

**PROJECT DESIGN
PLAN DEVELOPMENT
GUIDELINES**



**PREPARED BY
CIVIL ENGINEERING
CITY OF LITTLE ROCK**

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USE OF THESE GUIDELINES

The purpose of these guidelines is to provide a smooth design process, which will help the City of Little Rock and the Consulting Engineer. The Consultant shall be notified of the requirement to follow these guidelines prior to contract and fee negotiation. These guidelines are set to allow the Consulting Engineer prior knowledge of requirements and expectations before fee negotiation. The guidelines will allow the Consultant to know exactly what to submit and the expected process of designing plans for the City of Little Rock. All aspects of these guidelines shall be followed unless Consultant obtains prior written approval from City of Little Rock.

The use of these guidelines are for City of Little Rock projects which are designed by Consulting Engineers and are not receiving Federal Funds and are not required to meet AHTD plan format. Projects receiving Federal Funding will be required to meet AHTD plan format and these guidelines are not to be used. The Consultant will be notified if plans are required to meet AHTD formatting prior to contract and fee negotiation.

If the Consultant has any questions in regards to these guidelines, they should contact Public Works at 371-4831 and ask for the Civil Engineer III –Projects or the Civil Engineering Manager.

TABLE OF CONTENTS

<u>TITLE</u>	<u>PAGE NUMBER</u>
SECTION 1 – PROJECT PROCESS	4
SECTION 2 – PLAN SUBMITTALS / INVOICES	3
SECTION 3 – COVER SHEET	7
SECTION 4 – INDEX, GENERAL NOTES, LEGEND & QUANTITIES	7
SECTION 5 – TYPICAL SECTIONS	8
SECTION 6 – PLAN AND PROFILE SHEETS	8
SECTION 7 – CROSS-SECTIONS AND DRIVEWAY PROFILES	10
SECTION 8 – MAINTENANCE OF TRAFFIC (WHERE REQUIRED)	10
SECTION 9 – SIGNALIZATION PLAN (WHERE REQUIRED)	11
SECTION 10 – STRIPING PLAN (WHERE REQUIRED)	11
SECTION 11 – FIELD TIES / LAYOUT SHEET	11
SECTION 12 – EROSION CONTROL SHEETS	12
SECTION 13 – DETAILS / MISCELLANEOUS SHEETS	12
SECTION 14 – ADDITIONAL PLAN REVIEW CHECKLIST	13
SECTION 15 – SAMPLE QUANTITY ITEM NUMBERS	14
SECTION 16 – SAMPLE LAYERING SYSTEM	15
SECTION 17 – SAMPLE LEGEND	25

SECTION 1
PROJECT PROCESS

1. Consultant Engineering Firms hired by the City of Little Rock for the purpose of plan preparation shall follow these instructions unless they receive written notification from Public Works stating otherwise.
 - a) Written notice to proceed received from City of Little Rock prior to any work.
 - b) Consultant prepares preliminary plan (15%) for project showing proposed improvements and vertical profile. Typically plan and profile sheets showing existing and proposed right of way and proposed typical section sheets are sufficient. Consultant shall submit preliminary plans (15%) and an itemized cost estimate to Public Works. After receiving preliminary layout, Public Works will schedule a brief meeting (15%) scope meeting with consultant to discuss project. This (15%) scope meeting is to assist the consultant at an early level with Public Works expectations for project.
 - c) Upon receipt of written notice to proceed to (60%) design, consultant shall prepare and submit a complete set of plans for review including itemized cost estimate and all calculations used. See Section 2, Plan Submittals.
 - d) During the City's review of (60%) plans the consultant shall attend a field walk through with City personnel.
 - e) Upon receipt of comments on (60%) design from City of Little Rock, consultant shall prepare right of way and temporary construction documents for City of Little Rock to begin acquisition. Consultant shall obtain an example of right of way and temporary construction documents from City of Little Rock for use in preparation of documents. It is very important the right of way and temporary construction documents are done and submitted as soon as possible after meeting and receipt of 60% comment so City of Little Rock may begin acquisitions. If no major changes to the project are proposed in the 60% comments the consultant shall submit the plans to utility representatives and supply copy of transmittal letter to City of Little Rock. A list of utility representatives will be supplied to consultant by City of Little Rock.
 - f) Consultant shall make revisions according to comments on (60%) submittal and submit final plans for review and approval.

2. The final submittal shall be a full size complete, signed, and sealed set of plans on reproducible paper and in digital format. Itemized cost estimate in Excel and special provisions/conditions in Word shall also be submitted in digital format.

SECTION 2
PLAN SUBMITTALS

SUBMITTALS NOT FOLLOWING THESE GUIDELINES AND ADDRESSING ALL COMMENTS FROM PREVIOUS SUBMITTALS WILL BE RETURNED WITHOUT REVIEW.

Submittals for 15% scope meeting shall consist of the following:

1. 1 hard copy set of “Preliminary” Plan and Profile Sheets and Typical Sections of all streets including side streets. (22”X34” blacklines clearly marked 15% level)
2. 1 digital set of “Preliminary” Plan and Profile Sheets and Typical Sections of all streets including side streets. (“dwf” or “pdf” format)
3. One itemized cost estimate in digital (Excel) format and one paper copy.
4. Written request for Public Works to schedule 15% scope meeting.

Submittals at 60% shall consist of the following:

1. 1 hard copy set of plans.(22”X34” blacklines clearly marked 60% level)
2. 1 digital set of plans. (“dwf” or “pdf” format)
3. One itemized cost estimate in digital (Excel) format and one paper copy.
4. All calculation used in the design including but not limited to : hydrology, hydraulic, structural, alignment, and pavement calculations. Hydraulic design to be as required in City of Little Rock Drainage Manual.
4. All sheets except cover sheet shall be on border supplied digitally in “dwg” format by Public Works. Cover sheet to be made utilizing “dwg” base supplied by City of Little Rock.
5. Letter stating proposed centerline points are set in field, and request for field walk thru with Public Works employees.
6. Digital copy of plans on CD in “dwg” format with “ctb” file.
7. Title certificates and ownership names/addresses of adjacent property owners
8. Plans shall include but not be limited to the following
 - a) Cover Sheet
 - b) Index, General Notes, Legend and Quantities
 - c) Typical Sections
 - d) Plan and Profile Sheets
 - e) Street/Drainage cross sections and driveway profiles
 - f) Maintenance of traffic (where required)
 - g) Signalization Plan (where required)
 - h) Striping Plan (where required)
 - i) Centerline Field Ties/Layout sheet
 - j) Erosion Control Sheets
 - k) Miscellaneous/Special Details

Submittal after 60% public meeting and prior to final plan submittal shall consist of the following:

1. Right of way and temporary construction documents
2. Title certificates and ownership names/addresses of adjacent property owners

