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### **Scio Township Site Plan Process**

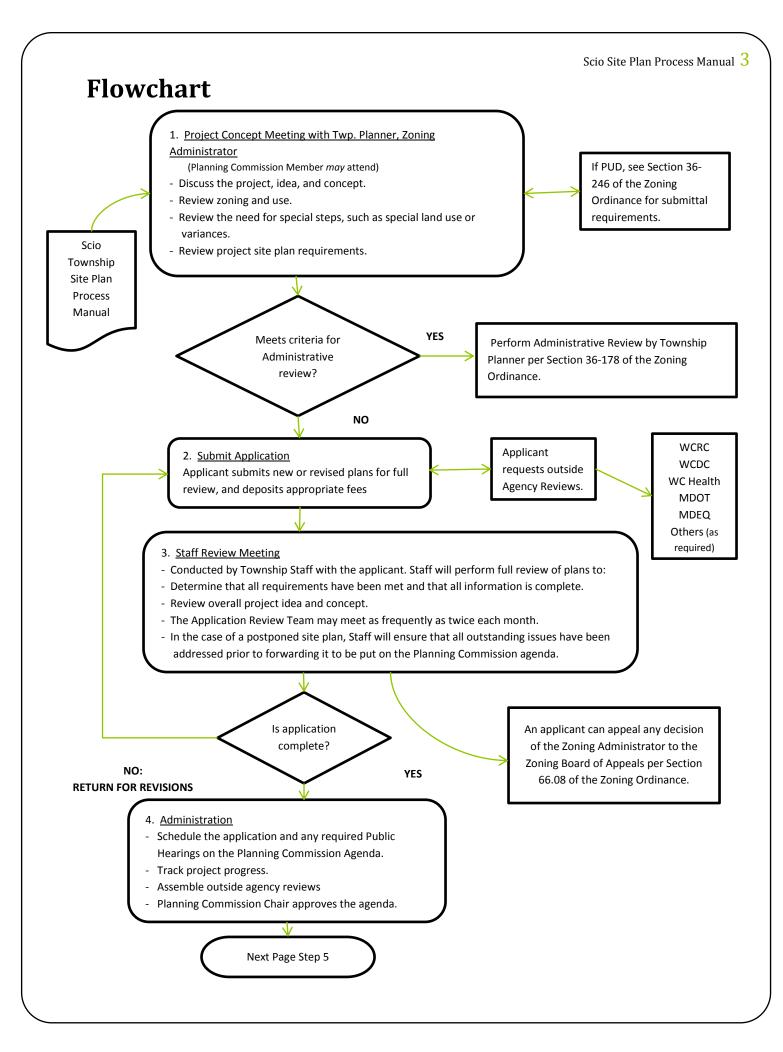
The Township of Scio utilizes the Site Plan Process as a tool to ensure the highest quality of site design, engineering efficiency, building architecture and landscape development. In implementing this process, the Township endeavors to protect the interests of all parties involved.

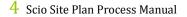
The purpose of the Site Plan Process Manual is to provide a general overview through the administration of the site plan process in Scio Township.

A description of the usual submission requirements is included as a guide for applicants wishing to submit site plans. Please note that these requirements may vary based on site specific circumstances.

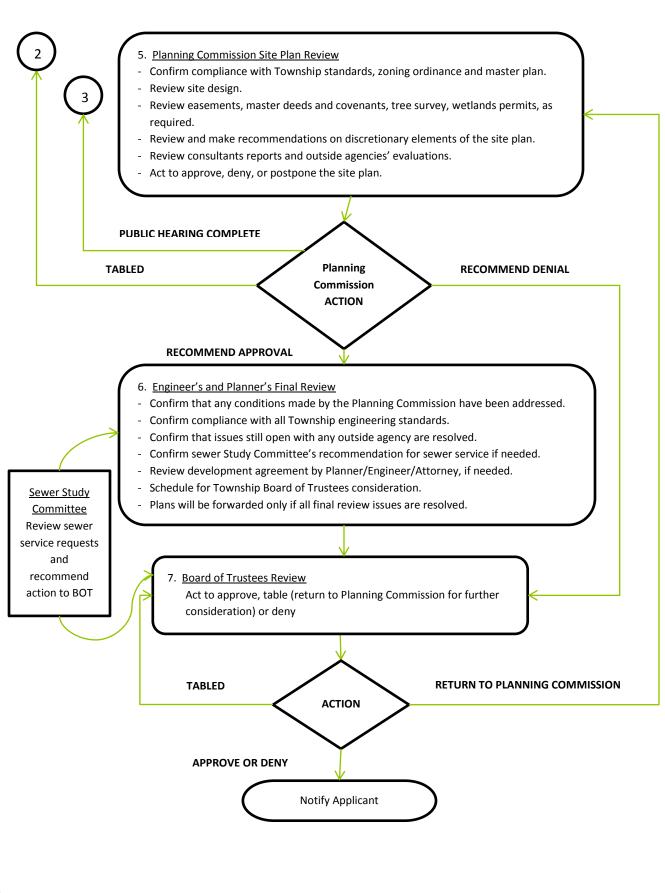
Applicants should review the Site Plan Process Manual thoroughly (along with other relevant documents) to reduce the amount of time spent on plan revisions and to fully understand Scio Township requirements.

It should be recognized that this Site Plan Manual does not supersede or preempt any part of Article VI, Site Plan Review, of the Scio Township Zoning Ordinance. It is the responsibility of the applicant to review Article VI.





## Flowchart (continued)



## **Step 1: Concept Meeting**

Applicants shall present and discuss a concept site plan with the Township Planner before submitting a formal Site Plan application.

The Concept Meeting will:

- 1. Identify the Applicant's contact information for all future communications.
- 2. Familiarize the Applicant with policy and procedural matters.
- 3. Identify other approvals or permits required from outside agencies.
- 4. Allow the Applicant and Township Staff to discuss the proposal and to revise the site plan concept and/or application, if needed, prior to submission.
- 5. Review submission requirements, zoning, landscaping, engineering and architectural design issues.
- 6. Identify relevant historical, cultural and physical land features.
- 7. Review the overall idea and concept.
- 8. Review the need for special steps, such as conditional use or variances.
- 9. Identify requirements for municipal sewer and water services.

The Concept Meeting Form in Appendix 2 shall be completed during the Concept Meeting.

