

STANDARD NOTES FOR EL PASO COUNTY GRADING AND EROSION CONTROL PLANS:

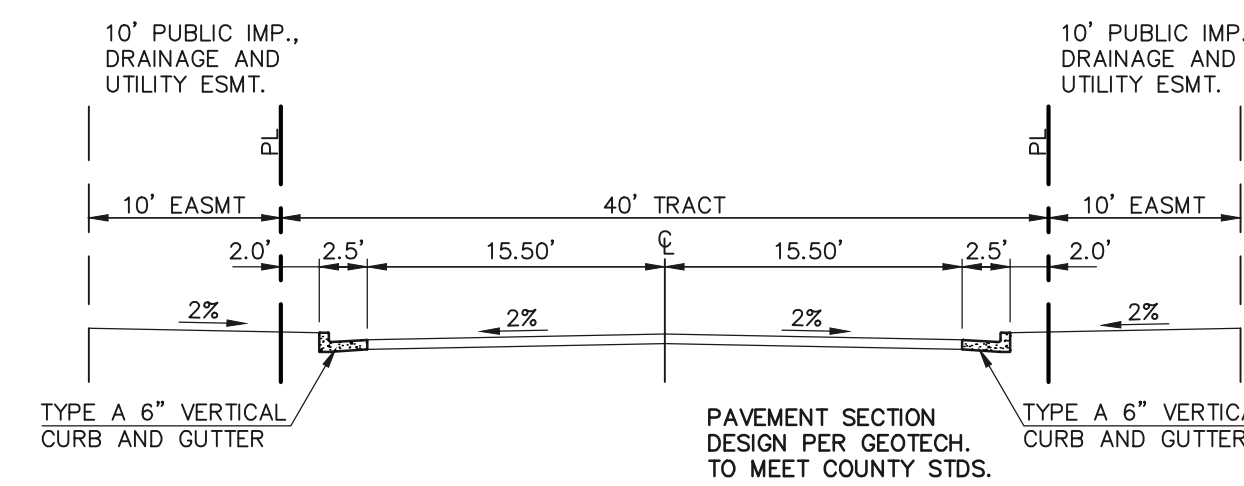
- STORMWATER DISCHARGES FROM CONSTRUCTION SITES SHALL NOT CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR DEGRADATION OF STATE WATERS. ALL WORK AND EARTH DISTURBANCE SHALL BE DONE IN A MANNER THAT MINIMIZES POLLUTION OF ANY ON-SITE OR OFF-SITE WATERS, INCLUDING WETLANDS.
- NOTWITHSTANDING ANYTHING DEPICTED IN THESE PLANS IN WORDS OR GRAPHIC REPRESENTATION, ALL DESIGN AND CONSTRUCTION RELATED TO ROADS, STORM DRAINAGE AND EROSION CONTROL SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE MOST RECENT VERSION OF THE RELEVANT ADOPTED EL PASO COUNTY STANDARDS, INCLUDING THE LAND DEVELOPMENT CODE, THE ENGINEERING CRITERIA MANUAL, THE DRAINAGE CRITERIA MANUAL, AND THE DRAINAGE CRITERIA MANUAL VOLUME 2. ANY DEVIATIONS TO REGULATIONS AND STANDARDS MUST BE REQUESTED, AND APPROVED, IN WRITING.
- A SEPARATE STORMWATER MANAGEMENT PLAN (SWMP) FOR THIS PROJECT SHALL BE COMPLETED AND AN EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP) ISSUED PRIOR TO COMMENCING CONSTRUCTION. DURING CONSTRUCTION THE SWMP IS THE RESPONSIBILITY OF THE DESIGNATED QUALIFIED STORMWATER MANAGER OR CERTIFIED EROSION CONTROL INSPECTOR AND SHALL BE LOCATED ON SITE AT ALL TIMES DURING CONSTRUCTION AND SHALL BE KEPT UP TO DATE WITH WORK PROGRESS AND CHANGES IN THE FIELD.
- ONCE THE ESQCP IS APPROVED AND A (NOTICE TO PROCEED) HAS BEEN ISSUED, THE CONTRACTOR MAY INSTALL THE INITIAL STAGE EROSION AND SEDIMENT CONTROL MEASURES AS INDICATED ON THE APPROVED GEC. A PRECONSTRUCTION MEETING BETWEEN THE CONTRACTOR, ENGINEER, AND EL PASO COUNTY WILL BE HELD PRIOR TO ANY CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE APPLICANT TO COORDINATE THE MEETING TIME AND PLACE WITH COUNTY STAFF.
- CONTROL MEASURES MUST BE INSTALLED PRIOR TO COMMENCEMENT OF ACTIVITIES THAT MAY CONTRIBUTE POLLUTANTS TO STORMWATER. TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, OR ANY DISTURBED LAND AREA SHALL BE COMPLETED IMMEDIATELY UPON COMPLETION OF THE DISTURBANCE.
- ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE MAINTAINED AND REMAIN IN EFFECTIVE OPERATING CONDITION UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED AND FINAL STABILIZATION IS ESTABLISHED. ALL PERSONS ENGAGED IN LAND DISTURBANCE ACTIVITIES SHALL ASSESS THE ADEQUACY OF CONTROL MEASURES AT THE SITE AND IDENTIFY IF CHANGES TO THOSE CONTROL MEASURES IS NEEDED TO ENSURE THE CONTINUED EFFECTIVE PERFORMANCE OF THE CONTROL MEASURES. ALL CHANGES TO TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES MUST BE INCORPORATED INTO THE STORMWATER MANAGEMENT PLAN.
- TEMPORARY STABILIZATION SHALL BE IMPLEMENTED ON DISTURBED AREAS AND STOCKPILES WHERE GROUND DISTURBING CONSTRUCTION ACTIVITY HAS PERMANENTLY CEASED OR TEMPORARILY CEASED FOR LONGER THAN 14 DAYS.
- FINAL STABILIZATION MUST BE IMPLEMENTED AT ALL APPLICABLE CONSTRUCTION SITES. FINAL STABILIZATION IS ACHIEVED WHEN ALL GROUND DISTURBING ACTIVITIES ARE COMPLETE AND ALL DISTURBED AREAS EITHER HAVE A UNIFORM VEGETATIVE COVER WITH INDIVIDUAL PLAN DENSITY OF 70 PERCENT OF PRE-DISTURBANCE LEVELS ESTABLISHED OR EQUIVALENT PERMANENT ALTERNATIVE STABILIZATION METHOD IS IMPLEMENTED. ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE REMOVED UPON FINAL STABILIZATION AND BEFORE PERMIT CLOSURE.
- ALL PERMANENT STORMWATER MANAGEMENT FACILITIES SHALL BE INSTALLED AS DEFINED IN THE APPROVED PLANS. ANY PROPOSED CHANGES THAT EFFECT THE HYDROLOGY OR HYDRAULICS OF A PERMANENT STORMWATER MANAGEMENT STRUCTURES MUST BE APPROVED BY THE EGM ADMINISTRATOR PRIOR TO IMPLEMENTATION.
- EARTH DISTURBANCES SHALL BE CONDUCTED IN SUCH A MANNER SO AS TO EFFECTIVELY MINIMIZE ACCELERATED SOIL EROSION AND RESULTING SEDIMENTATION. ALL DISTURBED AREAS SHALL BE DESIGNED, CONSTRUCTED, AND COMPLETED SO THAT THE EXPOSED AREA OF ANY DISTURBED LAND SHALL BE LIMITED TO THE SHORTEST PRACTICAL PERIOD OF TIME. PRE-EXISTING VEGETATION SHALL BE PROTECTED AND MAINTAINED WITHIN 50 HORIZONTAL FEET OF A WATERS OF THE STATE, UNLESS SHOWN TO BE INFEASIBLE AND SPECIFICALLY REQUESTED AND APPROVED.
- COMPACTION OF SOIL MUST BE PREVENTED IN AREAS DESIGNATED FOR INFILTRATION CONTROL MEASURES OR WHERE FINAL STABILIZATION WILL BE ACHIEVED BY VEGETATIVE COVER. AREAS DESIGNATED FOR INFILTRATION CONTROL MEASURES SHALL ALSO BE PROTECTED FROM SEDIMENTATION DURING CONSTRUCTION UNTIL FINAL STABILIZATION IS ACHIEVED. IF COMPACTION PREVENTION IS NOT FEASIBLE DUE TO SITE CONSTRAINTS, ALL AREAS DESIGNATED FOR INFILTRATION AND VEGETATION CONTROL MEASURES MUST BE LOOSENEED PRIOR TO INSTALLATION OF THE CONTROL MEASURE(S).
- ANY TEMPORARY OR PERMANENT FACILITY DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF STORMWATER AROUND, THROUGH, OR FROM THE EARTH DISTURBANCE AREA SHALL BE A STABILIZED CONVEYANCE DESIGNED TO MINIMIZE EROSION AND THE DISCHARGE OF SEDIMENT OFF SITE.
- CONCRETE WASH WATER SHALL BE CONTAINED AND DISPOSED OF IN ACCORDANCE WITH THE SWMP. NO WASH WATER SHALL BE DISCHARGED TO OR ALLOWED TO RUNOFF TO STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES. CONCRETE WASHOUTS SHALL NOT BE LOCATED IN AN AREA WHERE SHALLOW GROUNDWATER MAY BE PRESENT, OR WITHIN 50 FEET OF A SURFACE WATER BODY, CREEK OR STREAM.
- DURING DEWATERING OPERATIONS: UNCONTAMINATED GROUND WATER MAY BE DISCHARGED ON SITE, BUT SHALL NOT LEAVE THE SITE IN THE FORM OF SURFACE RUNOFF UNLESS AN APPROVED STATE DEWATERING PERMIT IS IN PLACE.
- EROSION CONTROL BLANKETING OR OTHER PROTECTIVE COVERING SHALL BE USED ON SLOPES STEEPER THAN 3:1.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL WASTES FROM THE CONSTRUCTION SITE FOR DISPOSAL IN ACCORDANCE WITH LOCAL AND STATE REGULATORY REQUIREMENTS. NO CONSTRUCTION DEBRIS, TREE SLASH, BUILDING MATERIAL WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURIED, DUMPED OR DISCHARGED AT THE SITE.
- WASTE MATERIALS SHALL NOT BE TEMPORARILY PLACED IN THE STREET, ALLEY OR OTHER PUBLIC WAY, UNLESS IN ACCORDANCE WITH AN APPROVED TRAFFIC CONTROL PLAN. CONTROL MEASURES MAY BE REQUIRED BY EL PASO COUNTY ENGINEERING IF DEEMED NECESSARY, BASED ON SPECIFIC CONDITIONS AND CIRCUMSTANCES.
- TRACKING OF SOILS AND CONSTRUCTION DEBRIS OFF-SITE SHALL BE MINIMIZED. MATERIALS TRACKED OFFSITE SHALL BE CLEANED UP AND PROPERLY DISPOSED OF IMMEDIATELY.
- THE OWNER/DEVELOPER SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL CONSTRUCTION DEBRIS, DIRT, TRASH, ROCK, SEDIMENT, SOIL AND SAND THAT MAY ACCUMULATE IN ROADS, STORM DRAINS AND OTHER DRAINAGE CONVEYANCE SYSTEMS AND STORMWATER APPURTENANCES AS A RESULT OF SITE DEVELOPMENT.
- THE QUANTITY OF MATERIALS STORED ON THE PROJECT SITE SHALL BE LIMITED, AS MUCH AS PRACTICAL, TO THAT QUANTITY REQUIRED TO PERFORM THE WORK IN AN ORDERLY SEQUENCE. ALL MATERIALS STORED ON-SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER, IN THEIR ORIGINAL CONTAINERS, WITH ORIGINAL MANUFACTURER'S LABELS.
- NO CHEMICAL(S) HAVING THE POTENTIAL TO BE RELEASED IN STORMWATER ARE TO BE STORED OR USED ONSITE UNLESS PERMISSION FOR THE USE OF A SPECIFIC CHEMICAL(S) IS GRANTED IN WRITING BY THE EGM ADMINISTRATOR. IN GRANTING APPROVAL FOR THE USE OF SUCH CHEMICAL(S), SPECIAL CONDITIONS AND MONITORING MAY BE REQUIRED.
- BULK STORAGE OF ALLOWED PETROLEUM PRODUCTS OR OTHER LIQUID CHEMICALS IN EXCESS OF 55 GALLONS SHALL REQUIRE ADEQUATE SECONDARY CONTAINMENT PROTECTION TO CONTAIN ALL SPILLS ONSITE AND TO PREVENT ANY SPILLED MATERIALS FROM ENTERING STATE WATERS, ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES.
- NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE CURB AND GUTTER OR DITCH EXCEPT WITH APPROVED SEDIMENT CONTROL MEASURES.
- OWNER/DEVELOPER AND THEIR AGENTS SHALL COMPLY WITH THE 'COLORADO WATER QUALITY CONTROL ACT' (TITLE 25, ARTICLE 8, CRS), AND THE 'CLEAN WATER ACT' (33 USC 1344), IN ADDITION TO THE REQUIREMENTS OF THE LAND DEVELOPMENT CODE, DCM VOLUME II AND THE EGM APPENDIX I. ALL APPROPRIATE PERMITS MUST BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION (1041, NPDES, FLOODPLAIN, 404, FUGITIVE DUST, ETC.). IN THE EVENT OF CONFLICTS BETWEEN THESE REQUIREMENTS AND LAWS, RULES, OR REGULATIONS OF OTHER FEDERAL, STATE, OR COUNTY AGENCIES, THE MORE RESTRICTIVE LAWS, RULES, OR REGULATIONS SHALL APPLY.
- ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.
- PRIOR TO CONSTRUCTION THE PERMITEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES.
- A WATER SOURCE SHALL BE AVAILABLE ON SITE DURING EARTHWORK OPERATIONS AND UTILIZED AS REQUIRED TO MINIMIZE DUST FROM EARTHWORK EQUIPMENT AND WIND.

Missing note #28. See GEC Checklist.

Revise this to #29.