Submittals at 100% shall consist of the following

1. 3 hard copy sets of plans. (22"X34" blacklines signed and sealed)
2. One itemized cost estimate in digital (Excel) format and one paper copy.
3. Special provisions for items not in AHTD or City specification book.
4. Letter requesting final approval of plans and stating proposed centerline points are set and maintained.
5. Digital copy of plans on CD in "dwg" and "dwf or pdf" format with "ctb" file.
6. Plans shall include but not be limited to the following
 - a) Cover Sheet
 - b) Index, General Notes, Legend and Quantities
 - c) Typical Sections
 - d) Plan and Profile Sheets
 - e) Street/Drainage cross section and driveway profiles
 - f) Maintenance of traffic (where required)
 - g) Signalization Plan (where required)
 - h) Striping Plan (where required)
 - i) Centerline Field Ties/Layout sheet
 - j) Erosion Control Sheets
 - k) Miscellaneous/Special Details

Consultant may request payments during plan development not to exceed the following:

1. After 15% scope meeting – up to 50% of contract amount
2. At 60% submittal – up to 75% of contract amount
3. At 90% submittal – up to 90% of contract amount
4. After final submittal approved for bid - 100% of contract amount.

Note: Roadway design shall be in accordance with current City of Little Rock Master Street Plan. Hydrology/Hydraulic design shall be in accordance with current City of Little Rock Drainage and Detention Manual.

SECTION 3 COVER SHEET

The cover sheet should include the following information:

1. Public Works base cover sheet layout shall be used. (will be provided by City)
2. Site map used with project location and limits noted and streets named large enough to be easily read.
3. North Arrow for site map.
4. Scale for site map.
5. Consultant's address in lower right corner.
6. Name of project. (provided by Public Works)
7. P.E. stamp and signature on final plans.
8. Ward Key Map.

SECTION 4 INDEX, GENERAL NOTES, LEGEND AND QUANTITIES

1. Page index shall match name on each sheet exactly.
2. Legend shall match drawing on plan and profile sheets.
3. Quantities shall match pay items in specification book by name. Item #'s shall match specification number when possible (see SECTION 15). Any item not in City or AHTD specifications shall be marked with "SP" beside item in quantity box and have a special provision written by consultant explaining material to use, how constructed and how to measure and paid.
4. An example of general notes may be obtained from Public Works however additional notes may be required to clarify site specific issues.
5. This sheet shall include a driveway schedule noting driveway centerline station and side, existing width and material, proposed width and material, and length and material of extensions beyond property line.
6. Quantities/quantity boxes should be placed on this sheet if possible, but a separate sheet may be used at discretion of consultant if needed for room.
7. Quantities should be summarized into boxes for each pay item similar to AHTD format.
8. Storm sewer piping shall be separated in quantity boxes between cross drain pipes and side drain pipes for each size of pipe used on project. A storm sewer pipe is defined as a cross drain pipe if any portion of the pipe is under street. Do not call out proposed pipe material. Drainage piping shall be called out as "Storm Drain Pipes, ___" (Cross drain or side drain)".
9. Quantities for sodding shall be separated between "Solid Sodding (Bermuda)" and "Solid Sodding (Special)" if any yards have special grass such as Zoysia or St. Augustine, etc.

SECTION 5 TYPICAL SECTIONS

1. Typical sections shall show all dimensions including sidewalk widths, paving thickness and right of way and temporary construction lines.
2. Typical sections shall show materials, compaction density and stations for typical section to be used.
3. Consultant shall supply typical section for each method of construction contractor will use on project. (example - side streets may be different dimension than main road and would require separate typical section)
4. Typical section shall identify profile (on plan and profile sheets) location. (example - if profile on plan and profile sheets is the centerline of typical section then the typical section should be noted with “profile” pointing to centerline.
5. Consultant should refer to City of Little Rock Master Street Plan for typical sections design features unless otherwise notified in writing by Public Works.
6. Typical sections shall show maximum slopes. (Sidewalk maximum cross slope is to be shown as 1%). Sidewalks may slope away from street if sidewalk is buffered to minimize grading.

SECTION 6 PLAN AND PROFILE SHEETS

1. Horizontal stations shall increase from west to east or south to north as applicable and on sheets from left to right. Stations shall increase on successive plan sheets. (example – higher stations on sheet 5 than on sheet 4)
2. Where project includes more than one street, no two streets shall have the same stations. (example – side streets should not have a station 1+00 if main road has a station 1+00)
3. Plan and profile sheet title shall match legend and a North arrow shall be on each sheet.
4. **Property owner name and address shall be shown on each property.**
5. Proposed improvements shall be clearly identified by darker lines or hatching.
6. Horizontal and vertical control (benchmark) shall be shown on each sheet. Construction benchmarks shall be set at a maximum interval of 500 foot intervals, and shown on the drawing.
7. All street names shall be labeled. Right of way and temporary construction easement lines must match documents for acquisition and be shown on plans along with existing right of way. Proposed right of way and temporary construction easements shall have station and offset labels at ends and angle points.
8. Profile elevations, existing and proposed, shall be labeled and be provided at maximum intervals of 25 feet across bottom of profile. Elevations given across bottom of profile sheet shall be labeled at least once per sheet.
9. Complete vertical and horizontal curve information shall be clearly shown on profile and plan drawings respectively.

10. Horizontal scale shall be 1"=20' and vertical scale shall be 1"=5'. Plan view shall have tic marks on 50' intervals along centerline and stations clearly labeled. Profile view vertical scale shall have light lines 1' on center with darker lines at 5' intervals. Profile view horizontal scale shall have light lines at 25' maximum increments and dark lines at each station.
11. Where possible station on plan view shall align with station in profile view.
12. Matchlines shall be shown where sheets overlap, along with station references.
13. Materials of existing items shall be labeled such as fence height and type, wall type, driveway material, etc.
14. All trees including in temporary construction easements shall be shown on plans. Trees to be removed during construction shall be indicated.
15. Station references shall be provided for items to be removed or relocated. References shall also include "Lt" or "Rt" to indicate location relative to the profile line.
16. Stationing shall typically be no smaller than 10+00 and negative stationing shall not be used.
17. Station equations shall be used only with prior written approval.
18. Existing and proposed storm sewer lines should show beginning and ending station, length, slope, upstream and downstream elevations at structures and each line shall be clearly shown as cross drain or side drain. Existing storm sewer lines shall indicate material type.
19. Curb inlets and other storm sewer structures shall show inlet and outlet elevations, station reference, top rim elevation and type as applicable.
20. Street intersection elevations shall be detailed in plan view as needed to facilitate drainage. (example – to show valley gutter across side street)
21. All non-standard (not on typical section) slopes (cut and fill) shall be clearly noted with correct slope information (2.5 to 1, etc) or distance from profile to tie in point.
22. All flared end sections shall be located a sufficient distance from street to allow a maximum 1 to 1 slope from edge of street to flow line of flared end section.
23. Show location of Project Information Kiosk.
24. Show periodic dimensions on streets, grass buffers and sidewalks. Show all radius dimensions.
25. Label the existing driveway material.
26. Side streets shall be profiled from centerline of main street to the tie point if any work is required on side street. Side streets are required by Code to be no steeper than 5% for the first 30 feet from main street curbline.
27. Vertical curve information shall include (L, K, E, and VPI, VPC and VPT elevations and stations).
28. Horizontal curve information shall include (T, R, L, I, and PC and PT stations).
29. When storm drain pipe systems change to a larger pipe, the top of the pipes should be at the same elevation.

