

# Development Guidelines - Contractors

## Introduction

This document explains the development guidelines for contractors producing websites on behalf of mso. These guidelines **must be followed** and any deviation from these guidelines may result in the withholding of some or all of your payment until corrections have been made to align with them.

## Development Process

### JIRA

You will be given access to a project on the mso JIRA system where you will be assigned tickets by the project manager explaining the requirements of the task/project. Questions about a ticket should be raised as comments on the appropriate ticket and directed to the project manager using JIRA's mention functionality, i.e. @nameofprojectmanager.

### WordPress

All sites should be developed on the latest version of WordPress available at the beginning of the build process.

### Code Repository

You will be provided with the Mercurial (<https://www.mercurial-scm.org/>) code repository hosted on BitBucket.

The repository should contain the contents of the WordPress theme you create at it's root and nothing else.

Please **do not** include any other parts of WordPress in this repository.

We are happy for you to commit and push to the repository as much as needed and even encourage you to do so as much as possible, so your current "work in progress" is stored away from your development environment as a backup. We also suggest making all your changes on a branch, which can be named as desired.

The code repository you have been provided with contains a "foundation" set of code which is referred to in the following sections. This "foundation" code is there to guide you with the required structure for the project and should be adjusted or removed as required.

## Standard WordPress Plugins

The following list is our standard WordPress Plugins which we use on all sites. These plugins should be the only plugins you use, unless you have a compelling reason to use another plugin. Any other plugin **must** be signed off by mso before being used.

Name	Download Link	Key (if required)
Advanced Custom Fields (ACF) Pro	<a href="https://wordpress.org/plugins/advanced-custom-fields/">https://wordpress.org/plugins/advanced-custom-fields/</a>	b3JkZXJfaWQ9OTgxNTZ8dHlwZT1kZXZlbG9wZXJ8ZGF0ZT0yMDE3LTAxLTl1IDEwOjEwOjA0
Custom Post Type UI	<a href="https://en-gb.wordpress.org/plugins/custom-post-type-ui/">https://en-gb.wordpress.org/plugins/custom-post-type-ui/</a>	N/A
Post Duplicator	<a href="https://en-gb.wordpress.org/plugins/post-duplicator/">https://en-gb.wordpress.org/plugins/post-duplicator/</a>	N/A
Contact Form 7	<a href="https://en-gb.wordpress.org/plugins/contact-form-7/">https://en-gb.wordpress.org/plugins/contact-form-7/</a>	N/A
WP Super Cache	<a href="https://en-gb.wordpress.org/plugins/wp-super-cache/">https://en-gb.wordpress.org/plugins/wp-super-cache/</a>	N/A
WordFence	<a href="https://en-gb.wordpress.org/plugins/wordfence/">https://en-gb.wordpress.org/plugins/wordfence/</a>	N/A

If you think you need any additional plugins please let the mso project manager know with the reason why you need to use the particular plugin, along with the links to the plugin. We will assess the plugin and see if we are happy for it to be used and let you know.

## PHP Files

Please structure your PHP files inside your theme in a logical way and ensure that all PHP file contents is indented so to be easily readable. For HTML in the PHP file please refer to the “Google HTML/CSS Style Guide” for how we expect the HTML to be styled:

<https://google.github.io/styleguide/htmlcssguide.html>

## CSS

At mso we do not use bulky CSS frameworks like Bootstrap or Foundation. These frameworks add massive amounts of additional unnecessary CSS to your WordPress theme, the vast majority of which is never actually used on the site.

For all sites we use CSS Flexbox (<https://css-tricks.com/snippets/css/a-guide-to-flexbox/>) and CSS media queries to make our sites responsive without the need for a framework.

All sites should be developed in a “mobile first” way, with media query breakpoints used to adjust the styling on larger screen sizes. On a standard website we will use the following breakpoints for different screen sizes and this will normally cover the vast majority of needs:

Small devices, e.g. landscape phones - min width = 576px  
Medium devices, e.g. tablets - min width = 768px  
Large devices, e.g. desktops - min width = 992px  
Extra large devices, e.g. large desktops - min width = 1200px

All CSS should be created using SASS (<http://sass-lang.com/>) and held within SCSS files that can be compiled into a single final CSS file used within the theme.

The SCSS files should be split down into logical individual files for different components within the sites design, e.g. one file per component.

The structure of these SCSS files should be “mobile first”, with the initial set of definitions being for the “default” output, with overrides added for the additional larger breakpoints, in ascending order, at the bottom of the SCSS file. Media queries should **never** be mixed into the middle of SCSS file. On average a single SCSS file should be no more than 500 lines and never more than 1000 lines. All SCSS files should be laid out in a logical way, using SCSS to provide the structure and indented well for readability.

An example SCSS file can be found in the “foundation” code in the `/assets/css/sass/_component-example.scss` file. This file shows the structure we would like followed.

## JavaScript

For JavaScript we use the latest version of jQuery (<http://jquery.com/>) as our standard JavaScript library. Any JavaScript you add should be split out into separate JS files located in the `/assets/js/` folder and split into logical files. All JS files should be laid out in a logical way and indented well for readability.

Many sites require an image “carousel”, for this we use Slick (<http://kenwheeler.github.io/slick/>).

Some sites require an image “lightbox”, for this we use Blueimp Gallery (<https://blueimp.github.io/Gallery/>).

We are happy for you to use other JavaScript libraries, within reason, however, please make sure any libraries used are open source and free for commercial use. If the library you would like to make use of is not then please check with mso before making use of it.

## File Compilation

For file compilation we use Gulp (<http://gulpjs.com/>). A Gulp file has been provided in the “foundation” code. This Gulp script should already do everything that is required and comes with a “default” process for compiling CSS and JavaScript, along with a watch task for compiling the CSS and JavaScript automatically when files are changed for development purposes.

If you do make any changes or additions to the Gulp task, please ensure that the default task only compiles files and never performs a watch or similar process that doesn't exist as this will cause us issues with our site hosting configuration.

## Questions

If you have any questions about the contents of this document then please speak with the project manager immediately and they will be happy to assist you.