- AT LEAST TEN (10) DAYS PRIOR TO THE ANTICIPATED START OF CONSTRUCTION, FOR PROJECTS THAT WILL DISTURB ONE (1) ACRE OR MORE, THE OWNER OR OPERATOR OF CONSTRUCTION ACTIVITY SHALL SUBMIT A PERMIT APPLICATION FOR STORMWATER DISCHARGE TO THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, WATER QUALITY DIVISION. THE APPLICATION CONTAINS CERTIFICATION OF COMPLETION OF A STORMWATER MANAGEMENT PLAN (SWMP), OF WHICH THIS GRADING AND EROSION CONTROL PLAN MAY BE A PART. FOR INFORMATION OR APPLICATION MATERIALS CONTACT:

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
WATER QUALITY CONTROL DIVISION
WQCD - PERMITS
4300 CHERRY CREEK DRIVE SOUTH
DENVER, CO 80246-1530
ATTN: PERMITS UNIT

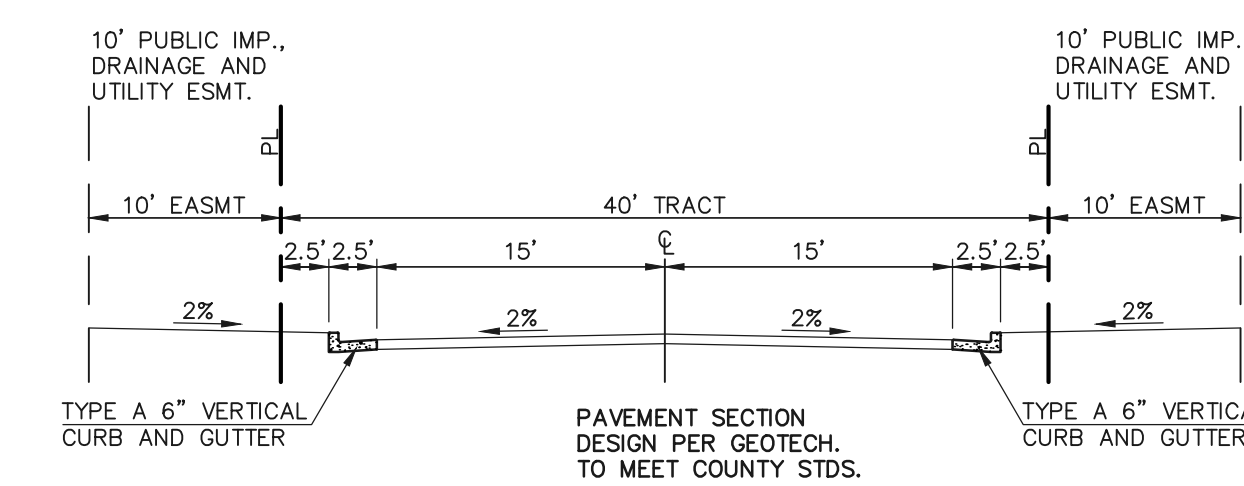


TRACT A - PRIVATE ROADWAY CROSS SECTION

STA. 0+51.00 TO STA. 1+01.00

SCALE: 1" = 10'

-BENT GRASS MARKET VIEW

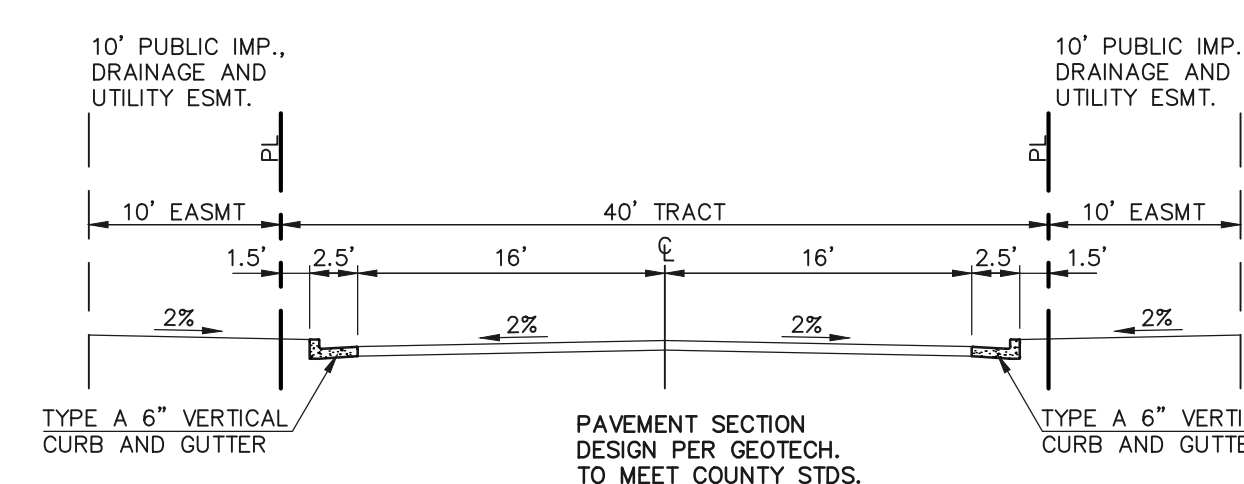


TRACT A - PRIVATE ROADWAY CROSS SECTION

STA. 1+34.46 TO STA. 5+91.78

SCALE: 1" = 10'

-BENT GRASS MARKET VIEW



TRACT A - PRIVATE ROADWAY CROSS SECTION

STA. 6+21.78 TO END

SCALE: 1" = 10'

-BENT GRASS MARKET VIEW

48 HOURS BEFORE YOU DIG,
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UTILITY NOTIFICATION CENTER OF COLORADO
IT'S THE LAW

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

NO.	REVISION	DATE
1	REVISED PER COUNTY COMMENTS	11-30-21

REVIEW:
PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF CLASSIC CONSULTING ENGINEERS AND SURVEYORS, LLC

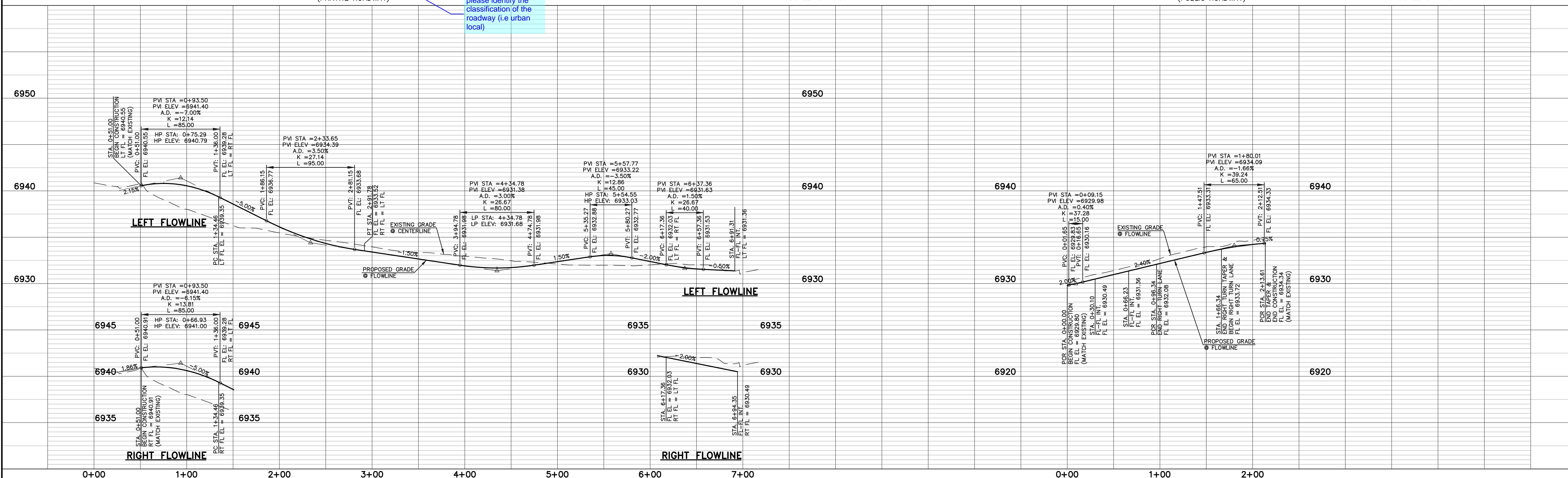
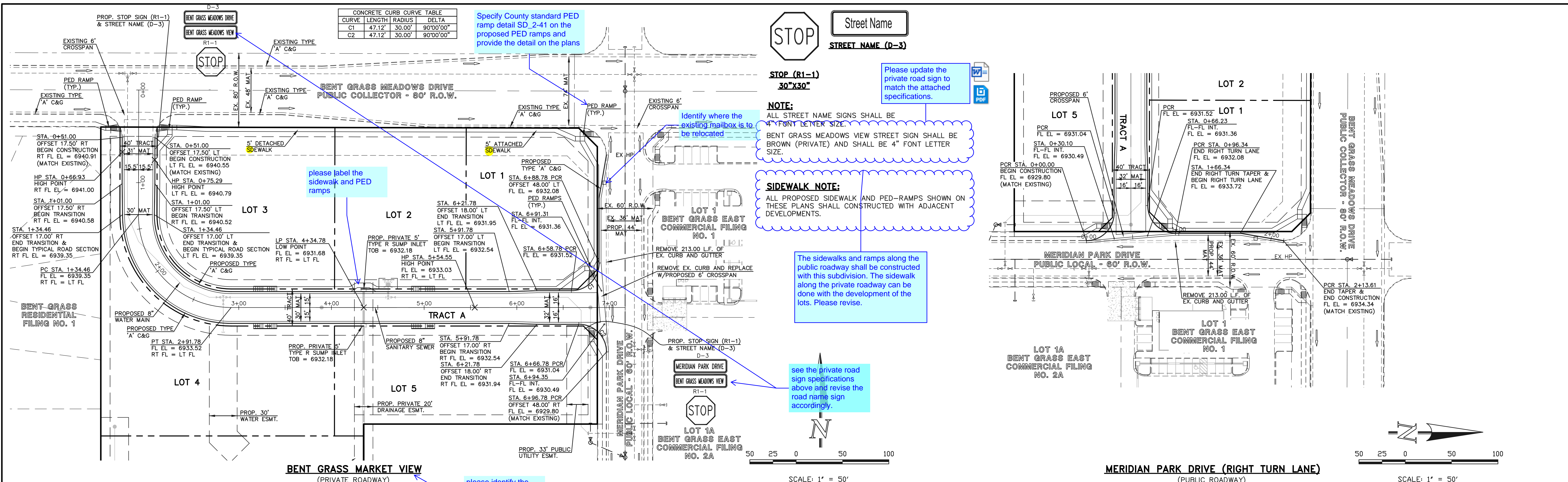
MARC A. WHORTON, COLORADO P.E. #37155 DATE



BENT GRASS EAST COMMERCIAL
FILING NO. 3
STREET SECTIONS / EROSION CONTROL NOTES

DESIGNED BY	PRA	SCALE	DATE	04-21-21
DRAWN BY	PRA	(H) 1" = N/A	SHEET	2 OF 8
CHECKED BY		(V) 1" = N/A	JOB NO.	2177.64





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CLASSIC CONSULTING ENGINEERS AND SURVEYORS, LLC

MARC A. WHORTON, COLORADO P.E. #37155 DATE



BENT GRASS EAST COMMERCIAL FILING NO. 3			
TRACT A) PRIVATE ROADWAY PLAN			
BENT GRASS MARKET VIEW			
DESIGNED BY	PRA	SCALE	DATE 04-21-21
DRAWN BY	PRA	(H) 1" = 50'	SHEET 4 OF 8
CHECKED BY	(V) 1" = 5'	JOB NO.	2177.64

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STRIPING LEGEND		
STRIPE	PAVEMENT MARKINGS	MARKING DESCRIPTION
1	CENTER LINES (EPOXY)	DOUBLE SOLID YELLOW, 4" WIDE-SPACED 3' APART
2	TWO WAY LEFT TURN LINES (EPOXY)	DOUBLE YELLOW, OUTSIDE SOLID YELLOW, 4" WIDE INSIDE BROKEN YELLOW, 4" WIDE-SPACED 3' APART
3	EDGE LINES (EPOXY)	SOLID WHITE, 4" WIDE
4	CHANNELIZING LINES (EPOXY)	SOLID WHITE, 8" WIDE

*NOTE: ALL STRIPING INSTALLATION SHALL BE PER COLORADO DEPARTMENT OF TRANSPORTATION "M&S STANDARDS"

Shall be 4' apart per CDOT standards (S-627-1)

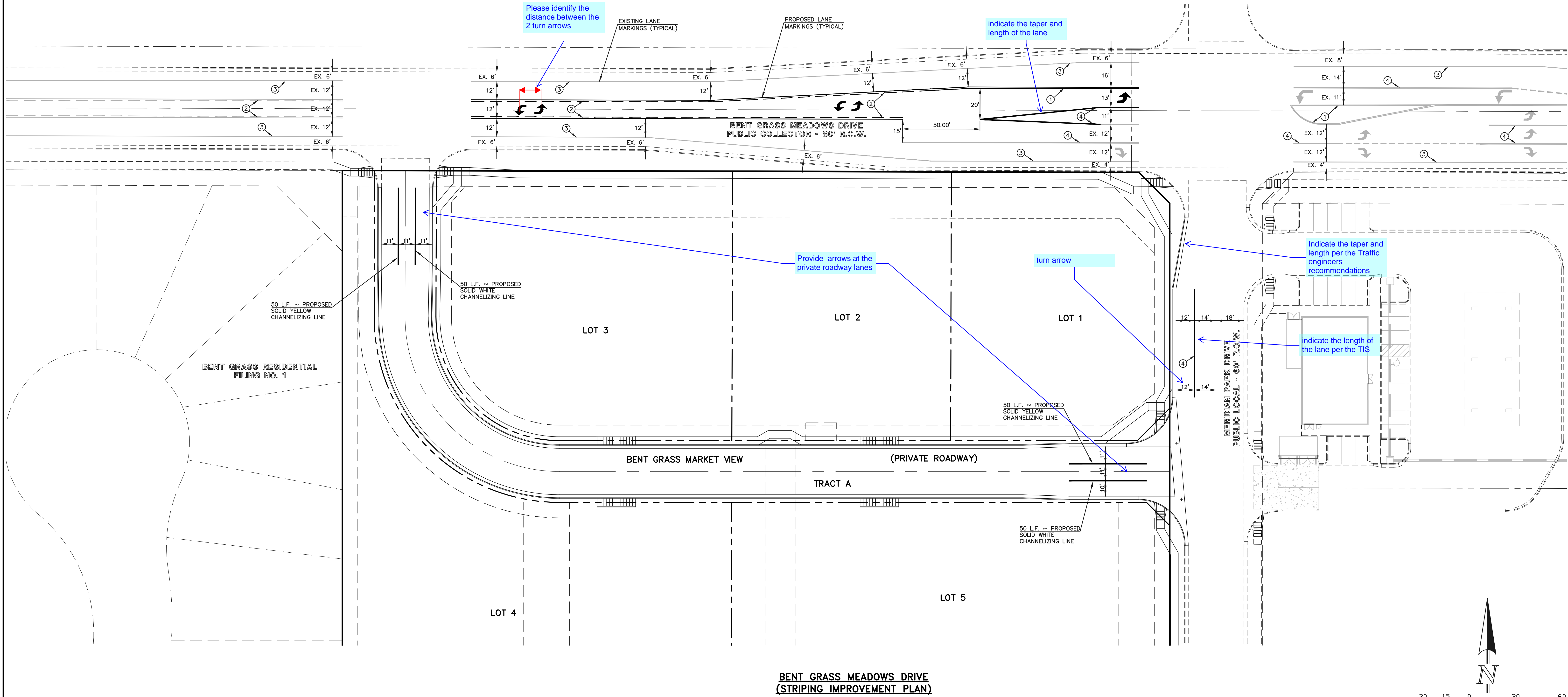
NOTE TO CONTRACTOR

ALL 4", 8" SOLID OR SKIP PAVEMENT MARKING ARE TO BE EPOXY.

per County standard notes turn arrows shall be 125 mil. Please revise

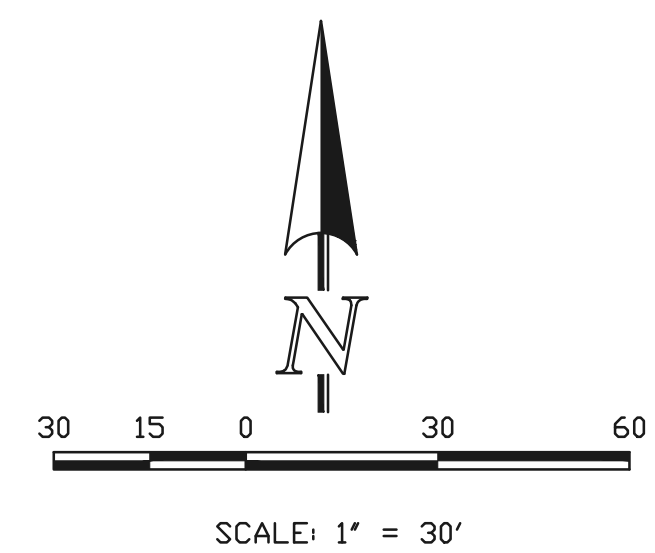
TURN ARROWS ARE TO BE 90 MIL PREFORMED THERMOPLASTIC PAVEMENT MARKING TYPE B.