SECTION 7
CROSS SECTIONS AND DRIVEWAY PROFILES

1. ROW and TCE locations shown on each cross-section.
2. Cut and fill volumes in cubic yard shall be provided at each section.
3. Elevations shown for proposed profile and existing profile must be labeled and match plan and profile sheets.
4. Show on each cross section – fences, houses, walls, sidewalks and all drainage pipes, etc. at proper elevations within right of way or temporary construction easements.
5. Scales shall be vertical 1"=5' with 1' delineation and horizontal 1"=10' with 1' delineation.
6. Cross sections shall be given at maximum intervals of 50' and at each major change in terrain.
7. Storm drain pipes both parallel and perpendicular shall be shown in cross sections at corresponding elevation.
8. Driveways may be profiled on separate sheets from cross sections or may be profiled with cross sections cut at the driveway centerline.
9. Each drive shall be profiled at center of drive and show percent grades. Absolutely no grade changes exceeding 16% will be permitted. Percent grade of existing driveway at match point must be shown on driveway profile.
10. Driveways shall be profiled from centerline of street to tie in point.
11. Driveway profiles shall use the same horizontal and vertical scales same as cross-sections if on separate sheets.
12. Driveways must be designed to prevent street drainage from entering driveway. See Public Works detail book for maximum grades and grade changes. Driveway grades in detail book are maximum grades and percent slopes should be designed at lower percent grade changes where possible.
13. Driveways must meet ADA requirements and have a 3 foot wide section with maximum slope of 2% where sidewalks cross the driveway. Showing 1% cross slope at sidewalk crossing of driveway is preferred to allow construction tolerances.
14. Do not allow ponding water behind curb or sidewalks at slope tie without provisions to drain the water.

SECTION 8
MAINTENANCE OF TRAFFIC (WHERE REQUIRED)

1. Maintenance of traffic plans should be provided when it is necessary to detour traffic for extended periods of time or when traffic patterns will change during construction. Written approval from City of Little Rock is required to omit maintenance of traffic plans from design.
2. Maintenance of traffic plans shall show advance-warning signage including type of signage and location of installation.
3. Plan should have notes showing each phase of barricading and areas to be constructed during each phase should be hatched.
4. Centerline stationing of streets shall be the same as plan and profile sheets.
5. North arrow and scale shown on plans.

**SECTION 9
SIGNALIZATION PLAN (WHERE REQUIRED)**

1. General notes related to signalization plan shown on sheet.
2. Plan to scale with north arrow shown.
3. Legend, wiring diagram and material specifications shall be shown on sheet.

**SECTION 10
STRIPING PLAN (WHERE REQUIRED)**

1. General notes related to striping plan shall be shown on sheet or in general notes.
2. Plan to scale with north arrow shown.
3. Plan shall be dimensioned showing proposed striping and existing striping, including stationing, location, type, size and color of stripe.
4. Removal of existing striping shall be shown where required.
5. Traffic Engineering determines striping materials to be used. Generally thermoplastic or 3-M permanent striping tape. (Supplied to engineer)
6. A note shall be included stating, " Contractor shall spot mark for striping layout and obtain approval from City of Little Rock Traffic Engineering prior to permanent installation."

**SECTION 11
FIELD TIES/LAYOUT SHEET**

1. Every control point on centerline alignment (start, end, PI's, PC's and PT's) must have State Plane/Pagis coordinates and field ties (offsets) for contractor to layout centerline and centerline shall include bearings and distance information.
2. Field ties (offsets) must be 3 dimensions to existing or set points, which will not be moved during utility relocations or construction. Dimensions are to be point to point including the vertical component of the distance not just the horizontal distance.
3. Consultant shall set centerline alignment and set each centerline station with nail and bottle cap at the time of the 60% submittal. Station identification shall be painted at each bottle cap for reference during field walk through with consultant.
4. This sheet should also show station, offset, elevation and description of construction benchmarks. Benchmarks should be set at no farther than 500 foot intervals. All projects shall have a minimum of two benchmarks. Do not use items such as power poles or fire hydrants for benchmarks if they may be moved during utility relocations.

SECTION 12
EROSION CONTROL SHEETS

1. The erosion control sheets may be the plan and profile sheets with erosion control devices shown, such as location of silt fences, inlet protection, etc. or shall be separate sheets.
2. Erosion control methods to be used shall reference proper detail in Public Works standard detail book.
3. All projects will require erosion control sheets and requirements unless written permission obtained from City of Little Rock to omit these requirements

SECTION 13
DETAIL/MISCELLANEOUS SHEETS

1. Additional sheets such as detail sheets may need to be added to above listed sheet to clarify construction issues.
2. Any inlet, curb, special access ramp, reinforced concrete section, etc. not in standard detail book shall be fully detailed and dimensioned and contain a special pay item and special provision.

SECTION 14
ADDITIONAL PLAN REVIEW CHECKLIST

- ___ AVOID INLETS IN INTERSECTION RADIUS IF POSSIBLE. (ADD INLETS IF NEEDED)
- ___ SHOW WING ON UPHILL SIDE OF INLETS AND DOUBLE WING AT SAG INLETS
- ___ SIDEWALK STATION AND DISTANCE FROM CENTERLINE WHERE ROUTED AROUND OBJECTS
- ___ INLET AND STATION INFORMATION ON PLAN MATCHES PROFILE
- ___ CHECK PIPE GRADES, ELEVATIONS AND COVER ON PROFILE
- ___ CENTERLINE PROFILE ELEVATIONS MATCH PROFILE INFORMATION
- ___ NO ACCESS RAMPS OVER INLETS OR UNABLE TO CONSTRUCT DUE TO REQUIRED ADA SLOPES
- ___ VERTICAL CURVES HAVE PROPER SIGHT DISTANCE FOR TYPE OF STREET
- ___ CURB TRANSITIONS FROM 6" TO 0" IN 5 FEET AT END OF CURBS. TRANSITION AFTER RADIUS.
- ___ SPECIFICATION WRITTEN FOR ITEM NOT IN CITY SPECS
- ___ HYDRAULICS (CHECK-REQUIRED HEAD AT ENTRANCES, INLET INTERCEPT CAPACITY, HGL, ETC.)
- ___ ARE QUANTITIES CORRECT?
- ___ PAY ITEMS CORRECT?
- ___ CONCRETE COMPRESSIVE STRENGTH GIVEN FOR WORK NOT IN SPECIFICATIONS
- ___ **DATES ON PLANS ARE KEPT CURRENT WITH REVISIONS**
- ___ RETAINING WALLS AND FENCES DO NOT AFFECT INTERSECTION SIGHT DISTANCE