## **Step 2: Application Submittal**

Proposed site plans will be reviewed using one of the following three (3) processes:

- 1. <u>Final Site Plan Review (Section 36-179 of the Township Zoning Ordinance).</u> *Also, all applicable information contained in Appendices 3 & 4 in this manual must be provided on the proposed plan.* 
  - a. Site Plan Review and approval is required for *all proposed uses and/or structures* within the Township except for detached single-family dwellings and farm buildings.
  - b. Site Plan Review and approval is required for <u>existing uses and/or structures</u>, except detached single-family dwellings and farm buildings, where an alteration to the existing use or structure would result in one of the following:
    - 1) An increase or reduction of the floor area of a structure or land area occupied by the use.
    - 2) A change of use, even if the change of use is permitted in the subject zoning district.

3) A variance from the provisions of this Ordinance, regardless of its size.

If it is determined by the Township Zoning Official that a Full Site Plan Review is required, the applicant must complete and submit a Site Plan Application to the Township.

2. Administrative Review (Section 36-178 of the Township Zoning Ordinance).

The Zoning Official may review site plans without submission to the Planning Commission in the following cases:

- a. Expansion or reduction of an existing, conforming structure or use that is five percent
  (5%) of the existing square footage or two thousand (2,000) square feet whichever is less.
- b. Provision for additional parking, loading/unloading spaces, and landscape improvements as required by the Zoning Ordinance. *Appendix 8 provides submittal requirements for Administrative Site Plan Review.*

#### 3. <u>Amendment to an Approved Site Plan (Section 36-182 of the Township Zoning Ordinance).</u>

A site plan may be amended upon application and in accordance with the provisions and procedures provided in Section 36-179 of the Scio Township Zoning Ordinance. Site Plans amended in order to be brought into compliance with the requirements of governmental agencies or authorities other than Scio Township, are subject to the provisions of the Ordinance. The Township Zoning Official shall have the authority to determine if a proposed change is substantive and therefore requires an amendment to the approved site plan.

## **Step 3: Application Review**

The application review is conducted by the Township Staff together with the applicant and will:

- 1. Determine that all requirements have been met and that all information is complete, including the additional requirements of Appendices 3 & 4 attached herein.
- 2. Review the overall idea and concept of the development.
- 3. Review the need for special steps, such as conditional land use or variances.
- 4. Identify requirements for municipal sewer and water services.

The Application Review Team may meet as frequently as twice each month.

## **Step 4: Administration**

After the Township Staff agrees that the application is administratively complete, the Township Administration will:

- 1. Schedule the application and any required Public Hearings on the Planning Commission's meeting agenda.
- 2. Track project progress.
- 3. Assemble outside agency reviews including: WCRC, WCDC, WC Health, MDOT, MEDQ, and others as required.

Note: The Planning Commission Chair approves the agenda.

### **Step 5: Planning Commission Review**

The Scio Township Planning Commission will:

- 1. Confirm compliance with Township standards, Zoning Ordinance and Master Plan.
- 2. Review site design.
- 3. Review easements, master deeds and covenants, tree surveys and wetlands permits.
- 4. Review and make recommendations on discretionary elements on the site plan as permitted by the Scio Township Zoning Ordinance.
- 5. Review outside agencies' evaluations.
- 6. Act to table or recommend approval or denial

### **Step 6: Engineer's and Planner's Final Plan Review**

In preparation for the Township's Engineer and Planner Final Review, all site plan information previously submitted, and all applicable information as required in Appendix 5 of this manual need to be provided.

The Engineer's and Planner's final review will:

- 1. Confirm compliance with all Township engineering standards.
- 2. Confirm that all open issues of the Township and/or any outside agency are resolved.
- 3. Confirm Sewer Study Advisory Committee's recommendation for sewer service if needed.
- 4. Review development agreement by Planner/Engineer/Attorney.
- 5. Schedule the proposed plan for Township Board of Trustees consideration.

Note: Site plans will not be forwarded to the Scio Township Board (Step 7) until all final review issues as noted above have been addressed at least 2 weeks before the Board of Trustees Meeting.

## **Step 7: Township Board of Trustees' Review**

The Scio Township Board of Trustees will take one of the following actions on the application:

- Approve application
- Table application for future review
- Return application to the Planning Commission for further consideration
- Or deny application

Upon approval the applicant will furnish 4 copies of the approved site plan to the Township for signing and distribution.

## **APPENDIX 1 – SITE PLAN APPLICATION**

# Township of **SCIO**

827 North Zeeb Road • Ann Arbor, MI 48103 (313) 665-2123

## COPY

APPLICANT:	AGENT/DEVELOPER	OWNER:	NAME		
	STREET, NUMBER		STREET, NUMBER		
	CITY, STATE, ZIP		CITY, STATE, ZIP		
	PHONE		PHONE		
	FAX				
			FAX		
ARCHITECT:			NE: F#	x:	
	AME OF DEVELOPMENT:	····			
LOT SIZE:	RIPTION:ATTACHEDON SITE PLAN		1ED		
STORIES:	EXISTING				
SQ. FT.: 🗌 /	ADDITION IN NEW	SQ. FT. I	BY USE:		
		🗆 сомм	ERCIAL		
SANITARY FA	CILITIES: 🗌 SEWER 🗌 SEPTIC		E		
WATER: 🗌 M	IUNICIPAL 🗌 PRIVATE WELL		HOUSE		
		🗆 MANU	FACTURING		
APPLICANT BIGNA	TURE DATE	OWNER BIG	NATURE		DATE
		<b>WITH T</b>	PPLICATION HAS BEEN REVIE HE TOWNSHIP ZONING ORDIN PERTY DESCRIPTION.		
		ORDINANCI	E ADMINIBTRATOR		DATE
PLANNING CO	MMISSION RECEIPT DATE	APPLICA	TION RECEIVED:		
PLANNING CO	MMISSION ACTION:	FEE REC	EIVED: CASH CHECK		
	PPROVED, DATE	5P			-
	DENIED, DATE				
TOWNSHIP BO	DARD: APPROVED, DATE				
	DENIED, DATE				DISTRIBUTION
EXPIRATION I	DATE:				WHITE - CLEAK CANARY - PLANNING COMMISSION PINK - PROPERTY FILE GOLD - APPLICANT

SITE PLAN SP

PROPERTY CODE NO.

