQUIREMENTS.

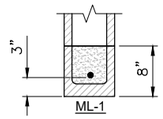


SCHEMATIC MASONRY COLUMN CONFIGURATION

D1 MASONRY COLUMN SCHEDULE
SCALE:NOT TO SCALE

MASONRY LINTEL SCHEDULE

LINTEL MARK	LINTEL DEPTH	LINTEL SPAN MAXIMUM	REINFORCING	
			HORIZONTAL	STIRRUPS
ML-1	8"	5'-4"	(1) #5 BAR CONT	NONE



ML-1

MASONRY LINTEL NOTES:

1. LINTEL WIDTH AND MATERIAL TYPE SHALL BE THE SAME AS THE WALL IN WHICH THE LINTEL IS CONSTRUCTED.
2. GROUT MASONRY LINTELS MONOLITHICALLY WITH THE SUPPORT WALL OR COLUMN AT EACH END.
3. MASONRY LINTEL ML-1 SHALL BE USED OVER OPENINGS IN MASONRY WALLS WHEN A SPECIFIC MASONRY LINTEL IS NOT OTHERWISE SPECIFIED. WHEN A LINTEL IS SPECIFIED ON THE PLANS, THE MAXIMUM SPAN AS NOTED IN THIS SCHEDULE SHALL NOT APPLY. CONSULT THE STRUCTURAL ENGINEER FOR LINTELS NOT SPECIFIED ON THE PLANS WHICH HAVE A SPAN GREATER THAN 12'-0".
4. EXTEND ALL HORIZONTAL REINFORCING 48 BAR DIAMETERS MINIMUM BEYOND THE EDGE OF ALL OPENINGS. IF HORIZONTAL REINFORCING CANNOT EXTEND 48 BAR DIAMETERS BEYOND EDGE OF OPENING, PROVIDE 90° STANDARD HOOK.
5. SPLICE TOP BARS AT MID-SPAN OF LINTEL ONLY AND BOTTOM BARS OVER SUPPORTS ONLY.
6. HORIZONTAL WALL REINFORCING SHALL CONTINUE THROUGH MASONRY LINTELS. WHERE BOTH HORIZONTAL WALL REINFORCING AND LINTEL REINFORCING OCCUR IN THE SAME COURSE, USE THE LARGER REINFORCING.
7. DOWEL VERTICAL REINFORCING OF WALL ABOVE LINTEL INTO THE FULL DEPTH OF LINTEL OR 48 BAR DIAMETERS, WHICHEVER IS LESS.
8. SEE GENERAL STRUCTURAL NOTES FOR ALL OTHER REQUIREMENTS.

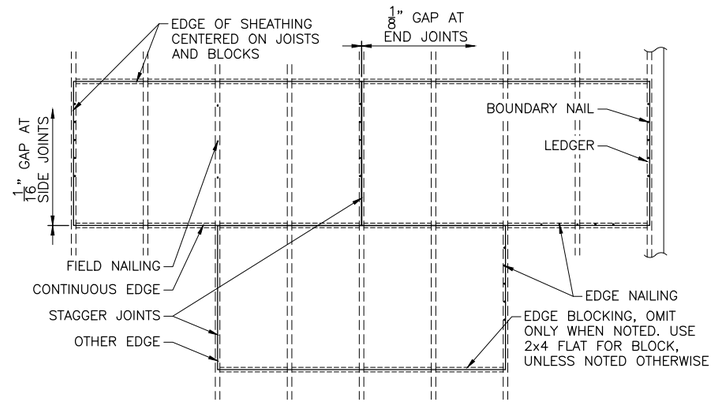
D2 MASONRY LINTEL SCHEDULE
SCALE:NOT TO SCALE

ROOF SHEATHING SCHEDULE

LOCATION	WOOD SHEATHING THICKNESS	NAIL SIZE	EDGE NAIL		FIELD NAIL	BOUNDARY NAIL	EDGE BLOCK
			CONT EDGE	OTHER EDGE			
TYPICAL	7/16" (24/16)	8d	6"oc	6"oc	12"oc	6"oc	NO

ROOF SHEATHING NOTES:

1. MINIMUM NAIL PENETRATION INTO FRAMING: 8d-1½", 10d-1⅝"
2. USE COMMON NAILS (8d DIAMETER=0.131", 10d DIAMETER=0.148")
3. SEE GENERAL STRUCTURAL NOTES FOR ALL OTHER REQUIREMENTS.