SECTION 15
SAMPLE QUANTITY ITEM NUMBERS

Item No.	Description of Work	Unit	Item No.	Description of Work	Unit
2.01	SITE PREPARATION (INCL. MOBILIZATION)	L.S.	18.06	STONE RETAINING WALL	C.Y.
3.01	UNCLASSIFIED EXCAVATION	C.Y.	18.07	HANDRAIL	L.F.
3.06	BORROW MATERIAL	C.Y.	18.08	1" THICK RIP RAP (GROUTED)	S.Y.
4.01	AGGREGATE BASE COURSE (CLASS 7)	TON	18.09	HANDICAP RAMP	S.F.
5.01	TACK COAT	GAL.	18.10	WATER FOR DUST CONTROL	GAL
6.01	ASPHALT SURFACE COURSE	TON	19.01	FINAL CLEAN-UP	L.S.
6.02	ASPHALT BINDER COURSE	TON	20.01	PIPE EMBEDMENT	TON
7.04	CONCRETE DRIVE (PRI.), 4"	S.F.	21.05	PROCESSING LIME TREATED SUBGRADE	S.Y.
7.06	CONCRETE DRIVE & APRON, 6"	S.F.	21.06	HYDRATED LIME	TON
8.01	CONCRETE CURB & GUTTER	L.F.	22.01	MAILBOX RELOCATION	EA
9.01	CONCRETE SIDEWALK, 4"	S.F.	23.01	B STONE	TON
9.02	CONCRETE STEPS	S.F.	24.01	SILT FENCE	L.F.
10.01	JUNCTION BOX	EA	25.01	NEW GATE	EA
10.02	CURB INLET	EA	25.02	RELOCATE EXISTING GATE	EA
10.03	GRATE INLET	EA	26.01	TRENCH OR EXCAVATION SAFETY SYSTEMS	L.S.
11.01	CONCRETE, REINFORCED RETAINING WALL	C.Y.	27.07	COLD MILLING ASPHALT PAVEMENT	S.Y.
11.02	CONCRETE, REINFORCED FOR BOX CULVERT	C.Y.	28.01	GUARDRAIL	L.F.
13.12	STORM DRAIN PIPES, 12" (CROSS DRAIN?)	L.F.	30.00	PAVING, CONCRETE	S.F.
13.18	STORM DRAIN PIPES, 18"	L.F.	31.00	CONCRETE DITCH PAVING	S.Y.
13.21	STORM DRAIN PIPES, 21"	L.F.	32.15	FLARED END SECTIONS, 15"	EA
13.24	STORM DRAIN PIPES, 24"	L.F.	32.18	FLARED END SECTIONS, 18"	EA
13.30	STORM DRAIN PIPES, 30"	L.F.	32.21	FLARED END SECTIONS, 21"	EA
13.36	STORM DRAIN PIPES, 36"	L.F.	32.24	FLARED END SECTIONS, 24"	EA
13.42	STORM DRAIN PIPES, 42"	L.F.	32.30	FLARED END SECTIONS, 30"	EA
13.48	STORM DRAIN PIPES, 48"	L.F.	32.36	FLARED END SECTIONS, 36"	EA
13.54	STORM DRAIN PIPES, 54"	L.F.	32.42	FLARED END SECTIONS, 42"	EA
13.60	STORM DRAIN PIPES, 60"	L.F.	32.48	FLARED END SECTIONS, 48"	EA
13.66	STORM DRAIN PIPES, 66"	L.F.	32.54	FLARED END SECTIONS, 54"	EA
13.72	STORM DRAIN PIPES, 72"	L.F.	32.60	FLARED END SECTIONS, 60"	EA
13.84	STORM DRAIN PIPES, 84"	L.F.	32.66	FLARED END SECTIONS, 66"	EA
14.01	SOLID SODDING (BERMUDA)	S.Y.	32.72	FLARED END SECTIONS, 72"	EA
14.02	SOLID SODDING (ZOYSIA)	S.Y.	32.84	FLARED END SECTIONS, 84"	EA
14.03	SOLID SODDING (ST. AUGUSTINE)	S.Y.	45.00	PRECAST REINF CONCRETE BOX CULVERT	L.F.
15.01	SHRUB REPLACEMENT	EA	46.00	HYDROSEEDING	AC.
15.02	HEDGE REPLACEMENT	L.F.	47.00	GEOTEX MATERIAL	S.Y.
15.03	TREE REPLACEMENT	EA	48.00	EROSION CONTROL MATTING	S.Y.
16.01	MAINTENANCE OF TRAFFIC	L.S.	49.00	TOP SOIL	C.Y.
17.01	CUT AND REPAIR EXISTING STREET SURFACE	S.Y.	50.00	THERMOPLASTIC PAVEMENT MARKING	L.F.
18.01	FENCING	L.F.	51.00	BOX CULVERT	C.Y.
18.05	RELOCATION OF SANITARY SEWER LINES	L.F.	52.00	PROJECT INFORMATION KIOSK	L.S.

Above is an example of quantity item numbers used on City projects. Additional items shall be numbered in a similar manner. Specifications shall be written for each item not in current City of Little Rock Specifications Book. The item number should match specification section and description should match the specification basis of payment name exactly. These will change or require modification as City Specifications change. Storm Drainage should be called out as "Storm Drain Pipes, (size) (cross drain or side drain)".

**SECTION 16
SAMPLE LAYERING SYSTEM**

City of Little Rock Layering System	
Name	Description
C-ALGN-DATA	Alignment Data
C-ALGN-LINE	Alignment Line
C-ALGN-STAN	Alignment Station
C-ALGN-STAN-EQU	Alignment Station Equation
C-ALGN-STAN-LBL	Alignment Station Label
C-ALGN-STAN-PTS	Alignment Station Point
C-ANNO-MTCH	Annotation Match Line
C-ANNO-MTCH-TEXT	Annotation Match Line Text
C-ANNO-NOTE	Annotation Notes
C-ANNO-TABL	Annotation Table
C-ANNO-TABL-PATT	Annotation Table Hatch
C-ANNO-TABL-TEXT	Annotation Table Text
C-ANNO-TABL-TITL	Annotation Table Title
C-ANNO-TABL-TTBL	Annotation Table Borders
C-CORR	Roadways Corridor
C-CORR-BNDY	Roadways Corridor Boundary
C-CORR-PATT	Roadways Corridor Hatch
C-DEMO-AREA	Demolition Area
C-DEMO-AREA-TXT	Demolition Area Text
C-DEMO-NOTES	Demolition Notes
C-DEMO-STRC	Demolition Structure
C-DEMO-STRC-TXT	Demolition Structure Text
C-DOMW-ALIGN	Domestic Water Alignment
C-DOMW-ALIGN-TXT	Domestic Water Alignment Text
C-DOMW-HYDR	Domestic Water Hydrant
C-DOMW-MAIN	Domestic Water Main
C-DOMW-MAIN-FIRE	Domestic Water Fire
C-DOMW-MARKER	Domestic Water Marker
C-DOMW-METER	Domestic Water Meter
C-DOMW-SERVICE	Domestic Water Service
C-DOMW-TXT	Domestic Water Text
C-DOMW-VALVE	Domestic Water Valve
C-DOMW-VALVE-VAULT	Domestic Water Valve Vault
C-EROS-LOD	Erosion Control Limits of Disturbance
C-EROS-PH1-BMP	Erosion Control Phase 1 Best Management Practices
C-EROS-PH1-BMP-TXT	Erosion Control Phase 1 Best Management Practices Text
C-EROS-PH1-NOTES	Erosion Control Phase 1 Notes
C-EROS-PH1-SDAREA	Erosion Control Phase 1 Design Area
C-EROS-PH1-SDAREA-TXT	Erosion Control Phase 1 Design Area Text
C-EROS-PH1-STPAD	Erosion Control Phase 1 Structural Pad