ZONING DISTRICT

DATE

# APPENDIX 2 – CONCEPT MEETING FORM / MEETING CONTACT LIST

## SCIO TOWNSHIP

CONCEPT MEETING FORM

#### **PROJECT NAME:**

#### **Applicant Contact Information:**

Name:

Address:

Phone:

Facsimile:

 $\square$ 

1

Email:

#### **MEETING AGENDA**

The following items should be discussed during the project concept meeting. This form should be completed during the project concept meeting and distributed to all parties.

Review of policy and procedural matters including scheduling.

Review required outside agency reviews and approvals.

Review all submission requirements including the Northfield Township Site Plan Process Manual and all checklists.

Review of the concept plan including any general zoning, landscaping, engineering and architectural design issues.

Identify relevant historic, cultural and physical land features.

Indicate to the applicant if a second project concept meeting will be required prior to apply for full site plan approval.

#### AUTHORIZING SIGNATURES

By signing below I attest to the fact that each of the above items was discussed at the project concept meeting:

Applicant: \_\_\_\_\_

Date:\_\_\_\_\_

Date:\_\_\_\_\_

Township Staff:\_\_\_\_\_

Please attach the project concept meeting sign-in sheet to this form.

## SCIO TOWNSHIP

#### CONCEPT MEETING CONTACT LIST

### **PROJECT NAME:**

#### **Meeting Date:**

#### **APPLICANT / OWNER / REPRESENTATIVES**

	Name	Phone	Email	
1.				
2.				
3.				
4.				
5.				
6.				
7.				
		TOWNSHIP STAFF		
1.				
2.				
3.				
4.				
5.				
6.				
7.				
The a	bove persons attended the concept	meeting for the project listed above	Э.	
<b>A</b>			Deter	
	ant:		Date:	
Town	ship Staff:		Date:	
	Please attach to the the project concept meeting form.			

## **APPENDIX 3 – SITE PLAN REVIEW CHECKLIST**

### SCIO TOWNSHIP

#### SITE PLAN REVIEW CHECKLIST

#### **PROJECT NAME:**

A Site Plan submitted for review and approval shall contain all of the following data prior to its submission to the Planning Commission for review and recommendation as provided in Article VI. Site plans shall consist of an overall plan for the entire development.

Nine (9) full size plan sets shall be submitted of at least 24" x 36" with plan view drawn to a maximum scale of 1"=50' for property less than five (5) acres or a maximum scale of 1"=100' for property five (5) acres or more. In addition to the Nine (9) full size plan sets, nine (9) reduced plan sets of 11" x 17" shall be submitted for review, with the required review fee and application forms.

In addition to the paper copies of the plan set as noted above, a full electronic version of the site plan as well as any text shall also be submitted in disk format. Three (3) disks shall be provided at the time of site plan submission.

The following minimum information shall be included on all site plans submitted to Scio Township:

	GENERAL INFORMATION	
Contact Info	Development Team information including Proprietors', Applicants', and Owners' names, addresses and telephone numbers.	
Title Block	Name, address and telephone number of the site plan preparer, project name, and date (month, day, year) including revisions.	
Location Map	A location map drawn at a scale of 1"=2,000' with north point, and indicating the proximity of the site to major roads and intersections.	
Scale / North Point	Plans shall be drawn to a scale not greater than 1"=20' nor less than 1"=200'. A north arrow shall be indicated on all pages.	
Legal Description	A legal description and certified survey of all subject parcels. Where a metes and bounds description is used, lot line angles or bearings shall be indicated on the plan. Lot line dimensions and angles or bearings shall be based upon the boundary survey prepared by a registered surveyor and shall correlate to the legal description.	
	General description of deed restrictions, if any.	
Professional Seal	The plans shall be sealed by a registered architect, engineer, landscape architect or planner.	
Existing Features to include:	Existing lot lines, building lines, structures, parking areas, etc., on the parcel(s), and within 100 feet of the site.	
	Existing and proposed lot line dimensions and lot area.	
	Existing buildings, structures, and other improvements, including drives, utility poles and towers, easements, pipelines, excavations, ditches (elevations and drainage directions), bridges, culverts. Provide a clear indication of improvements to remain or be removed.	
	Centerline and existing and proposed right-of-way lines of any street.	
	Owner, use and zoning classification and land use of petitioner's parcel(s) and all abutting parcels. Location and outline of buildings, drives, parking lots, and other improvements on adjacent properties.	
	Gross and net acreage figures; total ground floor area and lot coverage (percent); floor area ratio.	
	Proximity to major thoroughfares and section corners.	
PHYSICAL FEATURES		
Structures	Location and exterior dimensions of proposed buildings and structures, with the location to be referenced to property lines or to a common base point; all required setbacks; distances between buildings; height in feet and stories; finished floor elevations and contact grade elevations.	
Streets / Drives	Name, right-of-way, location and alignment of all proposed streets and drives; rights-of-way; surface type and width; location and typical detail of curbs; turning lanes with details; location, width, surface elevations and grades of all entries and exits; curve radii.	

	Right-of-way expansion where applicable; reservation or dedication of right-of-way to be clearly noted.	
	Designation of fire lanes.	
Parking	Location and dimensions of proposed parking lots; parking calculations; number of spaces in each lot; dimensions of spaces and aisles; angle of spaces; drainage pattern; surface type.	
Landscaping	Landscape plan showing location and size of plant materials of all existing and proposed plant materials.	
	Location and description of all existing and proposed landscaping berms, fencing and walls.	
	Location and size of proposed improvements of open spaces and recreation areas, and maintenance provisions for such areas.	
	Location and type of proposed screens and fences; height, typical elevation and vertical selection of screens, showing materials and dimensions.	
Pathways	Location, width and surface of proposed sidewalks and pedestrian ways.	
Transformer Pad	Transformer pad location and method of screening.	
Trash Receptacles	Location of existing and proposed outdoor trash container enclosures; size, typical elevation and vertical section of enclosures; showing materials and dimensions.	
Exterior Lighting	A lighting plan prepared in accordance with Section 36-315.	
Signs	Location, dimensions, area and height of proposed signs.	
Service Facilities	<ol> <li>Location of existing and proposed service facilities above and below ground, including:         <ol> <li>Well sites;</li> <li>Septic systems and other wastewater treatment systems. The location of the septic tank and drain field (soil absorption system) should be clearly distinguished;</li> <li>Chemical and fuel storage tanks and containers;</li> <li>Storage, loading and disposal areas for chemicals, hazardous substances, salt and fuels;</li> <li>Water mains, hydrants, pump houses, standpipes and building;</li> <li>Sanitary sewers and pumping stations (General Information);</li> <li>Stormwater control facilities and structures including storm sewers, swales, retention and detention basins, drainage ways and other facilities, including calculations for sizes (General Information); and</li> <li>Location of all easements.</li> </ol> </li> </ol>	
Historic Places	Historic structures as identified by the State of Michigan and/or National Registry of Historic Places pursuant to U.S. Department of the Interior review.	
Other	Any other pertinent physical features.	
	NATURAL FEATURES	
General	Existing natural features such as trees, wooded areas, streams, marshes, ponds and other wetlands. A clear indication of all natural features to remain and to be removed shall be provided.	
Soil	Soil characteristics of the parcel(s) to at least the detail provided by the U.S. Soil Conservation Service "Soil Survey of Washtenaw County, Michigan"	
	A description of measures to control soil erosion and sedimentation during grading and construction operations until a permanent ground cover is established. Such plan shall be approved by the County Soil Erosion and Sedimentation Control Agent.	
	Location of proposed retaining walls; dimensions and materials of same; fill materials; typical vertical sections; restoration of adjacent properties, where applicable.	
Topography	Existing topography with a maximum contour interval of two (2) feet. Topography on the site and beyond the site for a distance of 100 feet in all directions should be indicated.	

