

Public Works Design and Construction Manual

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**APPENDIX A-1. Site Development Application for DRT
Submittal**

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SITE DEVELOPMENT APPLICATION FOR DRT SUBMITTAL
PUBLIC WORKS DEPARTMENT
 171 North Ross Street, Suite 200
 Auburn, AL 36830
(334) 501-3000 ~ Fax: (334) 501-7294

Applicant Name: _____	Project Name: _____
Mailing Address: _____	Site Address: _____
_____	Phone Number: _____
Email Address: _____	

A COPY OF THE DEED TO THE SUBJECT PROPERTY MUST BE SUBMITTED WITH THIS APPLICATION. If the applicant is not the owner, then a letter allowing the applicant to act as an "authorized agent" must be on file. All associated fees will be charged to the applicant unless otherwise arranged.

General Location: _____

Gross Area of Subject Property: _____ Number of Individual Units (If residential): _____

Current Use: _____ Current Zoning District: _____

Proposed Use: _____

Is the proposed development to be on an existing lot of record? Yes No

Is the proposed development on a designated corridor? Yes No

Required Documents

For a complete list of the submittal requirements, see section 1.3.4 of the Public Works Design and Construction Manual

For site development projects an approved site plan, approved engineering plans and an approved landscape plan (pursuant to regulations in Section 802.12) are required before release of the zoning certificate. Additionally, all erosion & sediment control measures and detention (if required) must be installed and approved prior to release of the zoning certificate.

I, the applicant, certify that all of the above facts are true and correct to the best of my knowledge. I understand that any development approval(s) granted pursuant to this application shall be subject to all applicable regulations of the City of Auburn, and that such approval(s) shall expire unless construction has commenced within eighteen (18) months following date of approval.

Applicant's Signature: _____	Date: _____
Applicant's Name (Please print): _____	Time: _____

----- FOR OFFICE USE ONLY -----	
Received By: _____	Date & Time: _____
Submittal Approved? Yes <input type="checkbox"/> No <input type="checkbox"/> Comment (if rejected): _____	
DRT Meeting Date: _____	

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APPENDIX A-2. Subdivision Application for DRT Submittal

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SUBDIVISION APPLICATION FOR DRT SUBMITTAL
PUBLIC WORKS DEPARTMENT
 171 North Ross Street, Suite 200
 Auburn, AL 36830
 (334) 501-3000 ~ Fax: (334) 501-7294

Applicant Name: _____	Project Name: _____
Mailing Address: _____	Site Address: _____
_____	Phone Number: _____
Email Address: _____	

A COPY OF THE DEED TO THE SUBJECT PROPERTY MUST BE SUBMITTED WITH THIS APPLICATION. If the applicant is not the owner, then a letter allowing the applicant to act as an "authorized agent" must be on file. All associated fees will be charged to the applicant unless otherwise arranged.

General Location: _____

Gross Area of Subject Property: _____ Number of Individual Lots: _____

Current Zoning District: _____ Will this be developed as *Performance*? Yes No

Will this development require Lee County review? Yes No

Has a Preliminary Plat Been Approved? Yes No

Has the Preliminary Plat changed since it was approved by the Planning Commission? Yes No

If yes, describe the changes: _____

Required Documents

For a complete list of the submittal requirements, see section 1.3.4 of the Public Works Design and Construction Manual

I, the applicant, certify that all of the above facts are true and correct to the best of my knowledge. I understand that any development approval(s) granted pursuant to this application shall be subject to all applicable regulations of the City of Auburn, and that such approval(s) shall expire unless construction has commenced within eighteen (18) months following date of approval.

Applicant's Signature: _____	Date: _____
Applicant's Name (Please print): _____	Time: _____

----- FOR OFFICE USE ONLY -----	
Received By: _____	Date & Time: _____
Submittal Approved? Yes <input type="checkbox"/> No <input type="checkbox"/> Comment (if rejected): _____	
DRT Meeting Date: _____	

Unless the box below is checked, review comments will be posted on the City of Auburn web site where they will be available for download in PDF format.

Do not post the DRT review comments for the subject project on the City of Auburn web site.

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**APPENDIX B-1. Site Development Plans Engineering
Checklist**

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DRT Checklist for Site Development Construction Plans



Project Name: _____

This checklist must be submitted with every set of engineering construction plans for site developments (conditional & permitted use projects). All items on the checklist shall be addressed. If the item is not applicable to this project check the box next to the item labeled "N/A", and provide comment. Items preceded by an asterisk (*) are required for the submittal to be considered complete. If one of these items is missing from the submittal without a valid explanation, the entire submittal will be rejected. Note that this checklist is not intended to be all-inclusive, and fulfillment of this checklist does not alleviate the obligation of the designer to meet all City of Auburn code, regulations, ordinances, and specifications. The purpose of this checklist is to facilitate a more efficient plan review process for the designer and the review team.

Description	Check	N/A	Comments
Required Plan Sheets			
These are the basic sheets we expect to see in a set of plans. Some sheets may be combined on certain projects, or have different names (for example, water and sewer shown on one utility plan sheet for small projects).			
* Title/Cover Sheet			
* Project Notes			
* Existing Conditions/Demo Plan			
* Site Plan (engineering)			
* Water Plan			
* Sanitary Sewer Plan			
* Sanitary Sewer Profiles (for public infrastructure)			
* Grading & Drainage Plan			
* Storm Sewer Profiles (for public infrastructure)			
* Erosion & Sediment Control Plan			
* Street Plan & Profiles (for public infrastructure)			
* Miscellaneous Details, Cross-sections & Other Sheets			
* City of Auburn Standard Details			
Title Sheet			
Project Title			
Permit Numbers (USACE & ADEM)			
Relevant Contact Information			
Sheet Index			
Vicinity Map (legible)			
Engineer's Seal			
Project Notes			
Verify that project notes do not conflict with City of Auburn specifications			
Provide Legend			
Existing Conditions / Demo Plan			
Include North arrow			
Show locations of existing structures			
Indicate if structures are being removed			
Show existing topography with clearly labeled contours lines			
Minimum 2ft contour intervals with every 10ft line labeled			
Show existing water features including wetland areas			
Show existing easements and right-of-ways			
Show existing utilities			
Indicate if being removed/abandoned			
Show all property lines			
Show the limits of clearing & grubbing			
Site Plan (engineering)			
Show property lines, building layout, pavement, traffic/parking striping, traffic signs, etc.			
Indicate parking dimensions, lane widths, and corner radii			
Show dumpster location			
Verify Planning Commission resolutions have been met for Conditional Uses			
Water Plans			
*Required water service submittals prior to or with plan submittal:			
Development Application for Water and Sewer Service			
Backflow Protection Information Sheet			
Fire flow calculations (where applicable, coordinate with the WRM Department)			
Include North arrow			
If water layout requires multiple pages, include an overall plan sheet			
The following existing water infrastructure should be shown:			
Location, size, and material of all water mains and service lines			
Location and size of all water meters			
Location of the nearest main line valves for isolation of the site			

Description	Check	N/A	Comments
Location of the nearest fire hydrants			
Location of all blow-off valves and air release valves			
The following proposed water infrastructure should be shown:			
Location, size, and material of all water mains and service lines			
Location and size of all water meters (place at edge of ROW or easement)			
Location of all isolation valves, blow-off valves, and air release valves			
Location of all fire hydrants			
Location of FDC within 125 ft of a fire hydrant			
Location of all backflow prevention devices, and vaults			
Location of all bends, tees, and fittings (specify type and degree)			
Location and detail of all necessary thrust restraint			
Location of vault drain to grade or to storm sewer			
Show all existing and proposed easements			
Provide a general layout of other utilities (existing and proposed)			
Clearly differentiate between existing and proposed utilities			
Detail all main line connections showing appropriate tap configuration and fittings			
Provide backflow prevention for all main line connections			
Provide estimated static pressure (normally 820 - FFE / 2.31)			
Use pressure reducing valves where static pressure > 70 psi			
Size pipes to maintain a velocity not to exceed 10 ft/sec			
Provide minimum cover of 30 inches for lines 8 inches and smaller			
Provide minimum cover of 36 inches for lines larger than 8 inches			
Provide minimum 18 inches vertical separation where water & sewer cross			
Provide minimum 10 feet horizontal separation between water & sewer lines			
Provide sprinkler count			
Provide the following notes where applicable:			
"Existing services to be abandoned shall be terminated at the main."			
"Notify AWWB of any scheduled outages 7 days prior to the outage."			
"Only AWWB personnel are authorized to operate AWWB valves."			
Sanitary Sewer Plans			
*Required sewer service submittals prior to or with plan submittal:			
Development Application for Water and Sewer Service			
Grease Trap Sizing Worksheet			
Approved pump station design (coordinated with the WRM Department)			
Include North arrow			
If sewer layout requires multiple pages, include an overall plan sheet			
Show all existing and proposed easements			
Provide a general layout of other utilities (existing and proposed)			
The following existing sewer infrastructure should be shown:			
Location of all manholes with rim, and all invert elevations provided			
Location, sizes, materials, and slopes of all sewer mains and laterals			
Location, and size of grease traps and/or oil & grit separators			
The following proposed sewer infrastructure should be shown:			
Location of all manholes with rim, and all invert elevations provided			
Location, sizes, materials, and slopes of all sewer mains and laterals			
Location and size of grease traps where required			
Location and size of oil & grit separators where required			
Location of cleanouts at the edge of ROW or easement			
Clearly differentiate between existing and proposed utilities			
Label all manholes and pipes (correspond with labels on profile sheets)			
Provide contours or specify finish floor elevations			
Indicate how existing sewer mains or services are to be abandoned			
Manholes shall be locked down if less than 1 foot above the 100-yr BFE			
Public sanitary sewer main requirements:			
Manholes shall be located in the center of the street where possible			
Design sewer lines for maximum capacity at half full			
DIP required where cover is greater than 12 feet or less than 3 feet			

Description	Check	N/A	Comments
DIP required where less than 2 feet of clearance between utilities			
DIP required within the 100-yr BFE or where bouyancy is a concern			
Provide consistent pipe material between manholes			
Minimum slope requirements:			
4"=2%, 6"=1%, 8"=0.60%, 10"=0.35%, 12"=0.30%			
Provide a minimum 0.10' drop across all straight through manholes			
Provide a minimum 0.25' drop across all turning manholes			
Manhole spacing should not exceed 400 feet			
Services tied into mains shall have a 3 feet minimum separation			
Service lines should connect to manholes where possible			
Use standard 4 inch drop for service lines into manholes			
Service lines angled against the flow use a minimum 6 inch drop			
If angle against the flow >135 degrees connect lateral directly to main			
No more than four laterals connected to a pass through manhole			
No more than five laterals connected to a beginning manhole			
Cleanouts to be located in traffic rated enclosure in paved areas			
Backflow prevention is required when any sewer portion of a building is less than 12 inches above the rim elevation of the nearest upstream manhole. Such lots shall be identified on the plans and the plat.			
Sanitary Sewer Pipe Profiles			
Indicate pipe material, size, slope and length			
Show all utility crossings			
Show existing and proposed grades			
Show all rim and invert elevations			
Show outside drop manhole where drop is 2 feet or greater			
Label all manholes and pipes (correspond with labels on plan sheets)			
Show existing mains and structures at all connection points			
Clearly differentiate between existing and proposed utilities			
Clearly differentiate between material types			
Grading & Drainage Plans			
Include North arrow			
If plans require multiple pages, include at least one overall plan sheet			
Show existing topographic contours			
Maximum 2ft contour intervals with every 10ft line labeled			
Used lighter or dashed line type for existing contour lines			
Show proposed contours			
Maximum 2ft contour intervals with every 10ft line labeled			
Proposed contour lines should tie-in to existing contour lines			
Show streams and other water features			
Show stream & wetland buffers			
Show 100-yr flood plain boundaries			
Indicate minimum FFE's for lots adjacent to water features			
Show all existing structures, utilities, and easements that will remain			
Show mitigation areas			
Indicate steep slopes (City of Auburn Zoning Ordinance)			
Show curb & gutter (2ft City of Auburn Std. C&G)			
Show all storm water inlets			
Max access spacing 500ft for 15in to 48in pipe (for public infrastructure)			
Max access spacing 800ft for 54in or greater (for public infrastructure)			
Double-wing inlets only used in sags (for public infrastructure)			
Show all proposed culverts			
Indicate type and dimensions			
Show headwalls and energy dissipaters			
Show all storm sewer pipe			
Show headwalls at discharge points			
Show all manholes and junction boxes			
Extend discharge points at least 10 ft beyond building lines			
Show rip-rap or other energy dissipators at discharge points			
Show all proposed drainage & utility easement			
Show detention system(s)			
Fencing required around ponds for slopes steeper than 3:1			
Pipes discharge at bottom of pond slopes			
Show outlet structure(s)			

Description	Check	N/A	Comments
City of Auburn Standard Details			
Include all relevant City of Auburn standard details with the final plans			
Miscellaneous Design Requirements			
No trees within 10ft of center line of utilities			
Sight distance analysis needed?			
Storage/taper length calculations for turn lanes? (can be shown on plans)			
are any waivers or variances required?			
The following note should be added to all utility plans and plats ²			
Easements shall be the greater of 20ft or 2 times the depth to the bottom of the utility. Easement widths shall be in increments of 10ft.			
Slope and grades of easements shall be passable by vehicles (maximum easement cross slope of 4:1)			
All topography should be relative to MSL (no assumed datum)			
Utility stub outs for future development should be placed in easements extending to the edge of the property line			
¹ a. Any area that has been disturbed and will remain so for more than 15 days shall be seeded and mulched within 5 days of being disturbed. b. Additional BMPs may be required by the QCP and/or City of Auburn over the course of the project to minimize sediment release from the site c. All BMPs shall be designed and installed in accordance with the Alabama Handbook for Erosion Control, Sediment Control, and Storm water Management on Construction Sites and Urban Areas and the City of Auburn standard erosion and sediment control details. d. The use of floc-blocks, polyacrylamide (PAM), or other settling enhancement materials may be required by the QCP or City of Auburn during course of construction to minimize turbidity and sediment release from the site.			
² No permanent structures may be constructed or placed on easements. Fences may be erected perpendicularly across the easement provided there is a minimum 12-foot wide access gate installed. If the gate is to be locked there must be a City-approved lock installed in conjunction with the owners lock. No trees shall be planted within 10 feet of utilities.			

SIGNED: _____
(engineer of record)

Revised 01/01/2016

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APPENDIX B-2. Subdivision Construction Plans Engineering
Checklist

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DRT Checklist for *Subdivision* Construction Plans



Project Name: _____

This checklist must be submitted with every set of engineering construction plans for subdivision improvements. All items on the checklist shall be addressed. If the item is not applicable to this project check the box next to the item labeled "N/A", and provide comment. Items preceded by an asterisk (*) are required for the submittal to be considered complete. If one of these items is missing from the submittal without a valid explanation, the entire submittal will be rejected. Note that this checklist is not intended to be all-inclusive, and fulfillment of this checklist does not alleviate the obligation of the designer to meet all City of Auburn code, regulations, ordinances, and specifications. The purpose of this checklist is to facilitate a more efficient plan review process for the designer and the review team.

	Description	Check	N/A	Comments
Required Plan Sheets				
	These are the basic sheets we expect to see in a set of plans. Some sheets may be combined on certain projects, or have different names (for example, storm water profiles shown on the street plan & profile sheets).			
*	Title/Cover Sheet			
*	Project Notes			
*	Existing Conditions/Demo Plan			
*	Preliminary Plat			
*	Water Plan			
*	Sanitary Sewer Plan			
*	Sanitary Sewer Profiles			
*	Grading & Drainage Plan			
*	Storm Sewer Profiles			
*	Erosion & Sediment Control Plan			
*	Street Plan & Profiles			
*	Miscellaneous Details, Cross-sections & Other Sheets			
*	City of Auburn Standard Details			
Title Sheet				
Title Sheet - Title Sheet - T	Project Title			
	Permit Numbers (USACE & ADEM)			
	Relevant Contact Information			
	Sheet Index			
	Vicinity Map (legible)			
	Engineer's Seal			
Project Notes				
Notes	Verify that project notes do not conflict with City of Auburn specifications			
	Provide Legend			
Existing Conditions / Demo Plan				
Existing Conditions - Existing Conditions - Exist	Include North arrow			
	Show locations of existing structures			
	Indicate if structures are being removed			
	Show existing topography with clearly labeled contours lines			
	Minimum 2ft contour intervals with every 10ft line labeled			
	Show existing water features including wetland areas			
	Show existing easements and right-of-ways			
	Show existing utilities			
	Indicate if being removed/abandoned			
	Show all property lines			
Show the limits of clearing & grubbing				
Preliminary Plat				
Preliminary Plat	Include a copy of the approved Preliminary Plat			
	Indicate any changes from the approved plat			
	Verify planning commission resolutions were addressed			
Water Plans				
Water Plans - Water Plans - Water Pl	*Required water service submittals prior to or with plan submittal:			
	Development Application for Water and Sewer Service			
	Backflow Protection Information Sheet			
	Fire flow calculations (where applicable, coordinate with the WRM Department)			
	Include North arrow			
	If water layout requires multiple pages, include an overall plan sheet			
	The following existing water infrastructure should be shown:			
	Location, size, and material of all water mains and service lines			

Description	Check	N/A	Comments
Location and size of all water meters			
Location of the nearest main line valves for isolation of the site			
Location of the nearest fire hydrants			
Location of all blow-off valves and air release valves			
The following proposed water infrastructure should be shown:			
Location, size, and material of all water mains and service lines			
Location and size of all water meters (place at edge of ROW or easement)			
Location of all isolation valves, blow-off valves, and air release valves			
Location of all fire hydrants			
Location of FDC within 125 ft of a fire hydrant			
Location of all backflow prevention devices, and vaults			
Location of all bends, tees, and fittings (specify type and degree)			
Location and detail of all necessary thrust restraint			
Location of vault drain to grade or to storm sewer			
Show all existing and proposed easements			
Provide a general layout of other utilities (existing and proposed)			
Clearly differentiate between existing and proposed utilities			
Detail all main line connections showing appropriate tap configuration and fittings			
Provide backflow prevention for all main line connections			
Provide estimated static pressure (normally 820 - FFE / 2.31)			
Use pressure reducing valves where static pressure > 70 psi			
Size pipes to maintain a velocity not to exceed 10 ft/sec			
Provide minimum cover of 30 inches for lines 8 inches and smaller			
Provide minimum cover of 36 inches for lines larger than 8 inches			
Provide minimum 18 inches vertical separation where water & sewer cross			
Provide minimum 10 feet horizontal separation between water & sewer lines			
Provide sprinkler count			
Provide the following notes where applicable:			
"Existing services to be abandoned shall be terminated at the main."			
"Notify AWWB of any scheduled outages 7 days prior to the outage."			
"Only AWWB personnel are authorized to operate AWWB valves."			
Sanitary Sewer Plans			
*Required sewer service submittals prior to or with plan submittal:			
Development Application for Water and Sewer Service			
Grease Trap Sizing Worksheet			
Approved pump station design (coordinated with the WRM Department)			
Include North arrow			
The following existing sewer infrastructure should be shown:			
Location of all manholes with rim, and all invert elevations provided			
Location, sizes, materials, and slopes of all sewer mains and laterals			
Location, and size of grease traps and/or oil & grit separators			
The following proposed sewer infrastructure should be shown:			
Location of all manholes with rim, and all invert elevations provided			
Location, sizes, materials, and slopes of all sewer mains and laterals			
Location and size of grease traps where required			
Location and size of oil & grit separators where required			
Location of cleanouts at the edge of ROW or easement			
If sewer layout requires multiple pages, include an overall plan sheet			
Show all existing and proposed easements			
Provide a general layout of other utilities (existing and proposed)			
Clearly differentiate between existing and proposed utilities			
Label all manholes and pipes (correspond with labels on profile sheets)			
Provide contours or specify finish floor elevations			
Indicate how existing sewer mains or services are to be abandoned			
Manholes shall be locked down if less than 1 foot above the 100-yr BFE			
Public sanitary sewer main requirements:			
Manholes shall be located in the center of the street where possible			
Design sewer lines for maximum capacity at half full			
DIP required where cover is greater than 12 feet or less than 3 feet			
DIP required where less than 2 feet of clearance between utilities			
DIP required within the 100-yr BFE or where bouyancy is a concern			
Provide consistent pipe material between manholes			

Description	Check	N/A	Comments
Minimum slope requirements:			
4"=2%, 6"=1%, 8"=0.60%, 10"=0.35%, 12"=0.30%			
Provide a minimum 0.10' drop across all straight through manholes			
Provide a minimum 0.25' drop across all turning manholes			
Manhole spacing should not exceed 400 feet			
Services tied into mains shall have a 3 feet minimum separation			
Service lines should connect to manholes where possible			
Use standard 4 inch drop for service lines into manholes			
Service lines angled against the flow use a minimum 6 inch drop			
If angle against the flow >135 degrees connect lateral directly to main			
No more than four laterals connected to a pass through manhole			
No more than five laterals connected to a beginning manhole			
Cleanouts to be located in traffic rated enclosure in paved areas			
Backflow prevention is required when any sewer portion of a building is less than 12 inches above the rim elevation of the nearest upstream manhole. Such lots shall be identified on the plans and the plat.			
Sanitary Sewer Pipe Profiles			
Indicate pipe material, size, slope and length			
Show all utility crossings			
Show existing and proposed grades			
Show all rim and invert elevations			
Show outside drop manhole where drop is 2 feet or greater			
Label all manholes and pipes (correspond with labels on plan sheets)			
Show existing mains and structures at all connection points			
Clearly differentiate between existing and proposed utilities			
Clearly differentiate between material types			
Grading & Drainage Plans			
Include North arrow			
If plans require multiple pages, include at least one overall plan sheet			
Show existing topographic contours			
Maximum 2ft contour intervals with every 10ft line labeled			
Used lighter or dashed line type for existing contour lines			
Show proposed contours			
Maximum 2ft contour intervals with every 10ft line labeled			
Proposed contour lines should tie-in to existing contour lines			
Show streams and other water features			
Show stream & wetland buffers			
Show 100-yr flood zone boundaries			
Indicate minimum FFE's for lots adjacent to water features			
Show all existing structures, utilities, and easements that will remain			
Show mitigation areas			
Indicate steep slope areas as defined in the City of Auburn Zoning Ordinance			
Show curb & gutter (2ft City of Auburn Std. C&G)			
Show Inlets (single & double winged)			
Max access spacing 500ft for 15in to 48in pipe			
Max access spacing 800ft for 54in or greater			
Double-wing inlets only used in sags			
Show all proposed culverts			
Indicate type and dimensions			
Show headwalls and energy dissipaters			
Show all storm sewer pipe			
Show headwalls at discharge points			
Show all manholes and junction boxes			
Extend discharge points 10 ft beyond rear building lines			
Show rip-rap or other energy dissipators at discharges			
Show all proposed drainage & utility easement			
Show detention system(s)			
Fencing required around ponds for slopes steeper than 3:1			
Pipes discharge at bottom of pond slopes			
Show outlet structure(s)			

	Description	Check	N/A	Comments
Storm Water Pipe Profiles				
Storm Profiles - Storm Profiles	Indicate pipe size, material, slope and length			
	Pipe beneath streets shall be RCP			
	Show rim & invert elevations			
	Show 25-yr Hydraulic Grade Line			
	Show existing and proposed grades			
	Show all other utility crossings			
	Show existing pipe & structures at tie-ins			
Erosion & Sediment Control Plans				
E&SC Plans - E&SC Plans	Used a phased plan when applicable			
	Show clearing limits			
	Show stream & wetland buffers. Drainage basin of stream should be delineated from the commencement point of the stream, to the point that it leaves the property. Basin area determines buffer widths (see ZO)			
	Provide an ES&C legend			
	Identify project sign location and provide project rain gauge on site			
	All silt fencing shall be Class "A" (wire reinforced, metal staked, trenched) or C-POP			
	Construction Entrance Pad (min 20ft x 50ft) Use #1 stone with geotextile fabric underneath. One CEP per site at any given time.			
	Hay bales may not be used as stand-alone inlet protection. They can be used in conjunction with silt fence, silt savers, etc			
	Use rock check dams, wattles, or silt fence check dams (rather than hay bales) where applicable.			
	Design and show outlet protection at all discharges			
	Show curb inlet protection devices (no stand-alone hay bales)			
	Slopes greater than 3:1 require erosion control blankets. Specify types of blankets being used.			
	Show all sediment basin locations, filter structures, and sediment volumes			
	*Submit sediment storage calculations			
	Attach City of Auburn standard erosion & sedimentation ctrl. details			
Include the following notes on the E&SC Plans ¹				
Street Plan & Profiles				
Street Plan & Profiles - Street Plan & Profiles	Plan view			
	Include North arrow			
	Show existing and proposed topography			
	Show edge of pavement and curb/gutter			
	Show ROW & easements			
	Show station line			
	Show horizontal curve radii			
	Indicate tangent lengths (minimum 100ft between curves)			
	Indicate street width (b/c to b/c)			
	Indicate intersection corner property line radii (minimum 20ft)			
	Show proposed sidewalks			
	Profile View			
	Show existing and proposed centerline grades			
	Max grade for local streets = 15%			
	Max grade for collector streets = 12%			
	Max grade for minor arterial = 8%			
	Max grade = 5% within 100ft of intersection			
Show vertical alignment with all vertical curve data				
Indicate the design speed used (see PW Manual)				
Align stationing with the plan view station line				
Miscellaneous Details, Cross-sections, & Other Sheets				
Miscellaneous Details, Cross-sections,	Collector or arterial (or other special) striping			
	Show details for improvements to off-site infrastructure			
	Turn lanes - including buildup and striping (meet with City on widening)			
	Off-site sewer, water, or storm water improvements			
	Detention outlet control structure details			
	Culvert details			
	Tail ditch and/or swale details			
	Traffic control plan and detour plan			
Proposed street classifications & buildups				

Description	Check	N/A	Comments
City of Auburn Standard Details			
Include all relevant City of Auburn standard details with the final plans			
Miscellaneous Design Requirements			
Sight distance analysis needed?			
Storage/taper length calculations for turn lanes (can be shown on plans)			
No trees within 10ft of center line of utilities			
Are any waivers or variances required?			
The following note should be added to all utility plans and plats ²			
Easements shall be the greater of 20ft or 2 times the depth to the bottom of the utility. Easement widths shall be in increments of 10ft.			
Slope and grades of easements shall be passable by vehicles (maximum easement cross slope of 4:1)			
All topography should be relative to MSL (no assumed datum)			
Utility stub outs for future development should be placed in easements extending to the edge of the property line			
¹ a. Any area that has been disturbed and will remain so for more than 15 days shall be seeded and mulched within 5 days of being disturbed. b. Additional BMPs may be required by the QCP and/or City of Auburn over the course of the project to minimize sediment release from the site c. All BMPs shall be designed and installed in accordance with the Alabama Handbook for Erosion Control, Sediment Control, and Storm water Management on Construction Sites and Urban Areas and the City of Auburn standard erosion and sediment control details. d. The use of flocc-blocks, polyacrylamide (PAM), or other settling enhancement materials may be required by the QCP or City of Auburn during course of construction to minimize turbidity and sediment release from the site.			
² No permanent structures may be constructed or placed on easements. Fences may be erected perpendicularly across the easement provided there is a minimum 12-foot wide access gate installed. If the gate is to be locked there must be a City-approved lock installed in conjunction with the owners lock. No trees shall be planted within 10 feet of utilities.			

SIGNED: _____
(engineer of record)

Revised 01/01/2016

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APPENDIX B-3. Site Plan Sufficiency Checklist

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**SITE PLAN SUFFICIENCY CHECKLIST
PLANNING DEPARTMENT
FOR THE DEVELOPMENT REVIEW TEAM SUBMITTAL**

Eden Case # _____

REQUIRED

Table format:

Graphic information:

	Zoning and Current Land Use of adjacent properties		Vicinity map , north arrow, seal, (Name, address & Phone number of surveyor), date prepared and graphic scale
	Impervious surface area in square feet, Impervious surface ratio (calculated) Maximum and proposed		Certified boundary survey of the tract prepared by a registered surveyor, indicating an existing lot of record
	Floor area in square feet, Floor area ratio (calculated) Maximum and proposed		Location, height and dimensions of all structures
	Number of floors or stories, height of all structures		Location of all impervious surfaces
	Type(s) of bufferyard required, if any, Along each property boundary and width		Location and dimensions of all required bufferyards
	Number of parking spaces Required and proposed (calculated) based on Section 502 or 509 requirements		Areas of general landscaping pursuant to Section 426 / Areas of landscaping for off-street parking areas pursuant to Sections 426 and 433
	Corridor Overlay Information where applicable (building materials, sign, lighting etc) *Site plans subject to Corridor Overlay requirements must submit elevations		Locations and dimensions of all parking spaces, loading berths, and driveway aisles . One-way aisles must be labeled as such
			Location of all curb cuts and their distances from nearest adjacent curb cuts or street intersections
			Phase lines , if the development is to be constructed in phases
			Location and screening of solid waste receptacles

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APPENDIX B-4. Drainage Checklist

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Stormwater Drainage Checklist

Public Works Department
 171 N. Ross Street, Suite 200
 Auburn, Alabama 36830 (334) 501-3000 FAX (334) 501-7294
www.auburnalabama.org/pw

This checklist shall be submitted as part of the DRT submittal package for all projects that require stormwater detention. It shall be included as the first page of the drainage report, and be signed/sealed by an engineer registered in the state of Alabama.

Description	Checked	N/A	Comments
Drainage report stamped by AL engineer			
Description of existing drainage conditions, including existing infrastructure, land use, wetlands, floodplains, etc., included in report			
Basin maps included for pre- and post-development conditions			
Sub-basins & outfalls clearly identified on basin maps			
Post-development rate of discharge does not exceed pre-development discharge rate at all analysis points			
Post-development routing summary presented in tabular format			
Pre-Development Conditions worksheet included for each sub-basin			
Post-Development Conditions worksheet included for each analysis point			
Point of Analysis Peak Discharge Summary table included			
Total Peak Discharge Summary table included			
Gutter Spread Table completed and included			
Pipe Design Table completed and included			
Hydraulic grade line shown on pipe profiles and/or swale cross-sections			
"No adverse impact" statement (for downstream infrastructure) included in report			

Project Name: _____

Date: _____

Engineer's Signature: _____

Engineer's Seal:

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PRE-DEVELOPMENT CONDITIONS

Project Name: _____

Total Project Area (acres): _____

Comparison Point Name/Number: _____

Basin/Sub-Basin Area (acres): _____

	2 year storm	5 year storm	10 year storm	25 year storm	100 year storm
Curve Number or Runoff Coefficient					
Time of Concentration (min)					
Peak Flow (cfs)					

- 1- Use separate sheet for each comparison point that is used for stormwater calculations
- 2- Provide documentation for composite curve numbers or runoff coefficients
- 3- Provide documentation for time of concentration calculations
- 4- Provide documentation on calculations and method used to determine peak flow

Revised November 2011

POST-DEVELOPMENT CONDITIONS

Project Name: _____

Total Project Area (acres): _____

Comparison Point Name/Number: _____

Basin/Sub-Basin Area (acres): _____

Receiving Facility/Pond: _____

	2 year storm	5 year storm	10 year storm	25 year storm	100 year storm
Curve Number or Runoff Coefficient					
Time of Concentration (min)					
Peak Flow (cfs)					

- 1- Use separate sheet for each comparison point that is used for stormwater calculations
- 2- Indicate name of detention pond receiving runoff or bypass as appropriate
- 3- Provide documentation for composite curve numbers or runoff coefficients
- 4- Provide documentation for time of concentration calculations
- 5- Provide documentation on calculations and method used to determine peak flow

Revised November 2011

COMPARISON POINT PEAK DISCHARGE SUMMARY

Project Name: _____

Comparison Point Name/Number: _____

Return Period	Pre- Development Flow (Q cfs)	Post-Development Flow (Q cfs)	Delta Q (cfs)	% Increase (Q)
2				
5				
10				
25				
100				

Revised November 2011

TOTAL PEAK DISCHARGE SUMMARY

Project Name: _____

Return Period	Pre- Development Flow (Q cfs)	Post-Development Flow (Q cfs)	Delta Q (cfs)	% Increase (Q)
2				
5				
10				
25				
100				

Revised November 2011

APPENDIX B-5. DRT Meeting Waiver

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DRT Meeting Waiver



All projects involving new construction or additions to existing site plans must be submitted to the DRT for review. Some small projects may not require the formal DRT meeting that normally occurs one week after the review comments have been issued to the applicant. A project that meets all of the following criteria will not require the formal DRT meeting (however the project must still be submitted to the DRT for review, in accordance with applicable submittal requirements):

- The project site is less than 1 acre.
- The proposed project does not require detention.
- The proposed project involves only minor grading.
- The proposed project involves no new public infrastructure (streets, utilities, drainage, etc)
- No new driveway turnout will be constructed.
- No ADEM, ALDOT, or USACE permits are required.
- No new, or relocated, fire hydrants or FDC(s) are required.
- A traffic impact study is not required.
- The proposed, or existing, zoning is not UC or US.

In addition to projects meeting the above criteria, any project involving an addition or expansion onto an area that was originally indicated as a "future building area" (during a prior review) will not require the formal DRT meeting. In these cases, the original plans must have shown the proposed grading and utilities for the "future building area".

- Proposed addition or expansion area was shown on previously approved plans.

Name of previous project: _____ Approval Date (mm/yy): _____

For projects not meeting the above criteria, the formal DRT meeting is required unless otherwise indicated by the DRT secretary. In some cases, the DRT review will generate only minor comments from City staff. For these projects, the applicant will be notified upon receipt of the staff comments that the formal DRT meeting is optional.

If the applicant wishes to forgo the DRT meeting by virtue of meeting the above criteria, this form should be completed and included with the DRT submittal.

Project Name: _____

Applicant Signature: _____ Date: _____

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APPENDIX B-6. Signature Bond for Development

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STATE OF ALABAMA

LEE COUNTY

Signature Bond for Development



KNOW ALL MEN BY THESE PRESENTS, THAT WE _____ (hereinafter called the Principal) having received approval from the City of Auburn to construct the development know as _____, are held firmly unto the City of Auburn, Alabama (hereinafter called the Obligee), in full and just sum of the complete cost to repair or replace any and all infrastructure removed or damaged or displaced in the event we are unable to complete the project within a reasonable amount of time or if we declare bankruptcy or insolvency before completing the project.

NOW THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH THAT, if Principal shall promptly and faithfully construct the improvements in accordance with the approved construction plans which are made a part hereof by reference as if set out in here full, and said construction approved by Obligee, within a reasonable amount of time, then this agreement shall be null and void; otherwise to remain in full force and effect.

This agreement shall be binding on ourselves, our heirs, administrators, executors and assigns, jointly and severally and shall run with the land, firmly by these presents.

SIGNED, SEALED, AND DELIVERED THIS _____ day of _____, _____

OWNER

Owner's Agent

Witness to Agent's Signature:

(Seal)

Address

City, State

ATTEST:

Telephone Number

Note: This document must be filed in the Probate record after execution.

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APPENDIX C. Hold Harmless Agreement

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INDEMNITY AND HOLD HARMLESS AGREEMENT

STATE OF ALABAMA

LEE COUNTY

WHEREAS, the City of Auburn, Alabama (hereinafter the “City”) has a drainage and utility easement located along _____

_____ in Auburn, Alabama, and

(Right of way or location description)

WHEREAS, _____ (hereinafter the “Owner”) of property described as _____

_____, Auburn, Alabama, wishes to locate _____ (hereinafter the “Obstruction”)

on the City’s drainage and utility easement (shown by Exhibit A attached), and as a condition and obligation to the City for the granting of its consent to the Obstruction, the Owner, for itself and its successors in the ownership of the property on which Obstruction is located, has agreed to indemnify and hold harmless the City and holders of any interest in the easement where the Obstruction is located.

NOW, THEREFORE, in consideration of the granting of the consent of the undersigned to the placement of the Obstruction on and under the drainage and utility easement, the Owner does, for itself and its successors in the ownership of the property described, agree to indemnify, hold harmless and defend the City, its officials, representatives, agents, servants and employees from and against all liability and loss which the City and the holders of the interest in the drainage and utility easement on which the Obstruction is located may sustain as the result of claims, demands, costs or judgments arising out of the location of the Obstruction on the drainage and utility easement, including its reasonable costs in defending against any such claims. For the same consideration, the Owner agrees to release and discharge the City and The Water Works Board of the City of Auburn, Alabama from any damages to the Obstruction arising from utility maintenance work within the easement. The obligations of this indemnity shall be binding upon the successors and assigns of the Owner and shall be a covenant running with the land and shall be binding upon all future owners of the property on which the easement is located.

[Remainder of page intentionally left blank]

EXECUTED this the _____ day of _____, 20__.

Owner

By: _____
Its _____

CITY OF AUBURN, ALABAMA

By: _____
Its _____

THE WATER WORKS BOARD OF THE
CITY OF AUBURN, ALABAMA

By: _____
Its _____

STATE OF ALABAMA

LEE COUNTY

I, the undersigned authority, a Notary Public in and for said County, in said State, hereby certify that _____, whose name is signed to the foregoing instrument, on behalf of the Owner, and who is known to me, acknowledged before me on this date that, being informed of the contents of the foregoing document, he/she executed the same voluntarily on the day the same bears date.

Given under my hand and official seal this the _____ day of _____, 20__.

Notary Public
Commission Expires _____

STATE OF ALABAMA

LEE COUNTY

I, the undersigned authority, a Notary Public in and for said County, in said State, hereby certify that _____, whose name is signed to the foregoing instrument, on behalf of the City of Auburn, Alabama, and who is known to me, acknowledged before me on this date that, being informed of the contents of the foregoing document, he/she executed the same voluntarily on the day the same bears date.

Given under my hand and official seal this the _____ day of _____, 20____.

Notary Public
Commission Expires _____

STATE OF ALABAMA

LEE COUNTY

I, the undersigned authority, a Notary Public in and for said County, in said State, hereby certify that _____, whose name is signed to the foregoing instrument, on behalf of The Water Works Board of the City of Auburn, Alabama, and who is known to me, acknowledged before me on this date that, being informed of the contents of the foregoing document, he/she executed the same voluntarily on the day the same bears date.

Given under my hand and official seal this the _____ day of _____, 20____.

Notary Public
Commission Expires _____

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APPENDIX D. Easement Encroachment Agreement

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STATE OF ALABAMA)
)
COUNTY OF LEE)

LICENSE AGREEMENT

This Agreement made and entered into on this the _____ day of _____, _____, by and between The City of Auburn, Alabama, a municipal corporation, hereinafter referred to as “Licensor” and _____, hereinafter referred to as “Licensee.”

STATEMENT OF BACKGROUND INFORMATION

1. The City of Auburn, Alabama is the owner of that certain drainage and utility easement from _____, dated _____, and recorded in the Office of the Judge of Probate of Lee County, Alabama in _____.

2. Licensee has requested that it be permitted to construct and install its _____ and associated appurtenances within said easement, being further described on that certain map marked “Exhibit A”, attached hereto and made a part hereof by reference, and in consideration thereof has agreed to indemnify and hold harmless Licensor from any and all damages caused by its use of said easement. Licensee agrees to restore the drainage and utility easement to preconstruction conditions or better.

STATEMENT OF AGREEMENT

NOW, THEREFORE, for and in consideration of the above recitations and the mutual covenants and agreements contained herein, the parties do hereby agree as follows:

1. Licensee is hereby granted a revocable license or permit to install within the boundaries of the above-described easement its _____ and associated appurtenances in accordance with plans and specifications approved by the Licensor and at a location agreed upon by Licensor.

2. Licensee does hereby indemnify and hold harmless Licensor for any and all claims, damages and liability incurred by Licensor as a result of Licensee’s _____ and associated appurtenances being located within said easement and shall further be responsible for the payment or reimbursement of all defense costs, including, but not limited to, attorneys’ fees which result from the same.

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3. Licensor may terminate this Agreement at any time by giving to Licensee sixty (60) days written notice thereafter to so terminate this license in which case Licensee shall remove its _____ and associated appurtenances as soon as practical thereafter at no expense to the Licensor.

IN WITNESS WHEREOF, the parties have executed this License Agreement on the date first written above.

THE CITY OF AUBURN, ALABAMA,
A MUNICIPAL CORPORATION,

BY: _____

Bill Ham

ITS: Mayor

ATTEST:

BY: _____

Charles M. Duggan, Jr.

ITS: City Manager

LICENSEE

BY: _____ (L.S.)

ITS: _____

STATE OF ALABAMA

LEE COUNTY

I, the undersigned authority, a Notary Public in and for said County, in said State, hereby certify that _____, whose name is signed to the foregoing instrument, and who is known to me, acknowledged before me on this date that, being informed of the contents of this document, he/she executed the same voluntarily on the day the same bears date.

Given under my hand and official seal this the ___ day of _____.