STRIPING PLAN SHOWS FINAL LANE MARKINGS. REMOVE EXISTING LANE MARKINGS AS NECESSARY.



Indicate the taper and length per the Traffic engineers recommendations

Indicate the length of the lane per the TIS



**BENT GRASS MEADOWS DRIVE
(STRIPING IMPROVEMENT PLAN)**

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MARC A. WHORTON, COLORADO P.E. #37155 DATE

BENT GRASS EAST COMMERCIAL FILING NO. 3 STRIPING PLAN			
DESIGNED BY	PRA	SCALE	DATE 03-16-21
DRAWN BY	PRA	(H) 1" = 30'	SHEET 5 OF 8
CHECKED BY	(V) 1" = N/A	JOB NO.	2177.64

CLASSIC CONSULTING

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BENT GRASS MEADOWS DRIVE
PUBLIC COLLECTOR - 80' R.O.W.

Please provide the cross slope. Per the grading plan it appears that it may exceed 2% max criteria indicated in ECM 6.3.2 Figure 6-9

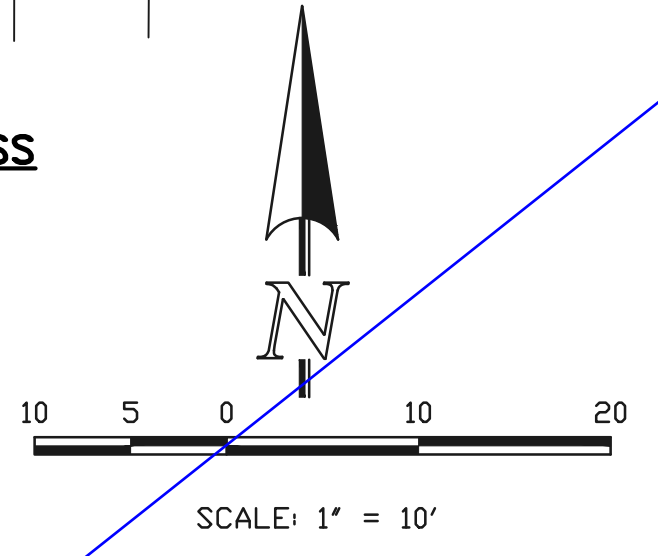
provide spot elevation

per ECM 6.3.1.G.5, The slope of the landing in any direction shall not exceed 2%. Please verify that all landings meet this criteria and revise accordingly.

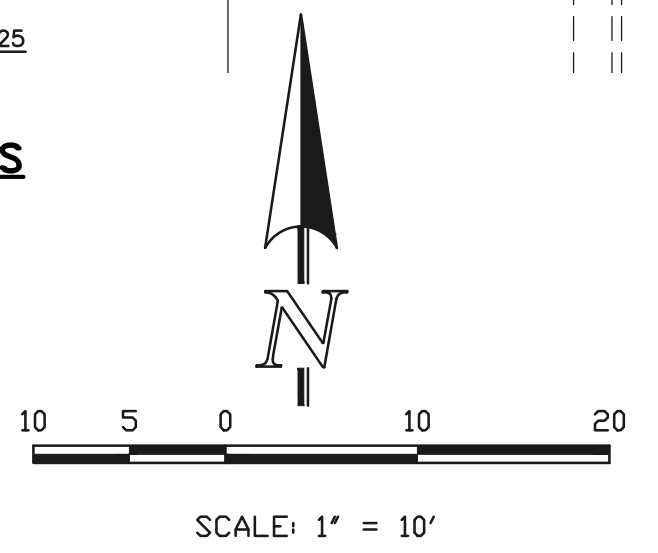
FYI: Should this slope exceed 5% in the field, edge protection per ECM 6.3.1.G would be required. Consider reducing the slope% to allow for construction tolerance

Please label the cross slope

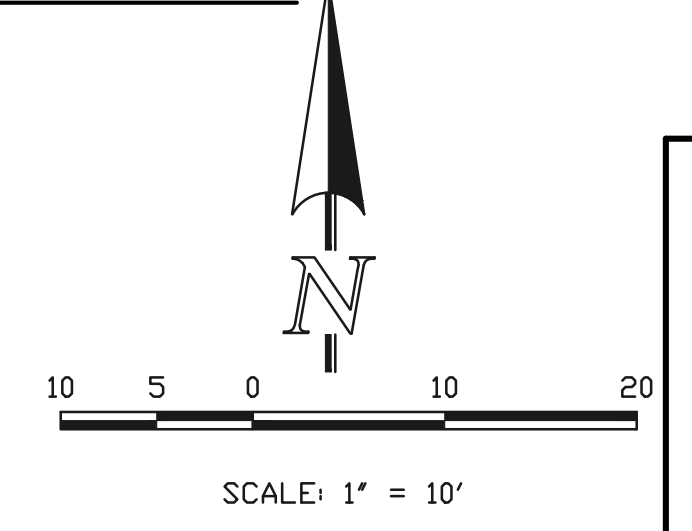
**INTERSECTION OF
BENT GRASS MEADOWS & BENT GRASS
MARKET VIEW (PRIVATE ROADWAY)
'RAMP DETAIL-01'**



**INTERSECTION OF
MERIDIAN PARK DRIVE & BENT GRASS
MARKET VIEW (PRIVATE ROADWAY)
'RAMP DETAIL-02'**



**INTERSECTION OF
BENT GRASS MEADOWS & MERIDIAN PARK DRIVE
'RAMP DETAIL-03'**



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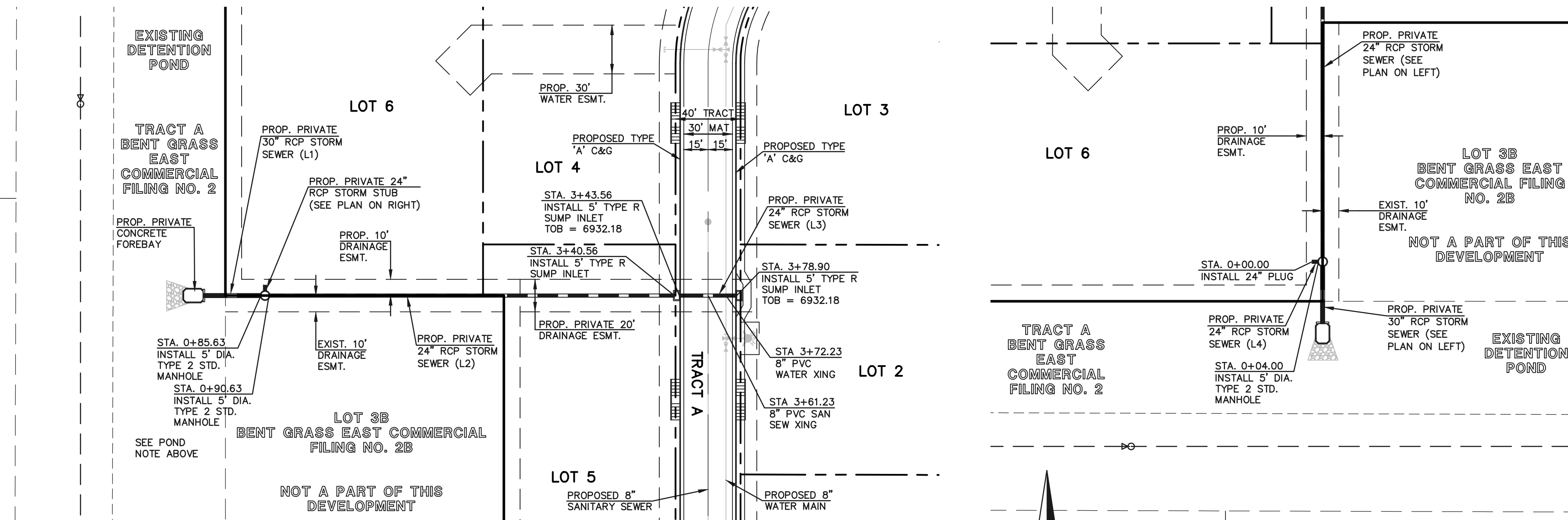
BENT GRASS EAST COMMERCIAL FILING NO. 3 PEDESTRIAN RAMP DETAILS			
DESIGNED BY	PRA	SCALE	DATE 03-16-21
DRAWN BY	PRA	(H) 1" = 10'	SHEET 6 OF 8
CHECKED BY	(V) 1" = N/A	JOB NO.	2177.64



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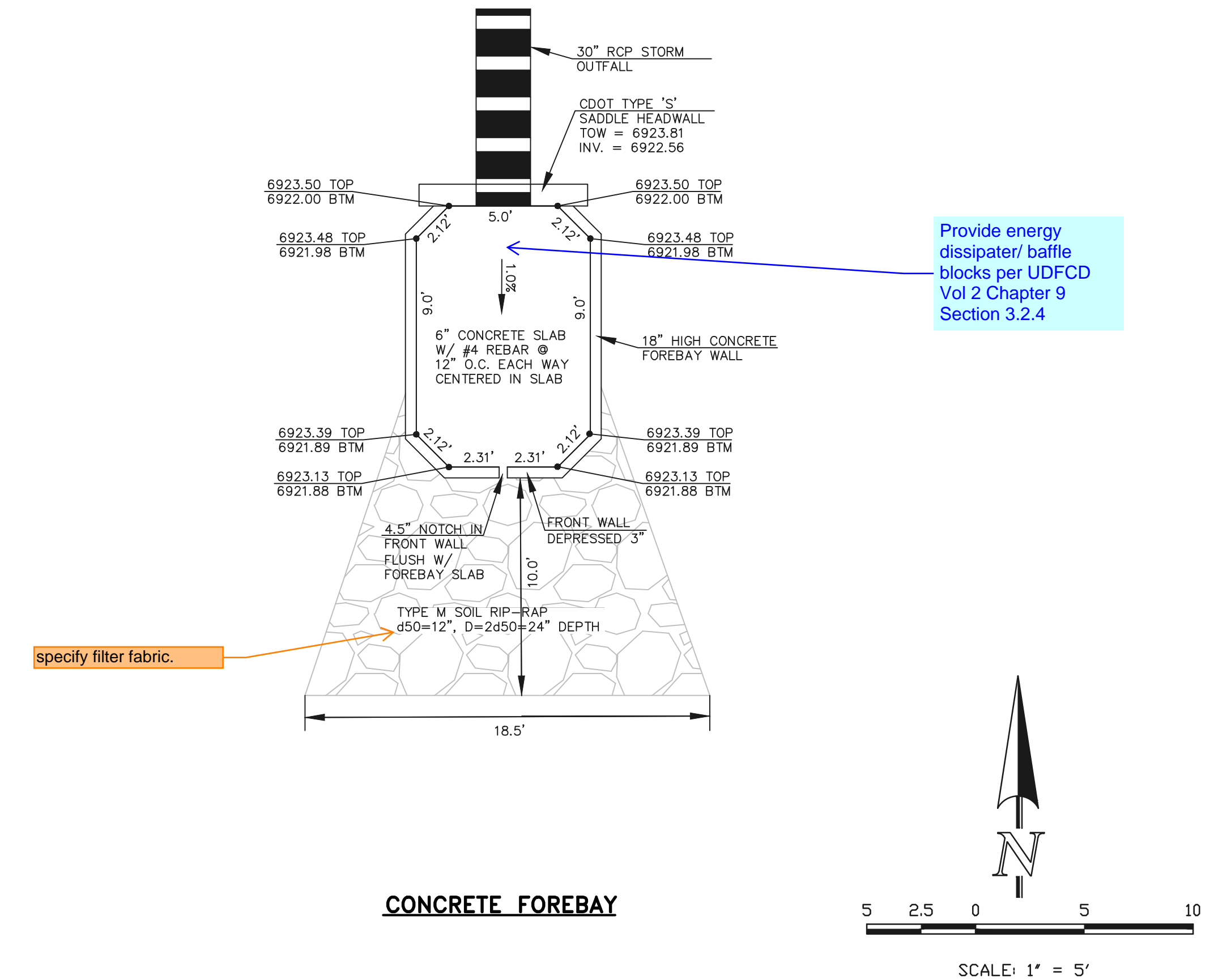
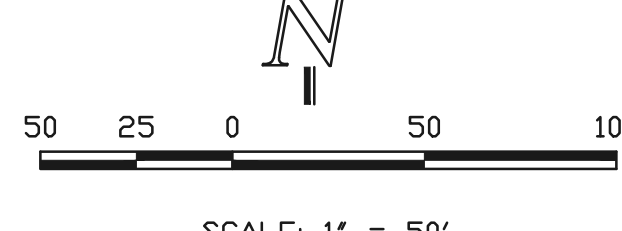
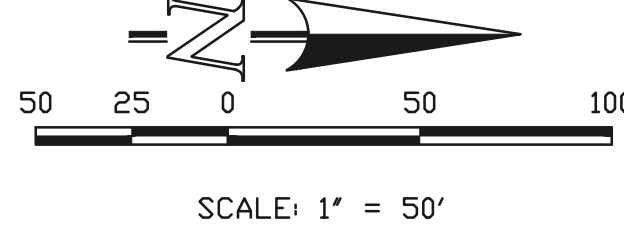
POND NOTE:
THIS POND INCLUDING ALL EXIST. STRUCTURES WAS ORIGINALLY
CONSTRUCTED WITH BENT GRASS RESIDENTIAL FILING NO. 1 (SF1412) WITH
OWNERSHIP AND MAINTENANCE BY THE BENT GRASS METRO. DISTRICT.