	be connected to existing contour lines at or before the property lines.	
Wetlands / Drainage	Location of existing drainage courses and associated bodies of water, on and off-site, and their elevations in accordance with Section 36-342 Water Feature and Wetland Buffer Protection.	
	Location of existing wetlands, regardless of whether State regulated or not.	
	Location of flood plains pursuant to Township FEMA maps.	
	Township groundwater recharge areas as they relate to the plan.	
Woodlands	Groups of trees shall be shown by an approximate outline of the total canopy; individual deciduous trees of six (6) inch diameter or larger and individual evergreen trees six (6) feet in height or higher, where not a part of a group of trees, shall be accurately located on the site plan.	
	Listing of rare of endangered species of flora or fauna, as identified by the State of Michigan and/or the Michigan Natural Feature Inventory (MNFI).	
	A tree replacement plan in accordance with Section 36-346 Tree and Woodland Resource Preservation.	
	ADDITIONAL REQUIREMENTS FOR RESIDENTIAL DEVELOPMENTS	
	Dwelling unit density, lot area per dwelling unit, and a complete schedule of the number, size and type of dwelling units.	
	Designation of units by type and number of units in each building.	
	Carport locations and details where proposed	
	Specific amount, location and type of facilities in all existing and proposed recreation areas.	
	Details of any community buildings and fencing of swimming pool(s) if proposed.	
	ADDITIONAL REQUIREMENTS FOR COMMERCIAL AND INDUSTRIAL DEVELOPMENTS	
	Loading / unloading areas.	
	Gross and usable floor area.	
	Number of employees in peak usage.	
	Description of the storage of hazardous substances pursuant to Section 36-313 of the Township Zoning Ordinance.	

## **APPENDIX 4 – LANDSCAPE PLAN REVIEW CHECKLIST**

### SCIO TOWNSHIP

#### LANDSCAPE PLAN REVIEW CHECKLIST

#### **PROJECT NAME:**

A separate detailed landscape plan shall be submitted as part of the site plan review process. On sites of greater than one (1) acre, landscape plans shall be prepared and sealed by a registered landscape architect licensed in the State of Michigan.

The landscape plan shall be included as a part of the overall site plan and shall meet the submittal requirements outlined in the Scio Township Site Plan Review Checklist. The checklist provided below is only a general guide to the detailed requirements of Section 36-345 of the Scio Township Zoning Ordinance. The applicant must meet the detailed standards of Section 36-345 as a part of any site plan submittal.

The landscape plan shall include, but not necessarily be limited to, the following items as detailed in Section 36-345 of the Scio Township Zoning Ordinance.

	LANDSCAPE PLAN INFORMATION			
1.	Existing and proposed topography, by contours, correlated with the grading plan.			
2.	Minimum scale: 1"= 40' for property less than five (5) acres, or 1"= 100' for property five acres or more. A different scale may be used provided it is sufficient to properly illustrate the landscape plan concept and that Ordinance requirements are met.			
3.	On parcels of more than one (1) acre, existing and proposed contours on-site and fifty (50) feet beyond the site at intervals not to exceed two (2) feet.			
4.	Location, type, size and condition of existing plant material to be saved, moved, or removed; proposed means of protecting existing plant materials during construction.			
5.	Location of proposed plant materials; a planting list of proposed materials, showing sizes, height, botanical and common names, spacing, and root type (bare root or balled and burlapped).			
6.	Location of all proposed improvements as shown on the site plan.			
7.	Sections, elevations, plans and details of landscape elements, such as berms, walls, ponds, retaining walls and tree wells.			
8.	Proposed planting dates.			
9.	Irrigation system plan for watering and draining landscape areas.			
10.	Planting and staking details, in text or graphic form, explaining the method of installation, type and depth of mulch, and any special planning requirements.			
11.	Typical straight cross-section including slope, height and width of berms.			
12.	Buffering between land uses and buffering along I-94 and M-14			
13.	Parking lot landscaping.			
14.	Subdivision and site condominium landscaping.			
15.	General site landscaping.			
16.	Refuse container screening.			
17.	Miscellaneous landscape requirements.			

# APPENDIX 5 – DETAILED CONSTRUCTION + ENGINEERING PLANS CHECKLIST

### SCIO TOWNSHIP

#### DETAILED CONSTRUCTION + ENGINEERING PLANS CHECKLIST

#### PROJECT NAME:

A detailed engineering plan submitted for review and approval shall contain all of the following data prior to its submission to Scio Township for review and recommendations as provided in Article VI of the Township Zoning Ordinance and in the Scio Township Site Plan Process Manual.

Ten (10) <u>folded</u> full size plan sets shall be submitted of at least 24" x 36" with plan view drawn to a maximum scale of 1"=50' for property less than five (5) acres or a maximum scale of 1"=100' for property five (5) acres or more. In addition to the ten (10) full size plan sets, one (1) reduced plan sets of 11" x 17" shall be submitted for review, with the required review fee and ten (10) copies of application forms and additional information submitted.

In addition to the paper copies of the plan set as noted above, a full electronic version of the site plan as well as any text shall also be submitted in CD format. Three (3) CDs shall be provided at the time of site plan submission.