Notary Public

Commission Expires _____

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APPENDIX E-1. Request for Design and Construction Standard Waiver Form

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Request for Design and Construction Waiver

Project Information

Name of Project: _____ Date: _____

Project Address: _____ Telephone No.: _____

Applicant Name: _____ Applicant Firm: _____

Waiver Information

Existing Standard

Manual Section Number and Title: _____

Brief Description of Existing Standard: _____

Proposed Waiver

Description of Proposed Waiver: _____

Hardship or Justification for Waiver: _____

Attachments

List All Supporting Documentation Submitted With This Form: _____

Note: For waivers to Standard Details, submit a hard-copy of the detail showing each proposed modification encircled with a "cloud"

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APPENDIX E-2. Amendments

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RESOLUTION NO. 11-197

WHEREAS, the City Council of the City of Auburn approved and adopted the Public Works Design and Construction Manual on November 2, 2010 with an effective date of January 1, 2011; and,

WHEREAS, the City Engineer, in collaboration with the development community, finds it necessary to implement material changes (a copy of which is attached and made a part hereof) for clarification and to comply with rule changes in the industry and to make these changes effective immediately.

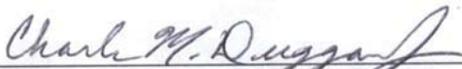
NOW THEREFORE, BE IT RESOLVED that the City Council of the City of Auburn, Alabama does hereby approve and accept the changes to the Public Works Design and Construction Manual effective immediately.

ADOPTED AND APPROVED by the City Council of the City of Auburn, Alabama, this the 15th day of November 2011.



BILL HAM, JR., Mayor

ATTEST:



CHARLES M. DUGGAN, JR., City Manager

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Summary of Proposed Changes to the Public Works Design & Construction Manual (PWDCM)

Table of Contents

1. Added Appendix B-6, Signature Bond for Development. The Signature Bond was referenced but no formal document was included in the manual.
2. Added Appendix E-2, Amendment Number 1. As the PW Manual is amended, copies of the resolution, changes, and effective date will become a part of the manual.

Section 1 – General Information

Section 1.2.1 Definitions

1. Include a definition for Development Agreement.

Section 1.3.3.6 Bonding

1. Added a reference to the location of the Signature Bond.

Section 1.3.3.8 Development Committee

1. Added a reference to the location of the Signature Bond and removed requirement for a performance bond to cover costs of improvements.

Section 1.3.4.3 DRT Submittal Requirements

1. Added language to define that the Stormwater Storage Facility Operations & Maintenance Agreement shall be submitted before the Zoning Certificate is issued.
2. Added minimum 300 dpi resolution requirement for digital submittals.

Section 1.3.4.4 DRT Forms and Checklists

1. Provide clarification on the intent of the forms and when they are required for a development.

Section 1.3.5.5 AWWB Water Main Connection Permit

1. Provide clarification to the chain of custody of the Water Main Connection Permit.

Section 1.5.1 As-Built Submittal

1. Add reference to the geoid model to be used for as-built surveys.
2. Add reference to the Continually Operating Reference Station (CORS) to be used for Global Position System (GPS) surveys and control datum.
3. Include a minimum observation time for GPS surveys for both critical and non-critical coordinates.
4. Include a maximum Position Dilution of Precision (PDOP) value allowed for GPS surveys.
5. Add minimum resolution requirements for digital submittals.

Section 1.6.1 Easements Discussion

1. Provide clarification that creek and ditch crossings must be made accessible prior to acceptance of the infrastructure.

Section 1.6.4 Easement Language

1. Add indemnity note for obstructions placed on easements.

Section 1.8 Acceptance

1. Provide clarification on Board authority and maintenance responsibility consistent with the current Backflow Prevention and Cross-Connection Control Policy.
2. Change “Sewer Division Manager” to “Sewer Collection System Manager”.

Section 1.9 Warranty Period

1. Provide clarification that the Board or the City will invoice the developer for any costs associated with required repairs due to defects in materials and workmanship during the warranty period.

Section 1.10 Fees and Charges

1. Remove all references to sewer surcharge areas.

Figure 1.1 Development Review Process Flowchart

1. Changed language from “DRT Secretary” to “Public Works” for consistency.
2. Added an action item “BMPs Installed by the Contractor and Inspected by the City” prior to Issuance of Clearing, Grading & Utility Permit.

Appendix B-4 Drainage Checklist

1. Updated Stormwater Drainage checklist verbiage to coincide with forms.
2. Changed the basin/sub basin pre development, post development, and sub basin peak forms to reference a Point-of-Analysis approach instead of a basin approach for consistency with practice.

Appendix B-6 Signature Bond

1. Added the Signature Bond for Development to be executed under specific circumstances. The Signature Bond was referenced but no formal document was included in the manual.

Appendix E-2 Amendments

1. Amendment Number 1. As the PW Manual is amended, copies of the resolution, changes, and effective date will become a part of the manual.

Section 2 – Traffic Signal Design Guidelines

Section 2.1.1 Signal Heads

1. Added requirement for a quick disconnect feature on LED lenses and wire termination in a terminal block to simplify maintenance.

Section 2.1.6 Power Supply

1. Added reference to standard details and specify a service disconnect.

Standard Details

1. Modified Signals Detail Sheet 1 to conform to MUTCD requirements
2. Modified Detail Sheet 2 to incorporate decorative top
3. Modified Detail Sheet 3 to enlarge details
4. Modified material specifications on Signals Detail Sheet 4.

Section 3 – Traffic Calming

Section 3.1 Traffic Calming Process Summary

1. Removed requirement for 66% approval response limit to allow neighborhoods that do not meet traffic calming warrants to still petition with 80% approval required for installation.

Section 3.4 Neighborhood Petitions and Cost Share

1. Modified the amount of time a petition can circulate to 3 months.

Section 5 – Roadway Design

Section 5.2.4.3 Sidewalks

1. Changed the minimum sidewalk width to 4' for local and cul-de-sac streets, and 5' for arterials, collectors, and residential collectors.

Section 5.2.6 Driveways

1. Added language to clarify City involvement for driveways proposed to tie to state routes within the City of Auburn.

Section 5.2.6.2 Driveway Location

1. Revised the language that specifies driveway location for double frontage lots. The language clarifies that this will be in residential developments.
2. Changed the language that when a property is proposed for a change of use, existing driveways that do not comply with the Manual “should” be closed instead of “shall”.

Section 5.2.6.3 Driveway Spacing

1. Removed driveway spacing requirements identified for Shug Jordan, EUD, and Auburn Outer Loop. Spacing along these roadways will be per the arterial standards.
2. Clarified that the average curb cut spacing requirement applies to “residential collector streets” instead of simply “collector streets” and how the calculation is performed.

Section 5.3.7 Deceleration Lanes and Tapers

1. Added reference to Appendix K for requirements for deceleration lanes.

Appendix K

1. Added notation for segments where right turn deceleration lanes are required

Appendix L

1. Updated list

Standard Details

1. Modified Streets Detail Sheet 12 to modify sidewalk requirements and identify requirements for ADA passing lanes.
2. Modified Streets Detail Sheet 13 to specify Detectable Warnings at handicap ramps as optional.
3. Added Streets Detail Sheet 25, Bus Turnout detail.

Section 7 – Drainage Section

Appendix T Stormwater Storage Facility Operation and Maintenance Agreement

1. Modified document to include owner/grantor contact information.

RESOLUTION NO. 12-245

WHEREAS, the City Council of the City of Auburn approved and adopted the Public Works Design and Construction Manual on November 2, 2010 with an effective date of January 1, 2011; and,

WHEREAS, the City Engineer, in collaboration with the development community, finds it necessary to implement material changes (a copy of which is attached and made a part hereof) for clarification and to comply with rule changes in the industry and to make these changes effective January 1, 2013.

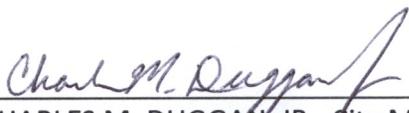
NOW THEREFORE, BE IT RESOLVED that the City Council of the City of Auburn, Alabama does hereby approve and accept the changes to the Public Works Design and Construction Manual effective January 1, 2013.

ADOPTED AND APPROVED by the City Council of the City of Auburn, Alabama, this the 18th day of December 2012.



BILL HAM, JR., Mayor

ATTEST:



CHARLES M. DUGGAN, JR., City Manager

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Pending Updates for the Public Works Design & Construction Manual
December, 2012

Table of Contents

1. Added 5.2.4.4 and 5.3.2.4 Irrigation
2. Added 5.3.2.5 Gates
3. Added Appendix P-1 Irrigation Policy

Section 1 – General Information

Section 1.3.3.6 Bonding

1. Added a reference to the bonding amount of 125% to help reduce the forfeiting of bonds by developers.

Section 1.3.4.1 DRT Process Overview

1. Clarified language regarding meeting date and reference to the location of DRT information.
2. Changed continuance guidelines from three weeks to six months.
3. Changed denial guidelines to coincide with expiration of continuance.

Section 1.3.4.3 DRT Submittal Requirements

1. Reduced numbers of full-size copies of plans required from 2 to 1, added a PDF submittal, and require hard and digital copy of the drainage report and traffic impact study to be submitted to be consistent with current practice.
2. Clarified final submittal requirements to include recorded Stormwater Storage Facility Operation and Maintenance Agreement to be consistent with current practice.

Section 1.5 Project Completion Requirements As-Built Drawings

1. Updated reference to datum due to changes in the CORS.

Appendix A-1 Site Development Application for DRT Submittal

1. Removed reference to posting comments on the City's website due to most engineers not wanting comments posted.

Appendix A-2 Subdivision Development Application for DRT Submittal

1. Removed reference to posting comments on the City's website due to most engineers not wanting comments posted.

Appendix E-2 Amendments

1. Amendment Number 2. As the PW Manual is amended, copies of the resolution, changes, and effective date will become a part of the manual.

Section 2 – Traffic Signal Design Guidelines

Section 2.1.2 Signal Supports

1. Removed references to Pelco since Pelco no longer makes the poles.

Section 2.1.4 Communications

1. Added option for other types of communication equipment to allow flexibility in equipment.

Section 2.1.6 Power Supply

1. Clarified the type of UPS and housing requirements.

Section 2.1.7 Vehicle Detection

1. Specify detection method must be approved by the City Engineer.

Section 2.1.7.4 Wireless Detection

1. Removed reference to wireless as the preferred detection method to provide flexibility in types of detection equipment.

Section 2.1.10 Pedestrian Signal

1. Added manufacturer's information on the push button.

Section 2.1.10.1 Warrants

1. Included reference to sidewalk to the list of evaluation items.

Section 2.1.11 Intersection Lighting

1. Specified cobra head fixture manufacturer's information.

Appendix G

1. Modified notes to eliminate reference to Pelco.
2. Clarified color of ball at top of crown.
3. Added luminaire arm and assembly to the traffic signal pole assembly.

Standard Details

1. Modified Signals Detail Sheet 2 to correct signal head placement and specify pole manufacturer.
2. Modified Signals Detail Sheet 4 underground power source details.
3. Removed Pelco details for the pole, arm, and arm clamp.

Section 3 – Traffic Calming

Section 3.2.2 Speed

1. Modified speeds in Table 3.1 to include ranges.

Section 3.3 Result of Traffic Calming Analysis

1. Modified speeds to include ranges.

Section 4 – Traffic Impact Studies

Section 4.2.2 Evaluation Elements

1. Added internal site circulation and flow to the analysis to be consistent with current practice.

Section 4.2.3 Roadway Traffic Volumes/Traffic Counts

1. Extended time for use of volumes from one to two years unless the area has experienced significant traffic growth.

Section 5 – Roadway Design

Section 5.2 Roadway Design Elements

1. Added reference to the International Fire Code (IFC).

Section 5.2.4.1 Streets

1. Added reference to the ALDOT Guidelines for Operation relative to asphalt placement rates and thicknesses.
2. Added reference to the International Fire Code (IFC).

Section 5.2.4.3 Sidewalks

1. Clarified reference to collectors for sidewalk location on both sides of a roadway.

Section 5.2.4.4 Irrigation

1. Added reference to the Irrigation Policy (Appendix P-1)

Section 5.2.6.1 Design Criteria

1. Added language to allow use of an engineered, site specific driveway turnout design.

Section 5.2.10 Median Openings

1. Clarified the type, location, and length of medians.
2. Added language to specify City Council's purview for median openings on College Street and West Glenn Avenue.

Section 5.3.2.4 Irrigation

1. Added reference to the Irrigation Policy (Appendix P-1)

Section 5.3.2.5 Gates

1. Added information relative to the allowance of gates.

Section 5.3.5 Left Turn Lane Warrants at Unsignalized Intersections

1. Updated based on new NCHRP.

Section 5.3.6 Right Turn Lane Warrants

1. Updated based on new NCHRP.

Section 5.3.7 Deceleration Lanes and Tapers

1. Clarified language for requirements for deceleration lanes.

Section 5.6 Street Lighting

1. Added requirement that all new subdivisions will have street lighting installed and have lighting plans approved prior to installation.

Section 5.7 Signing and Pavement Markings

1. Added reference for solar-powered marker installation for approved mid-block crossings.

Appendix K

1. Removed street segments where right turn deceleration lanes are required.

Appendix L

1. Added Cary Creek Parkway.

Appendix N

1. Updated form to include submission contact information.

Standard Details

1. Modified Streets Detail Sheet 1 to clarify sidewalk requirement and minimum width of 4'.
2. Modified Streets Detail Sheet 2 to clarify sidewalk requirement must be waived by Planning Commission to allow use.
3. Modified Streets Detail Sheet 9 to require toewall at end of flume.
4. Modified Streets Detail Sheet 10 to allow use of an engineered, site specific driveway turnout design.
5. Modified Streets Detail Sheet 14 to denote Detectable Warnings at handicap ramps as optional and the cross slope on the bottom detail to $\frac{1}{4}$ " per foot.
6. Modified Streets Detail Sheet 16 to show minimum width of multi-use path as 8' instead of 10'.
7. Modified Streets Detail Sheet 17 to show minimum width at entrance of parking area to 21' instead of 24' and extended dimension line to include gutter as requested by local engineers.
8. Modified Streets Detail Sheet 18 to extend dimension line to include gutter.
9. Modified Streets Detail Sheet 19 to extend dimension line to include gutter.
10. Modified Streets Detail Sheet 20 to replace perpendicular striping with tick marks, and reverse flow direction.
11. Updated Streets Detail Sheet 22 to reference latest International Building Code.

Section 7 – Drainage Section

Section 7.2.4 United States Geological Survey Regression Equation

1. Updated equation.

Section 7.2.5 Permeable Pavement

1. Clarified use of permeable pavement.

Standard Details

1. Added details for standard inlets with Neenah grates.
2. Updated Streets Detail Sheet 6 to require mechanical tamping around inlets.

RESOLUTION NO. 14-19

WHEREAS, the City Council of the City of Auburn approved and adopted the Public Works Design and Construction Manual on November 2, 2010 with an effective date of January 1, 2011; and,

WHEREAS, the City Engineer, in collaboration with the development community, finds it necessary to implement material changes (a copy of which is attached and made a part hereof) for clarification and to comply with rule changes in the industry and to make these changes effective immediately.

NOW THEREFORE, BE IT RESOLVED that the City Council of the City of Auburn, Alabama does hereby approve and accept the changes to the Public Works Design and Construction Manual effective immediately.

ADOPTED AND APPROVED by the City Council of the City of Auburn, Alabama, this the 4th day of February 2014.



Mayor

ATTEST:



City Manager

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Pending Updates for the Public Works Design & Construction Manual
February, 2014

Table of Contents

1. Added 5.11 Private Streets.
2. Added Appendix T-1. Stormwater Storage Facility Operation and Maintenance Agreement for Subdivisions.

Section 1 – General Information

Section 1.3.4.3 DRT Submittal Requirements

1. Removed required submittal of offsite easements for the initial submittal.
2. Added submission of required offsite easements with final submittal.
3. Changed submittal of the Stormwater Storage Facility Operation and Maintenance Agreement to be consistent with current practice.
4. Required digital copies of the final Traffic Impact Study and Drainage report with the final submittal.

Section 1.5.1 Surveying

1. Updated CORS name and reference number.
2. Updated water distribution features.
3. Updated storm water features to include outlet structure and shape.

Section 1.5.3 Submittal

1. Changed the submittal requirement to be consistent with current practice.

Section 1.6.4 Easement Language

1. Added a standard hold harmless note to cover irrigation systems.

Appendix E-2 Amendments

1. Amendment Number 3. As the PW Manual is amended, copies of the resolution, changes, and effective date will become a part of the manual.

Section 2 – Traffic Signal Design Guidelines

Section 2.1.1 Signal Heads

1. Removed references to GELcore.

Section 2.1.5 Signal Wiring, Conduit, and Junction Boxes

1. Clarified wiring installation methods to be consistent with current practice.

Section 2.1.7.3 Video Detection

1. Specify color camera instead of black and white.

Section 2.1.9 Intersection Signage

1. Changed specifications for illuminated signs to be consistent with current practice.

Section 2.1.10.3 Timing

1. Updated equation.

Standard Details

1. Modified Signals Detail Sheet 2 to show complete pole details.
2. Modified Signals Detail Sheet 4 underground power source details.

Section 5 – Roadway Design

Section 5.1

1. Added reference to plans adopted by the City and how they are incorporated into the PWDCM.

Section 5.2.4.3 Sidewalks

1. Added reference to Public Right of Way Accessibility Guidelines (PROWAG).
2. Clarified local commercial roadways to have 5' wide sidewalk.

Section 5.2.6.1 Design Criteria

1. Added language to allow additional width at the right of way for radius flares.

Section 5.2.6.5 Shared Driveways

1. Added language to specify the maximum width of a shared residential driveway.

Section 5.3.6 Right Turn Lane Warrants

1. Changed the National Cooperative Highway Research Program Report (NCHRP) from Report 279 to Report 457.

Section 5.11 Private Street

1. Incorporated language for the construction of private street.

Appendix K

1. Updated street names and segments.

Appendix L

1. Corrected the spelling of 'Mitcham' Avenue.

Appendix M

1. Added new streets

Standard Details

1. Modified Streets Detail Sheet 1 to clarify slope of greenspace for non-curb and gutter streets.
2. Added Street Detail Sheet 10A and 10B to show options for constructing sidewalks across driveway turnouts.
3. Modified Streets Detail Sheet 12 to add reference to PROWAG and added local commercial reference to 5' wide sidewalk.
4. Modified Streets Detail Sheet 13 to denote Detectable Warnings at handicap ramps as required.
5. Modified Streets Detail Sheet 14 to denote Detectable Warning Device as required.

Section 7 – Drainage Section

Section 7.4.5 Operation and Maintenance

1. Clarified submission requirements for the agreement.

Section 7.5.6 Conditional Letter of Map Revision

1. Changed the requirement of a CLOMR submission from 'may' to 'will' and adjusted when the CLOMR is needed.

Appendix T-1

1. Included an Operation and Maintenance Agreement applicable to subdivision projects.

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RESOLUTION NO. 14-267

WHEREAS, the City Council of the City of Auburn approved and adopted the Public Works Design and Construction Manual on November 2, 2010 with an effective date of January 1, 2011; and,

WHEREAS, the City Engineer, in collaboration with the development community, finds it necessary to implement material changes (a copy of which is attached and made a part hereof) for clarification and to comply with rule changes in the industry and to make these changes effective January 1, 2015.

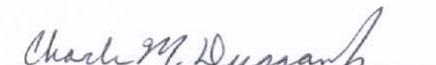
NOW THEREFORE, BE IT RESOLVED that the City Council of the City of Auburn, Alabama does hereby approve and accept the changes to the Public Works Design and Construction Manual effective January 1, 2015.

ADOPTED AND APPROVED by the City Council of the City of Auburn, Alabama, this the 16th day of December 2014.



BILL HAM, JR., Mayor

ATTEST:


CHARLES M. DUGGAN, JR., City Manager

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Summary of Proposed Changes to the Public Works Design & Construction Manual (PWDCM)
December, 2014

Table of Contents

1. Added Appendix P-2 Decorative Street Signs Policy.

Section 1 – General Information

Section 1.5.3 Project Completion Requirements – As-Built Drawings

1. Added language to specify how long the City quality control check should take.

Appendix B-1 and B-2

1. Modified forms to include the project name, modified the width of the construction exit pad, and added C-POP Silt Fence.

Appendix E-2 Amendments

2. Amendment Number 4. As the PW Manual is amended, copies of the resolution, changes, and effective date will become a part of the manual.

Section 2 – Traffic Signal Design Guidelines

Section 2.1.3 Cabinet and Controller Equipment

1. Clarified the requirement for cabinets.

Section 2.1.5 Signal Wiring, Conduit, and Junction Boxes

1. Clarified the size and lid requirements for junction boxes.

Section 2.1.6 Power Supply

1. Clarified the requirement for cabinets.

Section 2.1.10 Pedestrian Signal

1. Added language referencing the Public Rights-of-Way Accessibility Guidelines' (PROWAG).

Section 2.1.10.3 Timing

1. Changed pedestrian walking time from four seconds to three seconds and referenced the MUTCD.

Appendix G Traffic Signal Notes

1. Updated notes to be consistent with current practice on type of Mast Arm Pole and Pedestrian Pole. This includes type of pedestrian pole to be used.

Section 3 – Traffic Calming

Appendix I

1. Modified the example on the form.
2. Added reference to online form.

Section 5 – Roadway Design

Section 5.2.4.3 Sidewalks

1. Added language referencing the Public Rights-of-Way Accessibility Guidelines' (PROWAG).

Section 5.7.1 Street Name Signs

1. Incorporated language from the Decorative Street Signs Policy (Appendix P-2).

Appendix M

2. Changed Corporate Drive to Corporate Parkway.

Appendix N

1. Added reference to online form.

Standard Details

1. Modified Streets Detail Sheet 6 to clarify temporary and permanent patch requirements.
2. Modified Streets Detail Sheet 14 to clarify slope requirements for handicap ramps.

RESOLUTION NO. 15-285

WHEREAS, the City Council of the City of Auburn approved and adopted the Public Works Design and Construction Manual on November 2, 2010 with an effective date of January 1, 2011; and,

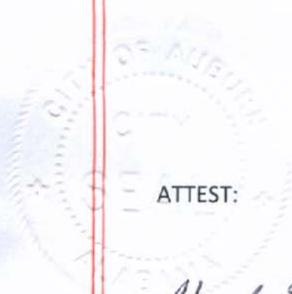
WHEREAS, the City Engineer, in collaboration with the development community, finds it necessary to implement material changes (a copy of which is attached and made a part hereof) for clarification and to comply with rule changes in the industry and to make these changes effective January 1, 2016.

NOW THEREFORE, BE IT RESOLVED that the City Council of the City of Auburn, Alabama does hereby approve and accept the changes to the Public Works Design and Construction Manual effective January 1, 2016.

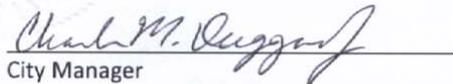
ADOPTED AND APPROVED by the City Council of the City of Auburn, Alabama, this the 15th day of December 2015.



Mayor



ATTEST:



City Manager

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Pending Updates for the Public Works Design & Construction Manual
December, 2015

Table of Contents

1. Added Section 5.6.4 Decorative Pedestrian Lighting.
2. Added Section 5.9.1 Transit Stops.
3. Added Section 5.12 Greenways.

Section 1 – General Information

Section 1.2.5 Acronyms and Definitions - Definitions

1. Added definition for ADA.
2. Added reference to the digital location for the standard specifications and standard details.

Section 1.3.1 Development Process – Overview

1. Added reference to the territorial jurisdiction of the City.

Section 1.3.3 Development Process – Subdivision

1. Added reference to reviews affected by the Lee County Planning Commission in the territorial jurisdiction of the City.

Section 1.3.3.4 Development Process – Engineering Plan

1. Added reference for developments in the territorial jurisdiction of the City.

Section 1.3.3.6 Development Process – Bonding

1. Added reference for street lighting requirements.

Section 1.3.4.1 Development Review Team – DRT Process Overview

1. Added review time for developments in the territorial jurisdiction of the City.

Section 1.3.4.3 Development Review Team – DRT Submittal Requirements

1. Added option for digital submittals.

Section 1.3.5 Permits

1. Added reference to departments responsible for each permit

Section 1.3.5.4 Permits – Clearing, Grading, and Utility Permit

1. Added requirement for submission of soil proctor information as part of this permit.

Section 1.4.2 Project Completion Requirements – Construction – Materials

1. Added reference to the digital location for the standard specifications and standard details.

Section 1.4.4 Project Completion Requirements – Construction – Inspection and Testing

1. Added reference for inspection of developments within the territorial jurisdiction.

Section 1.5.1 Project Completion Requirements – As-Built Drawings

1. Updated the reference to the Geoid model name.
2. Added requirements for control points and modified the horizontal and vertical accuracy of critical and non-critical points.

3. Added requirements for as-built drawings when pertaining to City maintained infrastructure.

Section 1.11.2.2 Updates and Waivers to the Manual - Procedure

1. Changed the appeal body from the Building Board of Adjustment to Planning Commission.

Appendix A-2

1. Modified form to include Lee County Review.

Appendix B-1 and B-2

1. Updated the forms to modify the water tank elevation to 820 on the pressure calculations.

Appendix E-1

1. Modified form to remove multiple waivers and provide justification area.

Appendix E-2 Amendments

1. Amendment Number 5. As the PW Manual is amended, copies of the resolution, changes, and effective date will become a part of the manual.

Section 2 – Traffic Signal Design Guidelines

Section 2.1.1 Signal Design Elements – Signal Heads

1. Clarified the type and color of mounting hardware and positioning of signal heads.

Section 2.1.2 Signal Design Elements – Signal Supports

1. Removed reference to separation requirements.

Section 2.1.3 Signal Design Elements – Cabinet and Controller Equipment

1. Modified the requirement for cabinets.

Section 2.1.4 Signal Design Elements – Communications

1. Clarified how equipment is handled when an intersection is modified or upgraded.

Section 2.1.5 Signal Design Elements – Signal Wiring, Conduit, and Junction Boxes

1. Added requirements for wiring when an intersection is modified or upgraded.
2. Clarified requirements for conduit.

Section 2.1.6 Signal Design Elements – Power Supply

1. Clarified how the power source is determined and changed the battery backup part number.

Section 2.1.7 Signal Design Elements – Vehicle Detection

1. Modified the requirement for video detection when an intersection is newly signalized or modified.
2. Clarified the requirements for loop wire.

Section 2.1.7.3 Signal Design Elements – Video Detection

1. Modified video detection requirements to include bicycles.
2. Added color requirement for cameras and mounting hardware.

Section 2.1.9 Signal Design Elements – Intersection Signage

1. Clarified requirements for illuminated signs.

Section 2.1.10 Pedestrian Signal

1. Clarified requirements for mounting hardware.
2. Modified requirements for pedestrian push buttons, including signage and Polera settings.

Section 2.1.11 Intersection Lighting

1. Clarified luminaire assembly fixture type.

Section 2.4 Construction

1. Added notification requirement to beginning work.

Section 2.4.3 Inspection

1. Added inspection requirements for traffic signals.

Appendix H

1. Added Sheet 5- Decorative Pedestrian Light detail.
2. Added Sheet 6 – Pedestrian Push Button Pole detail.

Section 5 – Roadway Design

Section 5.2.4.3 Roadway Design Elements – Sidewalks

1. Clarified cross slope requirements for sidewalk.
2. Added requirements for streetscape improvements within the Downtown Area, to include wider sidewalks, street trees, and decorative lighting.
3. Clarified sidewalk termination grading requirements.
4. Added inspection requirements for sidewalk within the right of way.
5. Added requirements for street trees, including tree wells, brick color, and Silva Cells.

Section 5.2.7.2 Roadway Design Elements - Bicycle and Pedestrian Facilities – Bicycle Lanes

1. Modified reference to design requirements for bicycle lanes.

Section 5.2.7.3 Roadway Design Elements - Bicycle and Pedestrian Facilities – Shared Roadway

1. Modified reference to design requirements for shared roadways.

Section 5.3 Intersection Design Elements

1. Added language regarding street jogs.

Section 5.6.4 Street Lighting – Decorative Pedestrian Lighting

1. Added requirements for decorative street lighting.

Section 5.8 Right-of-way Planting

1. Added requirements for street trees, including tree wells, brick color, and Silva Cells.

Section 5.9.1 Access Management and Coordination - Transit Stops

1. Added requirement for transit stops for purpose built student housing.

Section 5.12 Greenways

1. Added requirements for greenways.

Appendix K

1. Changed Richland Road segment.
2. Added segment to Wire Road.

Appendix L

1. Added directional points to seven (7) collector roads.
2. Added six (6) collector roads.

Appendix O

1. Modified Streets Detail Sheet 11 to specify minimum sidewalk cross slope, add a requirement for joint sealant, and make the expansion material consistent.
2. Modified Streets Detail Sheet 17 to clarify width requirements at landscaped islands.
3. Added Sheet 29 Silva Cell detail sheet.
4. Added Sheets 30 through 35 Tree Well and Grate detail sheets.
5. Added Sheet 36 Bus Turnout detail.
6. Added Sheet 37 Right In Right Out detail.
7. Changed all applicable slopes on details to percent instead of fractional representations.
8. Changed all applicable slopes on sidewalk details to include word 'Maximum'.
9. All sheets were renumbered due to the additional sheets.

APPENDIX F. Traffic Signal Plans Submittal Checklist

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CITY OF AUBURN TRAFFIC SIGNAL PLANS SUBMITTAL CHECKLIST

This checklist must be submitted with every set of plans for traffic signals improvements. All items on the checklist shall be addressed. If the item is not applicable to this project check the box next to the item labeled "N/A", and provide comment. Items preceded by an asterisk (*) are required for the submittal to be considered complete. If one of these items is missing from the submittal without a valid explanation, the entire submittal will be rejected. Note that this checklist is not intended to be all-inclusive, and fulfillment of this checklist does not alleviate the obligation of the designer to meet all City of Auburn code, regulations, ordinances, and specifications. The purpose of this checklist is to facilitate a more efficient plan review process for the designer and the review team.

	Description	Check	N/A	Comments
Required Plan Sheets				
	These are the basic sheets we expect to see in a set of plans. Some sheets may be combined on certain projects, or have different names (for example, storm water profiles shown on the street plan & profile sheets).			
*	Traffic Signal Notes Sheet			
*	Signal Plan Sheets			
*	Installation Notes			
*	Standard Details and Drawings Sheets			
*	Coordination Plan Sheets			
Signal Support				
Signal Support - Signal Support	Galvanized Steel Poles			
	Powder Coat Gloss Black finish			
	Smooth Pole (not fluted)			
	Smooth, Arched Mast Arm			
	Gloss Black Decorative Top included			
	Gloss Black Decorative Base included			
	Black Ball on Decorative top			
Cabinet				
Cabinet	Auburn Spec Cabinet (not ALDOT)			
	Painted Black			
	UPS included			
	8-Phase NEMA Compatible Controller included			
	Ground Mounted Cabinet			
	Interconnect Components specified			
	Preemption Requirements specified			
Power Supply				
Power supply - P	Underground Service designed			
	Future Service Corner/Disconnect Location shown			
	Verified with ALPCo			
	Show existing topography with clearly labeled contours lines			
Signal Heads				
Signal H	Yellow, Aluminum, 12inch signal heads			
	Gelcore ELD specified			
Pedestrian Signals				
Pedestrian Signal	Black, Aluminum heads			
	LED			
	Countdown style			
	Audible pedestrian buttons			
Signage				
Signage	Overhead Blue Street Name Signs specified			
	Overhead Turn Signs specified			
	Overhead Lane Control Signs required			
	Signal Ahead Signs required			
Luminaries				
Luminaries	Black, 250 W HPS over each stop bar			
	Cut-off style Cobra Head Fixture			
	12' Luminaire Arm			
Plans				
Plans-Plans	Traffic Signal Notes Sheet			
	Signal Plan Sheets			
	intersection geometry shown			
	utilities shown			
	pavement markings shown			
	right of way shown			
	Installation Notes Specified for the following:			
controller/cabinet specs				

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APPENDIX G. Traffic Signal Notes

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APPENDIX G. Traffic Signal Notes

Pavement markings shown are for illustrative purposes unless otherwise noted.

Controller shall be capable of running pedestrian phases.

Mast arm pole shall be galvanized steel, smooth, round poles (not fluted) with an arched mast arm and a powder coated gloss black (P33) finish.

The contractor shall not order the traffic signal material until the shop drawings and design calculations have been reviewed by the City of Auburn and written approval granted.

Poles shall include ornamental pole base and top as per City of Auburn standard.

Ball at top of crown shall be black.

The traffic signal pole assembly includes the pole structure, mast arm, decorative pole base, decorative pole top, luminaire arm and assembly, and miscellaneous hardware incidentals for a complete mast arm pole installation.

Cost of mast arm installation shall include all miscellaneous items, such as washers, bolts and all incidental items to have a complete installation.

Signal heads shall have a minimum clearance of 17' from the bottom of the signal head to the roadway.

Signal heads shall be yellow.

Signal heads shall be 12" LED's.

Luminaire assembly shall be gloss black Phillips Roadstar 130W98LED4K or approved equal.

Pedestrian signal housing shall be gloss black.

Pedestrian signals shall be led countdown signal heads (Lumination PS7-CFF1-01A-18).

Pedestrian pole shall be Holophane Wadsworth Aluminum Sitelink pole (or approved equal) with a powder coated gloss black finish.

Pedestrian signal head clamshell bracket shall be bolted to the pole, not banded.

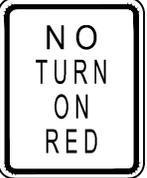
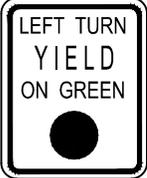
Uninterruptable power systems (battery back-up systems Clary SP 1000SN+) using the OP72C battery are required for all intersections. The entire ups system and batteries shall be housed in the standard City of Auburn traffic signal controller cabinet unless otherwise approved.

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APPENDIX H. Traffic Signal Details and Specifications

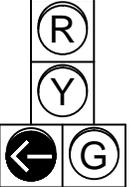
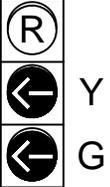
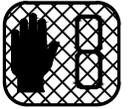
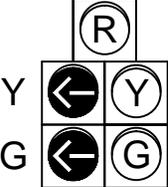
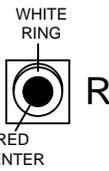
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DETAIL OF TYPICAL TRAFFIC SIGNAL SIGNS

 <i>R10-10(L)</i> 24" x 30"	 <i>R10-10(R)</i> 24" x 30"	 <i>R10-11a</i> 24" x 30"	 <i>R10-12</i> 24" x 30"	 <i>R10-3i</i> ** 9" x 15"	 <i>R10-3e</i> ** 9" x 15"
--	--	--	--	---	---

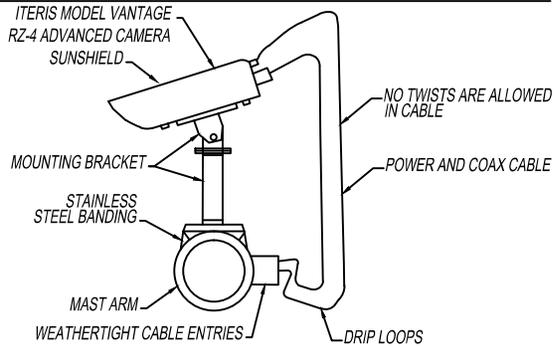
*Street name shall be included in braille on the face of the sign. ***

DETAIL OF TYPICAL TRAFFIC SIGNAL HEADS

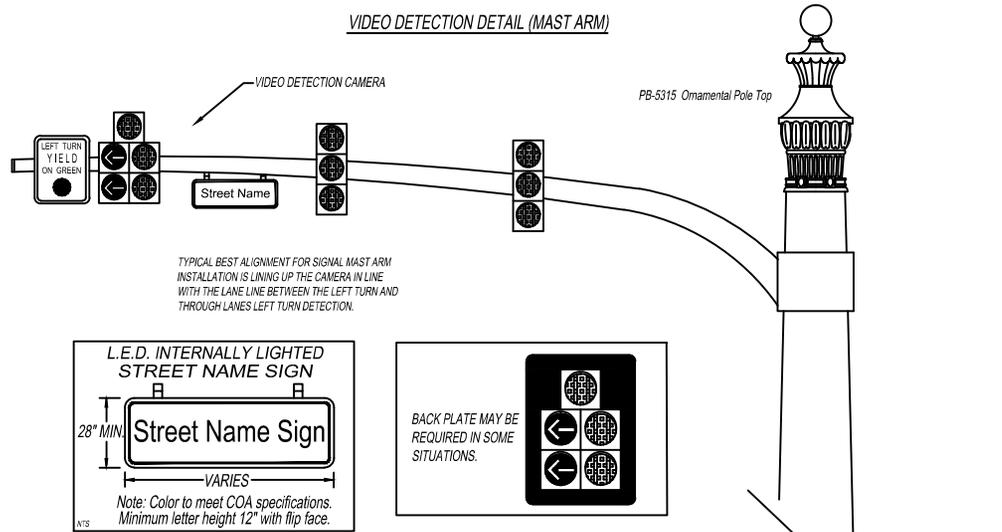
TYPE 1	TYPE 2	TYPE 3	TYPE 4	TYPE 5	TYPE 6	TYPE 7	TYPE 8
					 COUNTDOWN TYPE LED		 WHITE RING RED CENTER SUPPLEMENTAL RED INDICATION

STANDARD DETAILS: SIGNALS			
<small>PROJECT TITLE:</small>	<small>DEPARTMENT:</small> ENGINEERING	<small>REVISIONS:</small>	<small>GM: 07-28-2011</small>
	<small>SCALE:</small> N.T.S.		<small>GM: 02-13-2014</small>
	<small>DRAWN BY:</small> M.BERGIN / MCCRICKARD		<small>GM: 12-15-15</small>
	<small>CITY ENGINEER:</small> JEFF RAMSEY		
	<small>APPROV. BY:</small>		
	<small>IMPLEMENTED:</small>		

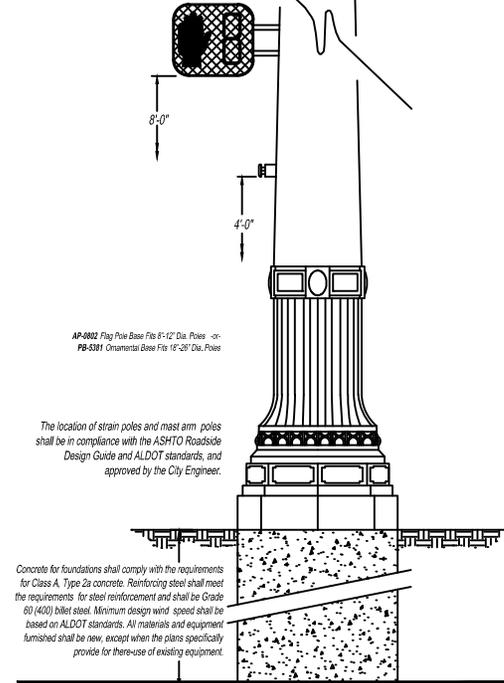
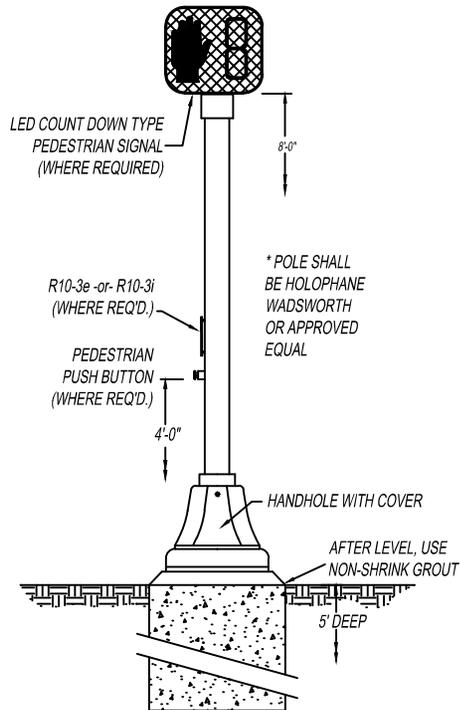
VIDEO DETECTION CAMERA MOUNTING DETAIL



VIDEO DETECTION DETAIL (MAST ARM)



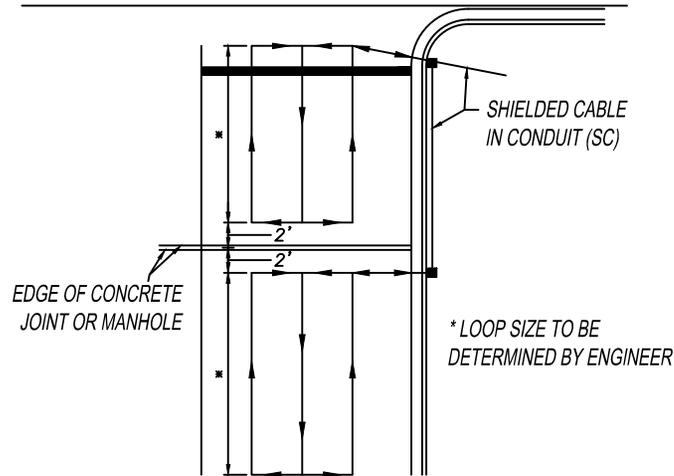
PEDESTRIAN POLE INSTALLATION DETAIL



Concrete for foundations shall comply with the requirements for Class A, Type 2a concrete. Reinforcing steel shall meet the requirements for steel reinforcement and shall be Grade 60 (400) billet steel. Minimum design wind speed shall be based on ALDOT standards. All materials and equipment furnished shall be new, except when the plans specifically provide for re-use of existing equipment.