LINE	LENGTH	BEARING
L1	35.63'	N00°00'03"E
L2	249.93'	N00°00'03"E
L3	35.34'	N00°00'03"E
L4	4.00'	N89°59'57"W

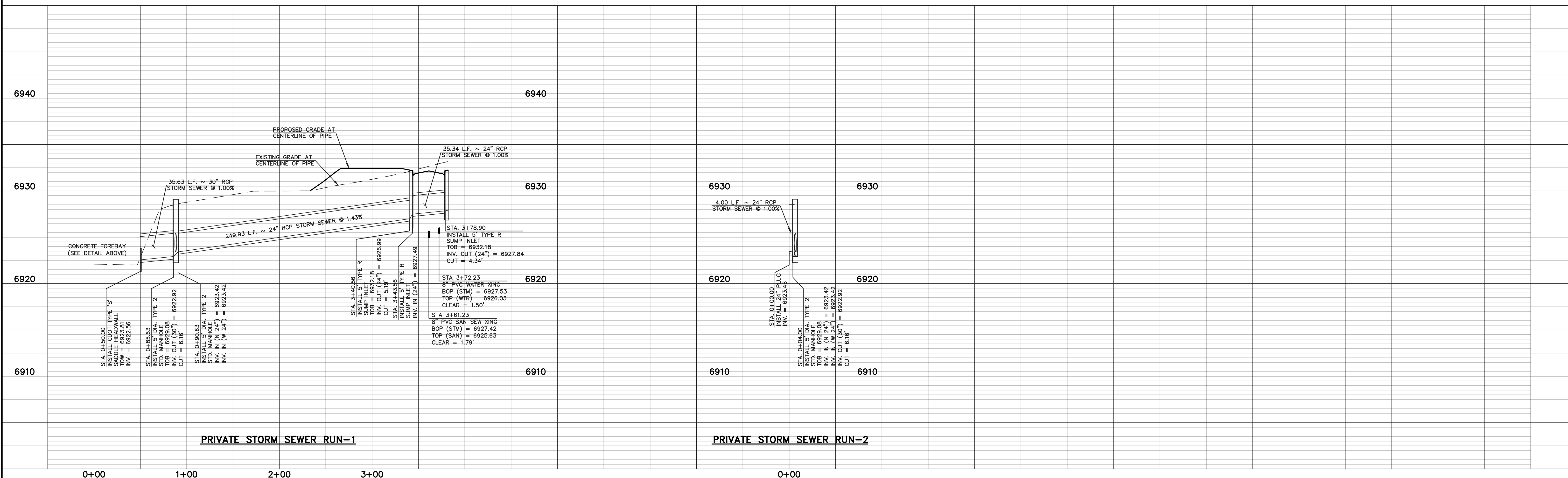
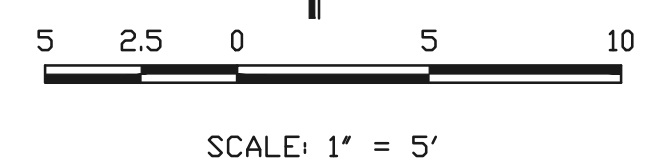


PRIVATE STORM SEWER RUN-1

PRIVATE STORM SEWER RUN-2



CONCRETE FOREBAY



PRIVATE STORM SEWER RUN-1

PRIVATE STORM SEWER RUN-2

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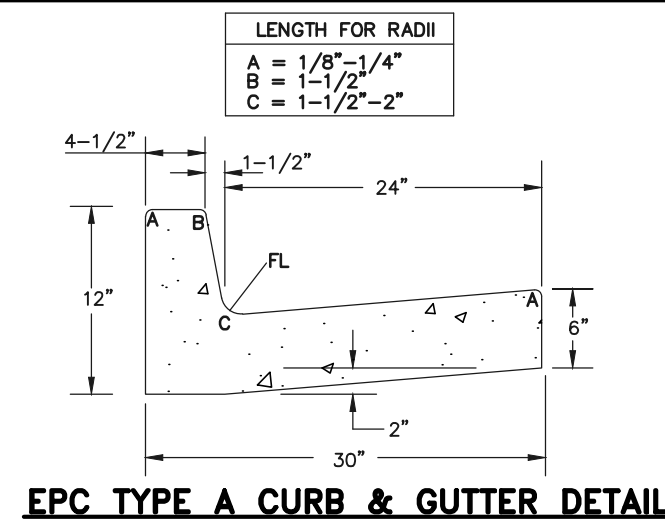
MARC A. WHORTON, COLORADO P.E. #37155 DATE



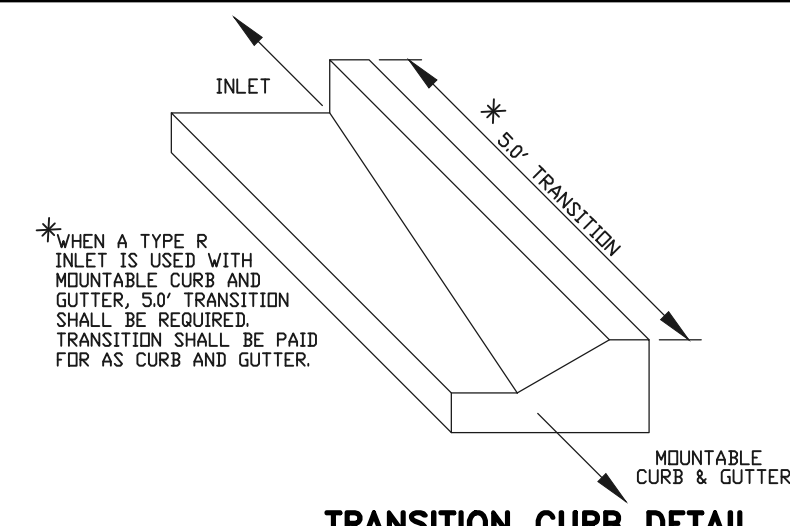
BENT GRASS EAST COMMERCIAL FILING NO. 3 PRIVATE STORM SEWER PLAN			
DESIGNED BY	PRA	SCALE	DATE 04-21-21
DRAWN BY	PRA	(H) 1" = 50'	SHEET 7 OF 8
CHECKED BY	(V) 1" = 5'	JOB NO.	2177.64



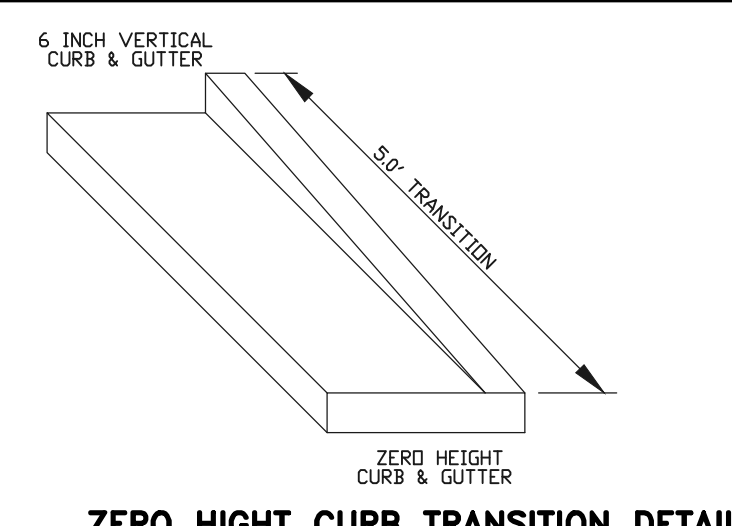
619 N. Cascade Avenue, Suite 200
Colorado Springs, Colorado 80903
(719)785-0790
(719)785-0799(fax)



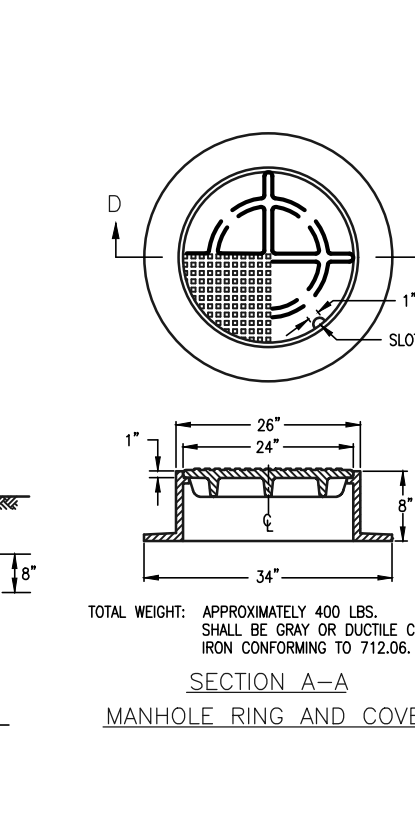
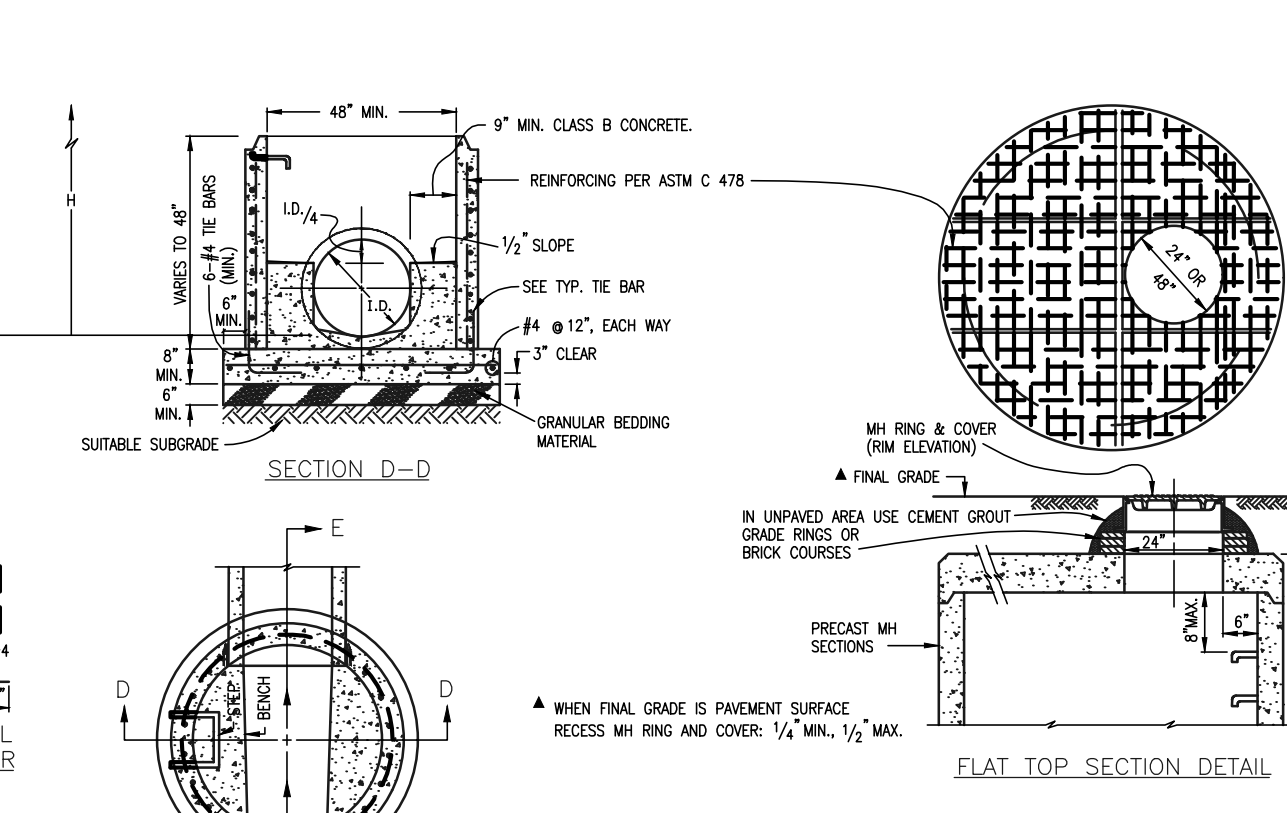
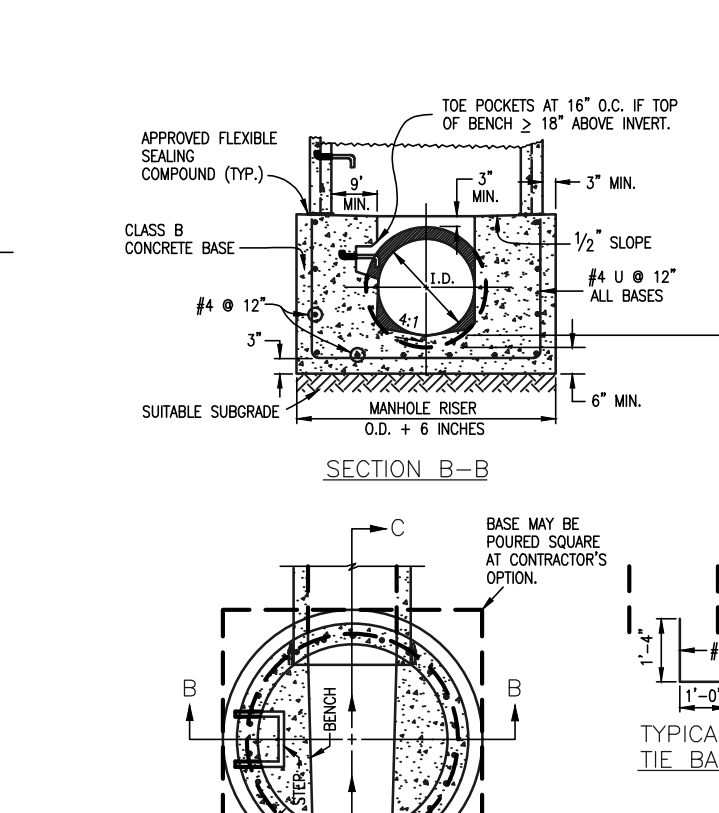
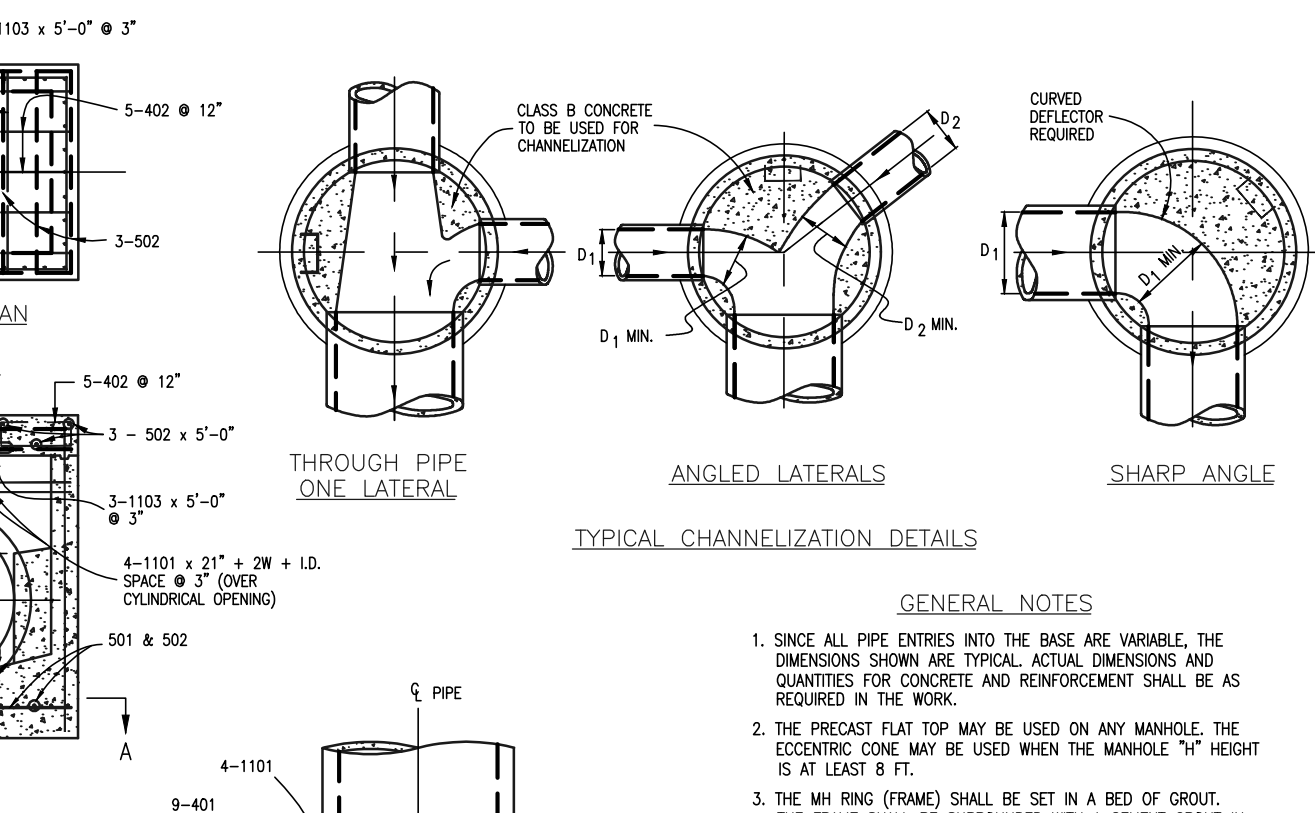
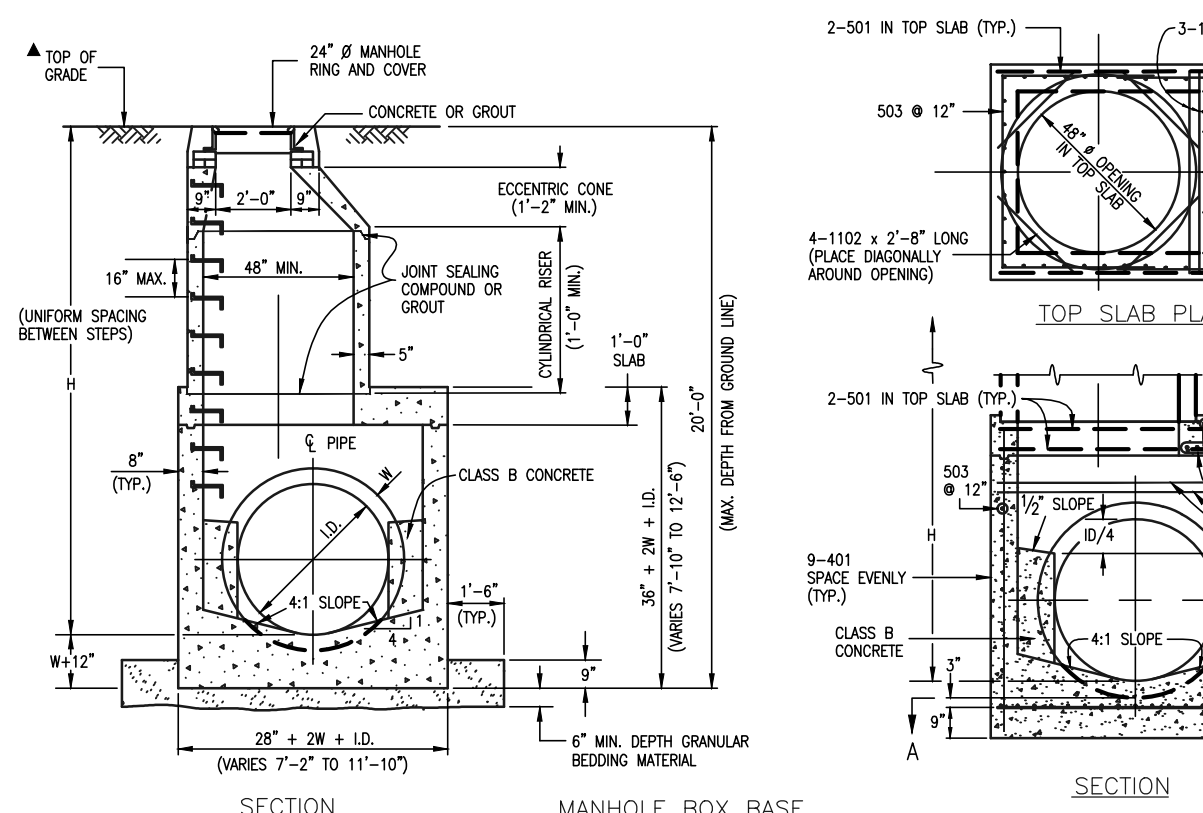
EPC TYPE A CURB & GUTTER DETAIL