#### NOTES:

<sup>1</sup>Owner of the property must sign application <u>**OR**</u> provide an authorization letter indicating another party can submit the request.

<sup>2</sup>Also refer to our website for our processing manual for required information on all site plans submitted (<u>www.twp.scio.mi.us</u>, Administration, Planning Commission, site plan process, site plan process manual).

<sup>3</sup><u>Resubmittals</u>: Submit the same number of copies of plans, 2 CDs and resubmittal fee.

<sup>4</sup>Additional copies of plans <u>may</u> be required when approved. This is for the Township to provide approved signed copies for the Township and the customer.

The following minimum information shall be included on all site plans submitted to Scio Township:

#### **GENERAL INFORMATION**

Submittal on 24" x 36" white paper having blue or black lines with a minimum horizontal scale of $1$ " = 50" and vertical of $1$ " = 5'. Other acceptable scales are 1" = 20'; 1" = 30' and 1" = 40'.	
General plan at 1"= 100' or 1"= 200' when size of site prohibits a single plan sheet. Show street names, units, utilities, pavement, site dimensions, phase lines, lot lines and lot numbers.	
A location map showing section number(s) and major thoroughfares in the project area shall be provided on the cover sheet of the plans.	
Lot number, parcel dimensions and adjoining rights-of-way shall be shown.	
Township standard notes and details much be attached to the plans.	
Plans must be signed and sealed by a professional engineer registered in the State of Michigan. All correspondence concerning the design of the site will be directed to the engineer whose seal appears on the plan.	
Name, address and phone number of the applicant, and the design engineer must be shown on the plans.	
Legal description of property must be provided on the plans.	
Both existing and proposed utilities must be a minimum of 10 feet from existing or proposed buildings.	
North arrow; scale; MISS DIG notice must be shown in the plans.	
The storm sewer, sanitary sewer and water main shall be shown on the same plan view. The landscaping plan shall be overlaid in a light scale for reference; plantings must not interfere with utilities.	
When more than 3 plan sheets are in a set, a cover sheet with an index shall be provided and each plan sheet shall include in a title block providing a summary of the information presented on that particular sheet.	
Adequate space must be provided to allow for turning movements of vehicles including trucks and fire engines per AASHTO guidelines.	
Provide a minimum of 2 benchmarks. The benchmarks must be referenced to the North American Vertical Datum of 1988 (NAVD '88). All benchmark locations shall be clearly indicated on the plans.	

TOPOGRAPHY			
A complete topographical survey is required for all proposed projects. A metes and bounds legal description of the project site shall be provided on the plans. Property lines shall be indicated by bearing and distance in the plan view. All existing easements shall also be shown on the plan view of the existing conditions.			
Existing off-site elevations must be given at a minimum of 50 feet and 100 feet abutting the entire perimeter of the site. Grades will be indicated at all property corners and along all property lines. On-site, intermittent elevations and/or defined contours (minimum contour interval of 2 feet) are required to establish the existing site drainage.			
<ul> <li>Existing features shall be located and shown within 100 feet of the project. Existing features to be shown shall include, but may not necessarily be limited to the following items: <ol> <li>Ditches;</li> <li>Culverts;</li> <li>Water supply system, stormwater management, sanitary sewer facilities including inverts and casting elevations at all structures;</li> <li>Gas, telephone, electric and cable television lines, including manholes and/or utility poles;</li> <li>Pedestrian facilities;</li> <li>Trees and other landmark vegetation;</li> <li>All streams, lakes and/or county drains with names shown; and</li> <li>Existing buildings and permanent structures.</li> </ol> </li> <li>Existing adjacent roads and existing right-of-way or easement lines shall be shown on the plans and shall extend across the entire site with grades shown on both sides of the road for: <ol> <li>Right-of way or easement line;</li> <li>Ditch centerline;</li> <li>Top of bank;</li> <li>Edge of shoulder;</li> </ol> </li> </ul>			
<ol> <li>Edge of pavement or top of curb; and</li> <li>Crown or centerline.</li> </ol>			
WATER SUPPLY SYSTEM			
Water distribution system improvements shall be designed in accordance with the requirements of the Michigan Safe			
	1		
Drinking Water Act, Act 399 of the Public Acts of 1976, as amended; as well as the latest revisions of the standards prescribed by the American Water Works Association (AWWA), the Detroit Water and Sewerage Department (DWSD), and as specified herein.			
Drinking Water Act, Act 399 of the Public Acts of 1976, as amended; as well as the latest revisions of the standards prescribed by the American Water Works Association (AWWA), the Detroit Water and Sewerage Department (DWSD), and			
Drinking Water Act, Act 399 of the Public Acts of 1976, as amended; as well as the latest revisions of the standards prescribed by the American Water Works Association (AWWA), the Detroit Water and Sewerage Department (DWSD), and as specified herein. Water infrastructure improvements specified in the Scio Township Master Plan or Capital Improvement Plan may be required as part of the project. The applicant shall contact the Township Engineer to determine if any improvements called for in the			
Drinking Water Act, Act 399 of the Public Acts of 1976, as amended; as well as the latest revisions of the standards prescribed by the American Water Works Association (AWWA), the Detroit Water and Sewerage Department (DWSD), and as specified herein. Water infrastructure improvements specified in the Scio Township Master Plan or Capital Improvement Plan may be required as part of the project. The applicant shall contact the Township Engineer to determine if any improvements called for in the Scio Water System Master Plan will be necessary. Plan and profile views shall be provided for all proposed water main including fire hydrant leads. The plan and profile shall			
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Where public water main construction is proposed, the Scio standards water main detail sheets much accompany the plans.				
WATER MAIN				
The minimum size water main allowed for use in the distribution system shall be 8" diameter. Other allowable sizes for use in the distribution system are 12" and 16". A 12" water main may be considered as minimum for internal transmission on industrial sites, major streets, collector streets and elsewhere as design dictates. Water mains larger than 16" in diameter are considered transmission mains.				
Water supply systems shall be designed to provide service from a double source of supply ("looped main"), or to be provided service by a double source of supply in the future when adjacent properties are developed with the approval of the Township Engineer.				
<ul> <li>Terminal dead end water mains with domestic service connections are discouraged, and will not be permitted without the written approval of the Township Engineer. Where terminal dead end water mains are permitted, a gate valve and fire hydrant shall be provided at the terminus of the main. The following are the maximum allowable lengths for terminal dead end water mains: <ol> <li>40 feet for 6" fire hydrant lead;</li> <li>600 feet for 8" water distribution mains (residential areas only);</li> <li>1,000 feet for 12" and larger water distribution mains.</li> </ol> </li> </ul>				
Water main shall be designed and constructed with a minimum 51/2-foot depth of cover over the top of pipe as measured from the proposed final grade. A minimum 18" vertical clearance shall be maintained between water mains and other underground utilities. Where the vertical alignment of the water main must be deflected in order to achieve the required vertical clearance the length of the deeper main shall be kept to a minimum and standards 45° bends shall be used to affect the necessary deflection.				
Water supply system improvements shall be designed to include adequate valves to properly isolate sections of water main without adversely impacting significant portions of the system. Valves on water mains 12" and smaller shall be gate valves and valves on water mains larger than 12" shall be butterfly valves.				
The connection of proposed water mains to existing water mains shall be accomplished by means of a tapping sleeve and valve unless the connection can be made without interrupting service on the existing water main or if the existing water main in 16" diameter or larger.				
<ol> <li>Valves shall be located so that:         <ol> <li>Three (3) valves to isolate any section water main, four maximum;</li> <li>No more than 800 feet of water main out of service for 8" water mains; not more then ¼ mile of water main out of service for mains 12" and larger;</li> <li>No more than two (2) fire hydrants out of service;</li> <li>No more than 24 single family units or 30 multiple family units out of service.</li> </ol> </li> </ol>				
Valves shall generally be located such that they will not be in street pavements, sidewalks or driveways.				
All valves shall be installed in a three (3)-piece, adjustable valve box with the following exception. Valves will be installed in gate wells where the valve will be located within existing or proposed pavement, or the valve is located on a water main larger than 16" in diameter, or the valve is part of a tapping valve connecting to a concrete water main requiring the use of a saddle sleeve.				
Generally, fire hydrants shall be spaced such that not more than 250 feet of fire hose would be required to reach the farthest corner of any proposed building. Spacing of hydrants around multiple, commercial or manufacturing establishments shall be considered on an individual basis and shall be determined by consultation with the Township Engineer and the Township's Fire Marshal. Hydrants shall be noted to be EJIW 5BR-250 or the Mueller Super-Centurion.				
No domestic service connections shall be permitted from 6" fire hydrant leads or transmission mains.				
SANITARY SEWER				
Sanitary sewer infrastructure improvements specified in the Scio Sanitary sewer system improvements shall be designed in accordance with the requirements of Part 41 of Act 451 of the Public Acts of 1994, as amended, the most recent revision of the Recommended Standards for Sewage Works by the Great Lakes-Upper Mississippi River Board of State Sanitary Engineers (commonly known as the "Ten States Standards") and as prescribed herein.				
Public sanitary sewers shall be provided where multiple lots or parcels will be served either presently or in the future. Public sanitary sewer system extensions will require the review and approval of the Township Engineer, Scio and the MDEQ. Public sanitary sewers are required when two (2) or more connections are made to the same sewer. In most instances, including multiple unit developments, the sewer may have to be public even though the project has one (1) owner. Scio and County approval will be required from private services serving more than one (1) building. The extension of the sanitary				