STANDARD DETAILS: SIGNALS			
PROJECT TITLE:	DEPARTMENT:	ENGINEERING	REVISIONS:
 City of Auburn	SCALE:	N. T. S.	GM: 07-28-2011
	DRAWN BY:	McCRICKARD	GM: 11-26-2012
	CITY ENGINEER:	JEFF RAMSEY	GM: 02-13-2014
	APPVD. BY:		GM: 12-15-15
	IMPLEMENTED:		

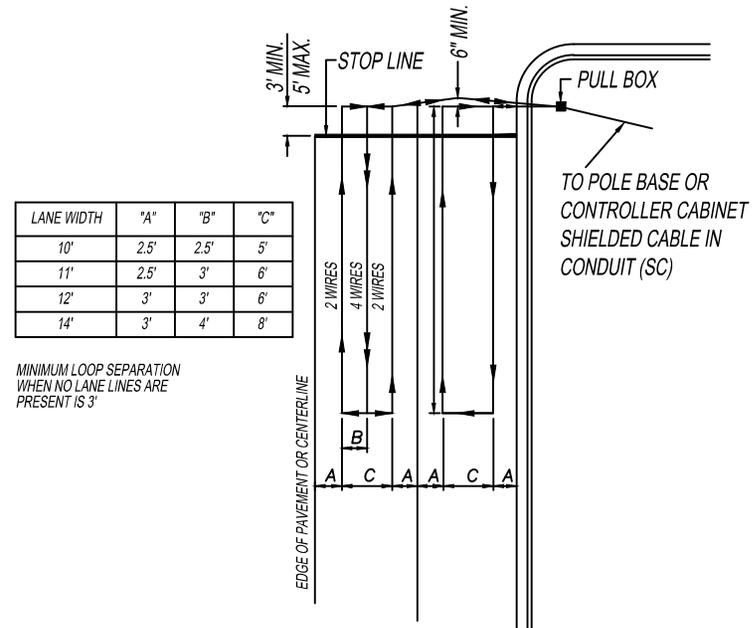
TYPICAL DETAIL OF LOOP DETECTOR WHERE TRANSVERSE CONCRETE JOINTS, MANHOLES ETC. ARE ENCOUNTERED



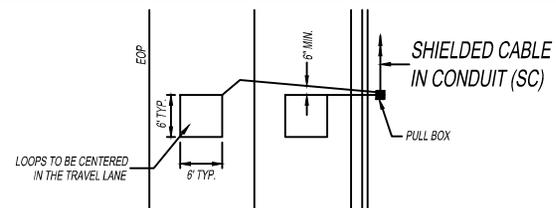
NOTE

NO LOOPS ARE TO BE INSTALLED THROUGH, OVER, OR UNDER TRANSVERSE CONCRETE JOINTS IN CONCRETE PAVEMENT, AND NO MANHOLES, INLETS, ETC. MAY BE LOCATED WITHIN A LOOP. IF ANY OF THE ABOVE ARE ENCOUNTERED THE LOCATION OF THE LOOP MAY BE VARIED SLIGHTLY AS DIRECTED BY THE ENGINEER. IF THE ABOVE ITEMS ARE UNAVOIDABLE, SMALLER LOOPS AS SHOWN TO THE RIGHT MAY BE USED. SMALLER LOOPS USED TO REPLACE ONE LARGE LOOP MAY BE CONNECTED TO ONE CHANNEL.

LARGE LOOP DETECTOR INSTALLATION DETAIL



SMALL LOOP DETECTOR INSTALLATION DETAIL

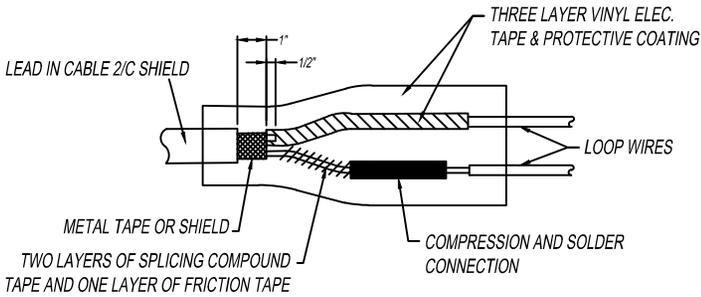


STANDARD DETAILS: SIGNALS

PROJECT TITLE:	DEPARTMENT: ENGINEERING	REVISIONS:	GM: 07-28-2011
	SCALE: N.T.S.		GM: 02-13-2014
	DRAWN BY: M.BERGIN / MCCRICKARD		GM: 12-15-15
	CITY ENGINEER: JEFF RAMSEY		
	APPVD. BY:		
	IMPLEMENTED:		

SHEET 3 OF 6

LOOP SPLICING DETAIL

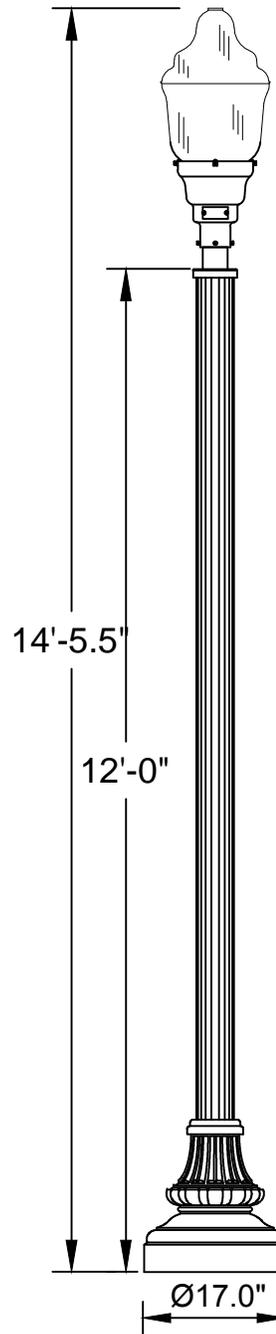


STANDARD DETAILS: SIGNALS			
<small>PROJECT TITLE:</small>			
 City of Auburn	<small>DEPARTMENT:</small>	ENGINEERING	<small>REVISIONS:</small>
	<small>SCALE:</small>	N.T.S.	GM: 07-28-2011
	<small>DRAWN BY:</small>	McCRICKARD	GM: 11-26-2012
	<small>CITY ENGINEER:</small>	JEFF RAMSEY	GM: 02-13-2014
	<small>APPRVD. BY:</small>		GM: 12-15-15
<small>IMPLEMENTED:</small>			SHEET 4 OF 6

DECORATIVE PEDESTRIAN LIGHT

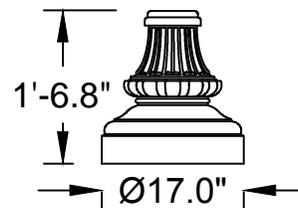
Pole - Wadsworth Aluminum Pole
 [WDA 12 L4E 17 P07 ABG BK]
 Prefix: Wadsworth Aluminum Pole
 Height: 12 Feet (Actual Height: 12'-0")
 Shaft Style: SiteLink 4.5 inch Fluted,
 .156 wall
 Base: 17 inch Round Base
 Tenon: 3 X 3 Tenon
 Pole Mounting: Anchor bolts,
 galvanized steel
 Finish: Powder Coat Black Paint Finish,
 unless otherwise noted during DRT
 Breakaway Kit: None
 Breakaway Kit Finish: None
 Base EPA: 1.62
 Base Weight: 41
 Anchor Bolt: AB-31-4

Fixture - Granville II LED (GVD)
 [GVD 80 4K AS S B 3 N N U]
 Prefix: Granville II LED (GVD)
 Source & Wattage: 80W 400mA Driver
 Color Temperature: 4000 Series CCT
 Voltage: Auto-Sensing Voltage (120-277)
 Housing: Simple
 Finish: Black
 Optics: Asymmetric Type III
 Trim: No Trim
 Finial: No Finial
 Trim and/or Finial Finish:
 No Trim and Clear or No Finial
 Dimming Drive: None
 Covers: None
 Finish for Cover: None
 NEMA Label: None
 Photocontrol Receptacle: None
 Dimming: None
 Photocontrol: None
 Dimming: None
 Photocontrol: None
 ROAM Dimming Contro: None
 Prewired Leads: None
 Photocontrol Kits: None
 Photocontrol Kit Finish: None
 Decorative Band: None
 House Side Shields: None
 Post Capital: None
 Luminaire EPA: 1.88
 Luminaire Weight: 59



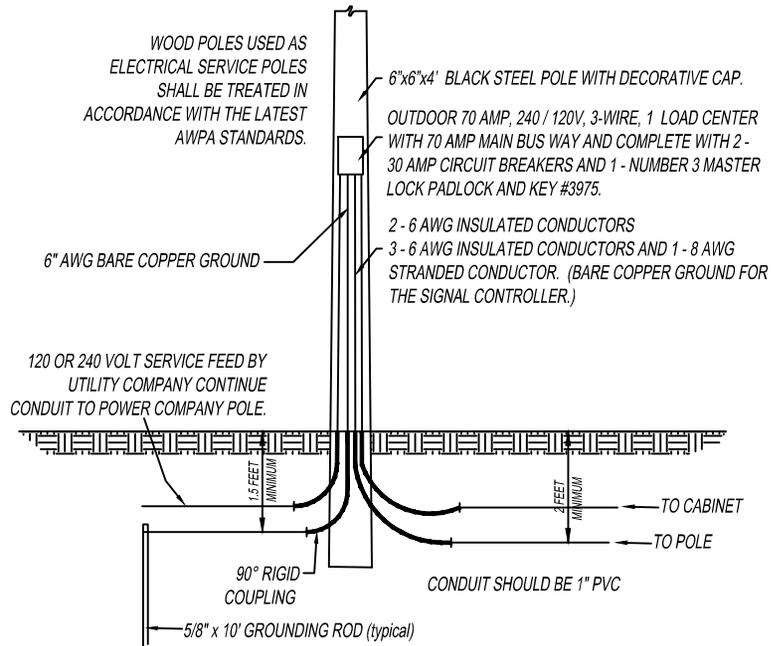
NOTES:

1. The lighting post shall be all aluminum, one-piece construction, with a classic tapered and fluted base design.
2. The base and fluted tapered cast shaft shall be heavy wall, cast aluminum produced from certified ASTM 356.1 Ingot per ASTM B-179-95a or ASTM B26-95.
3. The straight shafts shall be extruded from aluminum, ASTM 6061 ally.
4. The tapered shaft shall be extruded from aluminum, ASTM 6063 alloy, spun to a tapered shape.
5. Material heat treated to a T6 temper.

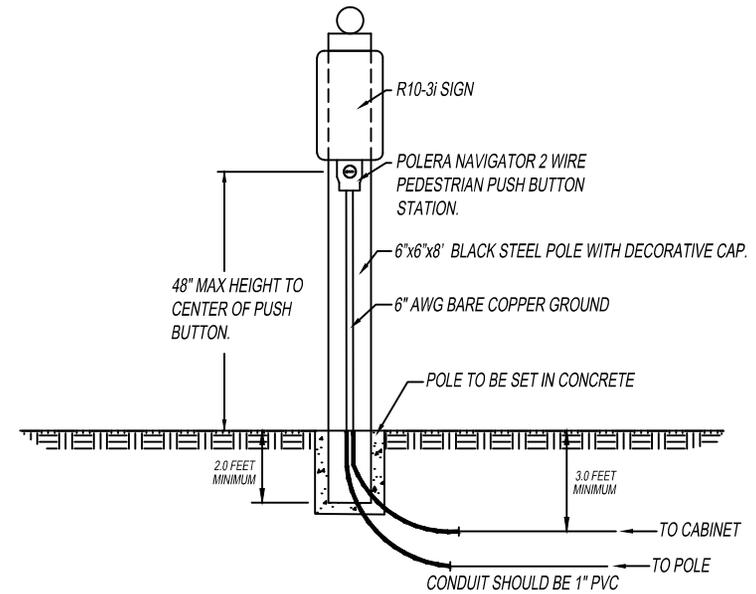


STANDARD DETAILS: SIGNALS		
<small>PROJECT TITLE:</small>	<small>DEPARTMENT:</small> ENGINEERING	<small>REVISIONS:</small>
 City of Auburn	<small>SCALE:</small> N.T.S.	
	<small>DRAWN BY:</small> MCCORMACK	
	<small>CITY ENGINEER:</small> JEFF RAMSEY	
	<small>APPROV. BY:</small>	
	<small>IMPLEMENTED:</small> 1-1-2016	SHEET 5 OF 6

UNDERGROUND POWER SOURCE FOR COMBINATION TRAFFIC SIGNAL AND STREET LIGHTING POLES



PEDESTRIAN PUSH BUTTON DETAIL



STANDARD DETAILS: SIGNALS			
PROJECT TITLE:	DEPARTMENT:	ENGINEERING	REVISIONS:
 City of Auburn	SCALE:	N.T.S.	GM: 07-28-2011
	DRAWN BY:	McCRICKARD	GM: 11-26-2012
	CITY ENGINEER:	JEFF RAMSEY	GM: 02-13-2014
	APPRD. BY:		GM: 12-15-15
	IMPLEMENTED:		

SP Series Specifications

ELECTRICAL

Input

Voltage 120 VAC +12%, -29%
(without battery discharge)

Frequency 48 to 62 Hz

Output

Voltage 120 VAC +3%

Frequency 50 or 60 Hz

Rating: SP 1000 SR/SN 1,250 VA/875 Watts
SP 1250 SR/SN PLUS 1,250 VA/875 Watts¹
SP 2000SR/SN/U 2,000 VA/1400 Watts

Crest Factor Ratio @50% Load Up to 4.8:1
(Non-linear Load and @75% Load Up to 3.2:1
< 5% THD) Typical @100% Load Up to 2.4:1

Total Harmonic Distortion (THD) 4.0% Max.

Dynamic Response ±4% for 100% Step Load Change
0.5 ms Recovery Time

Overload 110% for 10 sec;
200% for .05 sec

UPS Protection Input and Output Short Circuit;
Input and Output Overload;
Excessive Battery Discharge

ENVIRONMENTAL

Operating Temp. -40°C to +74°C (-40F to +165°F)

Humidity 0% to 95% Non-condensing

Altitude Sea Level to 10,000 ft (some
derating of temp. w/altitude > 6,000 ft)

MECHANICAL

Input Hardwired to PIM

Outputs Hardwired to PIM, w/single 15 Amp
Receptacle on back of UPS

Cabinet NEMA, 332 or CBO-123 Cabinet
Style Configurations Available;
NEMA 3R Type II and Type III
Optional

CUSTOM Options

Consult Factory for other Custom options

DESIGN

Standard Features Power Factor Corrected Input;
Fully Regenerative;
True On-Line Continuous Power;
Low Distortion Sinewave Output;
Designed for Non-linear Loads;
Extended Brownout Protection;
EIA/RS232 Data Interface

Specifications Meets FCC Class A, IEEE
587/ANSI C62.41, IEC 555 @
120 VAC and NEMA Stds

MTBF Inverter: > 100,000 hrs
System w/Bypass: 150,000 hrs
Calculated from Component Spec

Typical Recharge 48-72 hrs (more time required
Time to 85% with extended battery option)
Capacity @ Less than 20 hrs with optional
100% Load Fast Battery Charger

CONTROLS AND INDICATORS

Ramping LEDs Battery Level; Load Level
Single LEDs AC In; Inverter On; Low Battery
and Summary Alarm; Alarm Silence

Control Panel Power On; Cold Start; Test; Alarm
Silence; Event Counter (w/Reset);
Hour Meter; Battery Disconnect

Audible Alarms Utility Interrupt; Inverter Failure;
Overload; Low Battery; Self Test

Serial Interface for Full Interactive Remote Computer
EIA 232. Optional Monitoring and Control of Most
NTCIP and TCP/IP Features Including Load Control
via Standard RJ45 (requires optional monitoring
Connector software); NTCIP and TCP/IP
Ready

Contact Closures Open Collector for Remote
("D" connector) Annunciation of Power Up,
Power Down, On Battery, Low
Battery and Alarms

Specifications subject to change without prior notice.



Uninterruptible Power for Traffic Signal Applications - 1000, 1250 and 2000VA

Model	VA	Watts	Input Current (A)	Output Current (A)	Backup Time 100% / 50% Load	Unit Weight (lbs)	Rackmount H x W x D (in)
SP1000SN/SR ²	1,250	875	8.8	10.4	1.5 hrs. / 3.25 hrs.	20	3.50 x 19.0 x 13.0 (2U)
SP1250SN/SR Plus ^{1,2}	1,250	875	8.8	10.4	1.5 hrs. / 3.25 hrs.	20	3.50 x 19.0 x 13.0 (2U)
SP2000SN/SR ²	2,000	1400	18.0	20.0	15.0 min. / 35.0 min.	30	5.25 x 19.0 x 17.0 (3U)
SP1250U	1,250	875	8.8	10.4	1.5 hrs. / 3.25 hrs.	20	3.50 x 19.0 x 13.0 (2U)
SP2000U	2,000	1400	18.0	20.0	15.0 min / 35.0 min	30	5.25 x 19.0 x 17.0 (3U)

Note 1 Supports 1400 watt peak load for 10 seconds or less, intended for yellow incandescent applications.

Note 2 Requires Clary PIM30C, G, R, or GR for traffic applications.

CLARY
The Continuous Power Company™

Clary Corporation
150 E Huntington Drive Monrovia, Ca 91016
Tel: 800.442.5278 • Fax: 626.305.0254
• www.clary.com

Made in the USA

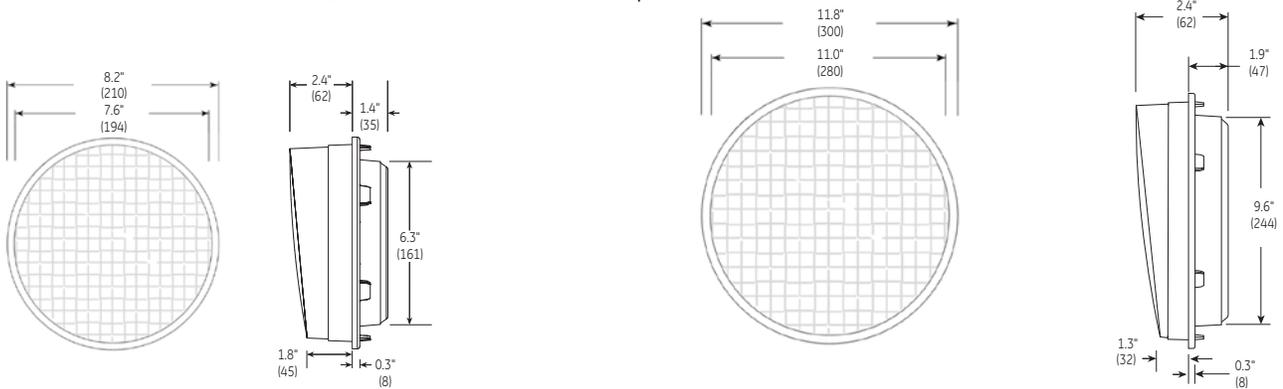
P/N 520-13481
08/04/06-Ver. 1.4

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RX11 LED Signal Modules

- 8 and 12 inch

Mechanical Outline Dimensions in inches. (mm) indicates metric equivalent



Design Compliance

Test Type	Compliance
Luminous Intensity	ITE VTCSH-STD Part 2 - July 1998
Chromaticity	ITE VTCSH-STD Part 2 - July 1998
Moisture Resistance	NEMA STD 250 Type 4 - 1991
Mechanical Vibration	MIL-STD-883 Method 2007
Electronic Noise	FCC Title 47 Sub. B Sec 15 ¹
Transient Voltage Protection	ITE VTCSH-STD Part 2 - July 1998
Controller Compatibility	NEMA TS-2-1992
Wiring	National Electric Code

¹ Class A

Operating Specifications

Parameter	Rating
Operating Temperature Range	-40 to +74°C (-40 to +165°F)
Operating Voltage Range	80 to 135 V (60Hz AC)
Power Factor (PF)	> 90 %
Total Harmonic Distortion (THD)	< 20 %
Voltage Turn-off (VTO)	45 V
Lens & Shell Material	UV Stabilized Polycarbonate
Wiring	16 AWG, Color Coded with Strain Relief

Product Information

Model Number	Size (in)	AC Voltage	Power (W)	Wavelength (nm)	Maintained Intensity (Cd)
		Nominal	Nominal	Dominant	Minimum ²
DR4-RTFB-20A	8	120V - 60 Hz	5	626	133
DR4-YTFB-20A	8	120V - 60 Hz	13	589	267 ³
DR4-GTFB-20A	8	120V - 60 Hz	6	508	267
DR4-GCFB-20A	8	120V - 60 Hz	6	508	267
DR6-RTFB-20A ⁴	12	120V - 60 Hz	10	626	339
DR6-YTFB-20A	12	120V - 60 Hz	22	589	678 ³
DR6-GTFB-20A	12	120V - 60 Hz	12	508	678
DR6-GCFB-20A	12	120V - 60 Hz	12	508	678

Options :

- Q : Quick Connect
- S : Medium Base Socket
- F : In-line Fuse

Standard product equipped with spade connectors.

² Measured at +2.5°H -2.5°W, T₀ = 25°C.

³ Actual intensity less than ITE VTCSH-STD Part 2 - July 1998.

⁴ May exceed maximum intensity of ITE VTCSH-STD Part 2 - July 1998.

Distributed by:



6180 Halle Drive • Valley View, Ohio 44125-4635, • USA
P: 216.606.6555 • F: 216.606.6599 • www.led.com • signals@led.com

For customer service & technical support, contact:
1-888-MY-GE-LED (1.888.694.3533)

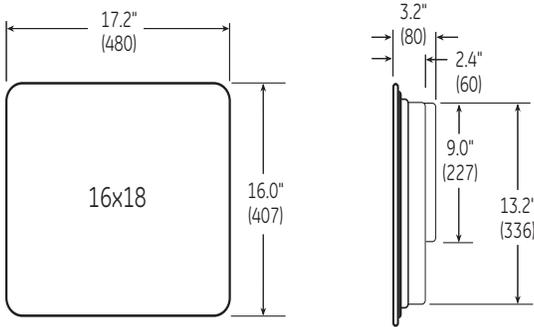
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LED Array Pedestrian Countdown Signals

- 16 X 18 inch module

Mechanical Outline Dimensions in inches. (mm) indicates metric equivalent



Design Compliance

Test type	Compliance
Luminous intensity	ITE Pedestrian Traffic Control Signal Indication - Part 2: Light Emitting Diode (LED) Pedestrian Traffic Signal Modules Section 4.1.1 (applies to: Hand & Person only)
Chromaticity	ITE PTCSI-STD - Part 2
Moisture Resistance	NEMA STD 250 Type 4 - 1991
Mechanical Vibration	MIL-STD-883 Method 2007
Electronic Noise	FCC Title 47 Sec 15 Sub. B ¹
Transient Voltage Protection	ITE PTCSI-STD - Part 2
Controller Compatibility	NEMA TS-2-1992
Wiring	National Electric Code

¹ Class A

Operating Specifications

Parameter	Rating
Operating Temperature Range	-40 to +74°C (-40 to +165°F)
Operating Voltage Range	80 to 135 V (60Hz AC)
Power Factor (PF)	> 90 %
Total Harmonic Distortion (THD)	< 20 %
Voltage Turn-Off (VTO)	45 V
Lens & Shell Material	UV Stabilized Polycarbonate
Wiring	16 AWG, Color Coded with Strain Relief
LED Color	Hand: Portland Orange Person: Lunar White Countdown: Portland Orange

Product Information

Model Number	Operating Cycle	Configuration	Symbol			AC Voltage Nominal	Power (W)			Figure
			Hand	Person	Countdown		Hand	Person	Countdown	
PS7-CFF1-01A-18 ²	Clearance	Overlay/ Countdown	Full	Full	2 Rows/ 9" high	120V - 60Hz	9	8	5	A
PS7-CFL1-01A	Overlay	Overlay	Full	Full	-	120V - 60Hz	9	8	-	B

² Full MUTCD Compliance

Standard product shipped with spade connectors.

Test Conditions: T_a = 25°C

Options: Q - Quick Connect, MB - For GTE Winkomatic (16 7/8" x 16 1/4") Housing,

MC - For Econolite (18" x 15 5/8") Housing.

Figure A



Figure B



Distributed by:



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P: 216.606.6612 • F: 216.606.6599 • W: www.led.com • E: signals@led.com

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APPENDIX I. Traffic Calming Request Form

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City of Auburn

Public Works Department
Traffic Engineering Division
365-B North Donahue Drive
Auburn, AL 36832
334. 501 .3029
Fax: 333.826.5049

Traffic Calming Request Form

The online form can also be found at <http://www.auburnalabama.org/pw/Default.aspx?PageID=824>

Please complete the following information:

Date: _____

Name: _____

Address: _____

Home Phone: _____

Work Phone: _____

Email: _____

Major Issue: (Circle one) Speeding Cut-through Traffic

Please describe the area in your neighborhood where the problem with speeding or cut-through traffic is most evident. List specific streets and intersections.
(Example: Traffic on Street A between Street B and Street C travels at speeds that make it unsafe for residents leaving their driveways.)

(Signature)

If you have any questions, please call Brandy Ezelle, Traffic Engineer, at 334.501.3029, or email bezelle@auburnalabama.org.

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APPENDIX J. Examples of Traffic Calming Measures

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APPENDIX J. Examples of Traffic Calming Measures:

Traffic calming involves two (2) types of devices to influence vehicle operation and driver behavior: 1) Vertical devices, such as speed humps or speed cushions; and 2) Horizontal devices, or street narrowing, such as chicanes, pinch points, traffic circles, and median islands.

J-1 Speed Humps / Speed Tables

Speed humps/cushions are rounded raised areas placed across the roadway. They are generally ten (10) to fourteen (14) feet long, and are three (3) to four (4) inches high. The profile of a speed hump can be circular, parabolic, or sinusoidal. They are often tapered as they reach the curb on each end to allow unimpeded drainage. Speed humps may increase noise due to braking, acceleration and vertical displacement of vehicles.

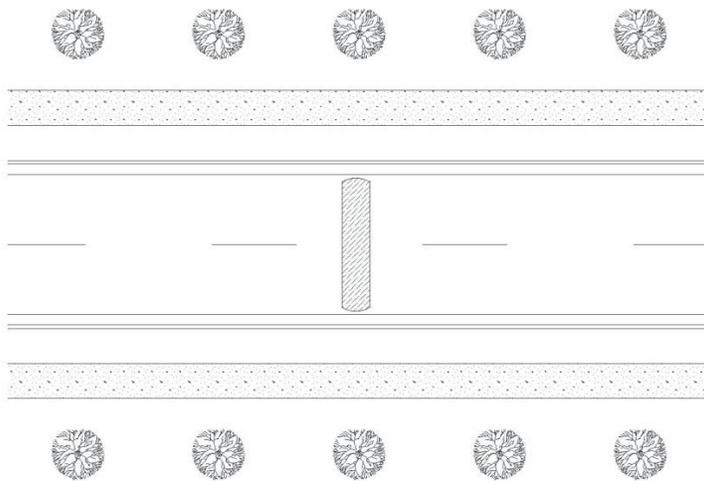


FIGURE 1
Example of a Speed Hump

Speed tables are flat-topped speed humps often constructed with brick or other textured materials on the flat section. Speed tables are typically long enough for the entire wheelbase of a passenger car to rest on the flat section. Their long flat fields give speed tables higher design speeds than Speed Humps. The brick or other textured materials improve the appearance of speed tables, draw attention to them, and may enhance safety and speed-reduction. Speed tables are good for locations where low speeds are desired but a somewhat smooth ride is needed for larger vehicles, or where flat surface is needed to function as a raised crosswalk.

J-2 Textured Pavements / Surface Roughing

Textured pavements, or surface roughing, are a traffic calming measure consisting of a change in typical roadway surface material with the use of brick, concrete pavers, stamped asphalt/concrete, or rumble strips. This treatment can be used on the entire footprint of an intersection or on individual raised or at-grade crosswalks. A textured treatment has the effect of increasing driver awareness to the idea that vehicles share the

space pedestrians and bicyclists. Textured pavements are also associated with reduced travel speeds. This type of traffic calming measure is useful in areas where the loss of on-street parking would be unacceptable.

J-3 Pinch Points

Pinch points are curb extensions at intersections or in mid-block areas that reduce the roadway width from curb to curb. They create a pedestrian-friendly environment by shortening crossing distances for pedestrians. When applied at intersections, they also tighten the curb radii at the corners, reducing the speeds of turning vehicles.

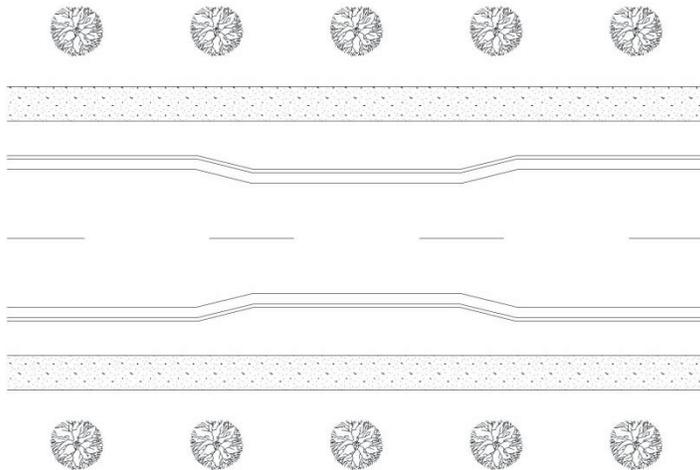


FIGURE 2
Example of a Pinch Point

J-4 Chicanes

Chicanes are mid-block curb extensions that alternate from one side of the street to the other, forming S-shaped curves. Chicanes can also be created by alternating on-street parking, either diagonal or parallel, between one side of the street and the other. Each parking bay can be created either by restriping the roadway or by installing raised, landscaping islands at the ends of each parking bay. This technique is also suitable for use with pairs off-set T-intersections.

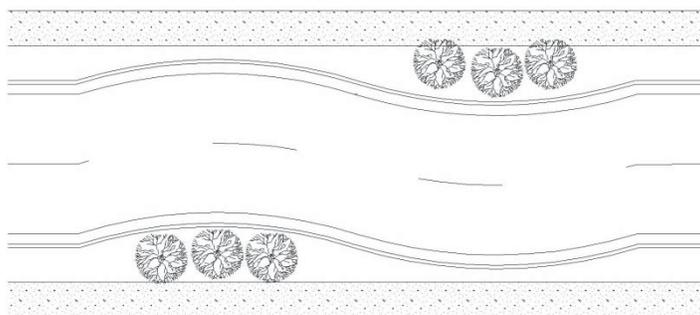


FIGURE 3
Example of a Chicane

J-5 Traffic Circles

Traffic circles are raised islands, placed in intersections, around which traffic circulates. Traffic circles, or mini-roundabouts, reduce the number of conflict points in an intersection and physically reduce speeds.

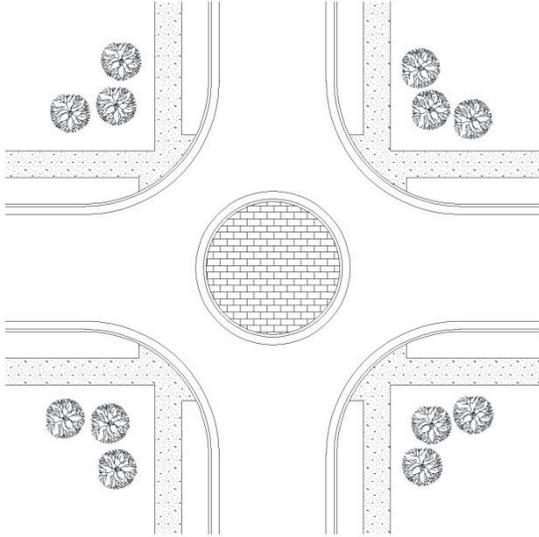


FIGURE 4
Example of a Traffic Circle

J-6 Median Islands

A median island is a raised barrier located along the centerline of a street that narrows the travel lanes at that location. When placed at the entrance to a neighborhood, it can provide positive indication that a driver is entering a residential area. If designed well, median islands can have positive aesthetic value, providing a landscaping opportunity.

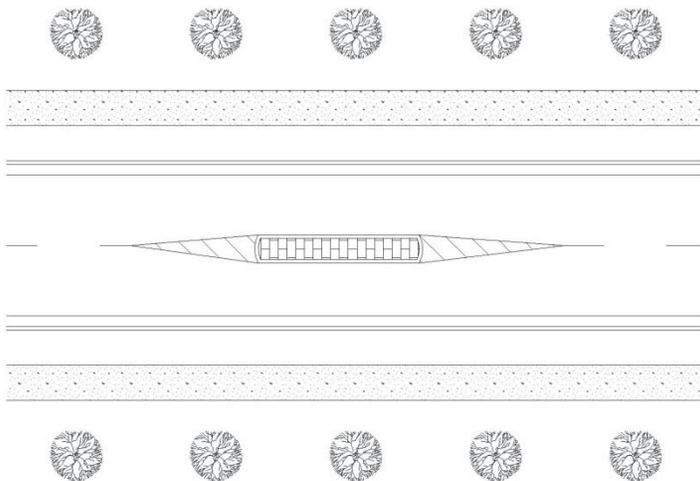


FIGURE 5
Example of a Median Island

J-7 Cut Through Closures

Partial or full road closures are often used to address the issue of cut through traffic. Full street closures can include landscaped islands, walls, gates, or bollards or any other type obstruction constructed in existing roadways to prevent the passage of vehicles. Barriers can also be constructed diagonally across an intersection to divert traffic and prohibit the through movement across the intersection.

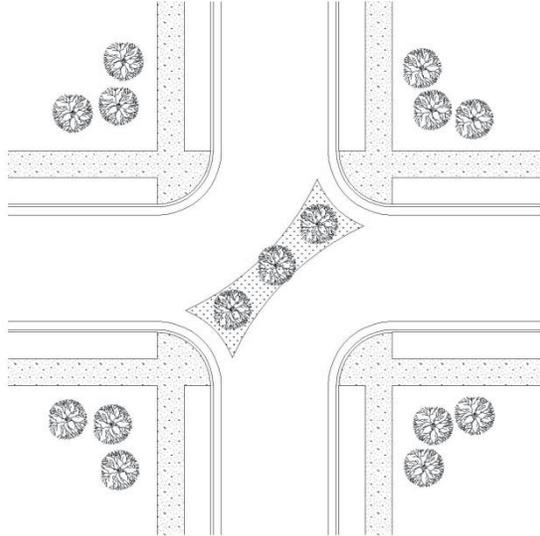


FIGURE 6
Example of a Full Road Closure

Partial or half closures are barriers that restrict traffic to one-way travel for a distance approaching or departing an intersection.

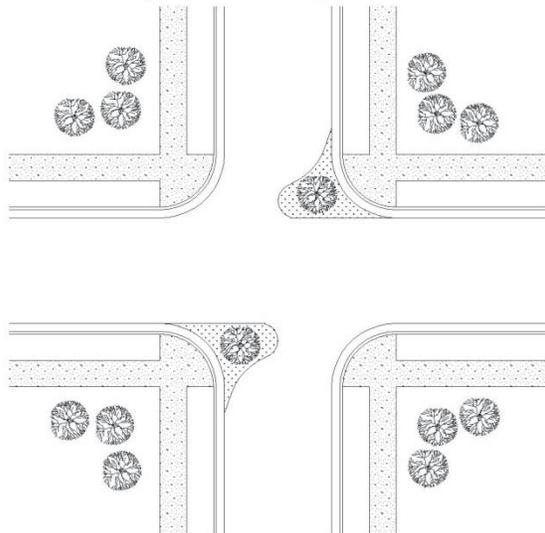


FIGURE 7
Example of a Partial Road Closure

APPENDIX K. Arterial Road List

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APPENDIX K. Arterial Roads List:

Beehive Road (Cox Road to Wire Road)
Bent Creek Road (I-85 to Glenn Avenue)
Chadwick Lane
College Street
Cox Road
Dean Road (Moores Mill Road to Opelika Road)
East University Drive
Farmville Road
Gay Street (Opelika Road to Samford Avenue)
Glenn Avenue (N. Donahue Dr. to City Limits)
Heath Road (AL 147)
Martin Luther King Drive
Moores Mill Road
N. Donahue Drive
Opelika Road
Pumphrey Avenue
Richland Road (Shug Jordan Parkway to Cotswold Way)
S. Donahue Drive (College St. to E. University Dr.)
Samford Avenue
Sandhill Road
Shelton Mill Road
Shug Jordan Parkway (AL 267/147)
Society Hill Road
U.S. Highway 280
Wire Road (Heisman Dr. to City Limits)

Generally, information is updated quarterly

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APPENDIX L. Collector & Residential Collector Road List

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APPENDIX L. Collector Roads List:

Airport Road	Rolling Ridge Road
Annalue Drive	Ross Street
Auburn Lakes Road	Saugahatchee Road (Annalue Dr. to Airport Rd.)
Beehive Road (Wire Rd. to Martin Luther King Dr.)	Shell Toomer Parkway
Bent Creek Road (Hamilton Road to I-85)	S. Donahue Drive (E. University Dr. to E. Longleaf Dr.)
Binford Drive	Southview Drive
Bragg Avenue	Stonewall Road
Bud Black Road	E. Thach Avenue
Byrd Street (Magnolia Avenue to MLK Drive)	Veterans Boulevard
Cary Creek Parkway	Webster Road
Chewacla Drive	Willis Turk Road
Chinook Street	Wire Road (W. Magnolia Ave. to Heisman Dr.)
Commerce Drive	Woodfield Drive (S. College Street to S. Gay Street)
County Club Road	Wrights Mill Rd (Samford Ave. to Shell Toomer Pkwy)
S. Dean Road (E. University Dr. to Moores Mill Rd.)	
N. Dean Road (Opelika Road to Sandstone Lane)	
N. Debardeleben Street	
Dekalb Street (Opelika Road to terminus)	
Drake Avenue	
Gatewood Drive	
S. Gay Street (Samford Avenue to E. University Drive)	
N. Gay Street (Opelika Road to Shelton Mill Road)	
W. Glenn Avenue (N. Donahue Drive to Byrd Street)	
Grand National Parkway	
Grove Hill Road	
Hamilton Road (Moores Mill Road to City Limits)	
Longleaf Drive	
Magnolia Avenue	
Mill Creek Road	
Miracle Road	
Mitcham Avenue	
Mrs. James Road	
Ogletree Road	
Old Cox Road	
Pear Tree Road	
Richland Road (Cotswold Way to Terminus)	

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Residential Collector Roads List:

Academy Drive (City Limits to Terminus)
Asheton Lane
Bedell Avenue
Bedrock Drive
Club Creek Drive (Yarbrough Farm to Falls Crest Dr.)
Conservation Drive
Cotswold Way
Crescent Boulevard (Piedmont Dr. to N. Donahue Dr.)
Deer Run Road
DeKalb Street (E. University Dr. to terminus)
Downs Way
Foster Street
Grove Hill Road
Keystone Drive
Longwood Drive
Lundy Chase Drive
Monticello Drive
Moores Mill Drive
Old Mill Road
Piedmont Drive
Preserve Drive (Conservation Dr. to northern terminus)
Rock Fence Road
Sanders Street
Solamere Lane
Stanton Drive (VFW Road to Grove Hill Road)
Tacoma Drive
Tuscany Hills Drive
VFW Road (Binford Drive to Stanton Drive)
Watercrest Drive
Yarbrough Farms Boulevard

Generally, information is updated quarterly.

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**APPENDIX M. Local Commercial/ Local Street/ Cul-de-Sacs/
Alleys List**

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APPENDIX M. Local Commercial/ Local Streets/ Cul-De-Sacs/ Alleys List

Local Commercial Roads List:

Corporate Parkway
Enterprise Drive
Haley Lane
Industry Drive
Innovation Drive
Mall Boulevard
Mall Parkway
McMillan Street
Paul Parks Lane
Riley Street
Technology Parkway
West Tech Lane

All other City streets, as applicable.

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APPENDIX N. Request for Sidewalk Construction Form

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Public Works Department
365-B North Donahue Drive
Auburn, AL 36832
(334) 501-3029

REQUEST FOR SIDEWALK CONSTRUCTION FORM

The online form can be found at <http://www.auburnalabama.org/mvc/pw/forms/sidewalk>

Please complete the following information:

Name: _____

Street Address: _____

Contact Phone No.: _____

Email (optional): _____

Other interested parties (Attach additional sheets if necessary for names)

Name	Address	Name	Address
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

I (or we) request that a sidewalk be constructed on _____

From _____ to _____

For the following reason(s): _____

Signature: _____ **Date:** _____

* Upon completion of the form, return to Jeff Ramsey at 171 North Ross Street or jramsey@auburnalabama.org.