TRANSITION CURB DETAIL

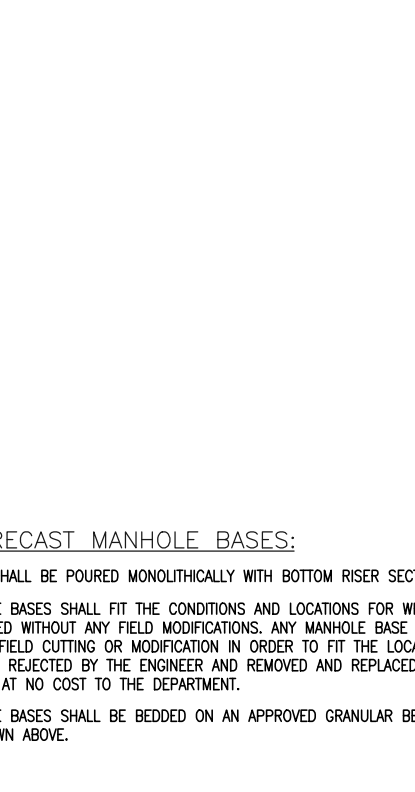
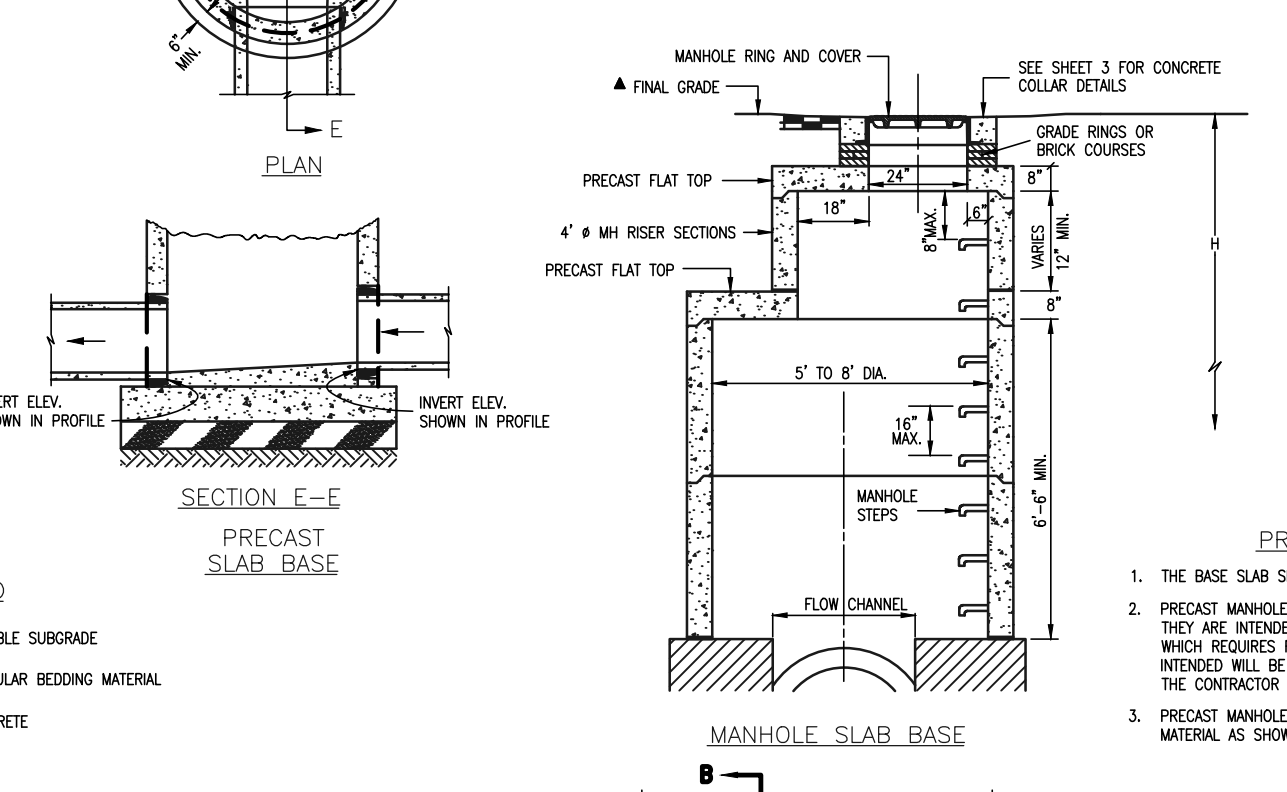
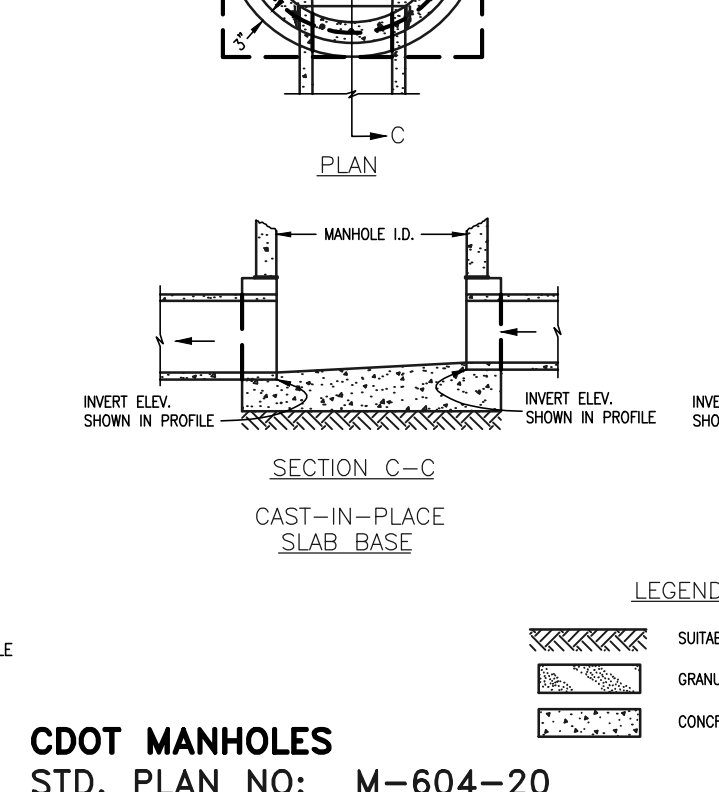
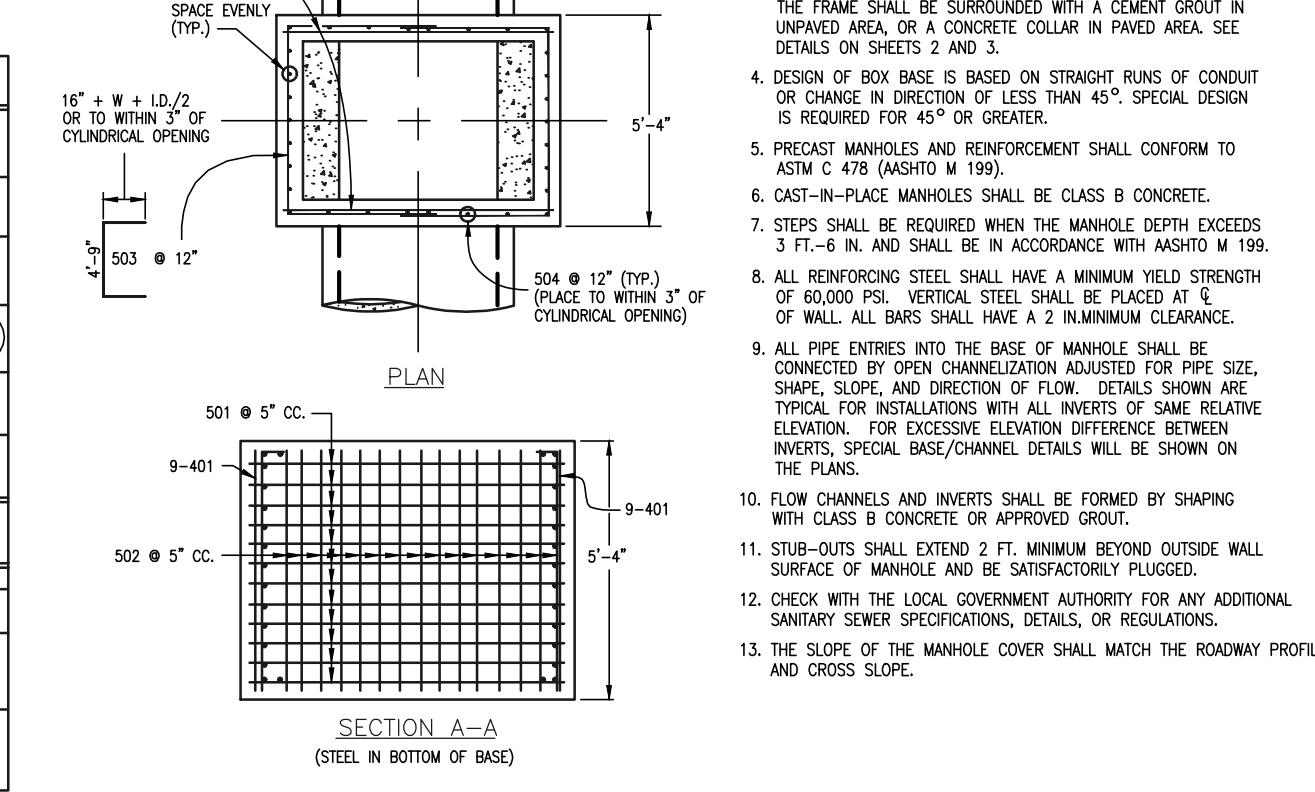