sewers will generally be required across the entire frontage of the site.	
Sanitary sewer improvement specified in the Scio Sanitary Sewer Master Plan may be required as part of the project. The applicant shall contact the Township Engineer to determine if any improvements called for in the Scio Sanitary Sewer Master Plan will be necessary.	
Plan and profile views shall be provided for all proposed sanitary sewer system improvements including force mains. The plan and profile shall be presented on the same plan sheet and shall be vertically oriented.	
Sanitary sewer design flow computations, the sanitary sewer district map and a sanitary sewer quantity list shall be provided on the cover sheet of the detailed engineering plans. The design flow computations and sanitary sewer district map shall include both current and future service populations and areas. The quantity list shall be delineated by existing or proposed road right-of-way easement.	
The following information must be shown in the plan view of the proposed sanitary sewer system improvements:	
1. Size, material and type of pipe;	
2. Length between structures;	
3. Slope of sewer between structures;	
4. Where required, a dedicated sanitary sewer easement must be shown on the plans. The sanitary sewer easement width shall be either twice the depth of the pipe plus 2 feet (rounded to the nearest whole foot), or 25 feet, whichever is greater;	
5. Top of casting and invert elevations at each structure;	
6. Progressive numbering system on structures.	
The following information must be shown in the profile view of the proposed sanitary sewer system improvements:	
1. Existing and proposed ground elevations;	
2. Length, type, class, size and slope of pipe between structures;	
3. Top of casting and all sewer inverts at all structures;	
4. All utility crossings;	
5. Special backfill areas, i.e. sand;	
6. Provisions for infiltration testing;	
<ol><li>Progressive numbering system on structures;</li></ol>	
8. Adjacent existing or proposed utilities plotted where parallel.	
Where public sewer construction is proposed, the Scio standard sanitary sewer detail sheets must accompany the plans.	
Sewer design flow computations shall be submitted to the Township Engineer for approval with a map delineating the area to be serviced. Major roads and natural features (rivers, lakes, streams) shall be included on the map. Present and future development phases with acreages and contributing off-site areas shall be shown with the number of lots included.	
The basis of design calculations shall include a tabulation of the usage types and the conversion of the various uses into REUs and shall be consistent with the Ann Arbor Table A.	
Sanitary sewers shall be designed on the basis of an average daily flow of 100 gallons per capita per day. The sanitary sewer capacity shall be designed on a peak design flow using the peaking factor as prescribed by the Ten States Standards.	
All sanitary sewers shall be designed to provide mean velocities, when flowing full, of not less than 2.0 feet per second, based on Manning's formula using an "n" value of 0.013. The maximum design velocity for sanitary sewers shall be 10.0 feet per second with the pipe flowing full.	
The minimum size for sanitary sewers shall be 8" diameter, with the terminal run of 8" sewer at a uniform grade of not less than 1.0% between structures. On all other 10" sanitary sewer runs, the minimum grade shall be 0.30% between structures.	
Sanitary sewers shall be located to provide unrestricted access for inspection and maintenance operations. A minimum of a 30-foot easement is required or twice the depth of bury plus the pipe diameter plus two (2) feet (rounded to the next largest full foot), whichever is greater.	
A minimum horizontal separation of ten (10) feet shall be provided between sanitary sewers and water mains. If it is impossible to obtain proper horizontal and vertical separation as described above, both the water main and sewer must be constructed of slip-on or mechanical joint pipe complying with public water supply design standards of the agency. It must also be pressure tested to 150 psi to assure water-tightness before backfilling. In addition, adequate horizontal separation shall be provided between sanitary sewers and all other underground utilities to allow a 1:1 trench slope from the bottom of the deeper utility, which will not undermine any shallower utility.	
The minimum depth of cover over the top of the sanitary sewer pipe shall be 4 feet as measured from the proposed ground elevation.	
Sanitary sewers shall be a minimum of 10 feet deep when fronting residential parcels to be directly connected to the sewer. Deep setbacks or unusual topographic conditions may require more depth.	