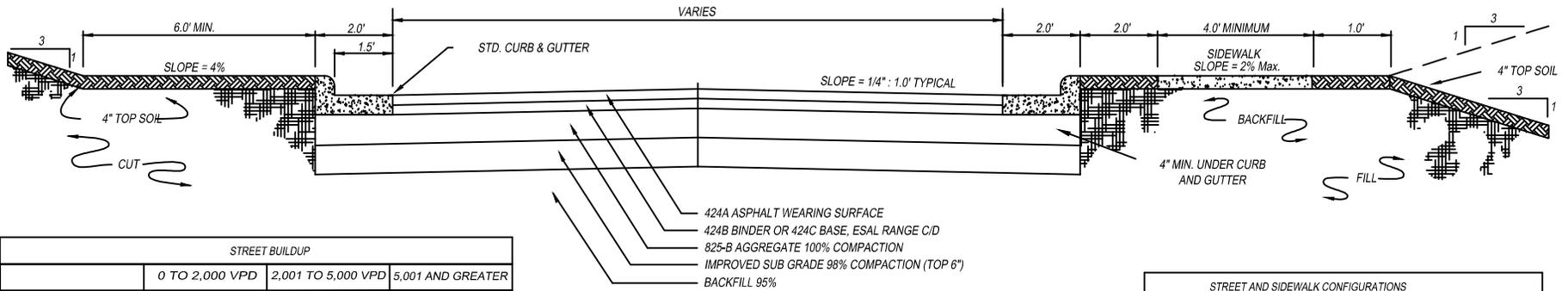
This section for official use only		
Evaluation	Determination	By/Date
Available ROW or easement	_____	_____
Terrain	_____	_____
Existing obstructions	_____	_____
Existing trees and impact	_____	_____
Drainage conditions	_____	_____
Cost Estimate	_____	_____
Recommendation	_____	_____

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APPENDIX O. Standard Drawings and Details

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TYPICAL STREET CROSS SECTION WITH CURB/GUTTER AND SIDEWALK



STREET BUILDUP						
	0 TO 2,000 VPD		2,001 TO 5,000 VPD		5,001 AND GREATER	
CLASSIFICATION	ALLEY/CUL-DE-SAC LOCAL RESIDENTIAL		RESIDENTIAL COLLECTOR		COLLECTOR/ARTERIAL LOCAL COMMERCIAL	
	CLASS II		CLASS III		CLASS IV	
	FULL DEPTH	ASPHALT/BASE	FULL DEPTH	ASPHALT/BASE	FULL DEPTH	ASPHALT/BASE
WEARING SURFACE (424A)	1"	1"	2.0"	1"	2.0"	1"
BINDER (424B) OR BASE (424C)	4"	2"	5.0"	4"	6.0"	4"
CRUSHED AGGREGATE BASE 825B		6.0"		6.0"		9.0"

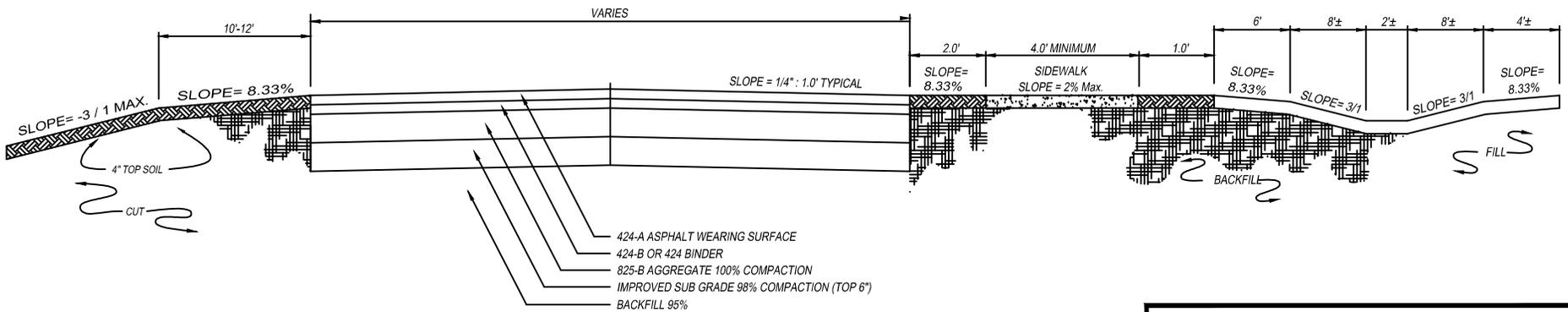
NOTES: MIXES SHALL COMPLY WITH THE LATEST EDITION OF THE ALABAMA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.
BINDER OR BASE LAYER TO BE PLACED IN TWO EQUAL LIFTS.

ASPHALT FINISH GRADES: (C & G)	
B/C to B/C	DIST. BELOW C/L @ T/C
26.0'	2.00"
28.0'	1.75"
31.0'	1.38"
35.0'	0.88"
40.0'	0.26"

STREET AND SIDEWALK CONFIGURATIONS				
CLASSIFICATION	B/C to B/C WIDTH	PAVEMENT WIDTH	ROW	SIDEWALK LOCATION
ALLEY (ONE-WAY)	NOT REQUIRED	11	25	NOT REQUIRED
ALLEY (TWO-WAY)	NOT REQUIRED	20	30	NOT REQUIRED
CUL-DE-SAC	26	22	50	1 SIDE*
LOCAL RESIDENTIAL	26	22	50	BOTH SIDES
LOCAL RESIDENTIAL	28	24	50	1 SIDE*
LOCAL COMMERCIAL	28	24	50	1 SIDE*
RESIDENTIAL COLLECTOR	31	27	60	BOTH SIDES
COLLECTOR	35	31	60	1 SIDE*
COLLECTOR	31	27	60	BOTH SIDES
COLLECTOR @ INTERSECTIONS	40	36	60	BOTH SIDES
ARTERIAL	52	48	80	BOTH SIDES

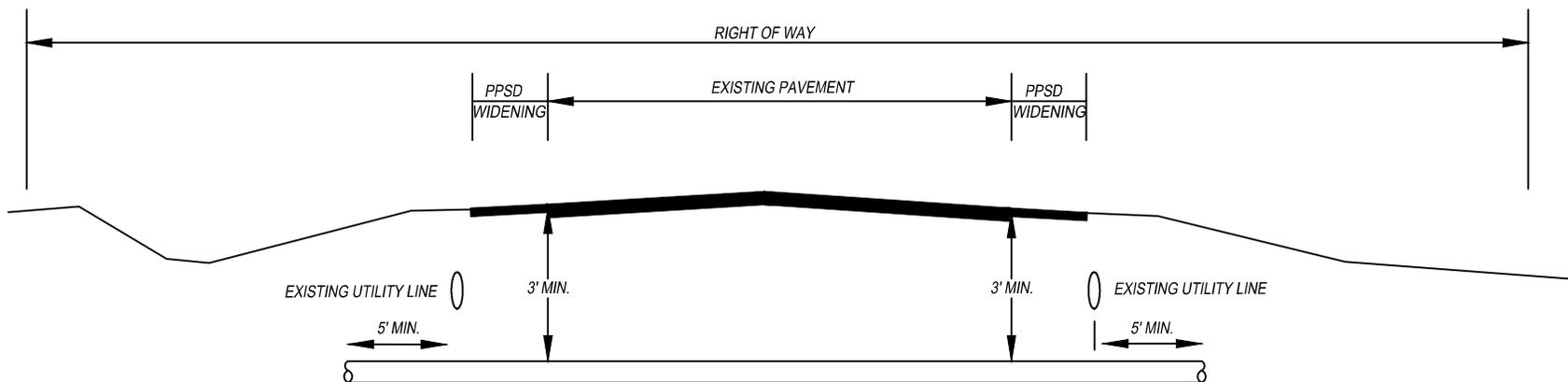
* CITY ENGINEER SHALL DETERMINE LOCATION OF SIDEWALK.

TYPICAL STREET CROSS SECTION WITHOUT CURB/GUTTER, AND WITH SIDEWALK



STANDARD DETAILS: STREETS		
PROJECT TITLE:	DEPARTMENT: ENGINEERING	REVISIONS: GM: 11-26-12
 City of Auburn	SCALE: N.T.S.	REVISIONS: GM: 12-15-15
	DRAWN BY: GINA MCCRICKARD	
	CITY ENGINEER: JEFF RAMSEY	
	APP'D. BY: JEFF RAMSEY	
IMPLEMENTED: 12-01-07		SHEET 1

JACK & BORE DETAIL



NOTES:

1. CASING SHOULD EXTEND AT LEAST 5' BEYOND EXISTING UTILITIES OR EDGE OF PAVEMENT, WHICHEVER IS GREATER.
2. IF WIDENING PLANS EXIST FOR THE ROADWAY TO BE BORED, ADDITIONAL CASING LENGTH MAY BE REQUIRED.
3. SPECIFIC INFORMATION ON BORING UNDER ROADWAYS IS FOUND IN THE PUBLIC WORKS DESIGN AND CONSTRUCTION MANUAL.

ENCASEMENT SIZING WATER AND SANITARY SEWER

CARRIER PIPE		SPACER	STEEL ENCASEMENT	
NOMINAL PIPE DIAMETER	STANDARD PIPE BELL O.D.	CASING SPACER BAND WIDTH	MINIMUM CASING THICKNESS	MINIMUM CASING DIAMETER
4	6.40	8	0.25	14
6	8.60	8	0.25	16
8	11.16	8	0.25	18
10	13.25	8	0.25	20
12	15.22	8	0.25	22
14	17.73	12	0.25	24
16	19.86	12	0.3125	26
18	22.16	12	0.3125	30
20	24.28	12	0.3125	32
24	28.50	12	0.3125	36
30	34.95	12	0.5	42
36	41.37	12	0.5	48

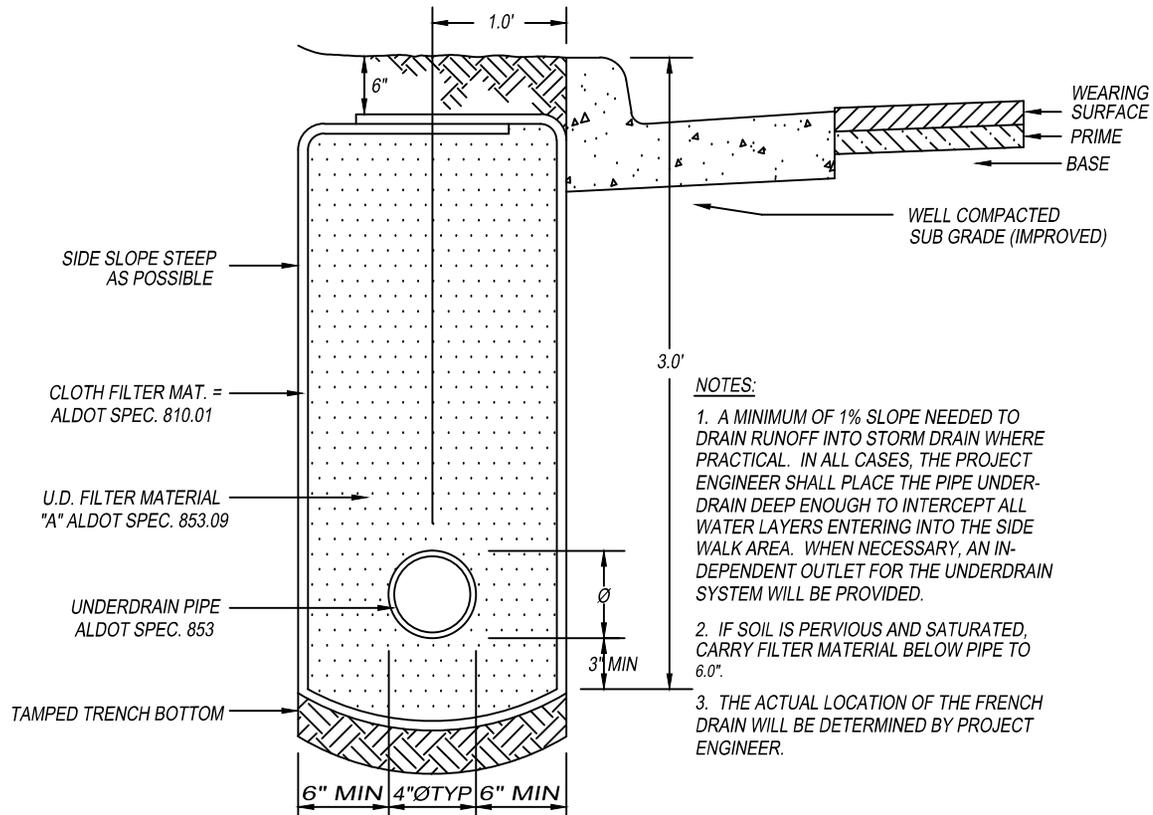
ALL SIZES INDICATED ARE IN INCHES.

*CASING DIAMETERS BASED ON BEING A MINIMUM OF 6 INCHES GREATER THAN THE OUTER DIAMETER OF THE JOINT BELL, TO THE NEAREST EVEN SIZE.

STANDARD DETAILS: STREETS

	PROJECT TITLE:	DEPARTMENT: ENGINEERING	REVISIONS: GM: 12-15-15
	SCALE: N.T.S.		
	DRAWN BY: GINA MCCRICKARD		
	CITY ENGINEER: JEFF RAMSEY		
	APPVD. BY: JEFF RAMSEY		
IMPLEMENTED: 12-01-07		SHEET 4	

PIPE UNDERDRAIN W/CURB & GUTTER

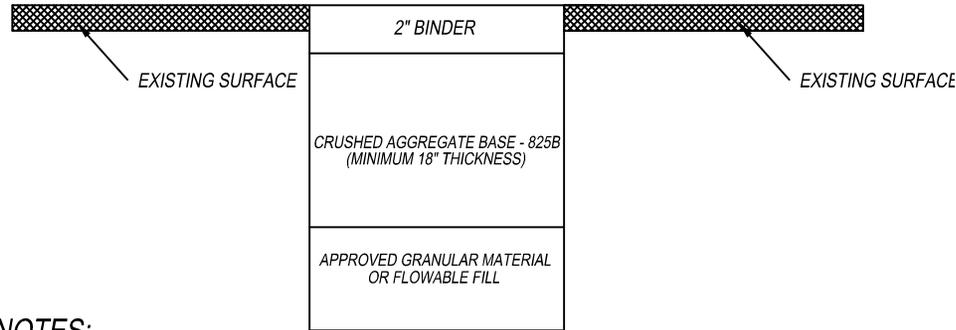


NOTES:

1. A MINIMUM OF 1% SLOPE NEEDED TO DRAIN RUNOFF INTO STORM DRAIN WHERE PRACTICAL. IN ALL CASES, THE PROJECT ENGINEER SHALL PLACE THE PIPE UNDERDRAIN DEEP ENOUGH TO INTERCEPT ALL WATER LAYERS ENTERING INTO THE SIDE WALK AREA. WHEN NECESSARY, AN INDEPENDENT OUTLET FOR THE UNDERDRAIN SYSTEM WILL BE PROVIDED.
2. IF SOIL IS PERVIOUS AND SATURATED, CARRY FILTER MATERIAL BELOW PIPE TO 6.0'.
3. THE ACTUAL LOCATION OF THE FRENCH DRAIN WILL BE DETERMINED BY PROJECT ENGINEER.

STANDARD DETAILS: STREETS		
<small>PROJECT TITLE</small>	<small>DEPARTMENT: ENGINEERING</small>	<small>REVISIONS: GM: 12-15-15</small>
 City of Auburn	<small>SCALE: N.T.S.</small>	
	<small>DRAWN BY: GINA McCRICKARD</small>	
	<small>CITY ENGINEER: JEFF RAMSEY</small>	
	<small>APPVD. BY: JEFF RAMSEY</small>	
	<small>IMPLEMENTED: 12-01-07</small>	SHEET 5

TEMPORARY UTILITY PATCH DETAIL

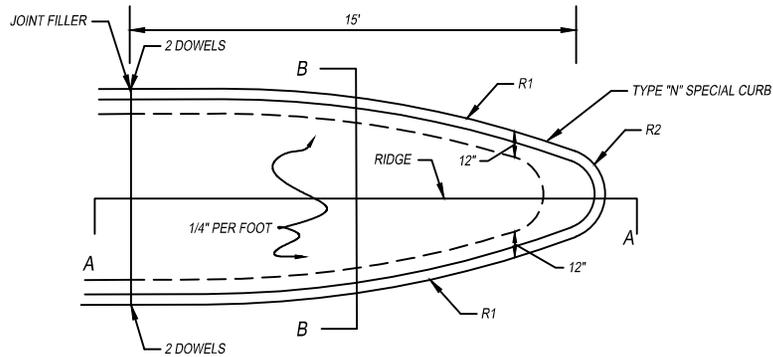


NOTES:

1. EDGES SHALL BE SAW CUT, VERTICAL AND SMOOTH OR JACK HAMMERED AND COATED WITH TACK.
2. 2" OF ASPHALT MUST BE PLACED IMMEDIATELY FOLLOWING WORK AND BE IN PLACE AT LEAST EIGHT WEEKS PRIOR TO PLACING THE FINAL PATCH.
3. ASPHALT AND CRUSHED AGGREGATE BASE MATERIALS SHALL BE IN ACCORDANCE WITH ALDOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.
4. APPROVED GRANULAR MATERIAL AND 825B TO BE COMPACTED IN EIGHT (8") LIFTS.
5. FLOWABLE FILL MUST BE PRE-APPROVED.

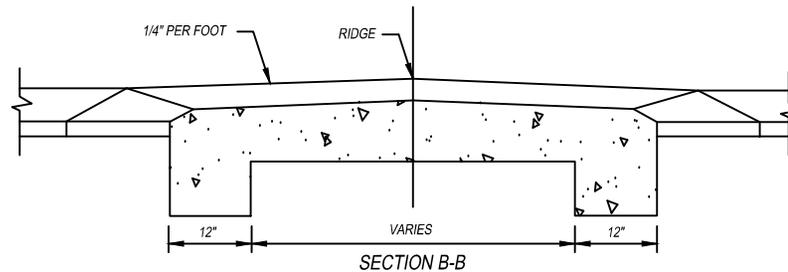
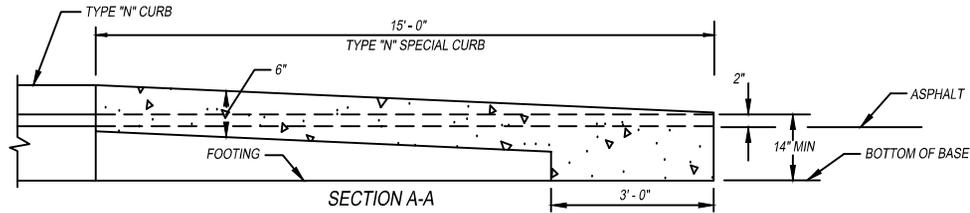
STANDARD DETAILS: STREETS		
<small>PROJECT TITLE:</small>	<small>DEPARTMENT: ENGINEERING</small>	<small>REVISIONS: GM: 6-24-11</small>
 City of Auburn	<small>SCALE: N.T.S.</small>	<small>REVISIONS: GM: 12-15-15</small>
	<small>DRAWN BY: GINA McCRICKARD</small>	
	<small>CITY ENGINEER: JEFF RAMSEY</small>	
	<small>APPVD. BY: JEFF RAMSEY</small>	
	<small>IMPLEMENTED: 12-01-07</small>	SHEET 7

MOUNTABLE ISLAND NOSE



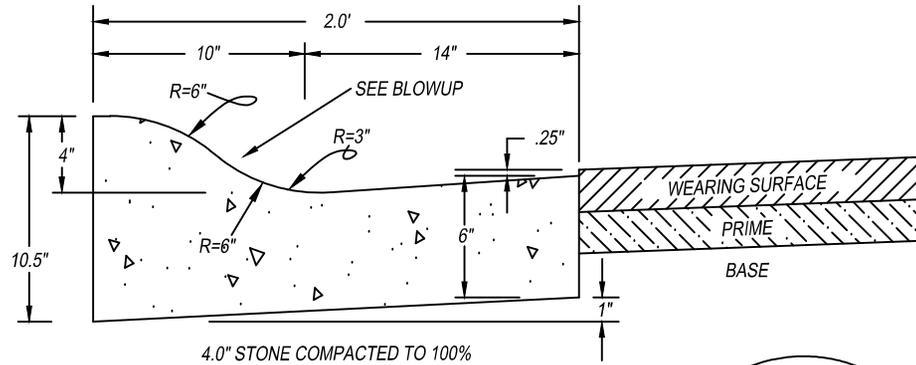
NOTES:

1. R1 = TURNING SPEED RADIUS: 20 MPH = 90', 25 MPH = 150', 30 MPH = 230'. R1 SHALL BE A MINIMUM OF 80'.
2. R2 = 1/2 MEDIAN WIDTH (MAXIMUM) BUT ACCEPTABLE WHEN R2 IS APPROXIMATELY 1/5 OF MEDIAN WIDTH.

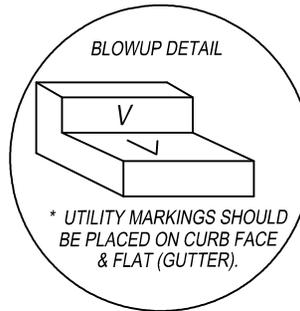
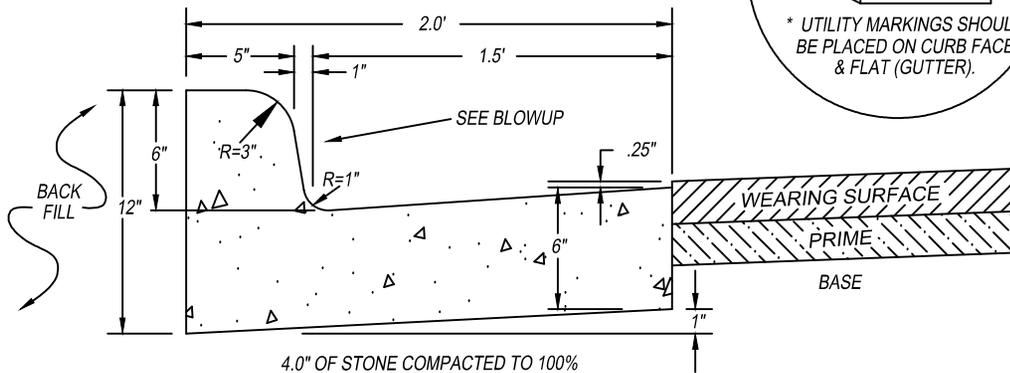


STANDARD DETAILS: STREETS													
<p style="font-size: 8px;">PROJECT TITLE:</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="font-size: 8px;">DEPARTMENT: ENGINEERING</td> <td style="width: 50px;"></td> </tr> <tr> <td style="font-size: 8px;">SCALE: N.T.S.</td> <td></td> </tr> <tr> <td style="font-size: 8px;">DRAWN BY: GINA MCCRICKARD</td> <td></td> </tr> <tr> <td style="font-size: 8px;">CITY ENGINEER: JEFF RAMSEY</td> <td></td> </tr> <tr> <td style="font-size: 8px;">APPVD. BY: JEFF RAMSEY</td> <td></td> </tr> <tr> <td style="font-size: 8px;">IMPLEMENTED: 1-1-2016</td> <td></td> </tr> </table>	DEPARTMENT: ENGINEERING		SCALE: N.T.S.		DRAWN BY: GINA MCCRICKARD		CITY ENGINEER: JEFF RAMSEY		APPVD. BY: JEFF RAMSEY		IMPLEMENTED: 1-1-2016	
DEPARTMENT: ENGINEERING													
SCALE: N.T.S.													
DRAWN BY: GINA MCCRICKARD													
CITY ENGINEER: JEFF RAMSEY													
APPVD. BY: JEFF RAMSEY													
IMPLEMENTED: 1-1-2016													
<p style="font-size: 8px;">City of Auburn</p>	SHEET 8												

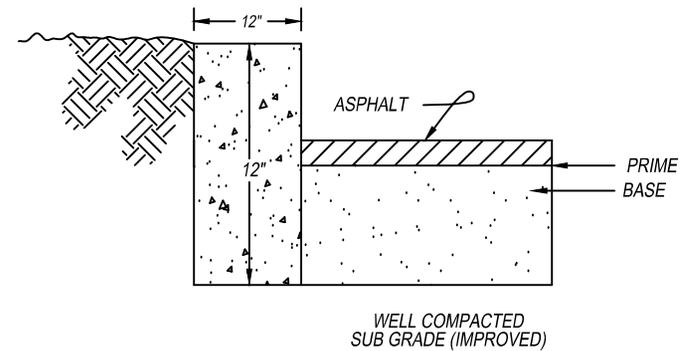
ROLL CURB



CURB & GUTTER



HEADER CURB



ROLL CURB

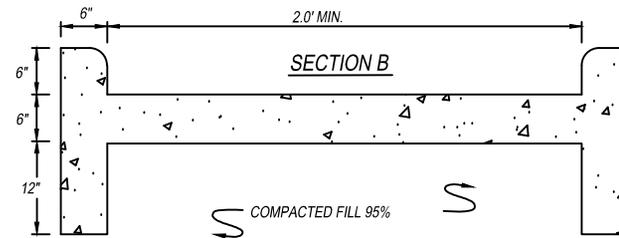
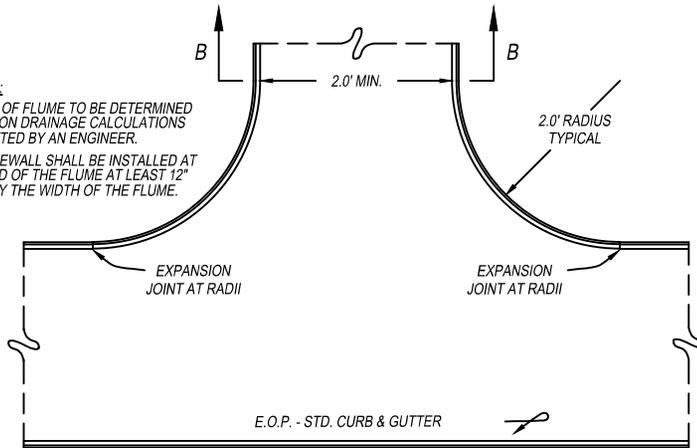
** USE OF SPILL CURB MUST BE REVIEWED AND APPROVED PRIOR TO INSTALLATION

STANDARD DETAILS: STREETS		
PROJECT TITLE:	DEPARTMENT: ENGINEERING	REVISIONS: GM: 6-24-11
 City of Auburn	SCALE: N.T.S.	REVISIONS: GM: 12-15-15
	DRAWN BY: GINA McCRICKARD	
	CITY ENGINEER: JEFF RAMSEY	
	APPVD. BY: JEFF RAMSEY	
IMPLEMENTED: 12-01-07	SHEET 9	

FLUME DETAIL

NOTES:

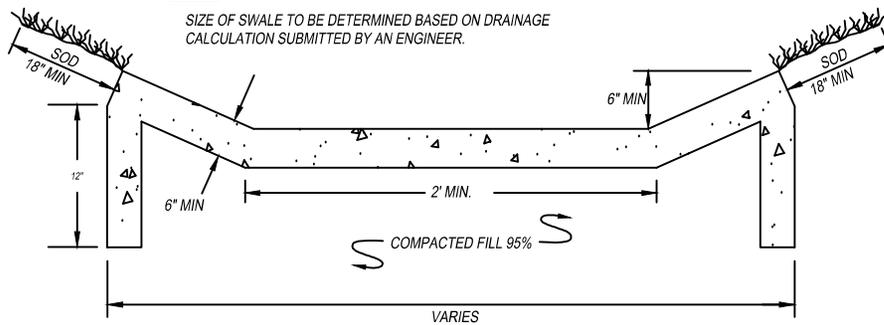
1. SIZE OF FLUME TO BE DETERMINED BASED ON DRAINAGE CALCULATIONS SUBMITTED BY AN ENGINEER.
2. A TOEWALL SHALL BE INSTALLED AT THE END OF THE FLUME AT LEAST 12" DEEP BY THE WIDTH OF THE FLUME.



SWALE

NOTE:

SIZE OF SWALE TO BE DETERMINED BASED ON DRAINAGE CALCULATION SUBMITTED BY AN ENGINEER.



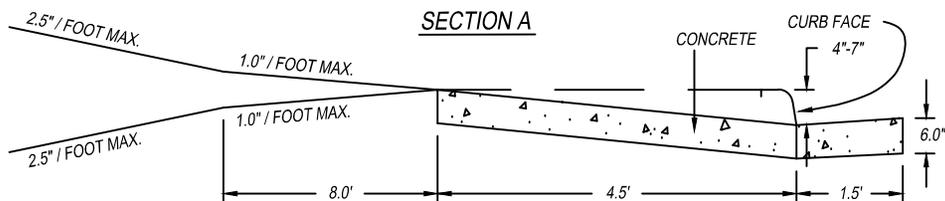
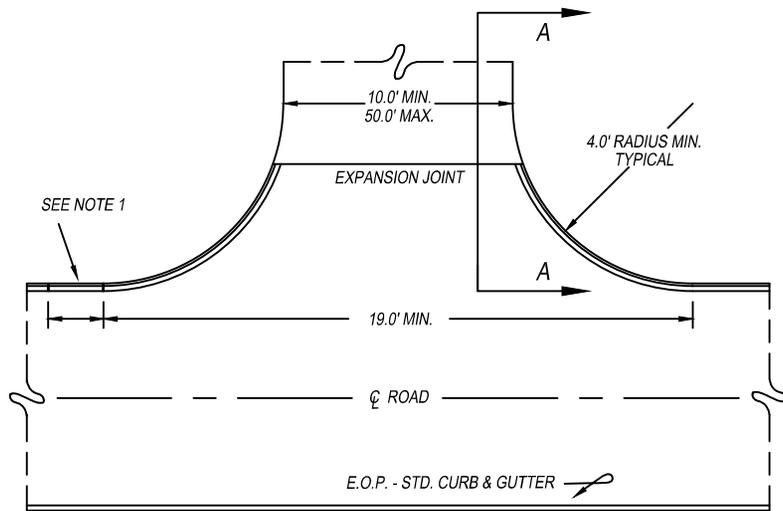
STANDARD DETAILS: STREETS

 City of Auburn	DEPARTMENT: ENGINEERING	REVISIONS: GM: 11-26-12
	SCALE: N.T.S.	REVISIONS: GM: 12-15-15
	DRAWN BY: GINA McCRICKARD	
	CITY ENGINEER: JEFF RAMSEY	
	APPVD. BY: JEFF RAMSEY	
IMPLEMENTED: 12-01-07	SHEET 10	

STANDARD DRIVEWAY

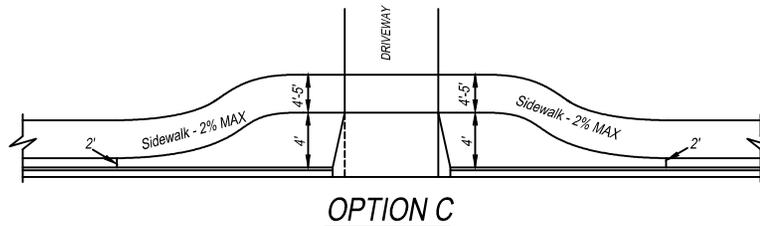
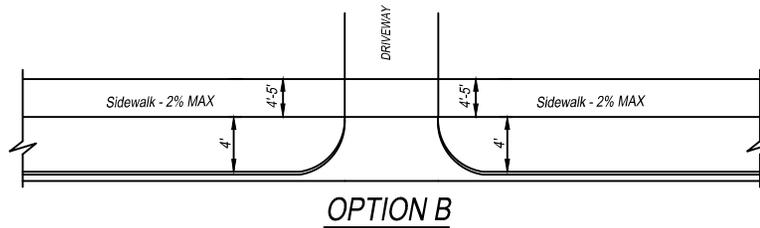
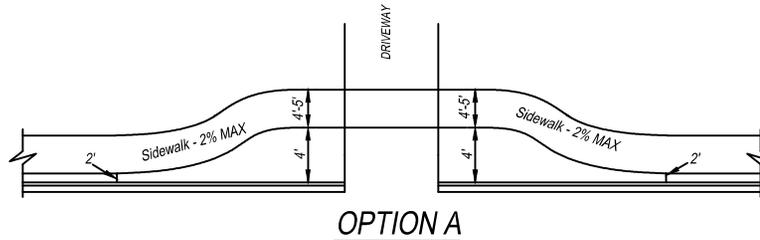
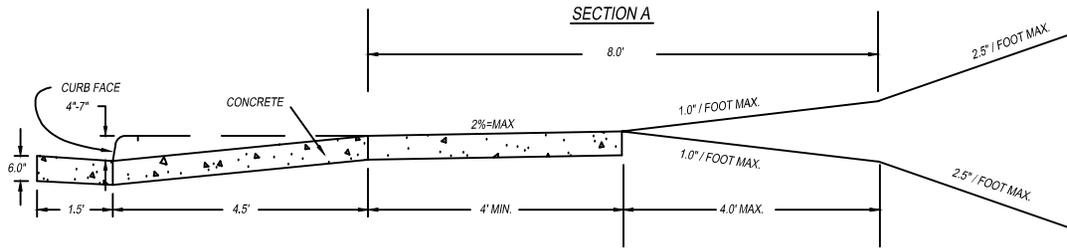
NOTES:

1. DISTANCE FROM RADIUS POINT TO EXISTING EXPANSION OR CONSTRUCTION JOINT SHALL BE AT LEAST 3'. IF THE DISTANCE IS LESS THAN 3.0', CURB & GUTTER SHALL BE REPLACED TO THE EXISTING JOINT.
2. EXPANSION JOINT TO BE PLACED AT TIE IN.
3. THE TEN FOOT MINIMUM WIDTH IS FOR RESIDENTIAL USES ON LOCAL STREETS, CUL-DE-SACS, AND ALLEYS. ALL OTHERS WILL BE TWELVE FOOT MINIMUM WIDTH. THE 50' WIDTH IS RESERVED FOR COMMERCIAL AND MULTI UNIT RESIDENTIAL DEVELOPMENTS.
4. DRIVEWAY TURNOUT WIDTHS ARE MEASURED AT THE RIGHT OF WAY.
5. REMOVE CURB & GUTTER FOR DRIVEWAY TURNOUT PLACEMENT. SAW CUTTING IS PERMITTED ALONG THE CURB LINE / GUTTER TO MAINTAIN EXISTING GUTTER.
6. ALL CONCRETE SHALL BE A MINIMUM OF SIX INCHES THICK.
7. RADII FOR USES OTHER THAN RESIDENTIAL MUST BE TWENTY-FIVE FOOT, MINIMUM.
8. ON STREETS WITH SIDEWALK CONCRETE DRIVEWAY TURNOUT MUST EXTEND TO THE BACK EDGE OF THE SIDEWALK.
9. CONCRETE DRIVEWAY TURNOUT MUST MEET CITY STANDARDS OR CAN BE DESIGNED TO SITE SPECIFIC CONDITIONS.



STANDARD DETAILS: STREETS		
PROJECT TITLE	DEPARTMENT: ENGINEERING	REVISIONS: GM: 11-26-12
 City of Auburn	SCALE: N.T.S.	REVISIONS: GM: 12-15-15
	DRAWN BY: GINA MCCRICKARD	
	CITY ENGINEER: JEFF RAMSEY	
	APPVD. BY: JEFF RAMSEY	
IMPLEMENTED: 12-01-07	SHEET II	

DRIVEWAY/SIDEWALK WITH GREENSPACE



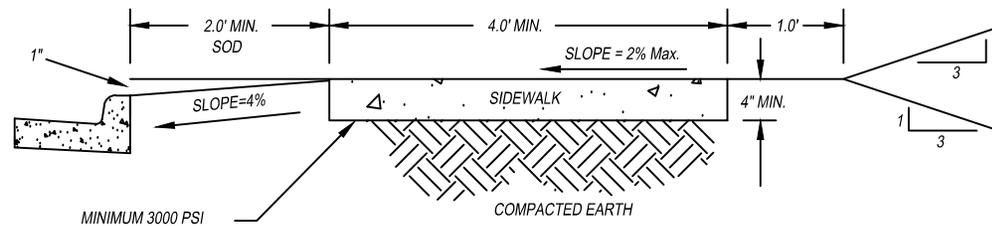
STANDARD DETAILS: STREETS		
<small>PROJECT TITLE:</small>	<small>DEPARTMENT: ENGINEERING</small>	<small>REVISIONS: BS: 12-09-2013</small>
	<small>SCALE: N.T.S.</small>	<small>REVISIONS: GM: 02-14-2014</small>
	<small>DRAWN BY: BRIAN SIMPSON</small>	<small>REVISIONS: GM: 12-15-15</small>
	<small>CITY ENGINEER: JEFF RAMSEY</small>	
	<small>APPVD. BY: JEFF RAMSEY</small>	
	<small>IMPLEMENTED: 12-01-07</small>	
		SHEET 12

NOTES:

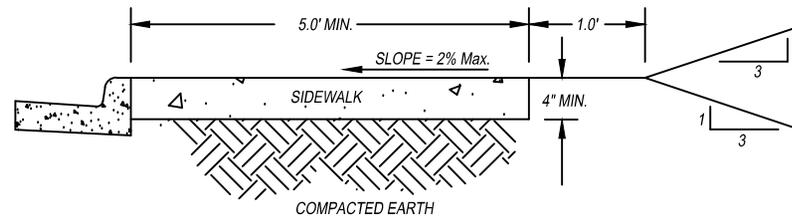
1. SIDE SLOPES FOR STREETS SHALL VARY FROM A POINT SIX (6') FEET BEHIND THE CURB TO THE EXISTING ELEVATION AT THE AT THE RIGHT OF WAY (R.O.W.), EXCEPT THAT SUCH SLOPE SHALL NOT BE GREATER THAN 3:1. IN CASES WHERE A 3:1 SLOPE CARRIES THE CONSTRUCTION LIMITS BEYOND THE R.O.W. LINE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY CLEARING & GRUBBING, EXCAVATION, BACKFILL, MULCHING OR ANY OTHER WORK REQUIRED TO ACCOMMODATE THE 3:1 SLOPE. IN CASES WHERE ROCK IS ENCOUNTERED, THE SLOPE MAY BE 2.5:1 IN THE ROCK PORTION.
2. FOR PORTLAND CEMENT CONCRETE PAVEMENTS, THE TYPICAL CROSS SECTION SHALL BE DESIGNED ON A CASE BY CASE BASIS.
3. CURB AND GUTTER SHALL BE CAST IN PLACE WITH THE FOLLOWING REQUIREMENTS: EXPANSION JOINT AT FIFTY (50.0') FOOT INTERVALS WITH DUMMY JOINTS AT TEN (10.0') FOOT INTERVALS. WHEN ELECTRIC, GAS, SEWER OR WATER SERVICE LINES ARE IN PLACE, AN "E", "G", "S" OR "W" SHALL BE MARKED ON CURB FACE AND FLAT/GUTTER AT THE APPROPRIATE LOCATION(S). AFTER THE CURB & GUTTER HAS BEEN CURED, EXTRA PRECAUTIONS WILL BE TAKEN DURING BACKFILLING AND/OR OTHER ACTIVITIES TO PREVENT DAMAGE OR MARRING OF FINISH; REFER TO CURB & GUTTER DETAILS FOR PLACEMENT OF UTILITY MARKINGS WITH A MIN. OF 4"x2" LETTERS.
4. ALL ROADWAY MATERIALS (ASPHALT AND CRUSHED AGGREGATE BASE) SHALL COMPLY WITH THE ALDOT STANDARDS, UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
5. TACK POINTS (PRIME) SHALL BE APPLIED PRIOR TO WEARING SURFACE APPLICATION, AND BETWEEN LAYERS OF PAVEMENT MATERIAL FOR RESURFACING PROJECTS. TACK SHALL BE SSI-H OR ASPHALTIC CEMENT AC-10 OR AC-20 AS SPECIFIED BY THE CITY ENGINEER. IN ADDITION, IF PAVING OPERATION IS DELAYED, OR EDGES BECOME DIRTY OR MUDDY, ALL DIRT AND MUD MUST BE REMOVED PRIOR TO APPLYING TACK COAT.
6. BASE AND WEARING SURFACE REQUIREMENTS ARE BASED ON CBR OF 6-9 FOR SUBGRADE SOILS. ALTERNATE DESIGN FOR FULL DEPTH PAVEMENTS OR VARIANCE TO LISTED THICKNESSES WILL BE CONSIDERED ON A CASE BY CASE BASIS, BASED ON SUBGRADE SOILS AND/OR EXPECTED TRUCK TRAFFIC.
7. PROVIDE 1 1/2" DEEP BY 1/8" WIDE CONTROL JOINTS EVERY 5' WITH EXPANSION JOINTS EVERY 50'. EXPANSION MATERIAL CAN BE FILTER BOARD OR A TREATED 1X4.
8. FOR NON CURB AND GUTTER STREETS, A PAVED DRIVEWAY TURNOUT IS REQUIRED. SLOPES MUST MEET ILLUSTRATED REQUIREMENTS ON THESE DETAILS.
9. ALL TREE PLANTINGS WITHIN THE RIGHT OF WAY MUST BE APPROVED BY THE CITY OF AUBURN PARKS AND RECREATION DEPARTMENT PRIOR TO INSTALLATION. PLANTINGS SHALL BE IN ACCORDANCE WITH THE STANDARD DETAIL.
10. WHEN A DEVELOPMENT WARRANTS THE WIDENING OF THE ROADWAY THAT WILL ALTER THE CURRENT TRAFFIC STRIPING, THE DEVELOPER, AT THEIR EXPENSE, SHALL PROVIDE A THREE-QUARTER INCH OVERLAY. THE LIMITS OF THE OVERLAY SHALL COVER ALL TRAVEL LANES AND WILL BEGIN AND END AT THE LIMITS OF THE ALL ROADWAY IMPROVEMENTS.
11. THE GUTTER DEPTH MAY BE USED TO ACCOUNT FOR THE DEPTH OF PARKING SPACE PROVIDED THERE IS A TWO FOOT GRASS STRIP BETWEEN THE BACK OF CURB AND THE FOUR FOOT WIDE SIDEWALK. IF SIDEWALK IS PLACED IMMEDIATELY ADJACENT TO THE BACK OF CURB AND THE GUTTER DEPTH IS USED FOR PARKING THE SIDEWALK SHALL BE INCREASED TO FIVE FEET WIDE. IN NO CASES SHALL THE GUTTER WIDTH BE COUNTED TOWARD THE WIDTH OF A PARKING SPACE.
12. JOINT SEAL SHALL BE PLACED ON THE BINDER LAYER IF THE WEARING SURFACE IS NOT APPLIED FOR 12 MONTHS.
13. SIDEWALK CROSS SLOPES SHALL BE 1% MINIMUM.