ZERO HEIGHT CURB TRANSITION DETAIL



QUANTITIES FOR CONCRETE MANHOLE BOX BASE

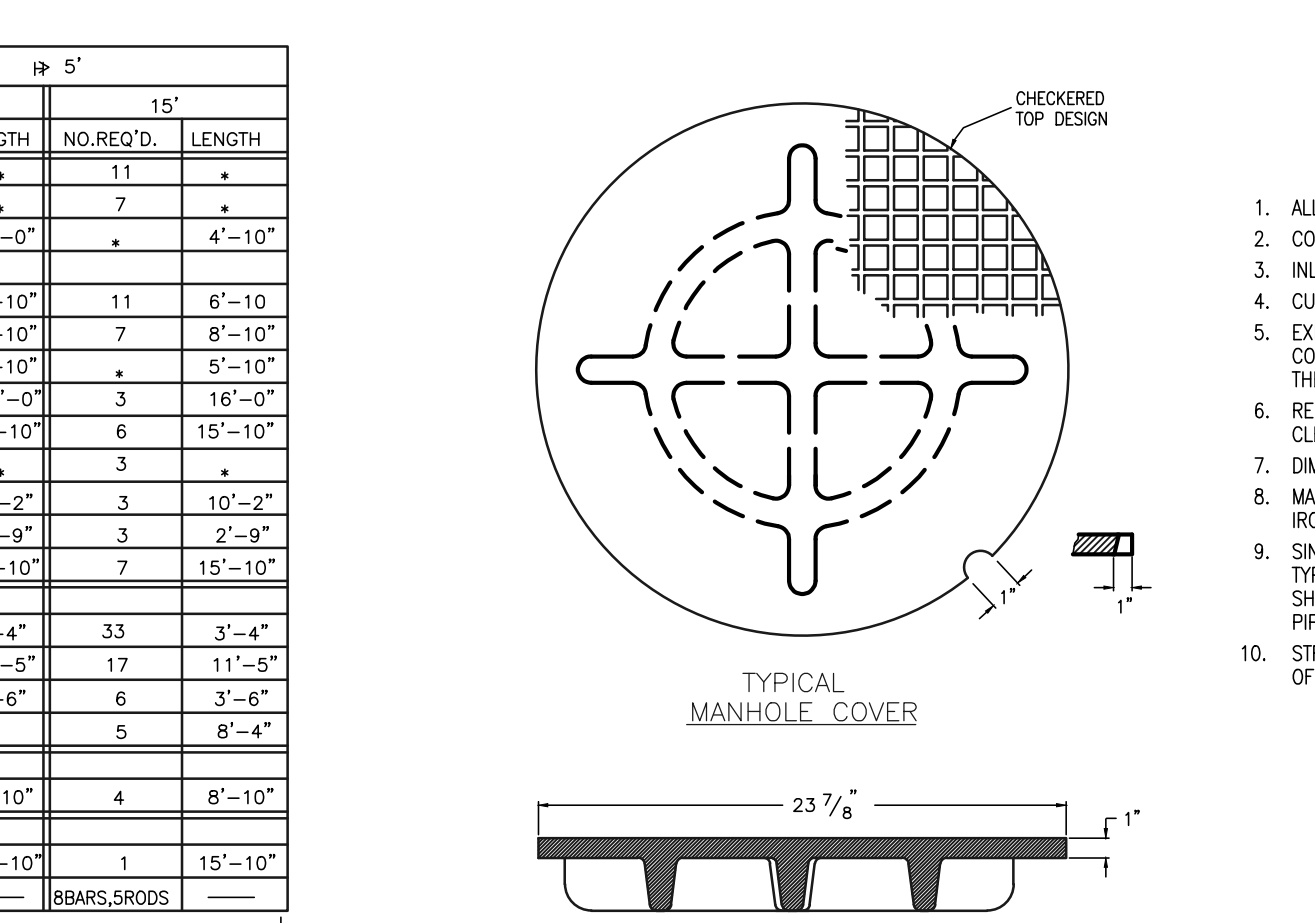
MARK	SIZE	TYPE	WT. #/FT.	FORMULAS
401	4	I	0.668	401 BAR LENGTH = 32" + 2W + I.D.
402	4	III	0.668	402 BAR LENGTH = I.D. + 2W
501	5	I	1.043	501 BAR LENGTH = 24" + I.D. + 2W
502	5	I	1.043	502 NUMBER BARS REQ'D. = 3 + (24 + I.D. + 2W) / 16
503	5	II	1.043	503 NUMBER BARS REQ'D. = 2 + (13 + I.D. + 2W) / 16
504	5	I	1.043	504 NUMBER BARS REQ'D. = 2 + (24 + I.D. + 2W) / 16
1101	11	I	5.313	1101 BAR LENGTH = 21" + I.D. + 2W
1102	11	I	5.313	1102 BAR LENGTH = 21" + I.D. + 2W
1103	11	I	5.313	1103 BAR LENGTH = 21" + I.D. + 2W



CDOT MANHOLES STD. PLAN NO: M-604-20

TABLE ONE ~ BAR LIST FOR CURB INLETS, TYPE "R"

MARK	DIA. IN.	O.C. SPACING	TYPE	ALL INLETS				INLETS, H = 5"			
				L=5"	L=10"	L=15"	L=10"	L=15"	L=10"	L=15"	
401	1 1/2"	11"	II	15	21	26	11	11	11	11	11
402	1 1/2"	11"	II	7	13	18	7	7	7	7	
403	9"	11"	II	4-10"	4-10"	4-10"	4-10"	4-10"	4-10"	4-10"	



GENERAL NOTES

- ALL CONCRETE SHALL BE CLASS B.
- CONCRETE WALLS SHALL BE FORMED ON BOTH SIDES AND SHALL BE 8 IN. THICK.
- INLET STEPS SHALL BE IN ACCORDANCE WITH ASHOTO M 199.
- CURB FACE ASSEMBLY SHALL BE GALVANIZED AFTER WELDING.
- EXPOSED CONCRETE CORNERS SHALL BE CHAMFERED 1/4 IN. CURB AND GUTTER CORNERS SHALL BE FINISHED TO MATCH THE EXISTING CURB AND GUTTER BEYOND THE TRANSITION GUTTER.
- REINFORCING BARS SHALL BE DEFORMED AND SHALL HAVE A 2 IN. MINIMUM CLEARANCE. ALL REINFORCING BARS SHALL BE EPOXY COATED.
- DIMENSIONS AND WEIGHTS OF TYPICAL MANHOLE RING AND COVER ARE NOMINAL.
- MATERIAL FOR MANHOLE RINGS AND COVERS SHALL BE GRAY OR DUCTILE CAST IRON CONFORMING TO 712.06.
- SINCE PIPE ENTRIES INTO THE BASE ARE VARIABLE, THE DIMENSIONS SHOWN ARE TYPICAL. ACTUAL DIMENSIONS AND QUANTITIES FOR CONCRETE AND REINFORCEMENT SHALL BE AS REQUIRED IN THE WORK. QUANTITIES INCLUDE VOLUMES OCCUPIED BY PIPES.
- STRUCTURAL STEEL SHALL BE GALVANIZED AND SHALL CONFORM TO THE REQUIREMENTS OF 712.06.