mum vertical separation of 18" shall be provided between sanitary sewers and water mains. In addition, a minimum I separation of 12" shall be provided between sanitary sewers and other underground utilities unless otherwise ed by the agency having jurisdiction over the other utility.			
Manholes shall be installed at intervals not to exceed 300 feet, or at the following locations:			
1. The upstream terminus of a sanitary sewer run;			
2. All changes in pipe grade;			
3. All changes in pipe size;			
4. All changes in horizontal alignment;			
5. All sewer junctions.			
Manholes for sewers 21" and smaller shall have a minimum diameter of 48". Manholes for sewers larger than 21" shall have a minimum diameter of 60". Larger diameter manholes may be required depending on such factors as the number of sewers at a junction or significant changes in horizontal alignment.			
cternal drop connections will be required where the invert of the outlet sanitary sewer is 18" or more below the inlet pipe vert. Internal drop connections will not be allowed.			
The 0.8 depth flow line of sewers shall be matched at structures when changing sizes of sewers.			
An allowance of 0.10 feet in grade shall be made for loss of head through a manhole where sewer alignment is deflected 30° or more.			
Building sewers included with sewer construction.			
For each parcel along the route of a sanitary sewer, a building lead shall be constructed from the sanitary sewer to a minimum of 10 feet beyond the property line. This applies to any parcels in the sanitary sewer service design area.			
The minimum grade for building sewers shall be 1% for 6" sewers and 2% for 4" sewers.			
STORMWATER MANAGEMENT SYSTEMS			
Stormwater management systems shall be designed in accordance with the Rules of the Washtenaw County Drain Commissioner (WCDC) Procedures and Design Criteria for Stormwater Management Systems, latest revision.			
Restricted discharge rates and/or improvements to downstream drainage courses may be required as prescribed by the Charter Township of Ypsilanti Stormwater Master Plan of 1994. The applicant shall contact the Township Engineer to determine what design criteria specified in the Stormwater Master Plan apply to the proposed project.			
Where an approved point of discharge is not available on the site, the applicant shall make such off-site drainage improvements as are necessary to provide positive drainage to an approved outlet, as determined by the Township Engineer and/or the WCDC. Such improvements shall be located in an easement secured by the applicant. The easement form and width of the easement shall be subject to Township approval.			
Plan and profile views shall be provided for all proposed stormwater management system improvements. The plan and profile shall be presented on the same plan sheet and shall be vertically oriented.			
Design calculations for all components of stormwater management systems, including but not necessarily limited to storm sewers, channels and detention facilities, shall be provided on the plans.			
drainage area map shall be included on the plans. The map shall define the areas tributary to catch basins and inlets ncluding upstream and off-site areas). The design calculations shall include the determination of the weighted run-off pefficients for the areas tributary to each specific inlet or outlet. The design calculations shall also include justification for the initial time of concentration used for the storm sewer design calculations.			
The following information must be shown in the plan view of the proposed storm sewer system improvements: 1. Size, material and type of pipe;			
2. Length between structures;			
3. Slope of sewer between structures;			
<ol> <li>Where required, a dedicated stormwater easement must be shown on the plans. The easement width shall be in accordance with the following:</li> </ol>			
a. 12 feet for open drainage along rear and side property lines;			
b. A minimum of 20 feet for enclosed storm drains;			
c. A minimum of 30 feet for open swales (cross lot drainage).			
The following information must be shown in the profile view of the proposed storm sewer system improvements:			
1. Existing and proposed ground elevations;			

2. Size metarial and two of piper	
<ol> <li>Size, material and type of pipe;</li> <li>Longth between structures;</li> </ol>	
3. Length between structures;	
4. Slope of sewer between structures;	
5. Hydraulic gradient between structures;	
<ol> <li>Top of casting and all invert elevations at each structure;</li> <li>All utility accessions.</li> </ol>	
7. All utility crossings;	
8. Special backfill areas, i.e. sand;	
9. Progressive numbering system;	
10. Adjacent existing or proposed utilities plotted where parallel.	
Where public sewer construction is proposed, Scio Township standard storm sewer detail sheets must accompany the plans.	
Components of stormwater management systems shall be designed in accordance with the requirements of the WCDC, as noted previously. The WCDC design criteria shall apply to all stormwater management system components, regardless of whether the facilities will be publicly dedicated or privately maintained at the completion of the project.	
PAVING IMPROVEMENTS	
Plans for roads and/or accompanying sidewalks/bikepaths shall be prepared in accordance with WCRC "Procedures and Guidelines for Developing Public Roads", latest revision and/or the Private Road Ordinance. In addition to any submittals equired for WCRC approval, plans shall also be submitted to Scio Township for review of the proposed road improvements in relation to other existing and proposed facilities. The applicant shall submit three (3) sets of WCRC approved paving blans to the Township upon County approval.	
Paving improvements for parking lots, internal roads and pedestrian facilities on private sites shall be designed in accordance with the requirements prescribed herein.	
Concrete curb and gutter will be required for all private roadway construction and parking lot construction with the following	
exceptions:	
1. Large lots of one (1) acre or more for residential detached housing;	
<ol><li>Industrial storage yards not used for regular road vehicle parking;</li></ol>	
3. Bituminous curb may be substituted for concrete curb and gutter in commercial parking lot construction.	
Inderground storm sewers, including edge drains for parking lots and roads, shall be designed and installed with all paving nprovements which require concrete curb and gutter or asphalt curb. Where pavements are to be constructed over clay oils or other poorly drained soils and a granular sub-base is used, an approved sub-drainage system shall be installed.	
Plan and profile views shall be provided for all proposed paving improvements. The plan and profile shall be presented on the same plan sheet and shall be vertically aligned. If possible, stormwater management improvements shall be shown on the same plan sheet as the paving improvements.	
The plans shall include typical cross-section(s) showing dimensions, materials, type and thickness of the proposed paving improvements.	
The following information shall be shown in the plan view of the proposed paving improvements:	
<ol> <li>Existing right-of-way or road easement as well as the proposed right-of way or road easement. A minimum 12-foot wide easement for private utilities shall be provided adjacent to each side of the proposed right-of-way or road easement.</li> </ol>	
<ol> <li>Centerline alignment, including curve data, stationing, edge of pavement and/or curb. Centerline and stationing are not required for parking lots.</li> </ol>	
<ol><li>Location of existing and proposed topographic features, including utilities;</li></ol>	
<ol><li>Location of existing and proposed traffic control devices;</li></ol>	
<ol><li>Location of existing and proposed street-light poles;</li></ol>	
6. Location of all proposed pedestrian facilities. Bikepaths may be required by the Township in lieu of sidewalks.	
The following information shall be shown in the profile view of the proposed paving improvements. Profiles are not required for proposed parking lots.	
<ol> <li>Existing and proposed ground at the centerline (for rural roads) or top of curb (for urban roads).</li> </ol>	
<ol> <li>Percent of grade and vertical curve data.</li> </ol>	
-	
Dimensional widths and thickness of materials and associated road features shall be designed in accordance with the typical road cross sections prescribed by the WCRC or the Private Road Ordinance. For public roads, the cross-section requirements will be based on the functional class of the road as designated by the WCRC.	
For parking lots and internal roads at non-residential sites, the cross-section requirements will be based on the functional class of the public road serving the property. The minimum width for an internal drive shall be 26 feet measured from the	