C-EROS-PH1-STPAD-TXT	Erosion Control Phase 1 Structural Pad Text
C-EROS-PH1-TXT	Erosion Control Phase 1 Text
C-EROS-PH2-BMP	Erosion Control Phase 2 Best Management Practices
C-EROS-PH2-BMP-TXT	Erosion Control Phase 2 Best Management Practices Text
C-EROS-PH2-NOTES	Erosion Control Phase 2 Notes
C-EROS-PH2-SDAREA	Erosion Control Phase 2 Design Area
C-EROS-PH2-SDAREA-TXT	Erosion Control Phase 2 Design Area Text
C-EROS-PH2-TXT	Erosion Control Phase 2 Text
C-EROS-PH3-BMP	Erosion Control Phase 3 Best Management Practices
C-EROS-PH3-BMP-TXT	Erosion Control Phase 3 Best Management Practices Text
C-EROS-PH3-NOTES	Erosion Control Phase 3 Notes
C-EROS-PH3-SDAREA	Erosion Control Phase 3 Design Area
C-EROS-PH3-SDAREA-TXT	Erosion Control Phase 3 Design Area Text
C-EROS-PH3-TXT	Erosion Control Phase 3 Text
C-EROS-SF	Erosion Control Silt Fence
C-EROS-SF-TXT	Erosion Control Silt Fence Text
C-EROS-WQAREA	Erosion Control Water Quality Area
C-EROS-WQAREA-TXT	Erosion Control Water Quality Area Text
C-ESMT-ACCS	Easement Access
C-ESMT-CATV	Easement Cable TV
C-ESMT-CONS	Easement Construction
C-ESMT-ELEC	Easement Electric
C-ESMT-GAS	Easement Gas
C-ESMT-LSCP	Easement Landscape
C-ESMT-TELE	Easement Telephone
C-ESMT-ROAD	Easement Road
C-ESMT-ROAD-PERM	Easement Road Permanent
C-ESMT-ROAD-TEMP	Easement Road Temporary
C-ESMT-SGHT	Easement Sight Distance
C-ESMT-SSWR	Easement Sanitary Sewer
C-ESMT-STRM	Easement Storm Sewer
C-ESMT-UTIL	Easement General Utility
C-ESMT-WATR	Easement Water
C-HYDR-POST	Post Developed Hydrology Area
C-HYDR-POST-TC	Post Developed Hydrology Time of Concentration
C-HYDR-POST-TXT	Post Developed Hydrology Text
C-HYDR-PRE	Pre Developed Hydrology Area
C-HYDR-PRE-TC	Pre Developed Hydrology Time of Concentration
C-HYDR-PRE-TXT	Pre Developed Hydrology Text
C-HYDR-SOIL	Soil Data Area
C-HYDR-SOIL-TXT	Soil Data Text
C-INTERFERENCE	Pipe Interference
C-LEGEND	Sheet Legend
C-PRKG	Parking Block
C-PRKG-CURB-STOP	Parking Curb Stop

C-PRKG-MARK	Parking Marker
C-PRKG-NUMB	Parking Number
C-PRKG-NUMB-NPLT	Parking Number No Plot
C-PROF	Profile Block
C-PROF-DIAG	Profile Diagram
C-PROF-DOMW	Profile Water
C-PROF-DOMW-TXT	Profile Water Text
C-PROF-DOMW-XS	Profile Water Cross Section
C-PROF-GRID	Roadways: profile grid
C-PROF-GRID-GEOM	Roadways: profile gridline @ geometry points
C-PROF-GRID-MAJR	Roadways: profile gridline @ major stations
C-PROF-GRID-MINR	Roadways: profile gridline @ minor stations
C-PROF-LINE	Profile Line
C-PROF-LINE-EXTN	Profile Line Extension
C-PROF-LTOF	Profile Left Offset
C-PROF-PNTS	Profile Points
C-PROF-RTOF	Profile Right Offset
C-PROF-SSWR	Profile Sanitary Sewer
C-PROF-SSWR-TXT	Profile Sanitary Sewer Text
C-PROF-SSWR-XS	Profile Sanitary Sewer Cross Section
C-PROF-STAN-GEOM	Profile Station Geometry
C-PROF-STAN-MAJR	Profile Major Station
C-PROF-STAN-MINR	Profile Minor Station
C-PROF-STRM	Profile Storm Sewer
C-PROF-STRM-TXT	Profile Storm Sewer Text
C-PROF-STRM-XS	Profile Storm Sewer Cross Section
C-PROF-TEXT	Profile Text
C-PROF-TICK	Profile Tick
C-PROF-TITL	Profile Title
C-PROF-TTLB	Profile Title Block
C-PROF-VIEW	Profile View
C-PROP	Property Block
C-PROP-BNDY	Property Boundary
C-PROP-BRNG	Property Bearing
C-PROP-CALL	Property Call
C-PROP-LOTS	Property Lots
C-PROP-MON	Property Monument
C-PROP-MON-TXT	Property Monument Text
C-PROP-OWNR	Property Owner
C-PROP-SBCK	Property Setback
C-PROP-TEXT	Property Text
C-PROP_LLL	Property Land Lot
C-PVMT-ASPHT	Pavement Asphalt Area
C-PVMT-CONC	Pavement Concrete Area
C-PVMT-GRVL	Pavement Gravel Area