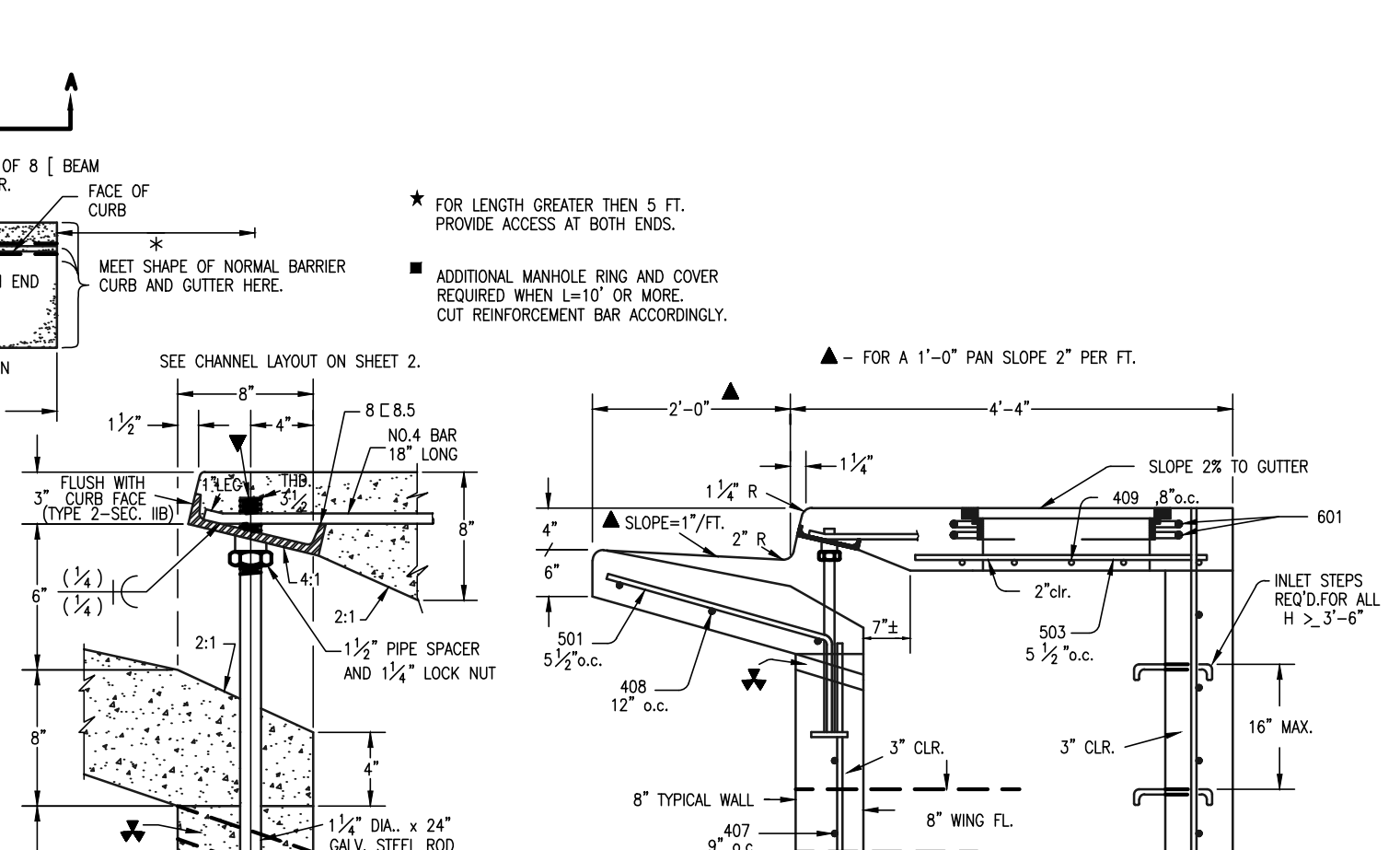
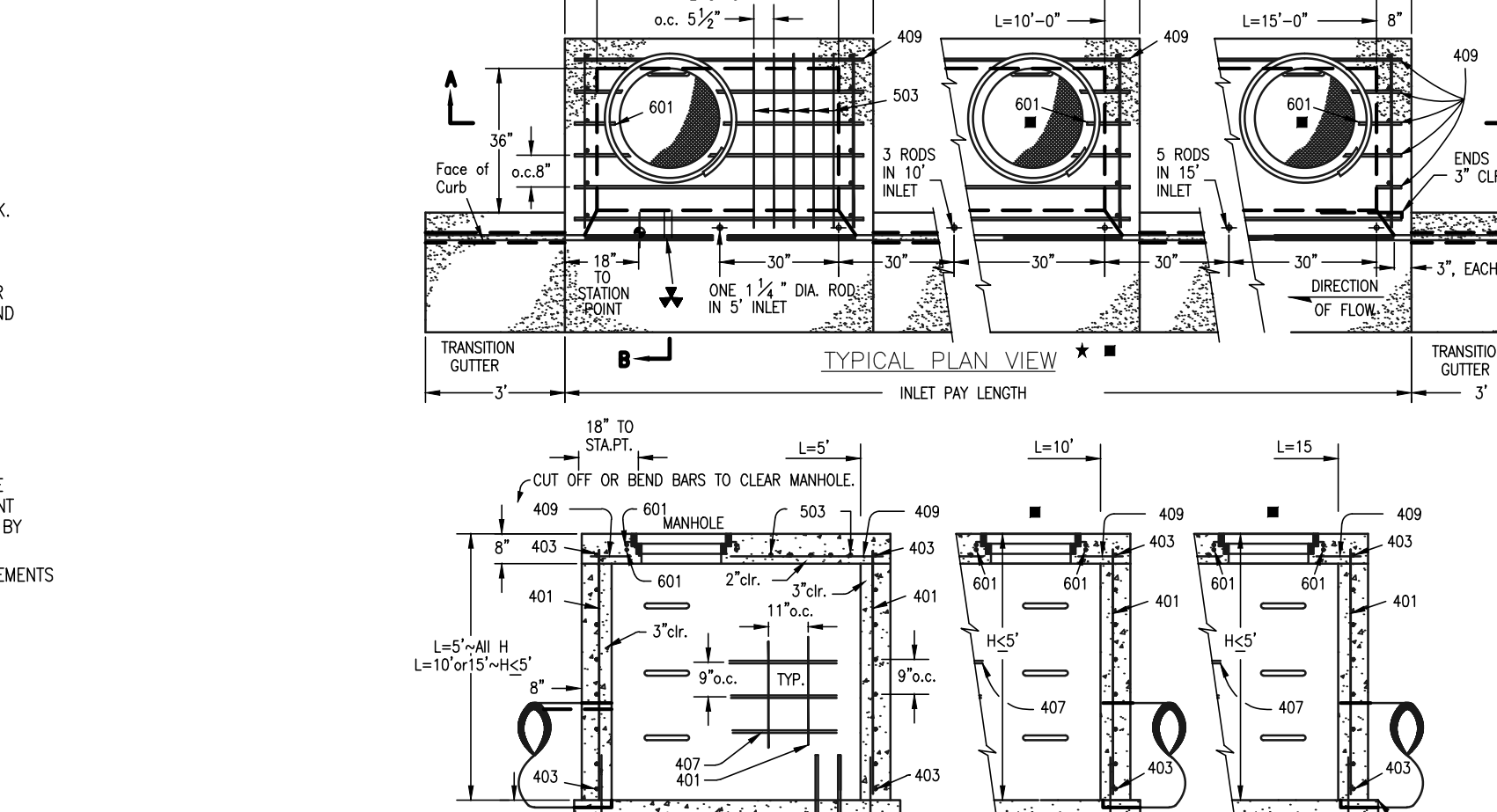
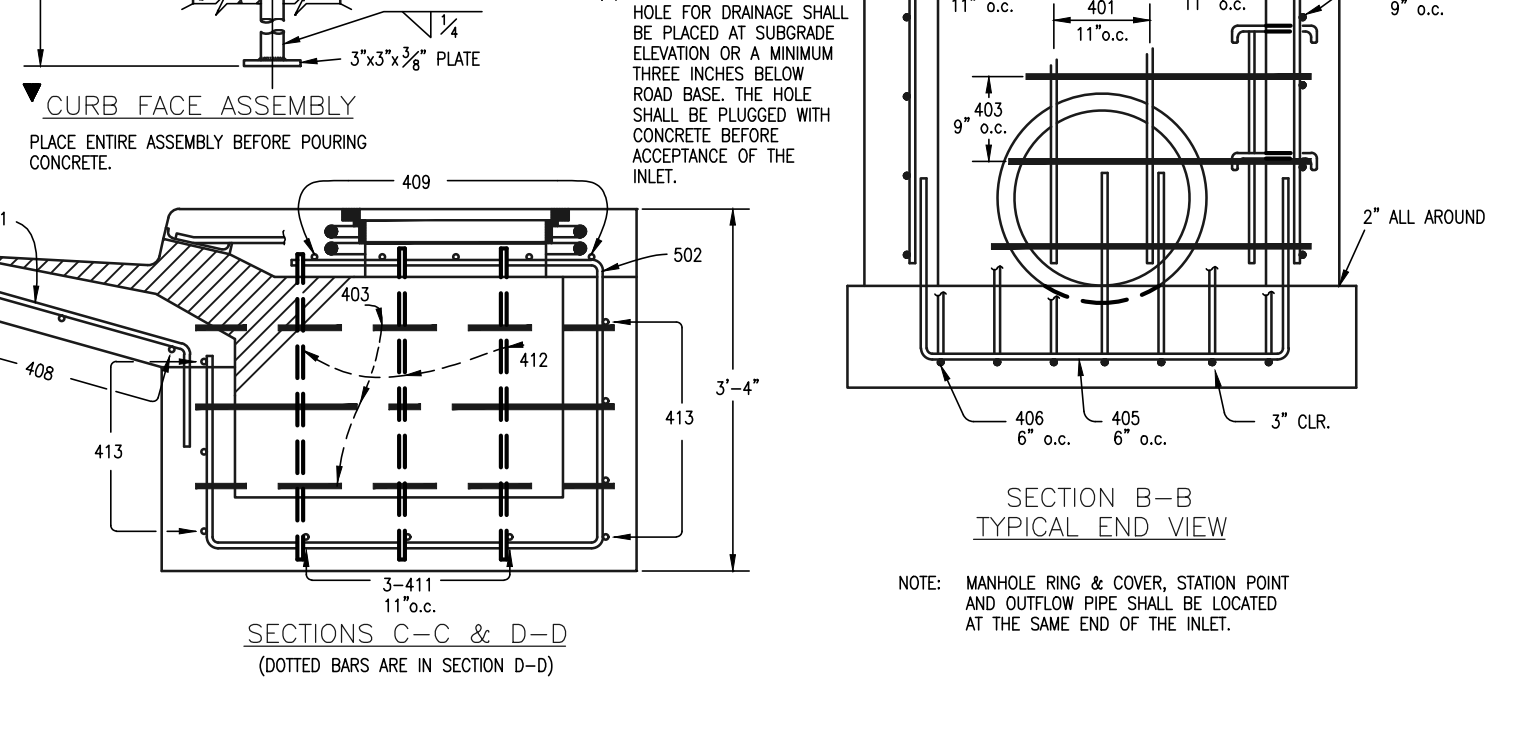
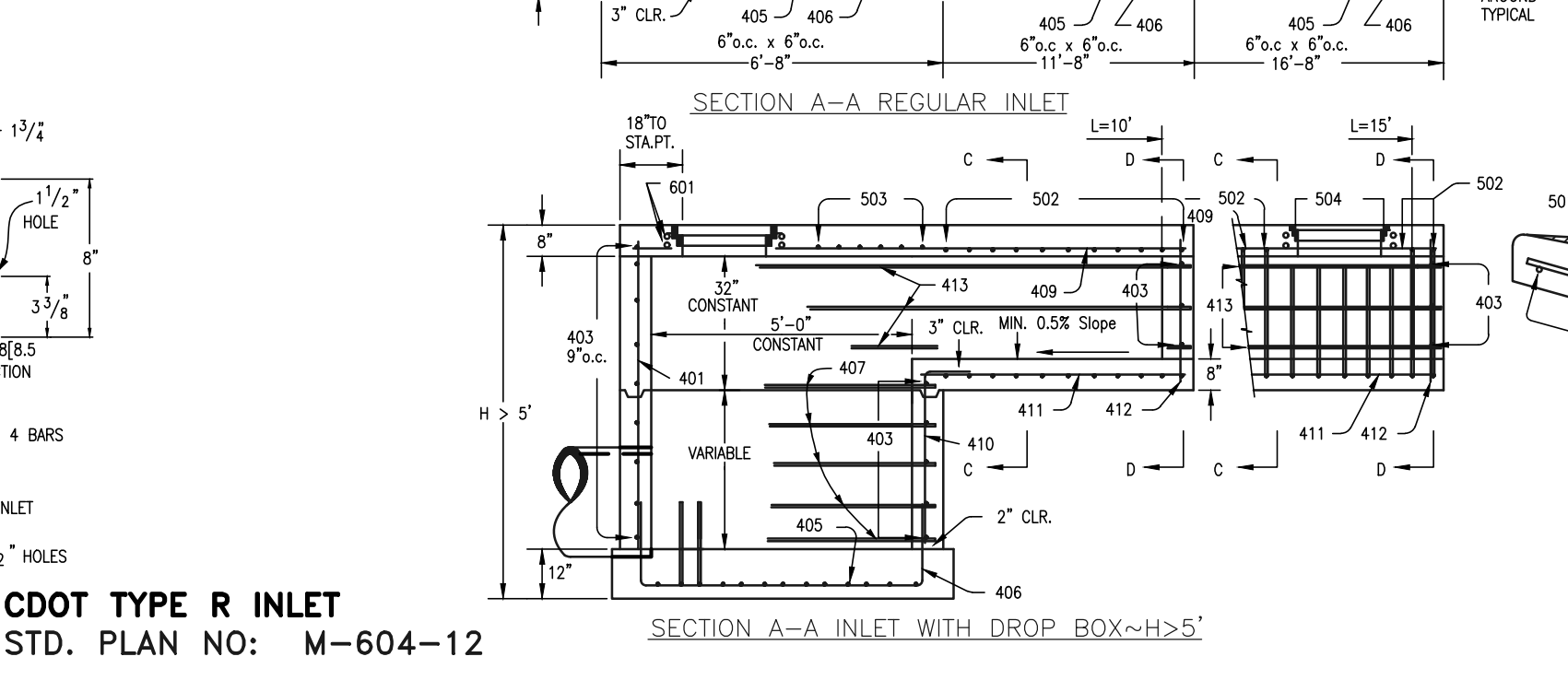
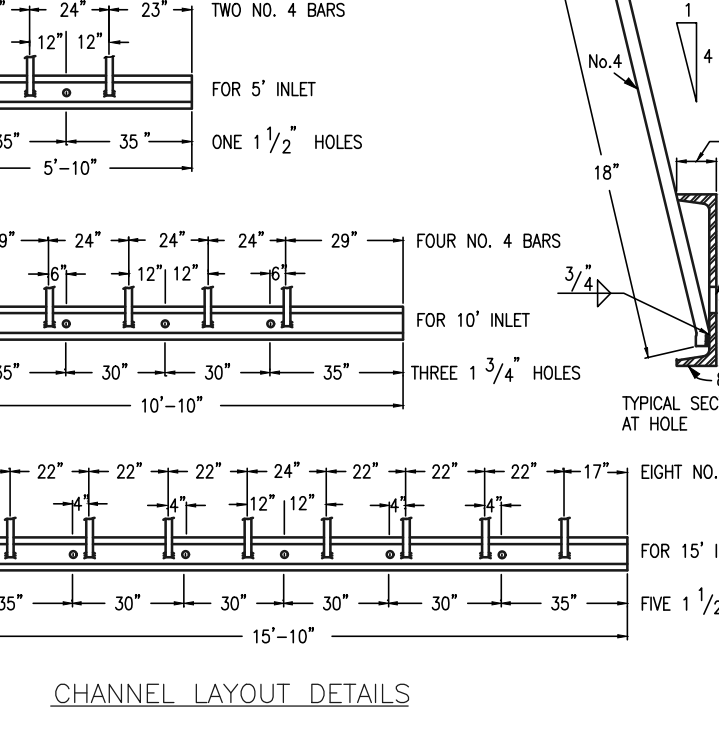
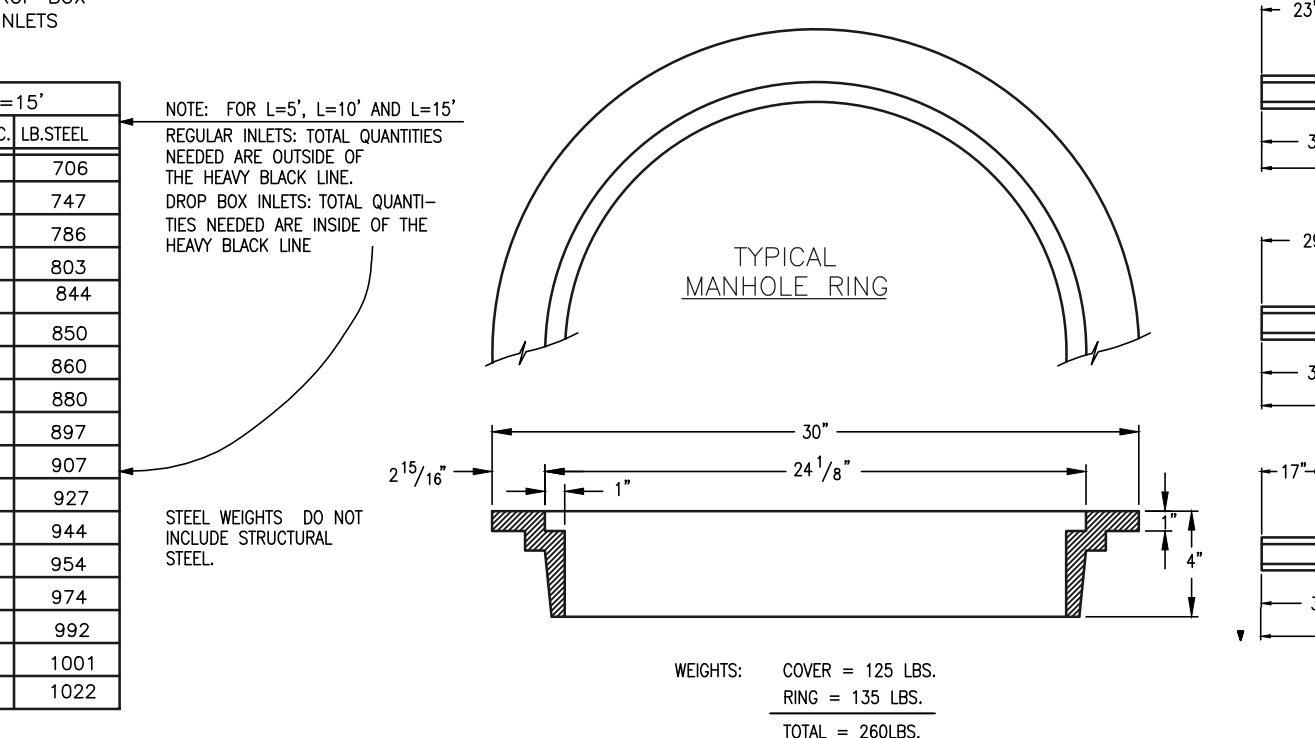
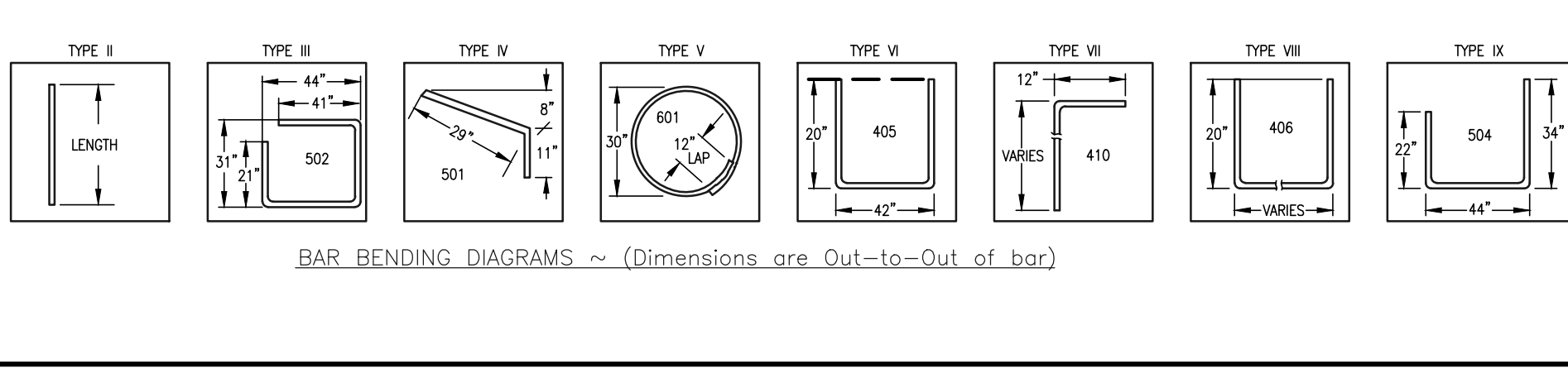


TABLE TWO ~ BARS AND QUANTITIES VARIABLE WITH "H"