back-of-curb to back-of-curb or edge of pavement to edge of pavement for non-curbed internal roads.				
Pedestrian facilities shall be designed in accordance with the requirements prescribed by the WCRC.				
Horizontal alignment of pavement and associated road features shall be designed in accordance with the requirements prescribed by the WCRC.				
Pedestrian facilities shall generally be located outside of the right-of-way in a dedicated easement. Pedestrian facilities will be located within the right-of-way with the permission of the WCRC. The horizontal alignment of pedestrian facilities shall be as close to parallel as practical to the right-of-way or easement.				
The vertical alignment of all public roads, internal roads and parking lots shall be designed in accordance with the requirements prescribed by the WCRC.				
SITE GRADING + EARTHWORK				
All proposed developments should be graded such that stormwater run-of will be intercepted within the boundaries of the site and conducted through a storm sewer system to an approved point of discharge.				
Easement for surface drainage shall be dedicated and recorded.				
For perimeter lots, the drainage easement width shall be 20-foot minimum, and for abutting lots with a common rear yard lot line, the easement width shall be at least 10 feet on each lot.				
<ol> <li>The following information must be shown in the plan view of the proposed grading:         <ol> <li>Grading plans shall be drawn to a scale of 1"= 50' or larger.</li> <li>The grading plans shall show the existing elevation topography either by contour method or grade point grid method.</li> <li>High and low street grade points, slope direction (by arrow) and the location of all catch basins, inlets and drainage ditches shall be shown on the grading plan.</li> <li>A detail of the typical lot drainage pattern shall b shown on the grading plan will all grade control points identified. All grade point elevations shall be shown for each lot per Detail A or B illustrated in Appendix A. This will include the first floor (F.F.), or the foundation grade (F.G.) elevations, high point (grade break), drainage arrows and additional spot elevations to clarify site grading.</li> </ol> </li> </ol>				
SOIL EROSION + SEDIMENTATION CONTROL				
Soil erosion and sedimentation control measures shall be incorporated into the design and construction of all projects as specified by Washtenaw County. All projects shall be designed and constructed so as to minimize soil erosion and sedimentation impacts to the environment.				
All proposed temporary and permanent soil erosion and sedimentation control measures shall be shown on the plans. All soil erosion control measures shall be identified in accordance with the Michigan Unified Keying System.				

## APPENDIX 6 – ZONING COMPLIANCE INSPECTION REPORT FORM

## SCIO TOWNSHIP

#### FINAL ZONING COMPLIANCE CHECKLIST

#### PROJECT NAME:

PRO	JECT ADDRESS:			
	AREA OF CONCERN			
	SCAPING	Complies	Does Not Comply	N/A
1.	Greenbelt			
2.	Parking lot islands, etc.			
3.	Site landscaping			
4.	Foundation plantings			
5.	Dumpster screening			
6.	Comments:	1		
		1		
7.	Base course			
8.	Final course			
9.	Striping			
10.	Aisle width			
11.	Number of spaces			
12.	Comments:			
LIGH	ΓING			
13.	Number of fixtures			
14.	Type of fixtures			
15.	Comments:			
SIGN	S	1	· · · · · ·	
16.	Number of signs			
17.	Size and area			
	Comments:			

**ENGINEERING COMMENTS:** 

UTILITIES COMMENTS:
Connection fees paid
FIRE CHIEF'S COMMENTS:
ACCESS:
OTHER CONDITIONS OF APPROVAL:
Inspected By:

## **APPENDIX 7 – ADMINISTRATIVE SITE PLAN (ASP)**

# Administrative Site Plan (ASP) Review Submittal Requirements

An Administrative Site Plan (ASP) submitted for review and approval shall contain all appropriate information prior to its submission to Scio Township for review and recommendations pursuant to Section 36-178.

Six (6) <u>folded</u> full size plan sets shall be submitted of at least 24" x 36" with plan view drawn to a maximum scale of 1"= 50' for property less than five (5) acres or a maximum scale of 1"=100' for property five (5) acres or more. In addition to the six (6) full size plan sets, one (1) reduced plan set of 11" x 17" shall be submitted for review. Six (6) copies of <u>any/all</u> additional information submitted.

In addition to the paper copies of the plan set as noted above, a full electronic version of the site plan as well as any text shall also be submitted in CD format. Two (2) CDs shall be provided at the time of plan submission in PDF format.

<sup>1</sup> Owner of property shall sign application OR provide an authorization letter indicating another party can submit for the request.

<sup>2</sup> Resubmittals require the same number of plan sets, 2 CDs, and resubmittal fee.

<sup>3</sup> Zoning Compliance will also need to be submitted when ASP is approved.