C-PVMT-MRKG	Pavement Markings
C-PVMT-TXT	Pavement Text
C-ROAD	Roadway Block
C-ROAD-ASSM	Roadway assemblies and subassemblies
C-ROAD-ASSM-BLIN	Roadways assembly baseline
C-ROAD-ASSM-OFFS	Roadways assembly offset
C-ROAD-ASSM-TEXT	Road Assembly Text
C-ROAD-BRNG	Roadways bearings
C-ROAD-CNTR	Roadways centerline
C-ROAD-CORR	Roadways corridor
C-ROAD-FEAT	Roadways feature line
C-ROAD-LABL	Roadways labels
C-ROAD-LINE	Roadways tangent lines
C-ROAD-LINE-EXTN	Roadways PVI extension lines
C-ROAD-LINK	Roadway Link
C-ROAD-LINK-TEXT	Roadway Link Text
C-ROAD-MARK	Roadway corridor and section marks
C-ROAD-PROF	Roadway profiles
C-ROAD-PROF-ASMC	Roadway profile asymmetrical curves
C-ROAD-PROF-CURV	Roadway profile vertical curves
C-ROAD-PROF-DIAG	Roadway profile band diagrams
C-ROAD-PROF-GRID	Roadway profile grid
C-ROAD-PROF-GRID-GEOM	Roadway profile gridline @ geometry points
C-ROAD-PROF-GRID-MAJR	Roadway profile gridline @ major stations
C-ROAD-PROF-GRID-MINR	Roadway profile gridline @ minor stations
C-ROAD-PROF-LINE	Roadway profile vertical lines
C-ROAD-PROF-LINE-EXTN	Roadway centerline extension
C-ROAD-PROF-LTOF	Roadway profile left offset sample lines
C-ROAD-PROF-PARB	Roadway profile parabolic curves
C-ROAD-PROF-PNTS	Roadway profile geometry points
C-ROAD-PROF-RTOF	Roadway profile right offset sample lines
C-ROAD-PROF-STAN-GEOM	Roadway profile geometry point labels
C-ROAD-PROF-TEXT	Roadway profile text
C-ROAD-PROF-TICK	Roadway profile tick marks
C-ROAD-PROF-TITL	Roadway profile label
C-ROAD-PROF-TTLB	Roadway profile label
C-ROAD-SHAP	Roadway Shape Area
C-ROAD-SHAP-PATT	Roadway Shape Area Hatch
C-ROAD-SPIR	Roadway spirals
C-ROAD-STAN	Roadway stationing
C-ROAD-STAN-MAJR	Roadway major stationing labels
C-ROAD-STAN-MINR	Roadway minor stationing labels
C-ROAD-TABL	Roadway Table
C-ROAD-TEXT	Roadway text
C-SCTN	Cross Section Block

C-SCTN-DIAG	Cross Section Diagram
C-SCTN-GRID-MAJR	Cross Section Major Grid
C-SCTN-LABL	Cross Section Label
C-SCTN-ROAD	Cross Section Road
C-SCTN-ROAD-TEXT	Cross Section Road Text
C-SCTN-ROAD-VIEW	Cross Section road View
C-SCTN-SHET	Cross Section Sheet
C-SCTN-TABL	Cross Section Table
C-SCTN-TEXT	Cross Section Text
C-SCTN-TICK	Cross Section Tick
C-SCTN-TITL	Cross Section Title
C-SCTN-TTLB	Cross Section Title Block
C-SCTN-VIEW	Cross Section View
C-SITE-BLDG	Site Building
C-SITE-BLDG-TXT	Site Building Text
C-SITE-BUFF	Site Buffer
C-SITE-BUFF-TXT	Site Buffer Text
C-SITE-CARS	Site Cars
C-SITE-CNTR	Site Centerline
C-SITE-CNTR-TABLE	Site Centerline Table
C-SITE-CNTR-TXT	Site Centerline Text
C-SITE-CURB	Site Curb
C-SITE-DIMS	Site Dimensions
C-SITE-EOP	Site Edge of Pavement
C-SITE-EOP-ALIGN	Site Edge of Pavement Alignment
C-SITE-EOP-ALIGN-TXT	Site Edge of Pavement Alignment Text
C-SITE-FENCE	Site Fence
C-SITE-FENCE-TXT	Site Fence Text
C-SITE-MOT	Site Maintenance of Traffic
C-SITE-SIGN	Site Signage
C-SITE-SIGN-TXT	Site Signage Text
C-SITE-STRC	Site Structures
C-SITE-STRC-TXT	Site Structures Text
C-SITE-STRIPE	Site Striping
C-SITE-TXT	Site Text
C-SITE-WALK	Site Sidewalk
C-SITE-WALK-TXT	Site Sidewalk Text
C-SITE-WALL-ALIGN-TOE	Site Bottom of Wall Alignment
C-SITE-WALL-ALIGN-TOE-TXT	Site Bottom of Wall Alignment Text
C-SITE-WALL-ALIGN-TOP	Site Top of Wall Alignment
C-SITE-WALL-ALIGN-TOP-TXT	Site Top of Wall Alignment Text
C-SSWR	Sanitary Sewer Block
C-SSWR-ALIGN	Sanitary Sewer Alignment
C-SSWR-ALIGN-TXT	Sanitary Sewer Alignment Text
C-SSWR-FM	Sanitary Sewer Force Main

C-SSWR-FM-STRC	Sanitary Sewer Force Main Structure
C-SSWR-FM-STRC-TXT	Sanitary Sewer Force Main Structure Text
C-SSWR-FM-TXT	Sanitary Sewer Force Main Text
C-SSWR-GREASE-OIL	Sanitary Sewer Grease Interceptor
C-SSWR-PIPE	Sanitary Sewer Piping
C-SSWR-PIPE-TXT	Sanitary Sewer Piping Text
C-SSWR-SERVICE	Sanitary Sewer Service
C-SSWR-STRC	Sanitary Sewer Structure
C-SSWR-STRC-TXT	Sanitary Sewer Structure Text
C-SSWR-TEXT	Sanitary Sewer Text
C-STRM-ALIGN	Storm Sewer Alignment
C-STRM-ALIGN-TXT	Storm Sewer Alignment Text
C-STRM-PIPE	Storm Sewer Piping
C-STRM-PIPE-TXT	Storm Sewer Piping Text
C-STRM-STRC	Storm Sewer Structures
C-STRM-STRC-TXT	Storm Sewer Structures Text
C-STRM-TEXT	Storm Sewer: text
C-TIN	Triangulated irregular network
C-TIN-BNDY	Triangulated irregular network: boundary
C-TIN-VIEW	Triangulated irregular network: triangle view
C-TOPO	Topography Blocks
C-TOPO-FEAT	Topography Feature Lines
C-TOPO-GRAD	Topography: grading
C-TOPO-GRAD-CUT	Topography: grading cut material
C-TOPO-GRAD-FILL	Topography: grading fill material
C-TOPO-MAJR	Topography: major gridlines
C-TOPO-MAJR-TXT	Topography: major contours, NEW
C-TOPO-MINR	Topography: minor gridlines
C-TOPO-MINR-TXT	Topography: minor contours, NEW
C-TOPO-TEXT	Topography: text
C-TOPO-USER	Topography: user contours
C-TOPO-WSHD	Topography: watershed
C-UTIL	Utility Block
C-UTIL-CB	Utility Cable
C-UTIL-CB-STRC	Utility Cable Structure
C-UTIL-CB-STRC-TXT	Utility Cable Structure Text
C-UTIL-CB-TXT	Utility Cable Text
C-UTIL-E	Utility Electric
C-UTIL-E-STRC	Utility Electric Structure
C-UTIL-E-STRC-TXT	Utility Electric Structure Text
C-UTIL-E-TXT	Utility Electric Text
C-UTIL-GAS	Utility Gas
C-UTIL-GAS-STRC	Utility Gas Structure
C-UTIL-GAS-STRC-TXT	Utility Gas Structure Text
C-UTIL-GAS-TXT	Utility Gas Text