STANDARD DETAILS: STREETS		
PROJECT TITLE:	DEPARTMENT: ENGINEERING	REVISIONS: GM: 12-15-15
 City of Auburn	SCALE: N.T.S.	
	DRAWN BY: GINA MCCRICKARD	
	CITY ENGINEER: JEFF RAMSEY	
	APPVD. BY: JEFF RAMSEY	
	IMPLEMENTED: 12-01-07	
		SHEET 14

SIDEWALK with GREENSPACE *



5' SIDEWALK



NOTES:

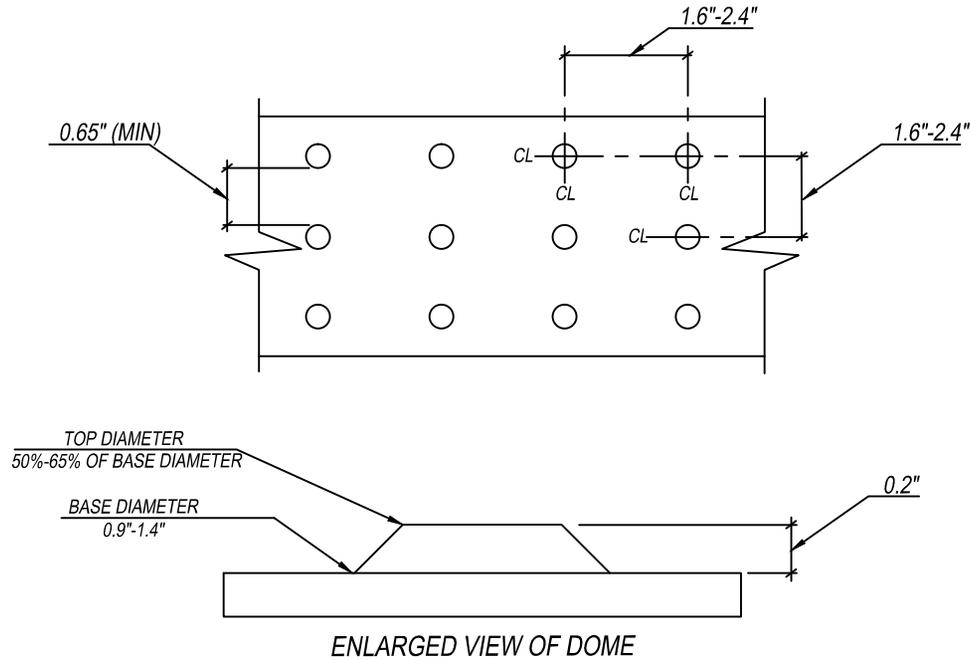
1. PROVIDE 1 1/2" DEEP BY 1/8" WIDE CONTROL JOINTS EVERY 5' WITH EXPANSION JOINTS EVERY 50'. EXPANSION MATERIAL CAN BE FILTER BOARD OR A TREATED 1x4.
2. WHEN THE DISTANCE BETWEEN THE BACK OF CURB AND THE EDGE OF SIDEWALK IS LESS THAN TWO FEET, THE SIDEWALK MUST BE A MINIMUM OF FIVE FEET WIDE.
3. SIDEWALK (ACCESSIBLE ROUTE) WITH CLEAR WIDTH LESS THAN 60 INCHES SHALL PROVIDE PASSING SPACES AT INTERVALS OF 200 FEET MAXIMUM. PASSING SPACES SHALL BE EITHER: A SPARE 60 INCHES BY 60 INCHES MINIMUM; OR, AN INTERSECTION OF TWO WALKING SURFACES PROVIDING A T-SHAPED SPACE COMPLIANT WITH PROWAG STANDARDS.

* 4 FOOT WIDTH IS ALLOWED ON LOCAL STREETS AND CUL DE SAC'S. 5 FOOT MINIMUM IS REQUIRED ON ALL ARTERIALS, COLLECTORS, LOCAL COMMERCIAL, AND RESIDENTIAL COLLECTORS.

STANDARD DETAILS: STREETS

<small>PROJECT TITLE:</small>	<small>DEPARTMENT: ENGINEERING</small>	<small>REVISIONS: GM: 6-24-11</small>
	<small>SCALE: N.T.S.</small>	<small>REVISIONS: GM: 02-17-2014</small>
	<small>DRAWN BY: GINA McCRICKARD</small>	<small>REVISIONS: GM: 12-15-15</small>
	<small>CITY ENGINEER: JEFF RAMSEY</small>	
	<small>APP'VD. BY: JEFF RAMSEY</small>	SHEET 15
	<small>IMPLEMENTED: 6-16-08</small>	

DETECTABLE WARNING AT HANDICAP RAMP



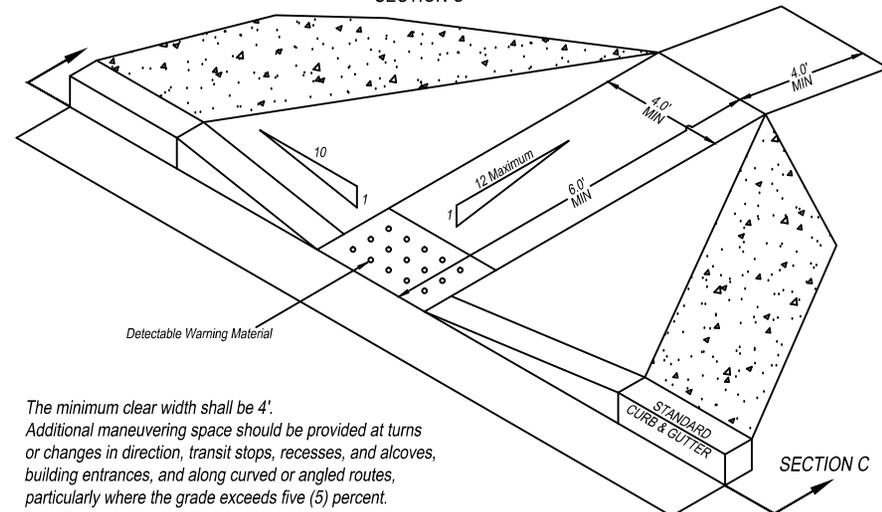
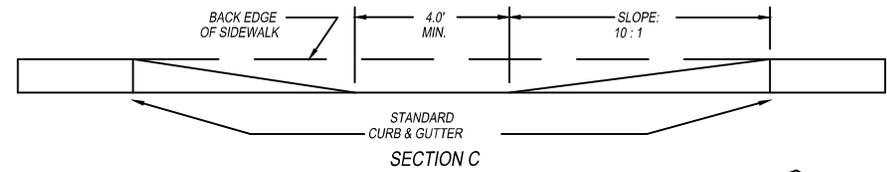
NOTES:

1. DETECTABLE WARNINGS SHALL CONSIST OF A SURFACE OF TRUNCATED DOMES AND SHALL COMPLY WITH APPLICABLE ADA REGULATIONS.
2. DOME SIZE: TRUNCATED DOMES IN A DETECTABLE WARNING SURFACE SHALL HAVE A BASE DIAMETER OF 0.9 INCH MINIMUM TO 1.4 INCHES MAXIMUM, A TOP DIAMETER OF 50 PERCENT OF THE BASE DIAMETER MINIMUM TO 65 PERCENT OF THE BASE DIAMETER MAXIMUM, AND HEIGHT OF 0.2 INCH
3. DOME SPACING: TRUNCATED DOMES IN A DETECTABLE WARNING SURFACE SHALL HAVE A CENTER-TO-CENTER SPACING OF 1.6 INCHES MINIMUM AND 2.4 INCHES MAXIMUM, AND A BASE-TO-BASE SPACING OF 0.65 INCH MINIMUM, MEASURED BETWEEN THE MOST ADJACENT DOMES.
4. CONTRAST: DETECTABLE WARNING SURFACES SHALL CONTRAST VISUALLY WITH ADJACENT GUTTER, STREET OR HIGHWAY, OR WALKWAY SURFACE EITHER LIGHT-ON-DARK, OR DARK-ON-LIGHT.
5. SIZE: DETECTABLE WARNING SURFACES SHALL EXTEND 24 INCHES MINIMUM IN THE DIRECTION OF TRAVEL AND THE FULL WIDTH OF THE CURB RAMP (EXCLUSIVE OF FLARES), THE LANDING, OR THE BLENDED TRANSITION.

PROJECT TITLE: STANDARD DETAILS: STREETS		
	DEPARTMENT: ENGINEERING	REVISIONS: GM: 6-24-11
	SCALE: N.T.S.	REVISIONS: AF: 10-08-13
	DRAWN BY: GINA McCRICKARD	REVISIONS: GM: 02-17-2014
	CITY ENGINEER: JEFF RAMSEY	REVISIONS: GM: 12-15-15
	APPVD. BY: JEFF RAMSEY	SHEET 16
IMPLEMENTED: 6-16-08		

HANDICAP RAMP

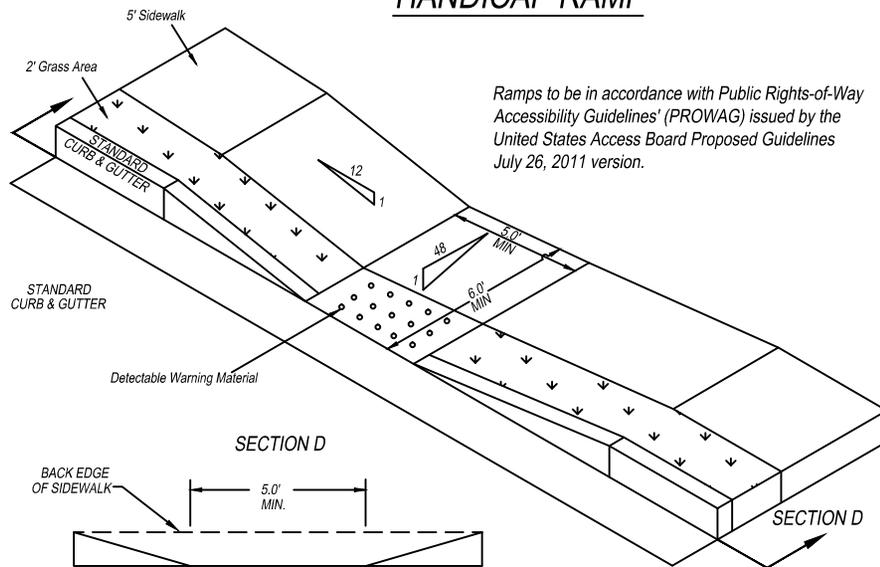
DOWN TOWN USE



The minimum clear width shall be 4'.
 Additional maneuvering space should be provided at turns or changes in direction, transit stops, recesses, and alcoves, building entrances, and along curved or angled routes, particularly where the grade exceeds five (5) percent.

HANDICAP RAMP

Ramps to be in accordance with Public Rights-of-Way Accessibility Guidelines' (PROWAG) issued by the United States Access Board Proposed Guidelines July 26, 2011 version.

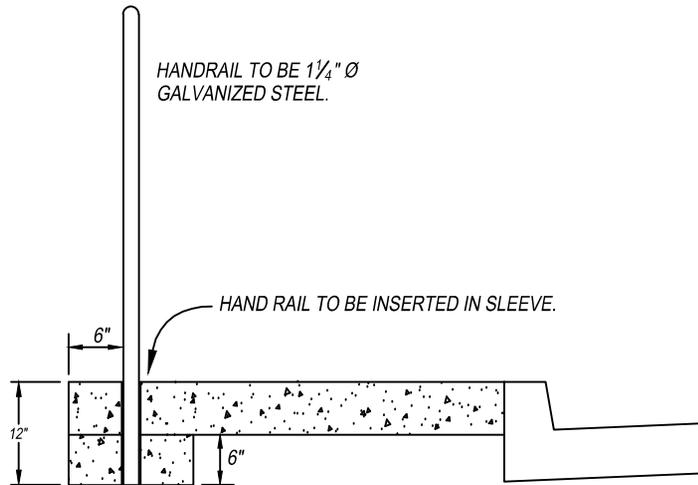
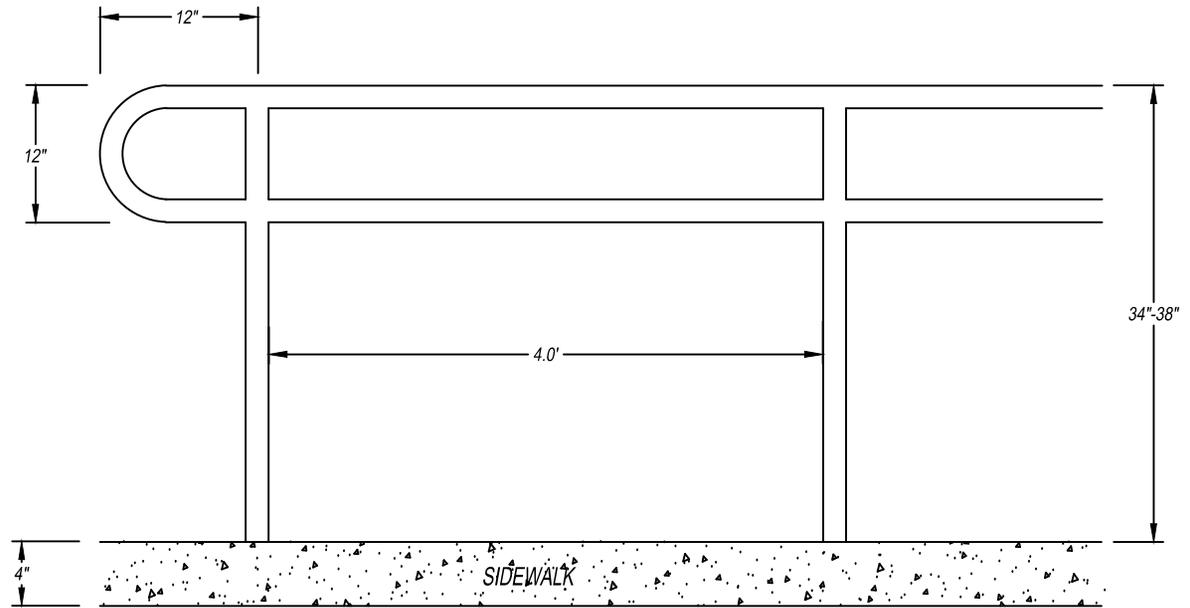


STANDARD DETAILS: STREETS		
PROJECT TITLE:	DEPARTMENT: ENGINEERING	REVISIONS: GM: 11-26-2012
	SCALE: N.T.S.	REVISIONS: GM: 02-14-2014
	DRAWN BY: GINA MCCRICKARD	REVISIONS: GM: 12-15-15
	CITY ENGINEER: JEFF RAMSEY	
	APPVD. BY: JEFF RAMSEY	
	IMPLEMENTED: 6-16-08	



SHEET 17

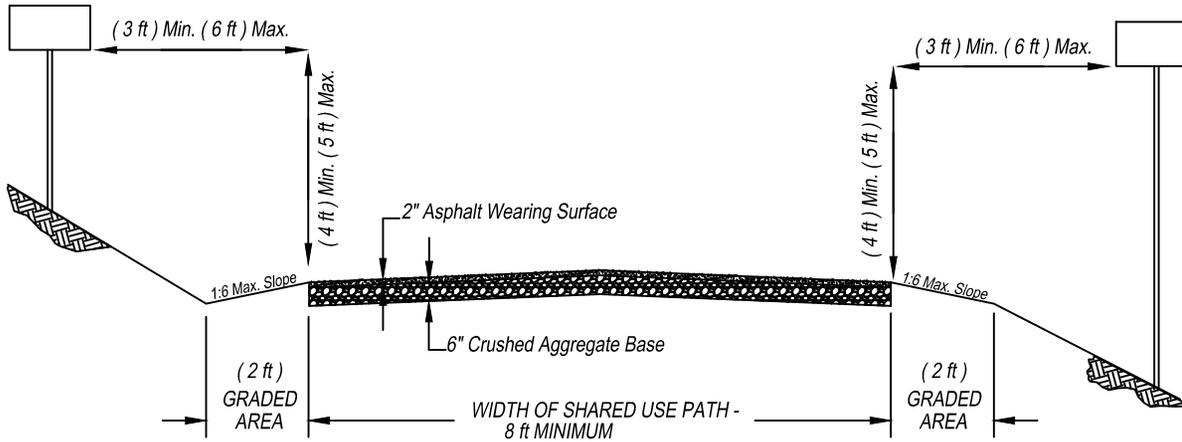
HAND RAIL DETAIL



RIGHT ALT. VIEW

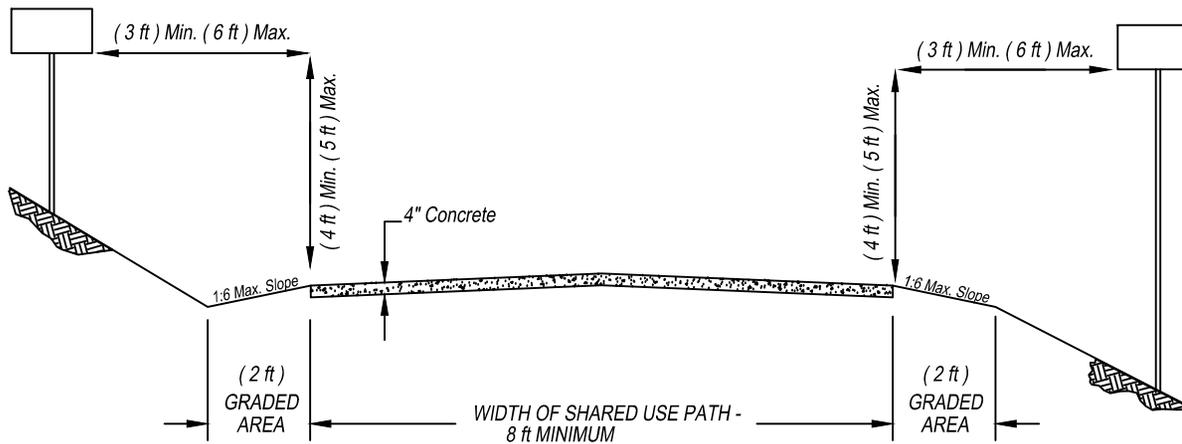
STANDARD DETAILS: STREETS		
PROJECT TITLE	DEPARTMENT: ENGINEERING	REVISIONS: GM: 12-15-15
 City of Auburn	SCALE: N.T.S.	
	DRAWN BY: GINA McCRICKARD	
	CITY ENGINEER: JEFF RAMSEY	
	APPVD. BY: JEFF RAMSEY	
	IMPLEMENTED: 6-16-08	
		SHEET 18

CROSS SECTION OF TWO-WAY SHARED USE PATH ON SEPARATED RIGHT-OF-WAY
ASPHALT PATH



AASHTO, GUIDE FOR THE DEVELOPMENT OF BICYCLE FACILITIES

CROSS SECTION OF TWO-WAY SHARED USE PATH ON SEPARATED RIGHT-OF-WAY
CONCRETE PATH



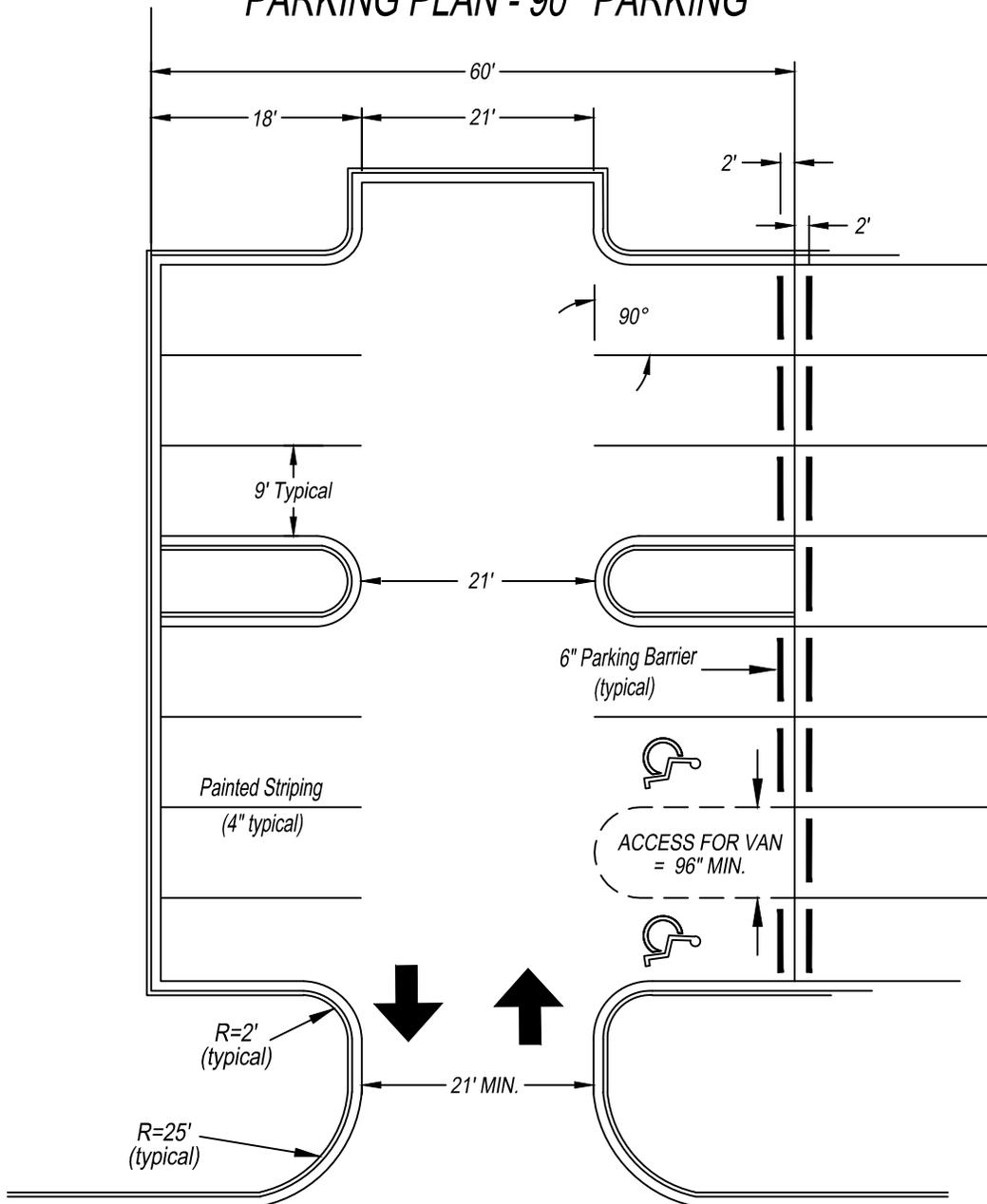
AASHTO, GUIDE FOR THE DEVELOPMENT OF BICYCLE FACILITIES

STANDARD DETAILS: STREETS

PROJECT TITLE:	DEPARTMENT: ENGINEERING	REVISIONS: GM: 11-26-12
	SCALE: N.T.S.	REVISIONS: GM: 12-15-15
	DRAWN BY: GINA MCCRICKARD	
	CITY ENGINEER: JEFF RAMSEY	
	APPVD. BY: JEFF RAMSEY	
	IMPLEMENTED: 6-16-08	



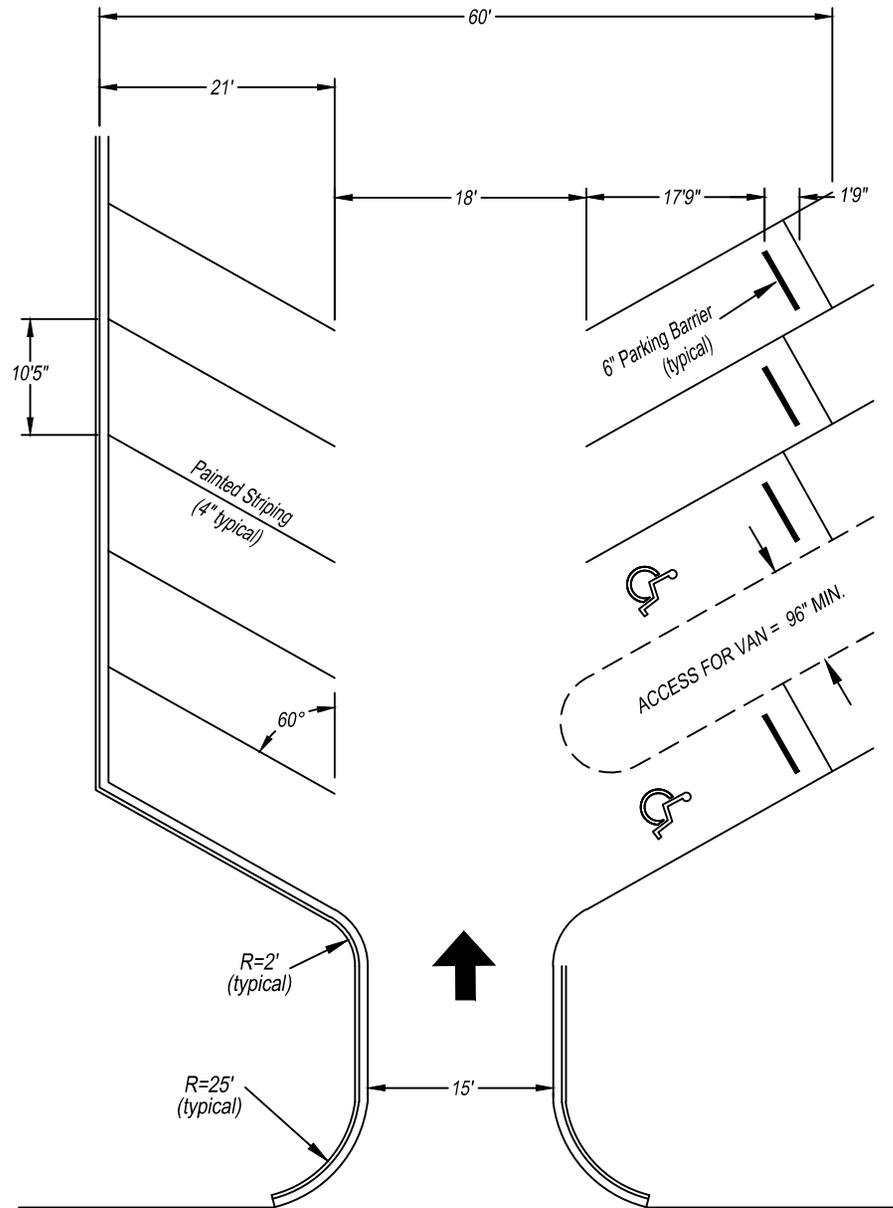
PARKING PLAN - 90° PARKING



STANDARD DETAILS: STREETS		
PROJECT TITLE:	DEPARTMENT: ENGINEERING	REVISIONS: GM: 11-26-12
	SCALE: N.T.S.	REVISIONS: GM: 12-15-15
	DRAWN BY: GINA MCCRICKARD	
	CITY ENGINEER: JEFF RAMSEY	
	APPVD. BY: JEFF RAMSEY	
	IMPLEMENTED: 6-16-08	



PARKING PLAN - 60° PARKING

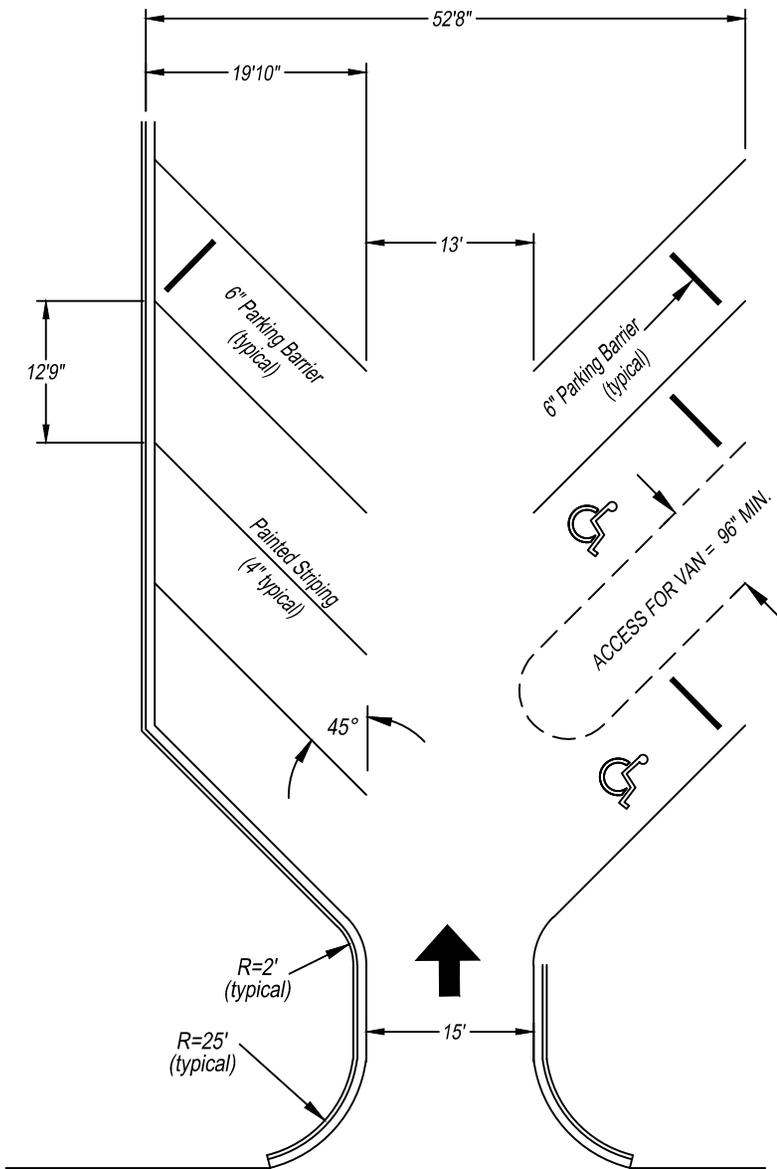


NOTE: ALLOW 3'9" FOR REAR OVERHANG.

STANDARD DETAILS: STREETS		
PROJECT TITLE:	DEPARTMENT: ENGINEERING	REVISIONS: GM: 11-26-12
	SCALE: N.T.S.	REVISIONS: GM: 12-15-15
	DRAWN BY: GINA MCCRICKARD	
	CITY ENGINEER: JEFF RAMSEY	
	APPVD. BY: JEFF RAMSEY	
	IMPLEMENTED: 6-16-08	



PARKING PLAN - 45° PARKING

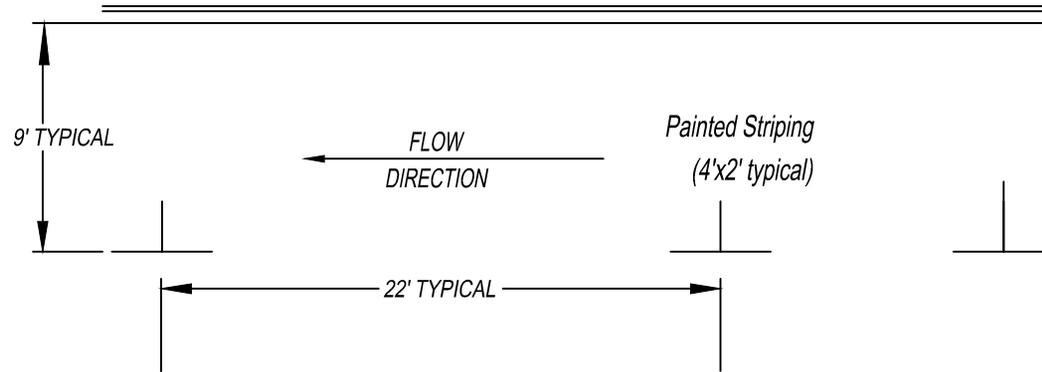


NOTE: ALLOW 3'3" FOR REAR OVERHANG.

STANDARD DETAILS: STREETS		
PROJECT TITLE:	DEPARTMENT: ENGINEERING	REVISIONS: GM: 11-26-12
	SCALE: N.T.S.	REVISIONS: GM: 12-15-15
	DRAWN BY: GINA MCCRICKARD	
	CITY ENGINEER: JEFF RAMSEY	
	APPVD. BY: JEFF RAMSEY	
	IMPLEMENTED: 6-16-08	



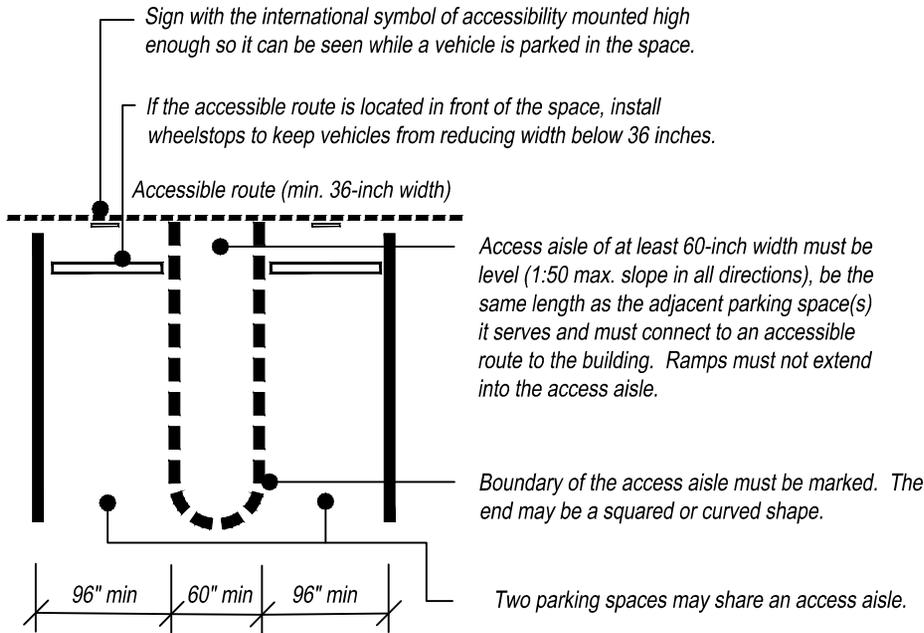
PARKING PLAN - PARALLEL PARKING



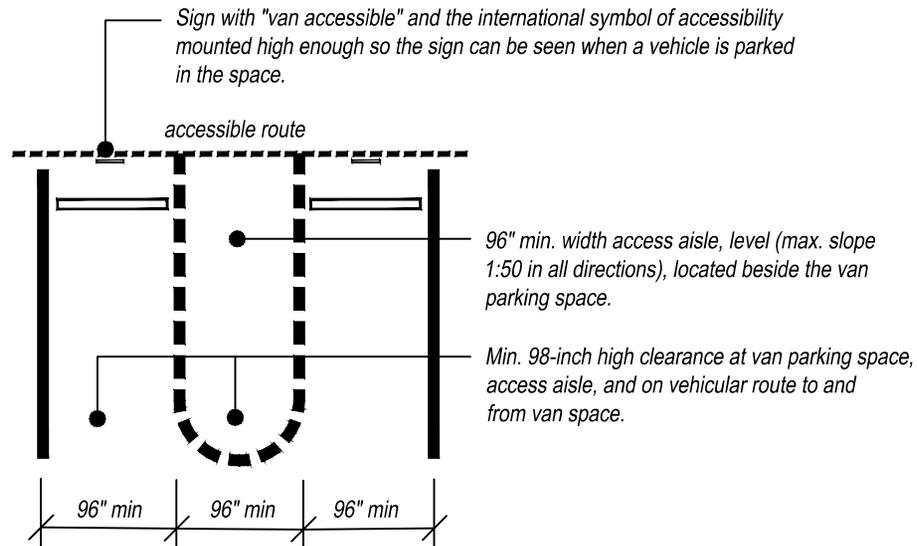
STANDARD DETAILS: STREETS		
PROJECT TITLE:	DEPARTMENT: ENGINEERING	REVISIONS: GM: 11-26-12
	SCALE: N.T.S.	REVISIONS: GM: 12-15-15
	DRAWN BY: GINA MCCRICKARD	
	CITY ENGINEER: JEFF RAMSEY	
	APPVD. BY: JEFF RAMSEY	SHEET 23
	IMPLEMENTED: 6-16-08	



Features of Accessible Parking Spaces for Cars



Three Additional Features for Van-Accessible Parking Spaces



STANDARD DETAILS: STREETS		
PROJECT TITLE:	DEPARTMENT: ENGINEERING	REVISIONS: GM: 12-15-15
 City of Auburn	SCALE: N.T.S.	
	DRAWN BY: GINA MCCRICKARD	
	CITY ENGINEER: JEFF RAMSEY	
	APPVD. BY: JEFF RAMSEY	
	IMPLEMENTED: 6-16-08	SHEET 24

ACCESSIBLE PARKING SPACES	
TOTAL PARKING SPACES PROVIDED	REQUIRED MINIMUM NUMBER OF ACCESSIBLE SPACES
1 to 25	1
26 to 50	2
51 to 75	3
76 to 100	4
101 to 150	5
151 to 200	6
201 to 300	7
301 to 400	8
401 to 500	9
501 to 1,000	2% of total
501 to 1,000	20, plus one for each 100 over 1,000

Where parking is provided, accessible parking spaces shall be provided in accordance with this table.

REFERENCE:
2012 INTERNATIONAL BUILDING CODE

SECTION 1106: PARKING AND PASSENGER LOADING FACILITIES

1106.1 Required. Where parking is provided, accessible parking spaces shall be provided in compliance with Table 1106.1, except as required by Sections 1106.2 through 1106.4. Where more than one parking facility is provided on a site, the number of parking spaces required to be accessible shall be calculated separately for each parking facility.

Exception: This section does not apply to parking spaces used exclusively for buses, trucks, other delivery vehicles, law enforcement vehicles or vehicular impound and motor pools where lots accessed by the public are provided with an accessible passenger loading zone.

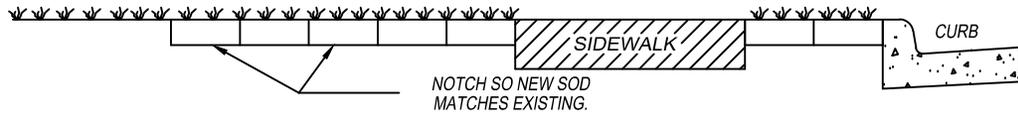
1106.2 Groups R-2 and R-3. Two percent, but not less than one, of each type of parking space provided for occupancies in Groups R-2 and R-3, which are required to have Accessible, Type A or Type B dwelling or sleeping units, shall be accessible. Where parking is provided within or beneath a building, accessible parking spaces shall also be provided within or beneath the building.

1106.3 Hospital outpatient facilities. Ten percent of patient and visitor parking spaces provided to serve hospital outpatient facilities shall be accessible.

1106.4 Rehabilitation facilities and outpatient physical therapy facilities. Twenty percent, but not less than one, of the portion of patient and visitor parking spaces serving rehabilitation facilities and outpatient physical therapy facilities shall be accessible.