D3 ROOF SHEATHING SCHEDULE
SCALE:NOT TO SCALE

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Kaysville, Utah 84037
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AGENCY

REVIEW

FILE: CITY STANDARDS_S-101X
JUB PROJ. # : ----
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DESIGN BY: PJT
CHECKED BY: PJT

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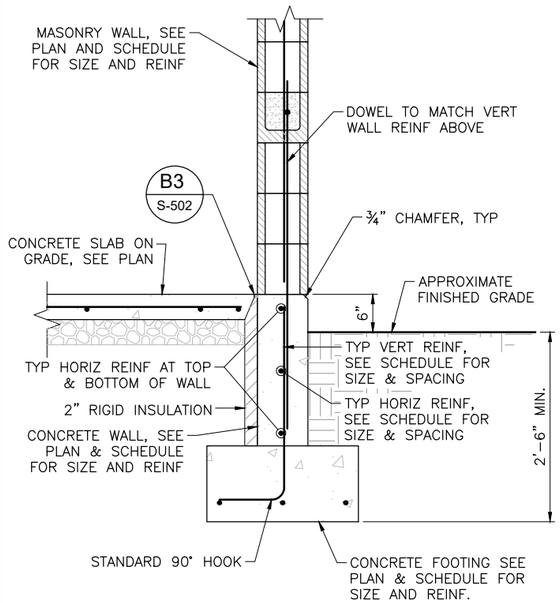
PUBLIC WORKS STANDARDS
PLAIN CITY CORPORATION

TYPICAL LIFT STATION SCHEDULES

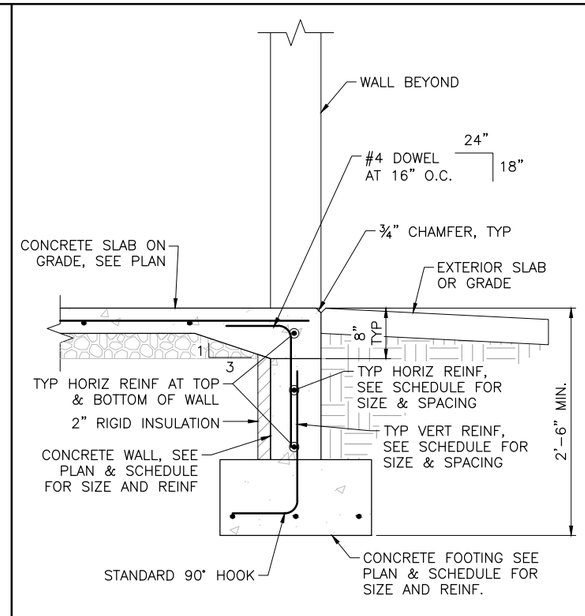
LAST UPDATED: 2/21/2020
SHEET NUMBER:
S-301

Plot Date:4/16/2020 1:45 PM Plotted By: Daniel Johnson
Date Created:2/20/2020 \\KAYS\PUBLIC\PROJECTS\JUB\PLAIN CITY\STANDARDS\2019\CITY STANDARDS_S-101X.DWG



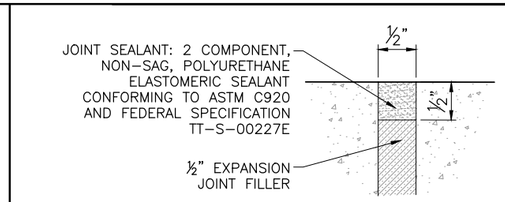
B1 CMU WALL BEARING AT EXTERIOR CONCRETE FOOTING

SCALE:1" = 1'-0"



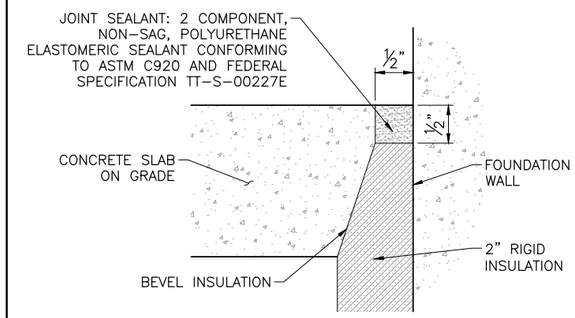
B2 CONCRETE FOUNDATION WALL AT OPENING

SCALE:1" = 1'-0"



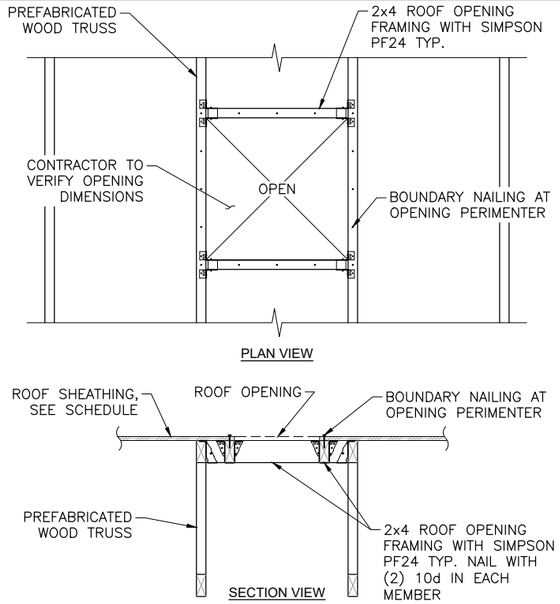
A3 JOINT SEALANT DETAIL

SCALE:6" = 1'-0"