H"	LENGTH	REGULAR INLETS			DROP BOX INLETS		
		NO. REQ'D.	WT. (LBS.)	WT. (LBS.)	NO. REQ'D.	WT. (LBS.)	WT. (LBS.)
3'-0"	2'-8"	10	7	3.2	285	5.3	497
3'-6"	3'-2"	10	7	3.4	305	5.7	528
4'-0"	3'-8"	12	9	3.7	326	6.0	559
4'-6"	4'-2"	12	9	3.9	354	6.4	571
5'-0"	4'-8"	14	11	4.1	354	6.7	602
5'-6"	5'-2"	16	13	4.4	375	6.0	607
6'-0"	5'-8"	16	13	4.6	382	6.2	616
6'-6"	6'-2"	18	15	4.8	402	6.4	637
7'-0"	6'-8"	20	17	5.0	423	6.6	654
7'-6"	7'-2"	20	17	5.3	430	6.9	664
8'-0"	7'-8"	22	19	5.5	451	7.1	684
8'-6"	8'-2"	24	21	5.7	471	7.3	702
9'-0"	8'-8"	24	21	6.0	479	7.6	711
9'-6"	9'-2"	26	23	6.2	499	7.8	732
10'-0"	9'-8"	28	25	6.7	520	8.0	749
10'-6"	10'-2"	30	27	6.7	527	8.3	759
11'-0"	10'-8"	30	27	6.9	547	8.5	779



CDOT TYPE R INLET STD. PLAN NO: M-604-12



48 HOURS BEFORE YOU DIG, CALL UTILITY LOCATORS

811

UTILITY NOTIFICATION CENTER OF COLORADO

ITS THE LAW

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

NO. REVISION	DATE	REVIEW:

PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF CLASSIC CONSULTING ENGINEERS AND SURVEYORS, LLC

MARC A. WHORTON, COLORADO P.E. #37155

CLASSIC CONSULTING

BENT GRASS COMMERCIAL

FILING NO. 3

DETAIL SHEET

DESIGNED BY: MAW SCALE: DATE: 04-21-21

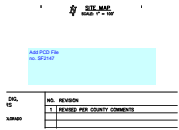
DRAWN BY: MAW (H) 1" = NA SHEET 8 OF 8

CHECKED BY: (V) 1" = NA JOB NO. 2177.64

619 N. Cascade Avenue, Suite 200 Colorado Springs, Colorado 80903 (719)785-0790 (719)785-0799(Fax)

Construction Drawings_v1 redlines.pdf Markup Summary 1-11-2022

Daniel Torres (32)



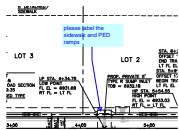
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Author: Daniel Torres
Date: 1/6/2022 8:29:11 AM
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Color: ■
Layer:
Space:

Add PCD File
no. SF2147



Subject: Callout
Page Label: [1] Layout1
Author: Daniel Torres
Date: 1/10/2022 1:12:24 PM
Status:
Color: ■
Layer:
Space:

Sidewalks are to be installed with this subdivision.
Please revise.



Subject: Callout
Page Label: [1] Layout1
Author: Daniel Torres
Date: 1/10/2022 1:15:24 PM
Status:
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Layer:
Space:

please label the sidewalk and PED ramps



Subject: Highlight
Page Label: [1] Layout1
Author: Daniel Torres
Date: 1/10/2022 1:15:33 PM
Status:
Color: ■
Layer:
Space:



Subject: Cloud+
Page Label: [1] Layout1
Author: Daniel Torres
Date: 1/10/2022 4:50:09 PM
Status:
Color: ■
Layer:
Space:

The sidewalks and ramps along the public roadway shall be constructed with this subdivision. The sidewalk along the private roadway can be done with the development of the lots. Please revise.



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Page Label: [1] Layout1
Author: Daniel Torres
Date: 1/10/2022 1:37:30 PM
Status:
Color: ■
Layer:
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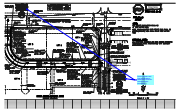
Please update the private road sign to match the attached specifications.



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Page Label: [1] Layout1
Author: Daniel Torres
Date: 1/10/2022 1:37:33 PM
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Color: ■
Layer:
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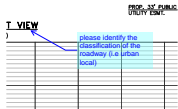


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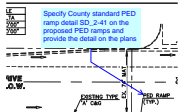
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Author: Daniel Torres
Date: 1/10/2022 4:48:47 PM
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Color: ■
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see the private road sign specifications above and revise the road name sign accordingly.



Subject: Callout
Page Label: [1] Layout1
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Date: 1/10/2022 2:29:02 PM
Status:
Color: ■
Layer:
Space:

please identify the classification of the roadway (i.e. urban local)

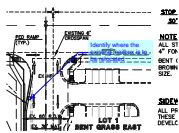


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Date: 1/10/2022 4:26:50 PM
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Specify County standard PED ramp detail SD_2-41 on the proposed PED ramps and provide the detail on the plans

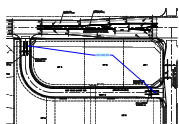


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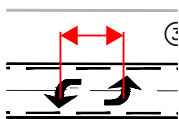
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Page Label: [1] Layout1
Author: Daniel Torres
Date: 1/10/2022 5:22:09 PM
Status:
Color: ■
Layer:
Space:

Identify where the existing mailbox is to be relocated



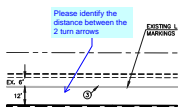
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Page Label: [1] Layout1
Author: Daniel Torres
Date: 1/10/2022 2:52:32 PM
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Color: ■
Layer:
Space:

Provide arrows at the private roadway lanes



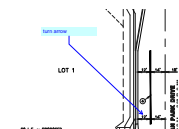
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Page Label: [1] Layout1
Author: Daniel Torres
Date: 1/10/2022 2:33:04 PM
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Layer:
Space:

Please identify the distance between the 2 turn arrows



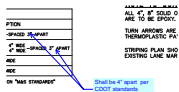
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Page Label: [1] Layout1
Author: Daniel Torres
Date: 1/10/2022 2:43:58 PM
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Space:

turn arrow



Subject: Callout
Page Label: [1] Layout1
Author: Daniel Torres
Date: 1/10/2022 2:49:38 PM
Status:
Color: ■
Layer:
Space:

Shall be 4" apart per CDOT standards (S-627-1)

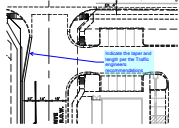


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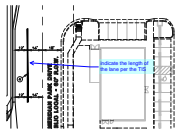
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Page Label: [1] Layout1
Author: Daniel Torres
Date: 1/10/2022 2:51:45 PM
Status:
Color: ■
Layer:
Space:

per County standard notes turn arrows shall be 125 mil. Please revise



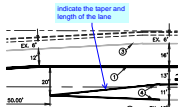
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Page Label: [1] Layout1
Author: Daniel Torres
Date: 1/10/2022 5:23:41 PM
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Space:

Indicate the taper and length per the Traffic engineers recommendations



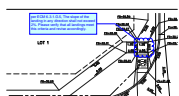
Subject: Callout
Page Label: [1] Layout1
Author: Daniel Torres
Date: 1/10/2022 5:23:13 PM
Status:
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Layer:
Space:

indicate the length of the lane per the TIS



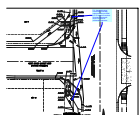
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Date: 1/10/2022 5:24:11 PM
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Space:

indicate the taper and length of the lane



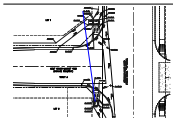
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Page Label: [1] Layout1
Author: Daniel Torres
Date: 1/10/2022 4:21:06 PM
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Space:

per ECM 6.3.1.G.5, The slope of the landing in any direction shall not exceed 2%. Please verify that all landings meet this criteria and revise accordingly.

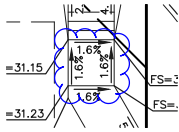


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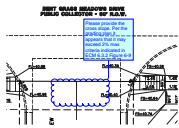
FYI: Should this slope exceed 5% in the field, edge protection per ECM 6.3.1.G would be required. Consider reducing the slope% to allow for construction tolerance



Subject: Line
Page Label: [1] Layout1
Author: Daniel Torres
Date: 1/10/2022 4:21:13 PM
Status:
Color: ■
Layer:
Space:



Subject: Cloud
Page Label: [1] Layout1
Author: Daniel Torres
Date: 1/10/2022 4:12:43 PM
Status:
Color: ■
Layer:
Space:



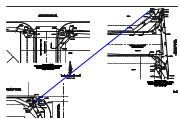
Subject: Cloud+
Page Label: [1] Layout1
Author: Daniel Torres
Date: 1/10/2022 4:17:31 PM
Status:
Color: ■
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Space:

Please provide the cross slope. Per the grading plan it appears that it may exceed 2% max criteria indicated in ECM 6.3.2 Figure 6-9

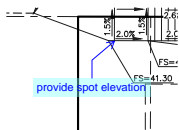


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Author: Daniel Torres
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Please label the cross slope

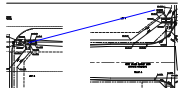


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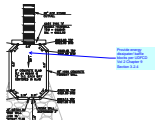


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Page Label: [1] Layout1
Author: Daniel Torres
Date: 1/10/2022 4:20:35 PM
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Space:

provide spot elevation



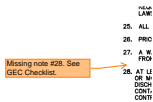
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Date: 1/10/2022 4:21:24 PM
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Space:



Subject: Callout
Page Label: [1] Layout1
Author: Daniel Torres
Date: 1/10/2022 5:32:04 PM
Status:
Color: ■
Layer:
Space:

Provide energy dissipater/ baffle blocks per UDFCD Vol 2 Chapter 9 Section 3.2.4

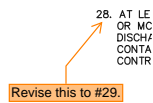
Glenn Reese - EPC Stormwater (15)



25. ALL
 26. PRO
 27. A
 28. AT LE
 OR MC
 DISCH
 CONTR

Subject: SW - Textbox with Arrow
Page Label: [1] Layout1
Author: Glenn Reese - EPC Stormwater
Date: 12/27/2021 2:43:12 PM
Status:
Color: ■
Layer:
Space:

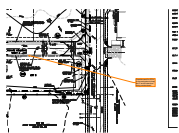
Missing note #28. See GEC Checklist.



28. AT LE
 OR MC
 DISCH
 CONTR

Subject: SW - Textbox with Arrow
Page Label: [1] Layout1
Author: Glenn Reese - EPC Stormwater
Date: 12/27/2021 2:43:23 PM
Status:
Color: ■
Layer:
Space:

Revise this to #29.



Subject: SW - Textbox with Arrow
Page Label: [1] Layout1
Author: Glenn Reese - EPC Stormwater
Date: 12/27/2021 1:34:57 PM
Status:
Color: ■
Layer:
Space:

Consider need for SCL's in the road gutter to keep the IP at the inlets from being overburdened.

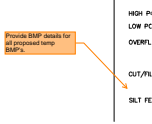


Subject: SW - Textbox with Arrow
Page Label: [1] Layout1
Author: Glenn Reese - EPC Stormwater
Date: 12/27/2021 1:52:44 PM
Status:
Color: ■
Layer:
Space:

With no sediment basin on the proposed site, how will this pond (and it's outlet) be protected from the sediment from this proposed site? There will be additional sediment loading in the pond. This might just be a maintenance issue, but consider additional ways to protect the pond's outlet structure and the discharging water, if applicable.



Subject: SW - Rectangle
Page Label: [1] Layout1
Author: Glenn Reese - EPC Stormwater
Date: 12/27/2021 1:04:55 PM
Status:
Color: ■
Layer:
Space:



Subject: SW - Textbox with Arrow
Page Label: [1] Layout1
Author: Glenn Reese - EPC Stormwater
Date: 12/27/2021 1:06:15 PM
Status:
Color: ■
Layer:
Space:

Provide BMP details for all proposed temp BMP's.



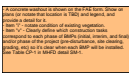
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Page Label: [1] Layout1
Author: Glenn Reese - EPC Stormwater
Date: 12/27/2021 1:06:08 PM
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Remember that the VTC detail should be min 75ft long, per DCMv2, Chap 3.3



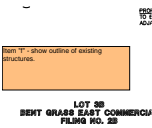
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Page Label: [1] Layout1
Author: Glenn Reese - EPC Stormwater
Date: 12/27/2021 1:43:56 PM
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Color: ■
Layer:
Space:

It seems that a small swale/berm would be appropriate here to protect existing road and building on Lot 3B from runoff and accompanying sediment. Consider need to protect this existing property during and after construction with temp (currently SF) and permanent BMPs.



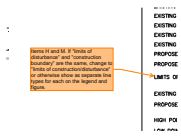
Subject: SW - Textbox
Page Label: [1] Layout1
Author: Glenn Reese - EPC Stormwater
Date: 12/27/2021 2:01:02 PM
Status:
Color: ■
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- A concrete washout is shown on the FAE form. Show on plans (or notate that location is TBD) and legend, and provide a detail for it.
- Item "i" - notate condition of existing vegetation.
- Item "v" - Clearly define which construction tasks correspond to each phase of BMPs (initial, interim, and final) and/or phase of the project (pre-disturbance, site clearing, grading, etc) so it's clear when each BMP will be installed. See Table CP-1 in MHFD detail SM-1.



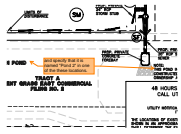
Subject: SW - Textbox
Page Label: [1] Layout1
Author: Glenn Reese - EPC Stormwater
Date: 12/27/2021 1:52:00 PM
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Item "f" - show outline of existing structures.



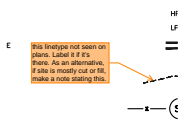
Subject: SW - Textbox with Arrow
Page Label: [1] Layout1
Author: Glenn Reese - EPC Stormwater
Date: 12/27/2021 1:49:00 PM
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Items H and M. If "limits of disturbance" and "construction boundary" are the same, change to "limits of construction/disturbance" or otherwise show as separate line types for each on the legend and figure.



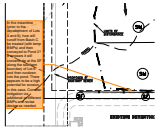
Subject: SW - Textbox with Arrow
Page Label: [1] Layout1
Author: Glenn Reese - EPC Stormwater
Date: 12/27/2021 1:52:51 PM
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Color: ■
Layer:
Space:

and specify that it is named "Pond 2" in one of the these locations.



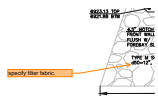
Subject: SW - Textbox with Arrow
Page Label: [1] Layout1
Author: Glenn Reese - EPC Stormwater
Date: 12/27/2021 1:55:16 PM
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this linetype not seen on plans. Label it if it's there. As an alternative, if site is mostly cut or fill, make a note stating this.



Subject: SW - Textbox with Arrow
Page Label: [1] Layout1
Author: Glenn Reese - EPC Stormwater
Date: 1/10/2022 9:31:58 AM
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In the meantime (prior to the development of Lots 4 and 6), how will runoff from Basin C be treated (with temp BMPs) and then conveyed to Pond 2? It appears it will concentrate at the SF along the southern boundary of Lot 6 and then rundown into the pond. There appears to be a high potential for erosion in this case. Consider mitigation via additional or different BMPs and revise design as needed.



Subject: SW - Textbox with Arrow
Page Label: [1] Layout1
Author: Glenn Reese - EPC Stormwater
Date: 12/27/2021 1:50:43 PM
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specify filter fabric.