STANDARD DETAILS: STREETS		
	DEPARTMENT: ENGINEERING	REVISIONS: GM: 11-26-12
	SCALE: N.T.S.	REVISIONS: GM: 12-15-15
	DRAWN BY: GINA MCCRICKARD	
	CITY ENGINEER: JEFF RAMSEY	
	APPVD. BY: JEFF RAMSEY	
IMPLEMENTED: 6-16-08	SHEET 25	

SOD DETAIL



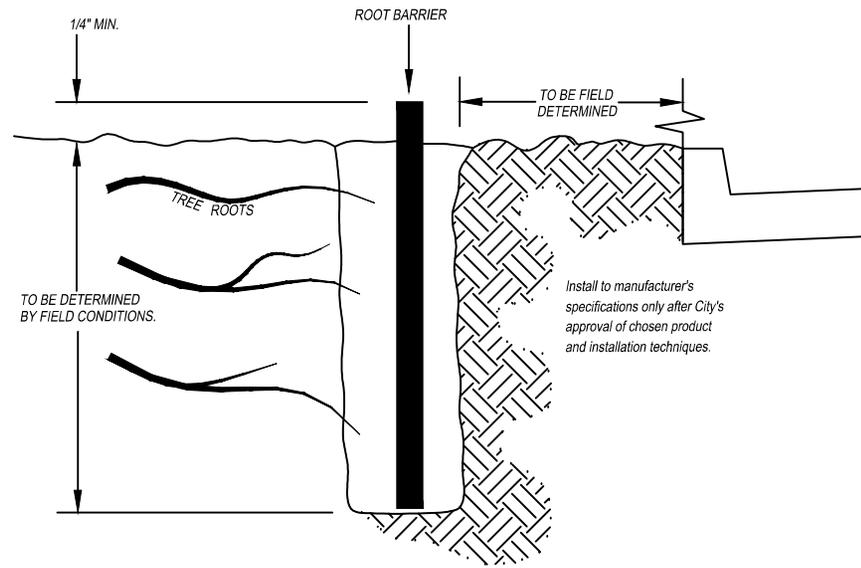
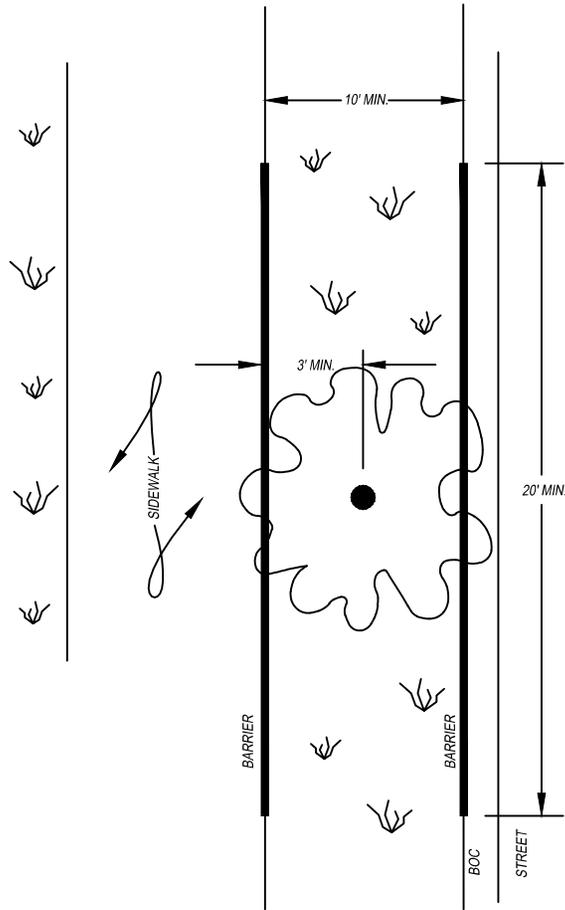
STANDARD DETAILS: STREETS

PROJECT TITLE:



DEPARTMENT: ENGINEERING	REVISIONS: GM: 12-15-15
SCALE: N.T.S.	
DRAWN BY: GINA McCRICKARD	
CITY ENGINEER: JEFF RAMSEY	
APPVD. BY: JEFF RAMSEY	SHEET 26
IMPLEMENTED: 6-16-08	

ROOT BARRIER



TREES MUST BE 10' MIN. FROM ALL POTABLE WATER / SANITARY SEWER FEATURES.

TREES MAY BE LOCATED 6' MIN FROM CURB INLETS WHEN BARRIER INSTALLED AT INLETS. OTHERWISE, SETBACK IS 10' MIN.

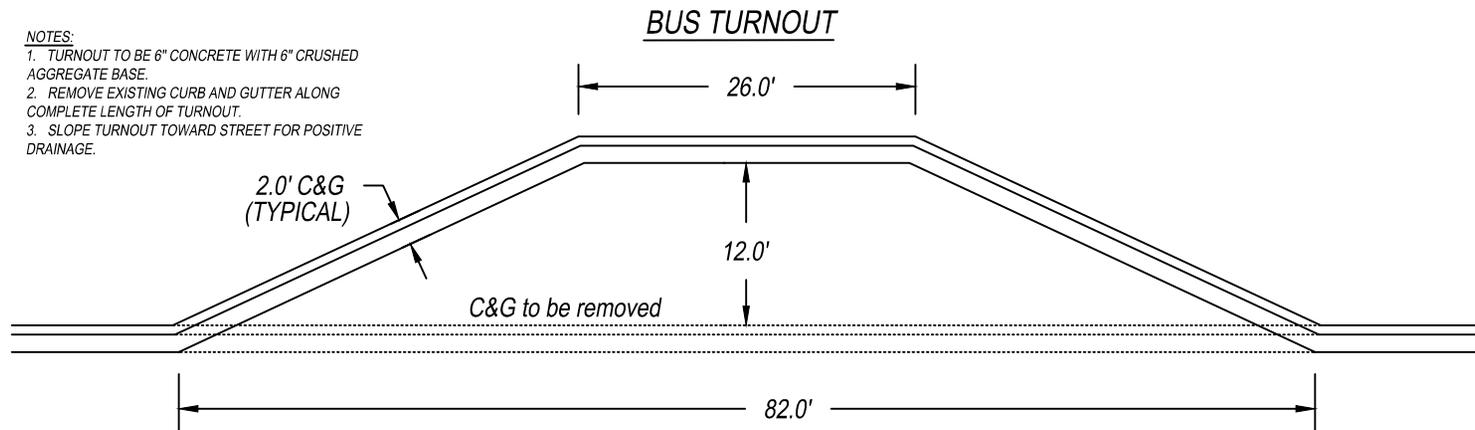
BARRIER TO BE INSTALLED AGAINST CURB / SIDEWALK / INLETS ACCORDING TO MANUFACTURER'S INSTRUCTION FOR THESE MIN. DISTANCES.

Install to manufacturer's specifications only after City's approval of chosen product and installation techniques.

STANDARD DETAILS: STREETS			
PROJECT TITLE:	DEPARTMENT: ENGINEERING	Revisions: GM:5-21-04	GM:6-24-11
 City of Auburn	SCALE: N.T.S.	BS: 2-17-06	GM:9-12-11
	DRAWN BY: GINA MCCRICKARD	BS: 11-22-07	
	CITY ENGINEER: JEFF RAMSEY	BS: 5-28-08	
	APPVD. BY: JEFF RAMSEY		
	IMPLEMENTED: 6-16-08		
			SHEET 27

NOTES:

1. TURNOUT TO BE 6" CONCRETE WITH 6" CRUSHED AGGREGATE BASE.
2. REMOVE EXISTING CURB AND GUTTER ALONG COMPLETE LENGTH OF TURNOUT.
3. SLOPE TURNOUT TOWARD STREET FOR POSITIVE DRAINAGE.



STANDARD DETAILS: STREETS

PROJECT TITLE:



DEPARTMENT: ENGINEERING

SCALE: N.T.S.

DRAWN BY: GINA MCCRICKARD

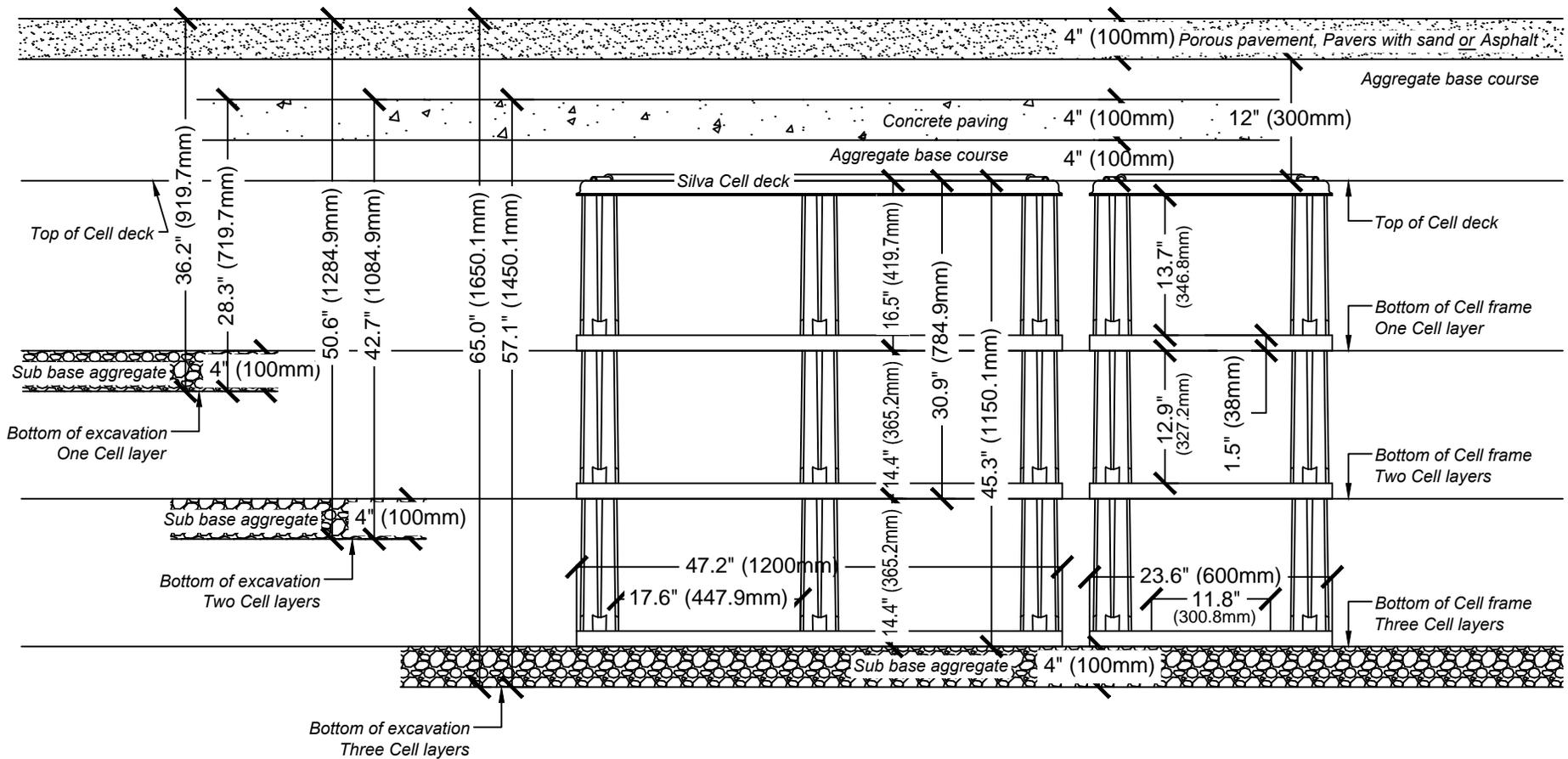
CITY ENGINEER: JEFF RAMSEY

APPVD. BY: JEFF RAMSEY

IMPLEMENTED: 1-1-2016

SHEET 28

SILVA CELL



This detail shall be used in conjunction with Silva Cells for Trees Details and Specifications.

The above information contained in this standard detail is not to scale.

The standard detail is provided for general education and informational purposes only and does not constitute an endorsement, approval or recommendation of any kind. The actual suitability and applicability of this information for a given use depends upon a wide variety of considerations, including specific project specifications, over which DeepRoot® has no information or control. This standard detail should NOT be used as a basis for volume calculations that are site specific and vary greatly depending on cell and deck spacing, soil conditions and soil compaction. All DeepRoot® Silva Cell products are sold with the understanding that the purchaser, either individually or in consultation with purchaser's design professionals, has independently determined the suitability of each product for the application for which it is purchased. Except as expressly provided, DeepRoot® disclaims all warranties, express or implied, and strongly encourages the reader to consult with a construction/design professional and/or engineer before applying any of this information to a specific use or purpose.

Deep Root Partners L.P.

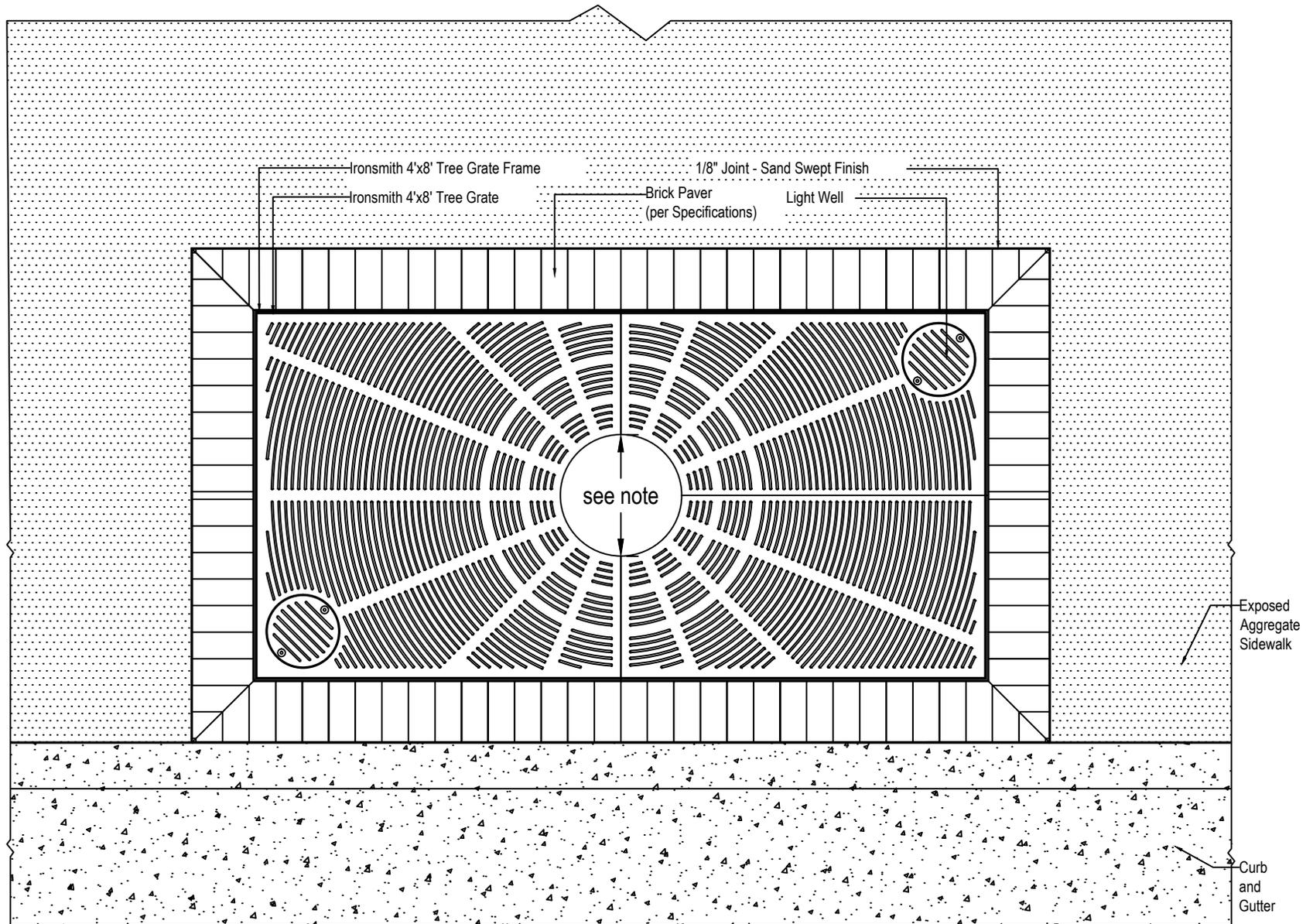
530 Washington Street
San Francisco, California 94111
Ph. 415 781-9700
www.deeproot.com

Copyright © 2010 Deep Root Partners, L.P.

STANDARD DETAILS: STREETS	
PROJECT TITLE:	
DEPARTMENT: ENGINEERING	
SCALE: N.T.S.	
DRAWN BY: GINA MCCRICKARD	
CITY ENGINEER: JEFF RAMSEY	
APPVD. BY: JEFF RAMSEY	
IMPLEMENTED: 1-1-2016	



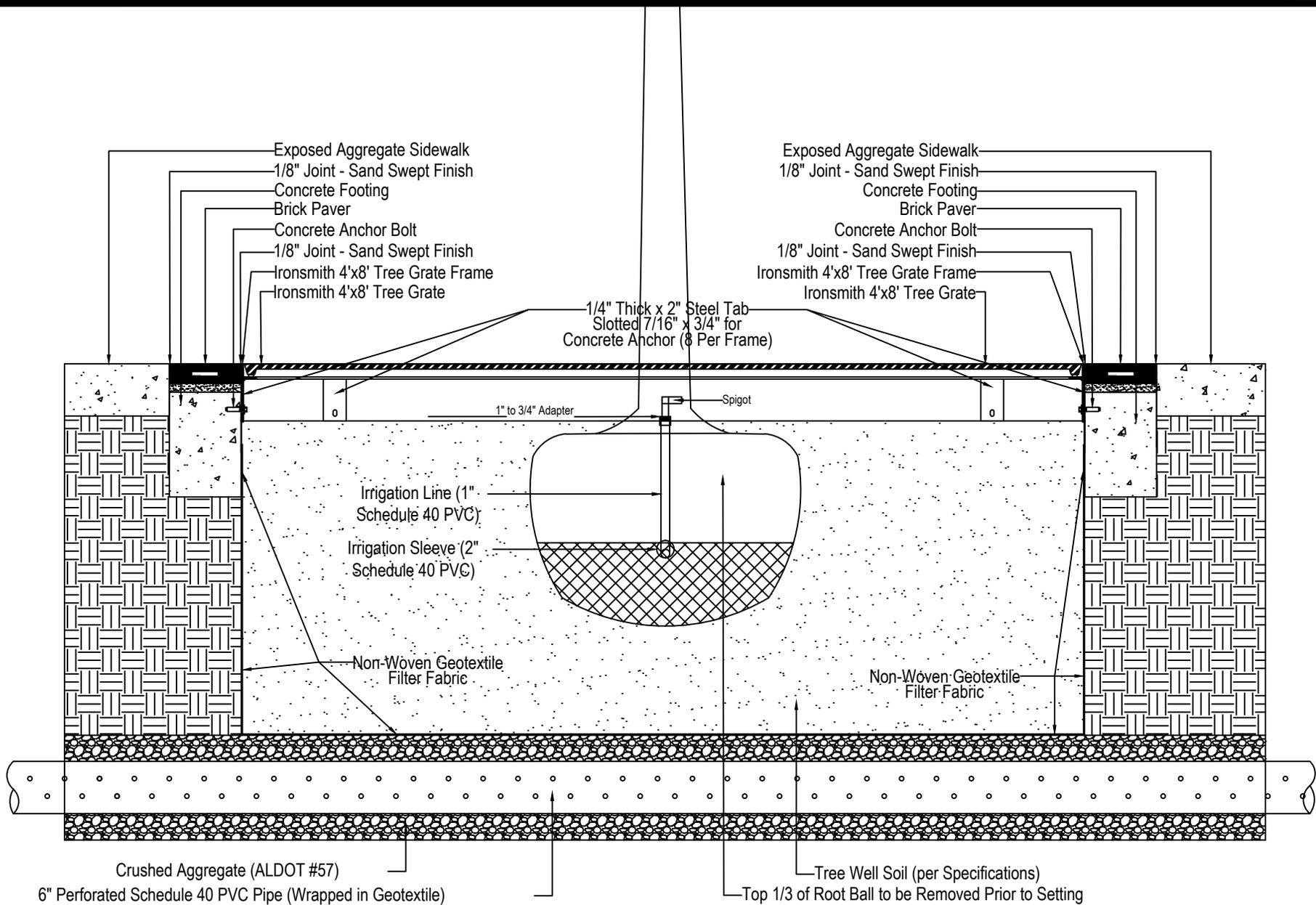
SHEET 29



TREE GRATE #M9628
 STYLE: OLYMPIAN

STANDARD DETAILS: STREETS	
PROJECT TITLE:	
DEPARTMENT: ENGINEERING	
SCALE: N.T.S.	
DRAWN BY: GINA MCCRICKARD	
CITY ENGINEER: JEFF RAMSEY	
APPVD. BY: JEFF RAMSEY	
IMPLEMENTED: 1-1-2016	SHEET 30





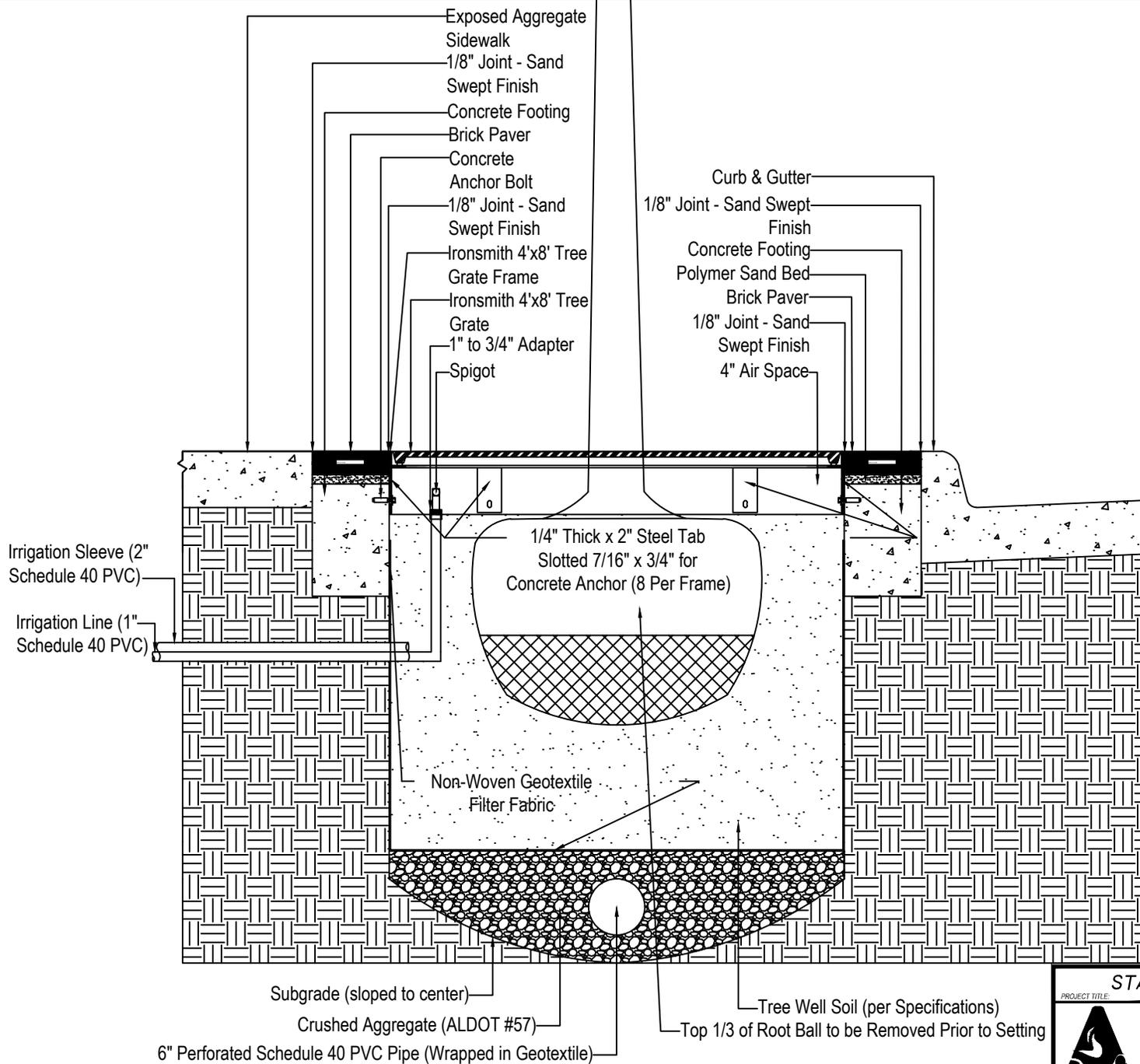
Crushed Aggregate (ALDOT #57)
 6" Perforated Schedule 40 PVC Pipe (Wrapped in Geotextile)

Tree Well Soil (per Specifications)
 Top 1/3 of Root Ball to be Removed Prior to Setting

STANDARD DETAILS: STREETS	
PROJECT TITLE:	
DEPARTMENT: ENGINEERING	
SCALE: N.T.S.	
DRAWN BY: GINA MCCRICKARD	
CITY ENGINEER: JEFF RAMSEY	
APPVD. BY: JEFF RAMSEY	
IMPLEMENTED: 1-1-2016	SHEET 31



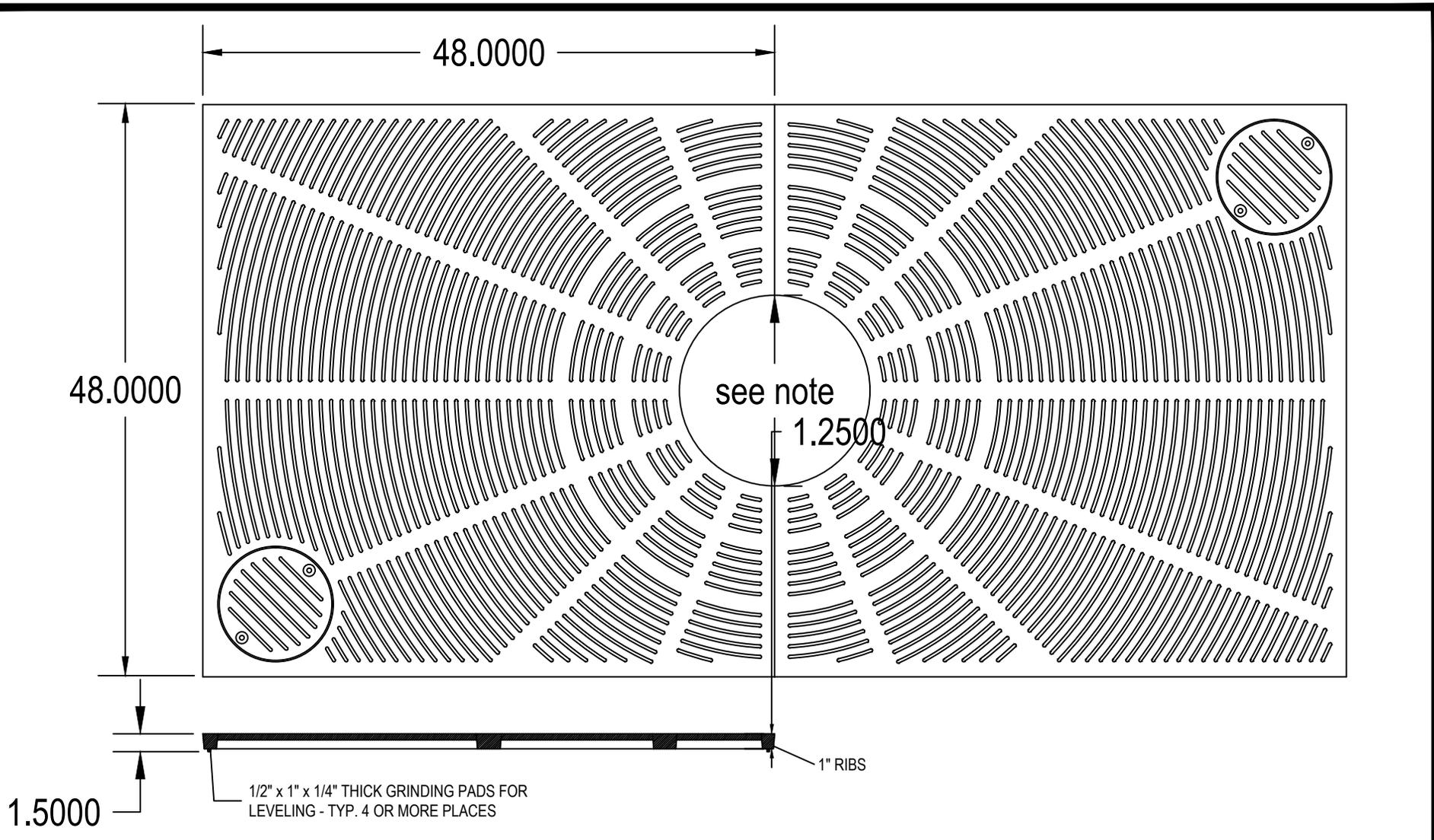
City of Auburn



STANDARD DETAILS: STREETS

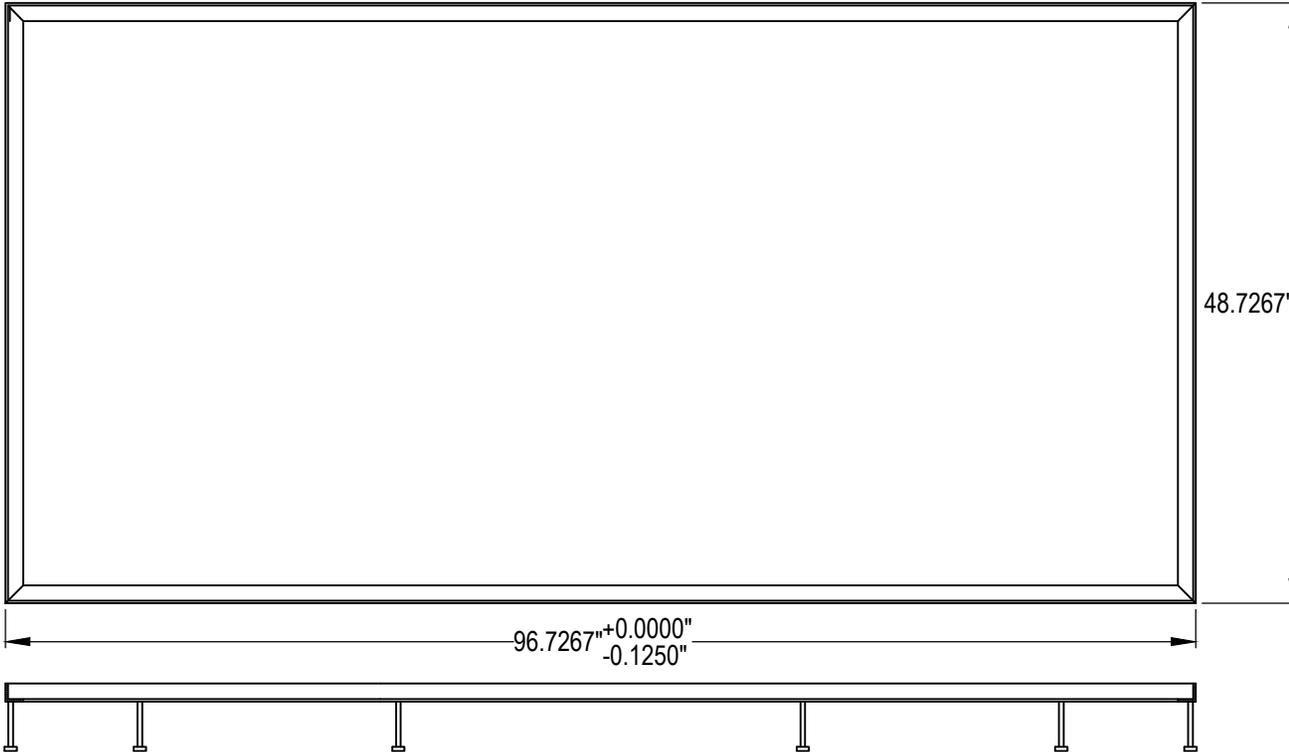


PROJECT TITLE:
 DEPARTMENT: ENGINEERING
 SCALE: N.T.S.
 DRAWN BY: GINA MCCRICKARD
 CITY ENGINEER: JEFF RAMSEY
 APPVD. BY: JEFF RAMSEY
 IMPLEMENTED: 1-1-2016



SLOT WIDTH IS 1/4" MAXIMUM, MEETS ADA COMPLIANCE.
 GRATE CAST FROM GRAY IRON OR ALUMINUM
 TREE OPENING SIZE TO BE 16"
 STEEL ANGLE FRAME REQUIRED
 FOR INSTALLATION USE MODEL M48X96F
 OUTER FRAME DIM. IS 3/4" ± 1/8"
 GREATER THAN GRATE. .

STANDARD DETAILS: STREETS	
PROJECT TITLE:	
 City of Auburn	DEPARTMENT: ENGINEERING
	SCALE: N.T.S.
	DRAWN BY: GINA MCCRICKARD
	CITY ENGINEER: JEFF RAMSEY
	APPVD. BY: JEFF RAMSEY
IMPLEMENTED: 1-1-2016	SHEET 33



M48x96F-5

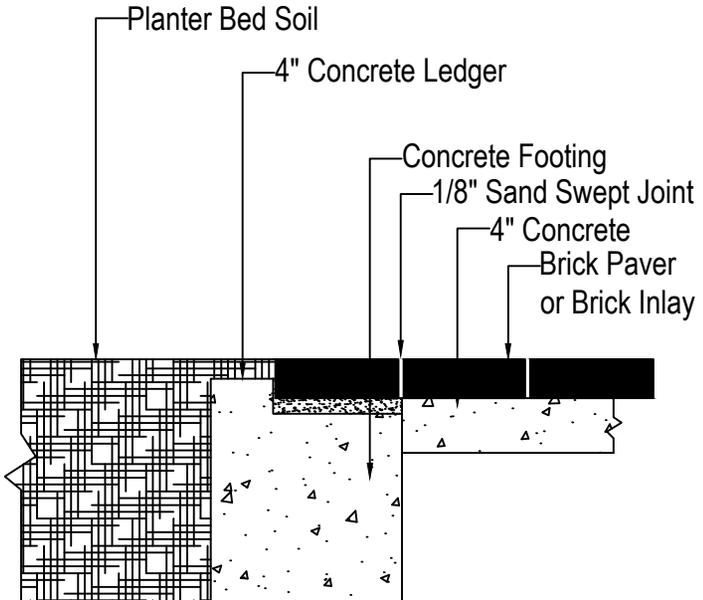
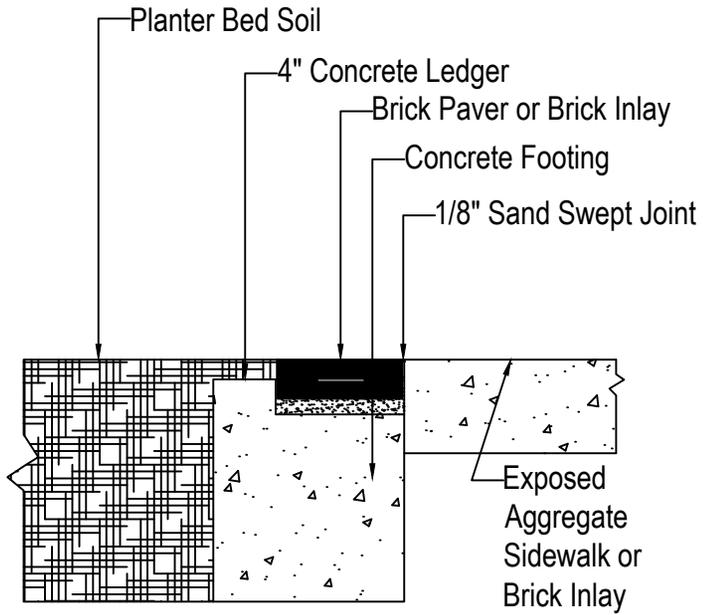
3/8" X 4" NELSON CONCRETE ANCHORS
 FRAME JIG WELDED FROM 1-3/4" x1-3/4" x1/4" STEEL ANGLE

CONCRETE ANCHORAGE PROVIDED BY 3/8" X 4" NELSON ANCHORS MACHINE WELDED TO FRAME

FRAMES CAN BE HOT DIPPED GALVANIZED AND/OR PAINTED TO MATCH GRATES

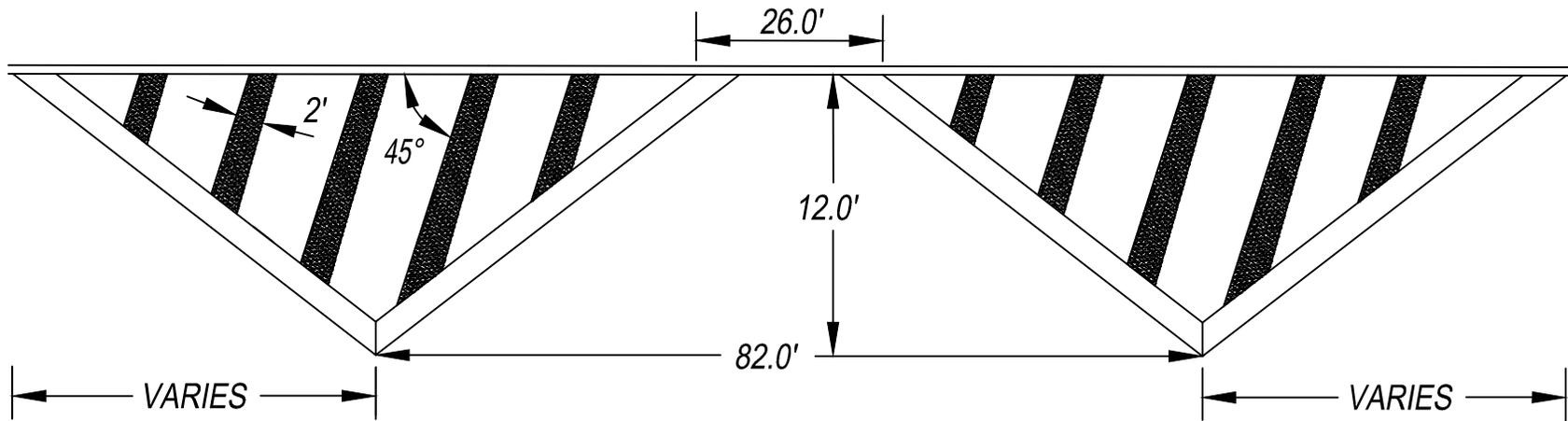
OTHER INSTALLATION CONFIGURATIONS AVAILABLE

STANDARD DETAILS: STREETS		
PROJECT TITLE:	DEPARTMENT: ENGINEERING	
 City of Auburn	SCALE: N.T.S.	
	DRAWN BY: GINA McCRICKARD	
	CITY ENGINEER: JEFF RAMSEY	
	APPVD. BY: JEFF RAMSEY	
	IMPLEMENTED: 1-1-2016	
		SHEET 34



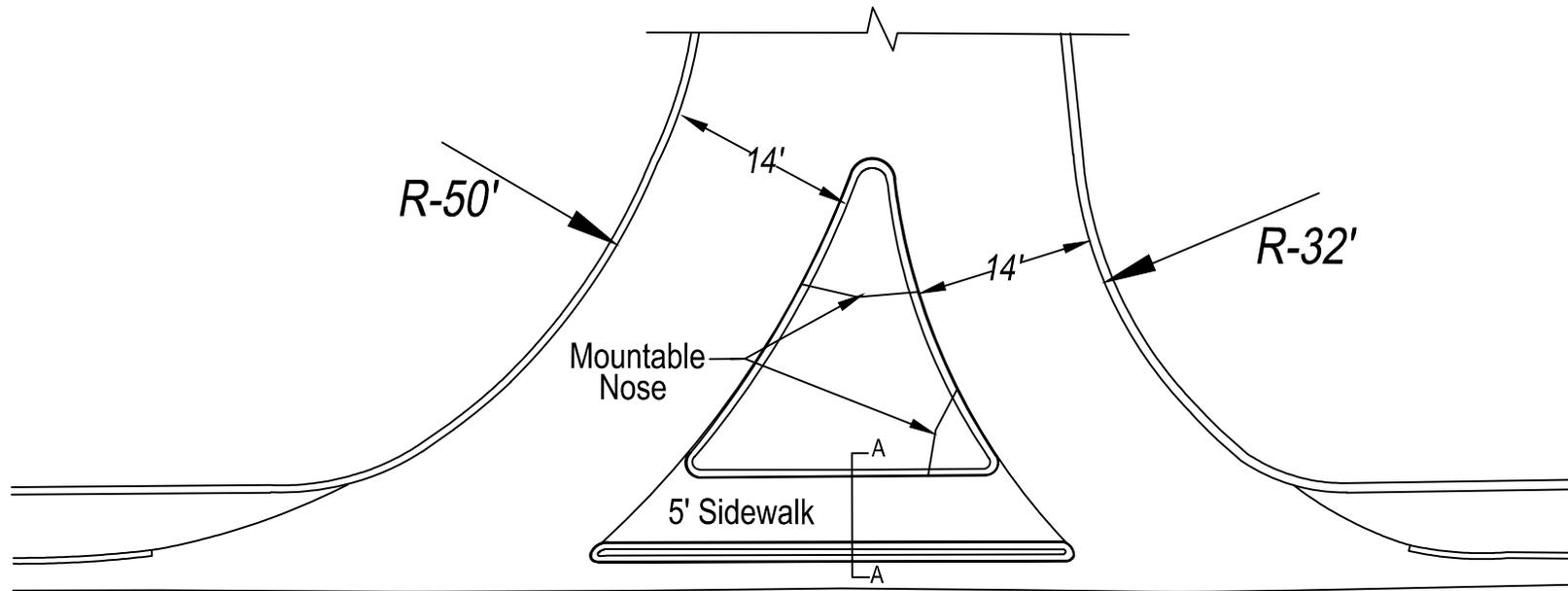
STANDARD DETAILS: STREETS	
PROJECT TITLE:	
 City of Auburn	DEPARTMENT: ENGINEERING
	SCALE: N.T.S.
	DRAWN BY: GINA MCCRICKARD
	CITY ENGINEER: JEFF RAMSEY
	APPVD. BY: JEFF RAMSEY
IMPLEMENTED: 1-1-2016	SHEET 35

BUS TURNOUT DETAIL PAINTED

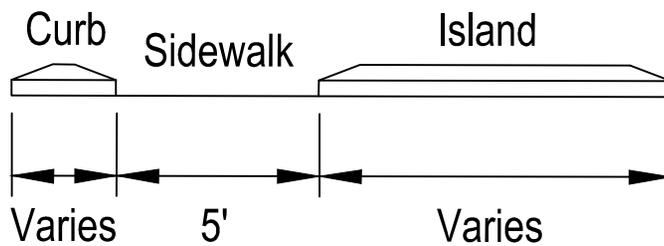


STANDARD DETAILS: STREETS	
PROJECT TITLE:	
 City of Auburn	DEPARTMENT: ENGINEERING
	SCALE: N.T.S.
	DRAWN BY: GINA MCCRICKARD
	CITY ENGINEER: JEFF RAMSEY
	APPVD. BY: JEFF RAMSEY
	IMPLEMENTED: 1-1-2016
	SHEET 36

RIGHT IN RIGHT OUT DETAIL



Detail-A



STANDARD DETAILS: STREETS	
PROJECT TITLE:	
DEPARTMENT: ENGINEERING	
SCALE: N.T.S.	
DRAWN BY: GINA MCCRICKARD	
CITY ENGINEER: JEFF RAMSEY	
APPVD. BY: JEFF RAMSEY	
IMPLEMENTED: 1-1-2016	



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APPENDIX P. Request for Installation of Traffic Signs

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Public Works Department
 Traffic Engineering Division
 365-B North Donahue Drive
 Auburn, AL 36832
 (334) 501 3029

REQUEST FOR INSTALLATION OF TRAFFIC SIGNS

Please complete the following information:

Development Name: _____

Contact: _____ Daytime Phone: _____

Address: _____

Email (optional): _____

Fill in number of signs requested:

<input type="text"/> Stop Sign (A)	<input type="text"/> Yield Sign (B)	<input type="text"/> Speed Limit ____ mph (C1)
<input type="text"/> Dead End (D)	<input type="text"/> No Outlet (E)	<input type="text"/> Speed Limit ____ mph (C2)
<input type="text"/> Other (F): _____	<input type="text"/> Other (G): _____	

Street Name Signs: *Attach additional sheets if necessary.*

	<u>North/South Street</u>	<u>East/West Street</u>	
<input type="text"/>	_____	_____	(H1)
<input type="text"/>	_____	_____	(H2)
<input type="text"/>	_____	_____	(H3)
<input type="text"/>	_____	_____	(H4)
<input type="text"/>	_____	_____	(H5)
<input type="text"/>	_____	_____	(H6)

Provide a map with the approximate locations of requested signs, labeled as "A" for Stop Signs, "B" for Yield Signs, etc. The Traffic Engineering Division of the Public Works Department will perform any necessary data collection and analysis to assess the need for the installation of a requested traffic sign. All signs shall be installed in accordance with the Manual on Uniform Traffic Control Devices, latest edition.