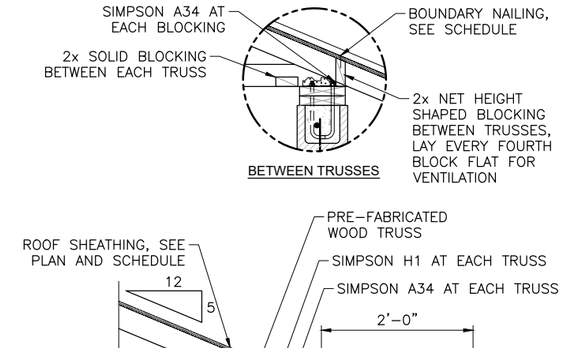
B3 JOINT INSULATION DETAIL

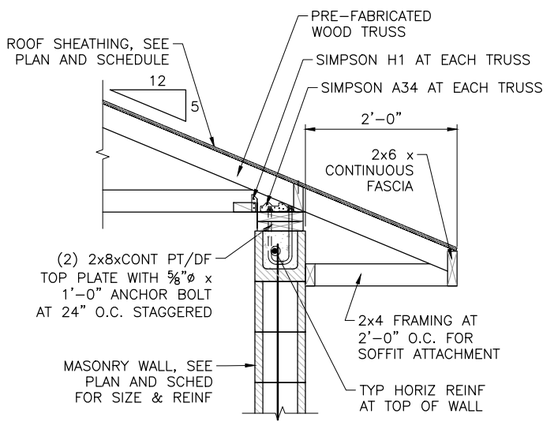
SCALE:6" = 1'-0"



B4 TYP WOOD ROOF OPENING DETAIL (OPENING LESS THAN 24" SQUARE)

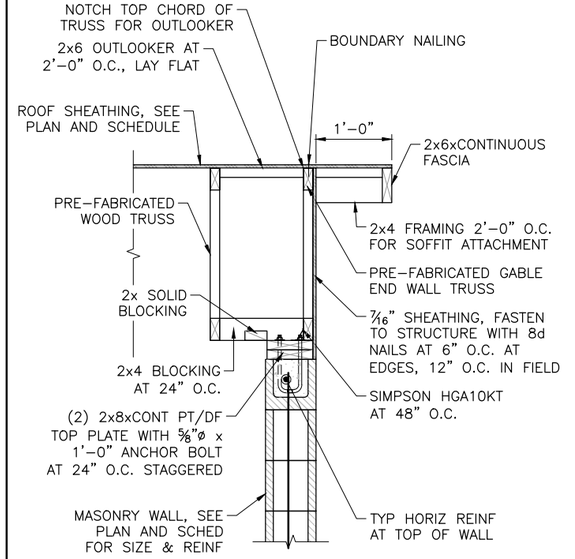
SCALE:1" = 1'-0"





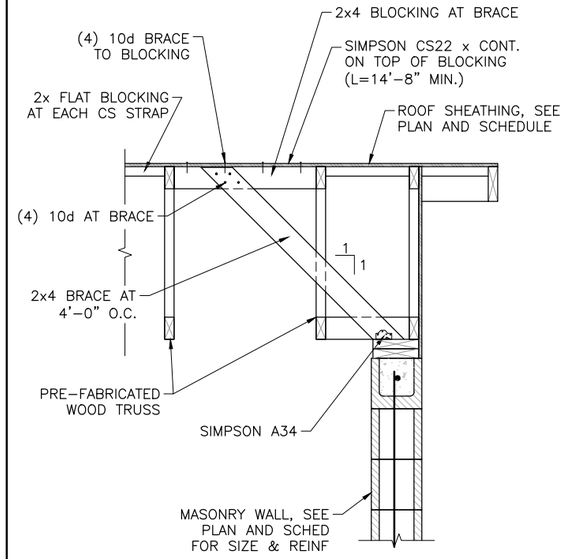
D1 PFT BEARING AT CMU WALL

SCALE:1" = 1'-0"



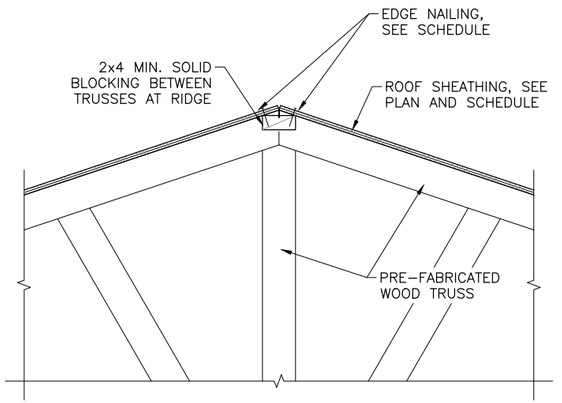
D2 GABLE END PFT AT CMU WALL

SCALE:1" = 1'-0"



D3 CMU WALL BRACE AT GABLE END

SCALE:1" = 1'-0"



D4 RIDGE BLOCKING

SCALE:1 1/2" = 1'-0"

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PLAIN CITY CORPORATION

TYPICAL LIFT STATION
FOOTINGS AND FOUNDATION DETAILS AND ROOF FRAMING DETAILS

LAST UPDATED: 2/21/2020
SHEET NUMBER:
S-502

Plot Date:4/16/2020 1:45 PM Plotted By: Daniel Johnson
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