C-UTIL-TELE	Utility Telephone
C-UTIL-TELE-STRC	Utility Telephone Structure
C-UTIL-TELE-STRC-TXT	Utility Telephone Structure Text
C-UTIL-TELE-TXT	Utility Telephone Text
C-UTIL-TXT	Utility Text
C-VIEW	Viewport
C-WORKING	Working Layer
C-XREF	Xref Layer
L-ANNO-NOTE	Landscape Notes
L-ANNO-PATT	Landscape Hatching
L-ANNO-SYMB	Landscape Symbols
L-ANNO-TEXT	Landscape Text
L-IRRG-EQMP	Irrigation Equipment
L-IRRG-HEAD	Irrigation Heads
L-IRRG-PIPE	Irrigation Piping
L-IRRG-TEXT	Irrigation Text
L-PLNT-BEDS	Landscape Planting Beds
L-PLNT-BUSH	Landscape Planting Bush
L-PLNT-BUSH-LINE	Landscape Planting Bush Line
L-PLNT-CTNR	Landscape Planting Centerline
L-PLNT-GRND	Landscape Planting Ground Cover
L-PLNT-MLCH	Landscape Planting Mulch
L-PLNT-SOD	Landscape Planting Sod
L-PLNT-TEXT	Landscape Planting Text
L-PLNT-TREE	Landscape Planting Tree
L-PLNT-TREE-LINE	Landscape Planting Tree Line
V-ALGN-DATA	Survey Alignment coordinates and curve data
V-ALGN-LINE	Survey Alignment
V-BLDG	Survey Building
V-BLDG-DECK	Survey Building Deck
V-BLDG-OVHD	Survey Building Overhead
V-BNDY	Survey Boundary
V-BNDY-CALL	Survey Boundary Calls
V-BNDY-DEED	Survey Boundary Deed
V-BNDY-MONUMENT	Survey Boundary Monument
V-BNDY-MONUMENT-TEXT	Survey Boundary Monument Text
V-BRDG	Survey Bridge
V-BRDG-CNTR	Survey Bridge Centerline
V-BRDG-DECK	Survey Bridge Deck
V-BRDG-EXPJ	Survey Bridge Expansion Joint
V-CB	Survey Cable
V-CB-TEXT	Survey Cable Text
V-CHAN	Survey Open Channel
V-CHAN-TEXT	Survey Open Channel Text
V-CTRL	Survey Control

V-CTRL-BMRK	Survey Control Benchmark
V-CTRL-NODE	Survey Control points: known points
V-CTRL-NODE-SHOT	Survey Control points: shots
V-CTRL-NODE-UNKN	Survey Control points: unknown points
V-DOMW-MAIN	Survey Domestic Water Main piping
V-DOMW-METR	Survey Domestic Water Meter
V-DOMW-STRC	Survey Domestic Water Structures
V-DOMW-WELL	Survey Domestic Water well houses
V-DRIV-ASPH	Survey Drive Asphalt
V-DRIV-CNTR	Survey Drive Centerline
V-DRIV-CONC	Survey Drive Concrete
V-DRIV-CURB	Survey Drive Curb
V-DRIV-CURB-BACK	Survey Drive Back of Curb
V-DRIV-CURB-FACE	Survey Drive Face of Curb
V-DRIV-GRVL	Survey Drive Gravel
V-DRIV-MRKG	Survey Drive Markings
V-DRIV-SIGN	Survey Drive Signage
V-DRIV-TEXT	Survey Drive Text
V-DRIV-UPVD	Survey Drive Unpaved
V-ELEC	Survey Electric
V-ELEC-TEXT	Survey Electric Text
V-ESMT-ACCS	Survey Easement Access
V-ESMT-CATV	Survey Easement Cable TV
V-ESMT-CONS	Survey Easement Construction
V-ESMT-ELEC	Survey Easement Electric
V-ESMT-GAS	Survey Easement Gas
V-ESMT-LSCP	Survey Easement Landscape
V-ESMT-ROAD	Survey Roadway
V-ESMT-ROAD-PERM	Survey Roadway Permanent
V-ESMT-ROAD-TEMP	Survey Roadway Temporary
V-ESMT-ROW	Survey Easement Proposed ROW
V-ESMT-SGHT	Survey Easement Sight Distance
V-ESMT-SSWR	Survey Easement Sanitary Sewer
V-ESMT-STRM	Survey Easement Storm Sewer
V-ESMT-TELE	Survey Easement Telephone
V-ESMT-UTIL	Survey Easement General Utility
V-ESMT-WATR	Survey Easement Water
V-FENC-GNRL	Survey Fence General
V-FENC-GNRL-TXT	Survey Fence General Text
V-FENC-POST	Survey Fence Post
V-FIRE-HYDR	Survey Fire Hydrant
V-FIRE-PIPE	Survey Fire Line
V-FLHA-100Y	Survey Flood Hazard Area 100 year
V-FLHA-100Y-TXT	Survey Flood Hazard Area 100 year Text
V-FLHA-FWAY	Survey Flood Hazard Area Floodway

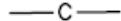
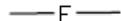
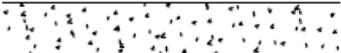
V-FLHA-FWAY-TEXT	Survey Flood Hazard Area Floodway Text
V-GAS-PIPE	Survey Gas Piping
V-GAS-STRC	Survey Gas Structures
V-GAS-TEXT	Survey Gas Text
V-LEGEND	Survey Legend
V-LNDSC-BUSH	Survey Landscaping Bush
V-LNDSC-TREE	Survey Landscaping Tree
V-LNDSC-TREE-LN	Survey Landscaping Tree Line
V-NODE	Survey Node
V-NODE-SPOT	Survey Node: spot elevations
V-NODE-TEXT	Survey Node: text
V-POND	Survey Pond
V-POND-EDGE	Survey Pond Edge
V-POND-TEXT	Survey Pond Text
V-POND-TOPB	Survey Pond Top of Bank
V-PROP-OWNR	Survey Property Owner
V-PROP-ROW	Survey Property: Right of ways
V-PROP-SBCK	Survey Property Setbacks
V-PROP-TXT	Survey Property Text
V-PROP_LL	Survey Property Land Lot
V-ROAD-CNTR	Survey Roadway Centerline
V-ROAD-CURB	Survey Roadway Curb
V-ROAD-CURB-BACK	Survey Roadway Back of Curb
V-ROAD-CURB-FACE	Survey Roadway Face of Curb
V-ROAD-EOP	Survey Roadway Edge of Pavement
V-ROAD-MARKING	Survey Roadway Markings
V-ROAD-MEDIAN	Survey Roadway Median
V-ROAD-MEDIAN-TXT	Survey Roadway Median Text
V-ROAD-NAME	Survey Roadway Name
V-ROAD-PROF	Survey Roadway Profile
V-ROAD-SIGN	Survey Roadway Signage
V-ROAD-STAN	Survey Roadway Stationing
V-SGHT	Survey Sight distance
V-SGHT-PROF	Survey Sight Distance Profile
V-SSWR	Survey Sanitary Sewer Block
V-SSWR-FORC	Survey Sanitary Sewer Force Main
V-SSWR-LATL	Survey Sanitary Sewer Lateral
V-SSWR-PIPE	Survey Sanitary Sewer Piping
V-SSWR-PUMP	Survey Sanitary Sewer pump stations
V-SSWR-STRC	Survey Sanitary Sewer Structures
V-SSWR-TEXT	Survey Sanitary Sewer Text
V-STRM	Survey Storm Sewer Block
V-STRM-PIPE	Survey Storm Sewer Piping
V-STRM-STRC	Survey Storm Sewer Structures
V-STRM-TEXT	Survey Storm Sewer Text