Signature: _____ **Date:** _____

This section for official use only		
Evaluation	Determination	By/Date
Planning Commission approved name	_____	_____
Speed limits	_____	_____
In accordance with MUTCD	_____	_____
Cost Estimate	_____	_____
Recommendation	_____	_____

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APPENDIX P-1. Irrigation Policy

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City of Auburn

Irrigation Policy

Effective January 1, 2013

Purpose: The purpose of this policy is to protect the use of public rights of way for their intended purposes and to repair and replace utilities located in public right of way at the lowest cost to the City of Auburn.

Background: The City of Auburn allows encroachments upon public right of way provided that such uses have been permitted and do not diminish the City's rights to use the public right of way for maintenance, repair, or expansion of infrastructure. Often private property owners install, construct, or cause to be constructed irrigation systems and landscaping within the right of way that can be affected by expanding the infrastructure. All of these actions have increased the costs to the City when performing maintenance, repair, or expansion of the infrastructure.

Policy:

1. To reduce the costs to City projects, the City shall not restore nor pay any restoration or replacement costs for any encroachment on public right of way, except as outlined in below.
2. Any work within existing street right of way will require an encroachment agreement and/or hold harmless agreement.
3. All trees planted within right of way, 10 feet from any paved surface, will include City approved root barriers.
4. It is understood that irrigation systems placed on City of Auburn right of way are placed there at the risk of the property owner and may be removed with notice to the owners without compensation or replacement.

In the case where the City allows irrigation within the City of Auburn right of way, the following shall apply:

1. A permit is required to be obtained from the Codes Enforcement Division of the Public Safety Department.
2. The system should be installed per the standard details outlined in the Public Works Design and Construction Manual.
3. No major irrigation equipment, such as backflow, controller, remote control valves or mainlines shall be located within the right of way. Lateral line, emitter and distribution tubing may be located within the right of way, but should be as close to the property line as possible.

4. Heads and pipe type shall be of a common type such that replacement is easily accommodated.
5. A hold harmless/indemnity agreement, and certification that if the city needs the right of way to expand infrastructure, the irrigation system and appurtenances will be removed as part of the construction. The homeowner understands that the City or its assigns has the right to remove the obstruction to accommodate the infrastructure expansion. The city will not replace irrigation or landscaping that had been placed on the right of way without prior approval by the Public Works Department.

Contact the Public Works Department at (334) 501-3000 or www.auburnalabama.org for questions concerning this policy.

APPENDIX P-2. Decorative Street Signs Policy

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City of Auburn

Decorative Street Signs Policy

(This policy is to be used in conjunction with the Public Works Design and Construction Manual Section 5.7 Signing and Permanent Markings)

Purpose

This policy document sets out formal policy and guidelines for developers and homeowners associations on the requirements for maintenance of decorative street name signs.

Background

The Traffic Engineering Division of the Public Works Department receives many requests each year to provide street name signs and regulatory signs within the City. The City of Auburn standard street name sign is reflective navy blue background with reflective white lettering. A one time charge of \$125.00 per intersection is billed to the developer upon installation of City standard street name signs. Many developers request the use of decorative signs and posts that are unique to their subdivision.

Policy

The City of Auburn will not be responsible for replacement of decorative signs and posts. If a decorative sign or post is damaged it is the responsibility of the developer or homeowners association to replace and/or repair the sign within 7 days of being notified by the Public Works Department Administration Division of the deficiency by mail and/or email. If requested by the developer or homeowners association, the City of Auburn will install a temporary replacement sign until a new sign can be obtained. Upon installation of the new decorative sign, the temporary signs and posts should be returned to the City of Auburn. If the sign is not returned, the developer or homeowners association will be charged \$125.00 for the temporary sign.

If the sign has not been repaired or replaced within 7 days and a temporary sign not requested, the Administrative Division will advise the Sign Technician to install a standard COA sign. The Sign Technician will follow up one month after installation of a temporary sign to see if the developer or homeowners association has taken any action. If the temporary sign has been replaced with a decorative sign and the temporary sign has not been returned to the City, the homeowners association will be charged for the temporary sign.

Note: Stop signs will require a COA sign be installed immediately for the safety of the public.

Contact the City of Auburn's Traffic Engineering Division at (334) 501-3000 or email us at webpw@auburnalabama.org for questions concerning this policy.

APPENDIX Q. Visual Inspection Checklist

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VISUAL INSPECTION CHECKLIST

CITY OF AUBURN
PUBLIC WORKS DEPARTMENT

INSPECTION YEAR:

TYPE OF INSPECTION: (**Informal, Regular, Formal**):

DAM NAME:

DAM INVENTORY NO:

LOCATION: __ ¼ of the __ ¼, Section ____, Township____, Range ____, Lee County

OWNER:

OPERATOR:

DATE OF INSPECTION:

RESERVOIR INFORMATION

Normal Reservoir Elevation (ft):

Reservoir Elevation at time of inspection (ft):

WEATHER CONDITIONS (**including recent rainfall**):

INSPECTION PERSONNEL

Alabama Licensed Professional Engineer(s):

Name Affiliation Area of Expertise

Non-Licensed technical expert(s) and advisors(s):

Name Affiliation Area of Expertise

City Representative(s):

Name Affiliation

Dam Owner Representative(s):

Name Affiliation

Others:

Name Affiliation

GENERAL INFORMATION

Name of Dam:

River Basin:

Stream Name:

Tributary of:

Latitude (N):

Longitude (W):

Purpose of Dam:

Hazard Classification:

Drainage Area (sq. mi.):

Height of Dam (ft):

Length (ft):

Normal Surface (ac):

Normal Capacity (ac-ft):

Maximum Surface (ac):

Maximum Capacity (ac-ft):

Principal Spillway Capacity (cfs):

Emergency Spillway Capacity (cfs):

Are the spillway(s) adequate for this classification of dam?

Principal: Yes No

Emergency: Yes No

If not, what percent of the PMP can be passed?

Principal: %

Emergency: %

HISTORY

Date Constructed:

Date(s) Reconstructed:

Designer:

Constructed by:

Owner & Address:

Owner Telephone Number:

Owner/Operator present during inspection (yes or no):

PREVIOUS INSPECTIONS (date of)

Last Informal Inspection:

Last Regular Inspection:

Last Formal Inspection:

EMERGENCY ACTION PLAN (Required for all High and Specified Significant dams)

Date of Approved Plan:

Date of Plan Revision:

Is the notification flowchart complete and current?

Is inundation mapping included?

Are emergency materials and equipment identified?

When was the plan last tested?

DOWNSTREAM HAZARD CLASSIFICATIONS

Present Hazard Classification:

Changes in Downstream Land Use and Habitation since last inspection:

Is present Classification appropriate?

OPERATION AND MAINTENANCE

Date of Operation and Maintenance Plan:

Are instructions adequate?

Do operating personnel follow instructions?

What are operating personnel capabilities?

EXAMINATION OF EMBANKMENT DAMS

DESCRIPTION OF STRUCTURE

Embankment Material:

Cutoff Type (If Known):

Impervious Core (If Known):

Internal Drainage System:

Movement (Horizontal and Vertical Alignment):

Junctions with Abutments or Embankments:

Miscellaneous:

CREST

Width of Crest:

Erosion on Crest Present:

Surface Cracks:

Settlement:

Unusual Conditions:

UPSTREAM SLOPE

Slope (Estimate) (H:V):

Trees, Undesirable Growth or Debris, Animal Burrows):

Sloughing, Subsidence or Depressions:

Slope Protection:

Unusual Conditions:

DOWNSTREAM SLOPE

Slope (Estimate) (H:V):

Trees, Undesirable Growth or Debris, Animal Burrows):

Sloughing, Subsidence or Depressions:

Surface Cracks or Movement at Toe:

Seepage:

External Drainage System (Ditches, Trenches, Blankets):

Condition Around Outlet Structure:

Unusual Conditions:

GROIN AND TOE AREA

Erosion around Groin Area:

Seepage at Groin Area:

Signs of Movement:

Depressions, Sinkholes:

Unusual Conditions:

SEEPAGE AND TOE DRAIN/RELIEF WELL FLOW SUMMATION

Location Estimated Flow Color (Turbidity)

EXAMINATION OF SPILLWAYS AND OUTLET WORKS

TYPE(S) AND DESCRIPTION OF SPILLWAY(S)

Principal:

Emergency:

Other:

FOR EACH SPILLWAY THE FOLLOWING ASPECTS MUST BE
EXAMINED WHERE APPROPRIATE

ENTRANCE CHANNEL

Description:

Vegetation (Trees, Bushes):

Debris:

Channel Side-Slope Stability:

Slope Protection/Erosion:

Unusual Conditions:

SPILLWAY CREST

Description:

Condition of Material:

Signs of Movement:

Joints:

Unusual Conditions:

INLET RISER

Description:

Condition of Material:

Signs of Movement:

Joints:

Floor:

Unusual Conditions:

SPELLWAY WING WALLS

Description:

Condition of Material:

Signs of Movement:

Joints:

Drains:

Unusual Conditions:

DOWNSTREAM APRON

Description:

Condition of Material:

Signs of Movement:

Unusual Conditions:

CONDUITS

Description:

Condition of Material:

Signs of Movement:

Joints:

Seepage:

Location Estimated Flow Turbidity

Unusual Conditions:

TRASH RACKS

Description:

Condition of Material:

Unusual Conditions:

CHUTES

Description:

Condition of Material:

Signs of Movement:

Joints:

Unusual Conditions:

STILLING BASIN

Description:

Condition of Material:

Signs of Movement:

Erosion:

Unusual Conditions:

OUTLET CHANNEL

Vegetation (Trees, Bushes):

Debris:

Channel Side-Slope Stability:

Erosion:

Unusual Conditions:

LOW LEVEL OUTLET

Description:

Condition:

Trash Rack:

Leakage:

Location Estimated Flow

Unusual Conditions:

Was the low-level outlet operated during the inspection?

Were there difficulties operating the low-level outlet?

When was the low-level outlet last operated and did this conform with the Operation and Maintenance Procedures?

Miscellaneous:

EMERGENCY SPILLWAY

Description:

Vegetation (Trees, Bushes):

Debris:

Channel Side-Slope Stability:

Slope Protection/Erosion:

Unusual Conditions:

OTHER SPILLWAY

Description:

Vegetation (Trees, Bushes):

Debris:

Channel Side-Slope Stability:

Slope Protection/Erosion:

Unusual Conditions:

EXAMINATION OF OTHER FEATURES

INSTRUMENTATION (Monumentation/Surveys, Observation Wells, Weirs, Piezometers, Etc.) location, condition:

(A separate report including instrument readings, condition of instruments, observations, and conclusions based upon the collected data should be attached.)

RESERVOIR

Slopes:

Sedimentation:

Unusual Conditions Which Affect Dam:

Unusual Conditions:

APPURTENANT STRUCTURES (Power House, Gatehouse, Penstocks, Water Supply, Other)

Description and Condition of each:

CONCLUSIONS

I certify that the above dam was personally inspected by me and the conditions described herein are correct to the best of my knowledge and belief.

I recommend the following repairs be made immediately:

The following long-term improvements should also be undertaken:

The following studies should also be undertaken:

Have the recommendations above included those from previous Regular or Formal Inspections?

Does the Emergency Action Plan or the Operation and Maintenance Procedures require revision?

Name of Professional Engineering Company/Consultant Representing the Owner:

Company/Consultant Address:

Company/Consultant Telephone Number:

Alabama Licensed Professional Engineer representing the dam owner in responsible charge of the inspection:

Sign _____ **Date** _____

Alabama Professional Engineer License Number _____

SEAL

(Department use only)

Dam Name _____

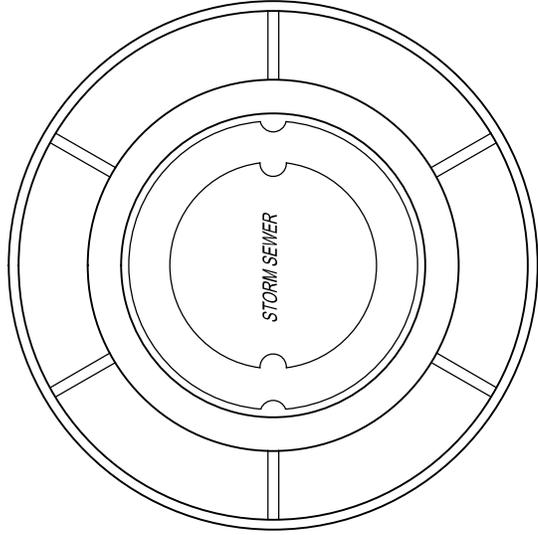
Reference No. _____ Hazard Classification: _____

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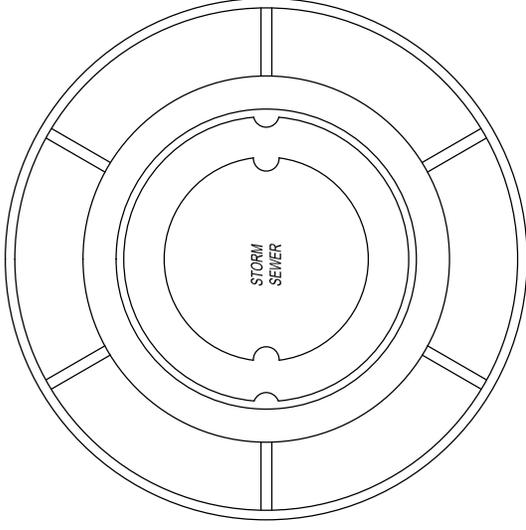
APPENDIX R. Storm Sewer Standard Details

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CAST IRON RING AND COVER DETAIL

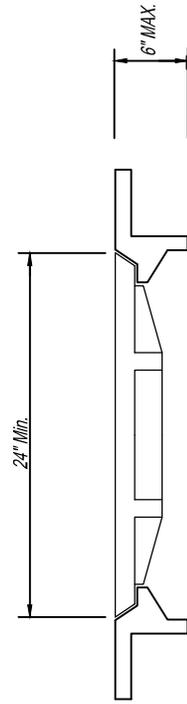


CAST IRON FRAME AND COVER DETAIL

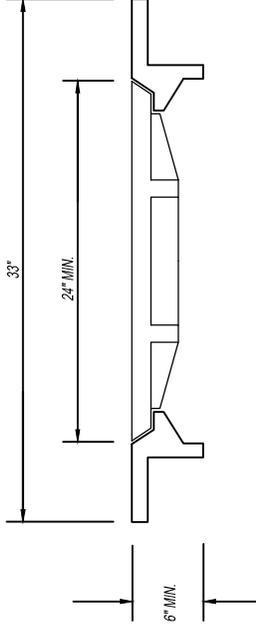


PLAN

CAST IRON FRAME AND COVER



CAST IRON FRAME AND COVER
NON TRAFFIC RATED



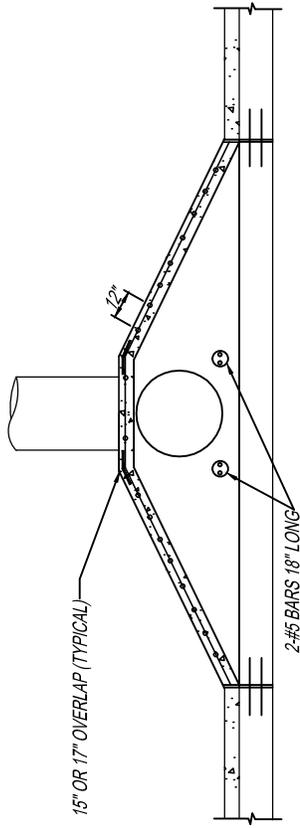
SECTIONAL ELEVATION
TRAFFIC RATED

STANDARD DETAILS: STORM SEWER

PROJECT TITLE	DEPARTMENT: ENGINEERING
	SCALE: N.T.S.
	DRAWN BY: BRIAN SIMPSON
	CITY ENGINEER: JEFF RAMSEY
	APPROD. BY: JEFF RAMSEY
	IMPLEMENTED: 12-20-07

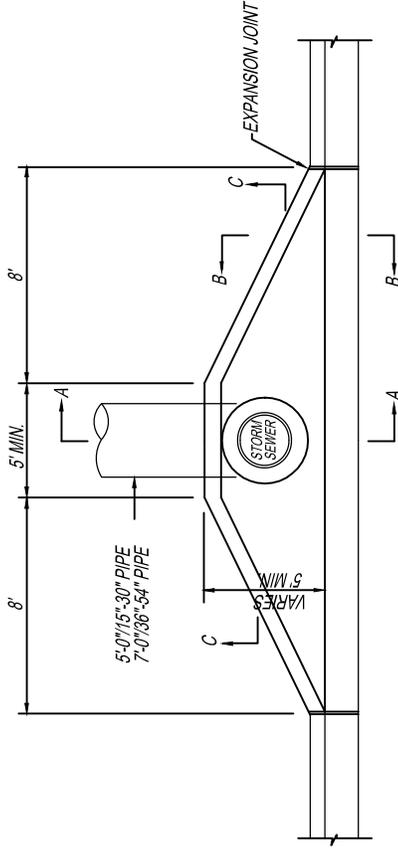


DOUBLE WING INLET

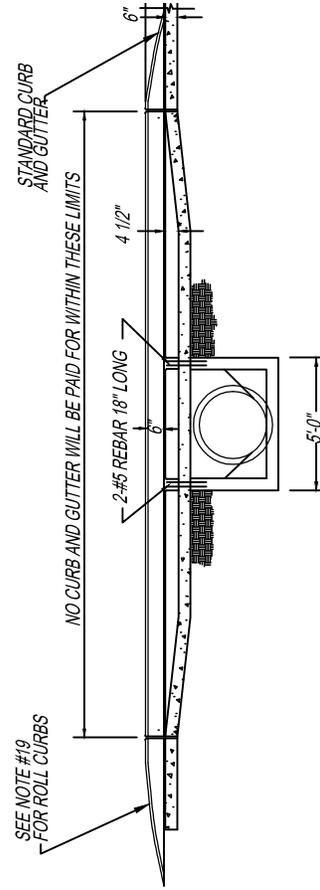


DOUBLE WING INLET SLAB SECTION

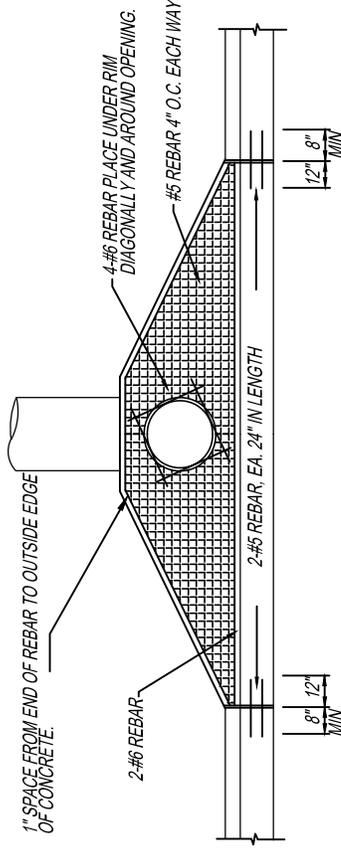
DOUBLE WING INLET



DOUBLE WING INLET PLAN



DOUBLE WING INLET ELEVATION



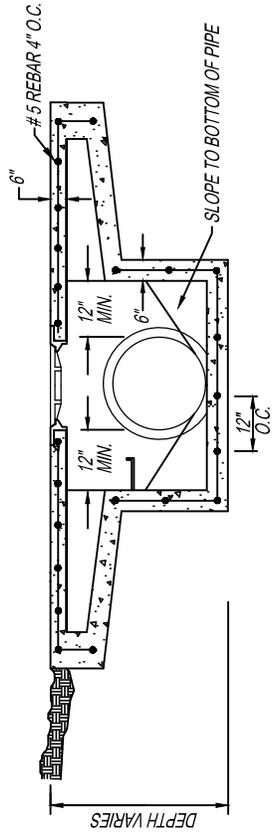
DOUBLE WING INLET TOP SECTION

STANDARD DETAILS: STORM SEWER

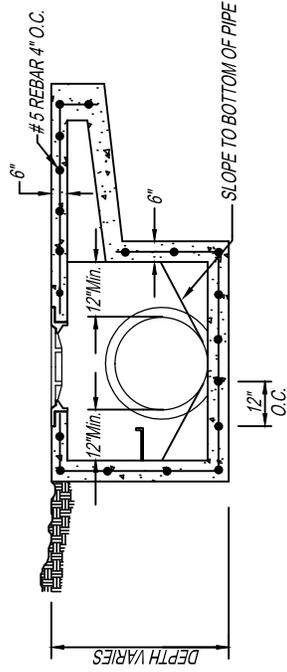


PROJECT TITLE	DEPARTMENT: ENGINEERING
	SCALE: N.T.S.
	DRAWN BY: BRIAN SIMPSON
	CITY ENGINEER: JEFF RAMSEY
	APPROD. BY: JEFF RAMSEY
	IMPLEMENTED: 12-01-07

DOUBLE WING INLET

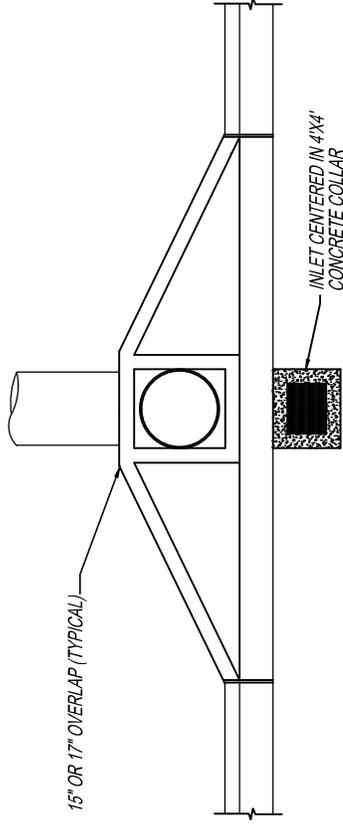


DOUBLE WING INLET DETAIL CC

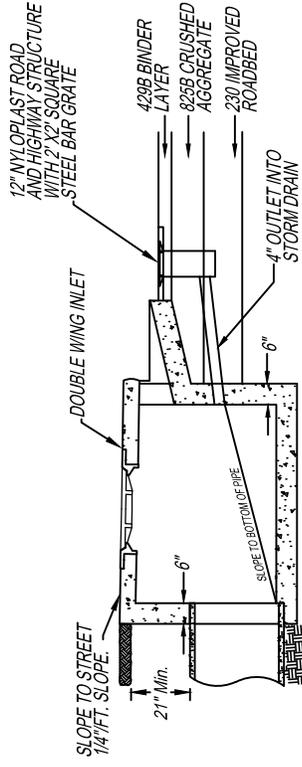


SINGLE WING INLET DETAIL DD

DOUBLE WING INLET



PLAN VIEW



PROFILE VIEW

NOTE:
THIS DETAIL SHALL BE USED AT THE SAG INLETS
WHERE WEARING SURFACE WILL NOT BE PLACED
AT THIS TIME.

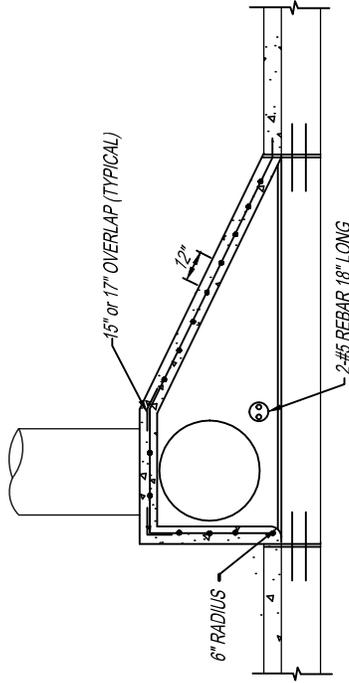
INLET SHALL BE PLACED AT LOWEST POINT IN
THE ROADWAY.

STANDARD DETAILS: STORM SEWER

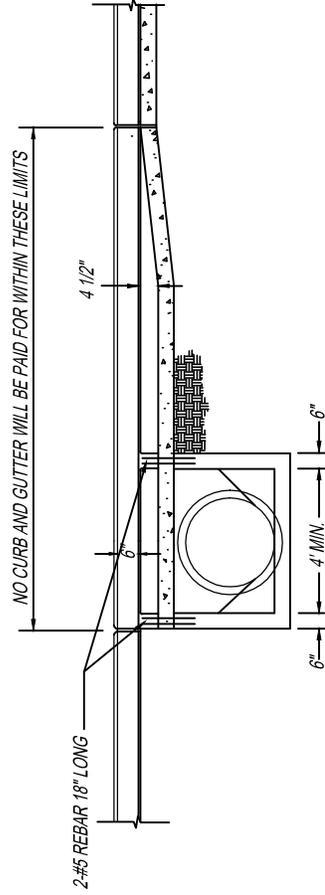


DEPARTMENT: ENGINEERING
SCALE: N.T.S.
DRAWN BY: BRIAN SIMPSON
CITY ENGINEER: JEFF RAMSEY
APPROV. BY: JEFF RAMSEY
IMPLEMENTED: 12-26-07

SINGLE WING INLET

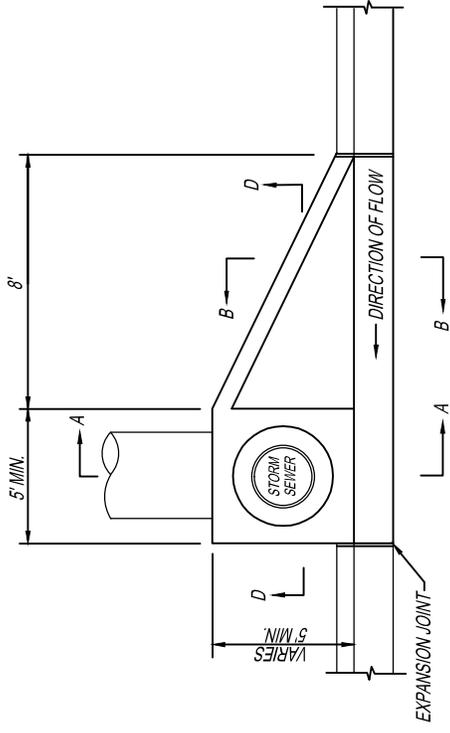


SINGLE WING INLET SLAB SECTION

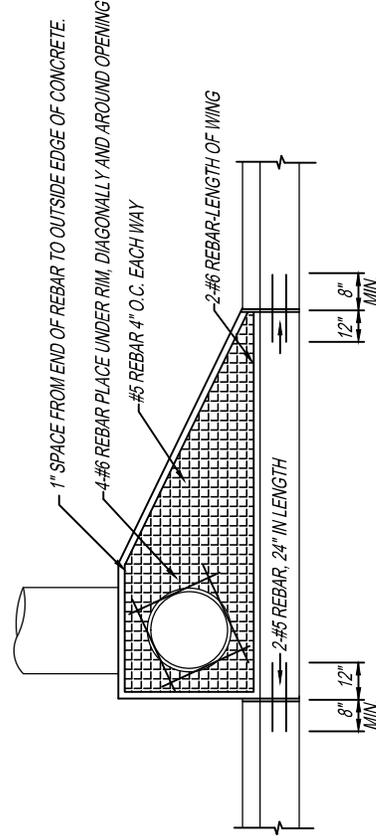


SINGLE WING INLET ELEVATION

SINGLE WING INLET



SINGLE WING INLET PLAN



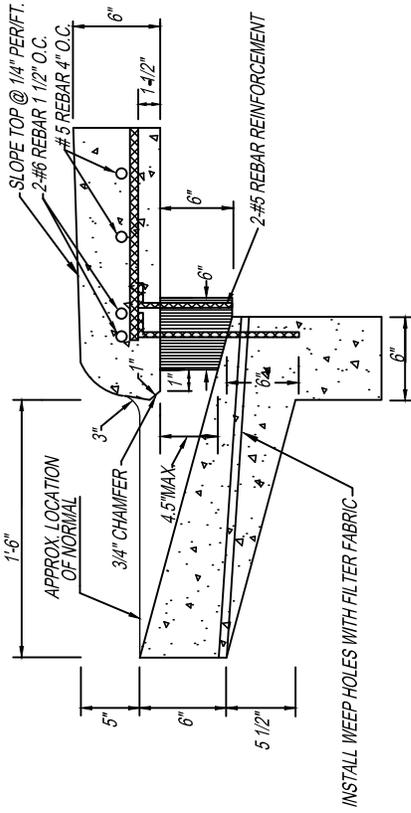
SINGLE WING TOP SECTION

STANDARD DETAILS: STORM SEWER

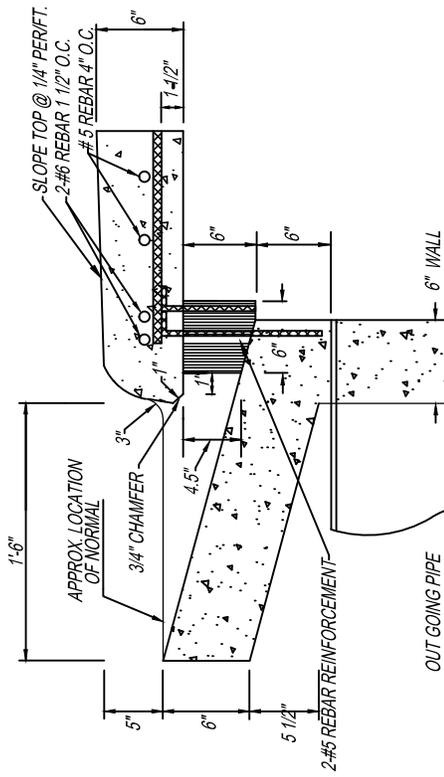


DEPARTMENT: ENGINEERING
 SCALE: N.T.S.
 DRAWN BY: BRIAN SIMPSON
 CITY ENGINEER: JEFF RAMSEY
 APP'D BY: JEFF RAMSEY
 IMPLEMENTED: 12-20-07

DEPRESSED GUTTER DETAIL #1 & #2

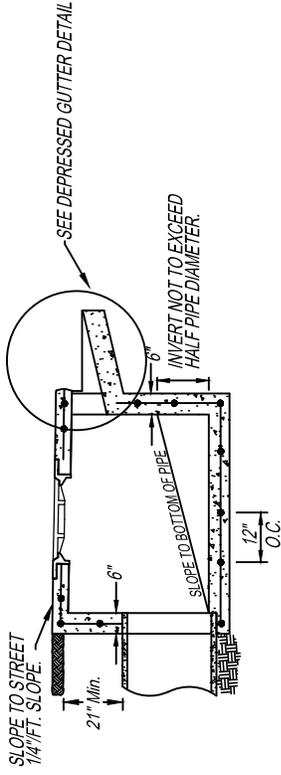


DEPRESSED GUTTER DETAIL #1

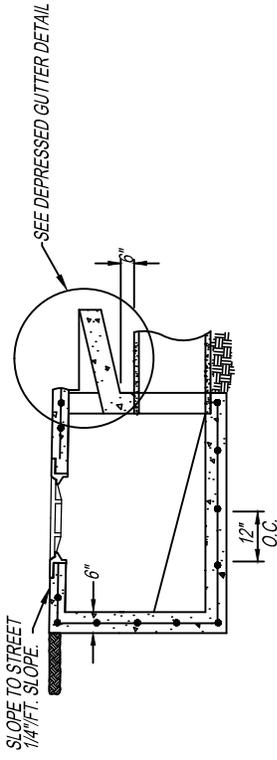


DEPRESSED GUTTER DETAIL #2

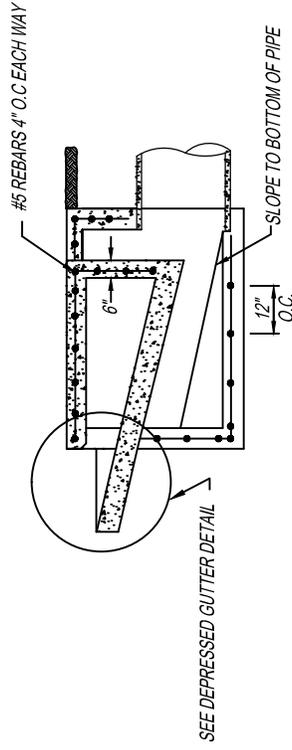
INLET BOX DETAIL AA #1, #2 & DETAIL BB



INLET BOX DETAIL AA (#1)



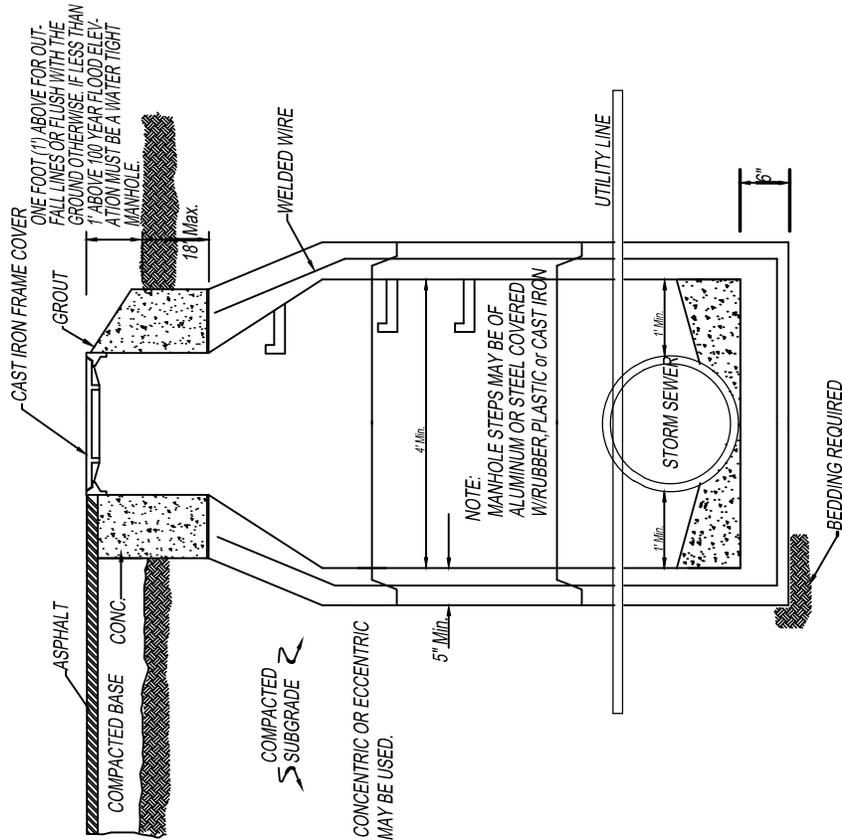
INLET BOX DETAIL AA (#2)



INLET BOX DETAIL BB

STANDARD DETAILS: STORM SEWER	
DEPARTMENT: ENGINEERING	
SCALE: N.T.S.	
DRAWN BY: BRIAN SIMPSON	
CITY ENGINEER: JEFF RAMSEY	
APPROV. BY: JEFF RAMSEY	
IMPLEMENTED: 12-6-07	
 City of Auburn	
SHEET 5 OF 12	

UTILITY CONFLICT MANHOLE

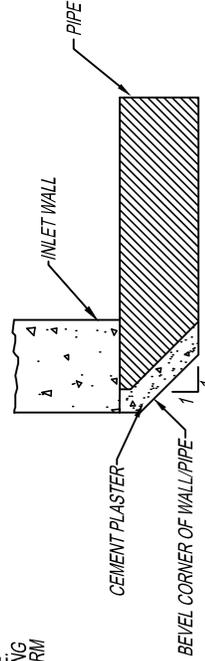


NOTE: CONCENTRIC OR ECCENTRIC CONE MAY BE USED.

NOTE: MANHOLE STEPS MAY BE OF ALUMINUM OR STEEL COVERED WITH RUBBER, PLASTIC OR CAST IRON

SECTIONAL ELEVATION

1. INSTALL JUNCTION BOX WHEN THERE IS A CONFLICT BETWEEN STORM SEWER AND OTHER UTILITY LINES.
2. IF THE CONFLICTING UTILITY LINE IS A SANITARY SEWER LINE, REPLACE THE V.C. OR PVC PIPE WITH DUCTILE IRON PIPE.
3. IF POSSIBLE INSTALL THE CONFLICTING UTILITY IN THE UPPER 1/3 OF THE STORM SEWER.