V-SURV-DATA	Survey data (benchmarks, and horizontal control points or monuments)
V-SURV-MISC	Miscellaneous survey data
V-SWLK	Survey Sidewalk
V-TELE	Survey Telephone
V-TELE-TEXT	Survey Telephone Text
V-TIN	Survey Triangulated Irregular Network
V-TIN-BNDY	Survey Triangulated Irregular Network Boundary
V-TIN-VIEW	Survey Triangulated Irregular Network View
V-TOPO	Survey Topographic Block
V-TOPO-FEAT	Survey Topographic Feature Lines
V-TOPO-FLOW	Survey Topographic Flow
V-TOPO-FLOW-TXT	Survey Topographic Flow Text
V-TOPO-MAJR	Survey Topographic Major Contours
V-TOPO-MAJR-TXT	Survey Topographic Major Contours Text
V-TOPO-MINR	Survey Topographic Minor Contours
V-TOPO-MINR-TXT	Survey Topographic Minor Contours Text
V-TOPO-SPOT	Survey Topographic Spots
V-TOPO-SPOT-TXT	Survey Topographic Spot Text
V-WALL	Survey Retaining Wall Block
V-WALL-BOT	Survey Bottom of Retaining Wall
V-WALL-BOT-TXT	Survey Bottom of Retaining Wall Text
V-WALL-TOP	Survey Top of Retaining Wall
V-WALL-TOP-TXT	Survey Top of Retaining Wall Text
V-WETL	Survey Wetland
V-WETL-TEXT	Survey Wetland Text
XX-TTLB	Paper Space Title Block and Sheet Layout

SECTION 16
SAMPLE LEGEND
EXISTING

IRON ROD	○ IR
PK NAIL	○ PK
R.R. SPIKE	○ RR(Sp)
CONC. MONUMENT	□ CM
WATER VALVE	⊗ WV
WATER METER	□ WM
FIRE HYDRANT	⊗ FH
GAS METER	⊗ GM
GAS VALVE	⊗ GV
CLEAN-OUT	○ CO
GUARD POST (BOLLARD)	● GP
SIGN POST	⊕
BENCHMARK	⊕
STORM SEWER MANHOLE	Ⓧ
SANITARY SEWER MANHOLE	Ⓢ
TELEPHONE MANHOLE	Ⓣ
ELECTRIC MANHOLE	ⓔ
TELEPHONE BOX	Ⓣ
ELECTRIC BOX	ⓔ
CABLE BOX	Ⓢ
UTILITY POLE	⊕
GUY WIRE	←
LIGHT POLE	⊕
POST OR POLE (TYPE AS NOTED)	⊕
MAILBOX	Ⓜ
DECIDUOUS TREE	⊗
EVERGREEN/CONIFEROUS TREE	⊕
BUSH	⊕
PROPERTY LINE	— — — — —
SETBACK LINE	— — — — —
EASEMENT LINE	- - - - -
CURB	=====
FENCE	— X — X — X —
OVERHEAD ELECTRIC	— OE — OE —
OVERHEAD TELEPHONE	— OT — OT —
OVERHEAD CABLE	— OC — OC —
UNDERGROUND TELEPHONE	— UGT —
UNDERGROUND ELECTRIC	— UGE —
UNDERGROUND CABLE	— UGC —
WATER LINE	— 8"W —
SEWER LINE	— 8"SS —
GAS LINE	— 4"G —
STORM SEWER/CULVERT	24" CMP/RCP/DIP ██████████
EDGE OF WOODS	~~~~~
CONTOUR LINE	- - - - - 650 - - - - -

PROPOSED

PROPOSED CONTOUR	
PROPOSED SPOT ELEVATION	
PROPOSED SPOT CURB ELEVATION	
STORM SEWER – PIPE	
STORM SEWER – MITERED END SECTION	
STORM SEWER – GRATE INLET	
STORM SEWER – JUNCTION BOX	
STORM SEWER – FLARED END SECTION	
STORM SEWER – HEADWALL	
STORM SEWER – SINGLE WING	
STORM SEWER – DOUBLE WING	
STORM SEWER – AREA INLET	
GRADE BREAK LINE	
HIGH POINT	HP
LOW POINT	LP
CUT LINE	
FILL LINE	
SANITARY SEWER PIPE	
SANITARY SEWER MANHOLE	
PROPOSED CURB	
PROPOSED CONCRETE	

CONSTRUCTION – ENTRANCE/EXIT	Co
CHECK DAM	Cd
CHANNEL STABILIZATION	Ch
CONSTRUCTION ROAD STABILIZATION	Cr
STREAM DIVERSION CHANNEL	Dc
DIVERSION SWALE	Di
DOWNDRAIN STRUCTURE – TEMPORARY	Dn1
DOWNDRAIN STRUCTURE – PERMANENT	Dn2
FILTER RING	Fr
GABION	Ga
GRADE STABILIZATION STRUCTURE	Gr
LEVEL SPREADER	Lv
ROCK FILTER DAM	Rd
SEDIMENT BARRIER	Sd1
INLET SEDIMENT TRAP	Sd2
TEMPORARY STREAM CROSSING	Sr
STORM DRAIN OUTLET PROTECTION	St
SURFACE ROUGHENING	Su
TOPSOILING	Tp
VEGETATED WATERWAY	Wt
BUFFER ZONE	Bf
DISTURBED AREA STABILIZATION – MULCHING	Ds1
DISTURBED AREA STABILIZATION – TEMPORARY SEEDING	Ds2
DISTURBED AREA STABILIZATION – PERMANENT VEGETATION	Ds3
DUST CONTROL	Du
MATTING/BLANKETS	Mb
STREAMBANK STABILIZATION	Sb