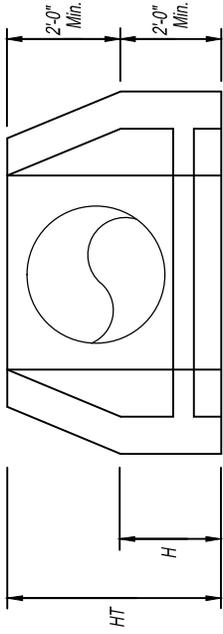
BEVELLED RING
(FOURED IN PLACE APPLICATION)

NOTES:

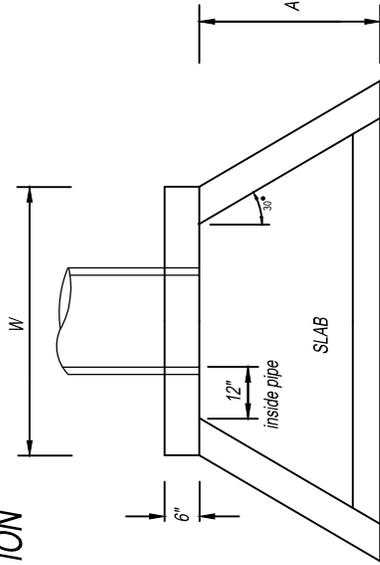
1. HEADWALL AND WINGWALLS SHALL HAVE A RUBBED SMOOTH FINISH. PIPE SHALL BE CUT FLUSH WITH THE INSIDE FACE OF THE HEADWALL.
2. JUNCTION BOX INVERTS SHALL BE SMOOTH AND APPROXIMATE THE CROSS SECTION OF THE PIPE USED. AT LEAST 0.25' OF FALL IS REQUIRED ACROSS ALL JUNCTION BOXES AND/OR INLETS. THE FLOOR SHALL BE SLOPED TO DRAIN ALL WATER TO THE INVERT. ALL PIPE SHALL BE CUT FLUSH WITH THE FACE OF THE JUNCTION BOX AND INLET JUNCTION BOX.
3. CAST IRON FRAME AND COVER SHALL WEIGH 375 POUNDS IN TRAFFIC AND 325 POUNDS OFF TRAFFIC.
4. ALL PIPES SHALL BE LAID WITH ENDS ABUTTING AND TRUE TO LINE AND GRADE. PIPE SHALL BE FITTED AND MATCHED TO FORM A LINE WITH A SMOOTH UNIFORM INVERT. GROUT SHALL THEN BE APPLIED SMOOTHLY TO THE OUTSIDE TOP TWO THIRDS AND THE INSIDE BOTTOM ONE HALF TO WATER PROOF ALL PIPE.
5. PRECAST MANHOLES MAY BE USED FOR PIPE UP TO 36". LARGER SIZES MUST BE APPROVED PRIOR TO USE.
6. FOR PIPE SIZES LARGER THAN 42", HEADWALLS SHALL BE AS SPECIFIED BY THE CITY ENGINEER.
7. INLETS SHALL NOT BE PLACED IN A RADIUS OF INTERSECTING STREETS OR DRIVES.
8. PRECAST ITEMS MUST BE APPROVED PRIOR TO USE.
9. CHAMFER STRIPS ARE REQUIRED ON ALL HEADWALL EDGES.
10. RIPRAP IS REQUIRED AT ALL PIPE OUTLETS WITH GEOFABRIC. THE SIZE OF THE PAD SHALL BE AS DESIGNED BY THE ENGINEER BUT SHALL BE CONSTRUCTED PER THE DETAIL.
11. DISTANCE FROM RADIUS POINT TO EXISTING EXPANSION OR CONSTRUCTION JOINT SHALL BE AT LEAST 3.0'. IF LESS THAN 3.0', CURB AND GUTTER SHALL BE REPLACED TO EXISTING JOINT.
12. MINIMUM INSIDE DIMENSION OF JUNCTION BOXES AND INLETS SHALL BE 4 FEET.
13. TOP OF INLET SHALL BE THE SAME ELEVATION AS ADJOINING CURB AND GUTTER.
14. 2" MINIMUM WEEP HOLES SHALL BE CONSTRUCTED IN INLETS TO FACILITATE SUBGRADE DRAINAGE.
15. IF INLETS ALSO SERVES AS A JUNCTION BOX, CONTOUR BOTTOM AS PER JUNCTION BOX REQUIREMENTS.
16. MORTAR: A CONCRETE MIX EQUIVALENT TO AT LEAST A 3000 PSI STABILITY.
17. NUMBER 5 REBAR SHALL BE INSTALLED INTO ALL CURB AND GUTTER COLD JOINT TIE INS, AT ALL INLETS & JUNCTION BOXES, OR TO BE DETERMINED BY THE PROJECT ENGINEER/PROJECT INSPECTOR.
18. INSTALL CAST IRON STEPS IN JUNCTION BOXES OR INLET EVERY 16" ON CENTER ACCESSIBLE TO MANHOLE COVER. AT LEAST ONE STEP IS REQUIRED PER BOX, MINIMUM.
19. FOUR FOOT (4') MINIMUM TRANSITIONS FROM ROLL CURB TO STANDARD CURB AND GUTTER TO ALLOW STANDARD INLET TO BE CONSTRUCTION.
20. INVERTS SHALL BE POURED CONCRETE. NO BRICK OR ROCKS SHALL BE USED AS FILLER MATERIAL.
21. #8 BARS REQUIRED IN GUTTER.
22. INVERTS SHALL NOT EXCEED HALF THE DIAMETER OF THE PIPE. NO FLAT AREAS ARE PERMITTED.
23. INLET TOPS SHALL BE SLOPED AT 1/4" PER FOOT TOWARD THE STREET (SEE DETAIL).
24. CONCRETE USED FOR STORM STRUCTURES MUST HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 psi.
25. MODIFIED INLETS MUST HAVE SAME CARRYING CAPACITY AS STANDARD INLETS. DIMENSIONS/DETAILS MUST BE APPROVED BY CITY OF AUBURN ENGINEER PRIOR TO INSTALLATION.
26. HOPE CAN BE USED FROM RIGHT OF WAY OUT WITH CITY OF AUBURN APPROVAL.
27. AN EXPANSION JOINT MUST BE PROVIDED AT THE INLET / CURB FACE.
28. MECHANICAL TAMPING IS REQUIRED AROUND AND BEHIND INLETS.

STANDARD DETAILS: STORM SEWER	
PROJECT TITLE	REVISIONS: GR: 11-26-12
DEPARTMENT: ENGINEERING	SCALE: N.T.S.
DRAWN BY: BRIAN SIMPSON	CITY ENGINEER: JEFF RAMSEY
APPROV. BY: JEFF RAMSEY	IMPLEMENTED: 12-01-07
City of Auburn	
SHEET 6 OF 12	

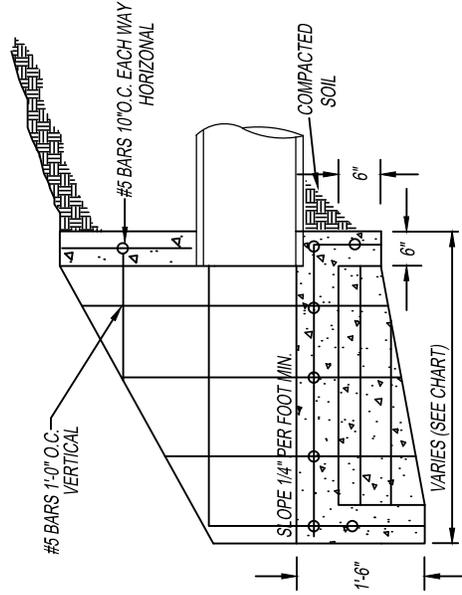
HEADWALL DETAIL



WINGED HEADWALL ELEVATION



WINGED HEADWALL PLAN



PIPE SIZE CHART

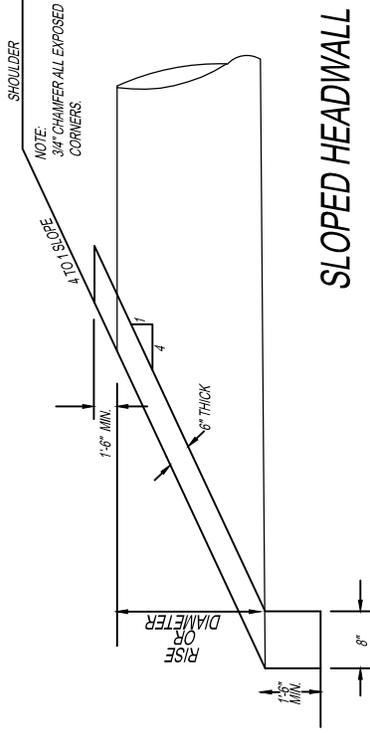
PIPE SIZE	A		W		H	
	MIN.		MIN.		MIN.	
15 IN	4 FT		DIA.+3 FT		2 FT	4 FT
18 IN	4 FT		DIA.+3 FT		2 FT	4 FT
24 IN	4 FT		DIA.+3 FT		2'-8"	4 FT
30 IN	4.5 FT		DIA.+3 FT		2'-6"	4'-6"
36 IN	5 FT		DIA.+3 FT		3 FT	5 FT
42 IN	5 FT		DIA.+3 FT		3 FT	6 FT
48 IN	5.5 FT		*****		3'-6"	6'-6"
54 IN	6 FT		*****		3'-6"	7 FT
60 IN	6.5 FT		*****		3'-6"	7'-6"
72 IN	7 FT		*****		4 FT	8 FT

NOTE: HEADWALL HEIGHT MAY VARY FROM THE CHART WITH APPROVAL OR RECOMMENDATION OF THE CITY ENGINEER.

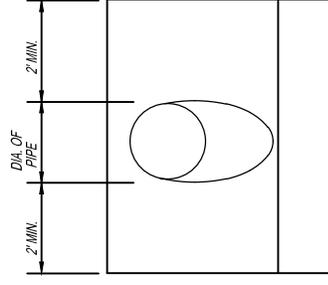
SECTIONAL ELEVATION

NTS

SLOPED HEADWALL DETAIL



SLOPED HEADWALL



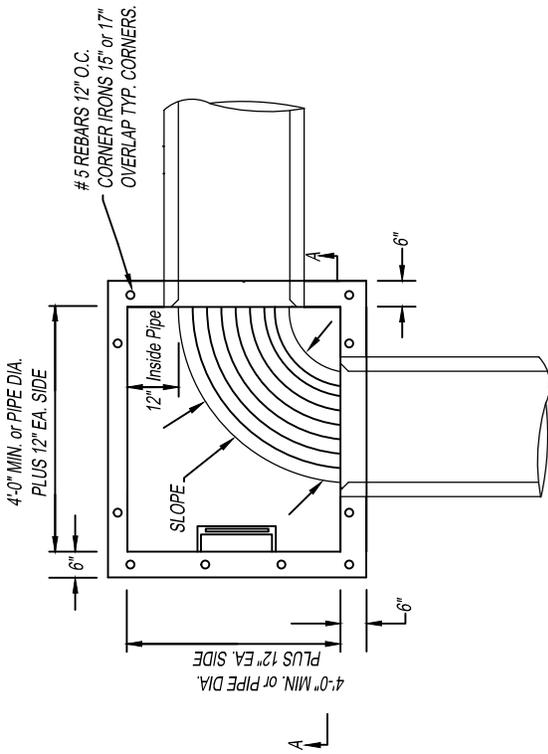
SLOPED HEADWALL ELEVATION

STANDARD DETAILS: STORM SEWER

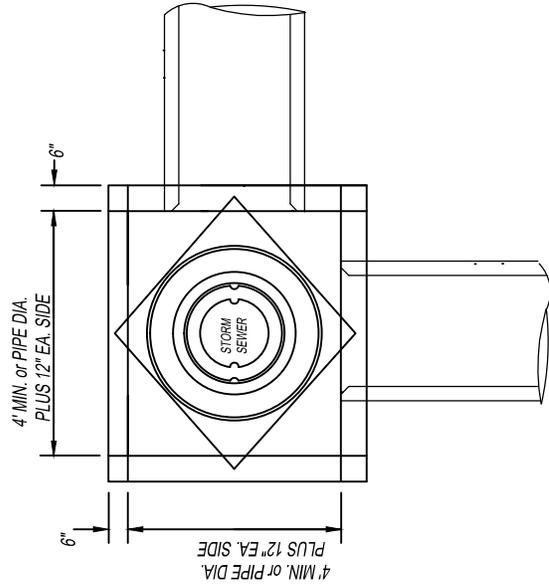


DEPARTMENT: ENGINEERING
 SCALE: N.T.S.
 DRAWN BY: BRIAN SIMPSON
 CITY ENGINEER: JEFF RAMSEY
 APPROV. BY: JEFF RAMSEY
 IMPLEMENTED: 12/21/07

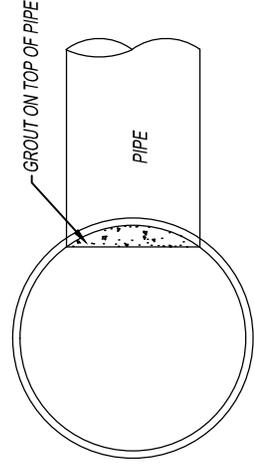
JUNCTION BOX DETAIL



SECTIONAL PLAN

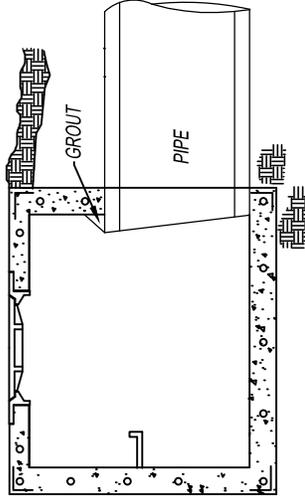


PLAN

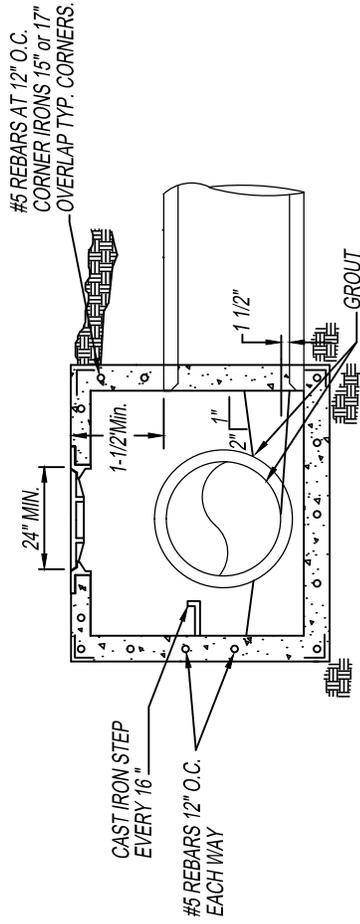


NOTE:
PIPE MUST BE FLUSH ON SIDES OF BOX.

PLAN VIEW PIPE ENTRANCE IN BOX



ELEVATION



SECTION AA

SECTIONAL ELEVATION AA

PROJECT TITLE: STANDARD DETAILS: STORM SEWER

DEPARTMENT: ENGINEERING

SCALE: N.T.S.

DRAWN BY: BRIAN SIMPSON

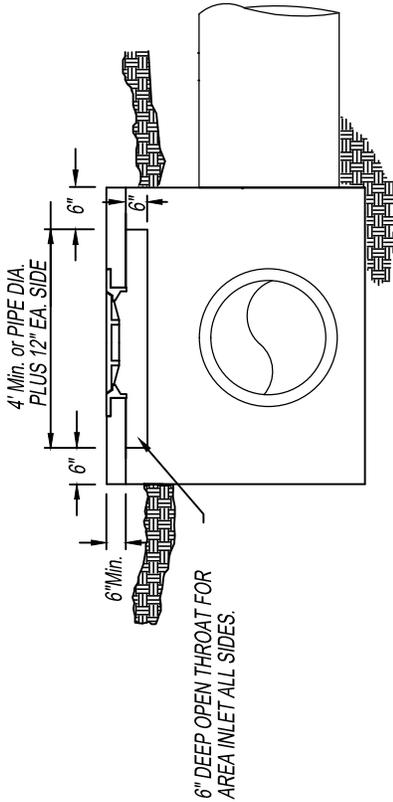
CITY ENGINEER: JEFF RAMSEY

APPROV. BY: JEFF RAMSEY

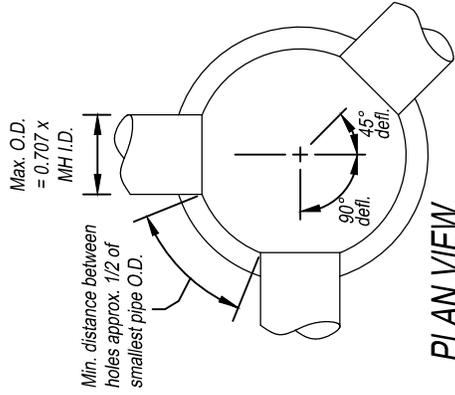
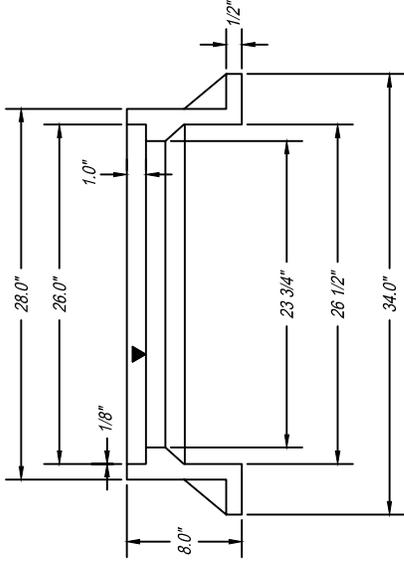
IMPLEMENTED: 12-20-07



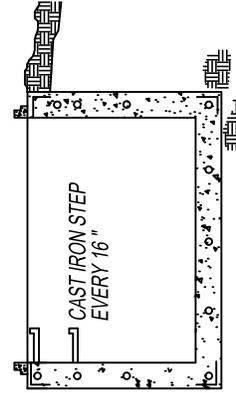
PRECAST MANHOLE



AREA INLET ELEVATION



Manhole Dia. (In.)	Max. Pipe Size O.D. (In.)		Hole Size (In.)
	From Straight thru to 45° Defl.	If 90° Defl.	
48	26.5	22.5	8-28
60	32.3	30.2	30-34
72	40.5	35.5	36-42



Pipe Dia.	Req'd Opening	MANHOLE DIA. (IN.)				
		48	60	72	84	96
15"	23"	85	>90	>90	>90	>90
18"	27"	83	>90	>90	>90	>90
21"	30"	72	>90	>90	>90	>90
24"	36"	55	85	>90	>90	>90
30"	42"	-	65	90	>90	>90
36"	48"	-	45	75	90	>90
42"	56"	-	-	50	70	90
48"	63"	-	-	15	45	70
54"	70"	-	-	-	30	56

* Opening = Pipe Dia. + (wall thickness x 2) + 3.5" free space

NTS

STANDARD DETAILS: STORM SEWER

DEPARTMENT: ENGINEERING

SCALE: N.T.S.

DRAWN BY: BRIAN SIMPSON

CITY ENGINEER: JEFF RAMSEY

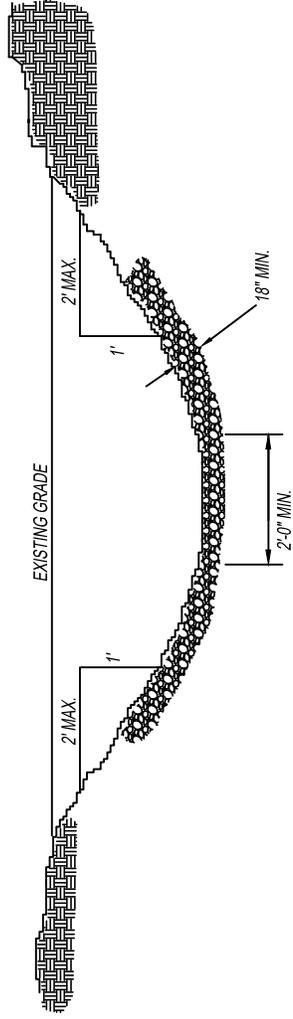
APPROD. BY: JEFF RAMSEY

IMPLEMENTED: 12-6-07

City of Auburn

SHEET 9 OF 12

RIPRAP DITCH SECTION



NOTE:

1. BOTTOM WIDTH IS DETERMINED BY ENGINEER.
2. A 3:1 SIDE SLOPE IS PREFERRED, BUT NO SLOPE CAN EXCEED 2:1.

PIPE SIZE	BOTTOM WIDTH
15 IN	2 FT
18 IN	2 FT
24 IN	3 FT
30 IN	3 FT
36 IN	4 FT
42 IN	4 FT
48 IN	5 FT
54 IN	5 FT
60 IN	6 FT
72 IN	7 FT

STANDARD DETAILS: STORM SEWER

PROJECT TITLE: _____

DEPARTMENT: ENGINEERING

SCALE: N.T.S.

DRAWN BY: BRIAN SIMPSON

CITY ENGINEER: JEFF RAMSEY

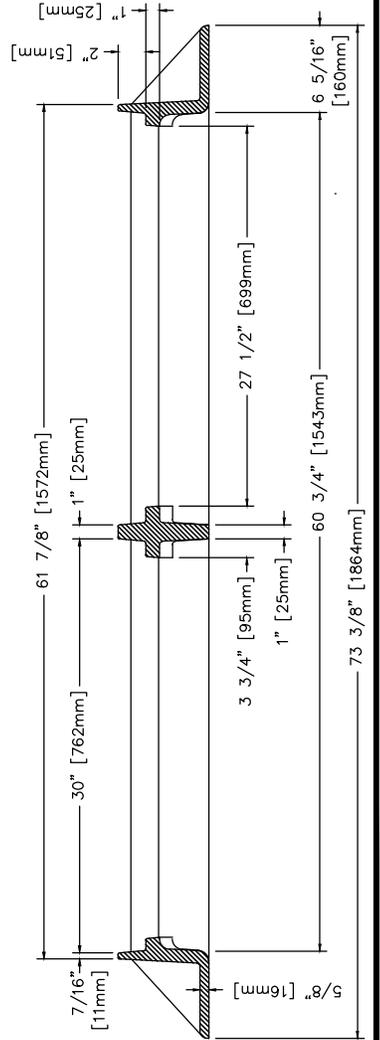
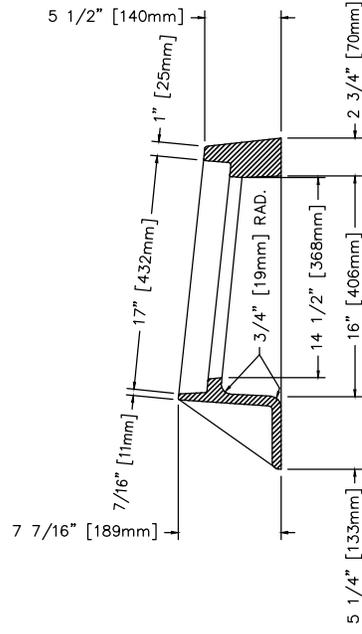
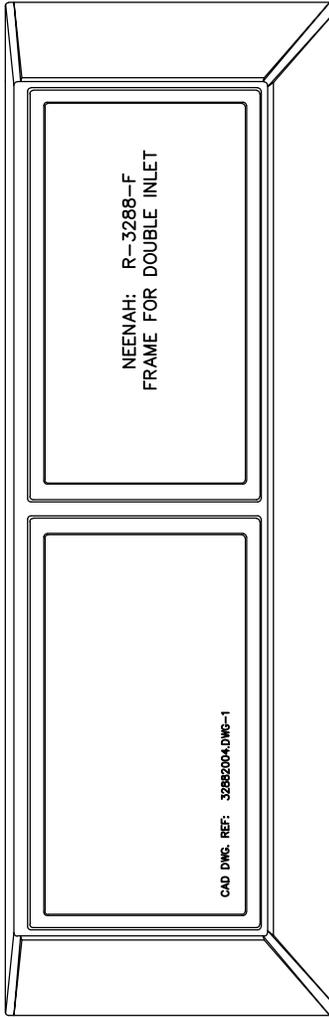
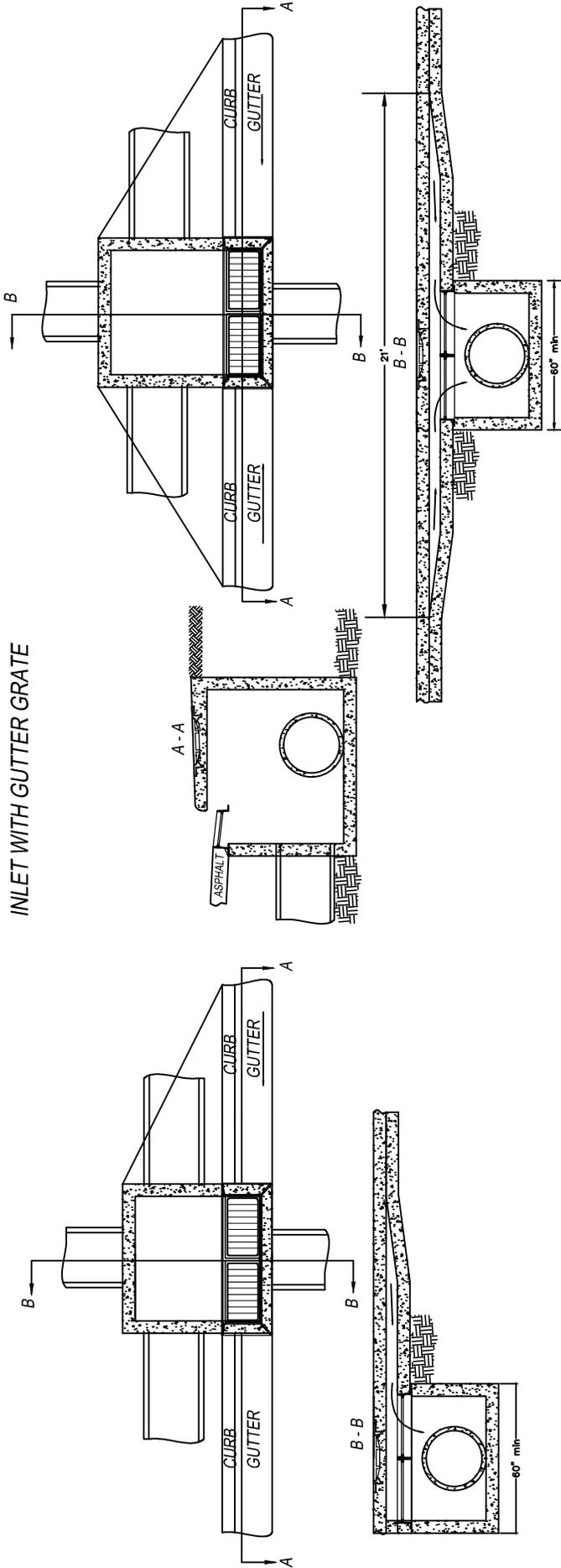
APPROD. BY: JEFF RAMSEY

IMPLEMENTED: 12-20-07

City of Auburn

SHEET 10 OF 12

INLET WITH GUTTER GRATE

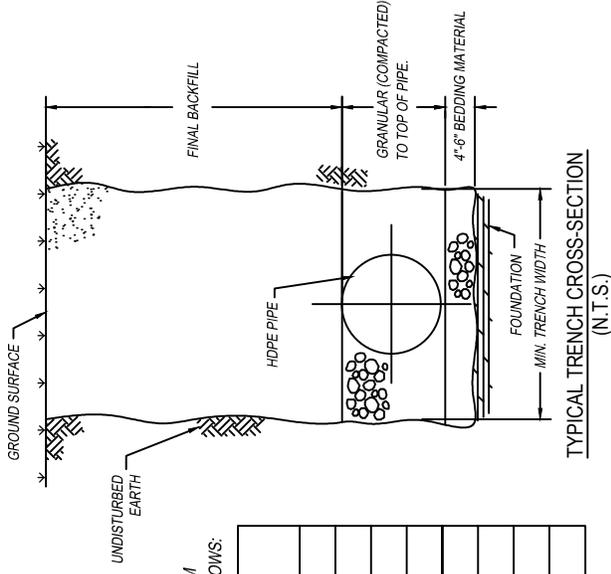


NOTE: ALL DIMENSIONS ARE SHOWN IN ENGLISH AND [METRIC]
 MATERIAL: CAST GRAY IRON ASTM A-48, CLASS 35B
 FINISH: NOT PAINTED

STANDARD DETAILS: STORM SEWER

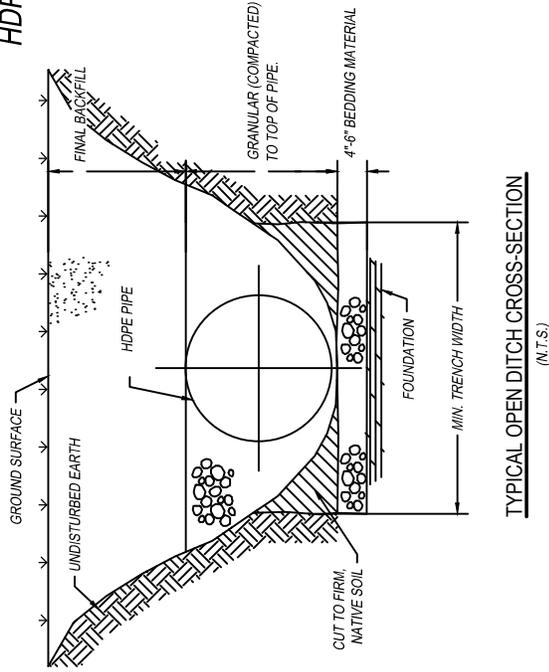
PROJECT TITLE	DEPARTMENT: ENGINEERING	REVISIONS: 01-12-2012
 City of Auburn	SCALE: N.T.S.	
	DRAWN BY: BRIAN SIMPSON	
	CITY ENGINEER: JEFF RAMSEY	
	APPROV. BY: JEFF RAMSEY	
	IMPLEMENTED: 12-21-07	
		SHEET 11 OF 12

HDPE PIPE INSTALLATION DETAIL



UNLESS SPECIFIED BY THE ENGINEER, MINIMUM RECOMMENDED TRENCH WIDTH SHALL BE AS FOLLOWS:

NOMINAL DIAMETER (IN.)	MIN. TRENCH WIDTH (IN.)
15	34
18	39
24	48
30	56
36	64
42	72
48	80
60	96



TYPICAL OPEN DITCH CROSS-SECTION (N.T.S.)

TYPICAL TRENCH CROSS-SECTION (N.T.S.)

NOTES

- BEDDING AND BACKFILL MATERIAL SHALL BE CLASS 1 MEETING ASTM D 2321. SEE DEFINITIONS BELOW.
 - TO PREVENT MIGRATION OF FINES AND LOSS OF PIPE SUPPORT FOR INSTALLATIONS WHERE SIGNIFICANT GROUND-WATER FLOW IS ANTICIPATED, CLASS 1 BEDDING AND BACKFILL MUST BE USED AND THE ENTIRE PERIMETER OF THE ENCASEMENT SHALL BE WRAPPED WITH AN APPROVED GEOTEXTILE FABRIC.
 - FOR INSTALLATIONS WHERE THE TRENCH BOTTOM IS UNSTABLE, UNDERCUT TO A DEPTH AS REQUIRED BY THE ENGINEER AND REPLACE WITH A SUITABLE BEDDING MATERIAL, PLACED IN 6-INCH LIFTS.
 - ALL HIGH-DENSITY POLYETHYLENE (HDPE) PIPE USED FOR CULVERT AND STORMDRAIN APPLICATIONS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M294, TYPE S, CURRENT EDITION AND VERIFIED THROUGH THE PLASTIC PIPE INSTITUTE (PPI) THIRD PARTY CERTIFICATION PROGRAM. ALL HDPE PIPE DELIVERED AND USED SHALL BEAR THE THIRD PARTY ADMINISTERED PPI SEAL.
 - INSTALLATIONS WHICH MEASURE OVER 15 FEET OF FILL FROM TOP OF PIPE TO FINISHED GRADE LEVEL ARE TO BE APPROVED BY CITY ENGINEER
- ASTM D 2321 MATERIAL DEFINITIONS:
 CLASS 1 - ANGULAR CRUSHED STONE OR ROCK, DENSE OR OPEN GRADED WITH LITTLE TO NO FINES. (1/4" TO 1.5" IN SIZE). INCLUDED NOT LIMITED TO SIZES 5, 57, 67, 8, 9, 10, & 610.

STANDARD DETAILS: STORM SEWER

PROJECT TITLE: _____

DEPARTMENT: ENGINEERING

SCALE: N.T.S.

DRAWN BY: BRIAN SIMPSON

CITY ENGINEER: JEFF RAMSEY

APPROD. BY: JEFF RAMSEY

IMPLEMENTED: 12-20-07

City of Auburn

SHEET 12 OF 12

APPENDIX S. Stormwater Storage Facility Final Certification

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City of Auburn

Stormwater Storage Facility Final Certification Form

Public Works Department
 171 N. Ross Street, Suite 200
 Auburn, Alabama 36830
 (334) 501-3000 FAX (334) 501-7294
www.auburnalabama.org

Project Name: _____

Storage Volume Summary:

	2-Year	5-Year	10-Year	25-Year	100-Year
Design Volume					
As-Built Volume					

Outlet Device Elevation Summary:

	Size and Description Information		Design Elevation	As-Built Elevation
	Design	As-Built		
Outlet Device #1				
Outlet Device #2				
Outlet Device #3				
Outlet Device #4				
Outlet Device #5				
Emergency Spillway				
Bottom of Pond				

(As necessary, please provide any comments or other information necessary to accurately describe the as-built storage facility conditions in a separate Memorandum and attach to this form)

By placing my professional stamp and signature on this form, I certify that this storage facility is constructed in accordance with the approved design on file with the City of Auburn and that all temporary sediment storage components have been removed. I further certify that the all drainage areas designed to be attenuated in the storage facility in fact do drain to this facility and the outlet peak discharge rates are equal to or less than the peak discharge rates as approved for the development.

Signed: _____

Seal:

Date: _____

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APPENDIX T. Stormwater Storage Facility Operations

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STATE OF ALABAMA
LEE COUNTY

STORMWATER STORAGE FACILITY OPERATION AND MAINTENANCE AGREEMENT

THIS AGREEMENT, made and entered into this the _____ day of _____,
by and between The City of Auburn, hereinafter referred to as City, and _____
_____, hereinafter referred to as Owner;

WITNESSETH

THAT WHEREAS, Owner is this day accepting responsibility for perpetual care, operation, maintenance, and associated liabilities of the storm water storage facility installed on that certain real property known as _____, as described in the deed and as shown on the plat thereof recorded in the Deed Book _____, Page _____, and/or Plat Book _____, Page _____ Lee County Court House; and

WHEREAS, as part of construction of the development the City's Phase II Storm Water Ordinance required that a storm water storage facility be constructed; and

WHEREAS, the Owner accepts responsibility for maintenance of the storm water storage facility listed below as prescribed in the attached Operation and Maintenance Plan; and

WHEREAS, the Owner grants access to the City to inspect the storm water storage facility; and

WHEREAS, the Owner understands that this Agreement shall endure to the benefit of his successors in title, whomsoever they may be in the future.

NOW, THEREFORE, it is understood and agreed by and between the parties:

1. Maintenance of the storm water storage facility shall be the sole responsibility of the Owner.
2. The responsibility for maintenance of the storm water storage facility shall pass in the chain of title to the Owner's successor in interest.
3. Operation and maintenance will be in accordance with previously approved Operation and Maintenance Plan.
4. Access is granted to the City to carry out all provisions of the City's Phase II Storm Water Ordinance, including but not limited to inspections of the storm water storage facility.
5. The City will provide a copy of its inspection report to the Owner, and any required maintenance or remedial work identified in the report must be completed within 60 days.
6. The Owner will submit evidence that the required maintenance and/or remedial repairs identified during the City's inspection have been completed within 60 days of receipt of the inspection report.
7. Failure to follow the Operations and Maintenance Plan and/or complete necessary repairs identified during the City's inspection will result in enforcement actions.

Future communications in writing, from the City to the Owner, shall be sent to the Owner's address, as stated below.

In Witness Whereof, the parties have executed this Agreement the day and year above first written.

By: _____
OWNER

GRANTOR'S SIGNATURE

ADDRESS

CITY, STATE

TELEPHONE NUMBER

I, _____, a Notary Public of said County and State, certify that _____ personally appeared before me this day and acknowledged that he/she is _____ of _____, an Alabama company and that by authority duly given and as the act of the _____ company, the foregoing instrument was signed in its name and by its _____, sealed with its corporate seal and/or attested by him/her as its _____.

Witness my hand and seal this _____ day of _____, _____.

Notary Public

(SEAL)

My Commission Expires: _____.

**APPENDIX T-1. Subdivision Operation and Maintenance
Agreement**

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Subdivision Stormwater Storage Facility Operations & Maintenance Agreement

This agreement made and entered into this _____ day of _____ 20____, by and between the City of Auburn, hereinafter referred to as CITY, and _____ hereinafter referred to as DEVELOPER;

WITNESSETH:

WHEREAS, the DEVELOPER intends to construct a development known as _____, located on lots _____, as shown on the plat thereof recorded in the Deed Book _____, Page _____, and/or Plat Book _____, Page _____ Lee County Court House, herein referred to as the DEVELOPMENT; and

WHEREAS, construction of the DEVELOPMENT requires, by the CITY, that the DEVELOPER construct a stormwater storage facility in accordance with the CITY's stormwater management requirements; and

WHEREAS, the stormwater management facility servicing the DEVELOPMENT is located on lot(s) _____, as described in the Deed Book _____, Page _____, and/or Plat Book _____, Page _____ Lee County Court House, herein referred to as the PROPERTY; and

WHEREAS, the DEVELOPER intends to establish a Homeowner's Association which is primarily responsible for the maintenance of landscaping thereon, and maintenance of the stormwater storage facility within the PROPERTY. Operation and maintenance of the stormwater storage facility shall be in accordance with the previously approved Operation and Maintenance Plan; and

WHEREAS, the DEVELOPER understands that this Agreement shall inure to the benefits of his successors in title, whomsoever they may be in the future.

NOW THEREFORE, in consideration of the mutual covenants and agreements, IT IS AGREED, as follows:

1. Each lot in the DEVELOPMENT, and any future subdivision of lots within the DEVELOPMENT, shall have attached to it an equal and undividable ownership in the PROPERTY and each and every lot owner, including lots retained by the DEVELOPER, shall be considered the "OWNER" of the stormwater storage facility(s) located on the PROPERTY. Subject to the other terms of the agreement, the Homeowner's Association shall, as the agent of the OWNER, thereafter be primarily responsible for the landscaping and maintenance of the stormwater storage facility located on the PROPERTY. If the Homeowner's Association is never created, is not responsive, or is dissolved, then the OWNER shall be responsible for all obligations of this agreement.
2. The CITY is authorized to access the PROPERTY to inspect the storm water storage facility as necessary to ascertain that the practices are being maintained and operated in accordance with the approved stormwater management plan.
3. The CITY is authorized to perform the corrective actions identified in the annual stormwater storage facility inspections report if the OWNER or Homeowner's Association does not make the required corrections in the specified time period.
4. Each lot in the DEVELOPMENT, and any future subdivision of lots within the DEVELOPMENT, shall be jointly and severally liable for any expense or cost incurred by the CITY to preserve, maintain, or restore the stormwater storage facility, or landscaping located on the PROPERTY. The CITY shall be empowered, without notice of hearing, to levy a special assessment against each OWNER within the DEVELOPMENT, and any future subdivision of the lots within the DEVELOPMENT, and each and every OWNER agrees to pay for any such special assessment for expenses incurred by the CITY for the maintenance of stormwater facility(s) should they not be maintained by the OWNER or the Homeowner's Association.
5. DEVELOPER, OWNER, and Homeowner's Association agree to indemnify and hold harmless the CITY, its board members, employees, agents, and officers from any costs, damage, loss, claim, suit, liability or award which may arise, come, be brought or incurred or assessed because of the existence of, and action or failure to act with respect to the stormwater storage facility, and the drainage and utility easements on the PROPERTY or because of any adverse effect upon any person or property related or alleged to be related to the stormwater storage facility and drainage and utility easements. The CITY shall have the right to defend any such claim and DEVELOPER, OWNER, and Homeowner's Association shall reimburse the CITY for any and all costs and/or expenses, including but not limited to attorney's fees, which the CITY may incur as a result of such claims.
6. The rights and obligations created by this Agreement shall be covenants running within the DEVELOPMENT and future subdivision thereof and shall inure to the benefit of, and be binding upon, the parties, their heirs, personal representatives, successors and assigns.

In Witness Whereof, the parties have executed this Agreement the day and year above first written.

By: _____ (DEVELOPER)

_____ (TELEPHONE NUMBER)

CITY OF AUBURN, ALABAMA
A Municipal Corporation

By: _____
Its: _____

STATE OF ALABAMA
LEE COUNTY

I, the undersigned authority, a Notary Public in and for said County, in said State, hereby certify that

_____, whose name is signed to the foregoing instrument, on behalf of the Developer, and who is known to me, acknowledged before me on this date that, being informed of the contents of the foregoing document, he/she executed the same voluntarily on the day the same bears date.

Given under my hand and official seal this the _____ day of _____, 2012.

Notary Public

Commission Expires _____

STATE OF ALABAMA

LEE COUNTY

I, the undersigned authority, a Notary Public in and for said County, in said State, hereby certify that

_____, whose name is signed to the foregoing instrument, on behalf of the City of Auburn, Alabama, and who is known to me, acknowledged before me on this date that, being informed of the contents of the foregoing document, he/she executed the same voluntarily on the day the same bears date.

Given under my hand and official seal this the _____ day of _____, 2012.

Notary Public

Commission Expires _____